TOA

9000M2 SERIES
MODULAR DIGITAL MATRIX MIXER AND MIXER/AMPLIFIERS

MIXER/AMPLIFIERS
A-9060SM2
A-9120SM2
A-9240SHM2
A-9060DHM2
A-9120DHM2

MIXER
M-9000M2

The TOA 9000M2 Series Digital Matrix Mixer/Amplifiers redefine the conventional mixer/amplifier category by combining a modular matrix mixer, digital signal processor (DSP) and amplifiers in a compact, two rack space package. The versatile new series is ideal for multi-zone paging, music distribution and room-combining applications. The 9000M2 Series models include dual and single channel amplifiers with high or low impedance outputs plus a matrix mixer-only version.

All models allow for easily configured, custom systems with up to eight mic/line inputs and eight outputs. Each 9000M2 Series chassis has two channels of built-in DSP with ten band parametric EQ, compressor, eight-level ducking 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.

Programming the 9000M2 is easy via the front panel or using the convenient new GUI programming interface (Windows™ XP/Vista), which allows fast configuration and upload/download of all settings.

Modules include the D-001T dual channel mic/line input module; D-001R dual line input module; T-001T dual channel line output module; AN-001T Ambient Noise Control module. ZP-001T telephone access zone paging module; C-001T control expansion module; & the new RC-001T and RS-485 Controller module.

Accessories include the AN-9001ceiling/wall-mount microphone; ZM-9001, ZM-9002, ZM-9003 remote panels; plus the New ZM-9011, ZM-9012, ZM-9013 & ZM-9014, and RS-485 remote panels.

The 9000M2 Series products are UL and cUL Listed and backed with TOA's five year product warranty.

HIGHLIGHTS

- **Modular digital matrix mixer/amplifiers** for a multitude of applications including audio-visual, zone paging, room combining and many more.
- **Enhanced GUI programming interface** for PC configuration and uploading/downloading of settings using RS-232 connection. Includes setup wizards and firmware upgrade utility.
- **Exceptional Audio Quality**:
  - 24-bit, 48 kHz sampling
  - Ultra-Low Distortion – 0.0008%
- **Modular Mixer** – up to 8 mic/line inputs and 8 outputs
- **Dual Channel Digital Signal Processor (DSP)** on Input & Output channels:
  - 10-Band Parametric EQ ▪ High and Low Pass Filters ▪ Bass and Treble ▪ Loudness
  - Compressor ▪ Gate ▪ Ducker ▪ NOM (Automix)
  - Delay (Output channel only) ▪ 34 TOA Speaker EQ Presets (Output channel only)
  - DSP included on 9000 Mainframe Outputs, D-001T, D-001R and T-001T modules
- **Single or Dual Channel Power Amplifiers** — 70.7 V, 25 V wide range of power ratings
- **Flexible Output Power** — dual channel models allow up to 50% of either amplifier channel to be allocated to the other channel (A-9060DHM2 and A-9120DHM2) (Ex. A-9060DHM2: CH1 90W, CH2:30W)
- **Flexible, Integrated Operating System (Mixer + Paging Matrix)**:
  - Mixer functions along with simultaneous Priority Paging Matrix activation, each with 32 presets.
  - Scene memory (x32) contains all mixer (non-priority) settings
  - Paging memory (x32) contains global (static) input settings, independent Xpoint assignments, paging trigger & paging output levels for all high priority (1, 2 & 3) inputs.
  - Both scene & paging memories are stored in a single template along with remote assignments, security lock and other global functions
  - Mixer & Paging functions are independent and mixer (scene) settings will not affect Paging (event) functions.

