

# THE PILBEAM THEATRE INSTALLATION

By **STEPHEN BRUEL**

## HISTORY

Originally opened in 1979, Rockhampton's Pilbeam Theatre is one of the finest theatres in regional Australia and is the focal point for the performing arts in Central Queensland. Named after the city's long serving Mayor, Rex Pilbeam, who was the driving force behind the push to ensure Rockhampton had a performing arts centre of a high international standard, the theatre is owned and operated by Rockhampton Regional Council, and offers a diverse range of productions all year round.

These productions include the Queensland Ballet, Opera Queensland, the Bell Shakespeare group, rock bands and international artists. There is also a strong community base with the venue being used regularly by local high, primary and dance schools, the local choral society and in-house productions.

## THE STAFF

When it came time to upgrade the PA system, the Pilbeam Theatre's Technical Co-ordinator Ross James and Senior Technician (Audio) Matthias Conway were both involved in the process, and with such a solid background in audio and theatre, and mixture of experience and youth, the decision was in safe hands.

"I started in the entertainment industry as a band manager/roadie in Melbourne 1969 and spent 25 years working audio, everything from cover bands to major acts, including a stint with my own PA hire business and two and a half years in television with ATV 0 (now channel 10)," said Ross. "My first theatre gig was with the Australian Opera season at the Princess Theatre in Melbourne. I then went touring Queensland with a cover band from Ballarat and settled in Rockhampton. I started doing casual audio work at the Pilbeam, and became a full time employee 17 years ago. These days I do more admin style work."

Matt Conway began his audio career as a trainee with the Pilbeam four years ago, and has held his current role for the past 18 months. As the main operator, Matt has the final say.

## THE NEED TO UPGRADE AND THE SOLUTION

According to Ross, the theatre's old system didn't quite provide even coverage across the room, and in particular, failed to project the top end frequencies to the back of the room. Matt and Ross decided to trial EV, JBL and Nexo systems side-by-side to see which system best suited them and remained on budget, and EV won the battle.

"We have run EV for the last three upgrades and have always been happy with the product, particularly its suitability for our dance shows and musicals," said Ross. "Most rock acts that perform here are roll ins with their

own systems so the big rock rig wasn't so much of a consideration. Although these other systems were great, the EV suited our use and came in on the budget."

Matt describes the process of comparing the three systems within the space.

"We were deciding between an Electro Voice EVA Line Array, Nexo's GEO S12s, and a JBL VRX system," said Conway. "We hung the EVA system, comprising of two EVA-2082S-906 and two EVA-2082S-920 boxes, on the left side of the venue using one Dynacord H5000 to power all four. We then placed four NEXO GEO S12 speakers on the right side using their Camco quad amp. I also ran the JBL VRX system for comparison."

The final PA system consists of four EVA-2082S-906 cabinets (two per side on top of the array due to the smaller vertical dispersion), four EVA-2082S-920 cabinets (two per side on the bottom of the array), one EVF-112S/126 for centre fill and two XCS312 cardioid subs hung centre of the pro arch.

"We also purchased four XI 1082 boxes for front fill and used the EV Netmax N8000 to process the whole venue,"



*Exterior of the theatre.*

added Matt. "That includes the onstage foldback which is also EV boxes plus we have Dynacord PowerH 5000 amplifiers to drive the system."

## THE VENUE

The venue has raked seating for 986 patrons and consists of a proscenium arch (12 metres wide by 5 metres high), a stage area (15 metres wide by 11.5 metres deep by 13.7 metres high) which is non-raked with a painted masonite finish,

and the orchestra pit (11 metres wide x 4.25 metres deep and 1.9 metres below stage) which is an electrically operated screw jack lift. The pit may also be used as a forestage at stage level or provide additional seating (up to 4 extra rows with a total of 80 seats).

Ross said another problem that needed to be addressed with the upgrade was that when the orchestra pit is set up to provide extra seating, there are four rows of seats situated either directly under or behind



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Senior Technician (Audio) Matthias Conway (left) and Technical Co-ordinator Ross James.



the flown system. Also, when extended to provide the forestage area, this space needed to be placed behind this system.

"In the past we would use extra speakers from previous systems to provide infill across either side of the pro arch," said Ross. "With the new system, we added four 8" infills that can be placed across the front of stage and are time aligned to suit."

The stage is equipped with 40 single purchase counterweight line sets with a working load limit of 400 kg, distributed evenly along the length of the batten so all lighting bars and masking can be hung to the user's requirements. The line sets are operated at stage level on the opposite prompt (OP) side of stage. The Stage Manager's Desk is located in the Prompt Corner (PC) and contains facilities for headset talkback (TELEX) to 12 stations with the points hard wired through the venue, four channels of radio talkback, cast call to all dressing rooms and the Green Room and Closed Circuit Colour TV.

"We have flown the PA and installed fixed foldback over the stage from the fly floor and the dimmer gallery," said Ross. "I instigated this about twelve years ago. It keeps the side stage area clear, works well for dance acts and musicals, and also cuts down a lot of set-up time."

There are 24 balanced microphone inputs located in floor traps on the orchestra pit/forestage (12 inputs) and on the stage (12 inputs). There is also an in-house multicore that carries 37 channels of audio and 15 line returns

from the centre of house mixing position to the OP stage with foldback tail or dropbox capable of locating in the pit. Additionally, there is a 36 channel multicore from prompt corner for the radio microphone system to the centre auditorium, with antenna distro using antennas mounted in the top corners of the proscenium arch having line of sight both onto the stage and throughout the auditorium.

## THE GEAR

The theatre has a fairly comprehensive gear list encompassing both digital and analogue technologies. The mixing consoles consist of Yamaha digital (M7CL/48, LS9/16), analogue (MG124c) and powered (EMX5012C) models, a MIDAS Venice 320/24 and Allen and Heath GL2400/16 analogue units. These are run through Dynacord (H5000 and H2500) and Crown power amplifiers.

"Amp racks are situated at the top of stair wells within close proximity to the speakers," said Ross. "This helps keep fan noise away from the stage."

Processing and effects units include dBX (266XL stereo compressors and 2231 stereo graphic equalisers with type 111 noise reduction), Yamaha (SPX-1000 effects unit) and TC Electronic (M-One XL effects unit). The newest member to the family is the EV NetMax 8000 processor, a digital audio system controller.

"We had the Netmax system set up for us originally with wireless control from a



EV arrays have the right sound for the room.

laptop when the system was tuned to the room," said Matt. "This system allows us to control processing, equalisation and delay settings quickly all from the one point."

The microphone selection consists of Audio Technica condenser models (ATM10a, ATM33a and ATM31a), Shure (SM58, SM57, Beta 58) and some Sennheiser, with 20 Shure UHF MA and UB wireless models with belt packs and headset microphones.

"We have just received delivery of 32 channels of UR Shure radio microphones to allow for the digital television rollout and digital frequency sale," said Ross.

## THE FUTURE

With such a vast array of upcoming events and productions including Powderfinger's Sunsets tour, Disney's High School Musical, plays featuring Gary McDonald, Henri Szeps and Max Cullen, dance festivals and a chamber orchestral performance by The Camerata of St John's, Brisbane, the arts are certainly alive in Central Queensland, and now sound better than ever.

