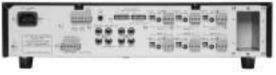


## MIXER/AMPLIFIERS

# 700 Series







#### 60/120/240 WATT 9-CHANNEL MIXER/AMPLIFIERS

- Nine channel integrated mixer/amplifiers for paging and background/foreground music distribution
- Proven TOA quality and reliability with wide frequency response, very low noise and distortion, and excellent output regulation
- Three models: A-706 (60 W), A-712 (120 W), A-724 (240 W)
- Six Mic/Line inputs, balanced, with mic trim, 23 VDC phantom power and removable terminal block connector
- Two Auxiliary inputs, unbalanced, with dual-RCA jacks for convenient connection of stereo sources
- Module slot accepts 900 Series plug-in modules with additional features
- Transformer-isolation for telephone paging applications (Input #1)
- 25 V, 70.7 V and 4 ohm speaker outputs with removable terminal block connector
- Auto-mute priority function assignable via external switches: Channels 1-3 and Module configurable as Mute Send; Channels 1-8 and Module configurable as Mute Receive
- Auto-mute sense control for adjusting mute activation threshold
- External mute terminals for activating mute function with external switch-closure
- Individual channel and master volume controls
- Bass/Treble tone controls
- Output level meter and power indicator
- Remote master volume controlled with an external 10k ohm linear-taper potentiometer
- Auxiliary output for connecting an external amplifier or recording device
- Insert jacks for connecting external signal processors
- Remote AC turn-on for activating power with an external switch-closure
- Turn-On delay disconnects output during power-up
- Over-current and thermal protection circuitry prevents potential damage from overloads, short-circuit and overheating
- Detachable IEC-type AC power cord
- Volume control security knobs included (4)
- Optional rack-mount kit, model MB-25B (2 RU)
- UL / cUL Listed
- Five year warranty

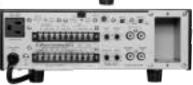
See pages 7 - 9 for modules.

# TOA

# **BG-M Series**



BG-1015 BG-1030 BG-1060 BG-1120



### 15/30/60/120 WATT 5-CHANNEL MIXER/AMPLIFIERS

- Compact five channel mixer/amplifiers for paging, background/foreground music distribution and music/messaging-on-hold
- Proven TOA quality and reliability
- Engineered for high performance with wide frequency response, very low noise and distortion, and excellent output regulation
- Four models: BG-1015 (15 W), BG-1030 (30 W) BG-1060 (60 W), BG-1120 (120 W)
- 900 series module slot with Page/BGM switch accepts most TOA plug-in modules for custom system configurations
- 25 V, 70.7 V and 4 ohm speaker outputs with screw terminal connector and protective cover plate
- Microphone page input, balanced, with screw terminal connector and 24 VDC phantom power
- Telephone page input, balanced, transformer-isolated with screw terminal connector and switchable 600/10k ohm input impedance
- Program (PGM) input, balanced, with screw terminal connector
- Auxiliary (AUX) input, unbalanced, with dual-RCA jacks for convenient connection of stereo sources
- Music-on-hold (MOH) output, balanced, with screw terminal connector
- Internal signal routing jumpers for assigning AUX/PGM and module to main and/or MOH outputs
- 1 watt zone output, 8 ohm, with screw terminal connector
- Auto-mute function allows voice-activated paging override of AUX/PGM and/or module without interrupting the MOH output
- Auto-mute sense control for adjusting mute activation threshold
- Selectable muting modes for versatile priority paging configurations
- External mute terminals for activating mute function with external switch-closure
- Bass/treble tone controls affect only the AUX/PGM channels to the main speaker output
- Insert jacks for connecting external signal processor
- Signal, clip, and power indicators provide unit status
- Rear panel AC convenience outlet with circuit breaker for powering external equipment
- Turn-on delay disconnects output during power-up
- Over-current and thermal protection circuitry prevents potential damage from overloads, short-circuit and overheating
- AC mains circuit breaker
- Volume control security knobs included (5)
- Optional rack-mount kit, model MB-1000 (2 RU)
- UL / cUL listed
- Five year warranty

See pages 7 - 9 for modules.