MODULAR DIGITAL MATRIX MIXER/AMPLIFIERS

A-9060SM2	1x 60W @ 25/70V, 4/8 ohms
A-9120SM2	1x 120W @ 25/70V, 4/8 ohms
A-9240SHM2	1x 240W @ 70V
A-9060DHM2	2x 60W @ 70V
A-9120DHM2	2x 120W @ 70V
M-9000	2x Line Level (Mixer only)

MODULES

D-001T	Dual Mic/Line Input with DSP
D-001R	Dual Line Input
T-001T	Dual Line Output Expansion with DSP
ZP-001T	Telephone DTMF Zone Paging
C-001T	Input/Output Control Expansion
AN-001T	Ambient Noise Control
RC-001T	RS-485 Control Module (req. AD-246 Adapter)

ACCESSORIES

AN-9001	Ceiling Mic for Ambient Noise Control
ZM-9001	Remote Switch Panel
ZM-9002	Remote Volume Switch Panel
ZM-9003	Zone Manager
ZM-9011	Remote Control Panel
ZM-9012	Remote Control Panel
ZM-9013	Remote Control Panel
ZM-9014	Remote Control Panel
SS-9001	4-Zone Speaker Selector

FEATURES

9000M2 SERIES MODULAR DIGITAL MATRIX
MIXER AND MIXER/AMPLIFIERS

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Features

- Multiple Input Priority Modes sets priority order when multiple inputs with the same priority level and output assignment are broadcast
  - First-In-First-Out (FIFO): input that occurs first is broadcast
  - Last-In-First-Out (LIFO): the most recent input is broadcast
  - MIX: all inputs are simultaneously mixed and broadcast
- Voice Operated (VOX) paging activation with adjustable threshold/sensitivity and gate release time
- Stereo Link — control two inputs or outputs with one volume control
- Mixer Out / Power Amp In Patching Loops (A-9060DHM2, A-9120DHM2) for connection of external processor(s)
- Balanced Line Output(s) — two: M-9000M2, one: A-9060SM2, A-9120SM2, A-9240SHM2; expandable with T-001T dual line output modules
- Software Utility for saving unit parameters to PC, updating unit firmware, virtual control activation and status indication
- Keylock Security sets password-protected access to prevents access to Input, Output, Utility & Power functions
- Alphanumeric Input/Output Channel and Memory Naming
- Detachable IEC-type AC Cable

Flexible Remote Control

- Two Remote Volume Control Terminals
- Four Control Inputs — programmable to activate Paging/Scene Memory, Volume Up/Down (Input or Output), Mute (Input or Output), Power On/Off, Emergency Mute, Sync On/Off(expandable to twelve with C-001T module). Works with optional ZM-9003 or custom contact panel
- Four Control Outputs (open collector) programmable to activate external relays (expandable to twelve with C-001T module) synchronized with Event/Scene Memory, Channel On/Off(Input or Output) and Power On/Off. Works with optional ZM-9003 or custom contact panel.
- RS-485 Remote Controllers:
  - ZM-9011 Single-gang assignable 4-button controller with LED status indicators
  - ZM-9012 Single-gang assignable Volume Controller with LED level indicators
  - ZM-9013 Dual-Gang assignable 8-button Controller with LED status indicators
  - ZM-9014 Dual-gang assignable 4-button controller with LED status indicators, plus assignable Volume Controller with LED level indicators
- RS-232 serial port :
  - Allows upload & download of programming templates and firmware upgrades as well as real-time control of various parameters.
  - Control protocol available
  - AMX and Crestron control modules available

9000M2 Series Models

Model	Power Amplifier Output(s)	Digital Signal Processor	Mic/Line Inputs	Line Outputs
A-9060SM2	1x 60 W @ 25/70V, 4/8 ohms	2 Channels	Up to 8 (4x D-001T)	Up to 7 (1 built-in plus 3x T-001T)
A-9120SM2	1x 120 W @ 25/70V, 4/8 ohms	2 Channels	Up to 8 (4x D-001T)	Up to 7 (1 built-in plus 3x T-001T)
A-9240SHM2	1x 240 W @ 70V	2 Channels	Up to 8 (4x D-001T)	Up to 7 (1 built-in plus 3x T-001T)
A-9060DHM2	2x 60 W @ 70V	2 Channels	Up to 8 (4x D-001T)	Up to 6 (3x T-001T)
A-9120DHM2	2x 120 W @ 70V	2 Channels	Up to 8 (4x D-001T)	Up to 6 (3x T-001T)
M-9000M2	2x Line Level	2 Channels	Up to 8 (4x D-001T)	Up to 8 (2 built-in plus 3x T-001T)

