

SxA360

SxA360
Compact Powered Sound
Reinforcement Speaker for
Live Sound, Speech, Playback, DJ,
AV, Institutional Venues



Key Features:

- Lightweight, Compact, Ergonomic Size
- Digital Power Amplifier
- 350W LF, 150W HF
- Line Output for Additional Powered Speakers
- 65° x 65° Constant Coverage Horn
- High Sensitivity, 129 dB Maximum SPL
- Dynamic Filters Provide Overload Protection and Linear Response
- Molded-in Pole Mount, Easily Suspended
- Linear Response



General Description:

The Electro-Voice® SxA360 sets a new standard for powered speakers. Its design provides the user a simple to use system with plenty of power in very compact, lightweight, attractive package.

This is a full range loudspeaker ideal for most applications requiring high-quality sound. The SxA360 offers a unique combination of high SPL, natural frequency response, and dynamic headroom in an extremely lightweight package. Its linear response provides excellent feedback-free sound without additional equalization.

Built-in suspension points and pole mount make it easy to position for your application without expensive accessories.

The high-frequency section of the SxA360 utilizes a molded-in, 65° x 65° constant-directivity horn. This unique pattern contributes to high intelligibility, vocals sound natural yet "cut through" in reverberant, noisy rooms. Coverage pattern is uniform, sound quality off-axis is very well maintained, even at 45° off axis (a 90° total coverage angle). The SxA360's high-frequency horn is driven by the DH2T, a one-inch-throat, wide-bandwidth, titanium-diaphragm driver using a unique, convex-drive TimePath™ phasing plug structure (U.S. Patent #4,525,604) for smooth and extended high-frequency response.

Technical Specifications:

Freq. Response (-10 dB):	60 Hz - 18 kHz
Max SPL:	126 dB
Horizontal Coverage:	65°
Vertical Coverage:	65°
LF Amplifier Power:	350W RMS
HF Amplifier Power:	150W RMS
Max SPL (Calculated):	129 dB
LF Transducer:	12" (300mm) DL12BFH Woofer
HF Transducer:	1" (25mm) exit DH2T Comp. Driver
Connectors:	Line Inputs: XLR and ¼" phone Combination Balanced Output: XLR
Power Requirement:	110-130 VAC, 50-60Hz, or 220-240 VAC, 50-60Hz 600 Watts
Enclosure Material:	Copolymer
Grille:	Powder Coated Steel
Dim (H x W x D):	23.1" x 16.9" x 12.3 ("586 x 429 x 312mm)
Net Weight (each):	36 lbs (16.6 kg)
Shipping Weight:	40 lbs (18.4 kg)

EV Electro-Voice®

FRI-2082/FRI-28LPM

Dual 8" Two-Way
Full-Range Speaker
System



Key Features:

- 200W Continuous Power
- Dual 8-inch LF Transducers
- Outstanding Vocal Clarity and Intelligibility
- Low-Profile Design Allows for Flexible Placement
- Secure Reinforced Cabinet Construction with Mounting Hardware included
- Paintable Enclosure available in Black Futura or White Finish
- Low Profile Monitor version available (FRI-28LPM)



General Description:

The Electro-Voice® FRI-2082 is a two-way full-range passive system in a unique slant-sided enclosure, designed to complement the FRI line of loudspeakers. It is particularly useful in stadiums, arenas, houses of worship, dance clubs, live music venues, gymnasiums, etc. The FRI-2082 includes dual 8-inch woofers, a 1" (25 mm) voice coil compression driver on a 100° x 100° constant-directivity horn, and a cloth coverable steel grille.

The FRI-2082 uses EV's exclusive RMD™ (Ring-Mode Decoupling) to provide outstanding vocal clarity and intelligibility in a cost-effective two-way system. The versatile, compact enclosure features a low profile cabinet design with integral suspension points and a U-bracket (included with FRI-2082) to allow horizontal or vertical mounting. The 100° x 100° horn pattern allows broad coverage for near field applications.

The FRI-2082 is available in black or white, and can easily be painted to match the decor. All mounting hardware is included for the FRI-2082.

Technical Specifications:

Freq. Response (-3 dB):	70 Hz - 20 kHz
Freq. Response (-10 dB):	45 Hz - 20 kHz
Max Calculated SPL:	116 dB Cont./122 dB Peak
Axial Sensitivity (SPL, 1W/1m):	93 dB
Power Handling:	200W Cont./800W Peak

Impedance:	8 ohms
Nominal Coverage Angle:	100° x 100° (-6 dB)
LF Transducers:	Dual 8-inch Woofers in Vented Enclosure
HF Transducer:	Compression Driver with 1-inch Titanium Diaphragm on a Constant-Directivity Horn
Recommended High-Pass Frequency (12 dB/octave min.):	50 Hz
Cabinet Type:	Low Profile Slant Design
Enclosure Material:	13-ply Plywood
Finish:	Black Futura
Connectors:	(1) Barrier Strip
Suspension Hardware:	(2) 3/8-16 threaded mounting/suspension points, 1 per side (FRI-2082)
Grille:	Powder-Coated Perforated 18GA Steel
Included Accessories:	Mounting Bracket and Hardware (FRI-2082) Rubber Feet (FRI-28LPM)
Dimensions (H x W x D):	8.9" x 24.4" x 14.4" (227mm x 620mm x 365mm)
Net Weight:	40.0 lbs (18.2 kg)
Shipping Weight:	52.0 lbs (23.6 kg)

EV Electro-Voice®

(2)



MONITORING



SOUND WIZARD - ACOUSTICAL DESIGN AND AV SYSTEMS CONSULTANCY
Shakti, Auroville - 605 101, Tamil Nadu, India / Tel: 0413 262 26 59 Fax: 262 34 10
Email: info@soundwizard.net Web site: www.soundwizard.net
TNGST: 4720858/95-96/ dt 1-4-93 CST: 399042/ dt 23-4-93

TASCAM 322



The 322 deck was built on our existing technology, adding features that contractors have specifically requested. The result is a deck that fits into a wide variety of applications, from music studios, boardrooms, house of worship, live venues, and more.

The 322 transports use an optical sensor for detecting leader on tapes. When the tape approaches the leader tape from the cassette, it will immediately flip the tape. This minimizes the amount of time lost when switching sides, since the deck won't have to pass through the leader to the end of the reel, then back to the recordable tape again. This makes the 322 the ideal machine for logging or long-form recording.

An RS-232 port on the back of the 322 allows serial control of the deck from the various control systems on the market. This is ideal for board rooms, lecture halls, or advanced home theater systems, and more.

Like the 302, the 322 offers independent audio input and output for each well, allowing total control over each deck. The 322 can be set up so that one deck plays a tape while the other records an external source. This is perfect for recording a meeting and playing audio sources back, or playing music from tape and recording a performance on top of it. If the situation calls for a common I/O structure, you can switch it easily on the front panel. This makes it easy for creating dual masters, or saving inputs on a mixer.

The 322 also offers Return To Zero function for easier cueing, $\pm 10\%$ pitch control to make changes in speed, headphone output with level control, and a wired remote as standard. The optional LA-322 kit adds balanced ports to the 322.

- Optical Leader Sensing for Quick Auto Reverse
- RS-232 Serial Control Port
- $\pm 10\%$ Pitch Control Independent for Each Deck
- Independent Unbalanced RCA Analog I/O for Each Deck
- RTZ (Return To Zero) Function on Each Deck
- RC-322A Wired Remote Included
- Headphone Output w/ Level Control
- 3-U Rack Mountable Dual Bi-Directional Cassette Deck
- Optional LA-322 Balancing Kit
- Optional WR-7000 Cascade Cables
- Both Cassette Wells Record Capable for Simultaneous Masters
- Normal (1x) and High (2x) Speed Dubbing Capability
- Dolby B and C with HX Pro Headroom Extension
- Electronic Tape Counter
- Record Mute Function (On RC-322A Only)
- 19" x 5.5" x 12.8" (482 x 140 x 323.9 mm)
- 17.19. lbs (7.8 kg)

TASCAM CD-01U Pro



The new TASCAM CD-01U and **CD-01U Pro** are professional CD players, each designed to fit into one rackspace. Available in two versions - an affordable unbalanced model and a professional model with balanced analog and digital outputs - the CD-01U and CD-01U Pro will save room in broadcast equipment racks and custom installations.

Both the CD-01U and CD-01U Pro have an RS-232 control port available for programming with AMX and Crestron systems. They feature MP3 playback, 20-second shock protection and pitch controls for flexible performance. Naturally, they each use reliable TASCAM slot-loading CD transports for years of trouble-free use, making the CD-01U and CD-01U Pro the new standards for compact CD playback.

- 1-space rackmountable CD Player
- CD-R/RW Playback, including 12cm and 8cm CDs
- MP3 Playback
- 20-second RAM buffer for shock protection
- Slot-loading CD transport
- RCA Unbalanced analog outputs
- S/PDIF optical digital output
- Repeat, Single-Play and Program playback modes
- $\pm 12.5\%$ pitch control
- Key Original mode allows you to change the speed without changing the pitch
- Call function returns to last play start point
- Auto Ready and Auto Cue
- Fade In/Out function (up to 10 seconds in 1/2 second steps)
- Eject block function
- Serial control via RS-232C
- Wireless remote control
- XLR balanced analog outputs (CD-01U Pro)
- XLR AES/EBU digital outputs (CD-01U Pro)
- Parallel control over 15-pin D-sub (CD-01U Pro)
- 19" x 2" x 13.1" (482.6 x 50 x 333.9 mm)
- 8.1 lbs (3.7 kg)

SPECIFICATIONS

ANALOG INPUTS

Type	XLR balanced 1/4" TRS stereo balanced
Impedance	approx. 22 k Ω balanced
Max. input level	+16 dBu
CMRR	typ. 40 dB

ANALOG OUTPUTS

Type	XLR, servo-balanced 1/4" TRS stereo servo-balanced
Impedance	approx. 100 Ω balanced
Max. output level	+16 dBu

SYSTEM SPECIFICATIONS

Frequency range	<10 Hz - 20 kHz @ 44.1 kHz <10 Hz - 22 kHz @ 48 kHz <10 Hz - 46 kHz @ 96 kHz
Signal-to-noise ratio	-90 dBu
Dynamic range	106 dB (analog in \Rightarrow analog out)
THD	0.007% typ. @ +4dBu, 1 kHz, Gain 1
Crosstalk	< -100 dB (analog in \Rightarrow analog out)
Signal delay	< 1 ms (analog in \Rightarrow analog out)

DIGITAL INPUT 1

Type	XLR servo-balanced
Standard	AES/EBU or S/PDIF
input impedance	110 Ω
nominal input level	0.2 - 5 V peak-to-peak

DIGITAL INPUT 2

Type	TOSLINK optical
Standard	AES/EBU or S/PDIF

DIGITAL OUTPUT 1

Type	XLR servo-balanced
Standard	AES/EBU or S/PDIF

DIGITAL OUTPUT 2

Type	TOSLINK optical
Standard	AES/EBU or S/PDIF

SYNC INPUT

Type	BNC
Standard	Wordclock (1 x sample rate)
input impedance	approx. 50 k Ω
Nom. level	2 - 6 V peak-to-peak

MIDI Interface

Type	5-pin DIN jacks In/Out/Thru
Implementation	cf. MIDI implementation chart

DIGITAL PROCESSING

Processor	high-resolution SHARC [®] DSP, 600 MFLOPs, 32-bit internal signal processing
Converter	24 Bit/96 kHz
Sample rate	external, 44.1 kHz, 48 kHz, 96 kHz

DISPLAY

Type	128 x 64 backlit liquid crystal display (green) with adjustable contrast
------	--

MEMORY

Presets	100 ROM + 100 user presets for engines A and B, 100 ROM + 100 user presets for combinations
---------	---

POWER SUPPLY

Mains voltage	85 - 250 V~, 50 - 60 Hz
Power consumption	10 W typ.
Fuse	T 1 A H
Mains connector	Standard receptacle

DIMENSIONS/WEIGHT

Dimensions	19" (482.6 mm) x 1 3/4" (44.5 mm) x 8 1/2" (217 mm)
Weight	approx. 4 3/4" lbs. (2.15 kg)

BEHRINGER makes every effort to ensure the highest standard of quality. Necessary modifications are carried out without notice. Thus, the specifications and design of the device may differ from the information given in this manual.

GENERAL DESCRIPTION *(continued)*

EQ curves from any preset independently, so you can add pre-set effects settings with real time changes.

The D•3500 features standard MIDI implementation and Samson's D•Net enabling device-to-device linking for creating larger audio systems, for interfacing to a personal computer. When linking the units you see the full power of the D•Class system. For systems using many D•Class units, the D•3500 can be fitted with the DNI D•Net network card. Samson's D Net is a high-speed communication protocol for connected multiple D•Class units, like the D2500 digital equalizer, D1500 RTA or more D•3500s. In addition to being 10 times faster than MIDI, the error rate is so close to zero, it's difficult to measure. All settings and parameters can be stored in any of the 99 preset locations providing instant recall of your favorite setups. Like all D•Class models, the D•3500 features an advanced 32-bit point floating processor DSP interface to high quality converters with 24-bit audio resolution and sample rates up to 96kHz for pristine audio quality. You can even upgrade your D•Class units to premium Analog-to-Digital and Digital-to-Analog I/O (Input/Output) converter boards, keeping your D•Class system up to date with the best technology, and sound, far onto the future.

The D•3500 is perfectly at home in the studio or on the road. The fact is, you would use the D•3500 equalizer for its precise filtering and superb audio quality alone, but you get the power of all the features, and then some, expected from a high quality digital equalizer. Whether you are a recordingist or a live sound engineer, you'll get a better sound using the D•3500 Digital Equalizer!

FEATURES

- > The D•3500 is a sophisticated digital equalizer combined with an advanced, and easy to use, automatic feedback management system providing 30 bands of parametric filters.
- > For stereo PA systems, the D•3500 can operate with 15 filter bands per side, or for mono operation (like stage monitors), you can use all 30 bands at once.
- > The D•3500 offers three filter modes. Resonance for reducing feedback due to room acoustic problems, Dynamic for feedback problems caused when microphone are moving around on stage, and Manual for adjusting the parametric filters by hand using the Filter Control Knobs.

- > For temporary feedback problems like those caused by microphones moving on stage, a unique AFR, Auto Filter Release, mode lets the EQ filters gradually restore themselves to the original levels once the feedback problem goes away thereby restoring not destroying your sound.
- > Advanced 32 bit floating point DSP with high-end, 24 Bit, 96K sample rate Analog-to-Digital and Digital-to-Analog converters provides a pristine sound quality with low distortion and wide dynamic range.
- > The LEARN mode allows the D•3500 to perform a single-button push, automatic feedback reduction system that will automatically "ring-out" your speaker system to remove feedback.
- > An onboard programmable Delay is included for time aligning speakers.
- > The D•3500 offers programmable High and Low Pass Filters for setting contour curves or for removing low-end stage rumble.
- > To help keep the over all system noise level low, the D•3500 includes a programmable Noise Gate with variable threshold control.
- > An added layer of speaker protection is accomplished by using the D•3500's programmable brick wall Limiter.
- > The programmable Enhancer can be used to add extra highs or as a noise reduction system by lowering the high frequency bands when no high frequency content is present.
- > Equalization curves plus all digital effects can be stored or recalled using the 99 User Preset Locations.
- > Optional DI01 Digital interface card for connecting to AES/EBU or S/PDIF.
- > The D•3500 takes advantage of the latest technology with upgradable Analog-to-Digital and Digital-to-Analog converters.
- > Electronically Balanced XLR Inputs and Outputs.
- > Standard 19", 2 rack-space design for easy integration into any traveling or fixed installation audio system.
- > Aluminum extruded front panel and steel chassis makes the D•3500 eminently road-worthy.
- > Three year extended warranty.

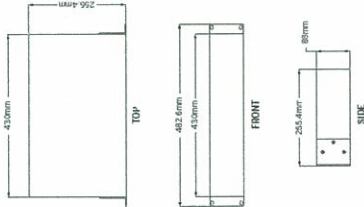
ARCHITECT'S & ENGINEER'S SPECIFICATIONS

The D•3500 shall be a stereo 15 band digital parametric equalizer for the purpose of equalizing an audio system and removing feedback. It shall have 15 filters per channel to adjust the levels of the audio. The D•3500 shall also have 2 types of automatic feedback reduction filters called Dynamic and Resonance. The unit shall also have a gate, delay, enhancer, HP/LP filters and a limiter for the purpose of equalizing and balancing an audio system. The D•3500 shall have balanced XLR inputs and outputs. The inputs and outputs shall be on cards so that they can be removed and upgraded. A slot shall also be provided for a D•Net card so that the unit can communicate with other D•Class units at a faster speed than from the included midi connections. There shall be 99 digital memory locations to store and recall user program information. The D•3500 is one of a series of 3 digital processors that can operate separately or together as a single piece of analyzing equipment.

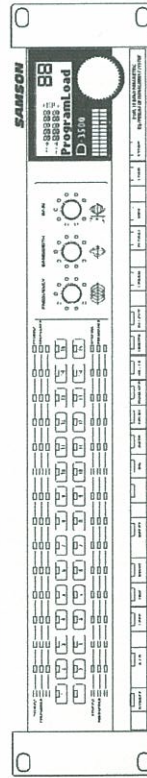
D•3500 SPECIFICATIONS

- Inputs**
- Type electronically balanced
 - Connector XLR
 - Impedance 22 kΩ at 1 kHz
- Max. input level** +22
- AI01 +14dBu
 - AI02 +20dBu
- Outputs**
- Type electronically balanced
 - Connector XLR
 - Impedance 100 Ohms at 1 kHz
- Max. output level** +14dBu
- AI01 +20dBu
 - AI02 +20dBu
- Frequency Response** 10 Hz to 35 kHz (-1dB) @ 96 kHz sampling rate
- Signal-to-noise-ratio**
- AI01 Noise floor (unweighted) < -92 dBFS (-78 dBu)
Noise floor (A-weighted) < -100 dBFS (-86 dBu)
 - AI02 Noise floor (unweighted) < -106 dBFS (-86 dBu)
Noise floor (A-weighted) < -112 dBFS (-92 dBu)
- THD** 0.005 % typ. @ +4 dBu, 1 kHz, unity gain

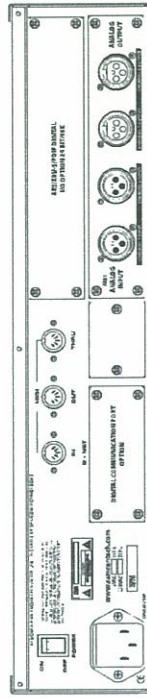
- Digital Processing Converter** 24-bit Delta-Sigma, 64/128-oversampling
- Sample Rate** 32, 44.1, 48, 64, 88.2, 96 kHz
- AI01, & AI02 96 kHz Type digital
 - DI01 31 band equalizer
- Frequency Range** 20 Hz to 20 kHz, 31 bands on ISO standard frequencies
- Display** Custom LCD for parameter control
- Memory** 100 memory locations, 99 user programmable
- Midi Interface** 5-pin DIN jacks In/Out/Thru
- Power supply** 115 V, 60 Hz, 230 V, 50 Hz
- Mains consumption 20 W typ.
 - Fuse 630mA for 100-120 Volt / 315mA for 220-240 Volt
- Mains connector Standard IEC receptacle
- Dimensions (W x D x H)** 19" x 10.5" x 3.5"
- Weight** 5.1 lb. (2.31 kg)



FRONT PANEL



BACK PANEL



8



AI01

AI01 FEATURES

- > Analog Input/Output Module utilizing high quality AD/DA converters
- > 100 db of dynamic range
- > Operates at 96k sample rates
- > Balanced XLR Inputs and Outputs



AI02

AI02 FEATURES

- > Analog Input/Output Module utilizing premium AD/DA converters
- > 112 db of dynamic range
- > Operates at 96k sample rates
- > Balanced XLR Inputs and Outputs



DI01

DI01 FEATURES

- > Digital Interface Module featuring AES/EBU and S/PDIF inputs and outputs
- > Gold plated XLR and RCA connectors
- > Standard BNC word clock connector



DN01

DN01 FEATURES

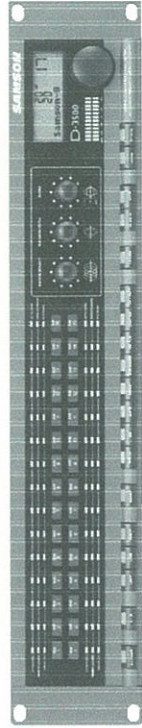
- > Module for controlling multiple D•Class units
- > High speed, Bi-Directional network protocol using standard XLR cable and connectors
- > Allows the D•1500 RTA to monitor up to 15 D•2500 equalizers on the LED display

PRODUCT: **D•3500**

SERIES: D•CLASS

DESCRIPTION: PARAMETRIC EQ & FEEDBACK MANAGEMENT SYSTEM

CATEGORY: DIGITAL SIGNAL PROCESSING



GENERAL DESCRIPTION

The D•3500 is an advanced parametric equalizer featuring cutting edge DSP and analog-to-digital conversion technology, together with a simple to use, traditional analog user interface. The D•3500's robust, 2 rack-space steel and aluminum extruded chassis design is not only road worthy, but it also provides a large front panel layout which is extremely easy to use and already familiar to audio engineers.

Thanks to the powerful DSP engine and clever software, the D•3500 is capable of producing EQ curves with more accurate and precise filters, far exceeding the capabilities of even the best analog equalizers. What you won't get is the accumulating additive hiss noise that you get from an analog equalizer when you add a lot of gain at high frequency bands. And, with the high-end 24 Bit AD and DA converters and 96K sampling rate, you'll enjoy pristine audio quality.

The beauty of the D•3500 is that while it is a sophisticated, advanced featured parametric equalizer, it can also work as a one-button automatic feedback management system. For feedback management, the D•3500 can employ up to 30 filters for a mono mix, like on stage monitors, or 2 times 15 bands for stereo PA applications. The LEARN mode let's you press a single button and have the D•3500 "ring out" your system automatically (as if there were a professional monitor mix engineer inside moving all the knobs for you). You just get a louder PA with less feedback! The feedback filters work in three modes; Resonance finds feedback problems inherent in the room then automatically sets. Dynamic constantly scan the frequency range looking for feedback

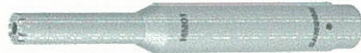
problems, and Manual which are set by using the EQ control knobs. Plus, the D•3500's feedback filters are intelligent. They know that often feedback occurs because performers move around on stage, so the problems can be a temporary ones. Other feedback systems that can destroy your sound because they just keep cutting more and more frequency until you're left with everything cut. Thanks to the Auto Restore Filter technology, the D•3500's filters are constantly monitoring the signal and will try to sneak back to the original positions so that the feedback reduction has a minimum effect on the sound of your mix.

For you "tweakers" out there, the D•3500 has 30 dedicated switches, which allow you to quickly access the filters that work together with the physical EQ control knobs located in the master section. You may forget that that you are using a digital EQ, simply press a filter button and grab a knob to tweak the equalizer.

In addition to being a simple to use, feedback management system and digital equalizer, the D•3500 is packed with all the goodies including HIGH & LOW PASS FILTER, NOISE GATE, LIMITER, ENHANCER and DELAY. All these digital effects are programmable and their associated parameters can be stored and recalled, as part of the 100 available user pre-sets. The HIGH and LOW PASS FILTERS allow you to quickly apply an EQ contour for rolling off the high and low end frequencies, for example, when equalizing vocal monitors.

The D•3500's NOISE GATE allows you to set a threshold level so you can mute any system hums and buzzes during silent sections keeping your system super clean. With the D•3500's LIMITER you can control the level being sent to your power amplifiers to help you insure good protection for your loudspeakers. The onboard ENHANCER will actually add high frequency to the system when there is program material at those frequencies, adding extra sparkle to the mix. The ENHANCER will also automatically turn down the high frequencies when there is no high frequency signal content, eliminating system noise and hiss, making the D•3500 a very effective noise reduction system. In addition, the D•3500 also offers on board DELAY for time aligning speakers. All settings and parameters for the equalizer and digital effects can be stored in 100 user pre-set locations. Using the large, easy to read, LCD display and convenient data wheel, it's possible to save your favorite equalization curves and recall them in the future. In addition, the powerful LOAD MASK allows you to recall certain effects or

continues>



GENERAL DESCRIPTION

The MM01 is a fixed charged condenser microphone designed especially for critical test and measurement applications. Manufactured with extreme care, superior electronics and the highest quality craftsmanship, the microphone delivers an exceptionally clear, accurate sound, with precision pattern control. The MM01 is a perfect compliment to any Real Time Analyzer, such as the D•1500 Digital RTA from Samson Audio. The microphone exhibits an extremely flat frequency response providing accurate results when measuring individual drivers or complete sound systems. Thanks to it's low noise and linear frequency response, MM01 can also be used for mixing acoustic instruments, or as ambient room mics for studio recording applications. In addition, the high SPL capability and omni-directional pick-up pattern makes the MM01 an excellent choice for a variety of specialty mixing applications in live sound situations.

FEATURES

- > Precision, fixed charged condenser measurement microphone.
- > Extremely flat frequency response.
- > Linear, omni-directional pick-up pattern.

- > +9 to 48 Volt phantom power operation.
- > Gold plated XLR connector.
- > The industrial designed is attractive while maintaining a compact and rugged construction.
- > A perfect compliment to any Real Time Analyzer, such as the D•1500 Digital RTA from Samson Audio.
- > Includes ABS carry case.

MM01 SPECIFICATIONS

Type	Fixed charged Condenser microphone
Polar Pattern	Omnidirectional
Frequency Response	20 Hz to 20000 Hz
Sensitivity	-37 dBV/pa (14mV/pa)
Rated Impedance	200Ω
Max. SPL	132 dB (THD less than or equal to 0.5% 1000 Hz)
S/N Ratio	71 dB, 1K, 1PA
Power Supply	9.52V Phantom power (IEC 268-15/DIN 45596)
Weight	130 g

- Multi point clip monitoring. Clip warning LEDs illuminate when the level exceeds +20dBu (2dB below the onset of clipping) to assist in optimum system gain setting
- Electronically balanced inputs and outputs (transformer balancing is available as an option). Connections are provided on both XLRs (pin 2 hot) and Phoenix-type strip connectors for fixed installation
- IEC mains inlet. The unit automatically adjusts for operation on all voltages from 100 to 240V AC
- KT logo for quality engineering and reliability 3-year KT warranty for peace of mind

© Copyright Klark Teknik 2006 [Home](#) [Products](#) [Contact Us](#) [Downloads](#) [Info Request](#) [Press Area](#) [Links](#) [Careers](#) [Back to Top](#)

Website by [Citizen Communication](#)

Product List

-  **Show Command**
Overview
-  **Helix DN9331 Rapide**
Graphic Controller
-  **Helix DN9340E**
Dual EQ
-  **Helix DN9344E**
Quad EQ
-  **Helix DN9848E**
System Controller
-  **Software**
-  **DN1248 Plus**
Mic Splitter
-  **DN370**
Graphic EQ
-  **DN360**
Graphic EQ
-  **DN410**
Dual Parametric EQ
-  **DN500 Plus Series**
Dynamic Processors
-  **DN100**
DI Box
-  **Square ONE**
Graphic EQ & Dynamics

DN370

- [Architect's & Engineer's Specification](#)
- [Technical Data](#)
- [Line Drawing](#)
- [Brochure](#)
- [Manuals](#)
- [3D Animation](#)

DN370

The all-new Klark Teknik DN370 is the latest evolutionary step in a process of design refinement that goes back over 30 years. With DN370 we've started from the ground up and produced a unit that is totally without compromise, and one that we believe is the finest professional graphic equaliser in the world today. It also perfectly complements the existing Klark Teknik range of equalisers, both analogue and digital.

Our aim is simply to provide discerning professional users with the best possible solutions for system control. Our market research shows that the graphic equaliser is still the most commonly-used EQ device in fixed and mobile live sound applications, as well as many installations, mainly because the physical user interface provides instant access and controllability in even the most demanding environments. To this end we have completely re-evaluated the role of the graphic EQ, focusing exclusively on providing a new feature set that better reflects the needs of modern users.

Like all Klark Teknik units, DN370 is engineered for a lifetime of hard use and carries our 3-year international factory warranty.

Overview

- Long-throw 45mm oil-damped faders with dust cover for increased accuracy and resolution
- All-new proportional-Q filters provide optimum control without undesirable audio artifacts
- Gain control with +6dB/-infinity range and centre detent at unity gain. Allows effective muting of channel in emergencies
- Range switch selects ± 6 dB or ± 12 dB operation for the faders, with LED indication
- Channel bypass switch with LED indication. The unit also provides automatic relay bypass in the event of power failure
- Sweepable high-pass filter with 20Hz to 500Hz range sets the lower frequency limit of the system. The control incorporates a push switch to select the filter in and out, with an illuminated ring for "at a glance" status indication. Invaluable for smooth rejection of unwanted subsonic and low frequencies, particularly relevant with modern compact wedge monitors



Photos: [Main](#) | [Front](#) | [Back](#)



distortion

- Separate side chain inputs are provided for each channel
- Gain reduction and output level metering is provided for each channel
- Additional features include stereo link function which provides two pairs of stereo channels
- XLR connectors fitted as standard for main audio terminations, with transformer balancing available as an option

DN514 Plus Overview

Quad Auto Gate

- Four frequency-conscious high performance gates in one single unit of rack space
- Optimised for fast set up and dependable triggering for every conventional gate application
- With two semi-automatic Attack Modes and hold time automatically scaled to release value, the DN514 Plus combines outstanding dynamic performance with simplified control
- Unique sync function synchronises harmony parts, brass section, etc., by interlocking all four gate release times
- Advanced VCA design for low noise and distortion
- Additional key inputs for each channel allows triggering from external sources
- Side chain monitor function simplifies filter set-up
- Threshold and release LED's provide visual information regarding gate status. Release contour indicated by release LED
- Both Master and channel bypass switches are provided to aid set-up

© Copyright Klark Teknik 2006 [Home](#) [Products](#) [Contact Us](#) [Downloads](#) [Info Request](#) [Press Area](#) [Links](#) [Careers](#) [Back to Top](#)

Website by [Citizen Communication](#)



Signal Processing by Definition

Home Products Contact Us Downloads FAQ Info Request Press Area Service Links Careers

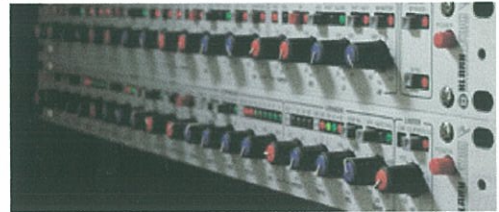
Product List

-  **Show Command**
Overview
-  **Helix DN9331 Rapide**
Graphic Controller
-  **Helix DN9340E**
Dual EQ
-  **Helix DN9344E**
Quad EQ
-  **Helix DN9848E**
System Controller
-  **Software**
-  **DN1248 Plus**
Mic Splitter
-  **DN370**
Graphic EQ
-  **DN360**
Graphic EQ
-  **DN410**
Dual Parametric EQ
-  **DN500 Plus Series**
Dynamic Processors
-  **DN100**
DI Box
-  **Square ONE**
Graphic EQ & Dynamics

DN500 Plus Series

- Architect's & Engineer's Specification
- Technical Data
- Line Drawing
- Brochure
- Manuals

Photos: **Main DN500 Plus** | **Front** | **Back DN504 Plus Front** | **Back DN514 Plus** | **Front** | **Back**



DN500 Plus Series

The DN500 Plus series utilises a 'THAT's' chip which features lower distortion, improved dynamic range and faster slew rate.

The DN500 Plus is our dual compressor / limiter / expander which is characterised by its extremely quiet operation, typically >2dB quieter than any comparable product. This alone has made it a broadcast-industry standard for many years. The two channels are linkable for true stereo operation, and both the compressor and expander sections are fitted with their own sidechain inputs.

The DN504 Plus Quad Compressor has enjoyed hugely increased popularity in recent years, due to the ever expanding use of in-ear monitor systems. This is because the unit can be configured into two stereo pairs, has all the superlative audio performance of the DN500 Plus, and fits two sets of stereo compression into just one rack space. This configuration also makes it extremely cost effective.

DN514 Plus has become one of the industry standard multi-gate devices for both recording and live applications. Providing the same superb audio performance as its other 500 Plus - series, DN514 Plus packs four channels of frequency conscious gating into just 1RU. This provides a significant operational advantage, being able to tailor the operation of each gate to a specific frequency range.

Overview

DN500 Plus Overview

Dual Compressor / Limiter Expander

- Two channels of full function compression, expansion, limiting and peak clipping in one unit of rack space
- Variable knee control for compression styles from hard to easy
- Auto attack/release mode for inaudible compression and easy set-up
- Manual attack/release mode for creating compression effects
- Advanced VCA design for extremely low noise and

13

EV X-Line Loudspeakers
EV Dx38 Digital Parameters

Loudspeaker System		X-LINE Rev. 2.4 3-Way+Sub P3000 6dBu 3-Way Full-Range Xvls & Xvlt, Plus Overlapping Xsub Subwoofer Configuration											
		Preset Name: X-LINE 2*4 3W+S P3K6 for EV P3000 Amplifier with 6-dBu Gain Setting											
Notes		> Read the "Instructions" worksheet in this workbook for details on how to implement the digital parameters. > ONLY use the input EQ to make adjustments for system EQ and room EQ. DO NOT adjust output EQ, filters & delays because this will compromise line array performance. > The output Compressors & Limiters are used for loudspeaker protection. The Thresholds shown are calibrated for the EV P3000 power amplifiers as shipped from the factory with in the "6-dBu for Rated Power" gain setting (33 dB). If amplifiers with different gain are used the compressor/limiter thresholds must be readjusted so that the gain reduction turns on at the indicated amplifier output voltages. > The Xvls, Xvlt & Xfil all share the same drive signal denoted as "Xxxx LF". > The input delay of the Xvls, Xvlt & Xfil full-range systems (Xxxx) must be adjusted for alignment with Xsub subwoofers.											
Programmer & Date: 1st/Last Rev		DEC: 01/23/01 - DEC: 07/09/01											
Assign	Frequency Band	Xxxx Input	Xsub Input			Xsub SUB	Xxxx LF	Xfil MB	Xfil HF	Xvlt MB	Xvlt HF	Xvls MB	Xvls HF
	Connector	A	B	C	D	1	2	3	4	5	6	7	8
Main	Input Routing					B	A	A	A	A	A	A	A
	Digital Gain (dB)	+0.0 dB	+0.0 dB			+1.5 dB	+2.3 dB			+1.0 dB	+0.0 dB	+1.0 dB	+0.0 dB
	Signal Delay (mSec)	5.000 mS	0.000 mS			0.000 mS	0.260 mS			0.375 mS	0.469 mS	0.000 mS	0.312 mS
	Polarity (Norm/Inv)					Norm	Norm			Norm	Norm	Norm	Norm
Crossover	HP Frequency (Hz)					32.6 Hz	50 Hz						
	HP Resp (Type,dB/Oct)					But24	But24						
	HP Q (+) or Boost (dB)												
	LP Frequency (Hz)					80 Hz	220 Hz			1250 Hz	16000 Hz	1250 Hz	16000 Hz
	LP Resp (Type,dB/Oct)					LR24	LR24			LR24	But24	LR24	But24
	LP Q (+) or Boost (dB)												
	Filter 1 Type					PEQ	PEQ			PEQ	PEQ	PEQ	PEQ
	Filter 1 Freq. (Hz)					45.4 Hz	56 Hz			600 Hz	912 Hz	553 Hz	936 Hz
Filter 1 Gain (dB)					+3.0 dB	+3.0 dB			-3.0 dB	-12.0 dB	-5.0 dB	-12.0 dB	
Filter 1 BW (Oct)					0.50 Oct	1.27 Oct			1.08 Oct	1.92 Oct	0.90 Oct	2.00 Oct	
Filter 1 Q (Q)					2.87 Q	1.10 Q			1.30 Q	0.70 Q	1.58 Q	0.67 Q	
Filter 1 Slope (dB/Oct)													
Filter 2 Type					PEQ	PEQ			PEQ	PEQ	PEQ	PEQ	
Filter 2 Freq. (Hz)					305 Hz	164 Hz			1560 Hz	3100 Hz	909 Hz	2850 Hz	
Filter 2 Gain (dB)					-4.0 dB	-2.0 dB			-5.0 dB	-5.0 dB	-5.0 dB	-5.0 dB	
Filter 2 BW (Oct)					1.00 Oct	0.51 Oct			2.54 Oct	1.70 Oct	0.90 Oct	2.50 Oct	
Filter 2 Q (Q)					1.41 Q	2.80 Q			0.50 Q	0.80 Q	1.58 Q	0.51 Q	
Filter 2 Slope (dB/Oct)													
Filter 3 Type						PEQ				PEQ		PEQ	
Filter 3 Freq. (Hz)						580 Hz				14800 Hz		15000 Hz	
Filter 3 Gain (dB)						-8.0 dB				+8.0 dB		+8.0 dB	
Filter 3 BW (Oct)						0.29 Oct				0.60 Oct		0.60 Oct	
Filter 3 Q (Q)						5.00 Q				2.39 Q		2.39 Q	
Filter 3 Slope (dB/Oct)													
Filter 4 Type	PEQ									PEQ		PEQ	
Filter 4 Freq. (Hz)	1820 Hz									2540 Hz		2540 Hz	
Filter 4 Gain (dB)	-3.0 dB									-4.5 dB		-3.0 dB	
Filter 4 BW (Oct)	0.20 Oct									0.20 Oct		0.20 Oct	
Filter 4 Q (Q)	7.21 Q									7.21 Q		7.21 Q	
Filter 4 Slope (dB/Oct)													
Compressor	Comp. Thresh. (dBu)					+3.0 dBu	+3.0 dBu			+3.0 dBu	+3.0 dBu	+3.0 dBu	+3.0 dBu
	Amp Out @ Thresh (Vrms)					49.1 V	49.1 V			49.1 V	49.1 V	49.1 V	49.1 V
	Comp. Ratio (X:1)					3:1	3:1			3:1	3:1	3:1	3:1
	Comp. Attack (mS)					10.00 mS	10.00 mS			8.00 mS	1.00 mS	8.00 mS	1.00 mS
	Comp. Release (mS)					200 mS	200 mS			150 mS	100 mS	150 mS	100 mS
Limiter	Limiter Thresh (dBu)					+8.0 dBu	+8.0 dBu			+8.0 dBu	+8.0 dBu	+8.0 dBu	+8.0 dBu
	Amp Out @ Thresh (Vrms)					87.2 V	87.2 V			87.2 V	87.2 V	87.2 V	87.2 V
	Limiter Release (mSec)					50 mS	50 mS			50 mS	50 mS	50 mS	50 mS

14

EV X-Line Loudspeakers
EV Dx38 Digital Parameters

Loudspeaker System		X-LINE Rev. 2.4 3-Way+Sub P3000 0dBu				Preset Name: X-LINE 2*4 3W+S P3K0 for EV P3000 Amplifier with 0-dBu Gain Setting							
Notes		> Read the "Instructions" worksheet in this workbook for details on how to implement the digital parameters. > ONLY use the input EQ to make adjustments for system EQ and room EQ. DO NOT adjust output EQ, filters & delays because this will compromise line array performance. > The output Compressors & Limiters are used for loudspeaker protection. The Thresholds shown are calibrated for the EV P3000 power amplifiers as shipped from the factory with in the "0-dBu for Rated Power" gain setting (39 dB). If amplifiers with different gain are used the compressor/limiter thresholds must be readjusted so that the gain reduction turns on at the indicated amplifier output voltages. > The Xvls, Xvt & Xfil all share the same drive signal denoted as "Xxxx LF". > The input delay of the Xvls, Xvt & Xfil full-range systems (Xxxx) must be adjusted for alignment with Xsub subwoofers.											
Programmer & Date: 1st/Last Rev		DEC: 01/23/01 - DEC: 07/09/01											
Assign	Frequency Band	Xxxx Input	Xsub Input			Xsub SUB	Xxxx LF	Xfil MB	Xfil HF	Xvt MB	Xvt HF	Xvls MB	Xvls HF
	Connector	A	B	C	D	1	2	3	4	5	6	7	8
Main	Input Routing					B	A	A	A				
	Digital Gain (dB)	+0.0 dB	+0.0 dB			+1.5 dB	+2.3 dB			+1.0 dB	+0.0 dB	+1.0 dB	+0.0 dB
	Signal Delay (mSec)	5.000 mS	0.000 mS			0.000 mS	0.260 mS			0.375 mS	0.469 mS	0.000 mS	0.312 mS
	Polarity (Norm/Inv)					Norm	Norm			Norm	Norm	Norm	Norm
Crossover	HP Frequency (Hz)					32.6 Hz	50 Hz						
	HP Resp (Type,dB/Oct)					But24	But24						
	HP Q (+) or Boost (dB)												
	LP Frequency (Hz)					80 Hz	220 Hz			1250 Hz	16000 Hz	1250 Hz	16000 Hz
	LP Resp (Type,dB/Oct)					LR24	LR24			LR24	But24	LR24	But24
	LP Q (+) or Boost (dB)												
	Filter 1 Type					PEQ	PEQ			PEQ	PEQ	PEQ	PEQ
	Filter 1 Freq. (Hz)					45.4 Hz	56 Hz			600 Hz	912 Hz	553 Hz	936 Hz
Filter 1 Gain (dB)					+3.0 dB	+3.0 dB			-3.0 dB	-12.0 dB	-5.0 dB	-12.0 dB	
Filter 1 BW (Oct)					0.50 Oct	1.27 Oct			1.08 Oct	1.92 Oct	0.90 Oct	2.00 Oct	
Filter 1 Q (Q)					2.87 Q	1.10 Q			1.30 Q	0.70 Q	1.58 Q	0.67 Q	
Filter 1 Slope (dB/Oct)													
Filter 2 Type					PEQ	PEQ			PEQ	PEQ	PEQ	PEQ	
Filter 2 Freq. (Hz)					305 Hz	164 Hz			1560 Hz	3100 Hz	909 Hz	2850 Hz	
Filter 2 Gain (dB)					-4.0 dB	-2.0 dB			-5.0 dB	-5.0 dB	-5.0 dB	-5.0 dB	
Filter 2 BW (Oct)					1.00 Oct	0.51 Oct			2.54 Oct	1.70 Oct	0.90 Oct	2.50 Oct	
Filter 2 Q (Q)					1.41 Q	2.80 Q			0.50 Q	0.80 Q	1.58 Q	0.51 Q	
Filter 2 Slope (dB/Oct)													
Filter 3 Type						PEQ				PEQ		PEQ	
Filter 3 Freq. (Hz)						580 Hz				14800 Hz		15000 Hz	
Filter 3 Gain (dB)						-8.0 dB				+8.0 dB		+8.0 dB	
Filter 3 BW (Oct)						0.29 Oct				0.60 Oct		0.60 Oct	
Filter 3 Q (Q)						5.00 Q				2.39 Q		2.39 Q	
Filter 3 Slope (dB/Oct)													
Filter 4 Type	PEQ									PEQ		PEQ	
Filter 4 Freq. (Hz)	1820 Hz									2540 Hz		2540 Hz	
Filter 4 Gain (dB)	-3.0 dB									-4.5 dB		-3.0 dB	
Filter 4 BW (Oct)	0.20 Oct									0.20 Oct		0.20 Oct	
Filter 4 Q (Q)	7.21 Q									7.21 Q		7.21 Q	
Filter 4 Slope (dB/Oct)													
Compressor	Comp. Thresh. (dBu)					-3.0 dBu	-3.0 dBu			-3.0 dBu	-3.0 dBu	-3.0 dBu	-3.0 dBu
	Amp Out @ Thresh (Vrms)					49.1 V	49.1 V			49.1 V	49.1 V	49.1 V	49.1 V
	Comp. Ratio (X:1)					3:1	3:1			3:1	3:1	3:1	3:1
	Comp. Attack (mS)					10.00 mS	10.00 mS			8.00 mS	100 mS	8.00 mS	1.00 mS
	Comp. Release (mS)					200 mS	200 mS			150 mS	100 mS	150 mS	100 mS
Limiter	Limiter Thresh (dBu)					+2.0 dBu	+2.0 dBu			+2.0 dBu	+2.0 dBu	+2.0 dBu	+2.0 dBu
	Amp Out @ Thresh (Vrms)					87.2 V	87.2 V			87.2 V	87.2 V	87.2 V	87.2 V
	Limiter Release (mSec)					50 mS	50 mS			50 mS	50 mS	50 mS	50 mS

15

Rear View



Specifications

AC voltage	90-250 V AC (50-60 Hz)
Power consumption	30 W maximum
Safety class	VDE/IEC Class I
Inputs	2 x XLR in, electronically balanced, transformers optional 2 x XLR OUT (Direct Out)
Nominal input voltage	1.55 V (+6 dBu)
Maximum input voltage	24.5 V (+30 dBu)
Input impedance	20 kΩ
Common-mode rejection	>40 dB (1 kHz)
A/D conversion	24-bit; 128x oversampled; linear phase
Outputs	4 x XLR out; electronically balanced
Nominal output voltage	1.55 V (+6 dBu)
Maximum output voltage	8.7 V (+21 dBu)
Output impedance	<100 Ω
Minimum load impedance	600 Ω
D/A conversion	24-bit; 128x oversampled; linear phase
Frequency response	20 Hz-20 kHz (-0.5 dB)
S/N ratio	>115 dB (typical)
THD without transformer	<0.01% (1 kHz)
THD with transformer	<0.05% (1 kHz)
Crossover	Independently adjustable high- and low-pass filters with Butterworth and Linkwitz-Riley 12- and 24-dB/octave slopes and Bessel 6-, 12-, 18- and 24-dB/octave slopes
EQ filters	Five filters per input; four filters per output: - Parametric EQ (20 Hz-20 kHz; Q 0.4-20.0; +/-12 dB) - Low shelf (20 Hz - 20 kHz; 6/12-dB slope; +/-12 dB); Hi shelf (6-dB slope; +/-12 dB) - High- and low-pass (6/12-dB slope; Q 0.4-2.0) - All pass (outputs only)
Compressors	One per output, with adjustable threshold, compression ratio, and attack/release times
Limiters	One per output, with adjustable threshold and release time
MIDI in/out/thru	Data dump/master-slave operation/remote control
Delay	3 master delays (2-900 ms) 4 channel delays (0-900 ms) Delay increment: 21 μsec
Data format	24-bit linear AD/DA conversion; 48-bit processing
Sample rate	48 kHz
Display	122 x 32 dots, graphic LCD display with LED backlight
Dimensions	1.72" (43.6 mm) x 19.0" (483 mm) x 14.8" (375 mm) w/d
Weight	11 lbs (5 kg)
Protection function	Password lock
Accessories (supplied)	RACE software (also free download from www.electrovoice.com) NRS 90243 RS-232 interface (installed)
Accessories (optional)	NRS 90247 RS-485 interface, DCN485 RS-232 to RS-485 converter NRS 90246 contact-closure interface NRS 90244 input transformer

Subject to change without prior notice.