## MIXER/AMPLIFIERS

# **BG** Series

BG-115 BG-130

#### 15/30 WATT 3-CHANNEL MIXER/AMPLIFIERS

- Compact three channel mixer/amplifiers for paging, music distribution and messaging-on-hold
- Proven TOA quality and reliability
- Engineered for high performance with wide frequency response, very low noise and distortion, and excellent output regulation
- Two models: BG-115 (15 W), BG-130 (30 W)
- 25 V, 70.7 V and 4 ohm speaker outputs with screw terminal connector and protective cover plate
- Microphone/telephone paging input (switchable), balanced, transformer-isolated, with screw-terminal connector and switchable 600/10k ohm input impedance
- Program (PGM) input, balanced, screw-terminal connector
- Auxiliary (AUX) input, stereo-summing dual-RCA jacks
- Music-on-hold (MOH) output adjustable from line-level to 1 W at 8 ohms
- Internal signal routing jumpers for assigning AUX/PGM to main and/or MOH outputs

- Auto-mute function allows voice-activated paging override of AUX/PGM without interrupting the MOH output
- External mute terminals for activating mute function with external switch-closure
- Bass/treble tone controls affect only the AUX/PGM channels to the main speaker output
- Signal, clip, and power indicators provide unit status
- Rear panel AC convenience outlet with circuit breaker for powering external equipment
- Turn-on delay disconnects output during power-up
- Over-current and thermal protection circuitry prevents potential damage from overloads, short-circuit & over-heating
- Optional volume control security knobs, model YA-920
- Optional rack and wall-mount kits: MB-25B-BK (2 RU), MB-25B-J (two units, 2 RU) and WB-900B (wall-mount)
- UL / cUL listed
- Five year warranty

# MOBILE MIXER/AMPLIFIERS

# **CA Series**

CA-115 (15 W)

CA-130 (30 W)

CA-160 (60 W)

#### MOBILE MIXER/AMPLIFIERS

- Mobile mixer/amplifiers for remote applications
- 12 VDC powered
- Easy to install, rugged and reliable
- Supports 4 or 8 ohm speaker loads
- Two microphone inputs with volume controls
- Handheld microphone included unidirectional, dynamictype with talk switch, 6' cord and mounting hardware
- Auxiliary input for connecting an external CD player, radio, tape deck or tone generator
- Mounting hardware included mounts under dashboard or into standard DIN-size console cutout
- Five year warranty



**FIVE YEAR WARRANTY** 

**FREE TECHNICAL SUPPORT** 



# **POWER AMPLIFIERS**

# **DA Series - NEW!**



# DA-250FH DA-250F

#### **MULTI-CHANNEL DIGITAL POWER AMPLIFIERS**

- DA-250FH
- 4x 250 W (70V)
- 2x 500 W bridged mode (140V)
- Limiter and High pass filter
- DA-250
- 4x 250 W (4 ohms) / 170 W (8 ohms)
- 2x 500 W bridged mode (8 ohms)
- Limiter
- Class D design 85% efficient!
- Up to 60% lower power consumption than conventional amplifiers
- Compact, single rack-space design
- Stack up to 5 units without open spaces between units
- Lightweight (14.6 lbs.)
- Independent power supply for each channel
- Low heat dissipation
- Recessed stepped attenuators
- Comprehensive protection circuitry
- Removable dust filters for easy maintenance
- Optional 250W, 70V output isolation transformer, model MT-250H (DA-250FH only)
- Five year warranty

Model	Per Ch. (70V)	Per Ch. (8 Ohms)	Per Ch. (4 Ohms)	Bridged (8 Ohms)
DA-250FH	250 W	_	_	_
DA-250F	_	170 W	250 W	500 W/ch