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MODULES

9000M2 Series Modules

AN-001T
Ambient Noise Controller Module

- Automatically adjusts output gain to compensate for changes in ambient noise level
- Each input can be assigned to control a specific output
- Two inputs with +24VDC phantom power for condenser mics
- 14 preset gain ratios
- Accessory sensing microphone available, model AN-9001
- Maximum two per chassis

C-001T
Input/Output Control Module

- Eight assignable control inputs for activating Event, Volume, Up/Down, Mute, Power On/Off, Emergency Mute or Sync On/Off
- Eight assignable control outputs for activating external relays
- Removable Terminal Block
- Maximum one per chassis

D-001T
Dual Mic/Line Input Module with DSP

- Two Balanced Mic / Line Inputs
- Digital Signal Processing
  - 10-Band Parametric EQ
  - Bass / Treble
  - Loudness
  - High and Low Pass Filters
  - Compressor
- Adjustable Sensitivity (nine levels, -60 to -10 dBV)
- Phantom Power (24 VDC)
- Removable Terminal Block
- Maximum four per chassis
- Required for VOX function and input metering

D-001R
Dual Line Input with DSP

- Two RCA phono inputs per channel provides stereo summing
- Digital Signal Processing
  - 10-Band Parametric EQ
  - Bass / Treble
  - Loudness
  - High and Low Pass Filters
  - Compressor

RC-001T
RS-485 Control Modules

- Allows use of up to 16 RS-485 remote control panels
- Bi-directioncal RS-485 communication provides control and status feedback display for each remote function
- Dual ports allows independent home runs for up to 8 modules each
- 24VDC power adapter (optional AD-246) required for each port used
- May be used in any control option slot on 9000M2 frame and even in addition to a C-001T when spare slots are available
- Works with ZM-9011, ZM-9012, ZM-9013, ZM-9014

T-001T
Dual Line Output Expansion Module with DSP

- Two Balanced Line Outputs
- Digital Signal Processing
  - 10-Band Parametric EQ
  - Bass / Treble
  - Loudness
  - High and Low Pass Filters
  - Compressor
  - TOA speaker EQ presets
- Removable Terminal Block
- Maximum three per chassis

ZP-001T
Telephone Zone Paging Module

- Telephone Paging to up to eight zones
- Uses DTMF dialing to access amplifier and/or line outputs
- Dial up to eight output zones in one operation
- Analog extension or page port compatible
- Page port operation requires contact closure activation
- RJ-11 Telephone Jack and Removable Terminal Blocks
- Maximum one per chassis

ACCESSORIES

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9 0 0 0 M 2   S E R I E S   A C C E S S O R I E S

ZM-9001
Remote Panel

▪ Six buttons to activate preset selection or volume up/down
▪ Wiring: shielded conductor to chassis Remote Volume terminals
▪ Max. loop resistance: 100 ohms (3000 ft. 22AWG)
▪ Fits one gang electrical box
▪ Maximum two ZM-9001/ZM-9002 per chassis
▪ Uses built in 9000M2 REMT VOL port

ZM-9002
Remote Panel

▪ Four push buttons to activate preset selection or volume up/down
▪ Volume control knob
▪ Wiring: shielded conductor to chassis Remote Volume terminals
▪ Max. loop resistance: 100 ohms (3000 ft. 22AWG)
▪ Fits one gang electrical box
▪ Maximum two ZM-9001/ZM-9002 per chassis
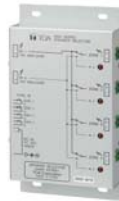▪ Uses built in 9000M2 REMT VOL port

AN-9001
Ambient Noise Sensing Microphone

▪ Ceiling or wall-mount condenser microphone
▪ Fits single-gang electrical box
▪ Use with AN-001T module or DP-L2 processor

SS-9001
Speaker Selector

▪ Switch up to four speaker lines on one amplifier output
▪ Two speaker amplifier inputs for Paging/BGM applications
▪ Works with built in 9000M2 I/O control output or optional C-001T module only
▪ Wall-mount bracket included
▪ Requires optional 24VDC power supply, model AD-246