PA20563



America

USA: Telex Communications Inc. 12000 Portland Ave South, Burnsville, MN 55337, USA, Phone: 952-884-4051, Fax: 952-884-0043
 Canada (East): Acoustik GE Inc. 5715 Kinocourt, Montréal, PQ H4W 1Y7, Canada, Phone: 866-369-2864, 514-369-2864, Fax: 514-487-9525
 Canada (Ontario): HEK Marketing Inc. 27 Fearn Crescent, Ajax, ON L1S 5L7, Canada, Phone: 800-494 6770, Fax 905-619-0366
 Canada (West): KMT Pro Audio, 04-301 Nassau Street North, Winnipeg, MB R3L-2J5, Canada, Phone: 888-850-8811, Fax: 204-489-7614
 Mexico: Telex de Mexico S.A. de C.V., Av. Parque Chapultepec 66-202, Col. El Parque, Edo. de Mexico, Phone: +52 (55) 5356-5434, Fax: +52 (55) 5356-5588
 Latin America: Telex Communications Inc. 12000 Portland Ave South, Burnsville, MN 55337, USA, Phone: 952-887-5532, Fax: 952-736-4212

Europe and Africa & Middle-East

Germany: Telex EVI Audio GmbH, Hirschberger Ring 45, D 94315, Straubing, Germany, Phone: +49 9421-706 0, Fax: +49 9421-706 265
 France: EVI Audio France S.A., Parc de Courcerin, Allée Lech Walesa, F 77185 Lognes, France, Phone: +33 1-6480-0090, Fax: +33 1-6006-5103
 UK: Telex Communications Ltd., 4, The Willows Centre, Willow Lane, Mitcham, Surrey CR4 4NX, UK, Phone: +44 208 646 7114, Fax: +44 208 640 7583
 Africa & Middle-East: Telex EVI Audio GmbH, Hirschberger Ring 45, D 94315, Straubing, Germany, Phone: +49 9421-706 0, Fax: +49 9421-706 265

Asia & Pacific Rim

Japan: EVI Audio Japan Ltd. 5-3-8 Funabashi, Setagaya-Ku, Tokyo, Japan 156-0055, Phone: +81 3-5316-5020, Fax: +81 3-5316-5031
 Australia: EVI Audio (Aust) Pty Ltd. Slough Business Estate, Unit 23, Silverwater, N.S.W. 2128, Australia, Phone: +61 2-9648-3455, Fax: +61 2-9648-5585
 China: Telex Communications Ltd., 4, The Willows Centre, Willow Lane, Mitcham, Surrey CR4 4NX, UK, Phone: +852 2351-3628, Fax: +852 2351-3329
 Singapore: Telex Pte. Ltd. 3015A Ubi Road 1, 05-10 Kampong Ubi Industrial Estate, Singapore 408705, Phone: +65 6746-8760, Fax: +65 6746-1206

Pro Audio Group • Telex Communications, Inc. • 12000 Portland Avenue South • Burnsville, Minnesota 55337 • USA
 Tel: 952-884-4051 • Fax: (USA) 952-884-0043 (INTL) 952-887-9212 • Web: www.electrovoice.com

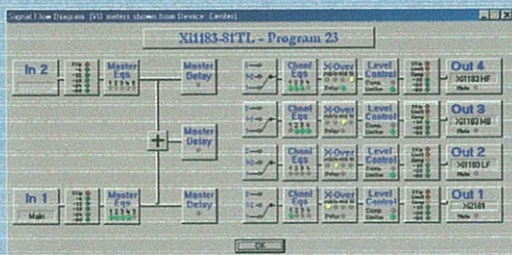
16



Dx38 — THE NEW STANDARD IN DIGITAL SOUND PROCESSING

EV's Dx38 digital sound system processor sets new standards for digital sound processing, with a dynamic range in excess of 115 dB, multiple filter functions, and exclusive **RACE** (Realtime Acoustic Cluster Editor) software.

Signal Flow Window



RACE's signal flow window provides a clear overview of all available parameters. Five master equalizers are available per input immediately after input metering. Each of these filters can be set as a hi- or lo-pass filter (6 dB/12 dB peak), as a hi- or lo-shelf filter (6/12 dB), or as a full parametric equalizer. A green LED symbol indicates whether each filter is activated.

The master delay allows each input or the sum of both inputs to be delayed separately up to 900ms. Fully flexible routing allows each input or the sum of both inputs to be routed to any of the four outputs. Each of the four filters per output provide the same filter functions as the master equalizers, as well as an all-pass filter for phase

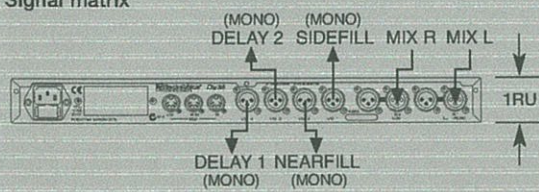
corrections. The crossover section provides a hi- or lo-pass filter for each channel and an output delay for alignment. The dynamics section provides independent compressors and limiters to ensure speaker protection.

The output meter display works like the whole editor in realtime. Level control and mute are available for each channel.

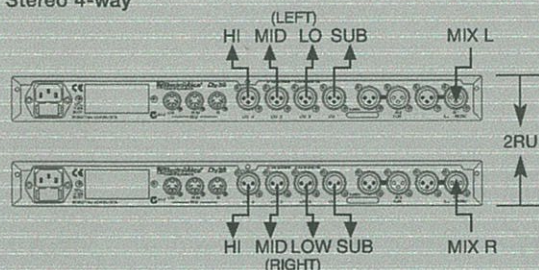
You don't need a PC to use the Dx38! The Dx38's parameters can all easily be edited on the front control panel. Once you try **RACE** software, however, you may never again want to work without it!

Applications

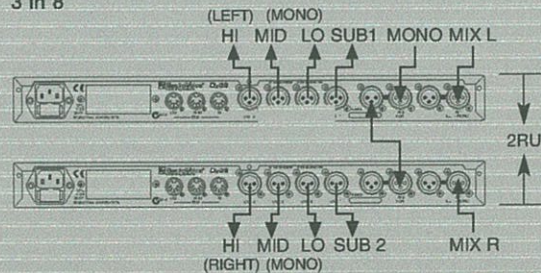
Signal matrix



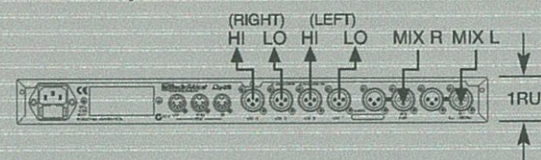
Stereo 4-way



3 in 8



Stereo 2-way



MIDAS VENICE SERIES PERFORMANCE SPECIFICATIONS

Features and Specifications	Venice 160	Venice 240	Venice 320
Inputs (total)	30	38	46
Mono-Inputs (Mic/Line) with Inserts	8	16	24
Stereo-Line/Mono-Mic-Input Channels	4/4	4/4	4/4
Stereo-Effect>Returns (Line)	4	4	4
Stereo-Tape-Return (Line)		1 left/right	
Busses		15	
Subgroups		4	
Aux Pre-Fader (Monitor)		2	
Aux Post-Fader (Effects)		2	
Aux switchable Pre/Post-Fader		2	
Master L/R		2	
Mono-PFL		1	
Stereo-AFL		2	
Outputs			
Subgroups (with Inserts)		4 impedanced balanced 1/4 inch jacks	
Aux Pre-Fader (Monitor)		2 XLR (balanced)	
Aux Post-Fader (Effects)		2 impedanced balanced 1/4 inch jacks	
Aux switchable Pre/Post-Fader		2 XLR (balanced)	
Master (with Inserts)		2 XLR (balanced)	
Master B Out		2 XLR (balanced)	
(switchable Mono/Stereo, pre-post Fader)			
Tape Send (Recording)		1 Stereo (Phono)	
Direct Outputs (1/4 inch Jack)	8	16	24
Stereo-Headphones		2 Stereo-1/4 inch jack	
Stereo-Speakers		2 impedanced balanced 1/4 inch jacks	
Additional Features			
Connector for desk lamps		2 x 12V/5W (4-Pin XLR)	
19" rack-mounting-kit,	yes	-	-
rotatable connector panel	yes	-	-
Accessories			
		Dust Cover (included)	
		12 V Desk Lamp (not included)	
		Input Transformer (not included)	
Technical Data			
Input Impedance			
Mic		2kΩ Balanced	
Line		20kΩ Balanced	
Input Gain			
Mic		Continuously variable 0dB to +60dB	
Line (Mono Channel)		Continuously variable -20dB to +40dB	
Line (Stereo Channel)		Continuously variable -10dB to +20dB	
Line Level Inputs		0dB	
Maximum Input Level			
Microphone and Line		+22dBu	
Line Level Inputs (Mono)		+42dBu	
Line Level Inputs (Stereo)		+22dBu	
CMR at 1kHz			
Mic (Gain +30dB)		> 80dB	
Line		> 40dB	
CMR at 100Hz			
Mic (Gain +30dB)		70dB typical	
Frequency Response (20Hz-20kHz)			
Mic to Mix (Gain +60dB)		+ 0dB to -1dB	
Noise (20Hz-20kHz)			
Mic EIN ref. 150Ω gain +60dB		-129dBu	
Mic EIN ref. 150Ω gain 0dB		-107dBu	
System Noise (20Hz-20kHz)			
Summing Noise (12 channels routed, faders down)		-90dBu	
Line to Mix Noise (12 channels routed at 0dB)		-84dBu	
Distortion at 1kHz			
Mic to Insert (+30dB Gain, +20dBu Output)		Typ 0.0007%	
Mic to Master (+30dB Gain, +20dBu Output)		< 0.009%	
Crosstalk at 1kHz			
Channel to Channel		< -80dB	
Mix to Mix		< -80dB	
Channel to Mix		< -80dB	
Fader Attenuation		> 100dB	
Switch Rejection		> 100dB	
Output Impedance			
Line Outputs		75Ω balanced	
Headphones		to drive 32Ω	
Maximum Output Level			
Master Outputs		+25dBu	
Line Outputs		+22dBu	
Headphones		+22dBu / 600Ω	
Nominal Signal Level			
Microphone		-60dBu to 0dBu	
Line		0dBu	
Equaliser Mono Channel			
Hi Pass Filter		2nd order Butterworth, 80Hz	
Treble		+/-15dB at 12kHz (Shelv)	
Hi Mid		Continuously variable 100Hz to 2kHz (1 Oct) +/-15dB	
Lo Mid		Continuously variable 400Hz to 8kHz (1 Oct) +/-15dB	
Bass		+/-15dB at 80Hz (Shelv)	
Equaliser Stereo Channel			
Treble		+/-15dB at 12kHz (Shelv)	
Hi Mid		3kHz (1.4 Oct) +/-15dB	
Lo Mid		300Hz (1.4 Oct) +/-15dB	
Bass		+/-15dB at 80Hz (Shelv)	
Size (mm/inch)			
Width	490 / 19.3"	698 / 27.5"	906 / 35.7"
Depth	568 / 22.4"	568 / 22.4"	568 / 22.4"
Height	194 / 7.6"	194 / 7.6"	194 / 7.6"
Weight (kg/lb)			
	16.4 / 36.2	21.1 / 46.5	25.8 / 56.9

18

Venice Crib Sheet

4* Mono

4* Stereo

<input type="checkbox"/> eq on	<input type="checkbox"/> eq on	<input type="checkbox"/> eq on	<input type="checkbox"/> eq on	<input type="checkbox"/> eq on	<input type="checkbox"/> eq on	<input type="checkbox"/> eq on	<input type="checkbox"/> eq on
<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute
<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo
input	input	input	input	stereo input	stereo input	stereo input	stereo input

Inputs _____ TO _____

NOTES

INPUT NUMBERS

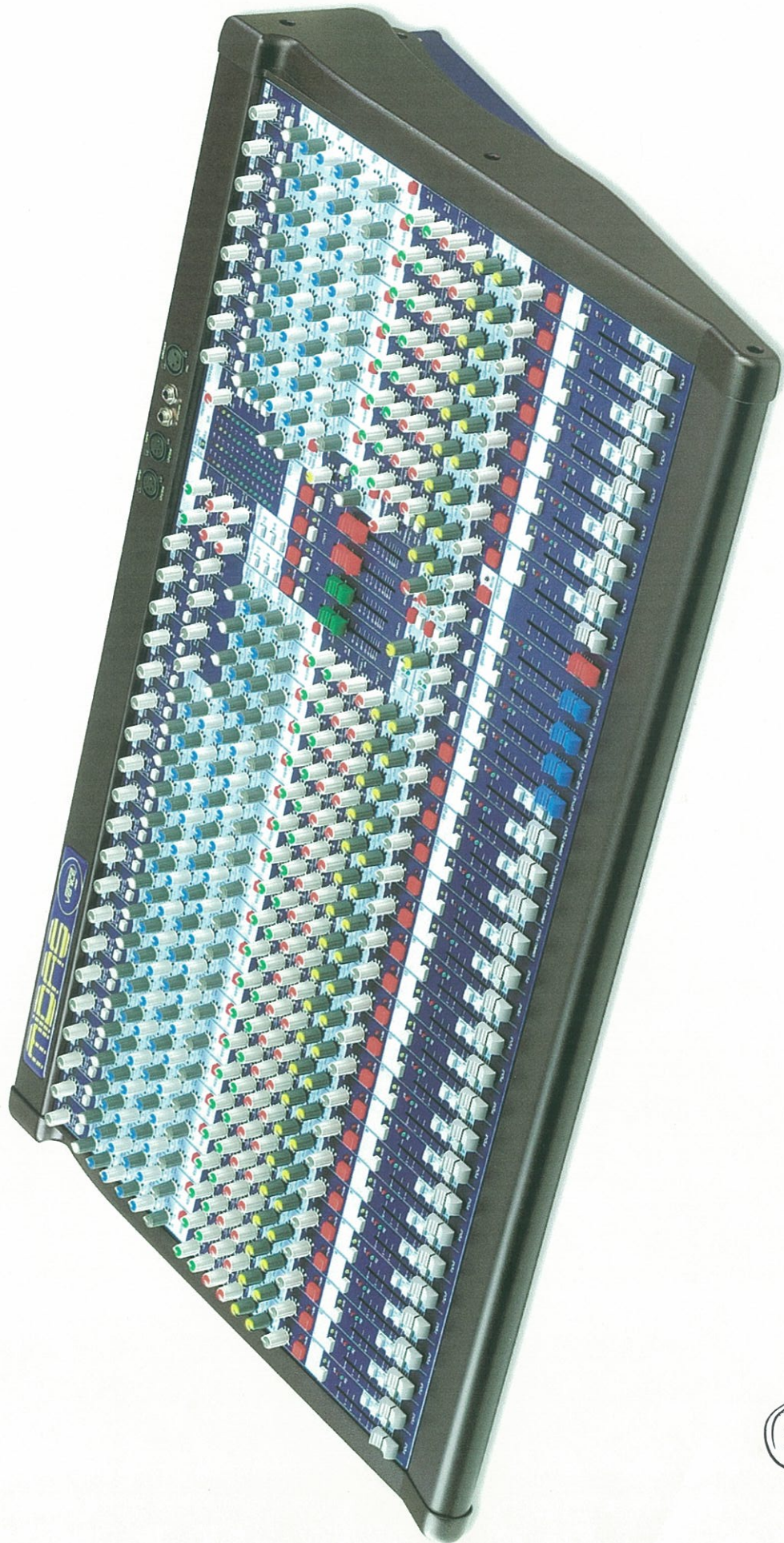
Venice Crib Sheet

eq on <input type="checkbox"/>	eq on <input type="checkbox"/>	eq on <input type="checkbox"/>	eq on <input type="checkbox"/>	eq on <input type="checkbox"/>	eq on <input type="checkbox"/>	eq on <input type="checkbox"/>	eq on <input type="checkbox"/>
<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute	<input type="checkbox"/> mute
<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo	<input type="checkbox"/> solo
input	input	input	input	input	input	input	input

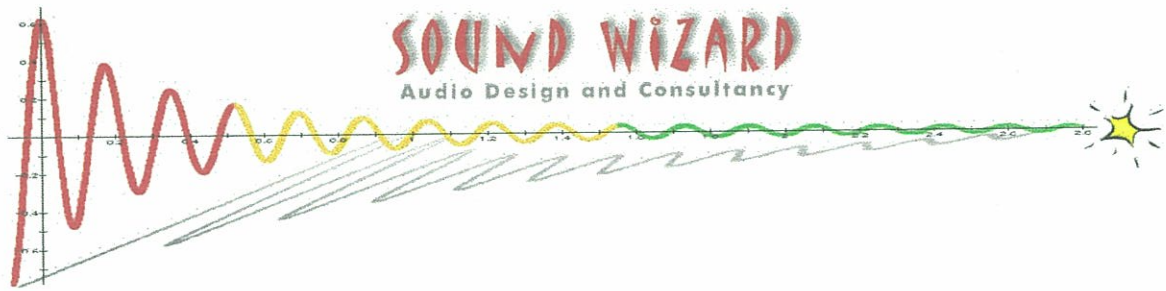
INPUTS
TO

NOTES

INPUT NUMBERS



(21)



MIXING AND PROCESSING



[Home](#)

[Products](#)

[News](#)

[Distribution](#)

[Support](#)

[Downloads](#)

[About us](#)

- Mobile Audio
- Concert Sound
- Permanent Installation
- Disco
- All Products
- Loudspeakers
- Loudspeaker- Systems
- Power Amplifiers
- Controller Amps
- CL Series
- LX Series
- LX 1600
- LX 2200
- LX 3000
- PowerH Series
- DPA Series
- PARAMUS
- Mixing Desks, Powered Mixers
- Controllers
- Software
- Matrix
- Message Manager
- Promatrix Power Supplies
- Promatrix Paging Stations
- Digital Control System
- Battery Modules / Chargers
- Archive
- Merchandising Shop

LX 3000

[Home](#) / [Products](#) / [All Products](#) / [Power Amplifiers](#) / [LX Series](#) / LX 3000

The new flagship of the LX series delivers a mighty 2 x 2100 watts into 2 ohms and 2 x 1500 watts into 4 ohms and therefore has plenty of headroom for large subwoofer arrays.

For decades, DYNACORD has been one of the leading manufacturers in the pro audio sector and has established a secure position in the amplifier market thanks to the excellent audio performance, absolute reliability and high stability of the Linear Precision series. With their outstanding operational security, which guarantees years of problem-free use, the amplifiers of the Linear Precision series are now the standard for a wide variety of full-range and multi-way loudspeakers systems in professional venues as diverse as theatres, stadiums, discotheques, clubs and concert halls.

Specifications

Load Impedance	2 Ω, 4 Ω, 8 Ω
Max. Midband Output Power, THD = 1%, 1kHz	2 Ω - 2100 W, 4 Ω - 1500 W, 8 Ω - 900 W
Rated Output Power, THD < 0.1%, 20Hz ... 20kHz	W, 4 Ω - 1200 W, 8 Ω - 900 W
Max. Single Channel Output Power, Dynamic Headroom, IHF-A	2 Ω - 2900 W, 4 Ω - 1800 W, 8 Ω - 1000 W
Max. Single Channel Output Power, Continuous, 1kHz	2 Ω - 2600 W, 4 Ω - 1700 W, 8 Ω - 950 W
Max. Bridged Output Power, THD = 1%, 1kHz	W, 4 Ω - 4200 W, 8 Ω - 3000 W
Maximum RMS Voltage Swing, THD = 1%, 1kHz	95 V
Power Bandwidth, ref. 1kHz, THD = 1%, half power @ 4 ohms	10Hz ... 60kHz
Voltage Gain, ref. 1kHz	32.0 dB
Input Sensitivity, rated power @ 8 ohms, 1kHz	+7.0 dBu (1.74 V rms)
THD at rated output power, MBW = 80kHz, 1kHz	< 0.05%
IMD-SMPTE, 60Hz, 7kHz	< 0.02%
DIM 30, 3,15kHz, 15kHz	< 0.05%
Maximum Input Level	+22 dBu (9.76 V rms)
Crosstalk, ref. 1kHz, at rated output power	< -80 dB
Frequency Response, ref 1kHz	15Hz ... 40kHz (-1dB)
Input Impedance, active balanced	20 kohms
Damping Factor, 1kHz	> 300
Slew Rate	38 V/μs
Signal to Noise Ratio, A-weighted	108 dB
Output Stage Topology	Class H
Power Requirements	100V, 120V, 220V, 230V, 240 V; 50Hz ... 60Hz (factory configured)
Power Consumption, 1/8 max. output power @ 4 ohms	1070 W
Protection	Audio Limiters, High Temperature, DC, HF, Back-EMF, Peak current Limiters Inrush Current Limiters, Turn-On delay
Cooling	Front-to rear, 3-stage fans
Ambient Temperature Limits	+5° ... +40° (40°F ... 105°F)
Safety Class	I
Dimensions (W x H x D) mm	483 x 88.1 x 384
Weight	8.70 kg (19.2 lbs)
Optional Accessories	Rear Rackmount 15.5" D112 930 (RMS15-CL), Rear Rackmount 18.0" D112 933 (RMS18-CL), LPN + Lo-Cut Filter D112963 (NRS 90268)

Downloads

[Manual \(2.2MB\)](#)

[PDF Data sheet \(289KB\)](#)

[PDF lx3000_3d \(1.7MB\)](#)

[JPG](#)

[Print data sheet for this product](#)

23

LX 2200

Switchmode Precision Power Amplifier

Technical Specifications

LX 2200

Load Impedance	2 ohms	4 ohms	8 ohms
Max. Midband Output Power THD = 1%, 1kHz	1600 W	1100 W	600 W
Rated Output Power THD < 0.1%, 20Hz ... 20kHz	---	900 W	450 W
Max. Single Channel Output Power Dynamic Headroom, IHF-A	2600 W	1400 W	720 W
Max. Single Channel Output Power Continuous, 1kHz	2100 W	1300 W	660 W
Max. Bridged Output Power THD = 1%, 1kHz	---	3200 W	2200 W
Maximum RMS Voltage Swing THD = 1%, 1kHz		78 V	
Power Bandwidth, ref. 1kHz THD = 1%, half power @ 4 ohms		10Hz ... 60kHz	
Voltage Gain, ref. 1kHz		32.0 dB	
Input Sensitivity rated power @ 8 ohms, 1kHz		+5.8 dBu (1.51 V rms)	
THD at rated output power MBW = 80kHz, 1kHz		< 0.05%	
IMD-SMPTE, 60Hz, 7kHz		< 0.02%	
DIM 30, 3,15kHz, 15kHz		< 0.05%	
Maximum Input Level		+22 dBu (9.76 V rms)	
Crosstalk ref. 1kHz, at rated output power		< -80 dB	
Frequency Response, ref 1kHz		15Hz ... 40kHz (-1dB)	
Input Impedance, active balanced		20 kohms	
Damping Factor, 1kHz		> 300	
Slew Rate		35 V/us	
Signal to Noise Ratio, A-weighted		107 dB	
Output Stage Topology		Class H	
Power Requirements	100V, 120V, 220V, 230V, 240 V;	50Hz ... 60Hz	(factory configured)
Power Consumption 1/8 max. output power @ 4 ohms, +10%		850 W	
Protection	Dynamic Audio Limiters, High Temperature, DC, HF, Back-EMF, Peak current Limiters Inrush Current Limiters, Turn-On delay		
Cooling	Front-to rear, 3-stage fans		
Ambient Temperature Limits	+5° ... +40° (40°F ... 105°F)		
Safety Class	I		
Dimensions (W x H x D) mm	483 x 88.1 x 386.8		
Weight	8.15 kg (18.0 lbs)		
Optional Accessory:			
Rear Rackmount 15.5"		112 930 (NRS 90262)	
Rear Rackmount 18.0"		112 933 (NRS 90 264)	

Amplifier at rated conditions, both channels driven, 8 ohms loads, unless otherwise specified

 **DYNACORD**

GERMANY

EVI Audio GmbH • Hirschberger Ring 45 • D-94315 Straubing
T: +49 (0) 9421 706 - 0 • F: +49 (0) 9421 706 - 265 • www.dynacord.com

FRANCE

EVI AUDIO FRANCE S.A. • Parc de Courcerin • Allée Lech Walesa • F-77185 Lognes
T: +33 (0) 1 - 64 80 00 90 • F: +33 (0) 1 - 60 06 51 03

UNITED KINGDOM

SHUTTLESOUND Ltd • 4 The Willows Centre • Willow Lane • Mitcham • Surrey CR4 4NX
T: +44 (0) 20 8254 5660 • F: +44 (0) 20 8254 5666 • www.shuttlesound.com

26

SPECIFICATIONS

S900

S1200

	8Ω	4Ω	2Ω	8Ω	4Ω	2Ω
Load Impedance	8Ω	4Ω	2Ω	8Ω	4Ω	2Ω
Maximum Midband Output Power, 1 kHz, THD=1%	280W	450W	650W	380W	600W	850W
Rated Output Power, 20 Hz ... 20 kHz, THD<0.2%	230W	350W	450W	300W	500W	650W
Max. Single Channel Output Power Dynamic-Headroom, IHF-A	340W	640W	720W	460W	880W	950W
Maximum Bridged Output Power 1 kHz, THD=1%	900W	1300W	-	1200W	1700W	-
Maximum RMS Voltage Swing 1 kHz, THD=1%	56 V			64 V		
Voltage Gain at 1 kHz	34 dB			35 dB		
Slew Rate	25 V/μs			30 V/μs		
Power Consumption at 1/8 maximum output power @ 4 Ω	550 W			750 W		
Input Sensitivity at rated output power @ 4 Ω, 1 kHz	0 dBu (775mV)					
THD at rated output power MBW=80kHz, 1 kHz	< 0.05%					
IMD-SMPTE, 60 Hz, 7 kHz	< 0.08%					
DIM 30 3.15 kHz, 15 kHz	< 0.03%					
Crosstalk ref. 1kHz, at rated output power	> -80 dB					
Frequency Response -1dB, ref. 1 kHz	13Hz ... 45kHz					
Power Bandwith THD=1%, ref. 1 kHz, half power @ 4 Ω	10Hz ... 50kHz					
Input Impedances 20Hz ... 20kHz, balanced	20kΩ					
Damping Factor at 100 Hz / 1 kHz	>300 / >200					
Signal to Noise Ratio A-weighted	103dB					
Power Requirements	230V, 50Hz ... 60Hz					
Safety Class	I					
Protection	Audio limiters, high temperature, DC, HF, Back-EMF, peak current limiters, inrush current limiters, turn-on delay, front-to-rear, 3-stage fans					
Dimensions (WxHxD), mm	483 x 132.5 x 385.5					
Weight	15kg			16kg		

Amplifier at rated conditions, both channels driven with 8Ω loads, unless otherwise specified.

25

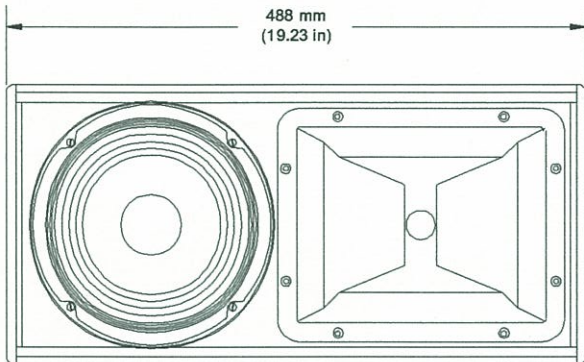


AMPLIFIERS

26

X-Array Install™ Xi-1082 Loudspeaker System

Figure 7 — Dimensions



Specifications

Axial Frequency Response (swept sine wave, 4 volts at 10 feet on axis, anechoic environment normalized for 1 watt/1 meter; see Figure 2):

50-20,000 Hz

Long-Term Average Power-Handling Capacity (per ANSI/EIA RS-426-A 1980; see Power-Handling Capacity section):

175 watts

Sensitivity (SPL at 1 m, 1 W into nominal impedance, anechoic environment, band-limited pink-noise signal, 100-15,000 Hz):

90 dB

Beamwidth (angle included by 6-dB-down points on polar responses, horizontal and vertical planes, indicated one-third-octave bands of pink noise; see Figures 1 and 3),

3,150-16,000 Hz,

Horizontal:

90° +10°/-16°

Vertical:

40° +18°/-0°

Directivity Factor, R_0 (Q), 2,000- to 20,000-Hz Median (see Figure 4):

13.2 (+6.5, -6.1)

Directivity Index, D_p , 2,000- to 20,000-Hz Median (see Figure 4):

11.2 dB (+1.8 dB, -2.7 dB)

Transducer Complement,

Low-Frequency:

8-inch woofer

High-Frequency:

DH3 Compression driver on HP94 Horn

Box Tuning Frequency:

55 Hz

Crossover Frequency:

3,500 Hz

Crossover Slope:

12 dB

Impedance,

Nominal:

8 ohms

Minimum:

5.8 ohms

Input Connections:

Single barrier strip with screw terminals

Enclosure Materials:

Plywood with removable grille

Finish:

Black textured paint

Grille:

Black powder-coated steel backed with foam

Suspension: See suspending the Xi-1082 section

Dimensions,

Height:

488 mm (19.23 in.)

Width:

235 mm (9.25 in.) (front)

150 mm (5.9 in.) (back)

Depth:

285 mm (11.23 in.)

Net Weight:

13.3 kg (28 lb)

Shipping Weight:

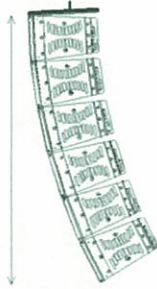
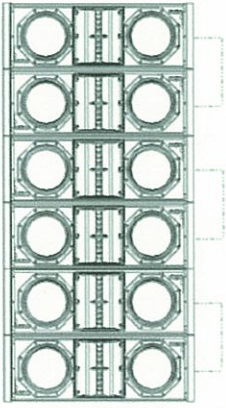
14.1 kg (31 lb)

Optional Accessories:

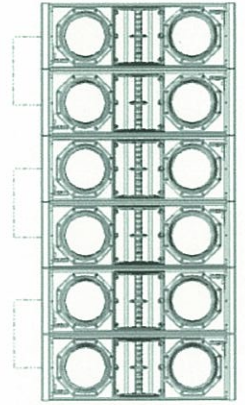
Mb1082 wall/ceiling mounting bracket kit; OmniMount® Series 100 mounting hardware

27

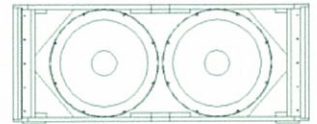
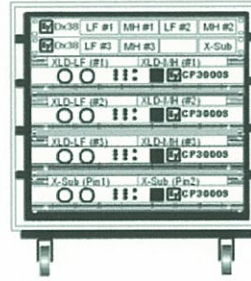
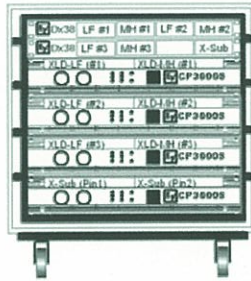
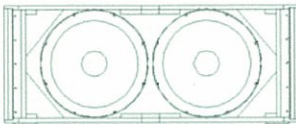
System Applications: 6 XLD-Biamp (3 Segments) - Very-Compact for Small to Medium Venues



Max. Height
1.5 m (5 ft)



Array Segmentation
might vary by venue



Cabinets: 12 x XLD 281, 2 x X-Sub

Amplifiers: 8 x CP 3000S

Controllers: 4 x DX38

Cabling: 6 x NL8 long, 10 x NL8 short

Horizontal Coverage 2 x 120 deg

Typical: Distance 117dB SPL @ 40 m (130ft)

Total Amp: Power 2 x 6.400 W = 12.800 W

Accessories: 4 x XLD Grid, 2 x Coupler-Beam, 3 x XLD Dolly

3 contol segments for optimized array control. Optional drive: 6 x P1200RL & 2 x P3000RL, or 6 x CP2200 & 2 x CP3000RL.
For subbass extension add 2 X-Subs.

28

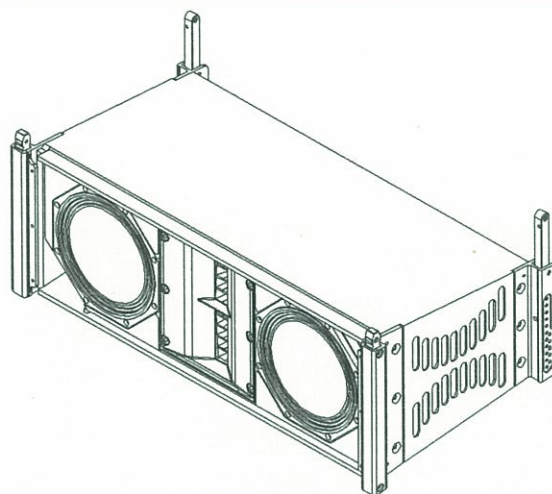


XLD281
3-Way, High-Output,
Very Compact
Line-Array Element



Key Features:

- Very Compact, Lightweight
- CCT™ (Coverage Control Technology)
- Simple, Quick Integrated Rigging
- 120° Horizontal Coverage to 250 Hz
- Versatile Subwoofer Integration
- Bi-Amp or Tri-Amp Operation
- Neodymium Transducers
- LAPS Aiming and Flying Software



General Description:

EV engineers have defined a new group of Very Compact line array elements, XLVC. It is comprised of the models; XLD281 full range, XLE181 full range, and the XS212 sub woofer. The XLD281 is a 3-way design using CCT (Coverage Control Technology) to control horizontal coverage to 250 Hz. It uses a 8" neodymium LF transducer, a 8" neodymium LF/MB transducer, and two neodymium 2" voice coil compression drivers combining through 2 hydra plane wave generators into a 120° x 10° waveguide. CCT uses both 8" transducers to provide maximum low frequency output and operating bandwidth while controlling horizontal beam width to 250 Hz by using DSP. The XLD281 can be used in tri-amp mode, or in bi-amp using a sophisticated internal passive network. Designed for use in arrays of four or more elements the XLD281 delivers full bandwidth audio with precise, predictable coverage control. Integrated rigging with hinge points located correctly between array elements is simple to use and quickly provides uncompromised line array performance. Ground stacking is easily done using Array Rails or subwoofers as the array base.

Most applications using flown very compact elements require subwoofers integrated into the same array as the full range systems. XLVC provides two methods to conveniently do this. The XS212 sub woofer module has the same rigging foot print as the XLD281 allowing it to be directly arrayed above, or below XLD281 full range systems. Where vertical space is limited sub woofer arrays can be created and flown behind the XLD281 full range array using an additional grid and a Coupler Beam. LAPS modeling software quickly provides array configurations and rigging information.

XLVC delivers unprecedented performance in applications ranging from live reinforcement to performing arts venues, to houses of worship.

Technical Specifications:

Freq. Response ¹ (-3 dB):	75 Hz-18 kHz
Freq. Range ¹ (-10 dB):	60 Hz-20 kHz
Max Calculated SPL ¹ :	135 dB Cont., 141 dB Pk
Horizontal Coverage:	120°
Vertical Coverage:	Array Dependant, Software Definable
Rigging:	Fully Captive Aluminum, 1° increments, 16 elements with 8 to 1 Safety Factor
LF1 Power Handling:	200W Cont., 800W Peak
LF2 Power Handling:	200W Cont., 800W Peak
HF Power Handling:	80W Cont., 320W Peak
Biamp LF1/HF Power Handling:	400W Cont., 1600W Peak LF2 - 200W Cont., 800W Peak
Sensitivity ¹ :	112 dB
Bandpass Freq ² :	50 - 250 Hz
LF1 to HF Crossover Freq ² :	1600 Hz
LF1 Passband:	1 x 8" DVN2080, 16 ohms
Recommended Amplifier:	EV CP3000S
LF2 Passband:	1 x 8" DVN2080, 16 ohms,
Recommended Amplifier:	EV CP3000S
HF Passband:	2 x ND2S, 16 ohms
Recommended Amplifier:	EV CP3000S
Biamp LF1/HF Passband:	16 ohms,
Recommended Amplifier:	EV CP3000S
Connectors:	2 x NL8
Enclosure Material:	Birch plywood w/EVCoat™
Grille:	Zinc plated steel with powdercoat paint
Environmental Spec:	IEC 529 IP24, MIL 810
Dim (HxWxD):	9.90" x 28.58" x 14.52" (251 x 726 x 369 mm)
Net Weight:	48 lbs (21.8 kg)
Shipping Weight:	51 lbs (23.1 kg)

¹ Full Space Measurement of 4 Elements.

² Use EV or KT Signal Processing or Download Presets from Electro-Voice Website.

EV Electro-Voice®

29

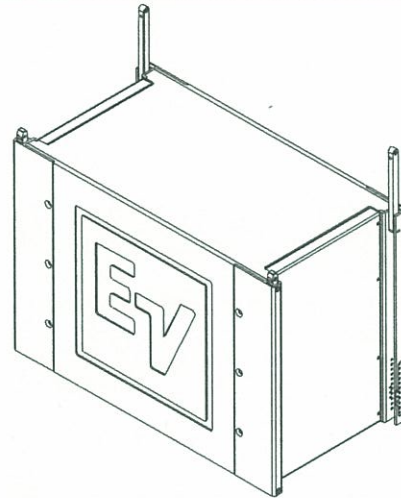


XS212
Dual 12" Side-Firing
Very Compact
Line-Array Bass Element



Key Features:

- Dual DVX3120 12" Transducers
- 136 dB, 1000W Continuous
- Very Compact, Lightweight
- Simple, Quick Integrated Rigging
- Versatile Integration in Main Arrays
- LAPS Aiming and Flying Software



General Description:

EV engineers have defined a new group of Very Compact line array elements, XLVC. It is comprised of the models; XLD281 full range, XLE181 full range, and the XS212 sub woofer. The XS212 is designed for high-level low frequency extension to 42 Hz. It uses two new generation DVX 3120 forced air-cooled 12" transducers capable of long, linear excursion and high power. A unique configuration allows side firing transducers to match the XLD281's horizontal coverage and provide smaller arrays. XS212 are designed to be used with a ratio of four XLD281 full range systems for each XS212 sub woofer.

Most applications using flown very compact elements require subwoofers integrated into the same array as the full range systems. XLVC provides two methods to conveniently do this. The XS212 sub woofer module has the same rigging foot print as the XLD281 allowing it to be directly arrayed above, or below XLD281 full range systems. Where vertical space is limited sub woofer arrays can be created and flown behind the XLD281 full range array using an additional grid and a Coupler Beam. LAPS modeling software quickly provides array configurations and rigging information. XS212 sub woofers can also be used as the base for ground stack applications.

XLVC delivers unprecedented performance in applications ranging from live reinforcement to performing arts venues, to houses of worship.

Technical Specifications:

Freq. Response ¹ (-3 dB):	52 Hz
Freq. Range ¹ (-10 dB):	42 Hz
Max Calculated SPL ¹ :	130 dB Cont., 136 dB Pk
Vertical Coverage:	Array Dependant, Software Definable
Rigging:	Fully Captive Aluminum, 1° increments, 16 elements with 8 to 1 Safety Factor
Power Handling:	1000W Cont., 4000W Peak
Sensitivity ¹ :	100 dB
Highpass Freq ¹ :	40 Hz
Recommended Crossover Freq ¹ :	100 Hz
LF Passband:	2 x 12" DVX3120, 4 ohms
Recommended Amplifier:	EV CP3000S
Connectors:	2 x NL8
Enclosure Material:	Birch plywood w/Futura
Grille:	Zinc plated steel with powdercoat paint
Environmental Spec:	IEC 529 IP24, MIL 810
Dim (HxWxD):	20.00" x 28.58" x 14.90" (508 x 726 x 378 mm)
Net Weight:	85 lbs (38.5 kg)
Shipping Weight:	90 lbs (40.8 kg)

¹ Half Space Measurement.



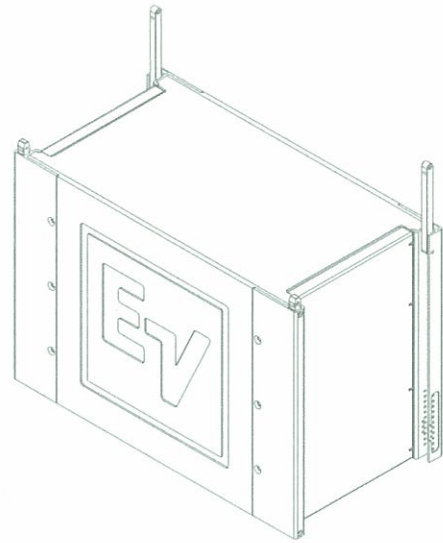
X-Line Very Compact - System Components

XS212

**double 12" side-firing
bass cabinet**

■ The XS212 is a double 12-inch bass cabinet featuring two of the new DVX3120 woofers. A unique configuration allows side firing transducers to match the XLD281 horizontal coverage and match the rigging footprint. That allows to either use the XS212 above or below arrays of XLD281 or, if vertical space is limited to be flown behind the full range array.

Depending on music style and taste the ratio of XLD to XS212 is 3 or 4 to 1. Ground stacked one XS212 has the same heights as two XLD281 which is convenient for transportation.



