



# CP-9550M2 MATRIX MIXER AMPLIFIER



**Versatile DSP-Mixer with built-in amplifier  
ideal for multi-zone paging and  
music distribution in  
room-combining applications**

# Light, compact and highly efficient solution for conference rooms, gymnasiums or restaurants



## 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.
- Triggers of paging activation.
  - VOX(audio activated) with adjustable threshold/sensitivity and gate release time.
  - Control input (Mainframe & C-001T with ZM-9003 or remote contacts).
  - ZM-9011/ZM-9013/ZM-9014 (Page initiate).
  - ZP-001T Telephone Zone Paging Module.
- Stereo Link – Mirrors all the settings of one channel to the adjacent channel, reducing redundant setup tasks for stereo signals. Useful for stereo zone applications.
- Speaker Line Switching – select up to four speaker lines from a single amplifier output using optional model SS-9001 Speaker Selector and AD-246 Power Supply.
- Keylock Security sets password-protected access to prevent access to Input, Output, Utility & Power functions.
- Requires only 2U space in a cabinet rack.
- Efficient - digital power amplifier efficiency as high as 80% to 90%, more than 60% reduction in energy consumption compared to analog power amplifier.
- The high durable - time continuing work that has been through a lot of rigorous testing to prove its functionality.
- High stability - Provide comprehensive protection circuitry in response to excessive current load, abnormal short circuit, DC voltage output and the heat sink temperature rises.
- Independent power supply - for each channel independent power supply design, even if a channel fails, it will not affect the other channel.
- RS-232C 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

\*AMX is a trademark of AMX Corporation

\*Crestron is a trademark of Crestron Electronics, Inc..

## ACCESSORIES

### 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 (9 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 Line Input Module with DSP



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

### AN-001T Ambient Noise Controller Module

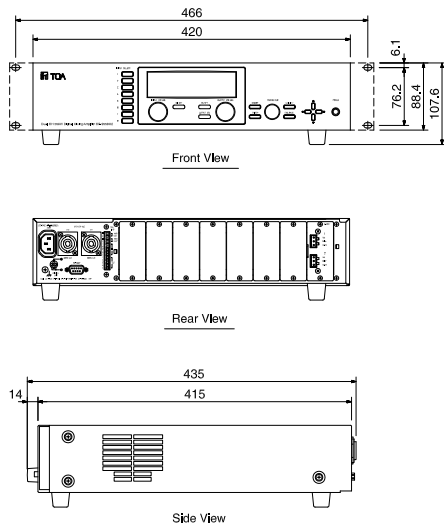


- Automatically adjusts output gain to compensate for changes in ambient noise level
- Each input can be assigned to control a specific output
- Two inputs with +24VDC phantom power for condenser mics
- 14 preset gain ratios
- Accessory sensing microphone: AN-9001
- Maximum two per chassis

### ZP-001T Telephone Zone Paging Module



- Telephone paging to up to eight zones
- DTMF dialing to access 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



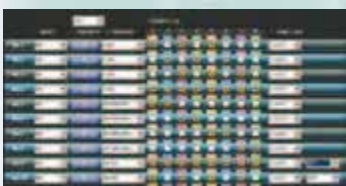
- Ducker • NOM (Automix)
- Delay (Output channel only)
- TOA Speaker EQ Presets (Output channel only)
- DSP included on CP-9550M2 Mainframe Outputs, D-001T, D-001R and T-001T modules
- Dual Channel Power Amplifier 550 W (4 Ω) or 350 W (8 Ω)
- Flexible, Integrated Operating System (Mixer + Paging Matrix):
  - 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 for a multitude of applications including audiovisual, 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
- 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

### Initial Setup Wizards

**Module Configuration Settings**  
Displays possible selections according to module insertion rules, ensuring correct system configuration.

**Input & Output Channel Name Settings**  
The names set using these screens are carried over into subsequent remote controller and paging configuration screens, streamlining the setting process.



### Remote Controller Settings

Easy pull-down menu facilitates complex settings! The remote controller buttons can be used to switch scene memory, turn output sources on or off, and control the start and stop of paging. The output source on/off function includes Simultaneous Mode, which allows simultaneous output from multiple sources, and Exclusive Mode, which allows selection of only one output source. Knobs on the remote controller adjust the volume for the selected input-output channels.



### EQ Settings

Select from 3 types: LPF, HPF and PEQ.  
Up to 12 filters can be applied to each input-output channel TOA's Speaker preset EQ is visible in graphic display Use the Adjust button to change and check the effects of EQ settings on the fly. Use the Enable check boxes to deactivate filters without erasing their settings. Use the All Bypass button to disable all filters at once. Using these in conjunction with the Adjust button allows EQ effects to be compared efficiently.



### Paging Settings

Set 3-level prioritized paging for each activation trigger (up to 32) To handle multiple simultaneous paging calls with the same priority level, the system can be set for "FIFO" (first in, first out), "LIFO" (last in, first out), or "MIX" (mixing). This allows paging settings to handle situations requiring sophisticated priority orders, for example in mass notification systems. It is also possible to make settings that cause a contact to be closed with the initiation of each page, a feature that can be used to illuminate a strobe, call up a CCTV camera's preset positions, or enable audio or video recording via external equipment. Additionally, the optional S-20S module allows different messages to be broadcast corresponding to individual triggered outputs.



