

Signal Processing

Equalizers

Peavey PV215EQ

- 1 RU
- dual channel (15 bands per channel)
- 12dB boost/cut per band
- 80 Hz 24 dB low cut filter
- XLR balanced inputs and outputs
- bypass switch with status LED
- centre-detent control sliders
- five year warranty



Peavey PV231EQ

- 2RU
- dual channel (31 bands per channel)
- switchable 6dB or 12dB boost/cut per band
- variable low cut and high cut filters per band
- output level LEDs per band
- XLR balanced inputs and outputs
- five year warranty



Crossovers

Peavey PV23XO/PV35XO

- 2-way stereo / 3-way mono (PV23XO) or 3-way stereo / 5-way mono (PV35XO) operation
- variable state filter controls
- 24dB/octave filters
- mute capabilities for each output channel
- balanced XLR inputs and outputs
- five year warranty



Compressors

Peavey CEL2A

- compressor/expander/limiter
- stereo or dual mono operation
- switchable low cut filter on each channel
- switchable de-esser on each channel
- 6.35mm TRS insert capability
- fully adjustable compressor/limiter/expander
- full gain reduction metering
- input/output switchable meters
- five year warranty



Rolls CL151 GLC Gate Compressor/Limiter/Gate

- XLR mic and 1/4" line inputs
- +12 VDC phantom power
- Smooth, soft-knee compression
- Noise gate
- Side chain for detector circuit access



Signal Processing

Speaker processors



Peavey VSX26

- 2 input/6 output loudspeaker DSP management system
- 48 kHz sample rate, 24-bit 256x over-sampled Delta-Sigma AD, DA
- USB A port for load/save of storage parameters from USB key
- XLR inputs and outputs, AES-EBU digital input
- +24dBu inputs and outputs
- built-in signal generator (white, pink, sine)
- fully adjustable crossover points
- easy-to-read LCD screen
- features per input:
 - 27-band Graphic EQ
 - Autograph® algorithm for automatic EQ settings
 - compressor/limiter
 - delay (340 ms)
- features per output:
 - crossover/bandpass filter (Butterworth, Bessel, Linkwitz-Riley)
 - parametric EQ (5-band, HP, LP Notch, Horn EQ, All-Pass),
 - compressor/limiter,
 - delay with polarity inversion
- 5 year warranty



Tannoy TDX1 DIGITAL SYSTEM CONTROLLER

Versatile, powerful and feature packed digital system controller, with crossover, EQ, delay and limiting functions and pre-programmed optimisation of the performance of Tannoy loudspeaker systems.

- Two input, 4 output on balanced XLR plus a digital input at 44.1 or 48kHz
- Signals present on inputs A & B can be routed to any of the four output channels
- Variable high and low pass filters for each output can be set with a choice of classic filters
- Four band parametric EQ on each input and output for speaker management
- Independent delay on all outputs (up to 200ms per channel)
- Four high performance limiters
- Presets pre-loaded with all common combinations of Tannoy products plus 100 'user presets'



Tannoy SC1VNET DIGITAL SYSTEM CONTROLLER

Tannoy's powerful 2-in 6-out digital system controller, the VNET SC1 combines the functions of multiple conventional processing products into 1RU of rack space. Using DSP-based digital crossovers with 96kHz sampling rates this versatile, feature packed unit will enable simple configuration and optimisation of loudspeakers for superior audio quality.

- Two balanced XLR analogue inputs and six balanced XLR analogue outputs
- Simple configuration and optimisation of loudspeakers in terms of speaker management and room EQ functionality
- Intuitive signal flow based interface and 2 x 24 character backlit LCD
- Unique routing engine allows any input to be sent to any output
- Butterworth, Bessel, Linkwitz Riley and Hardman type filters are available on all outputs
- Input and output gain is adjustable in 0.2dB steps from -40dB to +15dB
- Input delay adjustable in variable steps from 0 to 400ms, while output delay is adjustable to 80ms
- RS232 connector enables connection to a PC for enhanced control functions using VNET™ software

Signal Processing

Ducker

Rolls DU30B Mic Preamp Audio Ducker

- Ducks signal on RCA line input under signal on the mic or aux input
- Mic preamp with level control
- +12 VDC phantom power
- Variable sensitivity, duck depth, and duck release time



Stereo Converter

Rolls MB15B ProMatch Stereo Converter

- Stereo direct box
- Stereo RCA to stereo XLR
- Stereo 3.5mm headphone level to line level
- Stereo level control for each channel
- Works as stereo balanced line level control



Ambient Noise Compensation

TOA DPL2

- Digital ambient noise control (ANC) function automatically adjusts output gain to match changes in ambient noise levels
- Exclusive TOA algorithm distinguishes unit output sound level from ambient noise levels, for more accurate control
- Monitor output for sound picked up by the ambient noise sensor microphone
- Automatic level control feature keeps input signal at a constant level
- Maximum Output function acts as a limiter
- Sensor microphone input with phantom power
- Built-in key lock function prevents unauthorized adjustment
- Standard 1RU-size with rack-mount hardware included



DSP Systems

TOA D901

The D-901 DIGITAL MIXER is the ideal solution for a wide variety of installed sound applications including audio/visual, houses of worship and many others. The D-901's modular design supports up to twelve mic/line inputs and eight line outputs with flexible RS-232 or contact-closure remote control. Audio processing tools include auto-mixing, feedback suppression, multi-band parametric filters, compressors, limiters, noise gates, crossovers, delays and more. Full input-to-output matrixing allows users to store and recall any input to output combination for multi-zone or room-combining applications. The unit can be programmed via the front panel display or configured off-site with PC control software for later uploading.