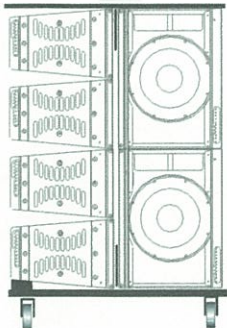
DVX3120 New Generation Woofer

■ EV® is one of the very few loudspeaker manufacturers that has a long experience, heritage and capability for designing and building their own transducers. The DVX3120 is the latest model from the brand new DVX-Series. Forced-Air-Voice-Coil-Cooling provides very low power compression for very high SPL capability, low distortion and reliability.

- 2 x 12" DVX3120 Woofer
- Same Footprint & Compatible Rigging to XLD281

XLD Bottom Dolly for convenient Transportation

■ The XLD bottom is suitable for two stacks of either XLD281 or XS212. A top cover and allows for additional stacking of other material on the top. The footprint of the Dolly is 80cm (32 inch) by 85 cm (33.4 inch) to match truck space by using three wide.



Technical Specifications

Freq. Response ¹ (-3 dB):	52 Hz
Freq. Range ¹ (-10 dB):	42 Hz
Max Calculated SPL ¹ :	130 dB Cont., 136 dB Pk
Vertical Coverage:	Array Dependant, Software Definable
Rigging:	Fully Captive Aluminum, 1° increments, 16 elements with 8 to 1 Safety Factor
Power Handling:	1000W Cont., 4000W Peak
Sensitivity ¹ :	100 dB
Highpass Freq ¹ :	40 Hz
Recommended Crossover Freq ¹ :	100 Hz
LF Passband:	2 x 12" DVX3120, 4 ohms
Recommended Amplifier:	EV CP3000S
Connectors:	2 x NL8
Enclosure Material:	Birch plywood w/Futura
Grille:	Zinc plated steel with powdercoat paint
Environmental Spec:	IEC 529 IP24, MIL 810
Dim (HxWxD):	20.00" x 28.58" x 14.90" (508 x 726 x 378 mm)
Net Weight:	85 lbs (38.5 kg)
Shipping Weight:	90 lbs (40.8 kg)

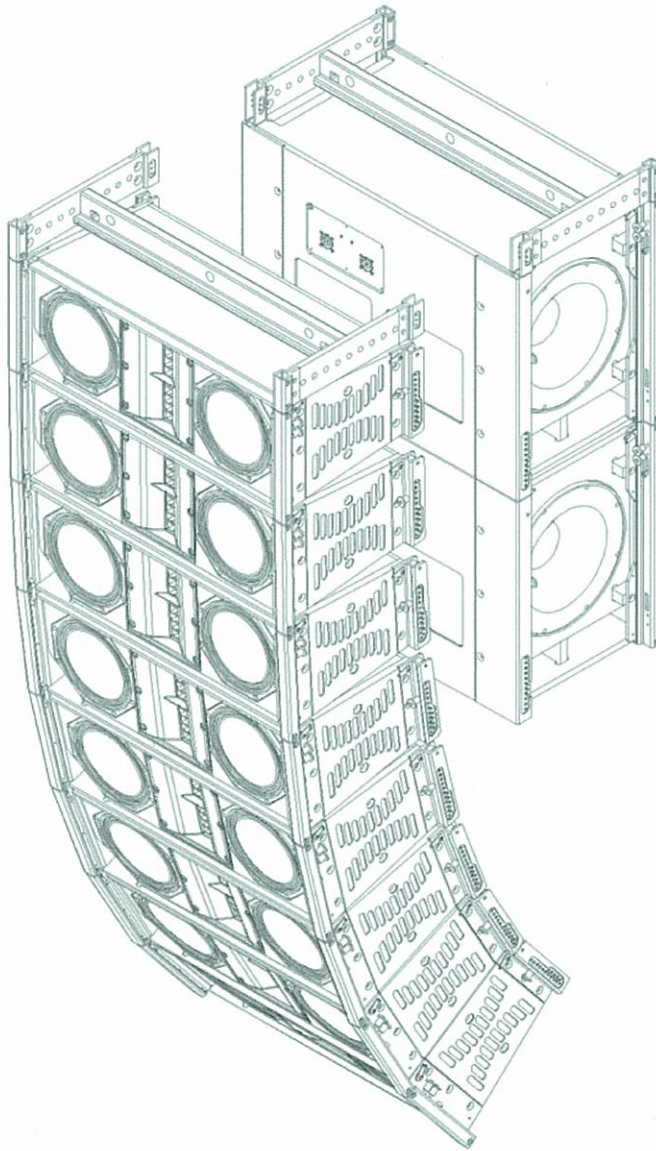
¹ Half Space Measurement.

EV Electro-Voice®

(31)

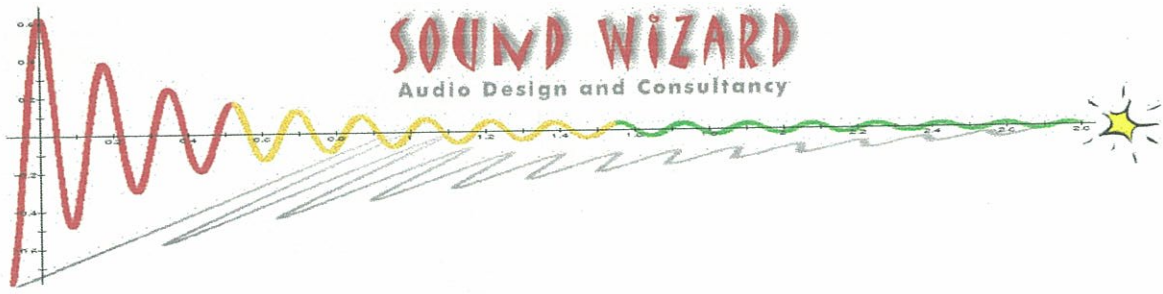


*THE COMPACT HIGH PERFORMANCE SOLUTION
FOR MOBILE AND INSTALLED APPLICATIONS*

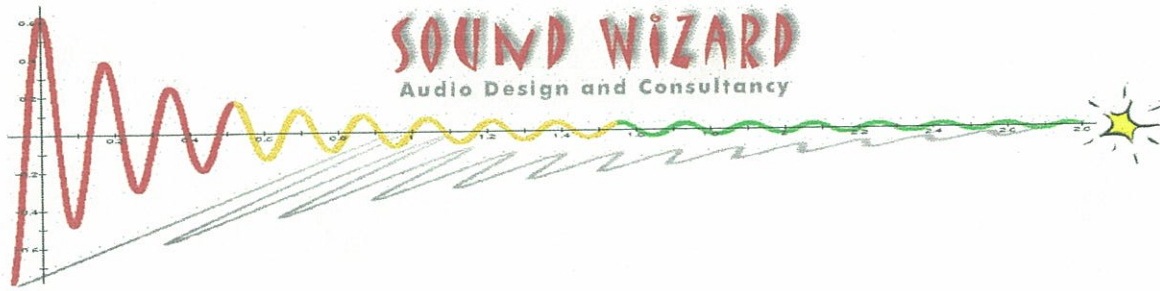


EY **Electro-Voice®**

52



MAIN FOH SYSTEM



KALAKSHETRA AUDITORIUM AUDIO EQUIPMENT SELECTION

SEPT 10th, 2007

PROVIDER = KALAKSHETRA			
TYPE	Model No.	ITEM DESCRIPTION	QTY
Mix	ELECTRICITY	40 TO 50MTR CABLE FOR POWERING THE MIXING CONSOLE AND ITS RACK, NEEDED ONLY IF NO PLUGS AVAILABLE @ MIX LOCATION OR IN CASE THE PLUG AVAILABLE IS ON ANOTHER PHASE	1
FOH	ELECTRICITY	30 AMPS NEEDED FOR FOH RACK (FF INCLUDED) 1x32A BREAKER + 2 DISTRIBUTION SOCKETS	1
Mon	ELECTRICITY	4 AMPS NEEDED FOR MON RACK (WITHOUT THE 4 POWERED ON-STAGE SPEAKERS), 1x16A BREAKER + 1 DISTRIBUTION SOCKET	1
Mix	ELECTRICITY	4 AMPS NEEDED FOR MIX RACK , 1x16A BREAKER + 2 DISTRIBUTION SOCKETS	1
FOH	ELECTRICITY	30 AMPS NEEDED FOR FOH RACK RIGHT BREAKER + 2 DISTRIBUTION SOCKETS	1

35

PROVIDER = PRESIDENT			
		<p>APW President 144 Maalavika Center / (basement) / Kodambakkam High Road 600 034 Chennai, Tamil Nadu Line 1: (44) 28 25 10 08 Line 2: (44) 28 21 75 06 Line 3: (44) 28 20 60 26 Fax: (44) 28 25 10 08 Email 1: krishna@apwpresident.com</p>	
	By SOUND WIZARD		
TYPE	Model No.	ITEM DESCRIPTION	QTY
Mon	EASIBOX 15U	Fly Case for monitor racks, 15U WITH CASTOR WHEELS AND HANDLES	1
FOH	EASIBOX 15U	Fly case for FOH LEFT and FF amps and processors racking, 15U WITH CASTOR WHEELS AND HANDLES	1
FOH	EASIBOX 15U	Fly case for FOH RIGHT and processors racking, 15 U WITH CASTOR WHEELS AND HANDLES	1
Mix	EASIBOX 15U	Fly Case for MIX racks, 15U WITH CASTOR WHEELS AND HANDLES	1

PROVIDER = STUDIO CARE			
	By SOUND WIZARD	Studio Care #58, Warren Road / Flat no.4 / Rajeswari Apts / Mylapore 600 004 Chennai, Tamil Nadu Line 1: (44) 42 04 94 36 studiocare@vsnl.net	
TYPE	Model No.	ITEM DESCRIPTION	QTY
Mon	SPEAKON MAIN CABLES	NL4 SPEAKON CABLES	2
Mon	SPEAKON LINK CABLES	NL4 SPEAKON CABLES	2
Mon	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	4
GR	XLR CABLES	XLR (F) TO XLR (M) SYMM. CABLES FOR GREEN ROOMS ACTIVE SPEAKERS, 20 MTR	1
GR	XLR CABLES	XLR (F) TO XLR (M) SYMM. CABLES FOR GREEN ROOMS ACTIVE SPEAKERS, 40 MTR	1
FF	LINK CABLES	BARE ENDS LINK CABLES FOR SPEAKERS, 8 MTR	2
FOH	MAIN INPUT SNAKE	Snake cable 32 ins, LENGHT= 50m splice at one end, harting or soca at other end (SEE SCHEMATIC)	1
FOH	MAIN OUTPUT SNAKE	Snake cable 8 OUTS, LENGHT= 50m splice at both ends + internal connection to harting or soca located in FOH RACK LEFT (SEE SCHEMATIC)	1
FOH	MONITOR RACK SNAKE	Snake cable 4 outs length according to the position of monitor rack, splice at one end, harting or soca at other end (SEE SCHEMATIC)	1
Mix	INSERT CABLES	ONE 6.35 STEREO JACK (M) TO 2 XLR (M/F), 6MTR	8
Mix	TASCAM CD01U PRO	CD PLAYER, STEREO, RACKMOUNT TYPE WITH AUTOEUE	1
Mix	TASCAM322	DOUBLE CASSETTE PLAYER AND RECORDER, RACKMOUNT TYPE	1
FOH	SPEAKON MAIN CABLES	NL8 TO NL4 SPEAKON CABLES, FOR BASS CABINETS	2
FOH	ON-STAGE SPLITBOX	1 IN / 2 OUTS REMOTE CONTROL AND SWITCHING BOX FOR LINE ARRAY 3 WAY SPEAKERS	1
FOH	SPEAKON MAIN CABLES	NL8 Y TYPE SPEAKON CABLES, ONE END SPLITTED 3xNL4 FITTED FOR LO/MID/HI SEPARATION, 1MTR	2
FF	SPEAKON CABLES	NL4 SPEAKON TO BARE END CABLE	2
Mon	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR ACTIVE MONITORS INPUT WIRING, 18 METER	2
FOH	RELAY SWITCHBOX	REMOTE CONTROL AND SWITCHING BOX FOR LINE ARRAY 3 WAY SPEAKERS	2
FOH	SPEAKON LINK CABLES	NL8 SPEAKON CABLES, 1 METER	6
FOH	SPEAKON LINK CABLES	NL8 TO NL8 SPEAKON FROM RELAY SWITCH BOX TOWARDS XLD281 CABINETS	4
INTERCOM	CABLE	SHIELDED CABLE FOR INTERCOM CONNEXION 100MTR + XLR PLUGS	1

(37)

PROVIDER = PRO MUSICALS			
	By SOUND WIZARD	Sudhin Prabhakar Pro Musicals 25, Casa Major Road / Egmore 600 008 Chennai, Tamil Nadu Line 1: (44) 28 19 36 07 Fax: (44) 28 19 38 23 Email 1: promusic@vsnl.com	
TYPE	Model No.	ITEM DESCRIPTION	QTY
FOH	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	12
FOH	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR FOH RACK	1
GR	M AUDIO SP3	STUDIO PRO 3 M AUDIO PAIR OF ACTIVE SPEAKERS FOR GREEN ROOMS	2
INST	SPARE CABLES	6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	4
MICS	MB1	SAMSON MB1 MIC STANDS SHORT BOOMS	8
MICS	MC18	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 6 METERS PACK OF 3 CABLES	18
MICS	BT4	SAMSON BT4 MIC STANDS LONG BOOMS	12
MICS	SB100	SAMSON SB100 MIC STANDS BIG STUDIO BOOMS	2
Mix	HF MICS CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	10
Mix	NEUTRIK ADAPTERS	RCA (F) TO 6.35 JACK (M) ADAPTERS	4
Mix	SPARE CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	4
Mix	XLR CABLES	RCA (M) TO 6.35 JACK ASYM. CABLES FOR CD CONNECTION, 6 MTRS	2
Mix	XLR CABLES	6.35 JACK (M) TO XLR ASYM. CABLES FOR SOURCE CONNECTION, 6 MTRS	2
Mix	SPARE CABLES	6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	2
Mix	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR MIX RACK	1
Mix	CH700	HEADPHONES	2
Mix	REV 2496	V-VERB PRO REV2496 dual engine (4ch) Behringer	1
Mon	SAMSON D3500	FEEDBACK SUPPRESSORS	2
Mon	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR FOH RACK	1
FF	SAMSON D3500 EQ	FEEDBACK SUPPRESSOR	1

28

PROVIDER = BOSCH			
	By SOUND WIZARD	Bosch / EVI Audio India Pvt Ltd No. 82 / 83, Borewell Road / Whitefields 560 066 Bengalooru, Karnataka Line 1: (80) 28 45 66 90	
TYPE	Model No.	ITEM DESCRIPTION	QTY
INTERCOM	PH1	INTERCOM HEADSETS	5
INTERCOM	BP319	TELEX WIRED INTERCOM BELTPACKS	5
INTERCOM	TW5W	INTERCOM SPLITTER	1
INTERCOM	PS15	TELEX WIRED INTERCOM POWER SUPPLY	1
INTERCOM	PH1	1 SPARE INTERCOM HEADSET	1
FRONT FILLS	Dynacord S1200	2 x 600 watts @ 4 ohms, High-Efficiency, Power amplifier	1
FRONT FILLS	EV Xi 1082	8-inch two-way, 90° x 40° in horizontal underbalcony format, flying, black FOR FRONT FILLS	4
FOH	EV XLD Grid	Grid for up to 16 XLD cabinets or 8 XS212 cabinets, aluminium, black + ACCESSORIES	2
FOH	EV DX38	2-in4 digital loudspeaker processor with x-over, EQ, delay, compressor/limiter, front-panel display, PC Remote software (RACE)	2
FOH	EV XLD 281	Very Compact line-array cabinet, 2 X 8" DVN2080, 2 X ND2, 120° x 10°, black	10
FOH	Dynacord LX 2200	2 x 1100 watts @ 4 ohms, High-Efficiency, Class-H, SMPS for medium speakers	2
FOH	Dynacord LX 3000	2 x 1500 watts @ 4 ohms, High-Efficiency, Class-H, SMPS for bass cabinets	2
FOH	EV XS 212	X-Line Very Compact Bass Cabinet, 2x DVX3120, 1000 watts, black	2
MICS	EV ND 468	N/DYM® dynamic supercardioid instrument microphone	3
MICS	EV ND 868	N/DYM® dynamic cardioid variant bass drum microphone	2
MICS	EV RE 92L	Premium lapel microphone, cardioid.	3
MICS	EV RE2 BP	Bodypack system includes: BPU-2 transmitter, and a RE-2 Receiver, no microphone in a hard shell road case.	4
MICS	KT DN 100	Roadworthy active direct injection box	3
MICS	EV RE200	Probe-style true condenser cardioid instrument microphone	2
MICS	EV PC 18"	Multi-pattern gooseneck microphone with mic switch and universal base, 18-inch gooseneck	3
MICS	EV RE97 TX	MiniMic Omnidirectional Low Profile Headworn microphone in light beige color with TA4F connector	4
MICS	EV RE90B	Boundary condenser microphone, Black	3
MICS	EV ND 767a	N/DYM® dynamic supercardioid lead vocal microphone	3
MICS	EV RE510	Handheld system includes: HTU2C-510 transmitter featuring the RE510 super cardioid Condenser element, and RE-2 diversity receiver.	2
MICS	EV RE2 N7	Handheld system includes: HTU2D-767a transmitter featuring the N/D 767a supercardioid dynamic element, and RE-2 diversity receiver all in a hard shell road case.	4
MIXING	KT DN 370	Dual 1/3 octave analogue GEQ with hi/lo pass and notch filters	1
MIXING	KT DN 504	Four channel / dual stereo compressor / limiter	2
MIXING	Midas Venice 320	28 Mono-, 4 Stereo-Line-Inputs Mixing console	1
MIXING	12V Desk Lamp	LITTLITE GOOSENECK TYPE	2
MONITORS	EV Sxa 360	Powered (100-120V), 12-inch two-way, 350+150W, 65° x 65°, line-level in/out, stand mount, black polypropylene, incl. 15ft (5m) power cord	4
MONITORS	KT DN 370	Dual 1/3 octave analogue GEQ with hi/lo pass and notch filters	1
MONITORS	EV Fri 28 lpm	Dual 8-inch, two-way, low profile, passive, 100° x 100° full range loudspeaker, 200-watt, 93dB 1w@1m, with non-skid rubber feet, Speakon® connectors, black (no bracket)	4
MONITORS	Dynacord S 900	2 x 450 watts @ 4 ohms, High-Efficiency Power amplifier for passive wedges	1



LISTS PER SUPPLIER

SOUND WIZARD - ACOUSTICAL DESIGN AND AV SYSTEMS CONSULTANCY
Shakti, Auroville - 605 101, Tamil Nadu, India / Tel: 0413 262 26 59 Fax: 262 34 10
Email: info@soundwizard.net Web site: www.soundwizard.net
TNGST: 4720858/95-96/ dt 1-4-93 CST: 399042/ dt 23-4-93

(Go)

By **SOUND WIZARD****ITEMS LIST CONT**

MIXING	ELECTRICITY	4 AMPS NEEDED FOR MIX RACK , 1x16A BREAKER + 2 DISTRIBUTION SOCKETS	1	KALAKSHETRA
MIXING	ELECTRICITY	40 TO 50MTR CABLE FOR POWERING THE MIXING CONSOLE AND ITS RACK	1	KALAKSHETRA
INTERCOM	PS15	TELEX WIRED INTERCOM POWER SUPPLY	1	BOSCH
INTERCOM	TW5W	INTERCOM SPLITTER	1	BOSCH
INTERCOM	BP319	TELEX WIRED INTERCOM BELTPACKS	5	BOSCH
INTERCOM	PH1	INTERCOM HEADSETS	5	BOSCH
INTERCOM	PH1	1 SPARE INTERCOM HEADSET	1	BOSCH
INTERCOM	CABLE	SHIELDED CABLE FOR INTERCOM CONNEXION 100MTR + XLR PLUGS	1	STUDIO CARE
MICROPHONES	EV ND 767a	N/DYM® dynamic supercardioid lead vocal microphone	3	BOSCH
MICROPHONES	EV RE510	Handheld system includes: HTU2C-510 transmitter featuring the RE510 super cardioid Condenser element, and RE-2 diversity receiver.	2	BOSCH
MICROPHONES	EV RE200	Probe-style true condenser cardioid instrument microphone	2	BOSCH
MICROPHONES	EV ND 468	N/DYM® dynamic supercardioid instrument microphone	3	BOSCH
MICROPHONES	EV ND 868	N/DYM® dynamic cardioid variant bass drum microphone	2	BOSCH
MICROPHONES	EV RE90B	Boundary condenser microphone, Black	3	BOSCH
MICROPHONES	EV RE 92L	Premium lapel microphone, cardioid.	3	BOSCH
MICROPHONES	KT DN 100	Roadworthy active direct injection box	3	BOSCH
MICROPHONES	EV RE2 N7	Handheld system includes: HTU2D-767a transmitter featuring the N/D 767a supercardioid dynamic element, and RE-2 diversity receiver all in a hard shell road case.	4	BOSCH
MICROPHONES	EV PC 18"	Multi-pattern gooseneck microphone with mic switch and universal base. 18-inch gooseneck	3	BOSCH
MICROPHONES	EV RE97 TX	MiniMic Omnidirectional Low Profile Headworn microphone in light beige color with TA4F connector	4	BOSCH
MICROPHONES	EV RE2 BP	Bodypack system includes: BPU-2 transmitter, and a RE-2 Receiver, no microphone in a hard shell road case.	4	BOSCH
MICROPHONES	MC18	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 6 METERS PACK OF 3 CABLES	18	PRO MUSICALS
MICROPHONES	BT4	SAMSON BT4 MIC STANDS LONG BOOMS	12	PRO MUSICALS
MICROPHONES	MB1	SAMSON MB1 MIC STANDS SHORT BOOMS	8	PRO MUSICALS
MICROPHONES	SB100	SAMSON SB100 MIC STANDS BIG STUDIO BOOMS	2	PRO MUSICALS
MICROPHONES	SPARE CABLES	6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	4	PRO MUSICALS
GREEN ROOMS	M AUDIO SP3	STUDIO PRO 3 M AUDIO PAIR OF ACTIVE SPEAKERS FOR GREEN ROOMS	2	PRO MUSICALS
GREEN ROOMS	XLR CABLES	XLR (F) TO XLR (M) SYMM. CABLES FOR GREEN ROOMS ACTIVE SPEAKERS, 40 MTR	1	STUDIO CARE
GREEN ROOMS	XLR CABLES	XLR (F) TO XLR (M) SYMM. CABLES FOR GREEN ROOMS ACTIVE SPEAKERS, 20 MTR	1	STUDIO CARE

(41)

By **SOUND WIZARD**

ITEMS LIST CONT

TYPE	Model No.	ITEM DESCRIPTION	QTY	PROVIDER
MONITORS	EASIBOX 15U REF 31-E415-F	Fly Case for monitor racks, 15U WITH CASTOR WHEELS AND HANDLES	1	PRESIDENT
MONITORS	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR FOH RACK	1	PRO MUSICALS
MONITORS	KT DN 370 EQ	Dual 1/3 octave analogue GEQ with hi/lo pass and notch filters	1	BOSCH
MONITORS	SAMSON D3500 EQ	FEEDBACK SUPPRESSORS, 1 FOR THE ACTIVE MONITORS AND ONE FOR THE PASSIVE WEDGES	2	PRO MUSICALS
MONITORS	EV Sxa 360	Powered (100-120V), 12-inch two-way, 350+150W, 65° x 65°, line-level in/out, stand mount, black polypropylene, incl.15ft (5m) power cord	4	BOSCH
MONITORS	EV Fri 28 lpm	Dual 8-inch, two-way, low profile, passive, 100° x 100° full range loudspeaker, 200-watt, 93dB 1w@1m, with non-skid rubber feet, Speakon® connectors, black (no bracket)	4	BOSCH
MONITORS	Dynacord S 900	2 x 450 watts @ 4 ohms,High-Efficiency Power amplifier	1	BOSCH
MONITORS	MON SNAKE	Snake cable 32 ins, LENGHT= according to the placement of monitor console, splice at one end, harting or soca at other end	1	STUDIO CARE
MONITORS	SPEAKON MAIN CABLES	NL4 SPEAKON CABLES	2	STUDIO CARE
MONITORS	SPEAKON LINK CABLES	NL4 SPEAKON CABLES	2	STUDIO CARE
MONITORS	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	4	STUDIO CARE
MONITORS	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR ACTIVE MONITORS INPUT WIRING, 18 METER	2	STUDIO CARE
MONITORS	ELECTRICITY	4 AMPS NEEDED FOR MON RACK (WITHOUT THE 4 POWERED ON-STAGE SPEAKERS), 1x16A BREAKER + 1 DISTRIBUTION SOCKET	1	KALAKSHETRA
MIXING	Midas Venice 320	28 Mono-, 4 Stereo-Line-Inputs Mixing console	1	BOSCH
MIXING	REV 2496 BEHRINGER	V-VERB PRO REV2496 dual engine (4ch) Behringer	1	PRO MUSICALS
MIXING	12V Desk Lamp	LITTLITE GOOSENECK TYPE	2	BOSCH
MIXING	KT DN 504	Four channel / dual stereo compressor / limiter	2	BOSCH
MIXING	KT DN 370 EQ	Dual 1/3 octave analogue GEQ with hi/lo pass and notch filters	1	BOSCH
MIXING	INSERT CABLES	ONE 6.35 STEREO JACK (M) TO 2 XLR (M/F), 6MTR	8	STUDIO CARE
MIXING	EASIBOX 15U REF 31-E415-F	Fly Case for MIX racks, 15U WITH CASTOR WHEELS AND HANDLES	1	PRESIDENT
MIXING	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR MIX RACK	1	PRO MUSICALS
MIXING	TASCAM CD01U PRO	CD PLAYER, STEREO, RACKMOUNT TYPE WITH AUTOCUE	1	STUDIO CARE
MIXING	TASCAM322	DOUBLE CASSETTE PLAYER AND RECORDER, RACKMOUNT TYPE	1	STUDIO CARE
MIXING	XLR CABLES	RCA (M) TO 6.35 JACK ASYM. CABLES FOR CD CONNECTION, 6 MTRS	2	PRO MUSICALS
MIXING	XLR CABLES	6.35 JACK (M) TO XLR ASYM. CABLES FOR SOURCE CONNECTION, 6 MTRS	2	PRO MUSICALS
MIXING	NEUTRIK ADAPTERS	RCA (F) TO 6.35 JACK (M) ADAPTERS	4	PRO MUSICALS
MIXING	SPARE CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	4	PRO MUSICALS
MIXING	SPARE CABLES	6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	2	PRO MUSICALS
MIXING	HF MICS CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	10	PRO MUSICALS
MIXING	CH700	HEADPHONES	2	PRO MUSICALS

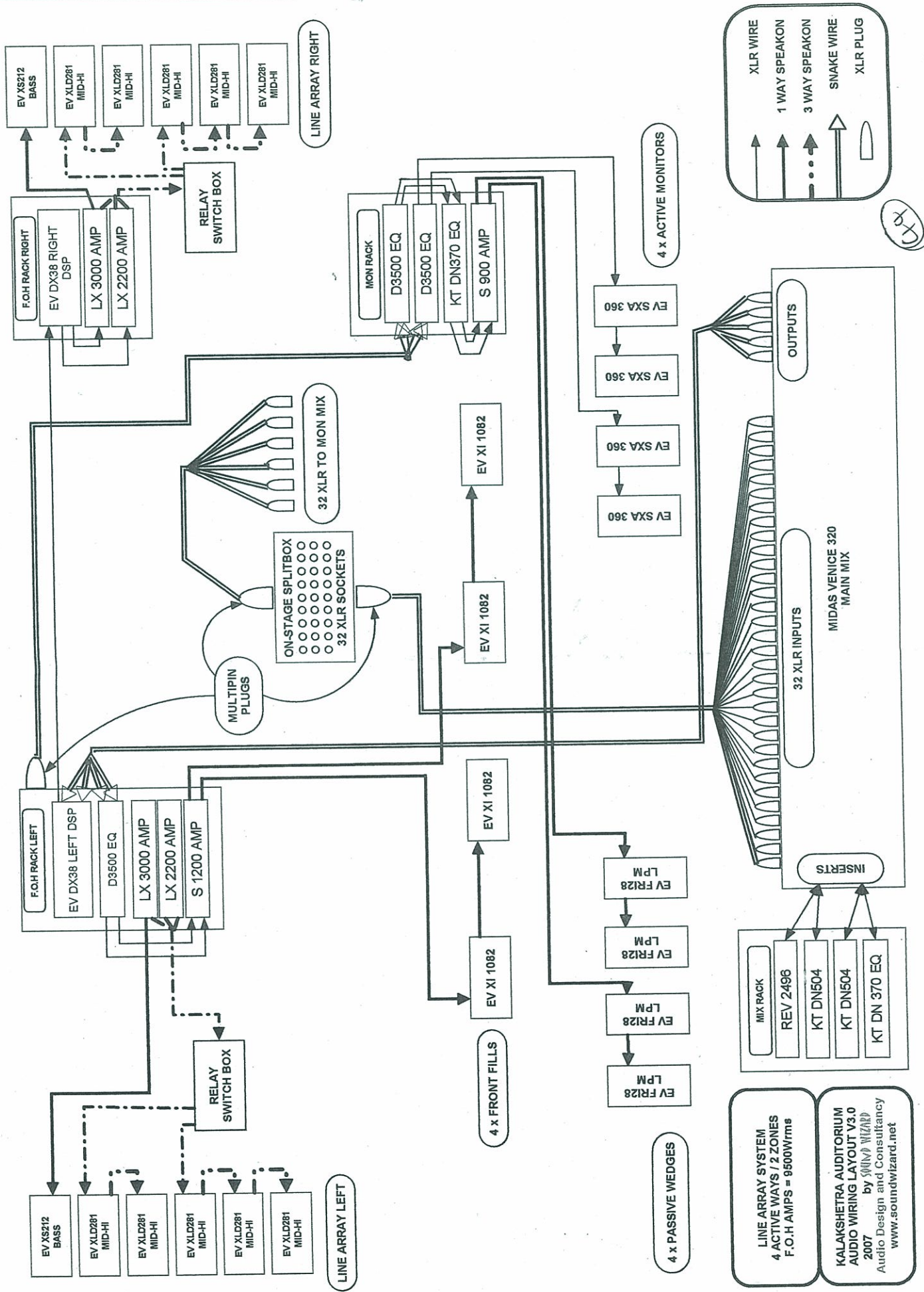
(42)

By **SOUND WIZARD**

ITEMS LIST

TYPE	Model No.	ITEM DESCRIPTION	QTY	PROVIDER
FOH SOUND SYSTEM	EV XLD 281	Very Compact line-array cabinet, 2 X 8" DVN2080, 2 X ND2, 120° x 10°, black	10	BOSCH
FOH SOUND SYSTEM	EV XS 212	X-Line Very Compact Bass Cabinet, 2x DVX3120, 1000 watts, black	2	BOSCH
FOH SOUND SYSTEM	EV XLD Grid	Grid for up to 16 XLD cabinets or 8 XS212 cabinets, aluminium, black + ACCESSORIES	2	BOSCH
FOH SOUND SYSTEM	EV DX38	2-in4 digital loudspeaker processor with x-over, EQ, delay, compressor/limiter, front-panel display, PC Remote software (RACE)	2	BOSCH
FOH SOUND SYSTEM	Dynacord LX 2200	2 x 1100 watts @ 4 ohms, High-Efficiency, Class-H, SMPS for medium and treble speakers	2	BOSCH
FOH SOUND SYSTEM	Dynacord LX 3000	2 x 1500 watts @ 4 ohms, High-Efficiency, Class-H, SMPS for bass cabinets	2	BOSCH
FOH SOUND SYSTEM	EASIBOX 15U REF 31-E415-F	Fly case for FOH LEFT and FF amps and processors racking, 15U WITH CASTOR WHEELS AND HANDLES	1	PRESIDENT
FOH SOUND SYSTEM	EASIBOX 15U REF 31-E415-F	Fly case for FOH RIGHT and processors racking, 15 U WITH CASTOR WHEELS AND HANDLES	1	PRESIDENT
FOH SOUND SYSTEM	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR FOH RACK	1	PRO MUSICALS
FOH SOUND SYSTEM	RELAY SWITCHBOX	1 IN / 2 OUTS REMOTE CONTROL AND SWITCHING BOX FOR LINE ARRAY 3 WAY SPEAKERS	2	STUDIO CARE
FOH SOUND SYSTEM	MAIN INPUT SNAKE	Snake cable 32 ins, LENGHT= 50m splice at one end, harting or soca at other end (SEE SCHEMATIC)	1	STUDIO CARE
FOH SOUND SYSTEM	MAIN OUTPUT SNAKE	Snake cable 8 OUTS, LENGHT= 50m splice at both ends + internal connection to harting or soca located in FOH RACK LEFT (SEE SCHEMATIC)	1	STUDIO CARE
FOH SOUND SYSTEM	MONITOR RACK SNAKE	Snake cable 4 outs length according to the position of monitor rack, splice at one end, harting or soca at other end (SEE SCHEMATIC)	1	STUDIO CARE
FOH SOUND SYSTEM	ON-STAGE SPLITBOX	SPLITTER BOX WITH 2 SOCAPEX OR HARTING PLUGS AND 32 XLR (SEE SCHEMATIC)	1	STUDIO CARE
FOH SOUND SYSTEM	SPEAKON MAIN CABLES	NL8 TO NL4 SPEAKON CABLES, FOR BASS CABINETS	2	STUDIO CARE
FOH SOUND SYSTEM	SPEAKON MAIN CABLES	NL8 Y TYPE SPEAKON CABLES, ONE END SPLITTED 3xNL4 FITTED FOR LO/MID/HI SEPARATION, 1MTR	2	STUDIO CARE
FOH SOUND SYSTEM	SPEAKON LINK CABLES	NL8 SPEAKON CABLES, 1 METER	6	STUDIO CARE
FOH SOUND SYSTEM	SPEAKON LINK CABLES	NL8 TO NL8 SPEAKON FROM RELAY SWITCH BOX TOWARDS XLD281 CABINETS	4	STUDIO CARE
FOH SOUND SYSTEM	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	12	PRO MUSICALS
FOH SOUND SYSTEM	ELECTRICITY	30 AMPS NEEDED FOR FOH RACK LEFT (FF INCLUDED) 1x32A BREAKER + 2 DISTRIBUTION SOCKETS	1	KALAKSHETRA
FOH SOUND SYSTEM	ELECTRICITY	30 AMPS NEEDED FOR FOH RACK RIGHT 1x32A BREAKER + 2 DISTRIBUTION SOCKETS	1	KALAKSHETRA
FRONT FILLS	EV Xi 1082	8-inch two-way, 90° x 40° in horizontal underbalcony format, flying, black FOR FRONT FILLS	4	BOSCH
FRONT FILLS	Dynacord S1200	2 x 600 watts @ 4 ohms, High-Efficiency, Power amplifier	1	BOSCH
FRONT FILLS	SPEAKON CABLES	NL4 SPEAKON TO BARE END CABLE	2	STUDIO CARE
FRONT FILLS	LINK CABLES	BARE ENDS LINK CABLES FOR SPEAKERS, 8 MTR	2	STUDIO CARE
FRONT FILLS	SAMSON D3500 EQ	FEEDBACK SUPPRESSOR	1	PRO MUSICALS

43



LINE ARRAY SYSTEM
 4 ACTIVE WAYS / 2 ZONES
 F.O.H AMPS = 9500W/rms

KALAKSHETRA AUDITORIUM
 AUDIO WIRING LAYOUT V3.0
 by **SMIV WIZARD**
 2007
 Audio Design and Consultancy
 www.soundwizard.net

MIX RACK
 REV 2496
 KT DN504
 KT DN504
 KT DN 370 EQ

INSERTS
 EV FR128 LPM
 EV FR128 LPM
 EV FR128 LPM
 EV FR128 LPM

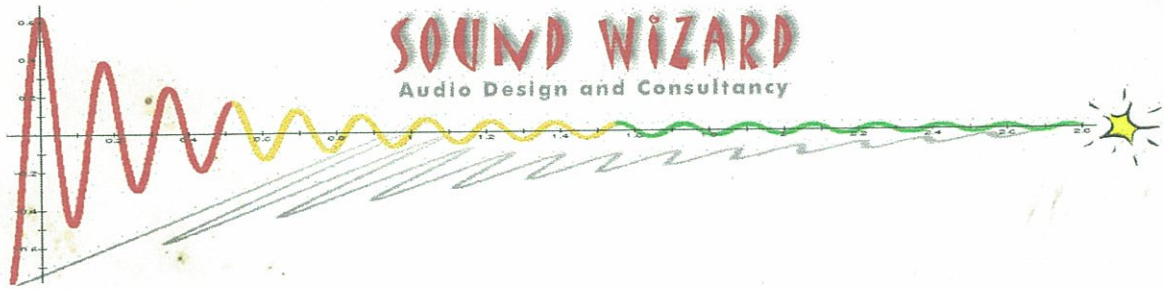
32 XLR INPUTS
 MIDAS VENICE 320
 MAIN MIX

OUTPUTS
 EV SXA 360
 EV SXA 360
 EV SXA 360
 EV SXA 360

4 x ACTIVE MONITORS
 MON RACK
 D3500 EQ
 D3500 EQ
 KT DN370 EQ
 S 900 AMP

XLR WIRE
 1 WAY SPEAKON
 3 WAY SPEAKON
 SNAKE WIRE
 XLR PLUG





KALAKSHETRA AUDITORIUM AUDIO EQUIPMENT LISTS

SEPT 10th, 2007



ALWAYS MAKE SURE THAT THE QUICK-RELEASE PINS ON THE HINGE BARS FULLY LOCK INTO THE HOLES IN THE FRONT RIGGING TUBES ON BOTH THE ENCLOSURE AND THE GRID.



ALWAYS MAKE SURE THAT THE LEFT AND RIGHT SWING ARMS ON THE ENCLOSURE ARE LOCKED INTO THE SAME HOLES FOR THE SAME VERTICAL SPLAY ANGLE ON THE GRID.



ALWAYS MAKE SURE THAT THE QUICK-RELEASE PINS FOR EVERY SWING ARM PASS THROUGH THE HOLE IN THE SWING ARM AND ARE FULLY LOCKED IN THE RIGGING CHANNELS IN THE GRID.

The AGCD adapter grid may also be used to stack an XLD281 enclosure on top of an XLC subwoofer. Figure 11b shows an XLD281 stacked on top of an XLC215 subwoofer.

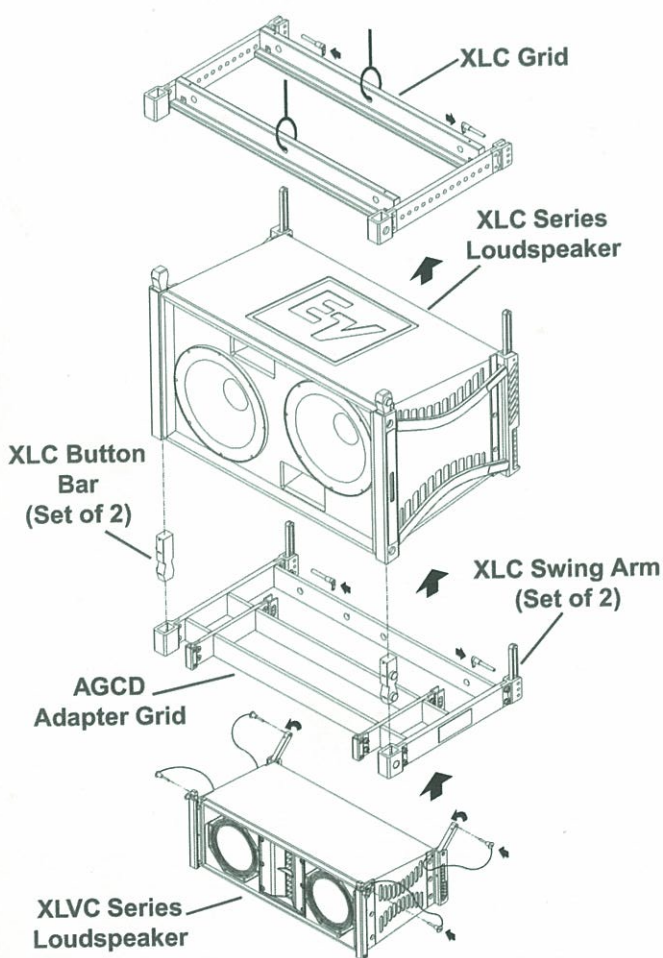


Figure 11a:
Using the AGCD Adapter Grid for Flying Arrays

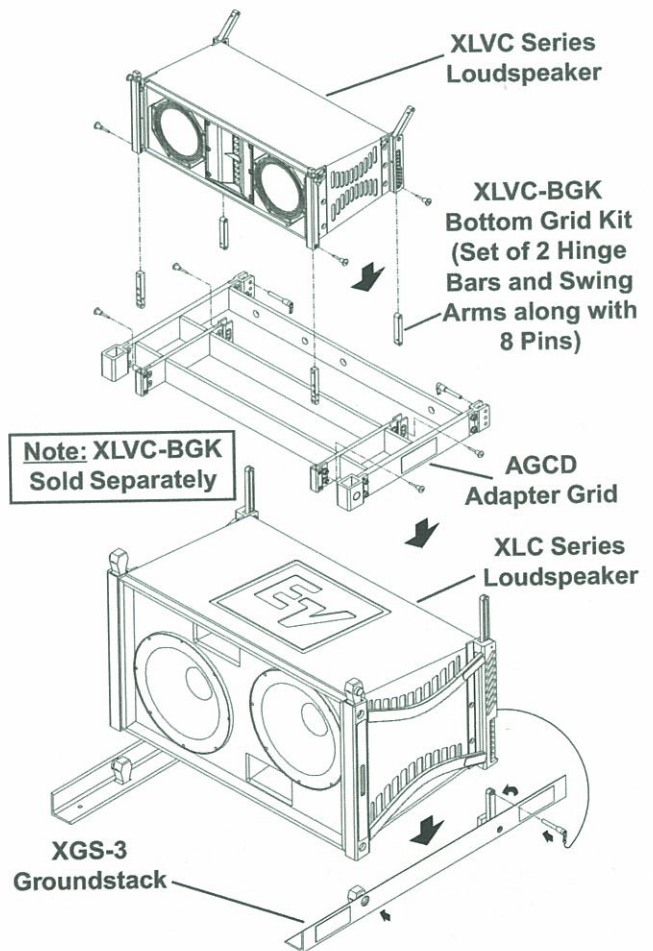


Figure 11b:
Using the AGCD Adapter Grid for Groundstacking Arrays

(4b)

Position an XLVC grid underneath the XLVC loudspeaker system, as shown in Figure 10a. Insert the loose swing arms on the bottom of the enclosure into the rear rigging channels on the grid and attach the arms to the grid in the top hole with the quick-release pins. Swing the grid up and insert the exposed hinge bars at the bottom front of the enclosure into the front rigging tubes on the grid and secure using the quick-release pins. The standard grid is now attached to the bottom of the enclosure.



ALWAYS MAKE SURE THAT THE LEFT AND RIGHT SWING ARMS ON THE ENCLOSURE ARE LOCKED INTO THE SAME HOLES FOR THE SAME VERTICAL SPLAY ANGLE ON THE GRID.



ALWAYS MAKE SURE THAT THE QUICK-RELEASE PINS FOR EVERY SWING ARM PASS THROUGH THE HOLE IN THE SWING ARM AND ARE FULLY LOCKED IN THE RIGGING CHANNELS IN THE GRID.

A 5/8-inch shackle can be installed into the center position of the spreader bar on the bottom grid. A ratchet strap can be attached to the shackle to enable adjustment for pull up. The entire array can then be lifted, as shown in Figure 10b, and the vertical tilt angle adjusted as necessary using the ratchet strap.