#### **IP Series**



IP-300D IP-450D IP-600D



#### **DUAL CHANNEL POWER AMPLIFIERS**

- Stereo, bridged, and parallel output modes switchselectable with independent adjustment of each channel in parallel mode
- Electronically balanced screw-terminal and 1/4" TRS phone jack input connectors
- Large dual screw-terminal barrier strip accepts two sets of #10 AWG speaker cable conductors for each output channel
- Stepped attenuators for precise gain adjustments, recessable to prevent accidental setting changes
- Attenuator security covers included provide an additional level of security
- Signal presence, peak, protect, and attenuator bypass LED's for instantly recognizable status indication
- Temperature-controlled, variable-speed fan for efficient cooling
- Removable front panel dust filters simplify maintenance
- Advanced protection circuitry
- In-rush current limiter prevents AC breaker overload during system turn-on of multiple amplifiers
- Built-in front rack-mount brackets and rear rack supports (2 RU)
- Optional transformers, model MT-300M (200 W), MT-450M (300 W), MT-600M (400 W)
- Five year warranty

Model	Per Ch. (8 Ohms)	Per Ch. (4 Ohms)	(8 Ohms)	25/70.7 V Per Ch. (w/optional transformers)
IP-300D	200 W	300 W	600 W	200 W/ch
IP-450D	300 W	450 W	900 W	300 W/ch
IP-600D	400 W	600 W	1200 W	400 W/ch

# **AUDIO A&E GUIDE**

The TOA Audio Architectural & Engineering Guide is a

compilation of all current TOA audio engineering specifications and is designed to help you easily identify and specify the correct TOA product for your projects. If you need more information, please visit TOA on the web at <a href="http://www.toaelectronics.com">http://www.toaelectronics.com</a> where you'll find specification sheets, manuals, CAD files, software and more!



The TOA Audio Architectural & Engineering Guide is available for download from: www.toaelectronics.com



# **Amplifier Mounting Hardware and Accessory Reference**

MODEL	ACCESSORY		
9000 Series	ACCESSORY AN-9001	Coiling Microphone for AN 001T	
9000 Series		Ceiling Microphone for AN-001T	
	SS-9001	4-zone Speaker Selector	
	ZM-9001	Remote Switch Panel	
	ZM-9002	Remote Volume Switch Panel	
DA-250FH	MT-250H	70.7V Isolation Transformer (250 W)	
700 Series	MB-25B	Rack-mount Kit (2 RU)	
	YA-920	Volume Control Security Knob	
	IT-455	Input Transformer (channels 2 and 3)	
A-900 Series	MB-25B	Rack-mount Kit (2 RU)	
M-900MK2	YA-920	Volume Control Security Knob	
P-906MK2			
P-912MK2			
P-924MK2	MB-35B	Rack-mount Kit (3 RU)	
	YA-920	Volume Control Security Knob	
W-906A	BX-9F	Flush-mount Backbox	
W-912A	BX-9S	Surface-mount Backbox	
	WE-2	Expander Kit (adds two module slots)	
BG-M Series	MB-1000	Rack-mount Kit (2 RU)	
	YA-920	Volume Control Security Knob	
BG Series	MB-25B-BK	Rack-mount Kit (2 RU)	
	MB-25B-J	Rack-mount Kit for Two Units (2 RU)	
	WB-900B	Wall-mount Kit	
IP Series	MT-300M	25/70.7 V Output Transformer (200 W)	
	MT-450M	25/70.7 V Output Transformer (300 W)	
	MT-600M	25/70.7 V Output Transformer (400 W)	
All Models	PF-013B	Perforated Vent Panel (1 RU)	



AN-9001



SS-9001



ZM-9001



ZM-9002



MB-35B



MB-25B











BX-9F





# MIXERS

#### D-901

#### MODULAR DIGITAL MIXER/PROCESSOR

- Rack-mount digital mixer for installed sound applications
- Ideal for applications such as audio/visual, corporate boardrooms and houses of worship
- Modular design allows versatile configurations up to 12 inputs and 8 outputs
- Intuitive operation via front panel display and controls
- Auto-Mixing allows "set-and-forget" operation
- Feedback Suppression automatically attenuates up to 12 problem frequencies
- Essential audio processing tools compressors, gates, crossovers, multi-band filtering, parametric, high/low-pass, all-pass and notch filters, horn EQ, high/low shelving and output delay
- Eight bus matrix with crosspoint gain control allows flexible input-to-output signal routing for zoning or room-combining
- Eight levels of assignable ducking for multi-level priority configurations
- Echo effect for vocal enhancement
- PC software for offsite programming and archiving settings
- Input and output channel metering

See page 15 for modules.