ZM-9003
Contact Closure Remote

▪ Fits in a standard dual-gang electrical box
▪ Removable screw terminal connector block
▪ Works with contact inputs on 9000M2 mainframe and on C-001T
▪ Two momentary buttons and four liatching buttons
▪ May be assigned to control program change, volume up/down, channel on/mute, emergency mute, power and paging prohibit function
▪ Removable terminal block
▪ Uses built in 9000M2 REMT VOL port

ZM-9011
Assignable Remote Button Panel

▪ Fits in standard single-gang electrical box
▪ Four assignable buttons each with LED status indicator can control Xpoint settings (on/off, select), paging acitivation, scene and relay activation
▪ Assignable ID rotary adjustmment on box
▪ Supplied matching decor plate
▪ Requires RC-001T

ZM-9012
Assignable Volume Controller

▪ Fits in standard single-gang electrical box
▪ Rotary Encoder can be assigned to control any input or output volume
▪ Multiple input or outputs may be "ganged" for Master volume control
▪ Multi-segment LED indicator provides visual volume level status
▪ Supplied matching decor plate
▪ Removable terminal block
▪ Requires RC-001T

ZM-9013
Assignable Remote Button Panel

▪ Fits in standard dual-gang electrical box
▪ Eight assignable buttons each with LED status indicator can control Xpoint settings (on/off, select), paging acitivation, scene and relay activation
▪ Assignable ID rotary adjustmment on box
▪ Supplied matching decor plate
▪ Removable terminal block
▪ Requires RC-001T

ZM-9014
Assignable Remote Button Panel with Volume Control

▪ Fits in standard dual-gang electrical box
▪ Four assignable buttons each with LED status indicator can control Xpoint settings (on/off, select), paging acitivation, scene and relay activation
▪ Assignable ID rotary adjustmment on box
▪ Supplied matching decor plate
▪ Removable terminal block
▪ Requires RC-001T

SPECIFICATIONS

Model No.	A-9060DHM2	A-9120DHM2	A-9060SM2
Output Power	2 x 60W @ 70V	2 x 120W @ 70V	1 x 60W @ 25/70V, 4/8 ohms
Audio Input	Max. 8 channels, modular construction (modules optional) Power amplifier input 1, 2: 0 dBV, 10k Ω, RCA pin jack		
Audio Output	Preamplifier output 1, 2: 0 dBV, 300 Ω, unbalanced, RCA pin jack		Preamplifier output 1: 0 dBV, 300 Ω, unbalanced, RCA pin jack; Preamplifier output 2: 0 dBV, 600 Ω, balanced, removable terminal block (3 pins)
	Speaker output 1, 2: 60 W, 70.7 V line, 83 Ω x 2, BTL output, removable terminal block (4 pins)	Speaker output 1, 2: 120 W, 70.7 V line, 41 Ω x 2, BTL output, removable terminal block (4 pins)	Removable terminal block (7 pins); Direct: 60W, 4 Ω, unbalanced; Transformer: 60W, 8 Ω 25V and 70V, balanced
Power Bandwidth	20 - 20,000 Hz, 0.008% THD		Direct: 20 - 20,000 Hz, 0.02% THD; Transformer: 50 - 20,000 Hz, 0.5% THD
Frequency Response	Power amplifier section: 20 - 20,000 Hz, +0, -1 dB Analog input module to speaker output: 20 - 20,000 Hz +1, -3 dB		
Total Harmonic Distortion	Power amplifier section: 0.0008% (22 kHz LPF, 1 kHz, rated power) Analog input module to speaker output: 0.008% (22 kHz LPF, 1 kHz, rated power)		0.008% (22 kHz LPF, 1 kHz, rated power) 0.008% (22 kHz LPF, 1 kHz, rated power)
S/N Ratio	At input short, 20 - 20,000 Hz, ALL FLAT or OFF setting Output volume min.: 90 dB (preamplifier output) Output volume max.: 61 dB (preamplifier output, input 1 volume: 0 dB, other inputs: OFF) Power amplifier section: 110 dB		
Crosstalk	Over 64 dB at 20 kHz		
Tone Control	Bass: +/-12 dB (at 100 Hz), Treble: +/-12 dB (at 10 kHz)		
Parametric EQ	10 bands, Freq: 20 ~ 20,000Hz, 31 steps, Variable range: +/- 12 dB, Q: 0.3 - 5		
Speaker Equalizer	10 (set up software has 30 TOA speaker presets)		
High-pass Filter	-12 dB/oct, Variable frequency range: 20 H z - 20 k Hz, 31 points		
Low-pass Filter	-12 dB/oct, Variable frequency range: 20 Hz - 20 kHz, 31 points		
Compressor	Depth: 1 - 5		
Delay	0 - 40 ms (1 ms steps), maximum 40 ms (CH1 + CH2) (Mix mode only)		
Scene/Event Memory	32		
Auxiliary Function	Key lock function		
Control Input/Output	RS-232CC, D-sub connector (9P, female) Control input: 4 inputs, no-voltage make contact input, open voltage: 3.3V DC, short-circuit current: under 1 mA, removable terminal block (14 pins) Control output: 4 outputs, open collector output, withstand voltage: 27V DC, control current: 50 mA, removable terminal block (14 pins) Remote volume: 2 channels, connect a 10k Ω/linear taper variable resister or 0 - 10 VDC, removable terminal block		
Power Source	120 V AC, 60 Hz		
Power Consumption	150 W	250 W	100 W
Operating Temperature	14˚ to 104˚ F (-10˚ to 40˚ C)		
Operating Humidity	35% to 80% RH (no condensation)		
Finish	Panel: aluminum, hair-line, black; Case: surface-treated steel plate, black paint		
Dimensions (W x H x D)	16.54" x 4.24" x 15.55" (420 x 107.6 x 395 mm)		16.54" x 4.24 " x 13.98" (420 x 107.6 x 355 mm)
Weight (without modules)	19.84 lbs. (9 kg)	24.25 lbs. (11 kg)	24.25 lbs. (11 kg)