The XLVC-BGK may also be used with the AGCD adapter grid for groundstacking XLD281 loudspeaker systems on top of XLC loudspeaker systems. See the AGCD section for details.

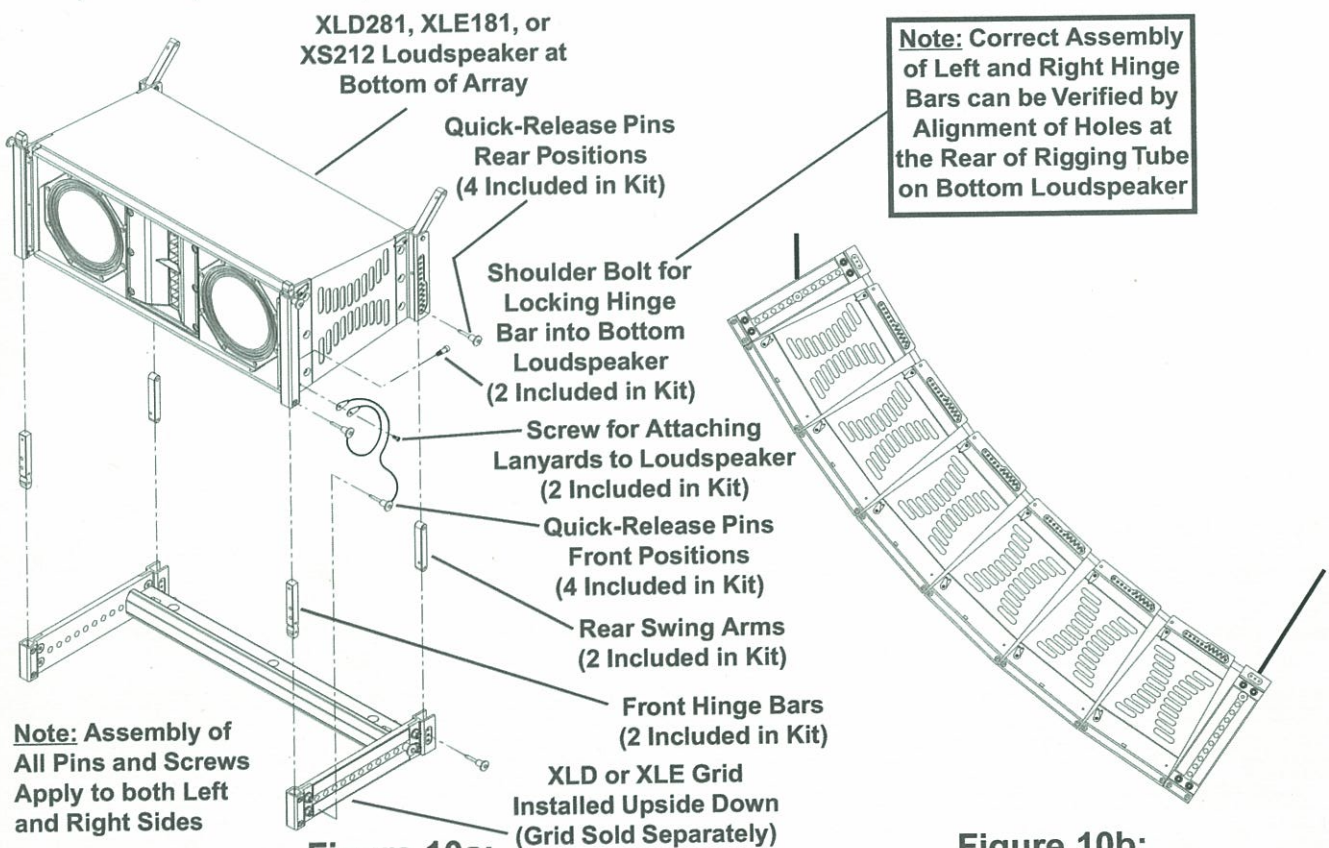


Figure 10a:

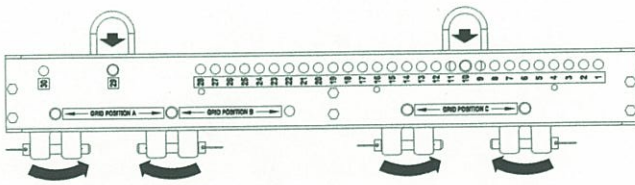
Assembling the XLVC-BGK and Secondary Grid at the Bottom of an Array

Figure 10b:

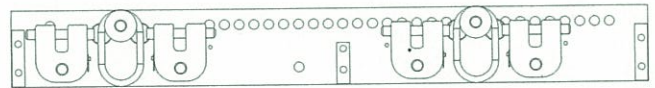
XLVC Array with XLVC-BGK and Secondary Grid as a Pull-Up

ELECTRO-VOICE® X-Line Very Compact™ Rigging Manual

(47)



Step 1: Install Pickup Rings in Hole #10 and #29 and Yokes in Positions A and C



Step 2: Rotate Yokes, Then Drop Pickup Rings (View Shown Cutaway for Clarity)

Figure 9e:
CBEAM Shipping/Transport Configuration

2.5 Using the XLVC-BGK and Grid for Pull Up

The XLVC-BGK is a rigging kit with the hardware necessary to install front hinge bars and rear swing arms on the bottom of the XLD281 and XLE181 loudspeaker system enclosures. This makes it possible to attach a grid to the bottom of an enclosure. The bottom grid can be used as a pull back on the bottom of a column to achieve downward tilt angles for the entire array that are greater than could be achieved from just a grid.

The XLVC-BGK consists of two front hinge bars, two rear swing arms, a shoulder bolt for the hinge bars and four sets of quick-release pins with screws to attach the lanyards to the enclosure rigging, as shown in Figure 10a.

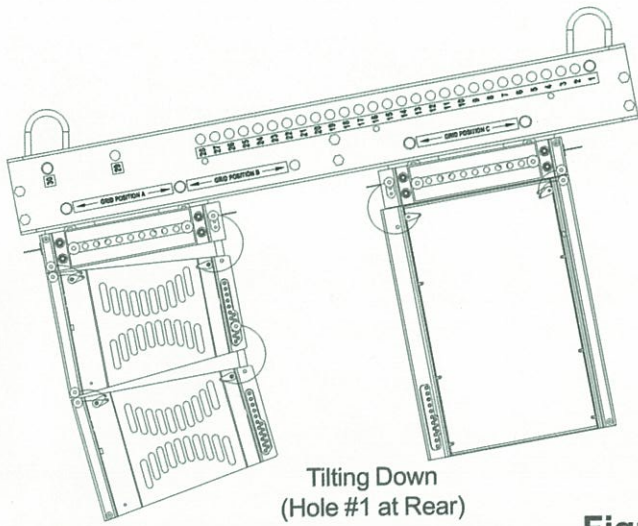
Install the rectangular ends of the two hinge bars into the front rigging tubes the XLVC enclosure, as shown in Figure 10a, and secure each in the tubes with a quick-release pin having a green lanyard. The front hinge bars are mirror image. Make sure that the hinge bars are installed into the rigging tubes on the enclosure so that the two holes on the back side of the tube line up with the two holes on the bars. If the holes do not line up, exchange the left and right bars. Install the large hex-socket-head shoulder bolt through the slot in the rigging tube into the rear of the front hinge bars. The head of this bolt will serve as a handle to move the hinge bars in and out of the tubes. On each side of the enclosure, insert one of the small hex-socket-head bolts through the tab of the lanyard securing the hinge bar and through the tab of another matching quick-release pin having a green lanyard, then screw the bolt into the threaded hole on the side of the enclosure rigging. The extra quick-release pin on each side will be used to secure the hinge bars to the bottom grid. The newly added rigging should match the hinge bar and lanyards at the top of the enclosure. The extra front hinge bars at the bottom can be retracted into the rigging tubes during transport.

Secure the swing arms to rigging channels on each side of the enclosure by inserting a quick-release pin having a yellow lanyard into the 3° hole on the rigging channel, as shown in Figure 10a. The extra quick-release pins having a yellow lanyard will be used to attach the loose end of the swing arms to the bottom grid. There is insufficient room for both sets of swing arms to be retracted into the rear rigging channel during transport. Therefore, the bottom set of swing arms and quick-release pins will need to be removed when the enclosure is transported. Because the extra hardware must be removed, screws are not provided to attach the rear lanyards to the sides of the enclosure rigging.

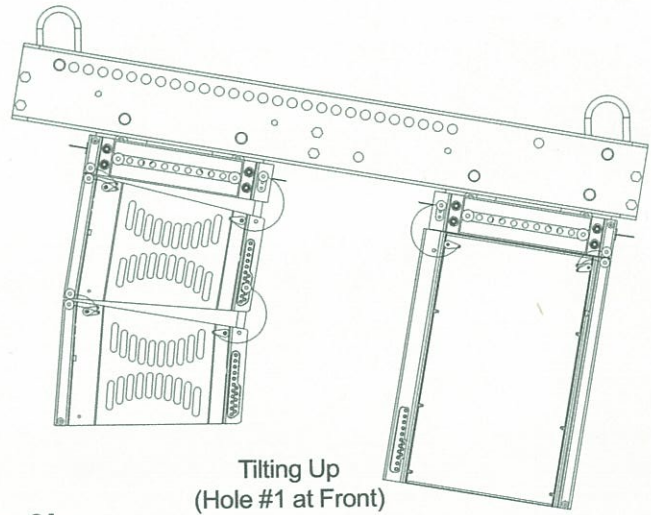


ALWAYS MAKE SURE THAT THE QUICK-RELEASE PINS ON THE HINGE BARS FULLY LOCK INTO THE ROUND HOLES IN THE FRONT RIGGING TUBES ON BOTH THE ENCLOSURE AND THE GRID.

48

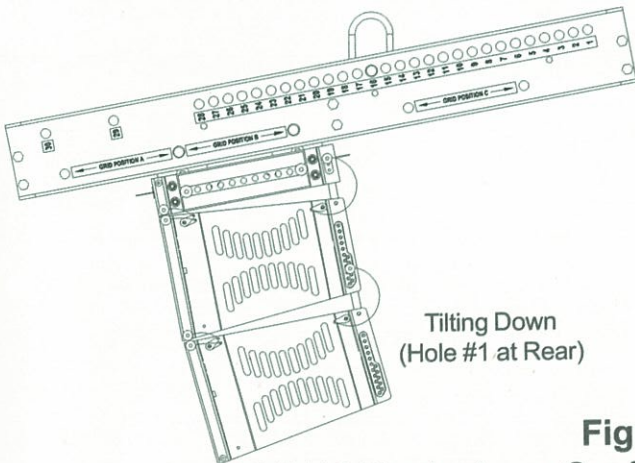


Tilting Down
(Hole #1 at Rear)

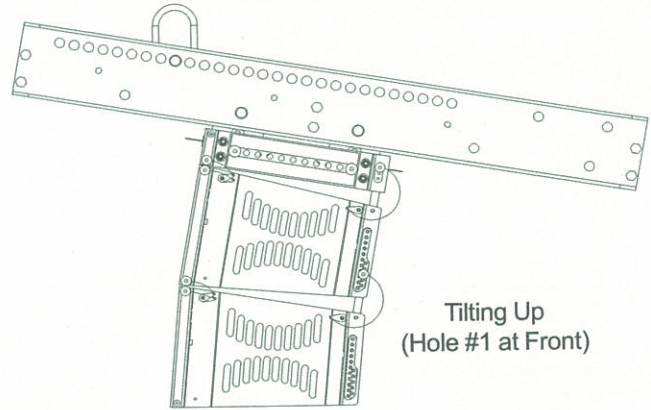


Tilting Up
(Hole #1 at Front)

Figure 9b:
CBEAM Dual-Array Configuration Using Grid Positions A and C

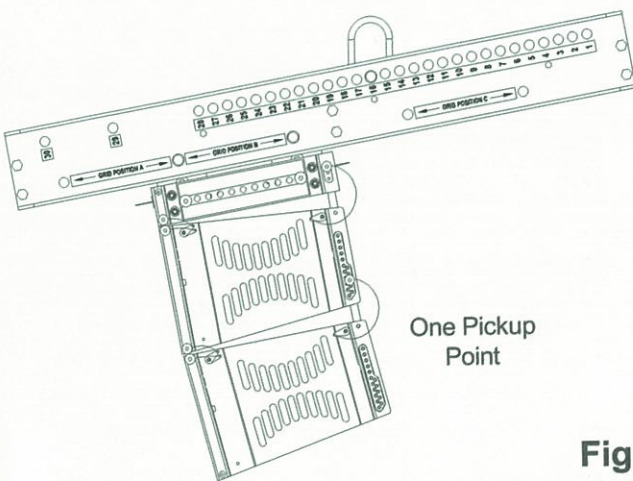


Tilting Down
(Hole #1 at Rear)

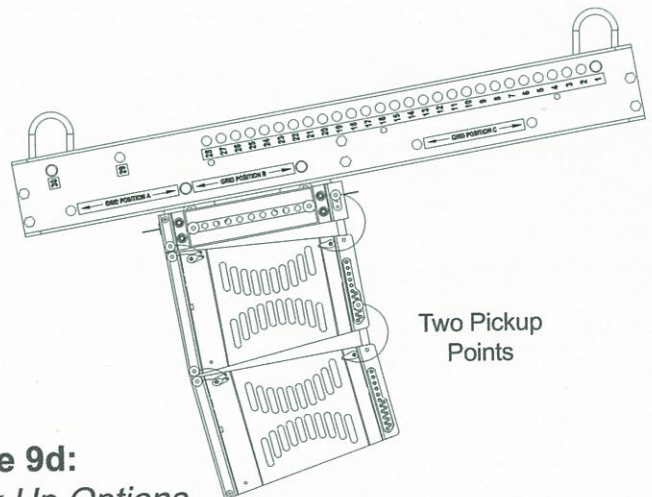


Tilting Up
(Hole #1 at Front)

Figure 9c:
CBEAM Single-Array Configuration Using Grid Position B



One Pickup
Point



Two Pickup
Points

Figure 9d:
CBEAM Pick Up Options



ALWAYS MAKE SURE THAT EACH QUICK-RELEASE PIN SECURING EACH GRID SPREADER BAR IS FULLY LOCKED IN EACH YOKE.

As shown in Figure 9d, the CBEAM may be picked up using one pickup point or two pickup points. The two pick up points may be raised and lowered as necessary to adjust the vertical tilt angle. When using two pick up points, the pickup rings are usually installed in Holes #1 and #30 at the extreme ends of the CBEAM for maximum front-to-back stability. However, the pickup rings may be relocated to redistribute the load between the front and back points. In Holes #1 and #30 can only accommodate tilt angles of up to 30° before the rings will contact the spacer bars in the beam assembly. When greater tilt angles are required, the pickup points should be moved towards the center of the CBEAM.

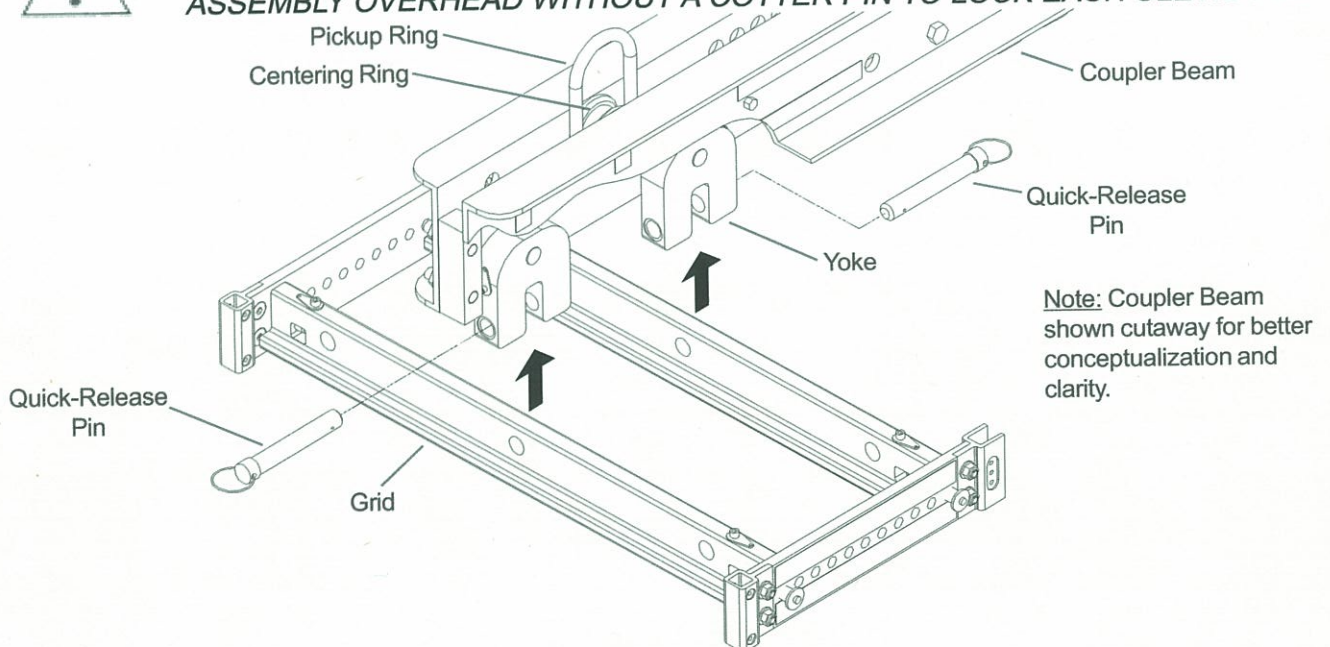
When using one pickup point, the vertical tilt of the array can be adjusted by changing the hole in which the pickup ring is installed in the CBEAM. The LAPS program can be used to determine which hole to use to achieve the desired vertical angle.

Each pickup ring has a centering ring. The centering ring positions the pickup ring in the center of the CBEAM slot so that array will hang straight and not tilt sideways. To relocate the pickup ring, remove the cotter pin from the clevis pin and remove the clevis pin from the beam assembly. Move the pickup ring and centering ring to the desired hole and reinstall the clevis pin in the beam assembly holes, then secure the clevis pin with the cotter pin.

For Shipping/Transport, the yoke and ring assemblies may be installed in the beam assembly, as shown in Figure 9e, so that all moving parts are recessed.



MAKE SURE THAT THE EACH CLEVIS PIN SECURING EACH PICKUP RING TO THE BEAM IS LOCKED IN POSITION BY THE COTTER PIN. DO NOT LIFT ANY ASSEMBLY OVERHEAD WITHOUT A COTTER PIN TO LOCK EACH CLEVIS PIN.

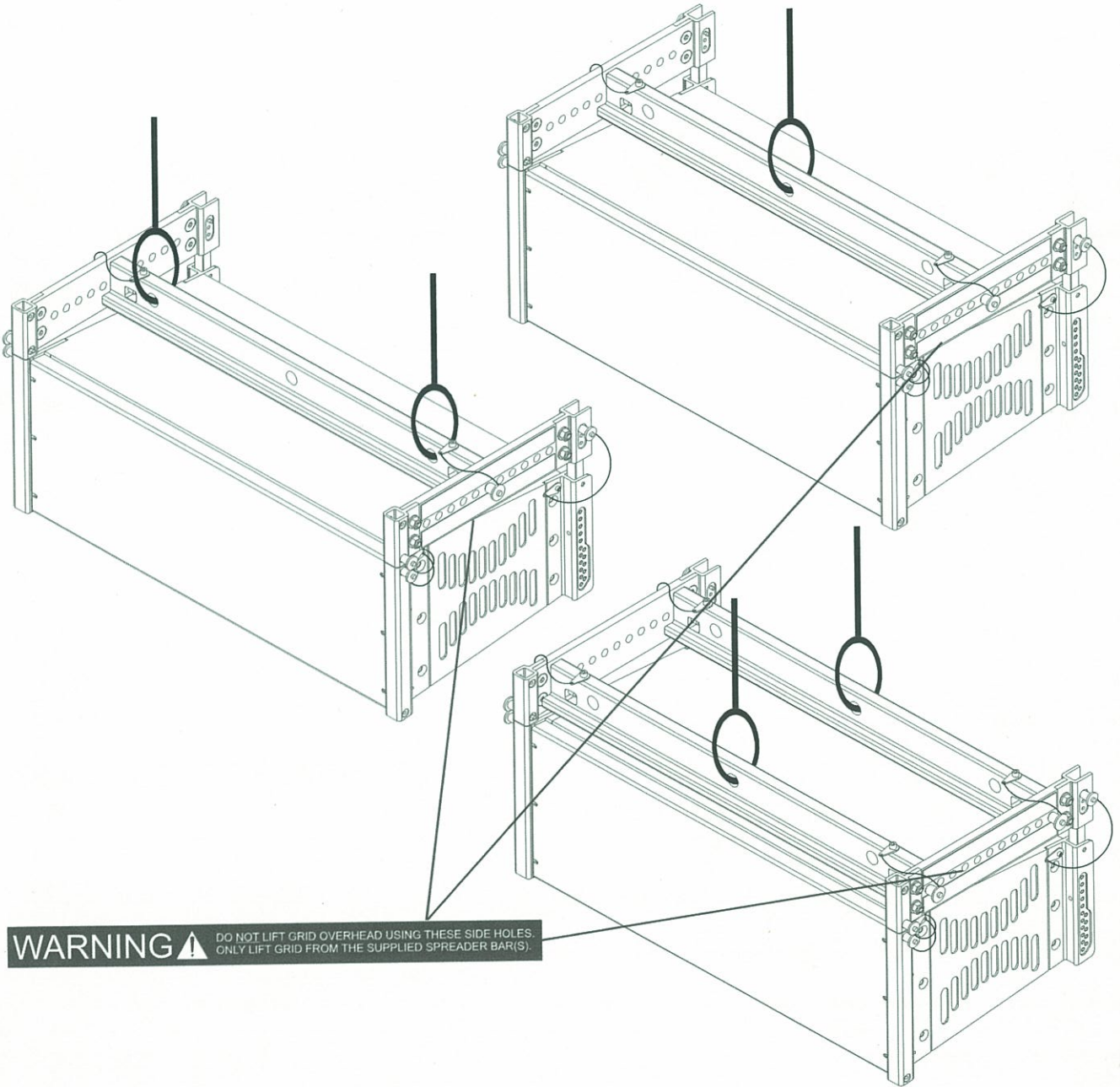


**Figure 9a:
CBEAM Rigging Assembly**

50



MAKE SURE THAT THE QUICK-RELEASE PINS ATTACHED TO THE GRID SIDEARMS FULLY LOCK INTO THE HOLES IN THE ENDS OF THE SPREADER BARS. ALWAYS MAKE SURE THAT EACH SPREADER BAR IS ATTACHED TO THE SAME HOLE ON THE LEFT AND RIGHT SIDEARMS.



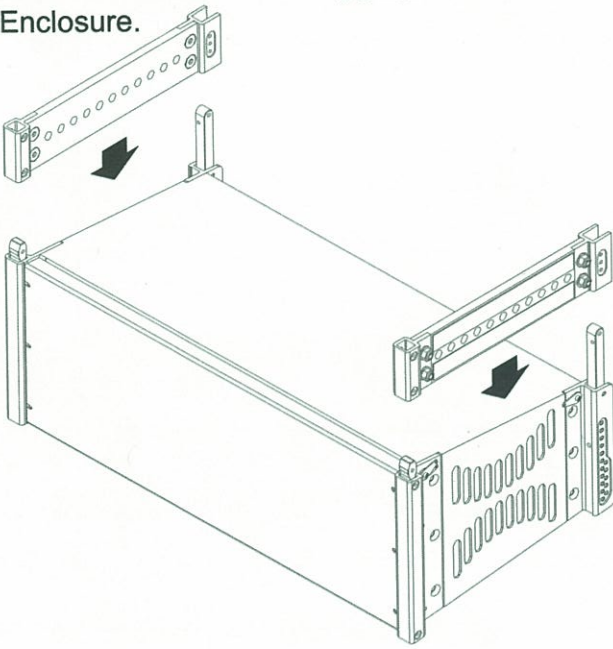
WARNING ⚠ DO NOT LIFT GRID OVERHEAD USING THESE SIDE HOLES. ONLY LIFT GRID FROM THE SUPPLIED SPREADER BAR(S).

Figure 8b:
XLD GRID and XLE GRID Rigging Configurations

51

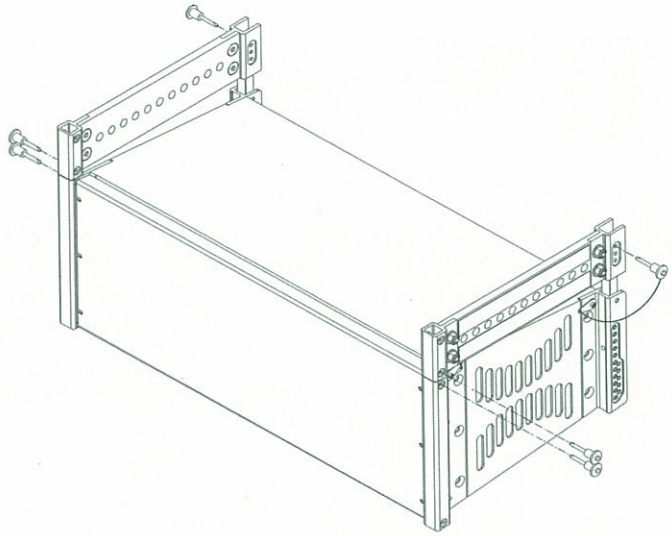
Step 1:

Assemble Sidearms to Rigging at top of the Enclosure.



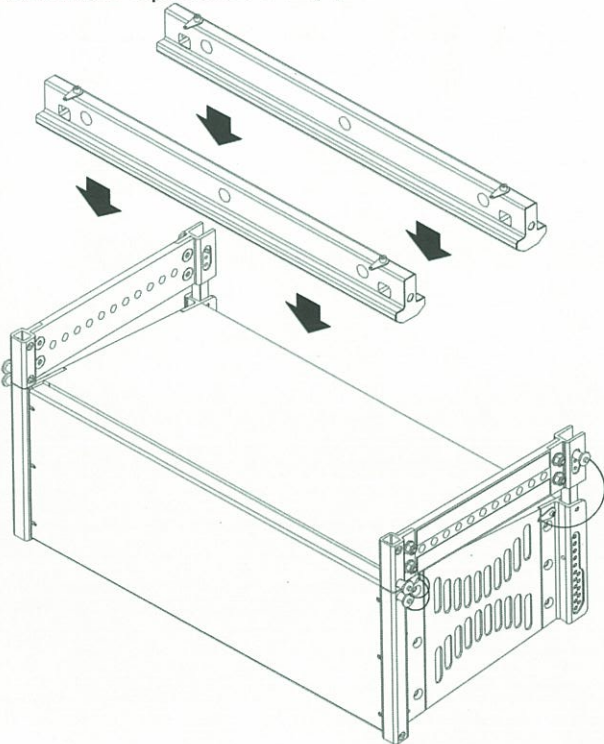
Step 2:

Insert Quick-Release Pins through Enclosure Rigging and Sidearms.



Step 3:

Assemble Spreader Bar(s) to Sidearms.



Step 4:

Insert Quick-Release Pins through Sidearms and Spreader Bar(s) using the hole locations from LAPS.

See next page for fully assembled configurations.

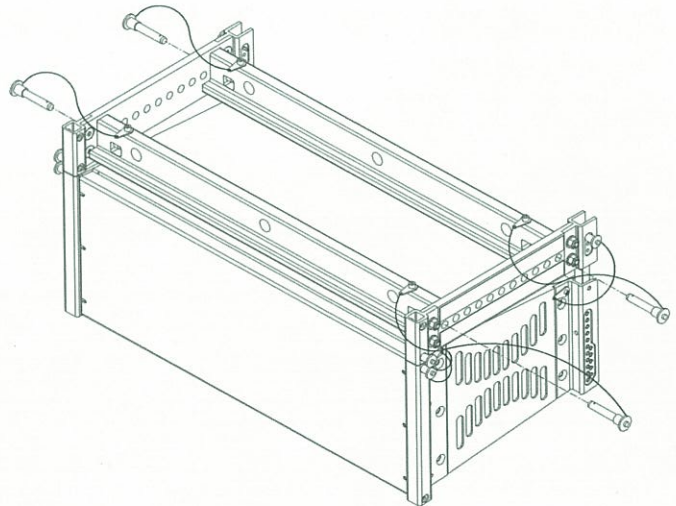


Figure 8a:
XLD GRID and XLE GRID Rigging Assembly

52

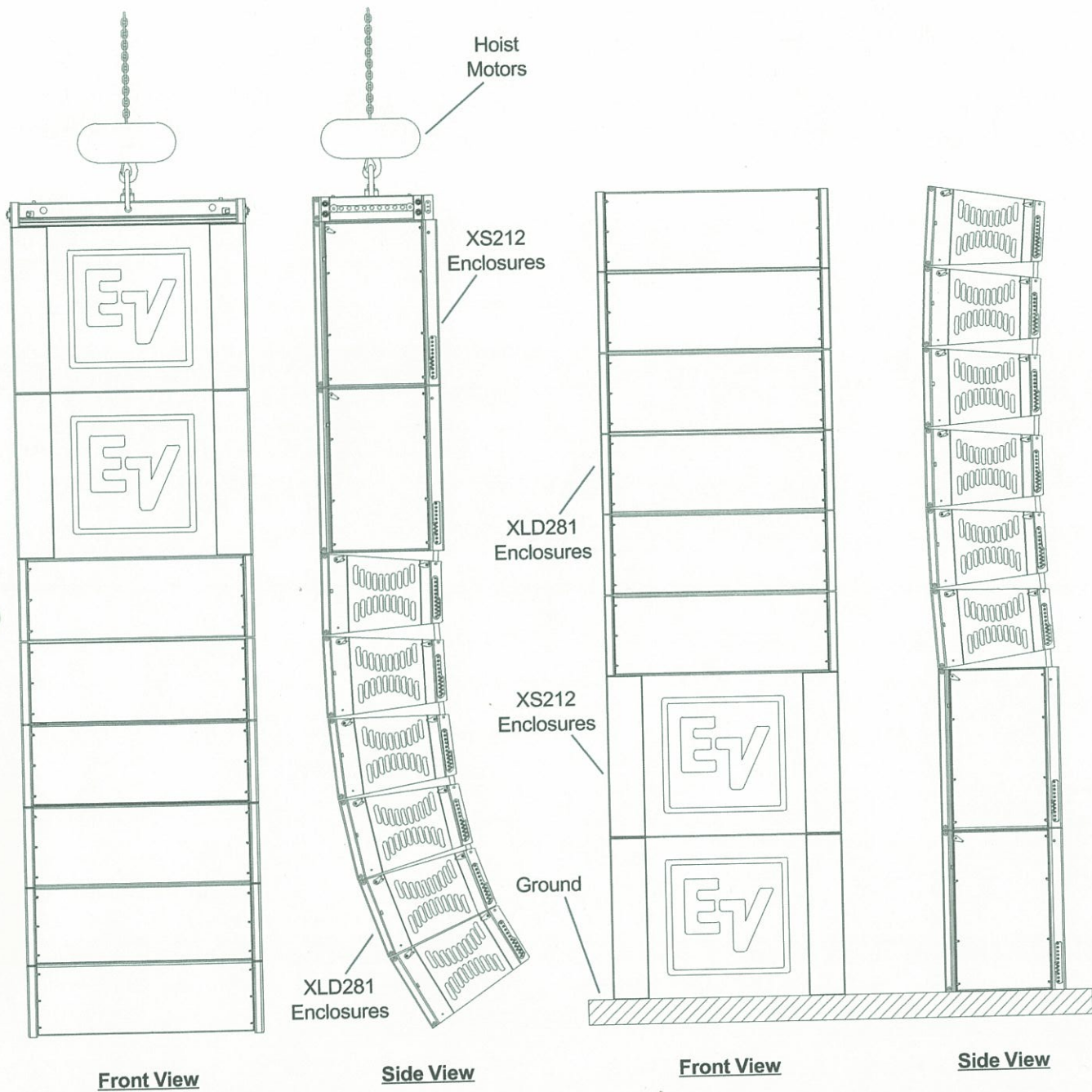
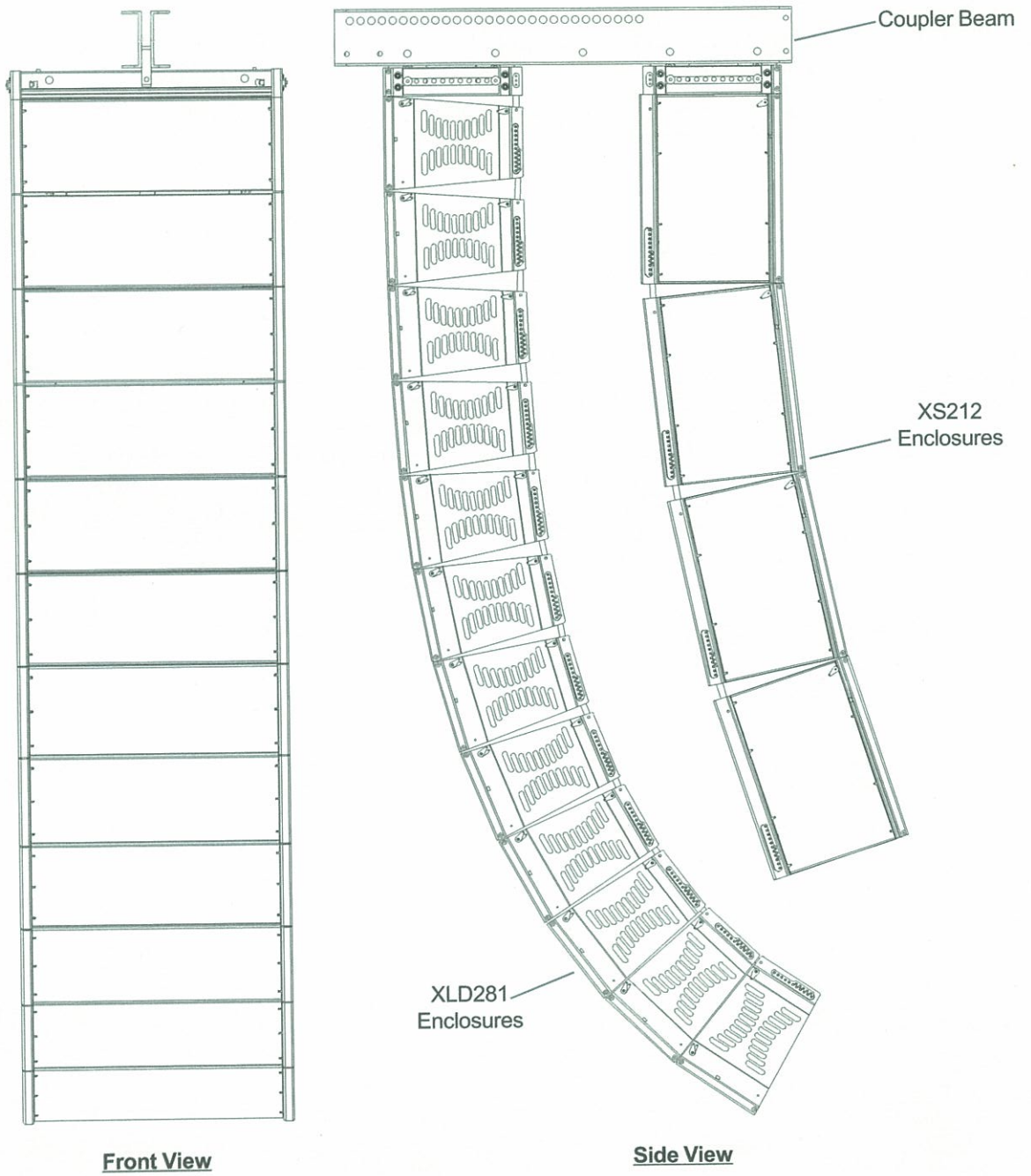


Figure 6b:
Flying an Array of XLD281's under XS212's using Interactive Rigging

Figure 6c:
Groundstacking XLD281's over XS212's using Interactive Rigging

53



Front View

Side View

Figure 6a:
*Flying an Array of XS212's behind XLD281's using the XLVC Coupler Beam
 (audience only sees XLD281's)*

59

XGS-4

The XGS-4, shown in Figure 5f, is a pair of rails that may be used to groundstack XLVC loudspeaker systems. Each rail is an L-bracket that has multiple sets of front hinge bar rigging and rear swing arm rigging that mate with the front rigging tube and rear rigging channels on the bottom XLVC loudspeaker enclosure rigging.

The XGS-4 may be used to stack a single column of XLD281 systems, a single column of XLE181 systems or an XLD281 column and XS212 column combined.

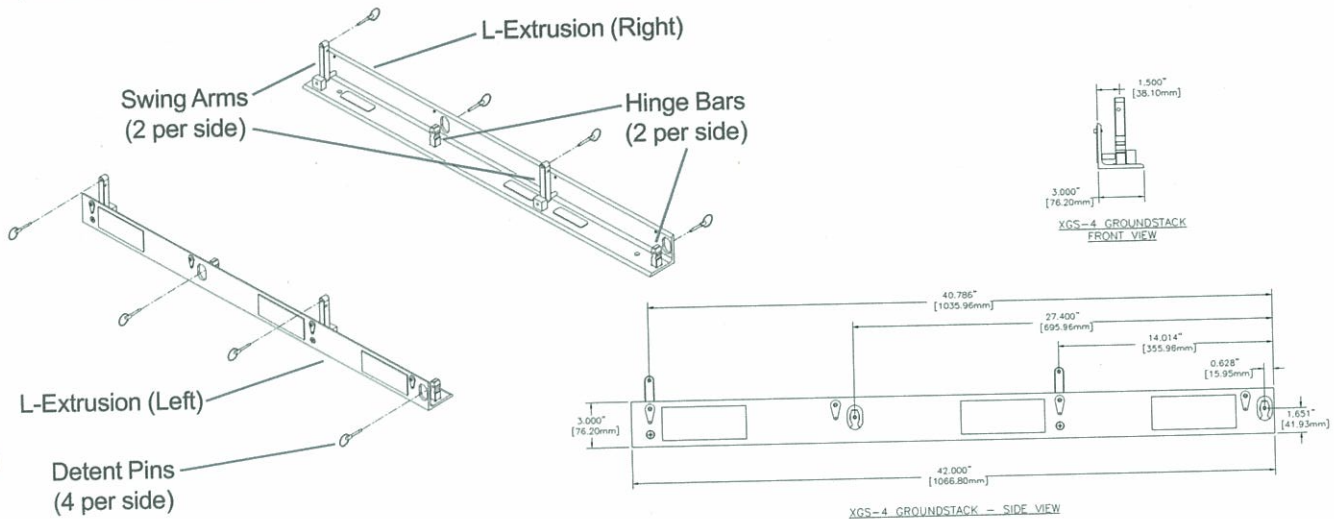


Figure 5f:

XGS-4 Groundstack Details/Dimensions

XLD/XS DOLLY

The XLD/XS DOLLY, shown in Figure 5g, is a dolly for transporting XLD281 and/or XS212 loudspeaker systems. The dolly will accommodate two columns of loudspeaker systems – two columns of XLD281 systems, two columns of XS212 systems or an XLD281 column and an XS212 column combined. XLD281 systems may be stacked 6 high on the dolly. XS212 systems may be stacked 3 high on the dolly. The systems are strapped down with ratchet straps and offer side panel kits for additional protection during transport.

SP12.6

The SP12.6 is a side panel kit to be seamlessly integrated into the XLD/XS Dolly when additional protection is needed during transport. The SP12.6 allows for protection of two columns of six XLD281 loudspeaker systems for a total of (12) XLD281 loudspeaker systems, for protection of two columns of three XS212 loudspeaker systems for a total of (6) XS212 loudspeaker systems, or for protection of combined columns of (6) XLD281 loudspeaker systems and (3) XS212 loudspeaker systems.

SP8.4

The SP8.4 is a side panel kit to be seamlessly integrated into the XLD/XS Dolly when additional protection is needed during transport. The SP8.4 allows for protection of two columns of four XLD281 loudspeaker systems for a total of (8) XLD281 loudspeaker systems, for protection of two columns of two XS212 loudspeaker systems for a total of (4) XS212 loudspeaker systems, or for protection of combined columns of (4) XLD281 loudspeaker systems and (2) XS212 loudspeaker systems.



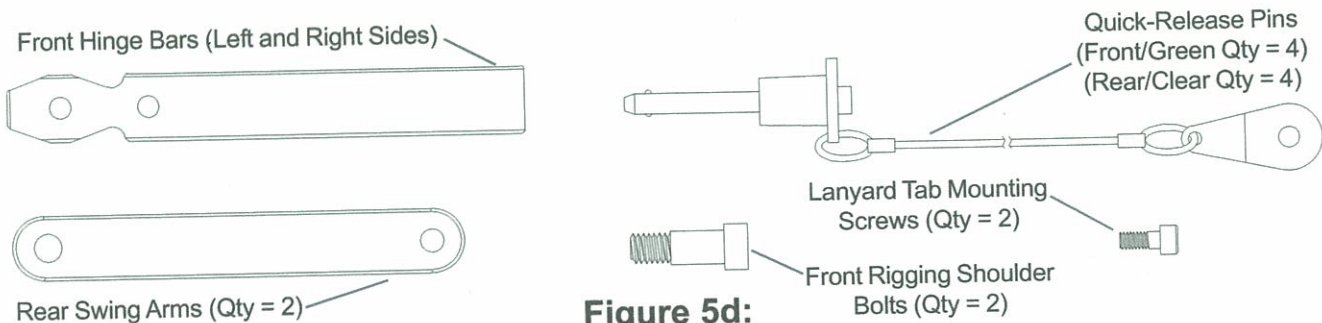


Figure 5d:
XLVC-BGK Bottom Grid Kit Contents

AGCD

The AGCD, shown in Figure 5e, is an adapter grid that allows XLD281 very-compact line-array loudspeaker systems to be rigged below XLC compact line-array loudspeaker systems. A typical example would be to use the AGCD construct a line array with two XLC215 (or XLC118) subwoofer systems at the top of a column with several XLD281 systems suspended below.

At the front of the AGCD are two sets of rigging tubes - one pair of rigging tubes mate with the XLVC front hinge bars and the other pair mate with the XLC front hinge bars. At the rear of the AGCD are two sets of rigging channels - one pair of rigging channels mate with the XLVC rear swing arms and the other pair mate with the XLC rear swing arms. The AGCD includes a pair of front XLC hinge bars and a pair of XLC rear swing arms that can be installed into the top of the adapter grid, allowing the AGCD to be suspended below an XLC215 (or XLC118) system. An XLD281 system can then be hung directly from the bottom of the AGCD.

The AGCD may also be used to place XLD281 loudspeaker systems on top of XLC215 (or XLC118) loudspeaker systems above an XGS-3 groundstack. In this case, the adapter grid is secured to the top of the XLC subwoofer and an XLD281 system may be attached to the top of the AGCD using the XLVC-BGK bottom grid kit.