Input Modules	
D921F	2 channel microphone/ line input module with XLRs
D921E	2 channel microphone/ line input module with terminal block connectors
D922F	2 channel microphone/ line input module, XLRs & DIP selection of features
D922E	2 channel microphone/ line input module, terminal block connectors
D923AE	2 Channel Digital Input Module
D937SP	Single Channel Stereo Digital Input Module
D936R	4 channel Stereo Input Module

Control Modules	
D981	Remote Control Module - Terminal Block Type
D983	Remote Control Module - RJ45
D984VC	VCA Control Module
Accessories	
D911	VCA Fader Unit 12 x 8 Requires D984VC

Output Modules	
D961SP	2 Channel Stereo Digital Output Module
D972AE	4 Channel Output Module
D971M	4 channel line output module with XLRs
D971E	4 channel line output module with terminal block connectors
D971R	4 channel line output module

DSP Systems

TOA M9000M2

The TOA M9000M2 Digital Matrix Mixer combines a modular matrix mixer and digital signal processor (DSP) in a compact 2RU package. This versatile modular unit is ideal for multi-zone paging, music distribution and room-combining applications. Setup is achieved via the GUI software which enables easily configured, custom systems with up to eight mic/line inputs and eight outputs. The M9000M2 has two inbuilt output channels (expandable to eight using the T001T module) with built-in DSP, including ten-band parametric EQ, compressor, delay, and more. Input and output modules include additional DSP. A new integrated operating mode provides powerful functionality for both simple mixing and complex multi-zone paging applications. Features include telephone zone paging, automatic microphone mixing and ambient noise control. Up to 16 control panels can be used via the RS485 interface on the RC001T module. An RS232 interface is also included



- **Modular Digital Matrix Mixer** for a multitude of applications including audio-visual, zone paging, room combining and more
- **Up to 8 mic/line inputs and 8 outputs**
- **Easy to configure and operate**
- **32 Scenes** - Up to 32 presets containing all mixer (non priority) settings
- **32 Paging Presets** - Up to 32 paging events can be programmed separate from scene presets
- **Cross-Point** – Cross-points can assigned to control panel buttons (ZM9011, ZM9013, ZM9014) independent of preset scenes
- **Exceptional audio quality**
 - 24-bit, 48 kHz sampling
 - Ultra-Low Distortion – 0.0008%
- **Dual Channel Digital Signal Processor (DSP):**
 - 10-Band Parametric EQ
 - High and low pass filters
 - Compressor
 - Loudness contour
 - Bass and treble
 - Delay (MIXER mode)
 - TOA speaker EQ presets
 - Additional DSP included on D-001T and T-001T modules
- **Telephone Zone Paging** — access up to eight zones with optional ZP-001T module
- **Automatic Mic Mixing** — automatically adjusts output level based on the total number of open microphones (NOM)
- **Ambient Noise Control** — automatically increases or reduces output levels in response to changes in ambient noise
- **Programmable** with Software via RS232 or via the Multi-function Display allows programming and operation without a PC
- **Multi-function Display** allows programming and operation without a PC

Accessories

TOA M9000 MODULES and CONTROL PANELS

The TOA M9000 chassis can accommodate a total of eight modules selected from the following

TOA M9000 Input/Output Modules	
D001T	Dual Mic/Line Input Module
D001R	Dual Line Input Module with RCA Connectors
T001T	Dual Line Output Module
RC001T	Remote control module for ZM9011/ZM9012/ZM9013/ ZM9014 control panels
ZP001T	Telephone Zone Paging Module
C001T	I/O Control Module
AN001T	Ambient Noise Control Module

TOA M9000 Control Panels	
VCA Control Panels - (up to two can be used in one frame)	
ZM9001	Remote panel six button, VCA control
ZM9002	Remote panel four button and level control VCA control
ZM9003	Remote panel, contact closure & VCA control
RS485 Control Panels (up to 16 can be used on the one frame)	
ZM9011	Remote panel, four assignable buttons, RC001T required
ZM9012	Remote panel, level control, RC001T required
ZM9013	Remote panel eight assignable buttons, RC001T required
ZM9014	Remote panel, four assignable buttons and level control, RC001T required
Accessories	
AN9001	Ambient Noise Sensing Mic