SPECIFICATIONS

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MIXER AND MIXER/AMPLIFIERS

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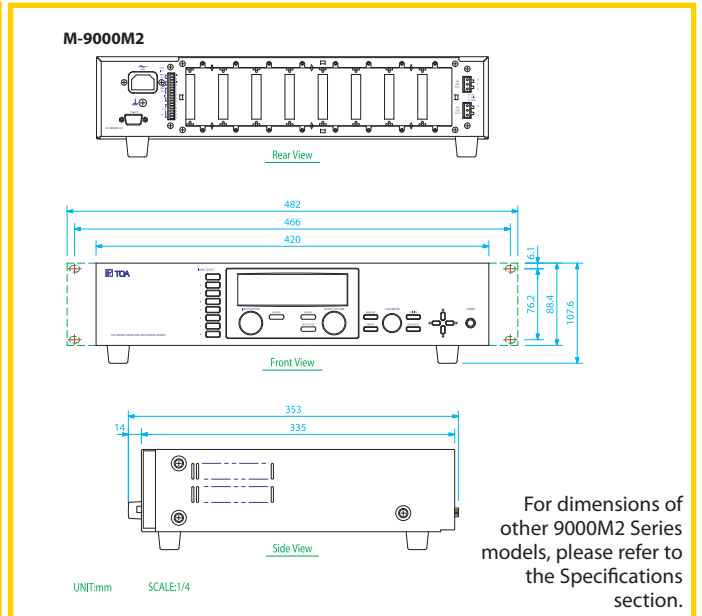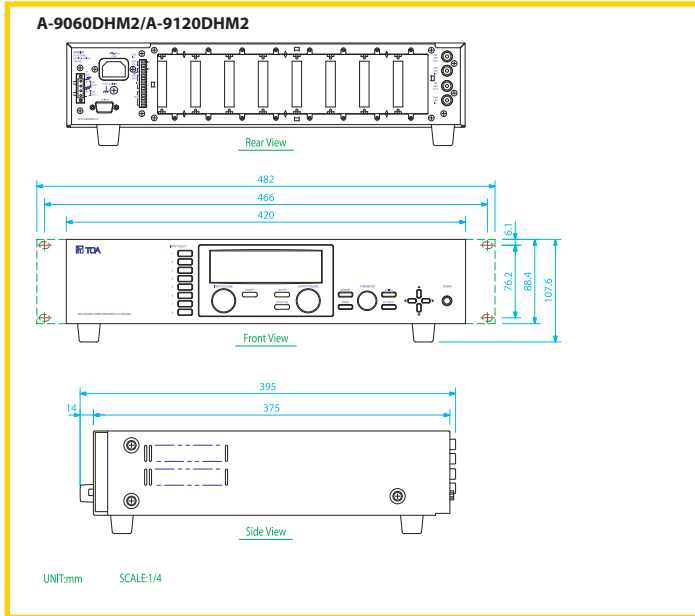| Model No.	A-9120SM2	A-9240SHM2	M-9000M2
Output Power	1 x 120W @ 25/70 V, 4/8 ohms	1 x 240W @ 70 V	n/a
Audio Input	Max. 8 channels, modular construction (modules optional) Power amplifier input : 0 dB, 10k Ω, RCA pin jack		Max. 8 channels, modular construction (modules optional)
Audio Output	Preamplifier output 1: 0 dB, 300 Ω, unbalanced, RCA pin jack Preamplifier output 2: 0 dB, 600 Ω, balanced, removable terminal block (3 pins)		Preamplifier output 1, 2: 0 dBV, 600 Ω, balanced, removable terminal block (3 pins)
	Speaker output: Removable terminal block (7 pins); Direct: 120W, 4 Ω, unbalanced; Transformer: 120W, 8 Ω 25 V & 70 V, balanced	Speaker output: 240 W, 21 Ω, BTL output, removable terminal block (4 pins)	
Power Bandwidth	Direct: 20 - 20,000 Hz, 0.02% THD Transformer: 50 - 20,000 Hz, 0.5% THD	20 - 20,000 Hz, 0.008% THD	
Frequency Response	Power amplifier section: 20 - 20,000 Hz, +0, -1 dB Analog input module to speaker output: 20 - 20,000 Hz +1, -3 dB		20 - 20,000 Hz +1, -3 dB
Total Harmonic Distortion	Power amplifier section: 0.008% (22 kHz LPF, 1 kHz, rated power) Analog input module to speaker output: 0.008% (22 kHz LPF, 1 kHz, rated power)	Power amplifier section: 0.0008% (22 kHz LPF, 1 kHz, rated power) Analog input module to speaker output: 0.008% (22 kHz LPF, 1 kHz, rated power)	0.008% (22 kHz LPF, 1 kHz, +10 dBV output)
S/N Ratio	At input short, 20 - 20,000 Hz, ALL FLAT or OFF setting Output volume min.: 90 dB (preamplifier output) Output volume max.: 61 dB (preamplifier output, input 1 volume: 0 dB, other inputs: OFF) Power amplifier section: 110 dB		At Input short, 20 - 20,000 Hz, ALL FLAT or OFF setting Output volume min.: 90 dB Output volume max.: 61 dB (input 1 vol.: 0 dB, other inputs: OFF)