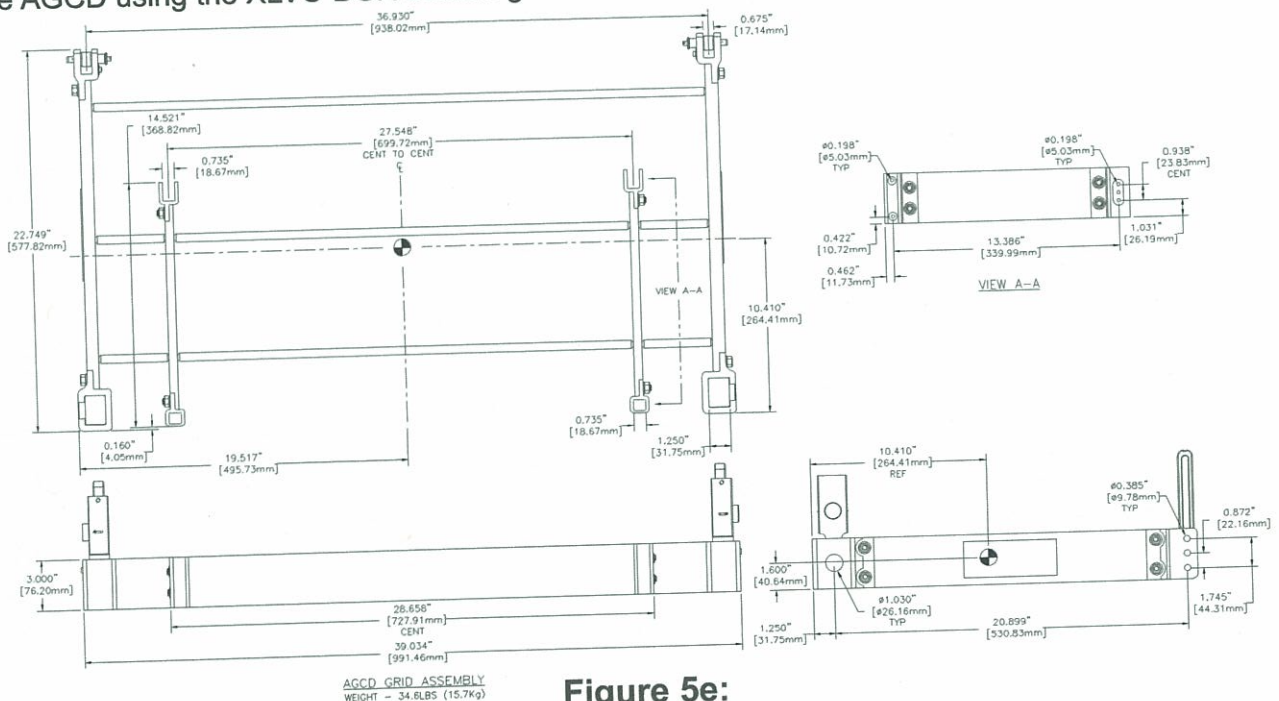
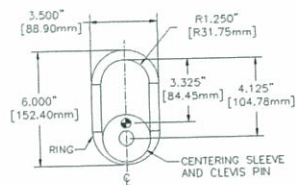
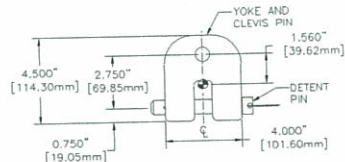


Figure 5e:
AGCD Adapter Grid Dimensions and Weights

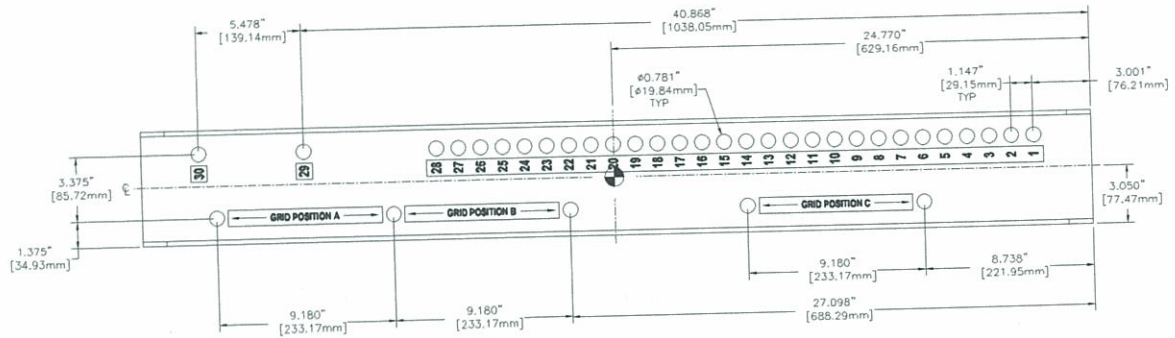
56



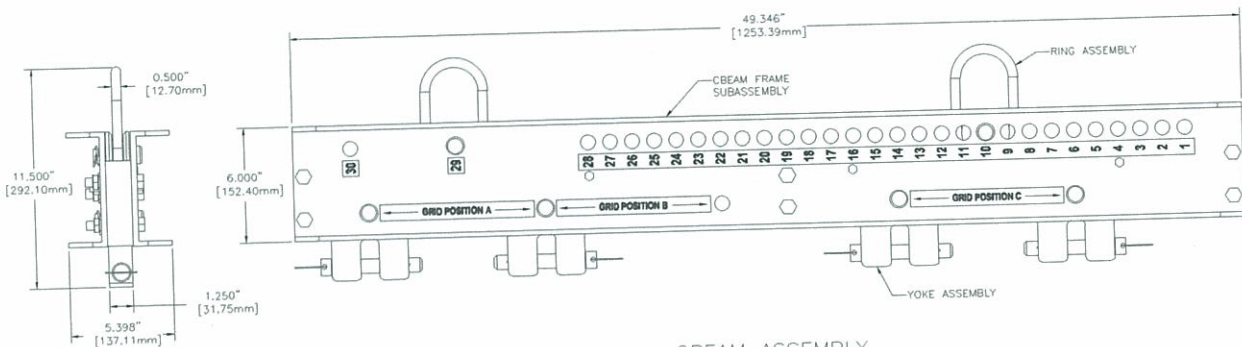
RING ASSEMBLY
WEIGHT - 1.5LBS (0.7Kg)



YOKE ASSEMBLY
WEIGHT - 2.7LBS (1.2Kg)



CBEAM FRAME SUBASSEMBLY
WEIGHT - 32.3LBS (14.7Kg)



CBEAM ASSEMBLY
WEIGHT WITH 2 YOKEs AND 2 RINGs - 40.7LBS (18.5Kg)
WEIGHT WITH 4 YOKEs AND 2 RINGs - 46.1LBS (20.9Kg)

Figure 5c:
CBEAM Rigging Dimensions and Weights

XLVC-BGK

The XLVC-BGK, shown in Figure 5d, is a bottom grid kit that allows the XLD GRID to be attached to the bottom of the XLD281 loudspeaker systems or the XLE GRID to be attached to the bottom of the XLE181 loudspeaker systems. The bottom grid can then be used to pull back a column of XLVC loudspeaker systems to achieve a greater downward tilt than gravity would allow without a pull back.

The top of all XLVC loudspeaker systems have hinge bars mounted in the top of the front rigging tubes and swing arms mounted in the top of the rear rigging channels. However, the rigging tubes and channels are open at the bottom of all XLVC system rigging to accept hinge bars and swing arms from an enclosure below. The XLVC-BGK consists of a pair of XLVC front hinge bars, a pair of XLVC rear swing arms and a set of quick-release rigging pins for those bars and arms.

57

XLE GRID

The XLE GRID is a grid used for suspending a column of XLE181 loudspeaker systems overhead and is shown in Figure 5b. The XLE GRID sidearms are identical to that of the XLD GRID. However, the XLE GRID spreader bars are shorter to match the width of the XLE181 loudspeaker system rigging.

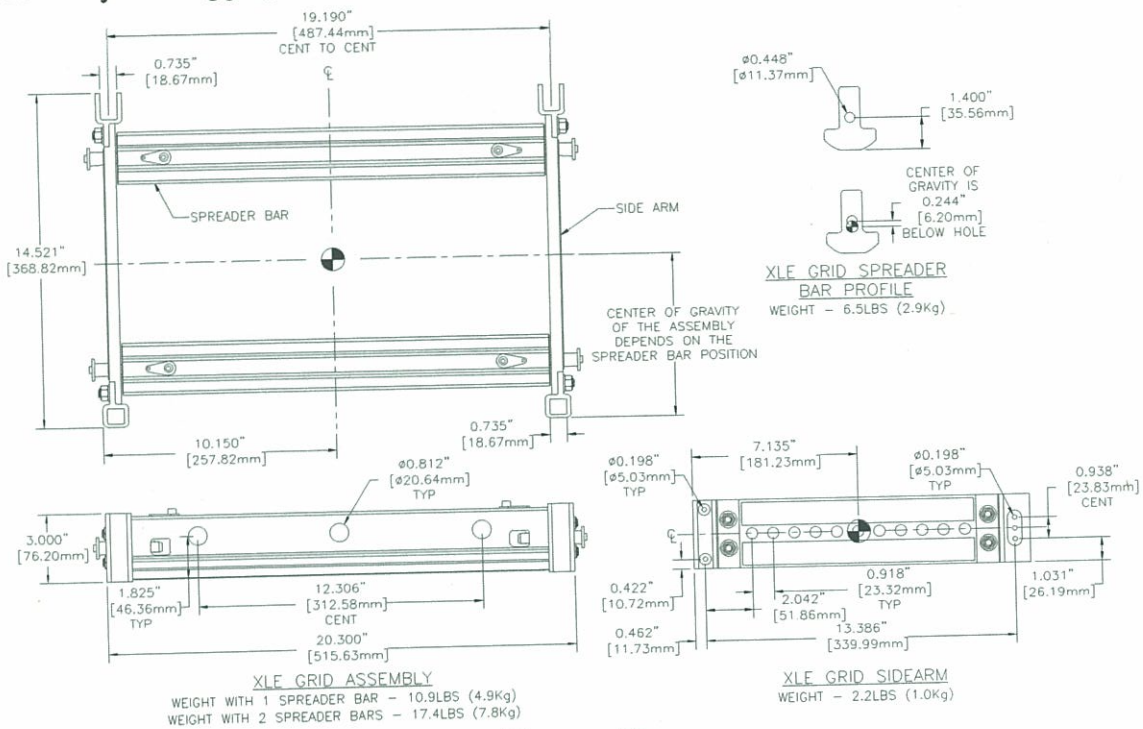


Figure 5b:

XLE GRID Rigging Dimensions and Weights

CBEAM

The CBEAM, shown in Figure 5c, has two functions. It may be used as a coupler beam to enable a column of XS212 systems to be hung behind either a column of XLD281 loudspeaker systems or a column of XLE181 systems. The XLD GRID and XLE GRID grids are used to attach a column of loudspeakers to the CBEAM. The CBEAM may also be used as an extender beam to hang a single column of loudspeaker systems overhead (either XLD281 or XLE181). As an extender beam, the CBEAM allows a single pickup point that is beyond the end of either the XLD GRID or the XLE GRID, enabling the entire array to be tilted downward at greater angles, eliminating the need to use a pull back from the bottom of the column. The CBEAM may also be reversed to enable greater upward angles for the loudspeaker column.

Two yoke assemblies are used to attach each grid (either XLD GRID or XLE GRID) to the CBEAM. Each yoke is fastened to the two spreader bars from the grids. Quick-release pins are used to secure the grid spreader bars to the yokes.

When two hoist motors are used to suspend a CBEAM overhead, the two motors are attached to the front and back of the CBEAM. In this case, the hoist motors are used to adjust the vertical angle of the CBEAM and the array underneath. When one hoist motor is used, the vertical angle of the CBEAM and the array underneath is determined by the front-to-back position at which the hoist is attached to the CBEAM. There are a series of holes in the CBEAM the user may select to adjust the vertical angle.

58

1.3 XLVC Rigging Accessory Details

Several accessories for rigging the XLVC loudspeaker systems are shown in Figure 5. This figure includes the center of gravity and rigging dimensions for the accessories and includes sufficient information to calculate the vertical angle of XLVC enclosures that are rigged together in a column, as well as the weight distribution throughout the column.

XLD GRID

The XLD GRID is a grid used for suspending a column of XLD281 or XS212 loudspeaker systems overhead and is shown in Figure 5a. The grid consists of two sidearm assemblies and two spreader bar assemblies. The front of the sidearm has a rectangular tube identical to that on the loudspeaker systems. The hinge bar from the top loudspeaker system is inserted into the grid tube and pinned into place using the same quick-release pins from the loudspeaker. The rear of the sidearm has channel with a vertical slot that is similar to that on the loudspeaker systems. The swing arm from the top loudspeaker system is inserted into the grid tube and pinned into place using the same quick-release pins from the loudspeaker.

The grid sidearms are then attached to either one or two spreader bars. Two spreader bars are used when two front-to-back pickup points are required. One spreader bar is used when two side-to-side pickup points are required or one center pickup point is required.

Quick-release pins are used to secure the sidearms to the spreader bar. The width of the assembly matches the width of the XLD281 and XS212 loudspeaker rigging.

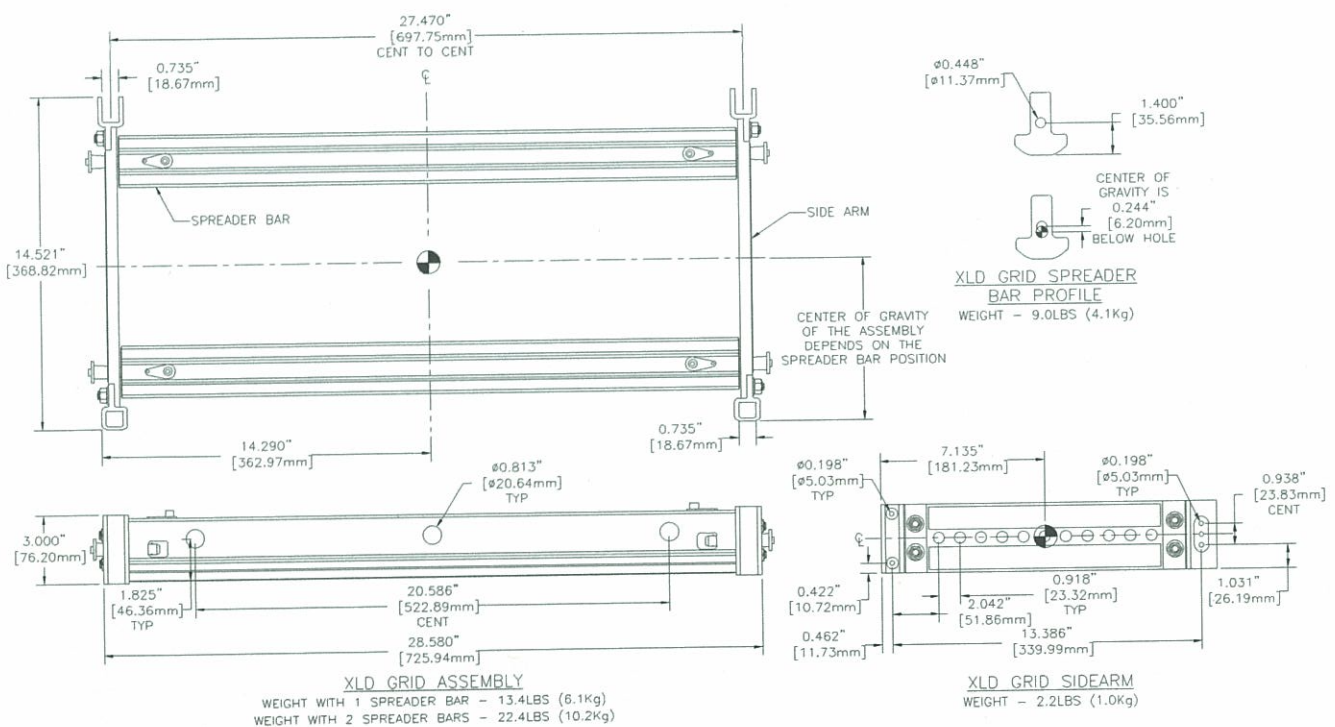
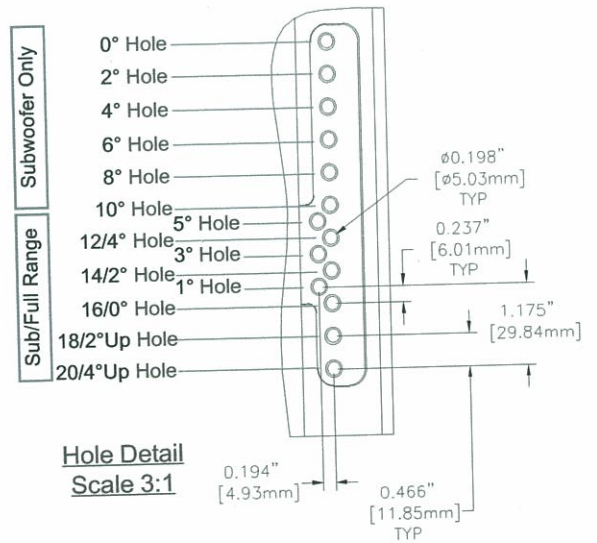
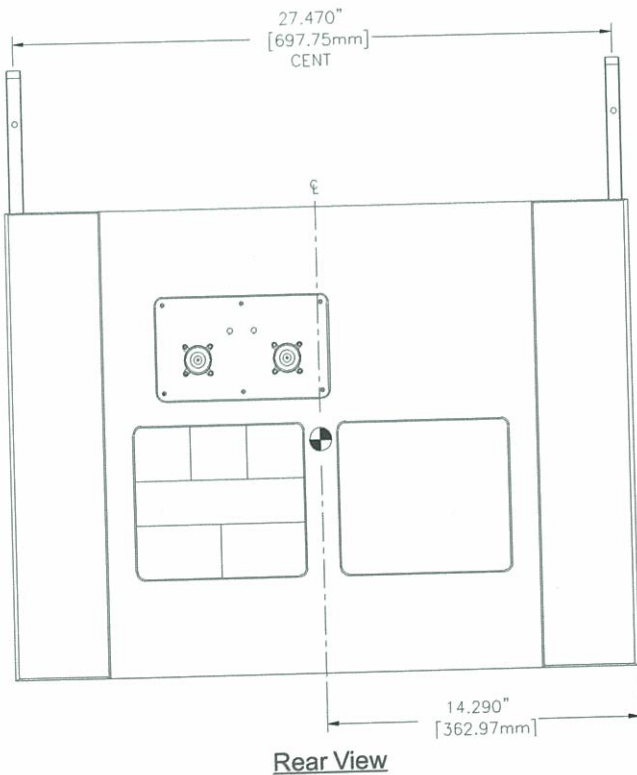
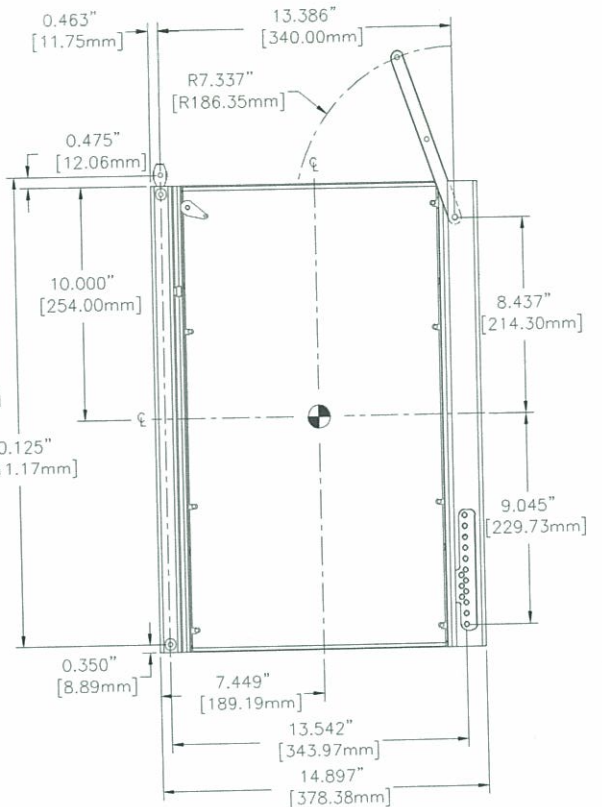
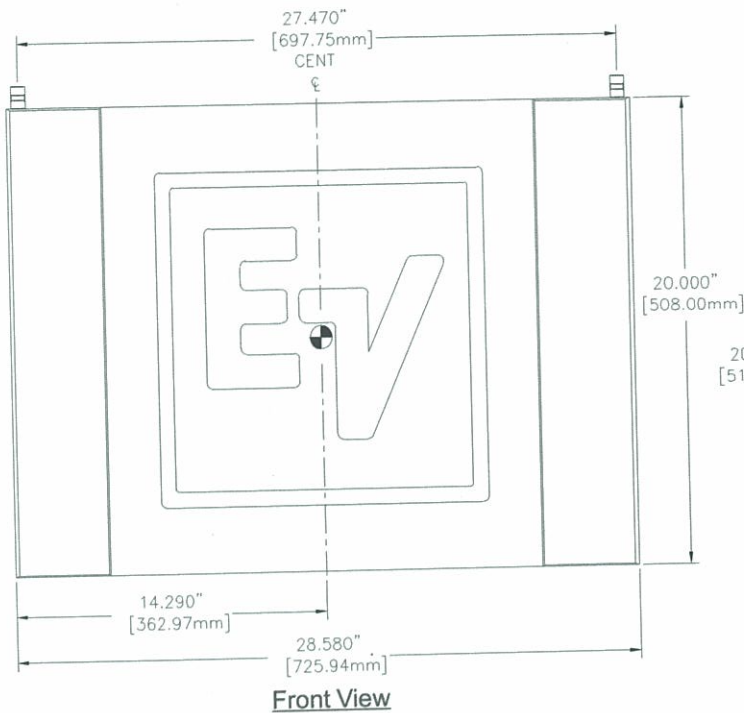


Figure 5a:
XLD GRID Rigging Dimensions and Weights

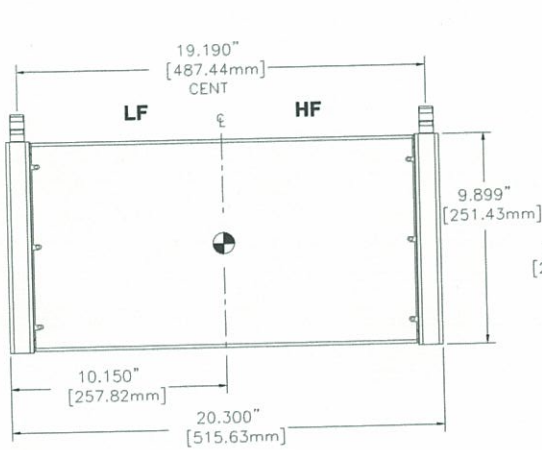




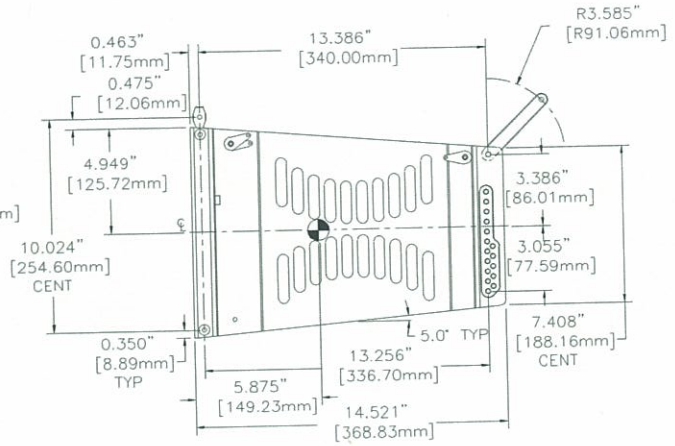
Weight: 90 lb (40.8 kg)

Figure 4c:
XS212 Rigging Dimensions and Weights

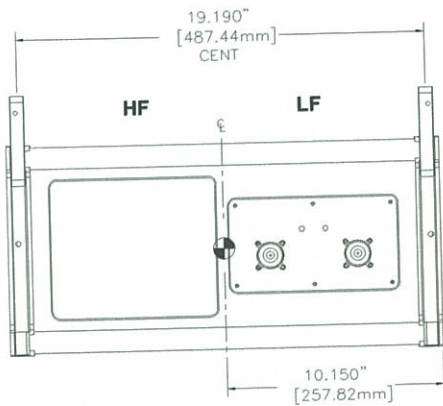
60



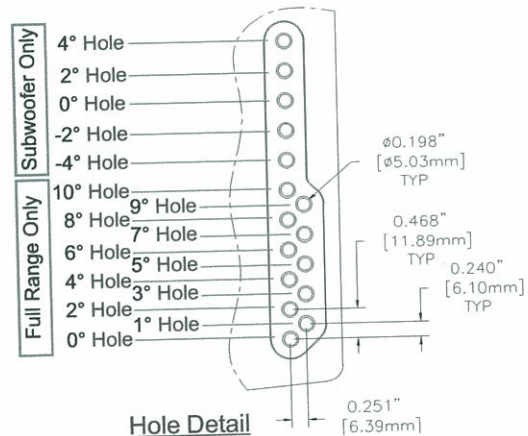
Front View (With Grille)



Side View



Rear View

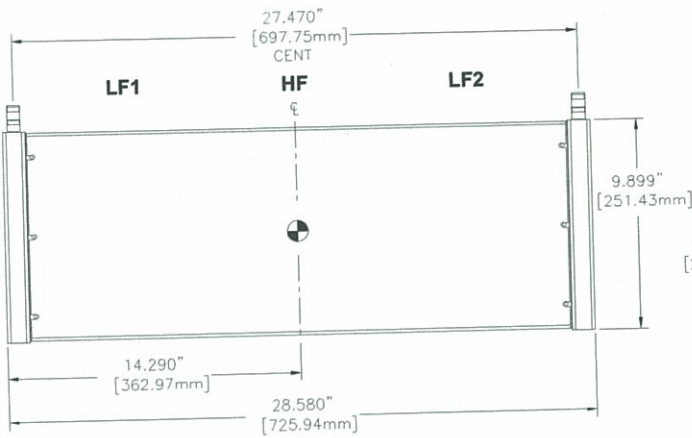


Hole Detail
Scale 3:1

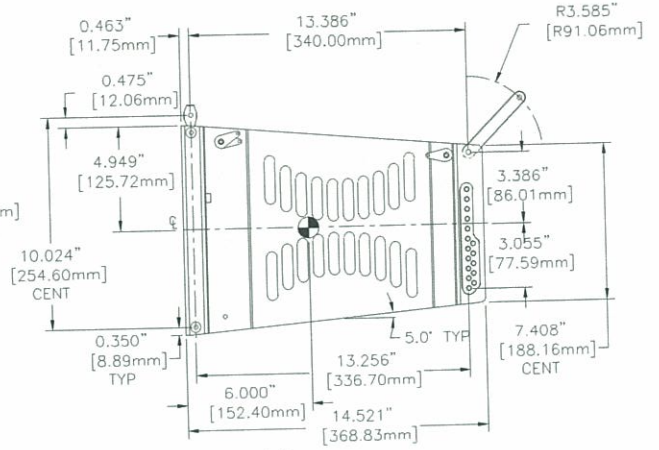
Weight: 38 lb (17.2 kg)

Figure 4b:
XLE181 Rigging Dimensions and Weights

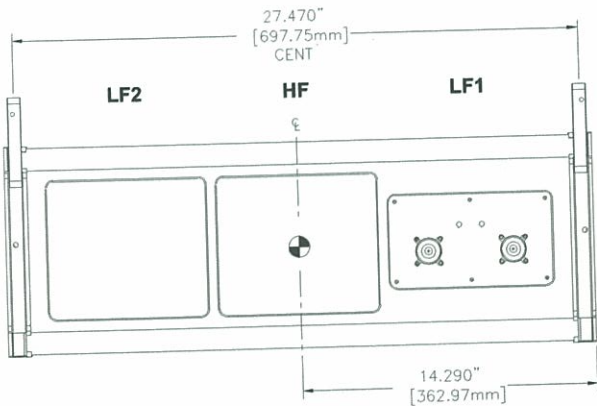
61



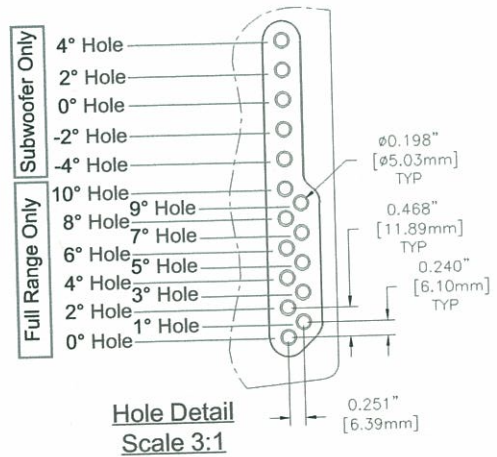
Front View (With Grille)



Side View



Rear View



Hole Detail
Scale 3:1

Weight: 48 lb (21.8 kg)

Figure 4a:
XLD281 Rigging Dimensions and Weights

62

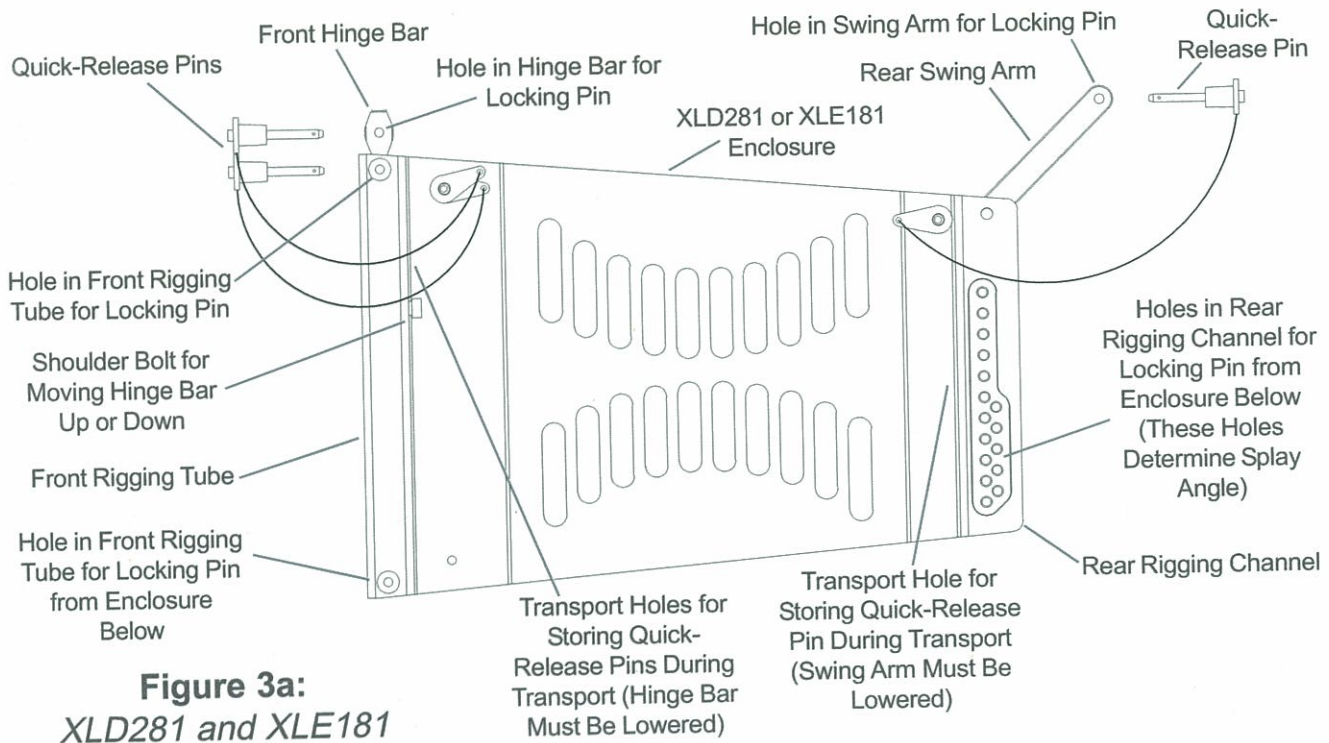


Figure 3a:
XLD281 and XLE181
Rigging Hardware

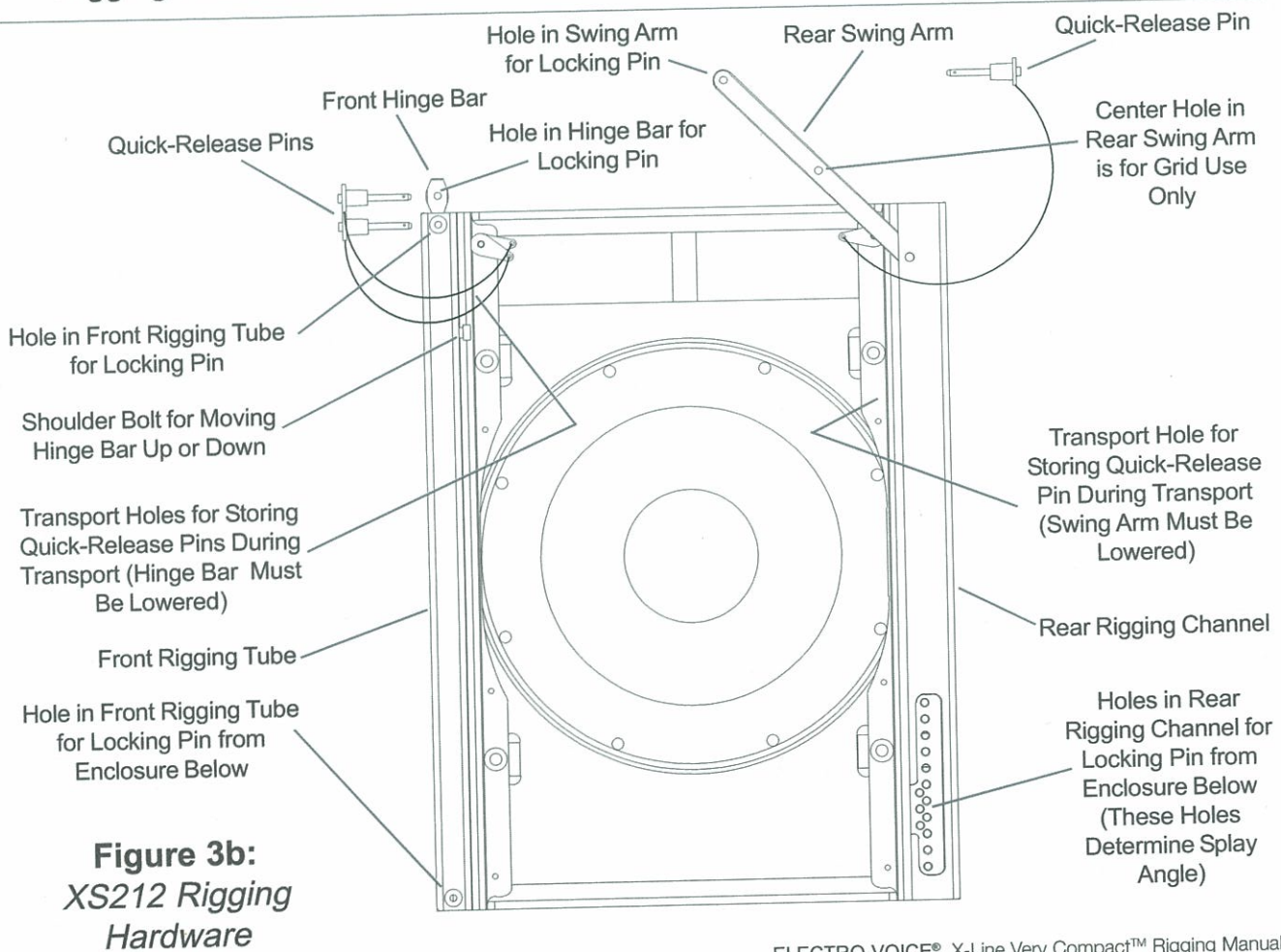


Figure 3b:
XS212
Rigging Hardware

63

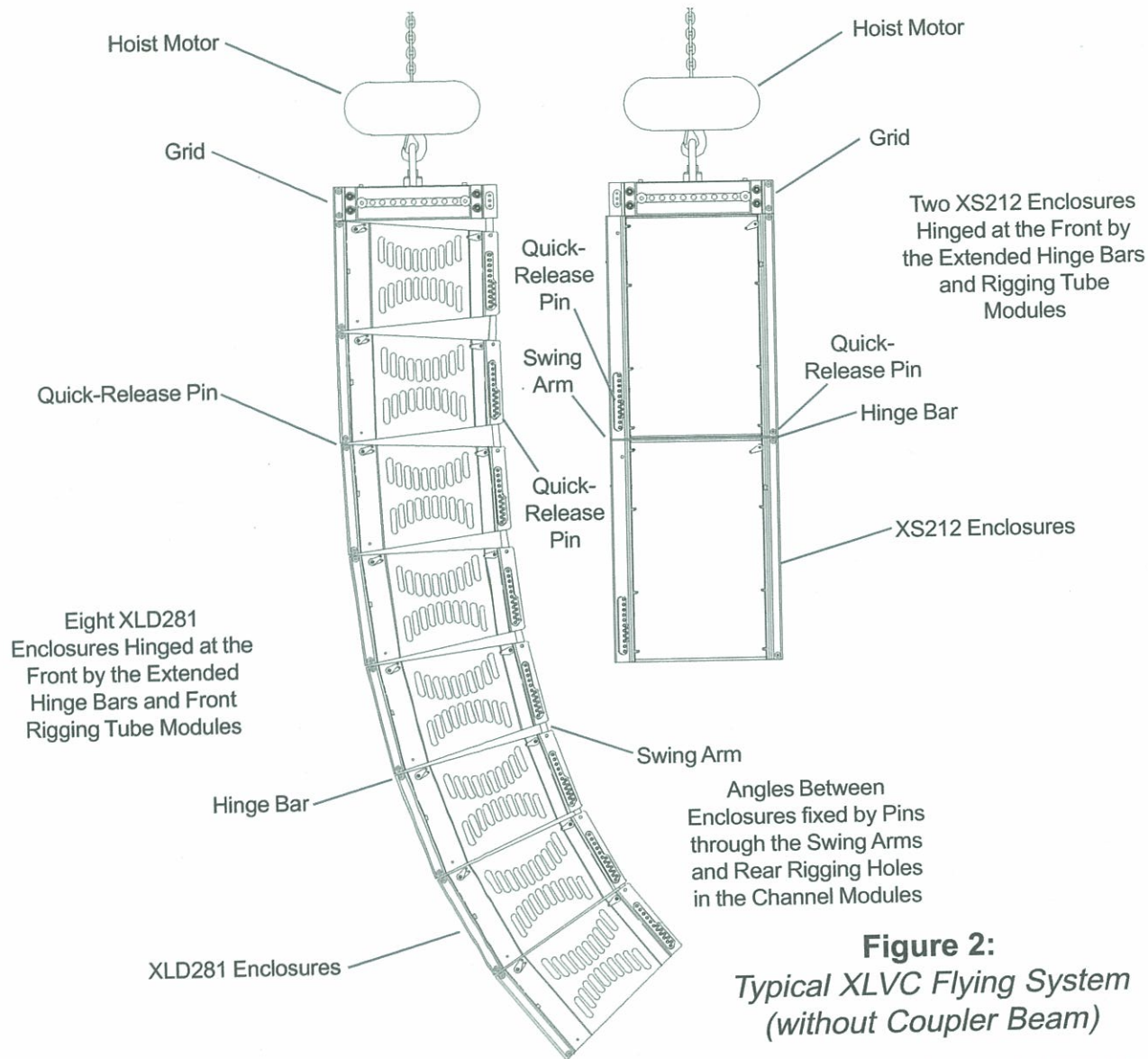


Figure 2:
*Typical XLVC Flying System
 (without Coupler Beam)*

The swing arm from an enclosure below can be pivoted up so that the quick-release pin from the enclosure below may be inserted through a hole in the rigging slot on the channel module above, linking the two enclosures together. The vertical tilt angle of the bottom enclosure is then determined by the hole in which the swing arm is pinned. This pin fixes the maximum distance the back corners of the enclosures may be separated. The XLD281 and XLE181 enclosures may be angled from 0° to 10° in 1° increments, while the XS212 enclosure may be angled from 0° to 20° in 2° increments.

The XLD281 and XS212 loudspeaker systems may be rigged together in the same column because they have the same width. However, the XLE181 system may not be rigged to either an XLD281 or XS212 because it is not as wide.

The center of gravity and rigging dimensions for all of the XLVC loudspeaker systems are shown in Figure 4. This figure includes sufficient information to calculate the vertical angle of XLVC enclosures that are rigged together in a column, as well as the weight distribution throughout the column.

69

1. X-Line Very Compact Rigging System

1.1 Overview of the XLVC Flying System

The XLVC loudspeaker systems have been designed to construct correct acoustic line arrays. Acoustic line arrays typically consist of independent columns of loudspeaker systems that acoustically and coherently sum to radiate cylindrical wavefronts. This simplifies the rigging system.

The XLVC loudspeaker enclosures utilize a hinged rigging system that makes constructing arrays easy, predictable and repeatable. This front-hinging rigging concept allows arrays to be accurately constructed with the least possible spacing between enclosures. The front and back rigging hardware for linking two enclosures together are captured as an integral part of the side rigging tube and channel modules.

A basic array is shown in Figure 2 that illustrates the integral components that make up a typical XLVC flying system. The XLD281 and XLE181 enclosures are vertically trapezoidal - taller at the front than at the back. The enclosures are hinged at the front corners using rigging hardware specially designed for the XLVC system. The enclosures are linked at the rear using rigging arms that have multiple attachment positions. The different positions adjust how close the back corners of the enclosures are pulled together; hence, adjusting the vertical angle of the bottom enclosure.

1.2 XLVC Enclosure Rigging Hardware Details

On each side of the enclosure are XLVC rigging tube and channel modules. All the rigging hardware needed to fly a column of XLVC enclosures is an integral part of the high-strength aluminum-alloy rigging tube and channel modules. The structural load is transmitted through the modules minimizing the load on the loudspeaker enclosure shell. Figure 3 illustrates the XLVC enclosure rigging hardware components. Figure 4 shows key dimensions for the rigging hardware.

At the front rigging module is a rectangular rigging tube. Captured inside the rigging tube is a rigging connector called the hinge bar. The hinge bar is constructed from a high-strength aluminum alloy. The hinge bar can slide out the top of the tube and be locked into position as shown in Figure 2. The portion of the hinge bar sticking out the top would be inserted into the front rigging tube of an enclosure above and pinned into place, linking the two enclosures together and forming a hinging point between the two enclosures. The hinge bar can also be fully retracted inside the tube for transportation.

Each hinge bar has two holes in the bar for rigging box-to-box or securing pins for transport. The front rigging tube has two holes for pinning the bar in place to construct arrays or for transport. As shown in Figures 3a and 3b, the bottom hole and pin on the bar locks the hinge bar in place at the top of the tube. The exposed top hole and pin is then used to lock the hinge bar in the tube of an enclosure above. For transportation, the hinge bar would be slid down inside the tube and would be locked in the tube module using the two "transport holes" on the rear of the front rigging tube.

At the rear is a channel module with a vertical rigging slot. Captured inside the rigging slot is a rigging connector called the swing arm. The swing arm is constructed from a high-strength aluminum alloy. The swing arm can be pivoted to stick out the top as shown in Figures 3a and 3b. At the bottom of the channel from the enclosure above, the rear rigging slot has a series of holes.

