



# Christian Reformed Church Sutherland Shire

Barden Ridge, Sydney NSW



## Electro-Voice & Dynacord Deliver the Gospel Loud & Clear

**T**he Christian Reformed Church was established in Sydney's leafy Sutherland Shire in 1960 and is one of 45 Reformed Church congregations across Australia. Following three location changes the current church building was completed in 1991, in the suburb of Barden Ridge, and serves an average service attendance of 250-300 parishioners.

### PA History

The first loudspeakers installed in the new church were only good enough for speech and were not used for the amplification of the band. Few years later, Matthew James, the sound specialist at the church, sourced a pair of the ever-reliable Electro-Voice SX-100 speakers from Bava's Music.

When asked how Matthew got introduced to EV audio gear he replied: "I've always been interested in sound and speakers and used to build my own speakers using the "loudspeaker design cookbook". I soon learned that to get the most natural best sound it takes years of testing drivers, crossovers and cabinet design, something that is impossible to do in the garage on a very limited budget!

I think what got me first interested in EV speakers was when we used to go down to the Black Stump conferences once a year at the Cataract scout site. EV speakers were extensively used, and I thought they sounded great."





*Two EVC-1122-VI Vari-Intense Loudspeakers situated above the projector screens.*

### The New Audio Visual System

Earlier in the year the church committee took the decision to upgrade the Audio Visual system for a number of reasons. Firstly, even though the SX-100 loudspeakers did a decent job for over a decade, the coverage they produced was not ideal around the back or sides of the church. "The EV SX-100 loudspeakers are great value for money and they sound nice, however they were just not designed for a church space of this size. There were a few areas where the sound was a bit thin."

Apart from the church band screaming for a new system, the second major reason for a new audio system, was the introduction of two new projectors and projector screens. The SX-100 loudspeakers were in the way. Hence, Matthew James started researching which Electro-Voice loudspeakers might suit a church of this size and provide quality sound, even coverage and value for money. He came across the Vari-Intense model and sought advice from Bava's Music and subsequently Electro-Voice product specialists who confirmed the choice was very suitable.

### The EVC-1122-VI (Vari-Intense) in Detail

With the main floor of the church being 18 m long x 14 m wide, and ceiling height of 7 m or more, it made sense to use the EVC Vari-Intense loudspeakers. As they are hung at just over 6 m, the unique driver, horn and waveguide combinations allows the EVC-1122-VI loudspeaker to throw and cover evenly across an area of 3 times their height position to the front, and 2 times their height to each side. This meant that just two of these would suffice to deliver quality sound across the entire floor.

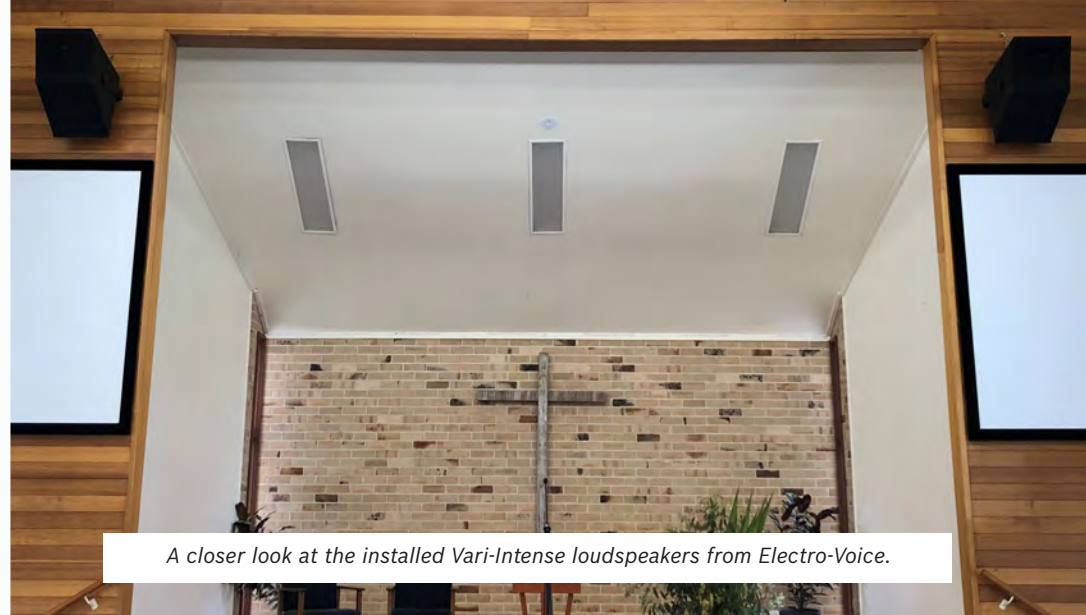
The advantage of the VI approach is that there is reduced variation in sound level from the front to the back of the audience, compared to typical point source solutions. The high frequency section of the EVC 1122-VI loudspeaker comprises a single 1 1/4-inch pure titanium dome compression driver directly coupled to a compound waveguide that combines long-throw and short-throw behaviour in a single acoustical device. This unique waveguide creates uniform pattern control and smooth, linear response.



***"The sound quality is great. Dispersion is very even throughout the church and the band are raving about how good they sound!"***







*A closer look at the installed Vari-Intense loudspeakers from Electro-Voice.*



### **Dynacord L Series Amplifier**

Dynacord's L2800 amplifier was chosen to power the Vari-Intense loudspeakers. With 1400 W per channel at 4 ohms, the amplifier is more than capable driving the 300 W continuous (1200 W peak) Vari-Intense loudspeakers. The L Series amplifiers are engineered for demanding live music applications. They are ideal for live performances in venues such as houses of worship, sports venues, school auditoriums and clubs. The L Series power amplifiers comprise a best-in-class, tour-grade feature set that brings real professional performance to a new price point. Their high-quality components and professional processing power and performance characteristics enable exceptional sound quality with plenty of headroom.

An on-board DSP includes multi-band PEQs, crossovers, limiters, and delay per channel. It also has true channel grouping control with extra DSP capabilities like PEQ, GEQ and delay for each group. The amplifier is also equipped with advanced FIR-Drive, a premium feature normally reserved for the highest quality tour-grade DSPs. It optimizes original factory loudspeaker settings, yielding a level of performance unheard of at this price point. Due to these reasons no additional DSP unit was required for this project.

### **EV PolarChoice Lectern Mic**

An Electro-Voice PolarChoice lectern microphone was chosen for the spoken audio. PolarChoice is a premium lectern microphone that is very flexible in terms of pick-up patterns. The user can select between omni, cardioid, supercardioid or hypercardioid patterns.

The microphone is designed to provide a smooth and uniform frequency response, no matter what pattern is selected. An extended low frequency response and switchable high-pass filter can be utilised.



*Dynacord L2800 DSP Live Series Amplifier*





### The Monitors

The band, featuring 3 vocalists, keyboard/organ/piano player, drummer, bass and guitar players, use three EV ZLX-12P powered loudspeakers as monitors. An EKX-15SP powered subwoofer for supplements the monitors and FOH speakers.

### Equipment:

- 2 x Electro-Voice EVC-1122/VI Vari-Intense 12" Loudspeaker
- 1 x Dynacord L2800/LD Live Series Amplifier
- 1 x Electro-Voice PolarChoice Lectern Mic
- 3 x Electro-Voice ZLX-12P Two-Way Powered Loudspeakers
- 1 x Electro-Voice EKX-15SP Powered Subwoofer



### End User:

#### The Reformed Church - Sutherland Shire

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### Supplier:

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### Manufacturer:

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