Crosstalk	Over 64 dB at 20 kHz		
Tone Control	Bass: +/-12 dB (at 100 Hz), Treble: +/-12 dB (at 10 kHz)		
Parametric EQ	10 bands, Freq: 20 ~ 20,000Hz, 31 points, Variable range: +/- 12 dB, Q: 0.3 - 5		
Speaker Equalizer	10 (set up software has 30 TOA speaker presets)		
High-pass Filter	-12 dB/oct, Variable frequency range: 20Hz - 20kHz, 31 points		
Low-pass Filter	-12 dB/oct, Variable frequency range: 20Hz - 20kHz 31 points		
Compressor	Depth: 1 - 5		
Delay	0 - 40 ms (1 ms steps), maximum 40 ms (CH1 + CH2) (Mix mode only)		
Scene/Event Memory	32		
Auxiliary Function	Key lock function		
Control Input/Output	RS-232C, D-sub connector (9P, female) Control input: 4 inputs, no-voltage make contact input, open voltage: 3.3 V DC, short-circuit current: under 1 mA, removable terminal block (14 pins) Control output: 4 outputs, open collector output, withstand voltage: 27 V DC, control current: 50 mA, removable terminal block (14 pins) Remote volume: 2 channels, connect a 10k Ω/linear taper variable resister or 0 - 10 VDC, removable terminal block (14pins)		
Power Source	120 V AC, 60 Hz		
Power Consumption	150 W	250 W	40 W
Operating Temperature	14˚ to 104˚ F (-10˚ to 40˚ C)		
Operating Humidity	35% to 80% RH (no condensation)		
Finish	Panel: aluminum, hair-line, black; Case: surface-treated steel plate, black paint		
Dimensions (W x H x D)	16.54" x 4.24" (3.5" w/out feet) x 13.98" (420 x 107.6 x 355 mm)	16.54" x 4.24" (3.5" w/out feet) x 15.55" (420 x 107.6 x 395 mm)	16.54" x 4.24" (3.5" w/out feet) x 13.9" (420 x 107.6 x 353 mm)
Weight (without modules)	28.66 lbs. (13 kg)	24.25 lbs. (11 kg)	13.23 lbs. (6 kg)