65

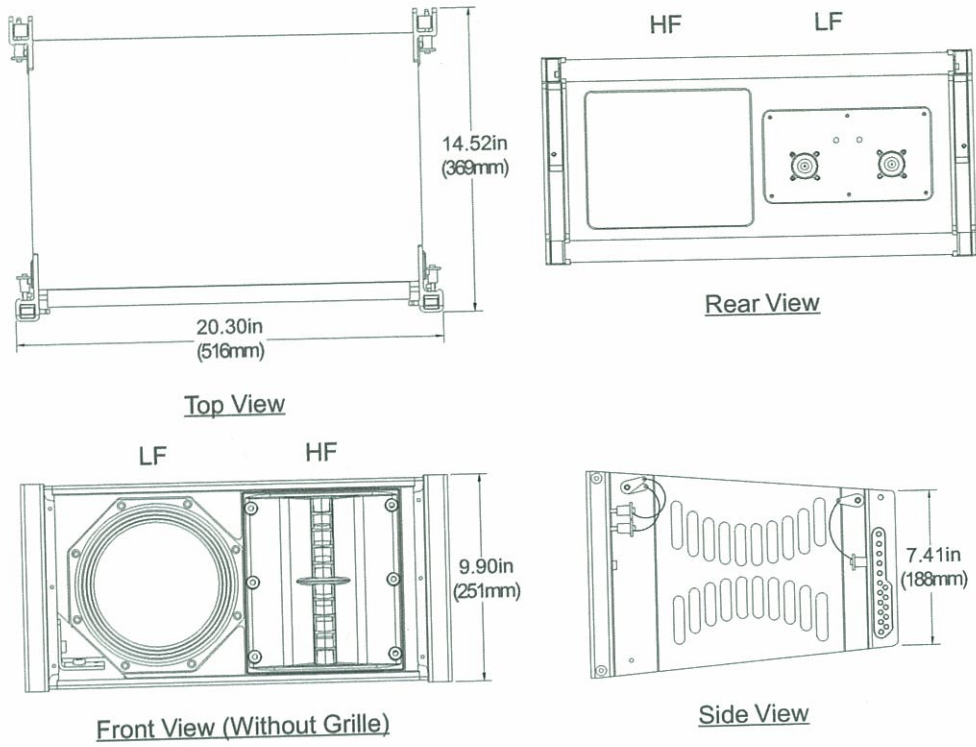


Figure 1b: XLE181 Loudspeaker System

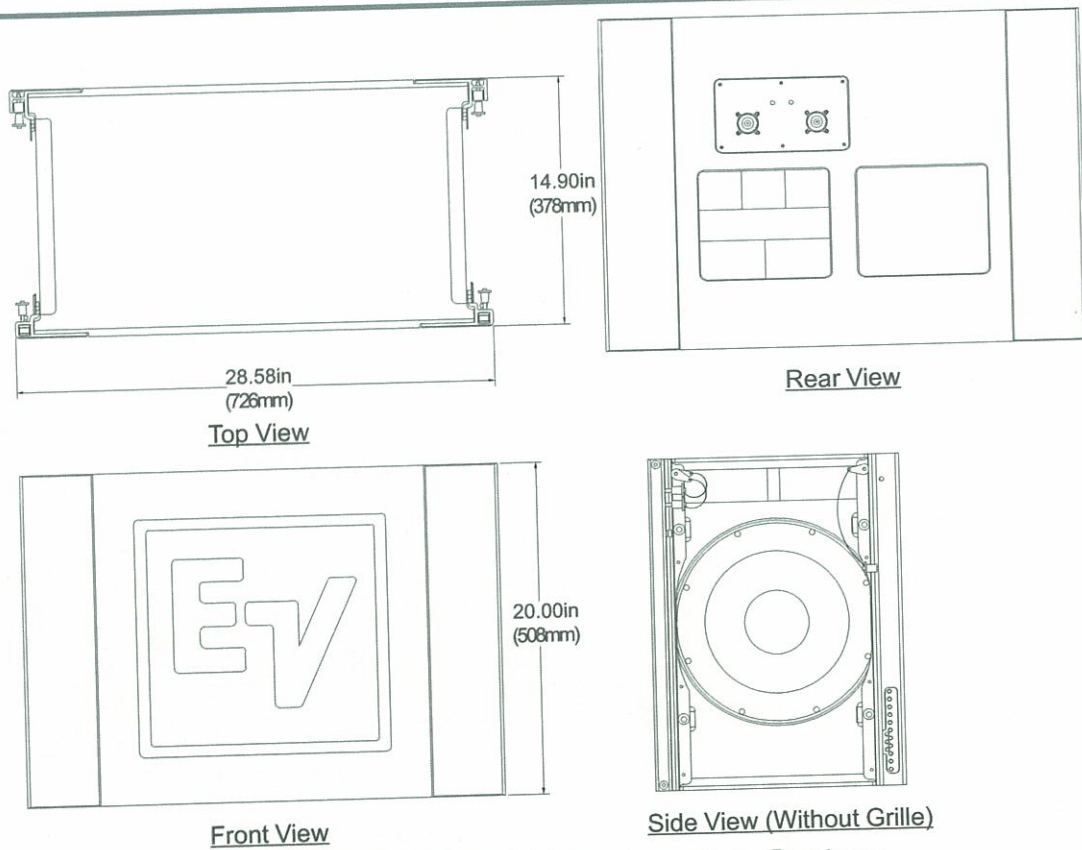


Figure 1c: XS212 Loudspeaker System

66

0. Introduction

The X-Line Very Compact (XLVC) loudspeaker systems represent an important step in line-array technology for small- and medium-scale sound reinforcement. The individual loudspeaker drivers, acoustic lenses, acoustic waveguides, enclosures and rigging hardware were all designed specifically for the XLVC product line to not only achieve the highest acoustic output with the highest fidelity, but also to produce a precise wavefront from each element to achieve state-of-the-art line-array performance. A brief description of the product line is included below. The XLVC loudspeaker systems are shown in Figure 1 with key dimensions and features.

XLD281: Three-way, LF1/LF2/HF loudspeaker system with a 120°H x 10°V coverage pattern. The system includes two DVN2080 8-inch (203-mm) LF drivers and two ND2S-16 2-inch (51-mm) HF drivers. The XLD281 has a switchable crossover that allows either biamp or triamp operation. The XLD281 utilizes an enclosure that is trapezoidal in the vertical plane (with an 10° total included angle) and has XLVC 10° rigging tube and channel modules secured to the left and right enclosure sides.

XLE181: Two-way, LF/HF loudspeaker system with a 120°H x 10°V coverage pattern. The system includes one DVN2080 8-inch (203-mm) LF driver and two ND2S-16 2-inch (51-mm) HF drivers. The XLE181 has a switchable crossover that allows either biamp or passive operation. The XLE181 utilizes a narrower 10° trapezoidal enclosure than the XLD281 and has XLVC 10° rigging tube and channel modules secured to the left and right enclosure sides.

XS212: Dual Side-Firing Bass System with two DVX3120 12-inch (305-mm) woofers. The XS212 utilizes an enclosure that is rectangular in shape and has XLVC elongated 20° rigging tube and channel modules secured to the left and right enclosure sides.

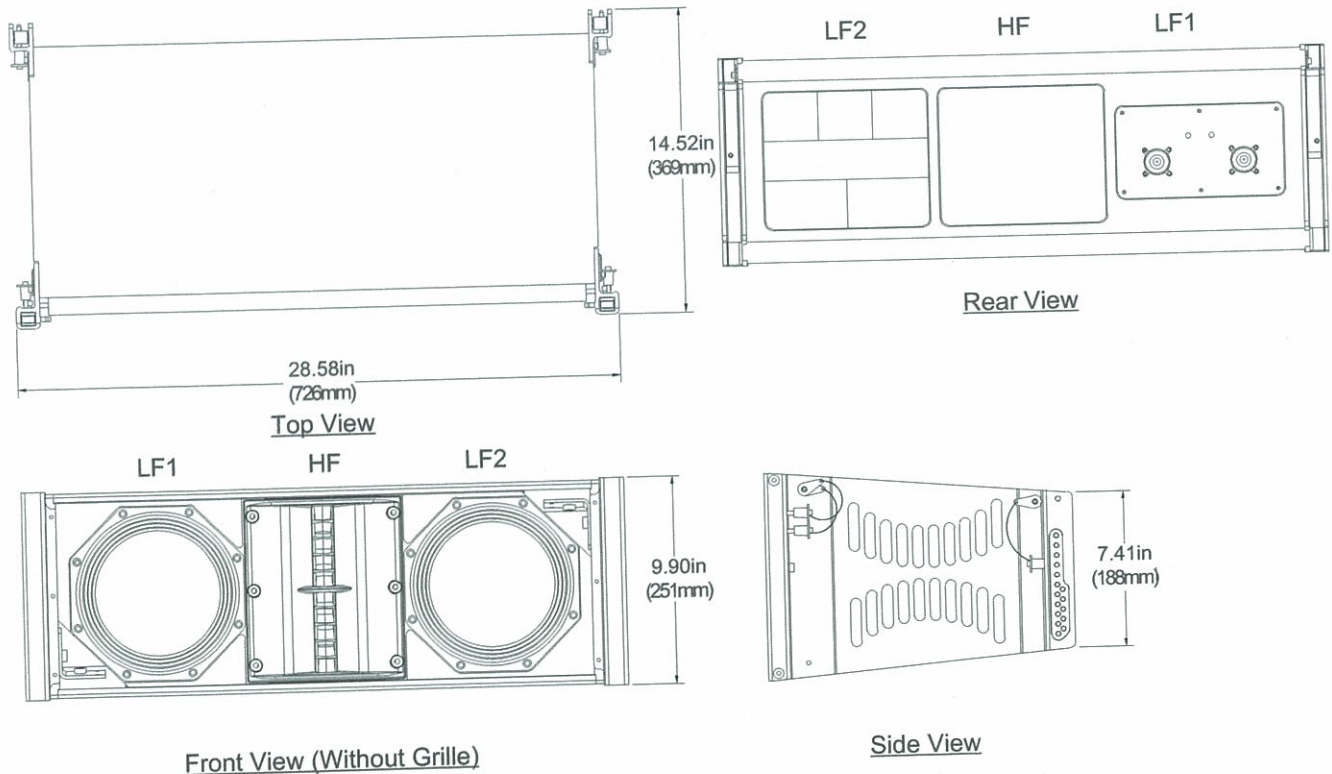
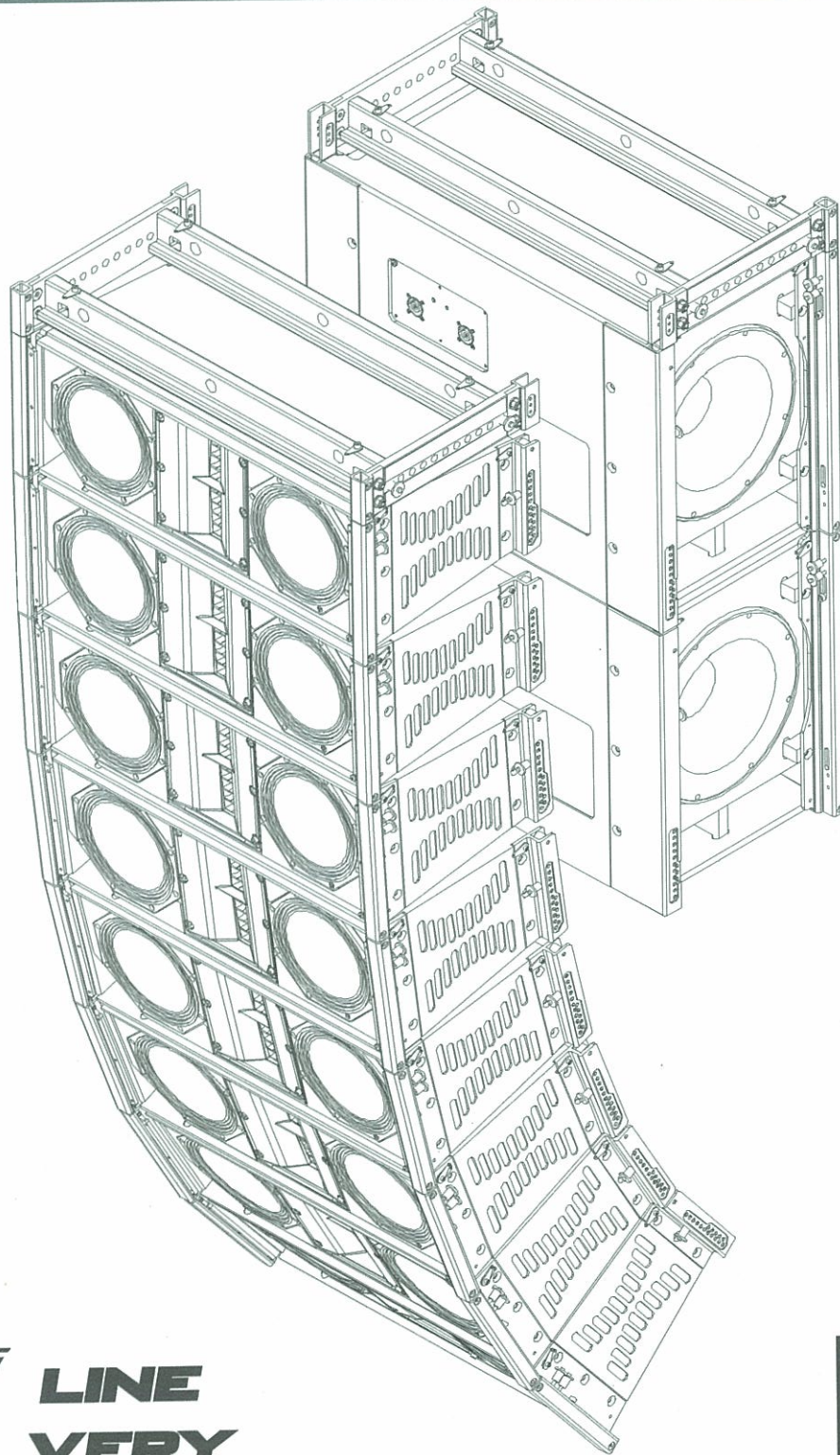


Figure 1a: XLD281 Loudspeaker System

67

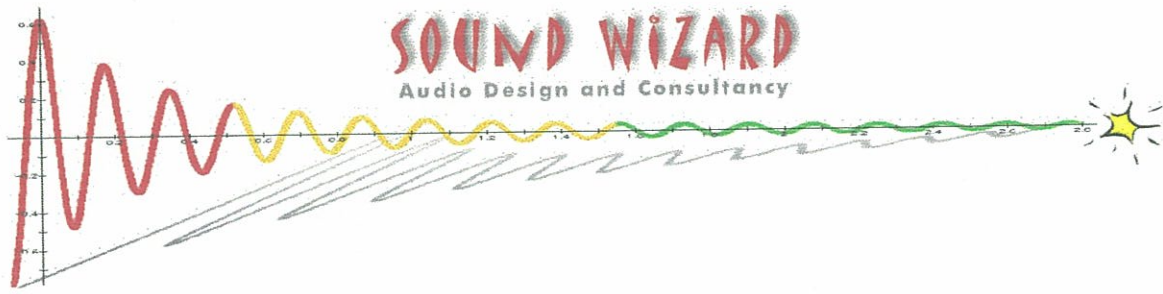
X-Line Very Compact Rigging Manual



X LINE
VERY
COMPACT™



68



LINE ARRAY

RIGGING SYSTEM DESCRIPTION

Bharatha Kalakshetra Auditorium

Item Description	Qty	Type
------------------	-----	------

Green Room Equipments

STUDIO PRO 3 PAIR OF ACTIVE SPEAKERS FOR GREEN ROOMS	3	SP3
XLR (F) TO XLR (M) SYMM. CABLES FOR ACTIVE SPEAKERS, 40 MTR	1	XLR CABLES
XLR (F) TO XLR (M) SYMM. CABLES FOR ACTIVE SPEAKERS, 20 MTR	2	XLR CABLES

70

Bharatha Kalakshetra Auditorium

Item Description	Qty	Type
Back-line Microphones and Accessories		
N/DYM® dynamic supercardioid lead vocal microphone	3	ND 767a
Handheld system includes: HTU2C-510 transmitter featuring the RE510 super cardioid Conden	2	RE510
Probe-style true condenser cardioid instrument microphone	2	RE200
N/DYM® dynamic supercardioid instrument microphone	3	ND 468
N/DYM® dynamic cardioid variant bass drum microphone	2	ND 868
Boundary condenser microphone,Black	3	RE90B
Premium lapel microphone, cardioid.	3	RE 92L
Roadworthy active direct injection box	3	DN 100
Handheld system includes: HTU2D-767a transmitter featuring the N/D 767a supercardioid dyn	4	RE2 N7
Multi-pattern gooseneck microphone with mic switch and universal base, 18-inch gooseneck	3	PC 18"
MiniMic Omnidirectional Low Profile Headworn microphone in light beige color with TA4F con	4	RE97 TX
Bodypack system includes: BPU-2 transmitter, and a RE-2 Receiver, no microphone in a hard st	4	RE2 BP
XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 6 METERS PACK OF 3 CABLES	18	MC18
MIC STANDS LONG BOOMS	12	BT4
MIC STANDS SHORT BOOMS	8	MB1
MIC STANDS BIG STUDIO BOOMS	2	SB100
6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	4	SPARE CABLES

(71)

Bharatha Kalakshetra Auditorium

Item Description	Qty	Type
Intercom		
TELEX WIRED INTERCOM POWER SUPPLY	1	PS15
INTERCOM SPLITTER	1	TW5W
TELEX WIRED INTERCOM BELTPACKS	5	BP319
INTERCOM HEADSETS	5	PH1
WALLMOUNT BOXES FOR INTERCOM CONNECTION, XLR FITTED	10	XLR BOX
XLR TO XLR SHIELDED CABLE FOR TELEX BELTPACKS, 5MTR	10	XLR CABLES
1 SPARE INTERCOM HEADSET	1	PH1
SHIELDED CABLE FOR INTERCOM CONNEXION 200MTR + XLR PLUGS	1	CABLE

72

Bharatha Kalakshetra Auditorium

Item Description	Qty	Type
Mixing Gear		
28 Mono-, 4 Stereo-Line-Inputs Mixing console	1	Midas Venice 320
4 CHANNEL DIGITAL REVERB PRO	1	REV 2496
LITTLITE GOOSENECK TYPE	2	12V Desk Lamp
Four channel / dual stereo compressor / limiter	2	DN 504
Dual 1/3 octave analogue GEQ with hi/lo pass and notch filters	1	DN 370 EQ
ONE 6.35 STEREO JACK (M) TO 2 XLR (M/F), 6MTR	8	INSERT CABLES
FLY CASE WITH CASTOR WHEELS AND HANDLES	1	EASIBOX 15U REF 31-E415-F
LINE FILTER	1	POWERBRITE PB11
CD PLAYER, STEREO, RACKMOUNT TYPE WITH AUTOCUE	1	CD01U PRO
DOUBLE CASSETTE PLAYER AND RECORDER, RACKMOUNT TYPE	1	TASCAM 322
RCA (M) TO 6.35 JACK ASYM. CABLES FOR CD CONNECTION, 6 MTRS	2	XLR CABLES
6.35 JACK (M) TO XLR ASYM. CABLES FOR SOURCE CONNECTION, 6 MTRS	2	XLR CABLES
RCA (F) TO 6.35 JACK (M) ADAPTERS	4	NEUTRIK ADAPTERS
XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	4	SPARE CABLES
6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	2	SPARE CABLES
XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	10	HF MICS CABLES
HEADPHONES	2	CH700



Bharatha Kalakshetra Auditorium

Item Description	Qty	Type
Monitors		
FLY CASE	1	EASIBOX 15U REF 31-E415-F
LINE FILTER	1	POWERBRITE PB11
GRAPHIC EQUALIZER	1	DN 370 EQ
FEEDBACK SUPPRESSOR	2	D3500 EQ
350+150 WRMS POWERED MONITORS	4	SXA360
PASSIVE MONITORS	4	FRI28LPM
2 x 450 WRMS AMPLIFIER	1	S 900
32 IN , LENGHT= according to the placement of monitor console, splice at one end, harting at other end	1	MON SNAKE
NL4 SPEAKON CABLES	2	SPEAKON MAIN CABLES
NL4 SPEAKON CABLES	2	SPEAKON LINK CABLES
XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	4	XLR CABLES
XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR ACTIVE MONITORS INPUT WIRING, 18 METER	2	XLR CABLES

74

Bharatha Kalakshetra Auditorium

Item Description	Qty	Type
Front Fills		
150W rms, 100° x 90° CABINETS	6	EV ID 4.2
2 x 600 WRMS AMPLIFIER	1	S1200
NL4 SPEAKON TO BARE END CABLE	2	SPEAKON CABLES
BARE ENDS LINK CABLES FOR SPEAKERS, 4 MTR	4	LINK CABLES
FEEDBACK SUPPRESSOR	1	D3500 EQ

15

Bharatha Kalakshetra Auditorium

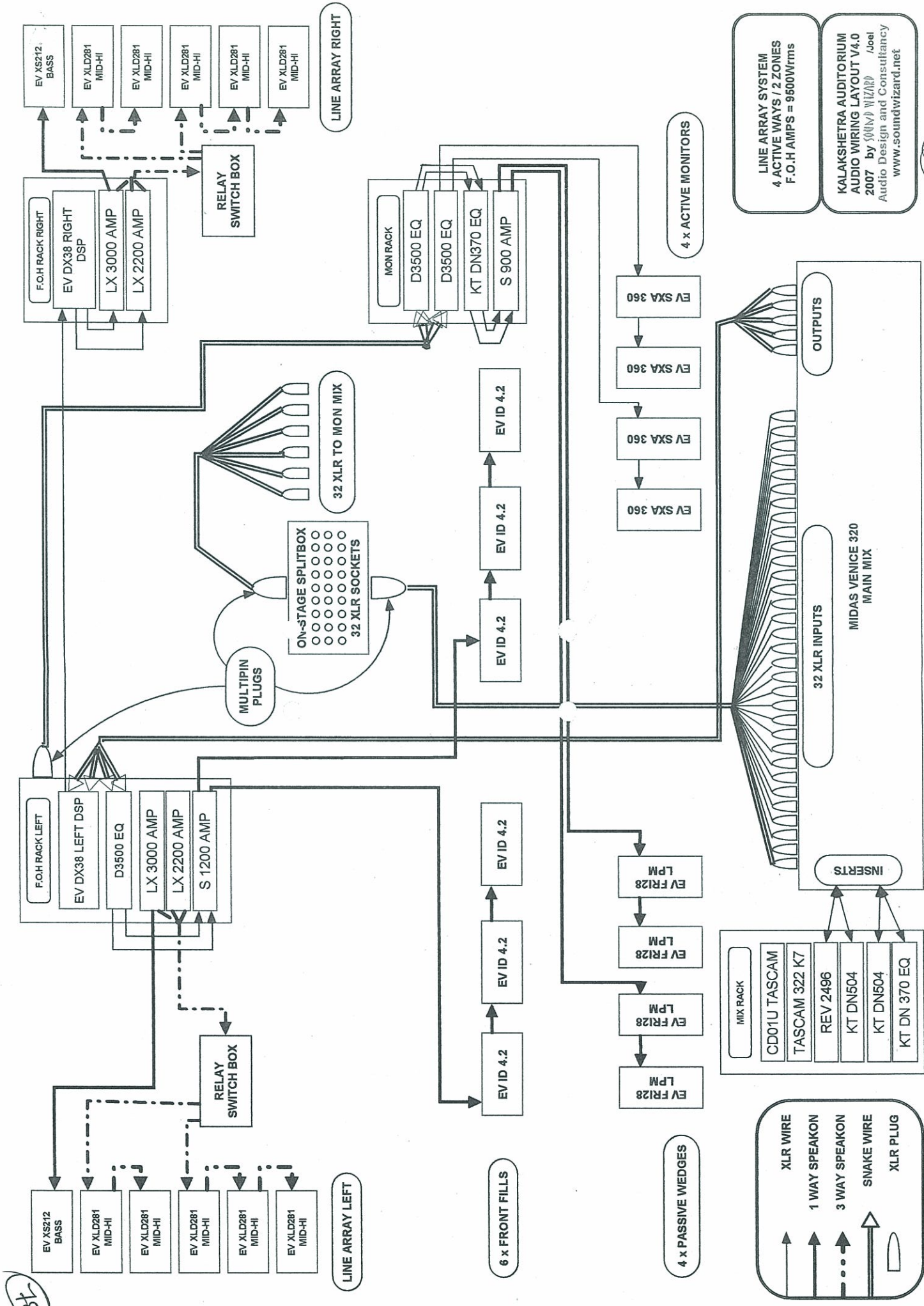
Item Description	Qty	Type
FOH Sound System		
LINE ARRAY CABINET	10	EV XLD 281
LINE ARRAY BASS CABINET	2	EV XS 212
GRIDS	2	EV XLD Grid
DIGITAL PROCESSORS	2	EV DX38
2 x 1100 WRMS AMPLIFIERS	2	LX 2200
2 x 1500 WRMS AMPLIFIERS	2	LX 3000
RACKS	2	EASIBOX 15U REF 31-E415-F
LINE FILTER	1	POWERBRITE PB11
1 IN / 2 OUTS SWITCHING BOX FOR LINE ARRAY 3 WAY SPEAKERS	2	RELAY SWITCHBOX
1 REMOTE CONTROL FOR THE RELAY SWITCHBOX	1	REMOTE CONTROL
70MTR / 32 IN Main Input Snake	1	MAIN INPUT SNAKE
70MTR / 8 OUT Main Output Snake	1	MAIN OUTPUT SNAKE
30MTR XLR LINK Cables	2	XLR CABLES
8MTR / 4 OUT Mono Rack Snake Cable	1	MONITOR RACK SNAKE
2 HARTING SOCKETS AND 32 XLR EQUIPPED On Stage Split Box	1	ON-STAGE SPLITBOX
NL8 TO NL4 SPEAKON CABLES, FOR BASS CABINETS	2	SPEAKON MAIN CABLES
NL8 Y TYPE SPEAKON CABLES, ONE END SPLITTED 3xNL4 FITTED FOR LO/MID/HI SEPARATION, 1MTR	2	SPEAKON MAIN CABLES
NL8 SPEAKON CABLES, 1 METER	6	SPEAKON LINK CABLES
NL8 TO NL8 SPEAKON FROM RELAY SWITCH BOX TOWARDS XLD281 CABINETS	4	SPEAKON LINK CABLES
XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	12	XLR CABLES

(76)

Bharata Kalakshetra Auditorium

Mics	
Dynamic Hypercardioid Vocal Mics	3
Condenser Hypercardioid Vocal Mics	3
Condenser Instrument Mics	1
Dynamic Percussion Mics	3
Dynamic LF Percussion Mics	2
Boundary Mic	3
Clip Mics for Instruments	3
Active DI Box	4
Wireless Vocal Sets	3
Podium Gooseneck Mic	2
Low Profile Head-worn Mics	4
Wireless Solutions for the Above	4
Intercom (Wired)	
Power Supply	1
Splitter	1
Belt Pack	5
Head Set	5

77



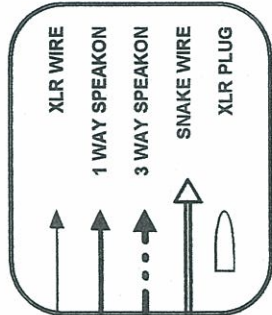
LINE ARRAY SYSTEM
 4 ACTIVE WAYS / 2 ZONES
 F.O.H AMPS = 9500Wrms

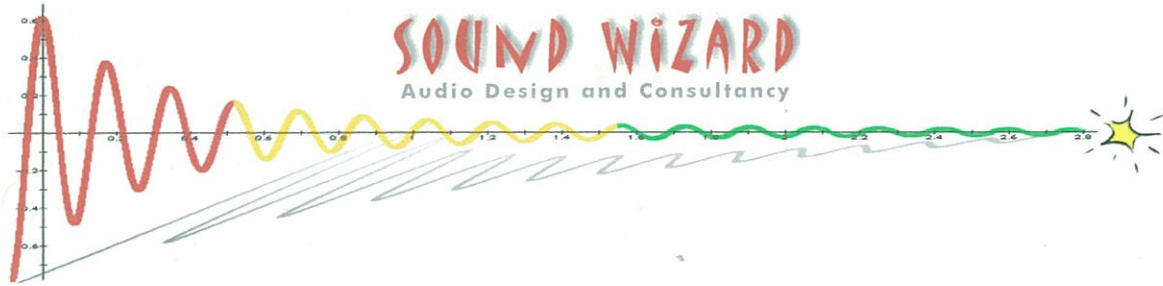
KALAKSHETRA AUDITORIUM
 AUDIO WIRING LAYOUT V4.0
 2007 by *(SUN) WIZARD* / Joel
 Audio Design and Consultancy
 www.soundwizard.net

78

87

79





September, 13th 2007

Dear Mrs Leela Samson,

Following our visit to your auditorium, please find enclosed the final Equipment List and the final Wiring Layout, updated with the new 6 smaller front-fills speakers, one more pair of speaker for the 3rd green room, and some modifications on the wiring (mainly about audio snakes, intercoms, and green room sections).

Do not hesitate to contact me for any further information you may need,

Best regards

Joel.

A handwritten signature in black ink, appearing to be 'Joel', written in a cursive style.



4. In build Digital Signal Processing (DSP) that aligns all components inside the box (called Guinness Focusing) and allows installers to tune each box individually for a maximum optimization with the venue.

5. Computer communication with each box that allows easy setting changes, but also real time monitoring of the state and load of each component/box.

6. Very easy rigging if any need arises to access any of the boxes, all with clips, no special tools are needed.

The Venue (D-Show)

Flexibility

- VENUE offers similar mixing capacity at a fraction of the price of other similar consoles.
- A loaded VENUE system can mix a total of 128 inputs, including 96 mic pres.
- VENUE does not include the matrixes in its primary bus count. We have 8 mono matrixes and 8 stereo matrixes in addition to the 24 aux/group buses. At the moment the matrixes/PQ feature a fairly fixed routing scheme, but we're working to expand this area in a future release, at which point we'll be on par for nearly all applications.
- Nearly every facet of VENUE can be scaled to suit a customer's budget, application or physical space.
- Using MIDI, one can control external MIDI driven devices or vice-versa.

Reliability

- All VENUE components feature dual redundant PSUs w/ on screen failure notification.
- In most other Consoles, the core DSP boxes (which do all of the mixing) and the I/O boxes (which typically feed the PA) each have single PSUs.
- Crashes are typically caused by the applications layered on top of the OS, not the OS itself. DiglDesign has 20 years developing and testing software, and D-Show software in particular is designed with comprehensive error handling mechanisms which make it extremely robust and able to recover gracefully from any failures which might occur. We have no regrets about using Win XPe, and have had no problems with it in.

Sound Quality

Digidesign have been doing digital mixing for over 20 years, and are the pioneers of large scale digital mixing systems in the recording world. It's no small task to create a powerful, flexible mixing engine combined with great sounding channel strip processing and a complete plug-in architecture.

Sincerely,


Deepu

06-04-09

(8)

DEEPU NAIR
SOUND ENGINEER
OLD # 2A, NEW # 19, C.G.E. COMPLEX, THIRUMURUGAN STREET
KALAKSHETRA COLONY, BESANT NAGAR
CHENNAI 600090

deepunair@me.com

<http://www.themusicmint.com>

To,

The Director
Kalakshetra Foundation
Thiruvanmiyur
Chennai 600041

Madam,

I recommend Kalakshetra Foundation to choose the Option 2, EAW Sound system along with Digidesign | VENUE (D-Show) system for the Koothambalam, Bharata Kalakshetra Auditorium.

Main concerns when selecting EAW equipment are (by order of priority):

1. Transparent system, offering sound enhancement without the feeling of the sound being played through loudspeakers
2. Versatile, handling all type of events from dance, theatre plays & fusion music
3. Easy to use, the "in house" engineers should quickly be able to operate the system with presets. Any modification in the settings and layout can be applied within a secure interface. After any event using a modified setup, the recall to the original state should be one button away.
4. Reasonably priced

EAW Leading Technology in this Category

In this 'line array' category, EAW has the following advantages compared to its competition (at an equivalent price range):

1. The EAW NTL720 is extremely compact versus dynamic range, there are 10 loudspeaker drivers hosted in each box that is less than 10X24X15 inches big (5 boxes needed on each side) - the outcome is a very low profile look.
2. Four way design (with subwoofer) that minimizes intermodulation distortion
3. No compression drivers: much more natural sound

(82)

4. In build Digital Signal Processing (DSP) that aligns all components inside the box (called Gunness Focusing) and allows installers to tune each box individually for a maximum optimization with the venue.

5. Computer communication with each box that allows easy setting changes, but also real time monitoring of the state and load of each component/box.

6. Very easy rigging if any need arises to access any of the boxes, all with clips, no special tools are needed.

The Venue (D-Show)

Flexibility

- VENUE offers similar mixing capacity at a fraction of the price of other similar consoles.
- A loaded VENUE system can mix a total of 128 inputs, including 96 mic pres.
- VENUE does not include the matrixes in its primary bus count. We have 8 mono matrixes and 8 stereo matrixes in addition to the 24 aux/group buses. At the moment the matrixes/PQ feature a fairly fixed routing scheme, but we're working to expand this area in a future release, at which point we'll be on par for nearly all applications.
- Nearly every facet of VENUE can be scaled to suit a customer's budget, application or physical space.
- Using MIDI, one can control external MIDI driven devices or vice-versa.

Reliability

- All VENUE components feature dual redundant PSUs w/ on screen failure notification.
- In most other Consoles, the core DSP boxes (which do all of the mixing) and the I/O boxes (which typically feed the PA) each have single PSUs.
- Crashes are typically caused by the applications layered on top of the OS, not the OS itself. Digidesign has 20 years developing and testing software, and D-Show software in particular is designed with comprehensive error handling mechanisms which make it extremely robust and able to recover gracefully from any failures which might occur. We have no regrets about using Win XP, and have had no problems with it in.

Sound Quality

Digidesign have been doing digital mixing for over 20 years, and are the pioneers of large scale digital mixing systems in the recording world. It's no small task to create a powerful, flexible mixing engine combined with great sounding channel strip processing and a complete plug-in architecture.

Sincerely,


Deepu Nair

06-04-09



DEEPU NAIR
SOUND ENGINEER
OLD # 2A, NEW # 19, C.G.E. COMPLEX, THIRUMURUGAN STREET
KALAKSHETRA COLONY, BESANT NAGAR
CHENNAI 600090

deepunair@me.com

<http://www.themusicmint.com>

To,

The Director
Kalakshetra Foundation
Thiruvannamiyur
Chennai 600041

Madam,

I recommend Kalakshetra Foundation to choose the Option 2, EAW Sound system along with Digidesign | VENUE (D-Show) system for the Koothambalam, Bharata Kalakshetra Auditorium.

Main concerns when selecting EAW equipment are (by order of priority):

1. Transparent system, offering sound enhancement without the feeling of the sound being played through loudspeakers
2. Versatile, handling all type of events from dance, theatre plays & fusion music
3. Easy to use, the "in house" engineers should quickly be able to operate the system with presets. Any modification in the settings and layout can be applied within a secure interface. After any event using a modified setup, the recall to the original state should be one button away.
4. Reasonably priced

EAW Leading Technology in this Category

In this 'line array' category, EAW has the following advantages compared to its competition (at an equivalent price range):

1. The EAW NTL720 is extremely compact versus dynamic range, there are 10 loudspeaker drivers hosted in each box that is less than 10X24X15 inches big (5 boxes needed on each side) – the outcome is a very low profile look.
2. Four way design (with subwoofer) that minimizes intermodulation distortion
3. No compression drivers: much more natural sound

(84)

4. In build Digital Signal Processing (DSP) that aligns all components inside the box (called Gunness Focusing) and allows installers to tune each box individually for a maximum optimization with the venue.

5. Computer communication with each box that allows easy setting changes, but also real time monitoring of the state and load of each component/box.

6. Very easy rigging if any need arises to access any of the boxes, all with clips, no special tools are needed.

The Venue (D-Show)

Flexibility

- VENUE offers similar mixing capacity at a fraction of the price of other similar consoles.
- A loaded VENUE system can mix a total of 128 inputs, including 96 mic pres.
- VENUE does not include the matrixes in its primary bus count. We have 8 mono matrixes and 8 stereo matrixes in addition to the 24 aux/group buses. At the moment the matrixes/PQ feature a fairly fixed routing scheme, but we're working to expand this area in a future release, at which point we'll be on par for nearly all applications.
- Nearly every facet of VENUE can be scaled to suit a customer's budget, application or physical space.
- Using MIDI, one can control external MIDI driven devices or vice-versa.

Reliability

- All VENUE components feature dual redundant PSUs w/ on screen failure notification.
- In most other Consoles, the core DSP boxes (which do all of the mixing) and the I/O boxes (which typically feed the PA) each have single PSUs.
- Crashes are typically caused by the applications layered on top of the OS, not the OS itself. Digidesign has 20 years developing and testing software, and D-Show software in particular is designed with comprehensive error handling mechanisms which make it extremely robust and able to recover gracefully from any failures which might occur. We have no regrets about using Win XP, and have had no problems with it in.

Sound Quality

Digidesign have been doing digital mixing for over 20 years, and are the pioneers of large scale digital mixing systems in the recording world. It's no small task to create a powerful, flexible mixing engine combined with great sounding channel strip processing and a complete plug-in architecture.

Sincerely,


Deepu Vair

06-04-09

85

DEEPU NAIR
SOUND ENGINEER
OLD # 2A, NEW # 19, C.G.E. COMPLEX, THIRUMURUGAN STREET
KALAKSHETRA COLONY, BESANT NAGAR
CHENNAI 600090
deepunair@me.com
<http://www.themusicmint.com>

To,

The Director
Kalakshetra Foundation
Thiruvanmiyur
Chennai 600041

Madam,

I recommend Kalakshetra Foundation to choose the Option 2, EAW Sound system along with Digidesign | VENUE (D-Show) system for the Koothambalam, Bharata Kalakshetra Auditorium.

Main concerns when selecting EAW equipment are (by order of priority):

1. Transparent system, offering sound enhancement without the feeling of the sound being played through loudspeakers
2. Versatile, handling all type of events from dance, theatre plays & fusion music
3. Easy to use, the "in house" engineers should quickly be able to operate the system with presets. Any modification in the settings and layout can be applied within a secure interface. After any event using a modified setup, the recall to the original state should be one button away.
4. Reasonably priced

EAW Leading Technology in this Category

In this 'line array' category, EAW has the following advantages compared to its competition (at an equivalent price range):

1. The EAW NTL720 is extremely compact versus dynamic range, there are 10 loudspeaker drivers hosted in each box that is less than 10X24X15 inches big (5 boxes needed on each side) – the outcome is a very low profile look.
2. Four way design (with subwoofer) that minimizes intermodulation distortion
3. No compression drivers: much more natural sound

(26)



Digidesign quote March 2009

Srl No.	Product	Price in INR
1	Option A – Mix Rack HD 64 (64 Track Recording)	3,869,145 INR

VENUE components

- D-Show Profile Mix Rack system, which includes:
 - o D-Show Profile console
 - o Mix Rack (48 mic/line inputs, 16 analog line outputs)
 - o D-Show® software
 - o VENUEPack 3.0 plug-ins
 - o Video monitor mounting bracket (monitor not included)
 - o Trackball mounting bracket (trackball not included)
 - o iLok USB Smart Key (preauthorized with all VENUEPack and factory-installed plug-ins)
 - o All necessary cables and user guides
 - Additional DSP Mix Engine Card (for a total of three)
 - VENUEPack Pro 3.0 plug-ins
 - HDx Pro Tools|HD interface card (for up to 64 channels of Pro Tools recording and playback)
- Pro Tools|HD components
- Pro Tools|HD 2 Accel** for PCI or PCIe (includes Pro Tools HD software and over 40 plug-ins)
 - Two 12' DigiLink™ cables

2	Option B – Mix Rack System (18 Track Recording)	2,981,290 INR
---	--	----------------------

Mix Rack System include the following VENUE components.

- o D-Show Profile console
- o Mix Rack (48 mic/line inputs, 16 analog line outputs)
- o with two DSP Mix Engnie Cards
- o D-Show® software
- o VENUEPack 3.0 plug-ins
- o Video monitor mounting bracket (monitor not included)
- o Trackball mounting bracket (trackball not included)
- o iLok USB Smart Key (preauthorized with all VENUEPack and factory-installed plug-ins)
- o All necessary cables and user guides
- o FWx Fire Wire Record and Playback -18 track recording

Terms:

1. VAT and Octroi will be extra as applicable
2. Payment terms: 100% payment along with order.
3. Delivery: 4 to 6 weeks of clean order
4. Validity: This offer is valid for 60 days from this date
5. This system does not include a MAC.

87



BOSCH

Kalashetra fine arts auditorium

Date : 19.08.2008

SL#	TYPE	Model No.	ITEM DESCRIPTION	QTY	Unit Price	Value
1	INTERCOM	PH1	INTERCOM HEADSETS	5	20,413.26	1,02,066.30
2	INTERCOM	BP319	TELEX WIRED INTERCOM BELTPACK S	5	33,716.34	1,68,581.70
3	INTERCOM	TW5W	INTERCOM SPLITTER	1	19,495.98	19,495.98
4	INTERCOM	PS15	TELEX WIRED INTERCOM POWER SUPPLY	1	51,607.08	51,607.08
5	INTERCOM	PH1	1 SPARE INTERCOM HEADSET	1	20,413.26	20,413.26

Total : 3,62,164.32

Note :

1. Taxes will be additional as applicable
2. Payment 100 % along with Confirmed PO
3. All Speaker cables from the console to the speaker point to be done by customer
Installation , signal cable , connectors

Digidesign quote March 2009



Srl No. Product

Price in INR
3,869,145 INR

1 Option A – Mix Rack HD 64 (64 Track Recording)

- VENUE components
- D-Show Profile Mix Rack system, which includes:
 - o D-Show Profile console
 - o Mix Rack (48 mic/line inputs, 16 analog line outputs)
 - o D-Show@ software
 - o VENUEPack 3.0 plug-ins
 - o Video monitor mounting bracket (monitor not included)
 - o Trackball mounting bracket (trackball not included)
 - o Lock USB Smart Key (preauthorized with all VENUEPack and factory-installed plug-ins)
 - o All necessary cables and user guides
 - Additional DSP Mix Engine Card (for a total of three)
 - VENUEPack Pro 3.0 plug-ins
 - HDX Pro Tools|HD interface card (for up to 64 channels of Pro Tools recording and playback)
 - Pro Tools|HD components
 - Pro Tools|HD 2 Accel** for PCI or PCIe (includes Pro Tools HD software and over 40 plug-ins)
 - Two 12' Digilink™ cables

2 Option B – Mix Rack System (18 Track Recording)

Mix Rack System include the following VENUE components:

- o D-Show Profile console
- o Mix Rack (48 mic/line inputs, 16 analog line outputs)
- o with two DSP Mix Engine Cards
- o D-Show@ software
- o VENUEPack 3.0 plug-ins
- o Video monitor mounting bracket (monitor not included)
- o Trackball mounting bracket (trackball not included)
- o Lock USB Smart Key (preauthorized with all VENUEPack and factory-installed plug-ins)
- o All necessary cables and user guides
- o FWX Fire Wire Record and Playback - 18 track recording

Terms:

1. VAT and Octroi will be extra as applicable
2. Payment terms: 100% payment along with order
3. Delivery: 4 to 6 weeks of clean order
4. Validity: This offer is valid for 60 days from this date
5. This system does not include a MAC.