- 16 internal memories for storage and recall of different signal routing and parameter configurations
- Eight front panel memory select buttons
- Flexible remote control modules:
  - Programmable switch inputs for activation of memory, volume up/down, channel on/off and stereo input selection
- Programmable relay outputs activate during memory, channel on/off, input status and stereo input selection
- AMX and Crestron control modules available
- Front panel lock protects settings
- Cooling fan ensures continuous reliable operation
- Built-in rack-mount brackets (3 RU)
- Five year warranty

# DP-K1 – NEW!

#### DIGITAL MIXER WITH AUTO RESONANCE CONTROL

- Rack-mount digital mixer / processor for installed sound applications such as houses of worship, sports facilities, convention centers, airports, and others
- Automatic Resonance Control (ARC)
- Advanced new measurement and processing algorithm improves speech intelligibility and sound quality in facilities with challenging acoustic environments
- Automatically identifies room mode frequencies and applies an inverse response curve to compensate for the measured room response
- Modular design allows versatile configurations up to 8 mic/line inputs and 8 line outputs (modules not included)
- Essential audio processing tools compressors, gates, crossovers, multi-band filtering, parametric, high/low-pass, all-pass and notch filters, horn EQ, high/low shelving and output delay
- Eight bus matrix allows flexible input-to-output signal routing for zoning or room-combining
- Network interface for remote programming and maintenance
- PC software for offsite programming and archiving settings



- Flexible remote control
  - Up to twenty-four programmable switch inputs for activation of memory, volume up/down, channel on/off and stereo input selection
- Up to sixteen programmable relay outputs for activate during memory, channel on/off, input status and stereo input selection
- Store and recall up to eight different signal routing and parameter configurations
- Input and output channel metering
- Eight front panel memory select buttons
- Front panel lock protects settings
- Cooling fan ensures continuous reliable operation
- Built-in rack-mount brackets (3 RU)
- Five year warranty

See page 15 for modules.

# D-911 - NEW!

# REMOTE CONTROLLER (D-901 only)

- Remote control of up to twelve inputs and eight outputs
- Eight programmable control switches and LED's
- Connects to D-984VC module via Cat5 cables (maximum distance 100m / 328 ft using Cat5)
- Five year warranty





### D-901/DP-K1 MODULES

#### D-921F

#### MIC/LINE INPUT MODULE (2)

- Two balanced mic or line level inputs
- 24-bit A/D converters
- Adjustable input gain
- Phantom power
- XLR-F connectors

#### D-921E

#### MIC/LINE INPUT MODULE (2)

- Two balanced mic or line level inputs
- 24-bit A/D converters
- Adjustable input gain
- Phantom power
- Phoenix-style terminal block

#### D-922F

#### MIC/LINE INPUT MODULE (2)

- Two balanced mic or line level inputs
- 20-bit A/D converters
- Adjustable input gain
- Phantom power
- XLR-F connectors

#### D-922E

#### MIC/LINE INPUT MODULE (2)

- Two balanced mic or line level inputs
- 20-bit A/D converters
- Adjustable input gain
- Phantom power
- Phoenix-style terminal block Connectors

#### D-923AE

# **AES/EBU DIGITAL INPUT MODULE**

- Two digital inputs
- AES/EBU format
- XLR-F connector
- Maximum distance: 328 ft (100m)

# D-937SP

#### S/PDIF DIGITAL INPUT MODULE

- Two digital inputs
- Includes both optical and coaxial connectors
- Maximum distance:
  - S/PDIF (coaxial): 32 ft (10m)
  - TOSLINK (optical): 16 ft (5m)

#### D-961SP

# S/PDIF DIGITAL OUTPUT MODULE

- Four digital outputs
- Includes both optical and coaxial connectors
- Maximum distance:
  - S/PDIF (coaxial): 32 ft (10m)
  - TOSLINK (optical): 16 ft (5m)



#### D-936R

#### STEREO INPUT MODULE (4)

- Four stereo connector pairs
- Unbalanced line level
- Individual input gain
- Programmable switching between connector pairs or summing mode
- Occupies two input channels
- RCA pin jack connectors



