Integrated AudioSolutions
DESIGN • CONSULTANCY • SALES

TATACHILLA
lutheran college

FROM GYMNASIUM TO ASSEMBLY HALL PERFORMANCE SPACE

Tatachilla Lutheran College is nestled in the McLaren Vale wine region of South Australia. Kostas Psorakis, then project manager at Osmond Electronics in Adelaide was approached by Clinton Camac, the head of ITC at the school to evaluate an Audio Visual upgrade to the school's gymnasium.

The brief was that with the College's growing performing arts curriculum an upgrade to the Gymnasium was required to allow it to be used as a performance space. Kostas, along with a number of other integrators was asked to submit submissions to meet the requirement.

Following careful consultation with Clinton covering the operational and performance requirement a proposal was submitted that covered the challenging acoustic characteristic of the space as well as a speaker design that took into account the immediate need while allowing for future expansion.

The acoustic design was based around the Electro Voice Innovation family of product which provided an extensive range of performance matched options allowing for cabinets with different coverage patterns to be used together maintaining a consistent voicing characteristic. In addition the family offers numerous rigging options to maximise the flexibility of the family where installation challenged exist.

The successful proposal involved a left/right design based on a two box cluster mounted horizontally utilising a EVF 1122S/64 (60 X 40 dispersion) cabinet at the top to provide narrow dispersion to cover the back of the space and a EVF 1122S/126 (120 x 60 dispersion) mounted beneath to provide a wide short throw coverage for the front of the room. The clusters were suspended from the ceiling such that they were just forward of the performance stage and hung five meters in from the side walls to minimise wall reflections.
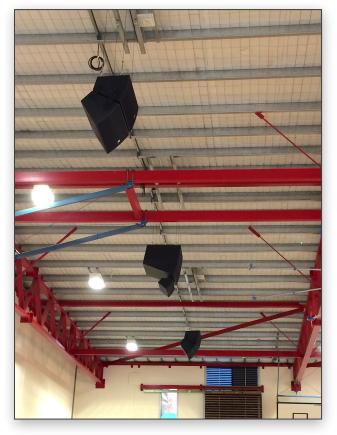

EV EVF cabinets horizontal array

The system was then supplemented by a centre hang of a EVF 2151D dual 15" bass cabinet to provide low frequency extension for the system. The choice of a dual 15" cabinet provided for a tight, punchy low frequency while assisting to

provide control in an acoustically challenging environment. In addition an EVU 2082/95 dual 8 inch cabinet was suspended below the bass cabinet to provide mid/hi fill to the area at the front of the room in the centre inside of the coverage of the EVF 1122S/126 cabinets. Custom bracketry was fabricated to facilitate the mounting of the EVU to the bottom of the EVF bass cabinet.

EV EVF - 2151D sub cabinet with EVU 2082 front fill ready to be flown into position

The control of the system was set up to facilitate a local/remote operation allowing for a simple 'local' mixer with minimal inputs and functionality to control a few microphones to allow for basic assemblies to be run by staff with only a fundamental knowledge of the system. The system then had a changeover switch to allow for a more sophisticated 'remote' mixer to control the system for performances requiring a higher input count and constant supervision.

Custom fabricated wall panels — basketball proof (pre painting)

In this respect a Midas M32 digital mixing console was installed to provide the control and functionality for the remote mixer with a simple single RU rack mixer located in the amplifier rack to provide local control.

The 'local' mixer has dedicated inputs located in the protected wall boxes while the 'remote' mixer utilised inputs via dedicated I/O boxes connected via Cat 5.

The 'remote' mixing console was installed in a 'roll away' desk arrangement to allow for it to be secured in a storeroom when not required. This mobile desk also housed wireless and video equipment to cater for larger productions. The 'local' mixer was located in the main amplifier rack mounted in a rear storeroom.

Custom mobile equipment operation console, included: Midas M32, wireless microphones and vision presentation switcher

This rack also contained the main system amplifiers consisting of Electro - Voice CPS contractor series units featuring install friendly Phoenix connectors for both inputs and outputs. In addition these amplifiers have their attenuators mounted on the rear away from roaming fingers.

The CPS family is noted for their high level of German Engineering resulting in exceptional audio performance while providing optimum protection. In addition this rack also mounted the hard of hearing loop amplifier that drove a loop installed beneath the sprung floor of the facility to provide complete coverage of the space. The system is also connected to the schools fire panel to allow for muting of the system in the event of the fire alarm being activated.

"The appeal of Electro-Voice as a speaker manufacture is their broad range of product offering a solution to most acoustic challenges. This range covers various levels of products at competitive price points allowing for a solution to be tailored to almost any requirement or budget. In addition the consistent voicing of Electro Voice products makes it easy to build systems from various product groups without performance compromise. With such a broad pallet of products available Electro Voice is my first choice when it comes to designing acoustic solutions."

Kostas Psorakis
Design Solutions . Project Manager

Kostas Psorakis	Project Management
Adam Budgen	System Design - C.A.D - Smaart Analysis
Justin Jones	System Installation - Fabrication
David Musch	System Installation - AV / Hearing Loop
Mike Longmire	Operation Manual
Phill Webb	Bosch Communication Senior Systems Product Specialist System Design

Watch the short installation VIDEO

AUDIO EQUIPMENT LIST

MAIN SPEAKERS

2   Electro-Voice EVF 1122D 120 x 60

2   Electro-Voice EVF 1122D   60 x 40

1   Electro-Voice EVF 2151D Sub Bass

1   Electro-Voice EVU 2082   Down-Fill

DIGITAL CONSOLE

1 Midas M32 Digital Console

2 Midas DL 153 16 input 8 output stage boxes

Custom Roll Around console stand with rack mounting

AMPLIFIERS

2 Electro-Voice CPS 2.12 Power Amplifiers (Main)

1 Electro-Voice CPS 2.9 Power Amplifiers (Down Fill)

1 Electro-Voice CPS 2.12 Power Amplifiers (Sub)

SPEAKER SYSTEM MANAGMENT

1 BSS Blu 100 networked Speaker processor + Wall Panel

STAGE / PERFORMANCE

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