BOSCH

Kalashetra fine arts auditorium

Date : 19.08.2008

SL#	TYPE	Model No.	ITEM DESCRIPTION	QTY	Unit Price	Value
1	INTERCOM	PH1	INTERCOM HEADSETS	5	20,413.26	1,02,066.30
2	INTERCOM	BP319	TELEX WIRED INTERCOM BELTPACK S	5	33,716.34	1,68,581.70
3	INTERCOM	TW5W	INTERCOM SPLITTER	1	19,495.98	19,495.98
4	INTERCOM	PS15	TELEX WIRED INTERCOM POWER SUPPLY	1	51,607.08	51,607.08
5	INTERCOM	PH1	1 SPARE INTERCOM HEADSET	1	20,413.26	20,413.26

Total : 3,62,164.32

Note :

1. Taxes will be additional as applicable
2. Payment 100 % along with Confirmed PO
3. All Speaker cables from the console to the speaker point to be done by customer Installation , signal cable , connectors

90

Supplier Rivera

CD Player
Brand Pioneer
Qty 1

Model CMX-3000

Specifications
Double Deck Pro

Optional Surround
Surround Processor
DVD Player
Brand Denon
Qty 1

Model DN-A7100
DN-V310

Specifications
7.1 Decoder
DTS/Dolby Compatible

(15)

option 2

Supplier MRH Digital

	Brand	Qty	Model	Specifications
Signal Processor	QSC	1	DSP30	EQ, Dynamics, Delays for Sub
Side Monitors	QSC	4	AD-S282H	900W/8Ω
Wedges (H:26.9"/W:14.7"/D:14.9")	QSC	4	HPR122	500W
Amplifiers	QSC	1	RMX5050HD	1800W/4Ω
Speaker Processor	QSC	1	DSP322ua	EQ, Dynamics, Delays, Crossover
Green Room Speakers	QSC	4	AD-S32T	30W/8Ω

(26)


option 2

Supplier Pro Musicals

	Brand	Qty	Model	Specifications
Feedback Processor	Samson	3	D-3500	Feedback Suppressor, EQ, Dynamic Compressor/Limiter/Gate
Dynamic Processor	Presonus	1	ACP88	Multi Effects Digital Processor
FX Processor	Alesis	2	Midiverb 4	Power Stabilizer
Power Conditioner	Samson	4	Powerbrite Pro10	16 Rack Spaces
Racks	Samson	1	SRK16	12 Rack Spaces
Racks	Samson	2	SRK12	Telescopic Boom Stands
Microphone Stands	Samson	12	BT4	Mini Boom Stands
Microphone Stands	Samson	8	MB1	Studio Boom Stands
Microphone Stands	Samson	2	SB100	50W/8Ω
Green Room Amplifiers	Samson	2	Servo 120a	Open Headphones
Headphones	Samson	2	CH 700	

Optional Recorder	Brand	Qty	Model	Specifications
Digital Multitrack Recorder	Alesis	1	ADAT HD24	24 Track Hard Disk Recorder

option 2



Supplier Aditya Infotech

Line Array (H:47/1.20m W:24"/0.60m) Subwoofer (W:25.9"/0.65m) Grid	Brand	Qty	Model	Specifications
Flying Cables	EAW	10	NLT720	500W/500W/500W
Front Fill Speaker	EAW	2	NTS22	1000W
Amplifiers	EAW	2	FB172	For Line Array
Gooseneck	EAW	2	KF750	For Subs
HandHeld Transmitter with Mic	EAW	4	VR61	150W/8Ω
BodyPack System	EAW	1	CAZ1400	450W/4Ω
MiniMic Headworn	Audix	3	Micropod 18HC	M1250 with Flexible gooseneck
Lavalier	Audix	4	W3-OMS	RAD-360 System with OMS dynamic transmitter
BodyPack System (accessory)	Audix	4	W3-BP	RAD-360 Bodypack System with transmitter
Lavalier Accessories	Audix	4	HT5-BG	Slim-line headset vocal condenser
Lavalier Accessories	Audix	4	ADX10	Miniaturized lavalier condenser
Lavalier Accessories	Audix	4	W3-BP	To use HT5 or ADX10 wired
Mixing Console	Audix	4	APS-911	Windscreen
Lamp	Mackie	4	MC10L	Metal Clip
Digital EQ for Main PA & Surrounds	Mackie	1	Onyx3280	Battery/Phantom power adapter
	Mackie	3	4 Pin Desk Lamp	32 Channels/8Aux/Mute Groups
	Mackie	1	QUAD EQ	12 Volts
				Digital Graphic EQ

Optional	Brand	Qty	Model	Specifications
Speakers down + balcony	EAW	20	VR61	300W/8Ω
Amplifiers	EAW	5	CAZ1400	450W/4Ω

56

option 2

Fax: (22) 23 86 23 42

Mobile 1: (0) 93 225 32 349

Email 2: riverainternational@gmail.com

Email 1: ppatils@gmail.com

Web: www.riverainternational.com

Mr. Apollo

Company: **Pro Musicals**

: # 25 - Casa Major Road / Egmore /

600 008 Chennai, Tamil Nadu

Line 1: (44) 28 19 36 07

Line 2: (44) 28 19 34 45

Fax: (44) 28 19 38 23

M1 name: Apollo

Mobile 1: (0) 98 843 04 426

Email 1: apollo_promusic@vsnl.net

Web: www.promusicals.com

option 3

Supplier Rivera

CD Player

Brand
Pioneer

Qty
1

Model
CMX-3000

Specifications
Double Deck Pro

Optional Surround Processor DVD Player

Brand
Denon
Denon

Qty
1
1

Model
DN-A7100
DN-V310

Specifications
7.1 Decoder
DTS/Dolby Compatible

(96)

Supplier Aditya Infotech

	Brand	Qty	Model	Specifications
Gooseneck	Audix	3	Micropod 18HC	M1250 with Flexible gooseneck
HandHeld Transmitter with Mic	Audix	4	W3-OM5	RAD-360 System with OM5 dynamic transmitter
BodyPack System	Audix	4	W3-BP	RAD-360 Bodypack System with transmitter
MiniMic Headworn	Audix	4	HT5-BG	Slim-line headset vocal condenser
Lavalier	Audix	4	ADX10	Miniaturized lavalier condenser
BodyPack System (accessory)	Audix	4	W3-BP	To use HT5 or ADX10 wired
Lavalier Accessories	Audix	4	APS-911	Windscreen
Lavalier Accessories	Audix	4	WS10S	Metal Clip
Lavalier Accessories	Audix	4	MC10L	Battery/Phantom power adapter
Mixing Console	Mackie	1	Onyx3280	32 Channels/8Aux/Mute Groups
Lamp	Mackie	3	4 Pin Desk Lamp	12 Volts
Digital EQ for Main PA	Mackie	1	QUAD EQ	Digital Graphic EQ

97

Options

option 3

Supplier Pro Musicals

	Brand	Qty	Model	Specifications
Feedback Processor	Samson	3	D-3500	Feedback Suppressor, EQ, Dynamic
Dynamic Processor	Presonus	1	ACP88	Compressor/Limiter/Gate
FX Processor	Alesis	2	Midiverb 4	Multi Effects Digital Processor
Power Conditioner	Samson	4	Powerbrite Pro10	Power Stabilizer
Racks	Samson	1	SRK21	21 Rack Spaces
Racks	Samson	1	SRK16	16 Rack Spaces
Racks	Samson	2	SRK12	12 Rack Spaces
Microphone Stands	Samson	12	BT4	Telescopic Boom Stands
Microphone Stands	Samson	8	MB1	Mini Boom Stands
Microphone Stands	Samson	2	SB100	Studio Boom Stands
Green Room Amplifiers	Samson	2	Servo 120a	50W/8Ω
Headphones	Samson	2	CH 700	Open Headphones

Optional Recorder

Recorder	Alesis	1	ADAT HD24	24 Track Hard Disk Recorder
----------	--------	---	-----------	-----------------------------

98

option 3

SUPPLIER MRH DIGITAL

	Brand	Qty	Model	Specifications
Line Array (H:45"/1.14m W:20"/0.51m)	QSC	10	WL3082	500W/500W/170W/16Ω
Subwoofer (W:20"/0.50m)	QSC	2	WL212-sw	2200W/4Ω
Amplifiers	QSC	2	RMX1850	360W/8Ω - 600W/4Ω
Amplifiers	QSC	4	RMX5050	1100W/8Ω - 1800W/4Ω
Amplifiers	QSC	2	RMX2450	2400W/4Ω Bridged
Signal Processor	QSC	1	SC28	EQ, Dynamics, Delays, Crossover
Grid	QSC	2	AF3082-S	To fly Line Array
Extension Bar	QSC	2	EB3082	To fly Subs behind Line Array
Front Fill Speaker	QSC	4	AD-S82H	480W/8Ω
Amplifiers	QSC	1	RMX4050HD	1400W/4Ω
Side Monitors	QSC	4	AD-S282H	900W/8Ω
Wedges (H:26.9"/W:14.7"/D:14.9")	QSC	4	HPR122	500W
Amplifiers	QSC	1	RMX5050HD	1800W/4Ω
Speaker Processor	QSC	1	DSP322ua	EQ, Dynamics, Delays, Crossover
Green Room Speakers	QSC	4	AD-S32T	30W/8Ω

Optional Surround

	Brand	Qty	Model	Specifications
Front Fill Speaker	QSC	20	AD-S82H	480W/8Ω
Amplifiers	QSC	5	RMX2450	750W/4Ω

99

option 3

Supplier Rivera

Specifications
Double Deck Pro

Model
CMX-3000

Qty
1

Brand
Pioneer

CD Player

Optional Surround Processor

Specifications
7.1 Decoder
DTS/Dolby Compatible

Model
DN-A7100
DN-V310

Qty
1
1

Brand
Denon
Denon

Surround Processor
DVD Player

100

Supplier Aditya Infotech

	Brand	Qty	Model	Specifications
Gooseneck	Audix	3	Micropod 18HC	M1250 with Flexible gooseneck
HandHeld Transmitter with Mic	Audix	4	W3-OM5	RAD-360 System with OM5 dynamic transmitter
BodyPack System	Audix	4	W3-BP	RAD-360 Bodypack System with transmitter
MiniMic Headworn	Audix	4	HT5-BG	Slim-line headset vocal condenser
Lavalier	Audix	4	ADX10	Miniaturized lavalier condenser
BodyPack System (accessory)	Audix	4	W3-BP	To use HT5 or ADX10 wired
Lavalier Accessories	Audix	4	APS-911	Windscreen
Lavalier Accessories	Audix	4	WS10S	Metal Clip
Lavalier Accessories	Audix	4	MC10L	Battery/Phantom power adapter
Mixing Console	Mackie	1	Onyx3280	32 Channels/8Aux/Mute Groups
Lamp	Mackie	3	4 Pin Desk Lamp	12 Volts
Digital EQ for Main PA	Mackie	1	QUAD EQ	Digital Graphic EQ

(101)

Option 3

options

Supplier Pro Musicals

	Brand	Qty	Model	Specifications
Feedback Processor	Samson	3	D-3500	Feedback Suppressor, EQ, Dynamic Compressor/Limiter/Gate
Dynamic Processor	Presonus	1	ACP88	
FX Processor	Alesis	2	Midiverb 4	Multi Effects Digital Processor
Power Conditioner	Samson	4	Powerbrite Pro10	Power Stabilizer
Racks	Samson	1	SRK21	21 Rack Spaces
Racks	Samson	1	SRK16	16 Rack Spaces
Racks	Samson	2	SRK12	12 Rack Spaces
Microphone Stands	Samson	12	BT4	Telescopic Boom Stands
Microphone Stands	Samson	8	MB1	Mini Boom Stands
Microphone Stands	Samson	2	SB100	Studio Boom Stands
Green Room Amplifiers	Samson	2	Servo 120a	50W/8Ω
Headphones	Samson	2	CH 700	Open Headphones

Optional Recorder

Recorder	Alesis	1	ADAT HD24	24 Track Hard Disk Recorder
----------	--------	---	-----------	-----------------------------

102

option 3

SUPPLIER MRH DIGITAL

	Brand	Qty	Model	Specifications
Line Array (H:45"/1.14m W:20/0.51m)	QSC	10	WL3082	500W/500W/170W/16Ω
Subwoofer (W:20"/0.50m)	QSC	2	WL212-sw	2200W/4Ω
Amplifiers	QSC	2	RMX1850	360W/8Ω - 600W/4Ω
Amplifiers	QSC	4	RMX5050	1100W/8Ω - 1800W/4Ω
Amplifiers	QSC	2	RMX2450	2400W/4Ω Bridged
Signal Processor	QSC	1	SC28	EQ, Dynamics, Delays, Crossover
Grid	QSC	2	AF3082-S	To fly Line Array
Extension Bar	QSC	2	EB3082	To fly Subs behind Line Array
Front Fill Speaker	QSC	4	AD-S82H	480W/8Ω
Amplifiers	QSC	1	RMX4050HD	1400W/4Ω
Side Monitors	QSC	4	AD-S282H	900W/8Ω
Wedges (H:26.9"/W:14.7"/D:14.9")	QSC	4	HPR122	500W
Amplifiers	QSC	1	RMX5050HD	1800W/4Ω
Speaker Processor	QSC	1	DSP322ua	EQ, Dynamics, Delays, Crossover
Green Room Speakers	QSC	4	AD-S32T	30W/8Ω

Optional Surround

	Brand	Qty	Model	Specifications
Front Fill Speaker	QSC	20	AD-S82H	480W/8Ω
Amplifiers	QSC	5	RMX2450	750W/4Ω

103

Supplier MRH Digital

	Brand	Qty	Model	Specifications
Signal Processor	QSC	1	DSP30	
Side Monitors	QSC	4	AD-S282H	EQ, Dynamics, Delays for Sub
Wedges (H:26.9"/W:14.7"/D:14.9")	QSC	4	HPR122	900W/8Ω
Amplifiers	QSC	1	RMX5050HD	500W
Speaker Processor	QSC	1	DSP322ua	1800W/4Ω
Green Room Speakers	QSC	4	AD-S32T	EQ, Dynamics, Delays, Crossover 30W/8Ω

501

option 2

Supplier Rivera

CD Player

Brand
Pioneer

Qty
1

Model
CMX-3000

Specifications
Double Deck Pro

DVD Player
Surround Processor

Brand
Denon
Denon

Qty
1
1

Model
DN-A7100
DN-V310

Specifications
7.1 Decoder
DTS/Dolby Compatible

Optional
Surround

option 2

501

Supplier Pro Musicals

	Brand	Qty	Model	Specifications
Feedback Processor	Samson	3	D-3500	Feedback Suppressor, EQ, Dynamic Compressor/Limiter/Gate
Dynamic Processor	Presonus	1	ACP88	Multi Effects Digital Processor
FX Processor	Alesis	2	Midiverb 4	Power Stabilizer
Power Conditioner	Samson	4	Powerwrite Pro10	16 Rack Spaces
Racks	Samson	1	SRK16	12 Rack Spaces
Racks	Samson	2	SRK12	Telescopic Boom Stands
Microphone Stands	Samson	12	BT4	Mini Boom Stands
Microphone Stands	Samson	8	MB1	Studio Boom Stands
Microphone Stands	Samson	2	SB100	50W/8Ω
Green Room Amplifiers	Samson	2	Servo 120a	Open Headphones
Headphones	Samson	2	CH 700	

Optional Recorder	Brand	Qty	Model	Specifications
Digital Multitrack Recorder	Alesis	1	ADAT HD24	24 Track Hard Disk Recorder

Option 2
 (801)

Supplier Aditya Infotech

Item Description	Brand	Qty	Model	Specifications
Line Array (H:47/1.20m W:24"0.60m)	EAW	10	NTL720	500W/500W/500W
Subwoofer (W:25.9"/0.65m)	EAW	2	NTS22	1000W
Grid	EAW	2	FB172	For Line Array
Flying Cables	EAW	2	KF750	For Subs
Front Fill Speaker	EAW	4	VR61	150W/8Ω
Amplifiers	EAW	1	CAZ1400	450W/4Ω
Gooseneck	Audix	3	Micropod 18HC	M1250 with Flexible gooseneck
HandHeld Transmitter with Mic	Audix	4	W3-OMS	RAD-360 System with OM5 dynamic transmitter
BodyPack System	Audix	4	W3-BP	RAD-360 Bodypack System with transmitter
MiniMic Headworn	Audix	4	HT5-BG	Slim-line headset vocal condenser
Lavalier	Audix	4	ADX10	Miniaturized lavalier condenser
BodyPack System (accessory)	Audix	4	W3-BP	To use HT5 or ADX10 wired
Lavalier Accessories	Audix	4	APS-911	Windscreen
Lavalier Accessories	Audix	4	WS10S	Metal Clip
Lavalier Accessories	Audix	4	MC10L	Battery/Phantom power adapter
Mixing Console	Mackie	1	Onyx3280	32 Channels/8Aux/Mute Groups
Lamp	Mackie	3	4 Pin Desk Lamp	12 Volts
Digital EQ for Main PA & Surrounds	Mackie	1	QUAD EQ	Digital Graphic EQ

Optional		Brand	Qty	Model	Specifications
Surround		EAW	20	VR61	300W/8Ω
Speakers down + balcony		EAW	5	CAZ1400	450W/4Ω
Amplifiers		EAW	5	CAZ1400	450W/4Ω

(Total)

option 2

Fax: (22) 23 86 23 42

Mobile 1: (0) 93 225 32 349

Email 2: riverainternational@gmail.com

Email 1: ppatils@gmail.com

Web: www.riverainternational.com

Mr. Apollo

Company: **Pro Musicals**

: # 25 - Casa Major Road / Egmore /

600 008 Chennai, Tamil Nadu

Line 1: (44) 28 19 36 07

Line 2: (44) 28 19 34 45

Fax: (44) 28 19 38 23

M1 name: Apollo

Mobile 1: (0) 98 843 04 426

Email 1: apollo_promusic@vsnl.net

Web: www.promusicals.com

108

Contacts:

Dhruv Datta

Company: **Aditya Infotech Ltd**

: #12-13 & 15-A - Janki Centre / 29 - Shah Industrial Estate /

Off. Veera desai road / Andheri (west) /

400 053 Mumbai

Line 1: (22) 26 74 15 95

Line 2: (22) 26 74 15 96

Line 3: (22) 26 74 15 98

Fax: (22) 26 74 15 00

M1 name: Dhruv Datta

Mobile 1: (0) 93 218 94 353

M2 name: Amilpurti

Mobile 2: (0) 93 138 91 845

Email 1: dhruv_datta@adityagroup.com

Email 2: sathishkumar_mogili@adityagroup.com

S. Gopinadhan

Company: **MRH Digital System Pvt. Ltd**

: Skanda Krupa / # 191- 1st Cross / 38th Main /

BOOHBCS / BTM Layout II Stage /

560 068 Bengalooru, Karnataka

Line 1: (80) 41 20 05 71

Line 2: (80) 41 20 05 72

Line 3: (80) 41 20 05 73

Fax: (80) 41 20 05 74

M1 name: Gopinadhan

Mobile 1: (0) 93 437 71 035

Prasad Patil

Company: **Rivera International**

: # 7-397A-1B / Mangaldas House / Naaz Cinema Compound /

Lamington Road /

400 004 Mumbai, Maharashtra

Line 1: (22) 23 80 05 55

- Digital mixing board (from DIGIDESIGN), 2 options (A & B) are presented. It is an expensive item but very versatile in terms of stage production and live recording. If this item is selected, there will be no need of the item 'mixer + external processing'. So the indicated price shows the actual increase in price, not the cost of this item.

We hope that this report will be clear enough, it is a complicated situation with multiple choices, we tried our best to present in the simplest way. Deepu would be very helpful to you in order to clarify any question, he would understand the meaning of each listed item.

Enclosed we have:

List option 1: the original **EV** quote as per today's rough rates.

List option 2: **EAW** (better quality) option, as per today's rates + 4 pages break down

List option 3: **QSC** (cheaper) option as per today's rate + 4 pages break down

Each list is accompanied by a 4 pages break down (by supplier) without the rates in order to request each supplier a proper official quote. You would have first to choose between list 2 or 3. The suppliers contacts are listed below.

Bosh previous quote for the **TELEX** (communication) equipment as you received it already. If you wish, we can explore this item furthermore, but the budget might be equivalent.

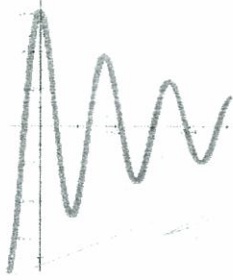
Digidesign quote for option A & B digital mixers.

At your service for any further details,

Warm Regards,

Didier Weiss





SOUND WIZARD

Auroville, Mar 16th, 2009

Dear Leela Samson,

Kindly find enclosed the summary of our research as per the up to date audio equipment purchase for your main auditorium.

As you already know from our communication so far, the initial list stays technically very true, as per using line array technology associated with DSP. The original selection based on 2005 has in 2009 evolved with many other brands being either better in terms of quality/flexibility or cheaper for the same quality level.

So, amongst the few supplier giving proper technical support in India, and amongst all the equipment we have tested so far, 2 lists (options 2 & 3) came out in a very coherent way.

Main system:

From the **option 1** (original EV) – amounting about 80 lakhs as per today's rate.

We selected **option 2** based on EAW components. It is a very well know brand from USA, that provides in this case the latest improvement in technology, the line array being released on the market a few months ago only. The budget would be around 70 lakhs, for a totally outstanding result.

We also selected **option 3** based on QSC components. It is also a USA brand, that is known for very good quality/price and gets a very good support in India. The final quality will be excellent in any case, comparable to the original EV selection at a much cheaper price.

Optional equipments:

For each of the option 2 & 3 we gave a list of additional optional equipments:

- Surround implementation in the hall, for Dolby/DTS movie implementation in your auditorium.
- Digital multitrack recording device, in order to be able to work editing and mixing in a studio at a later phase. Note that this option is not needed if you go for the Digidesign mixing board.
- Communication system, that is intercom between several places. We kept the original quote and list from Telex. There might be other options by now if you are interested, but that will require more time to study. The budget could be be reserved based on these prices.

111

Contacts:

Dhruv Datta

Company: **Aditya Infotech Ltd**

: #12-13 & 15-A - Janki Centre / 29 - Shah Industrial Estate /

Off. Veera desai road / Andheri (west) /

400 053 Mumbai

Line 1: (22) 26 74 15 95

Line 2: (22) 26 74 15 96

Line 3: (22) 26 74 15 98

Fax: (22) 26 74 15 00

M1 name: Dhruv Datta

Mobile 1: (0) 93 218 94 353

M2 name: Amilpurti

Mobile 2: (0) 93 138 91 845

Email 1: dhruv_datta@adityagroup.com

Email 2: sathishkumar_mogili@adityagroup.com

S. Gopinadhan

Company: **MRH Digital System Pvt. Ltd**

: Skanda Krupa / # 191- 1st Cross / 38th Main /

BOOHBCS / BTM Layout II Stage /

560 068 Bengalooru, Karnataka

Line 1: (80) 41 20 05 71

Line 2: (80) 41 20 05 72

Line 3: (80) 41 20 05 73

Fax: (80) 41 20 05 74

M1 name: Gopinadhan

Mobile 1: (0) 93 437 71 035

Prasad Patil

Company: **Rivera International**

: # 7-397A-1B / Mangaldas House / Naaz Cinema Compound /

Lamington Road /

400 004 Mumbai, Maharashtra

Line 1: (22) 23 80 05 55

- Digital mixing board (from DIGIDESIGN), 2 options (A & B) are presented. It is an expensive item but very versatile in terms of stage production and live recording. If this item is selected, there will be no need of the item 'mixer + external processing'. So the indicated price shows the actual increase in price, not the cost of this item.

We hope that this report will be clear enough, it is a complicated situation with multiple choices, we tried our best to present in the simplest way. Deepu would be very helpful to you in order to clarify any question, he would understand the meaning of each listed item.

Enclosed we have:

List option 1: the original **EV** quote as per today's rough rates.

List option 2: **EAW** (better quality) option, as per today's rates + 4 pages break down

List option 3: **QSC** (cheaper) option as per today's rate + 4 pages break down

Each list is accompanied by a 4 pages break down (by supplier) without the rates in order to request each supplier a proper official quote. You would have first to choose between list 2 or 3. The suppliers contacts are listed below.

Bosh previous quote for the **TELEX** (communication) equipment as you received it already. If you wish, we can explore this item furthermore, but the budget might be equivalent.

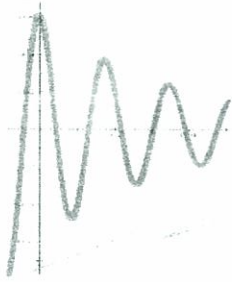
Digidesign quote for option A & B digital mixers.

At your service for any further details,

Warm Regards,

Didier Weiss





SOUND WIZARD

Auroville, Mar 16th, 2009

Dear Leela Samson,

Kindly find enclosed the summary of our research as per the up to date audio equipment purchase for your main auditorium.

As you already know from our communication so far, the initial list stays technically very true, as per using line array technology associated with DSP. The original selection based on 2005 has in 2009 evolved with many other brands being either better in terms of quality/flexibility or cheaper for the same quality level.

So, amongst the few supplier giving proper technical support in India, and amongst all the equipment we have tested so far, 2 lists (options 2 & 3) came out in a very coherent way.

Main system:

From the **option 1** (original EV) – amounting about 80 lakhs as per today's rate.

We selected **option 2** based on EAW components. It is a very well know brand from USA, that provides in this case the latest improvement in technology, the line array being released on the market a few months ago only. The budget would be around 70 lakhs, for a totally outstanding result.

We also selected **option 3** based on QSC components. It is also a USA brand, that is known for very good quality/price and gets a very good support in India. The final quality will be excellent in any case, comparable to the original EV selection at a much cheaper price.

Optional equipments:

For each of the option 2 & 3 we gave a list of additional optional equipments:

- Surround implementation in the hall, for Dolby/DTS movie implementation in your auditorium.
- Digital multitrack recording device, in order to be able to work editing and mixing in a studio at a later phase. Note that this option is not needed if you go for the Digidesign mixing board.
- Communication system, that is intercom between several places. We kept the original quote and list from Telex. There might be other options by now if you are interested, but that will require more time to study. The budget could be reserved based on these prices.

114

19/19

Supplier Rivera

CD Player	Brand Pioneer	Qty 1	Model CMX-3000	Specifications Double Deck Pro
-----------	------------------	----------	-------------------	-----------------------------------

	Optional Surround			
Surround Processor	Brand Denon	Qty 1	Model DN-A7100	Specifications 7.1 Decoder
DVD Player	Brand Denon	Qty 1	Model DN-V310	Specifications DTS/Dolby Compatible

STL

option 3

6/18/19

Supplier Aditya Infotech

	Brand	Qty	Model	Specifications
Gooseneck	Audix	3	Micropod 18HC	M1250 with Flexible gooseneck
HandHeld Transmitter with Mic	Audix	4	W3-OM5	RAD-360 System with OM5 dynamic transmitter
BodyPack System	Audix	4	W3-BP	RAD-360 Bodypack System with transmitter
MiniMic Headworn	Audix	4	HT5-BG	Slim-line headset vocal condenser
Lavalier	Audix	4	ADX10	Miniaturized lavalier condenser
BodyPack System (accessory)	Audix	4	W3-BP	To use HT5 or ADX10 wired
Lavalier Accessories	Audix	4	APS-911	Windscreen
Lavalier Accessories	Audix	4	WS10S	Metal Clip
Lavalier Accessories	Audix	4	MC10L	Battery/Phantom power adapter
Mixing Console	Mackie	1	Onyx3280	32 Channels/8Aux/Mute Groups
Lamp	Mackie	3	4 Pin Desk Lamp	12 Volts
Digital EQ for Main PA	Mackie	1	QUAD EQ	Digital Graphic EQ

(9/11)

Options

Supplier Pro Musicals

	Brand	Qty	Model	Specifications
Feedback Processor	Samson	3	D-3500	Feedback Suppressor, EQ, Dynamic Compressor/Limiter/Gate
Dynamic Processor	Presonus	1	ACP88	Multi Effects Digital Processor
FX Processor	Alesis	2	Midiverb 4	Power Stabilizer
Power Conditioner	Samson	4	Powerbrite Pro10	21 Rack Spaces
Racks	Samson	1	SRK21	16 Rack Spaces
Racks	Samson	1	SRK16	12 Rack Spaces
Racks	Samson	2	SRK12	Telescopic Boom Stands
Microphone Stands	Samson	12	BT4	Mini Boom Stands
Microphone Stands	Samson	8	MB1	Studio Boom Stands
Microphone Stands	Samson	2	SB100	50W/8Ω
Green Room Amplifiers	Samson	2	Servo 120a	Open Headphones
Headphones	Samson	2	CH 700	

Recorder	Optional Recorder	Brand	Qty	Model	Specifications
		Alesis	1	ADAT HD24	24 Track Hard Disk Recorder

Optrou3
 (711)

5/21

6/19

SUPPLIER MRH DIGITAL

	Brand	Qty	Model	Specifications
Line Array (H:45"/1.14m W:20/0.51m)	QSC	10	WL3082	500W/500W/170W/16Ω
Subwoofer (W:20"/0.50m)	QSC	2	WL212-sw	2200W/4Ω
Amplifiers	QSC	2	RMX1850	360W/8Ω - 600W/4Ω
Amplifiers	QSC	4	RMX5050	1100W/8Ω - 1800W/4Ω
Amplifiers	QSC	2	RMX2450	2400W/4Ω Bridged
Signal Processor	QSC	1	SC28	EQ, Dynamics, Delays, Crossover
Grid	QSC	2	AF3082-S	To fly Line Array
Extension Bar	QSC	2	EB3082	To fly Subs behind Line Array
Front Fill Speaker	QSC	4	AD-S82H	480W/8Ω
Amplifiers	QSC	1	RMX4050HD	1400W/4Ω
Side Monitors	QSC	4	AD-S282H	900W/8Ω
Wedges (H:26.9"/W:14.7"/D:14.9")	QSC	4	HPR122	500W
Amplifiers	QSC	1	RMX5050HD	1800W/4Ω
Speaker Processor	QSC	1	DSP322ua	EQ, Dynamics, Delays, Crossover
Green Room Speakers	QSC	4	AD-S32T	30W/8Ω

Optional	Brand	Qty	Model	Specifications
Surround	QSC	20	AD-S82H	480W/8Ω
Front Fill Speaker	QSC	5	RMX2450	750W/4Ω

(8/1)

option 3

15/10

Optional Surround	Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Front Fill Speaker	QSC	20	AD-S82H	480W/8Ω	Passive	80Hz-21kHz	120dB	Rs.18,000	Rs.360,000	Rs.757,125
Amplifiers	QSC	5	RMX2450	750W/4Ω	--	--	--	Rs.39,600	Rs.198,000	
Surround Processor	Denon	1	DN-A7100	7.1 Decoder	--	--	--	Rs.70,000	Rs.70,000	
DVD Player	Denon	1	DN-V310	DTS/Dolby Compatible	--	--	--	Rs.45,000	Rs.45,000	
Recorder	Alesis	1	ADAT HD24	24 Track Hard Disk Recorder	24 Bit/96kHz	--	--	--	--	Rs.140,000
Communication	Telex	--	--	Same as Previous list	--	--	--	--	--	Rs.362,164
Digidesign - Digital Mixer	Digidesign	1	Mix Rack System	48 Mic/Line Input - 16 line outputs	18 Track Recording	--	--	Rs.2,981,290	Rs.2,981,290	Rs.2,657,478
Items not needed on the main list (mixer & external processing)									Rs.619,088	
D-Show Profile		1							Included	
DSP Mix Engine Cards		2							Included	
D-Show software		1							Included	
VenuePack 3.0 Plugins		1							Included	
Video monitor mounting brackets		1							Included	
Trackball mounting ball		1							Included	
Ilok USB Smart Key		1							Included	
All necessary cables and user guides		1							Included	
Fvx Firewire Record and Playback		1							Included	

12

11

10/19

Option 3
Main PA

Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
QSC	10	WL3082	600W/500W/70W/16Ω	Passive	68Hz-18kHz	128/128/133dB	Rs.155,500	Rs.1,555,000	Rs.3,115,600
QSC	2	WL212-sw	2200W/4Ω	Passive	32Hz-35kHz	135dB	Rs.148,000	Rs.296,000	
QSC	2	RMX1850	360W/8Ω - 600W/4Ω	For Highs	--	--	Rs.72,000	Rs.144,000	
QSC	4	RMX5050	1100W/8Ω - 1800W/4Ω	For Mid & Lows	--	--	Rs.81,200	Rs.324,800	
QSC	2	RMX2450	2400W/4Ω Bridged	For Subs	--	--	Rs.40,000	Rs.80,000	
QSC	1	SC28	EQ, Dynamics, Delays, Crossover	2 In/8 Out	--	--	Rs.71,000	Rs.71,000	
QSC	2	AF3082-S	To fly Line Array	--	--	--	Rs.59,000	Rs.118,000	
QSC	2	EB3082	To fly Sub behind Line Array	--	--	--	Rs.56,600	Rs.113,200	
QSC	4	AD-S82H	480W/8Ω	Passive	80Hz-21kHz	120dB	Rs.18,000	Rs.72,000	
QSC	4	RMX4050HD	1400W/4Ω	--	--	--	Rs.70,000	Rs.280,000	

Stage Monitor

Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
QSC	4	AD-S282H	900W/8Ω	Passive	80Hz-27kHz	125dB	Rs.37,800	Rs.151,200	Rs.576,197
QSC	4	HPR122	500W	Active	62Hz-18kHz	131dB	Rs.53,500	Rs.214,000	
QSC	1	RMX5050HD	1800W/4Ω	For Side Monitors	--	--	Rs.81,200	Rs.81,200	
Samson	3	D-3500	Feedback Suppressor, EQ, Dynamic	--	--	--	Rs.21,925	Rs.65,775	

Processing for Monitors & Front Fill

Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
QSC	1	DSP322ua	EQ, Dynamics, Delays, Crossover	8 Out	--	--	Rs.180,906	Rs.180,906	Rs.203,519

Microphones

Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Audix	3	Micropod 18HC	M1250 with flexible gooseneck 18"	--	--	--	Rs.20,355	Rs.61,065	Rs.532,828
Audix	4	W3-OM5	RAD-360 System with OM5 dynamic transmitter	--	--	--	Rs.40,480	Rs.161,920	
Audix	4	W3-BP	RAD-360 Bodypack System with transmitter	--	--	--	Rs.30,000	Rs.120,000	
Audix	4	HT5-BG	Slim-line headset vocal condenser	--	--	--	Rs.20,125	Rs.80,500	
Audix	4	ADX10	Miniaturized lavaller condenser	--	--	--	Rs.50,140	Rs.200,560	
Audix	4	W3-BP	To use HT5 or ADX10 wired	--	--	--	Rs.0	Rs.0	
Audix	4	APAS-911	Windscreen	--	--	--	Rs.0	Rs.0	
Audix	4	WS10S	Metal Clip	--	--	--	Rs.0	Rs.0	
Audix	4	MC10L	Battery/Phantom power adapter	--	--	--	Rs.0	Rs.0	

Mixer + External Processing

Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Mackie	1	Onyx3280	32 Channels/8Aux/Mute Groups	Analog	--	--	Rs.330,000	Rs.330,000	Rs.619,088
Mackie	3	4 Pin Desk Lamp	12 Volts	--	--	--	Rs.4,000	Rs.12,000	
Mackie	1	QUAD EQ	Digital Graphic EQ	4 Channels	--	--	Rs.77,000	Rs.77,000	
Presonus	1	ACP88	Compressor/Limiter/Gate	8 Channels	--	--	Rs.88,500	Rs.88,500	
Alesis	2	Midlverb 4	Multi Effects Digital Processor	--	--	--	Rs.21,400	Rs.42,800	

External Equipment

Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Pioneer	1	CMX-3000	Double Deck Pro	--	--	--	Rs.45,000	Rs.45,000	Rs.241,650
Samson	4	Powerbrite Pro10	Power Stabilizer	--	--	--	Rs.10,600	Rs.42,400	
Samson	1	SRK21	21 Rack Spaces	--	--	--	Rs.7,100	Rs.7,100	
Samson	1	SRK16	16 Rack Spaces	--	--	--	Rs.6,600	Rs.6,600	
Samson	2	SRK12	12 Rack Spaces	--	--	--	Rs.6,100	Rs.12,200	
Samson	12	BT4	Telescopic Boom Stands	--	--	--	Rs.1,800	Rs.21,600	
Samson	8	MB1	Mini Boom Stands	--	--	--	Rs.1,500	Rs.12,000	
Samson	2	SB100	Studio Boom Stands	--	--	--	Rs.6,500	Rs.13,000	
QSC	4	AD-S32T	30W/8Ω	Passive	73Hz-20kHz	105dB	Rs.6,400	Rs.25,600	
Samson	2	Servo 120a	50W/8Ω	--	--	--	Rs.12,800	Rs.25,600	
Samson	2	CH 700	Open Headphones	--	--	--	Rs.1,900	Rs.3,800	

Wiring

Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Microphone Cables									Rs.400,000
Patching Cables									
Snake									
Speaker Wiring									Approximate Cost

Total

Total									Rs.5,691,782
--------------	--	--	--	--	--	--	--	--	---------------------

The prices given above are approximate

122

121

option 3
= PSC line array

same quality as EV at a much
better price

12/19

Supplier MRH Digital

	Brand	Qty	Model	Specifications
Signal Processor	QSC	1	DSP30	EQ, Dynamics, Delays for Sub
Side Monitors	QSC	4	AD-S282H	900W/8Ω
Wedges (H:26.9"/W:14.7"/D:14.9")	QSC	4	HPR122	500W
Amplifiers	QSC	1	RMX5050HD	1800W/4Ω
Speaker Processor	QSC	1	DSP322ua	EQ, Dynamics, Delays, Crossover
Green Room Speakers	QSC	4	AD-S32T	30W/8Ω

129

option 2

12/19

Supplier Rivera

CD Player	Brand	Qty	Model	Specifications
	Pioneer	1	CMX-3000	Double Deck Pro

Optional Surround	Brand	Qty	Model	Specifications
Surround Processor	Denon	1	DN-A7100	7.1 Decoder
DVD Player	Denon	1	DN-V310	DTS/Dolby Compatible

125

option 2

6/11

Supplier Pro Musicals

	Brand	Qty	Model	Specifications
Feedback Processor	Samson	3	D-3500	Feedback Suppressor, EQ, Dynamic Compressor/Limiter/Gate
Dynamic Processor	Presonus	1	ACP88	Multi Effects Digital Processor
FX Processor	Alesis	2	MidiVerb 4	Power Stabilizer
Power Conditioner	Samson	4	Powerbrite Pro10	16 Rack Spaces
Racks	Samson	1	SRK16	12 Rack Spaces
Racks	Samson	2	SRK12	Telescopic Boom Stands
Racks	Samson	12	BT4	Mini Boom Stands
Microphone Stands	Samson	8	MB1	Studio Boom Stands
Microphone Stands	Samson	2	SB100	50W/8Ω
Microphone Stands	Samson	2	Servo 120a	Open Headphones
Green Room Amplifiers	Samson	2	CH 700	
Headphones	Samson	2		

Optional Recorder				
Digital Multitrack Recorder	Alesis	1	ADAT HD24	24 Track Hard Disk Recorder

126

option 2

10/19

Supplier Aditya Infotech

Line Array (H:471.20m W:24"0.60m) Subwoofer (W:25.9"0.65m) Grid Flying Cables Front Fill Speaker Amplifiers Gooseneck Handheld Transmitter with Mic BodyPack System MiniMic Headworn Lavalier BodyPack System (accessory) Lavalier Accessories Lavalier Accessories Lavalier Accessories Mixing Console Lamp Digital EQ for Main PA & Surrounds	Brand	Qty	Model	Specifications
	EAW	10	NTL720	500W/500W/500W
	EAW	2	NTS22	1000W
	EAW	2	FB172	For Line Array
	EAW	2	KF750	For Subs
	EAW	4	VR61	150W/8Ω
	EAW	1	CAZ1400	450W/4Ω
	Audix	3	Micropod 18HC	M1250 with Flexible gooseneck 18"
	Audix	4	W3-OM5	RAD-360 System with OM5 dynamic transmitter
	Audix	4	W3-BP	RAD-360 Bodypack System with transmitter
	Audix	4	HT5-BG	Slim-line headset vocal condenser
	Audix	4	ADX10	Miniaturized lavalier condenser
	Audix	4	W3-BP	To use HT5 or ADX10 wired
	Audix	4	APS-911	Windscreen
	Audix	4	WS10S	Metal Clip
	Audix	4	MC10L	Battery/Phantom power adapter
	Mackie	1	Onyx3280	32 Channels/8Aux/Mute Groups
	Mackie	3	4 Pin Desk Lamp	12 Volts
	Mackie	1	QUAD EQ	Digital Graphic EQ

Optional	Brand	Qty	Model	Specifications
Speakers down + balcony	EAW	20	VR61	300W/8Ω
Amplifiers	EAW	5	CAZ1400	450W/4Ω

127

option 2

Option 1 = original option

Main PA										
Line Array (H:49.4"/1.25m W:28.6"/0.73m)	Brand	Qty	Model	Specifications (Peak)	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Subwoofer (W:28.58"/0.73m)	EV	10	XLD281	800W/400W/16Ω	Passive	75Hz-18kHz	135dB	Rs.222,504	Rs.2,225,040	Rs.4,232,710
Amplifiers	EV	2	X5212	2000W/4Ω	Passive	52Hz	136dB	Rs.175,731	Rs.351,462	
Amplifiers	Dynacord	4	LX2200	1100W/4Ω	For Highs & Mids			Rs.126,954	Rs.507,816	
Signal Processor	Dynacord	1	LX3000	1600W/4Ω	For Subs			Rs.180,408	Rs.180,408	
Grid	EV	2	DX38	EQ, Dynamics, Delays, Crossover	2 In/4 Out			Rs.78,846	Rs.157,692	
Front Fill Speaker	EV	4	XLD Grid					Rs.54,123	Rs.216,492	
Amplifiers	EV	4	XH1082	350W/8Ω	Passive	50Hz-20kHz	118dB	Rs.45,436	Rs.181,745	
Amplifiers	Dynacord	1	SL1200	950W/4Ω				Rs.50,001	Rs.50,001	

Stage Monitor										
Side Monitors	Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Wedges	EV	4	Sxa360	500W	Passive	60Hz-18kHz	129dB	Rs.92,543	Rs.370,170	Rs.608,909
Amplifiers	EV	4	F1281pm	400W/8Ω	Passive	70Hz-20kHz	122dB	Rs.45,771	Rs.183,083	
Feedback Processor	Dynacord	2	SL1200	480W/8Ω	For Wedges			Rs.50,001	Rs.100,002	
	Samson	3	D-3500	Feedback Suppressor, EQ, Dynamic				Rs.21,925	Rs.65,775	

Processing for Monitors & Front Fill										
Digital EQ	Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
	Klark Teknik	2	KT DN9344	Multi-EQ	4 Channels			Rs.298,649	Rs.597,298	Rs.671,960

Microphones										
Gooseneck	Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
MiniMic Headworn	EV	3	EV PC 18"	M1250 with flexible gooseneck				Rs.20,936	Rs.62,808	Rs.536,301
Condenser with transmitter	EV	4	EV RE97 TX	Slim-line headset vocal condenser				Rs.25,057	Rs.100,228	
Handheld Transmitter with Mic	EV	4	EV RE510	HTU2C-510 transmitter featuring the RE510				Rs.40,000	Rs.160,000	
	EV	4	EV RE2 N7	HUT2D-767a transmitter featuring the N/D 767a				Rs.38,419	Rs.153,676	

Mixer + External Processing										
Mixing Console	Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Lamp	Midas	1	Venice 320	32 Channels/6Aux	Analog			Rs.328,600	Rs.328,600	Rs.1,023,705
Digital EQ for Main PA	Klark Teknik	1	KT DN9340	Multi-EQ	Stereo			Rs.298,649	Rs.298,649	
Dynamic Processor	Klark Teknik	2	KT DN504	Compressor/Limiter	4 Channels			Rs.114,537	Rs.229,074	
FX Processor	Alesis	2	Midverb 4	Multi Effects Digital Processor				Rs.21,400	Rs.42,800	

External Equipment										
CD Player	Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Power Conditioner	Pioneer	1	CMX-3000	Double Deck Pro				Rs.45,000	Rs.45,000	Rs.241,650
Racks	Samson	4	Powerbrite Pro10	Power Stabilizer				Rs.10,600	Rs.42,400	
Racks	Samson	1	SRK21	21 Rack Spaces				Rs.7,100	Rs.7,100	
Racks	Samson	1	SRK16	16 Rack Spaces				Rs.6,500	Rs.6,500	
Racks	Samson	2	SRK12	12 Rack Spaces				Rs.6,100	Rs.12,200	
Microphone Stands	Samson	12	BT4	Telescopic Boom Stands				Rs.1,800	Rs.21,600	
Microphone Stands	Samson	8	MB1	Mini Boom Stands				Rs.1,500	Rs.12,000	
Microphone Stands	Samson	2	SB100	Studio Boom Stands				Rs.6,500	Rs.13,000	
Green Room Speakers	QSC	4	AD-S32T	30W/8Ω	Passive	73Hz-20kHz	105dB	Rs.6,400	Rs.25,600	
Green Room Amplifiers	Samson	2	Servo 120a	50W/8Ω				Rs.12,800	Rs.25,600	
Headphones	Samson	2	CH 700	Open Headphones				Rs.1,900	Rs.3,800	

Wiring										
Microphone Cables	Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Patching Cables										Rs.400,000
Snake										Approximate Cost
Speaker Wiring										