#### D-971M

#### LINE OUTPUT MODULE (4)

- Four balanced line level outputs
- XLR-M connectors



#### **LINE OUTPUT MODULE (4)**

- Four balanced line level outputs
- Phoenix-style terminal block connectors

## D-971R

#### LINE OUTPUT MODULE (4)

- Four stereo or mono sum line level outputs
- RCA pin jack connectors

#### D-981

#### REMOTE CONTROL MODULE

- Eight programmable switch closure inputs for activation of memory, volume up/down, channel on/off and stereo input selection
- Eight programmable relay outputs of memory, channel on/off, contact input status and stereo input selection



# D-972AE

#### **AES/EBU DIGITAL OUTPUT MODULE**

- Four digital outputs
- AES/EBU format
- XLR-M connectors
- Maximum distance: 328 ft (100m)



#### D-983

#### REMOTE CONTROL MODULE

- Twenty-four programmable switch closure inputs for activation of memory, volume up/down, channel on/off and stereo input
- Sixteen programmable relay outputs of memory, channel on/off, contact input status and stereo input selection



# D-984VC

#### VCA CONTROL MODULE (D-901 only)

- Interface to D-911 Remote Controller via Cat5 cables or configure custom interface
- Eight RJ-45 connectors
- Control up to 12 inputs, eight outputs
- Eight programmable switch closure inputs for activation of memory, volume up/down, channel on/off and stereo input selection
- Eight programmable relay outputs of memory, channel on/off, contact input status and stereo input selection





















# MIXERS

#### M-9000 - NEW!

#### MODULAR DIGITAL MATRIX MIXER/PROCESSOR

- Modular Design Eight module slots allow up to 8 mic/line inputs and 8 line outputs
- Dual Channel Digital Signal Processor (DSP):
  - 10-Band Parametric EQ
  - High and Low Pass Filters
  - Bass and Treble
  - Loudness
  - Compressor
  - Delay (Mix mode)
  - Automixing (Mix mode)
  - TOA Speaker EQ Presets
  - Additional DSP included on D-001T & T-001T modules



- Matrix and Mix Modes two separate feature sets to suit both zone paging matrix and conventional mixing applications
- Two balanced line outputs
- Rack kit included (2RU)
- Five Year Warranty

See page 4 for complete feature listing. See page 5 for modules.

#### M-900MK2

#### 8-CHANNEL MODULAR MIXER

- Eight module slots accept any combination of TOA plug-in modules for custom system configurations
- Balanced, transformer-isolated output with selectable impedance, screw terminal connector and protective cover plate
- Dual mute bus permits multiple levels of paging priority using optional mute-type modules
- External mute terminals for activating mute function with external switch-closure
- Remote master volume terminals for control with an external 10k ohm linear-taper potentiometer (supplied by others)
- Individual channel and master volume controls
- Bass/treble tone controls with tone defeat switch
- Auxiliary output for connecting an external mixer or recording device



- Bridging input/output for input expansion or recording device
- Normal, clip, power, protect, and signal indicators provide unit status
- Rear panel AC convenience outlet for powering external equipment
- Turn-on delay disconnects output during power-up
- Volume control security knobs included (4)
- Optional rack-mount kit, model MB-25B (2 RU)
- UL / cUL listed
- Five year warranty

See pages 7-9 for modules.

#### M-243

#### 6-CHANNEL STEREO MIXER

- Two mono mic/line inputs, each with compressor and high pass filter
- Four stereo inputs with RCA and 1/4" phone plug connectors
- Stereo output with separate paralleled record outputs
- Two mono outputs, switchable to stereo sum
- Inputs independently assignable to any combination of stereo and mono outputs
- Stereo and mono sub-inputs for direct access to individual mixing buses



- Auto-priority of mono over stereo inputs for paging/BGM applications
- Low and high frequency EQ for stereo output (with clipping indicators)
- Security cover and rack-mount kit included (1 RU)
- Five year warranty

# **FIVE YEAR WARRANTY**



# FREE TECHNICAL SUPPORT