### Cross Points Settings

Up to 32 preprogrammed broadcast patterns that switch according to each scene can be stored in the scene memory.

## ACCESSORIES

### T-001T Dual Line Output Module

- 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

### C-001T Input/Output Control Module

- 8 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

### RC-001T RS-485 Control Module

- Allows use of up to 16 RS-485 remote control panels
- Bi-directional 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 24V DC power adapter (optional AD-246) required for each 1 port used
- For control option slot on mainframe in addition to a C-001T

• SPECIFICATIONS

<b>Model</b>	<b>CP-9550M2</b>
<b>Power Supply</b>	230 V (50 / 60 Hz)
<b>Power Consumption</b>	253 W (according to IEC/EN 60065)
<b>Audio Input</b>	Max. 8 channels, modular construction (modules optional)
<b>Speaker Output</b>	550 W x 2 (4 Ω), 350 W (8 Ω), Connector: Neutrik NL4MD-H-1 x 2
<b>Amplifier</b>	Class D
<b>Module Slot</b>	Analog input (slot 1 - 8): -10dB*, 10k Ω, unbalanced
<b>Control Input/Output</b>	R5-232C, D-sub connector (9P, female) Control input: 4, no-voltage make contact, open voltage: 3.3V DC, short-circuit current: 1mA or less, removable terminal block (14 pins) Control output: 4 outputs, open collector output, withstand voltage: 27V DC, control current: 50mA, removable terminal block (14 pins) Remote volume: 2 channels, connect a 10k Ω/linear taper variable resistor or input the DC voltage of 0 to 10V, removable terminal block (14 pins)
<b>Signal processing</b>	24 bit / 48 kHz
<b>Cross Talk</b>	> 60 dB (20 kHz)
<b>Functions</b>	Tone Control Bass: +/-12dB (at 100Hz), Treble: +/-12dB (at 10kHz) Parametric EQ 10 bands, Freq: 20Hz – 20kHz, 31 steps, Variable range: +/- 12dB, Q: 0.3 – 5 Speaker Equalizer 10 (setup software has 30 TOA speaker presets) High-pass Filter -12dB/oct, Variable frequency range: 20Hz - 20kHz, 31 steps Low-pass Filter -12dB/oct, Variable frequency range: 20Hz - 20kHz, 31 steps Compressor Depth: 1 – 5 Delay 0 – 40 ms (1 ms steps), maximum 40 ms (CH1 + CH2) Scene/Event Memory 32 Auxiliary Function Key lock function
<b>Frequency Response</b>	20 Hz ... 20 000 Hz
<b>THD</b>	< 0,008 %
<b>S/N Ratio</b>	90 dB
<b>Operating Temperature</b>	-10° to 40 °C
<b>Operating Humidity</b>	35% to 80% RH (no condensation)
<b>Finish</b>	Panel: aluminum, hair-line, black; Case: surface-treated steel plate, black paint
<b>Dimensions (B x H x T)</b>	420 x 107.6 x 415 mm
<b>Weight</b>	9.6 kg (without modules)

ACCESSORIES

**ZM-9001**

**Remote Panel**

- Six assignable buttons to activate preset selection or volume up/down
- Operates on Remote Volume Control terminal on the 9000M2 back panel



**ZM-9002**

**Remote Panel**

- Four assignable buttons to activate preset selection or volume up/down  
Variable knob to control volume
- Operates on Remote Volume Control terminal on the 9000M2 back panel



**ZM-9003**

**Remote Panel**

- Works with contact inputs on mainframe and on C-001T
- Six buttons - 4 locking with label strips and 2 momentary buttons for control program change, volume up/down, channel on/mute, emergency mute, power, paging prohibit function.



**ZM-9011**

**Remote Control Panel**

- Four assignable buttons each with LED status indicator can control Xpoint settings (on/off, select), paging activation, scene and relay activation
- Assignable ID rotary adjustment on box T



**ZM-9012**

**Remote Control Panel**

- Rotary Encoder can be assigned to control any input or output volume
- Multiple input or outputs may be "ganged" for
- Master volume terminals
- Multi-segment LED indicator provides visual volume level status



**ZM-9013**

**Remote Control Panel**

- Eight assignable buttons each with LED status indicator can control Xpoint settings (on/off, select), paging activation, scene and relay activation
- Assignable ID rotary adjustment on box



**ZM-9014**

**Remote Control Panel**

- Four assignable buttons each with LED status indicator can control Xpoint settings (on/off, select), paging activation, scene and relay activation
- Assignable ID rotary adjustment on box



**AN-9001**

**Ambient Noise Sensing Microphone**

- Ceiling or wall-mount condenser microphone
- Fits one gang electrical box
- Use with AN-001T module



**SS-9001**

**Speaker Selector**

- Switch up to four speaker lines on one amplifier output
- Two amplifier inputs for Paging/BGM applications
- Triggered by ZP-001T module control outputs
- Wall-mount bracket included
- Requires optional 24VDC power supply(AD-246)



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Preliminary Data - errors excepted - technical data may change without prior notice