Total
Rs.7,915,236

The prices given above are approximate

129

129

option 1
= ElectroVoice (EV)
line array
→ Original selection

Fax: (22) 23 86 23 42
Mobile 1: (0) 93 225 32 349
Email 2: riverainternational@gmail.com
Email 1: ppatils@gmail.com
Web: www.riverainternational.com

Mr. Apollo
Company: **Pro Musicals**
: # 25 - Casa Major Road / Egmore /
600 008 Chennai, Tamil Nadu
Line 1: (44) 28 19 36 07
Line 2: (44) 28 19 34 45
Fax: (44) 28 19 38 23
M1 name: Apollo
Mobile 1: (0) 98 843 04 426
Email 1: apollo_promusic@vsnl.net
Web: www.promusicals.com

(131)

81A

132

Optional	Brand	Qty	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Speakers down + balcony	EAW	20	VR81	300W/8Ω	Passive	85Hz-20kHz	118dB	Rs.25,610	Rs.512,200	Rs.891,225
Amplifiers	EAW	5	CAZ1400	450W/4Ω	--	--	--	Rs.33,000	Rs.165,000	
Surround Processor	Denon	1	DN-A7100	7.1 Decoder	--	--	--	Rs.70,000	Rs.70,000	
DVD Player	Denon	1	DN-V310	DTS/Dolby Compatible	--	--	--	Rs.45,000	Rs.45,000	
Digital Multitrack Recorder	Alesis	1	ADAT HD24	24 Track Hard Disk Recorder	24 Bit/96kHz	--	--	--	--	Rs.140,000
Communication	Telex	--	--	Same as Previous list	--	--	--	--	--	Rs.362,164
Digital Mixer	Digidesign	1	Mix Rack System	48 Mic/Line Input - 16 line outputs	18 Track Recording	--	--	Rs.2,981,290	Rs.2,981,290	Rs.2,657,478
Mix Rack System (Option B)		1							Rs.610,086	
Items not needed on the main list (mixer & external processing)										
D-Show Profile	--	1	--	--	--	--	--	--	Included	
DSP Mix Engine Cards	--	2	--	--	--	--	--	--	Included	
D-Show software	--	1	--	--	--	--	--	--	Included	
VenuePack 3.0 Plugins	--	1	--	--	--	--	--	--	Included	
Video monitor mounting brackets	--	1	--	--	--	--	--	--	Included	
Trackball mounting ball	--	1	--	--	--	--	--	--	Included	
lock USB Smart Key	--	1	--	--	--	--	--	--	Included	
All necessary cables and user guides	--	1	--	--	--	--	--	--	Included	
F.w Firewire Record and Playback	--	1	--	--	--	--	--	--	Included	

133

132

Option 2

Brand	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
EAW	NTL720	500W/500W/500W	Active	75Hz-21kHz	133dB	Rs.306,890	Rs.3,066,900	Rs.4,508,146
EAW	NTS22	1000W	Active	35Hz-130Hz	132dB	Rs.226,895	Rs.453,790	
QSC	DSP30	EQ, Dynamics, Delays for Sub	2 In/2 Out	--	--	Rs.38,600	Rs.38,600	
EAW	FB172	For Line Array	--	--	--	Rs.125,700	Rs.259,400	
EAW	KF760	For Subs	--	--	--	Rs.16,000	Rs.32,000	
EAW	VR61	160W/8Ω	Passive	86Hz-20kHz	118dB	Rs.25,610	Rs.102,440	
EAW	CAZ1400	450W/4Ω	--	--	--	Rs.33,000	Rs.33,000	

Stage Monitor

Brand	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
QSC	AD-S282H	900W/8Ω	Passive	80Hz-27kHz	126dB	Rs.37,800	Rs.151,200	Rs.576,197
QSC	HPR122	500W	Active	62Hz-18kHz	131dB	Rs.63,600	Rs.214,000	
QSC	RMX5080HD	1800W/4Ω	For Side Monitors	--	--	Rs.81,200	Rs.81,200	
Samson	D-3500	Feedback Suppressor, EQ, Dynamic	--	--	--	Rs.21,925	Rs.65,775	

Processing for Monitors & Front Fill

Brand	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
QSC	DSP322ua	EQ, Dynamics, Delays, Crossover	8 In/8 Out	--	--	Rs.180,906	Rs.180,906	Rs.203,619

Microphones

Brand	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Audix	Micropod 18HC	M1250 with flexible gooseneck 18"	--	--	--	Rs.20,355	Rs.61,065	Rs.532,828
Audix	W3-OM5	RAD-360 System with OM5 dynamic transmitter	--	--	--	Rs.40,480	Rs.161,920	
Audix	W3-BP	RAD-360 Bodypack System with transmitter	--	--	--	Rs.30,000	Rs.120,000	
Audix	HT5-BG	Slim-line headset vocal condenser	--	--	--	Rs.20,125	Rs.80,500	
Audix	ADX10	Miniaturized lavallier condenser	--	--	--	Rs.12,635	Rs.50,140	
Audix	W3-BP	To use HT5 or ADX10 wired	--	--	--	Rs.0	Rs.0	small amount
Audix	APS-911	Windscreen	--	--	--	Rs.0	Rs.0	
Audix	WS10S	Metal Clip	--	--	--	Rs.0	Rs.0	
Audix	MC10L	Battery/Phantom power adapter	--	--	--	Rs.0	Rs.0	

Mixer & External Processing

Brand	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Mackie	Onyx3280	32 Channels/Aux/Mute Groups	Analog	--	--	Rs.330,000	Rs.330,000	Rs.619,088
Mackie	4 Pin Desk Lamp	12 Volts	--	--	--	Rs.4,000	Rs.12,000	
Mackie	QUAD EQ	Digital Graphic EQ	4 Channels	--	--	Rs.77,000	Rs.77,000	
Presonus	ACP88	Compressor/Limiter/Gate	8 Channels	--	--	Rs.88,500	Rs.88,500	
Alesis	Midverb 4	Multi Effects Digital Processor	--	--	--	Rs.21,400	Rs.42,800	

External Equipment

Brand	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
Pioneer	CMX-3000	Double Deck Pro	--	--	--	Rs.45,000	Rs.45,000	Rs.233,663
Samson	Powerbrite Pro10	Power Stabilizer	--	--	--	Rs.10,600	Rs.42,400	
Samson	SRK16	16 Rack Spaces	--	--	--	Rs.6,500	Rs.6,500	
Samson	SRK12	12 Rack Spaces	--	--	--	Rs.6,100	Rs.12,200	
Samson	BT4	Telescopic Boom Stands	--	--	--	Rs.1,800	Rs.21,600	
Samson	MB1	Mini Boom Stands	--	--	--	Rs.1,500	Rs.12,000	
Samson	SB100	Studio Boom Stands	--	--	--	Rs.6,500	Rs.13,000	
GSC	AD-S32T	30W/8Ω	Passive	73Hz-20kHz	105dB	Rs.6,400	Rs.25,600	
Samson	Servo 120a	50W/8Ω	--	--	--	Rs.12,800	Rs.25,600	
Samson	CH 700	Open Headphones	--	--	--	Rs.1,900	Rs.3,800	

Wiring

Brand	Model	Specifications	Details	Frequency Range (-3dB)	Max SPL	Rate	Price	Total Incl. Tax
		Microphone Cables	--	--	--			Rs.350,000
		Patching Cables & patch bays	--	--	--			Approximate Cost
		Snake	--	--	--			
		Speaker Wiring	--	--	--			

Total

								Rs.7,024,441
--	--	--	--	--	--	--	--	--------------

The prices given above are approximate

135

134

option 2

= EAW line array

much better quality at a similar
price range

6/3



BOSCH

Sheet 1

Kalashetra fine arts auditorium

Date : 19.08.2008

SL.#	TYPE	Model No.	ITEM DESCRIPTION	QTY	Unit Price	Value
------	------	-----------	------------------	-----	------------	-------

1	INTERCOM	PH1	INTERCOM HEADSETS	5	20,413.26	1,02,066.30
2	INTERCOM	BP319	TELEX WIRED INTERCOM BELTPACK S	5	33,716.34	1,68,581.70
3	INTERCOM	TW5W	INTERCOM SPLITTER	1	19,495.98	19,495.98
4	INTERCOM	PS15	TELEX WIRED INTERCOM POWER SUPPLY	1	51,607.08	51,607.08
5	INTERCOM	PH1	1 SPARE INTERCOM HEADSET	1	20,413.26	20,413.26

Total : 3,62,164.32

- Note :
1. Taxes will be additional as applicable
 2. Payment 100 % along with Confirmed PO
 3. All Speaker cables from the console to the speaker point to be done by customer installation , signal cable , connectors

137

5/19

Digidesign quote March 2009

Srl No.	Product	Price in INR
1	Option A – Mix Rack HD 64 (64 Track Recording)	3,869,145 INR

VENUE components

- D-Show Profile Mix Rack system, which includes:
 - o D-Show Profile console
 - o Mix Rack (48 mic/line inputs, 16 analog line outputs)
 - o D-Show® software
 - o VENUEPack 3.0 plug-ins
 - o Video monitor mounting bracket (monitor not included)
 - o Trackball mounting bracket (trackball not included)
 - o iLok USB Smart Key (preauthorized with all VENUEPack and factory-installed plug-ins)
 - o All necessary cables and user guides
 - Additional DSP Mix Engine Card (for a total of three)
 - VENUEPack Pro 3.0 plug-ins
 - HDx Pro Tools|HD interface card (for up to 64 channels of Pro Tools recording and playback)
- Pro Tools|HD components
- Pro Tools|HD 2 Accel** for PCI or PCIe (includes Pro Tools HD software and over 40 plug-ins)
 - Two 12' DigiLink™ cables

2	Option B – Mix Rack System (18 Track Recording)	2,981,290 INR
---	--	----------------------

Mix Rack System include the following VENUE components.

- o D-Show Profile console
- o Mix Rack (48 mic/line inputs, 16 analog line outputs)
- o with two DSP Mix Engnie Cards
- o D-Show® software
- o VENUEPack 3.0 plug-ins
- o Video monitor mounting bracket (monitor not included)
- o Trackball mounting bracket (trackball not included)
- o iLok USB Smart Key (preauthorized with all VENUEPack and factory-installed plug-ins)
- o All necessary cables and user guides
- o FWx Fire Wire Record and Playback -18 track recording

Terms:

1. VAT and Octroi will be extra as applicable
2. Payment terms: 100% payment along with order.
3. Delivery: 4 to 6 weeks of clean order.
4. Validity: This offer is valid for 60 days from this date
5. This system does not include a MAC.

138

Contacts:

Dhruv Datta

Company: **Aditya Infotech Ltd**

: #12-13 & 15-A - Janki Centre / 29 - Shah Industrial Estate /

Off. Veera desai road / Andheri (west) /

400 053 Mumbai

Line 1: (22) 26 74 15 95

Line 2: (22) 26 74 15 96

Line 3: (22) 26 74 15 98

Fax: (22) 26 74 15 00

M1 name: Dhruv Datta

Mobile 1: (0) 93 218 94 353

M2 name: Amilpurti

Mobile 2: (0) 93 138 91 845

Email 1: dhruv_datta@adityagroup.com

Email 2: sathishkumar_mogili@adityagroup.com

S. Gopinadhan

Company: **MRH Digital System Pvt. Ltd**

: Skanda Krupa / # 191- 1st Cross / 38th Main /

BOOHBCS / BTM Layout II Stage /

560 068 Bengalooru, Karnataka

Line 1: (80) 41 20 05 71

Line 2: (80) 41 20 05 72

Line 3: (80) 41 20 05 73

Fax: (80) 41 20 05 74

M1 name: Gopinadhan

Mobile 1: (0) 93 437 71 035

Prasad Patil

Company: **Rivera International**

: # 7-397A-1B / Mangaldas House / Naaz Cinema Compound /

Lamington Road /

400 004 Mumbai, Maharashtra

Line 1: (22) 23 80 05 55

139

- Digital mixing board (from DIGIDESIGN), 2 options (A & B) are presented. It is an expensive item but very versatile in terms of stage production and live recording. If this item is selected, there will be no need of the item 'mixer + external processing'. So the indicated price shows the actual increase in price, not the cost of this item.

We hope that this report will be clear enough, it is a complicated situation with multiple choices, we tried our best to present in the simplest way. Deepu would be very helpful to you in order to clarify any question, he would understand the meaning of each listed item.

Enclosed we have:

List option 1: the original **EV** quote as per today's rough rates.

List option 2: **EAW** (better quality) option, as per today's rates + 4 pages break down

List option 3: **QSC** (cheaper) option as per today's rate + 4 pages break down

Each list is accompanied by a 4 pages break down (by supplier) without the rates in order to request each supplier a proper official quote. You would have first to choose between list 2 or 3. The suppliers contacts are listed below.

Bosh previous quote for the **TELEX** (communication) equipment as you received it already. If you wish, we can explore this item furthermore, but the budget might be equivalent.

Digidesign quote for option A & B digital mixers.

At your service for any further details,

Warm Regards,

Didier Weiss



1/19



Auroville, Mar 16th, 2009

Dear Leela Samson,

Kindly find enclosed the summary of our research as per the up to date audio equipment purchase for your main auditorium.

As you already know from our communication so far, the initial list stays technically very true, as per using line array technology associated with DSP. The original selection based on 2005 has in 2009 evolved with many other brands being either better in terms of quality/flexibility or cheaper for the same quality level.

So, amongst the few supplier giving proper technical support in India, and amongst all the equipment we have tested so far, 2 lists (options 2 & 3) came out in a very coherent way.

Main system:

From the **option 1** (original EV) – amounting about 80 lakhs as per today's rate.

We selected **option 2** based on EAW components. It is a very well know brand from USA, that provides in this case the latest improvement in technology, the line array being released on the market a few months ago only. The budget would be around 70 lakhs, for a totally outstanding result.

We also selected **option 3** based on QSC components. It is also a USA brand, that is known for very good quality/price and gets a very good support in India. The final quality will be excellent in any case, comparable to the original EV selection at a much cheaper price.

Optional equipments:

For each of the option 2 & 3 we gave a list of additional optional equipments:

- Surround implementation in the hall, for Dolby/DTS movie implementation in your auditorium.
- Digital multitrack recording device, in order to be able to work editing and mixing in a studio at a later phase. Note that this option is not needed if you go for the Digidesign mixing board.
- Communication system, that is intercom between several places. We kept the original quote and list from Telex. There might be other options by now if you are interested, but that will require more time to study. The budget could be be reserved based on these prices.

141

PROVIDER = PRESIDENT			
		APW President 144 Maalavika Center / (basement) / Kodambakkam High Road 600 034 Chennai, Tamil Nadu Line 1: (44) 28 25 10 08 Line 2: (44) 28 21 75 06 Line 3: (44) 28 20 60 26 Fax: (44) 28 25 10 08 Email 1: krishna@apwpresident.com	
	By SOUND WIZARD		
TYPE	Model No.	ITEM DESCRIPTION	QTY
MONITORS	EASIBOX 15U	Fly Case for monitor racks, 15U WITH CASTOR WHEELS AND HANDLES	1
FOH SOUND SYSTEM	EASIBOX 15U	Fly case for FOH LEFT and FF amps and processors racking, 15U WITH CASTOR WHEELS AND HANDLES	1
FOH SOUND SYSTEM	EASIBOX 15U	Fly case for FOH RIGHT and processors racking, 15 U WITH CASTOR WHEELS AND HANDLES	1
MIXING	EASIBOX 15U	Fly Case for MIX racks, 15U WITH CASTOR WHEELS AND HANDLES	1

142

PROVIDER = KALAKSHETRA			
TYPE	Model No.	ITEM DESCRIPTION	QTY
MIXING	ELECTRICITY	40 TO 50MTR CABLE FOR POWERING THE MIXING CONSOLE AND ITS RACK, NEEDED ONLY IF NO PLUGS AVAILABLE @ MIX LOCATION OR IN CASE THE PLUG AVAILABLE IS ON ANOTHER PHASE	1
FOH SOUND SYSTEM	ELECTRICITY	30 AMPS NEEDED FOR FOH RACK (FF INCLUDED) 1x32A BREAKER + 2 DISTRIBUTION SOCKETS	1
MONITORS	ELECTRICITY	4 AMPS NEEDED FOR MON RACK (WITHOUT THE 4 POWERED ON-STAGE SPEAKERS), 1x16A BREAKER + 1 DISTRIBUTION SOCKET	1
MIXING	ELECTRICITY	4 AMPS NEEDED FOR MIX RACK , 1x16A BREAKER + 2 DISTRIBUTION SOCKETS	1
FOH SOUND SYSTEM	ELECTRICITY	30 AMPS NEEDED FOR FOH RACK RIGHT 1x32A BREAKER + 2 DISTRIBUTION SOCKETS	1

143

PROVIDER = STUDIO CARE			
	By SOUND WIZARD	Studio Care #58, Warren Road / Flat no.4 / Rajeswari Apts / Mylapore 600 004 Chennai, Tamil Nadu Line 1: (44) 42 04 94 36 studiocare@vsnl.net	
TYPE	Model No.	ITEM DESCRIPTION	QTY
MONITORS	SPEAKON MAIN CABLES	NL4 SPEAKON CABLES	2
MONITORS	SPEAKON LINK CABLES	NL4 SPEAKON CABLES	2
MONITORS	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	4
GREEN ROOMS	XLR CABLES	XLR (F) TO XLR (M) SYMM. CABLES FOR GREEN ROOMS ACTIVE SPEAKERS, 20 MTR	2
GREEN ROOMS	XLR CABLES	XLR (F) TO XLR (M) SYMM. CABLES FOR GREEN ROOMS ACTIVE SPEAKERS, 40 MTR	1
FRONT FILLS	LINK CABLES	BARE ENDS LINK CABLES FOR SPEAKERS, 4 MTR	4
FOH SOUND SYSTEM	MAIN INPUT SNAKE	Snake cable 32 ins, LENGHT= 70m splice at one end, harting or soca at other end (SEE SCHEMATIC)	1
FOH SOUND SYSTEM	MAIN OUTPUT SNAKE	Snake cable 8 OUTS, LENGHT= 70m splice at both ends + internal connection to harting or soca located in FOH RACK LEFT (SEE SCHEMATIC)	1
FOH SOUND SYSTEM	XLR CABLES	30MTR SHIELDED XLR TO XLR CABLE FOR LEFT FOH RACK TO RIGHT FOH RACK JOINT, 1 FOR THE RIGHT CHANNEL SOUND AND THE OTHER FOR RELAY SWITCHBOX ACTIVATION	2
FOH SOUND SYSTEM	MONITOR RACK SNAKE	Snake cable 4 outs length according to the position of monitor rack, splice at one end, harting or soca at other end (SEE SCHEMATIC)	1
MIXING	INSERT CABLES	ONE 6.35 STEREO JACK (M) TO 2 XLR (M/F), 6MTR	8
MIXING	TASCAM CD01U PRO	CD PLAYER, STEREO, RACKMOUNT TYPE WITH AUTOCUE	1
MIXING	TASCAM322	DOUBLE CASSETTE PLAYER AND RECORDER, RACKMOUNT TYPE	1
FOH SOUND SYSTEM	SPEAKON MAIN CABLES	NL8 TO NL4 SPEAKON CABLES, FOR BASS CABINETS	2
FOH SOUND SYSTEM	ON-STAGE SPLITBOX	1 IN / 2 OUTS REMOTE CONTROL AND SWITCHING BOX FOR LINE ARRAY 3 WAY SPEAKERS	1
FOH SOUND SYSTEM	SPEAKON MAIN CABLES	NL8 Y TYPE SPEAKON CABLES, ONE END SPLITTED 3xNL4 FITTED FOR LO/MID/HI SEPARATION, 1MTR	2
FRONT FILLS	SPEAKON CABLES	NL4 SPEAKON TO BARE END CABLE	2
MONITORS	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR ACTIVE MONITORS INPUT WIRING, 18 METER	2
FOH SOUND SYSTEM	RELAY SWITCHBOX	1 IN / 2 OUTS SWITCHING BOX FOR LINE ARRAY 3 WAY SPEAKERS	2
FOH SOUND SYSTEM	REMOTE CONTROL	1 REMOTE CONTROL FOR THE RELAY SWITCHBOX	1
FOH SOUND SYSTEM	SPEAKON LINK CABLES	NL8 SPEAKON CABLES, 1 METER	6
FOH SOUND SYSTEM	SPEAKON LINK CABLES	NL8 TO NL8 SPEAKON FROM RELAY SWITCH BOX TOWARDS XLD281 CABINETS	4
INTERCOM	XLR BOX	WALLMOUNT BOXES FOR INTERCOM CONNECTION, XLR FITTED	10
INTERCOM	XLR CABLES	XLR TO XLR SHIELDED CABLE FOR TELEX BELTPACKS, 5MTR	10
INTERCOM	CABLE	SHIELDED CABLE FOR INTERCOM CONNEXION 200MTR + XLR PLUGS	1

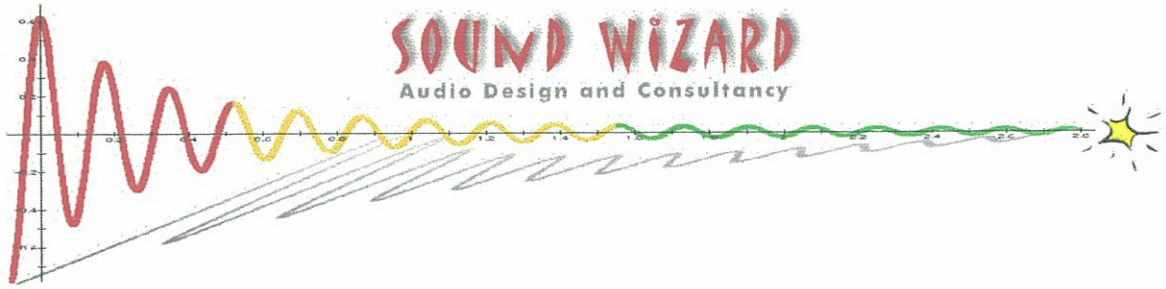
144

PROVIDER = BOSCH			
	By SOUND WIZARD	Bosch / EVI Audio India Pvt Ltd No. 82 / 83, Borewell Road / Whitefields 560 066 Bengalooru, Karnataka Line 1: (80) 28 45 66 90	
TYPE	Model No.	ITEM DESCRIPTION	QTY
INTERCOM	PH1	INTERCOM HEADSETS	5
INTERCOM	BP319	TELEX WIRED INTERCOM BELTPACKS	5
INTERCOM	TW5W	INTERCOM SPLITTER	1
INTERCOM	PS15	TELEX WIRED INTERCOM POWER SUPPLY	1
INTERCOM	PH1	1 SPARE INTERCOM HEADSET	1
FRONT FILLS	Dynacord S1200	2 x 600 watts @ 4 ohms, High-Efficiency, Power amplifier	1
FRONT FILLS	EV ID 4.2	150W rms, 100° x 90° in horizontal underbalcony format, black FRONT FILLS	6
FOH SOUND SYSTEM	EV XLD Grid	Grid for up to 16 XLD cabinets or 8 XS212 cabinets, aluminium, black + ACCESSORIES	2
FOH SOUND SYSTEM	EV DX38	2-in4 digital loudspeaker processor with x-over, EQ, delay, compressor/limiter, front-panel display, PC Remote software (RACE)	2
FOH SOUND SYSTEM	EV XLD 281	Very Compact line-array cabinet, 2 X 8" DVN2080, 2 X ND2, 120° x 10°, black	10
FOH SOUND SYSTEM	Dynacord LX 2200	2 x 1100 watts @ 4 ohms, High-Efficiency, Class-H, SMPS for medium speakers	2
FOH SOUND SYSTEM	Dynacord LX 3000	2 x 1500 watts @ 4 ohms, High-Efficiency, Class-H, SMPS for bass cabinets	2
FOH SOUND SYSTEM	EV XS 212	X-Line Very Compact Bass Cabinet, 2x DVX3120, 1000 watts, black	2
MICROPHONES	EV ND 468	N/DYM® dynamic supercardioid instrument microphone	3
MICROPHONES	EV ND 868	N/DYM® dynamic cardioid variant bass drum microphone	2
MICROPHONES	EV RE 92L	Premium lapel microphone, cardioid.	3
MICROPHONES	EV RE2 BP	Bodypack system includes: BPU-2 transmitter, and a RE-2 Receiver, no microphone in a hard shell road case.	4
MICROPHONES	KT DN 100	Roadworthy active direct injection box	3
MICROPHONES	EV RE200	Probe-style true condenser cardioid instrument microphone	2
MICROPHONES	EV PC 18"	Multi-pattern gooseneck microphone with mic switch and universal base, 18-inch gooseneck	3
MICROPHONES	EV RE97 TX	MiniMic Omnidirectional Low Profile Headworn microphone in light beige color with TA4F connector	4
MICROPHONES	EV RE90B	Boundary condenser microphone, Black	3
MICROPHONES	EV ND 767a	N/DYM® dynamic supercardioid lead vocal microphone	3
MICROPHONES	EV RE510	Handheld system includes: HTU2C-510 transmitter featuring the RE510 super cardioid Condenser element, and RE-2 diversity receiver.	2
MICROPHONES	EV RE2 N7	Handheld system includes: HTU2D-767a transmitter featuring the N/D 767a supercardioid dynamic element, and RE-2 diversity receiver all in a hard shell road case.	4
MIXING	KT DN 370	Dual 1/3 octave analogue GEQ with hi/lo pass and notch filters	1
MIXING	KT DN 504	Four channel / dual stereo compressor / limiter	2
MIXING	Midas Venice 320	28 Mono-, 4 Stereo-Line-Inputs Mixing console	1
MIXING	12V Desk Lamp	LITTLITE GOOSENECK TYPE	2
MONITORS	EV Sxa 360	Powered (100-120V), 12-inch two-way, 350+150W, 65° x 65°, line-level in/out, stand mount, black polypropylene, incl. 15ft (5m) power cord	4
MONITORS	KT DN 370	Dual 1/3 octave analogue GEQ with hi/lo pass and notch filters	1
MONITORS	EV Fri 28 lpm	Dual 8-inch, two-way, low profile, passive, 100° x 100° full range loudspeaker, 200-watt, 93dB 1w@1m, with non-skid rubber feet, Speakon® connectors, black (no bracket)	4
MONITORS	Dynacord S 900	2 x 450 watts @ 4 ohms, High-Efficiency Power amplifier for passive wedges	1

145

PROVIDER = PRO MUSICALS			
	By SOUND WIZARD	Sudhin Prabhakar Pro Musicals 25, Casa Major Road / Egmore 600 008 Chennai, Tamil Nadu Line 1: (44) 28 19 36 07 Fax: (44) 28 19 38 23 Email 1: promusic@vsnl.com	
TYPE	Model No.	ITEM DESCRIPTION	QTY
FOH SOUND SYSTEM	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	12
FF	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR FOH RACK	1
GREEN ROOMS	M AUDIO SP3	STUDIO PRO 3 M AUDIO PAIR OF ACTIVE SPEAKERS FOR GREEN ROOMS	3
MICROPHONES	SPARE CABLES	6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	4
MICROPHONES	MB1	SAMSON MB1 MIC STANDS SHORT BOOMS	8
MICROPHONES	MC18	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 6 METERS PACK OF 3 CABLES	18
MICROPHONES	BT4	SAMSON BT4 MIC STANDS LONG BOOMS	12
MICROPHONES	SB100	SAMSON SB100 MIC STANDS BIG STUDIO BOOMS	2
MICROPHONES	HF MICS CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	10
MICROPHONES	NEUTRIK ADAPTERS	RCA (F) TO 6.35 JACK (M) ADAPTERS	4
MICROPHONES	SPARE CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	4
MIXING	XLR CABLES	RCA (M) TO 6.35 JACK ASYM. CABLES FOR CD CONNECTION, 6 MTRS	2
MIXING	XLR CABLES	6.35 JACK (M) TO XLR ASYM. CABLES FOR SOURCE CONNECTION, 6 MTRS	2
MIXING	SPARE CABLES	6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	2
MIXING	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR MIX RACK	1
MIXING	CH700	HEADPHONES	2
MIXING	REV 2496	V-VERB PRO REV2496 dual engine (4ch) Behringer	1
MONITORS	SAMSON D3500	FEEDBACK SUPPRESSORS	2
MONITORS	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR FOH RACK	1
FRONT FILLS	SAMSON D3500 EQ	FEEDBACK SUPPRESSOR	1

146



AUDIO EQUIPMENT LISTS per Supplier

By **SOUND WIZARD****ITEMS LIST CONT**

MIXING	ELECTRICITY	4 AMPS NEEDED FOR MIX RACK , 1x16A BREAKER + 2 DISTRIBUTION SOCKETS	1	KALAKSHETRA
MIXING	ELECTRICITY	40 TO 50MTR CABLE FOR POWERING THE MIXING CONSOLE AND ITS RACK	1	KALAKSHETRA
INTERCOM	PS15	TELEX WIRED INTERCOM POWER SUPPLY	1	BOSCH
INTERCOM	TW5W	INTERCOM SPLITTER	1	BOSCH
INTERCOM	BP319	TELEX WIRED INTERCOM BELTPACKS	5	BOSCH
INTERCOM	PH1	INTERCOM HEADSETS	5	BOSCH
INTERCOM	XLR BOX	WALLMOUNT BOXES FOR INTERCOM CONNECTION, XLR FITTED	10	STUDIO CARE
INTERCOM	XLR CABLES	XLR TO XLR SHIELDED CABLE FOR TELEX BELTPACKS, 5MTR	10	STUDIO CARE
INTERCOM	PH1	1 SPARE INTERCOM HEADSET	1	BOSCH
INTERCOM	CABLE	SHIELDED CABLE FOR INTERCOM CONNEXION 200MTR + XLR PLUGS	1	STUDIO CARE
MICROPHONES	EV ND 767a	N/DYM® dynamic supercardioid lead vocal microphone	3	BOSCH
MICROPHONES	EV RE510	Handheld system includes: HTU2C-510 transmitter featuring the RE510 super cardioid Condenser element, and RE-2 diversity receiver.	2	BOSCH
MICROPHONES	EV RE200	Probe-style true condenser cardioid instrument microphone	2	BOSCH
MICROPHONES	EV ND 468	N/DYM® dynamic supercardioid instrument microphone	3	BOSCH
MICROPHONES	EV ND 868	N/DYM® dynamic cardioid variant bass drum microphone	2	BOSCH
MICROPHONES	EV RE90B	Boundary condenser microphone, Black	3	BOSCH
MICROPHONES	EV RE 92L	Premium lapel microphone, cardioid.	3	BOSCH
MICROPHONES	KT DN 100	Roadworthy active direct injection box	3	BOSCH
MICROPHONES	EV RE2 N7	Handheld system includes: HTU2D-767a transmitter featuring the N/D 767a supercardioid dynamic element, and RE-2 diversity receiver all in a hard shell road case.	4	BOSCH
MICROPHONES	EV PC 18"	Multi-pattern gooseneck microphone with mic switch and universal base, 18-inch gooseneck	3	BOSCH
MICROPHONES	EV RE97 TX	MiniMic Omnidirectional Low Profile Headworn microphone in light beige color with TA4F connector	4	BOSCH
MICROPHONES	EV RE2 BP	Bodypack system includes: BPU-2 transmitter, and a RE-2 Receiver, no microphone in a hard shell road case.	4	BOSCH
MICROPHONES	MC18	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 6 METERS PACK OF 3 CABLES	18	PRO MUSICALS
MICROPHONES	BT4	SAMSON BT4 MIC STANDS LONG BOOMS	12	PRO MUSICALS
MICROPHONES	MB1	SAMSON MB1 MIC STANDS SHORT BOOMS	8	PRO MUSICALS
MICROPHONES	SB100	SAMSON SB100 MIC STANDS BIG STUDIO BOOMS	2	PRO MUSICALS
MICROPHONES	SPARE CABLES	6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	4	PRO MUSICALS
GREEN ROOMS	M AUDIO SP3	STUDIO PRO 3 M AUDIO PAIR OF ACTIVE SPEAKERS FOR GREEN ROOMS	3	PRO MUSICALS
GREEN ROOMS	XLR CABLES	XLR (F) TO XLR (M) SYMM. CABLES FOR GREEN ROOMS ACTIVE SPEAKERS, 40 MTR	1	STUDIO CARE
GREEN ROOMS	XLR CABLES	XLR (F) TO XLR (M) SYMM. CABLES FOR GREEN ROOMS ACTIVE SPEAKERS, 20 MTR	2	STUDIO CARE

148

By **SOUND WIZARD**

ITEMS LIST CONT

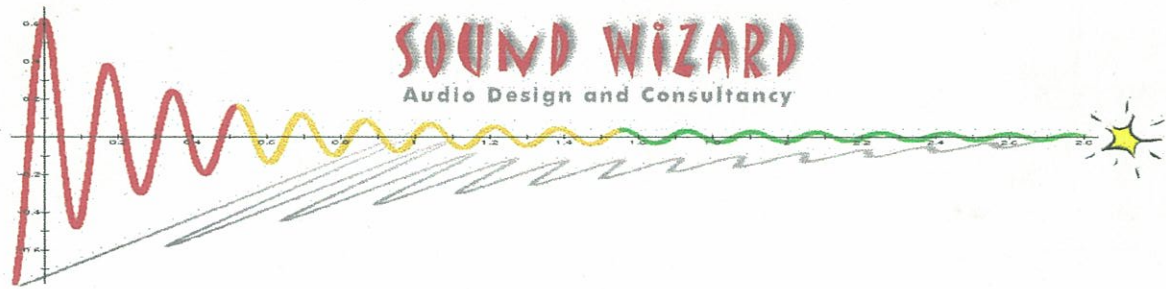
TYPE	Model No.	ITEM DESCRIPTION	QTY	PROVIDER
MONITORS	EASIBOX 15U REF 31-E415-F	Fly Case for monitor racks, 15U WITH CASTOR WHEELS AND HANDLES	1	PRESIDENT
MONITORS	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR FOH RACK	1	PRO MUSICALS
MONITORS	KT DN 370 EQ	Dual 1/3 octave analogue GEQ with hi/lo pass and notch filters	1	BOSCH
MONITORS	SAMSON D3500 EQ	FEEDBACK SUPPRESSORS, 1 FOR THE ACTIVE MONITORS AND ONE FOR THE PASSIVE WEDGES	2	PRO MUSICALS
MONITORS	EV Sxa 360	Powered (100-120V), 12-inch two-way, 350+150W, 65° x 65°, line-level in/out, stand mount, black polypropylene, incl.15ft (5m) power cord	4	BOSCH
MONITORS	EV Fri 28 lpm	Dual 8-inch, two-way, low profile, passive, 100° x 100° full range loudspeaker, 200-watt, 93dB 1w@1m, with non-skid rubber feet, Speakon® connectors, black (no bracket)	4	BOSCH
MONITORS	Dynacord S 900	2 x 450 watts @ 4 ohms, High-Efficiency Power amplifier	1	BOSCH
MONITORS	MON SNAKE	Snake cable 32 ins, LENGHT= according to the placement of monitor console, splice at one end, harting or soca at other end	1	STUDIO CARE
MONITORS	SPEAKON MAIN CABLES	NL4 SPEAKON CABLES	2	STUDIO CARE
MONITORS	SPEAKON LINK CABLES	NL4 SPEAKON CABLES	2	STUDIO CARE
MONITORS	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	4	STUDIO CARE
MONITORS	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR ACTIVE MONITORS INPUT WIRING, 18 METER	2	STUDIO CARE
MONITORS	ELECTRICITY	4 AMPS NEEDED FOR MON RACK (WITHOUT THE 4 POWERED ON-STAGE SPEAKERS), 1x16A BREAKER + 1 DISTRIBUTION SOCKET	1	KALAKSHETRA
MIXING	Midas Venice 320	28 Mono-, 4 Stereo-Line-Inputs Mixing console	1	BOSCH
MIXING	REV 2496 BEHRINGER	V-VERB PRO REV2496 dual engine (4ch) Behringer	1	PRO MUSICALS
MIXING	12V Desk Lamp	LITTLITE GOOSENECK TYPE	2	BOSCH
MIXING	KT DN 504	Four channel / dual stereo compressor / limiter	2	BOSCH
MIXING	KT DN 370 EQ	Dual 1/3 octave analogue GEQ with hi/lo pass and notch filters	1	BOSCH
MIXING	INSERT CABLES	ONE 6.35 STEREO JACK (M) TO 2 XLR (M/F), 6MTR	8	STUDIO CARE
MIXING	EASIBOX 15U REF 31-E415-F	Fly Case for MIX racks, 15U WITH CASTOR WHEELS AND HANDLES	1	PRESIDENT
MIXING	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR MIX RACK	1	PRO MUSICALS
MIXING	TASCAM CD01U PRO	CD PLAYER, STEREO, RACKMOUNT TYPE WITH AUTOCUE	1	STUDIO CARE
MIXING	TASCAM322	DOUBLE CASSETTE PLAYER AND RECORDER, RACKMOUNT TYPE	1	STUDIO CARE
MIXING	XLR CABLES	RCA (M) TO 6.35 JACK ASYM. CABLES FOR CD CONNECTION, 6 MTRS	2	PRO MUSICALS
MIXING	XLR CABLES	6.35 JACK (M) TO XLR ASYM. CABLES FOR SOURCE CONNECTION, 6 MTRS	2	PRO MUSICALS
MIXING	NEUTRIK ADAPTERS	RCA (F) TO 6.35 JACK (M) ADAPTERS	4	PRO MUSICALS
MIXING	SPARE CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	4	PRO MUSICALS
MIXING	SPARE CABLES	6.35 JACK (M) TO JACK (M) ASYM. SHIELDED CABLES , 4 METERS	2	PRO MUSICALS
MIXING	HF MICS CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES , 4 METERS	10	PRO MUSICALS
MIXING	CH700	HEADPHONES	2	PRO MUSICALS

149

By **SOUND WIZARD****ITEMS LIST**

TYPE	Model No.	ITEM DESCRIPTION	QTY	PROVIDER
FOH SOUND SYSTEM	EV XLD 281	Very Compact line-array cabinet, 2 X 8" DVN2080, 2 X ND2, 120° x 10°, black	10	BOSCH
FOH SOUND SYSTEM	EV XS 212	X-Line Very Compact Bass Cabinet, 2x DVX3120, 1000 watts, black	2	BOSCH
FOH SOUND SYSTEM	EV XLD Grid	Grid for up to 16 XLD cabinets or 8 XS212 cabinets, aluminium, black + ACCESSORIES	2	BOSCH
FOH SOUND SYSTEM	EV DX38	2-in4 digital loudspeaker processor with x-over, EQ, delay, compressor/limiter, front-panel display, PC Remote software (RACE)	2	BOSCH
FOH SOUND SYSTEM	Dynacord LX 2200	2 x 1100 watts @ 4 ohms, High-Efficiency, Class-H, SMPS for medium and treble speakers	2	BOSCH
FOH SOUND SYSTEM	Dynacord LX 3000	2 x 1500 watts @ 4 ohms, High-Efficiency, Class-H, SMPS for bass cabinets	2	BOSCH
FOH SOUND SYSTEM	EASIBOX 15U REF 31-E415-F	Fly case for FOH LEFT and FF amps and processors racking, 15U WITH CASTOR WHEELS AND HANDLES	1	PRESIDENT
FOH SOUND SYSTEM	EASIBOX 15U REF 31-E415-F	Fly case for FOH RIGHT and processors racking, 15 U WITH CASTOR WHEELS AND HANDLES	1	PRESIDENT
FOH SOUND SYSTEM	POWERBRITE PB11	SAMSON LINE FILTER AND LIGHTS FOR FOH RACK	1	PRO MUSICALS
FOH SOUND SYSTEM	RELAY SWITCHBOX	1 IN / 2 OUTS SWITCHING BOX FOR LINE ARRAY 3 WAY SPEAKERS	2	STUDIO CARE
FOH SOUND SYSTEM	REMOTE CONTROL	1 REMOTE CONTROL FOR THE RELAY SWITCHBOX	1	STUDIO CARE
FOH SOUND SYSTEM	MAIN INPUT SNAKE	Snake cable 32 ins, LENGHT= 70m splice at one end, harting or soca at other end (SEE SCHEMATIC)	1	STUDIO CARE
FOH SOUND SYSTEM	MAIN OUTPUT SNAKE	Snake cable 8 OUTS, LENGHT= 70m splice at both ends + internal connection to harting or soca located in FOH RACK LEFT (SEE SCHEMATIC)	1	STUDIO CARE
FOH SOUND SYSTEM	XLR CABLES	30MTR SHIELDED XLR TO XLR CABLE FOR LEFT FOH RACK TO RIGHT FOH RACK JOINT, 1 FOR THE RIGHT CHANNEL SOUND AND THE OTHER FOR SWITCHBOX ACTIVATION	2	STUDIO CARE
FOH SOUND SYSTEM	MONITOR RACK SNAKE	Snake cable 4 outs length according to the position of monitor rack, splice at one end, harting or soca at other end (SEE SCHEMATIC)	1	STUDIO CARE
FOH SOUND SYSTEM	ON-STAGE SPLITBOX	SPLITTER BOX WITH 2 SOCAPEX OR HARTING PLUGS AND 32 XLR (SEE SCHEMATIC)	1	STUDIO CARE
FOH SOUND SYSTEM	SPEAKON MAIN CABLES	NL8 TO NL4 SPEAKON CABLES, FOR BASS CABINETS	2	STUDIO CARE
FOH SOUND SYSTEM	SPEAKON MAIN CABLES	NL8 Y TYPE SPEAKON CABLES, ONE END SPLITTED 3xNL4 FITTED FOR LO/MID/HI SEPARATION, 1MTR	2	STUDIO CARE
FOH SOUND SYSTEM	SPEAKON LINK CABLES	NL8 SPEAKON CABLES, 1 METER	6	STUDIO CARE
FOH SOUND SYSTEM	SPEAKON LINK CABLES	NL8 TO NL8 SPEAKON FROM RELAY SWITCH BOX TOWARDS XLD281 CABINETS	4	STUDIO CARE
FOH SOUND SYSTEM	XLR CABLES	XLR (M) TO XLR (F) SYMM. SHIELDED CABLES FOR PROCESSORS AND AMP INPUT WIRING, 1 METER	12	PRO MUSICALS
FOH SOUND SYSTEM	ELECTRICITY	30 AMPS NEEDED FOR FOH RACK LEFT (FF INCLUDED) 1x32A BREAKER + 2 DISTRIBUTION SOCKETS	1	KALAKSHETRA
FOH SOUND SYSTEM	ELECTRICITY	30 AMPS NEEDED FOR FOH RACK RIGHT 1x32A BREAKER + 2 DISTRIBUTION SOCKETS	1	KALAKSHETRA
FRONT FILLS	EV ID 4.2	150W rms, 100° x 90° in horizontal underbalcony format, black FRONT FILLS	6	BOSCH
FRONT FILLS	Dynacord S1200	2 x 600 watts @ 4 ohms, High-Efficiency, Power amplifier	1	BOSCH
FRONT FILLS	SPEAKON CABLES	NL4 SPEAKON TO BARE END CABLE	2	STUDIO CARE
FRONT FILLS	LINK CABLES	BARE ENDS LINK CABLES FOR SPEAKERS, 4 MTR	4	STUDIO CARE
FRONT FILLS	SAMSON D3500 EQ	FEEDBACK SUPPRESSOR	1	PRO MUSICALS

150



KALAKSHETRA AUDITORIUM AUDIO EQUIPMENT LISTS

Update SEPT 13th, 2007

SOUND WIZARD

152

Pl. go through with Deepa Noor
& obtain quote. News before
App 3/09. D 23/09

594221
PON

KIND Attn. Mrs. LEE LA SAMSON
TO
M/S : KALAKSHETRA FOUNDATION
RUKMANI DEVI COLLEGE OF FINE
KALAKSHETRA ROAD/
THIRUVANMIYUR/
CHENNAI - 600041
PH: 044- 2452 1169/
2452 0836.

From:

SOUND WIZARD
Shakti-Auroville 605 101
Tamil Nadu-India
Tel : 0413 2622659 Fax : 0413 2623410
Email : soundwiz@auroville.org.in
Website : www.soundwizard.net

1/11