9000M2 SERIES MODULAR DIGITAL
MATRIX MIXER AND MIXER/AMPLIFIERS
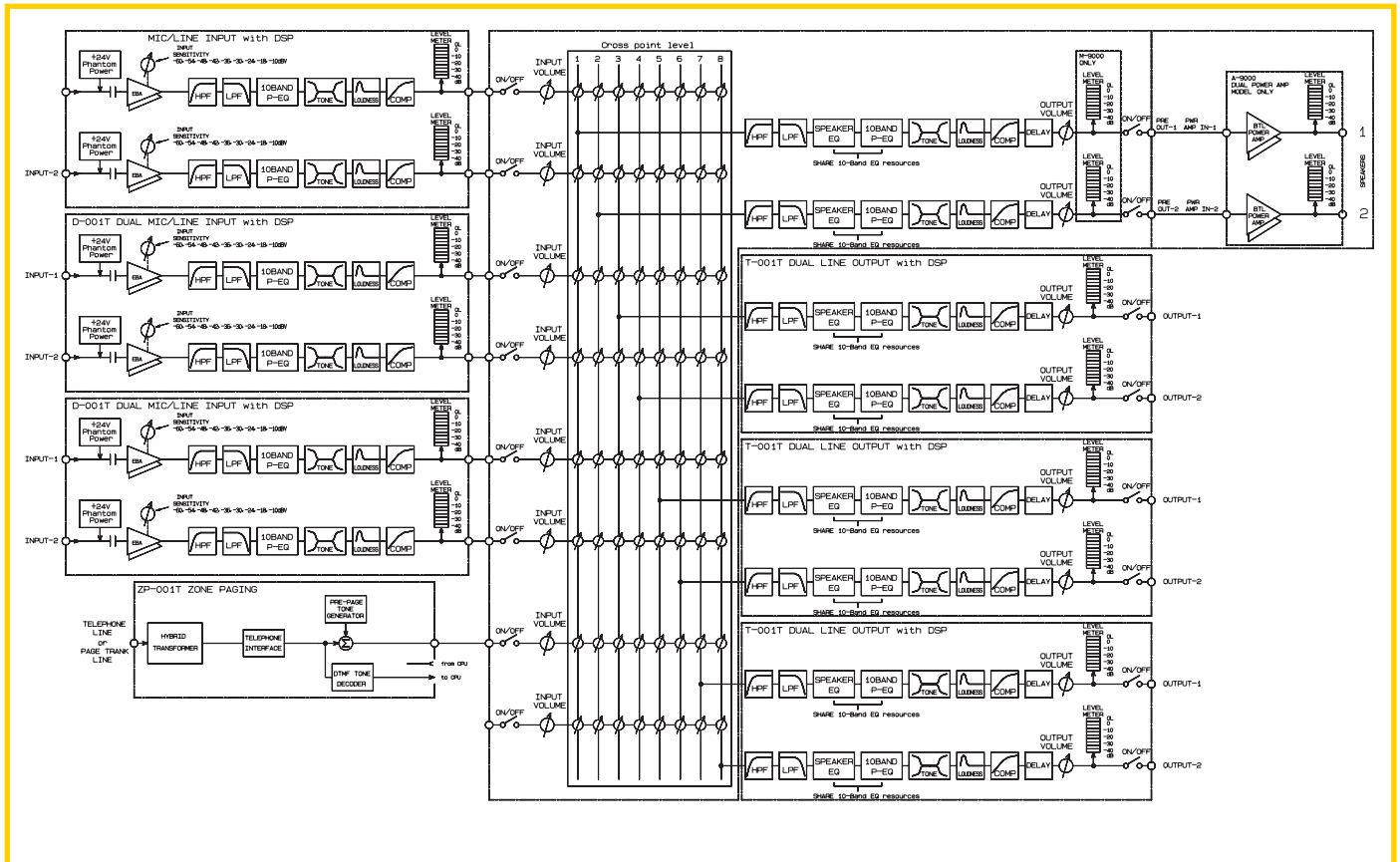
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DIMENSIONAL DRAWINGS

A-9060DHM2/A-9120DHM2

Rear View

Front View

Side View

UNIT:mm   SCALE:1/4

M-9000M2

Rear View

Front View

Side View

UNIT:mm   SCALE:1/4

For dimensions of other 9000M2 Series models, please refer to the Specifications section.

BLOCK DIAGRAM

TOA Canada Corporation

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9000M2 SERIES
MODULAR DIGITAL MATRIX
MIXER AND MIXER/AMPLIFIERS

P-9000 SERIES
POWER AMPLIFIERS

The **TOA P-9000 Series Power Amplifiers** comprised of the P-9060DH and P-9120DH provide 2-Channel power amplifiers to provide system expansion of the 70.7 volt amplifier outputs for the 9000 Series Mixer/Amplifiers using the T-001T output modules. This maintains the systems cool 9000 Series style and look.

HIGHLIGHTS

- 2-Channel Power Amplifiers with 70.7V outputs:
  - P-9060DH - 60W
  - P-9120DH - 120W
- 2-Channel Power Amplifier models feature flexible output power allowing 50% of one amplifier channel to be allocated to the second amplifier channel.
- Channel 1 & 2 Inputs balanced (H=Hot, C=Cold and E=Shield) with selectable input sensitivity: 0dB or -20dB.
- Channel 1 input to ALL selectable switch.
- Volume control security cover knobs included: Qty. 2 YA-920
- 2RU Rack Mounting hardware included.
- Front panel LED indicators for: Protect, Peak, Signal and Power.

Model No.	P-9060DH	P-9120DH
Output Power	2x 60W @ 70.7V	2x 120W @ 70.7V
Input	CH 1, CH 2 input: –20 dB* or 0 dB* (switchable), 10 kΩ, electronically-balanced, removable terminal block , CH 1 mode ON/OFF switch (ON: CH 1 to All ch, OFF: Each ch)	
Output	Speaker output CH 1, CH 2: 60 W, 83 Ω x 2, BTL output (70 V line), M4 screw terminal, distance between barriers: 9 mm (0.35")	Speaker output CH 1, CH 2: 120W, 41Ω x 2, BTL output (70 V line), M4 screw terminal, distance between barriers: 9 mm (0.35")
Power Bandwidth	20 – 20,000 Hz, 0.08% T.H.D.	
Frequency Response	20 – 20,000 Hz (–3 dB, +1 dB)	
Total Harmonic Distortion	0.008% (22 kHz LPF, 1 kHz, rated output, input level selector switch in 0 dB* position)	
S/N Ratio	At Input short, 20 – 20,000 Hz, Input level selector switch in 0 dB* position Output volume min.: 105 dB, Output volume max.: 97 dB	
Function	Output disconnected for approx. 5 s after switching power on	
LED Indicator	Power (blue) x 1, Protect (red) x 2, Peak (red) x 2, Signal (green) x 2	
Ventilation System	Forced air cooling (fan speed: variable with temperature)	
Power Source	120 V AC, 60 Hz	
Power Consumption	225 W (rated output), 106 W (UL60065)	404 W (rated output), 208 W (UL60065)
Operating Temperature	14˚ to 104˚ F (-10˚ to 40˚ C)	
Operating Humidity	35% to 80% RH (no condensation)	
Finish	Panel: Aluminum, hair-line, black; Case: SECC, black paint	
Dimensions (W x H x D)	16.54" x 4.24" x 15.98" (420 x 107.6 x 406 mm)	
Weight (without modules)	18.08 lbs (8.2 kg)	22.05 lbs (10kg)