



CP-9550M2/9500M2

Matrix Mixer Amplifier

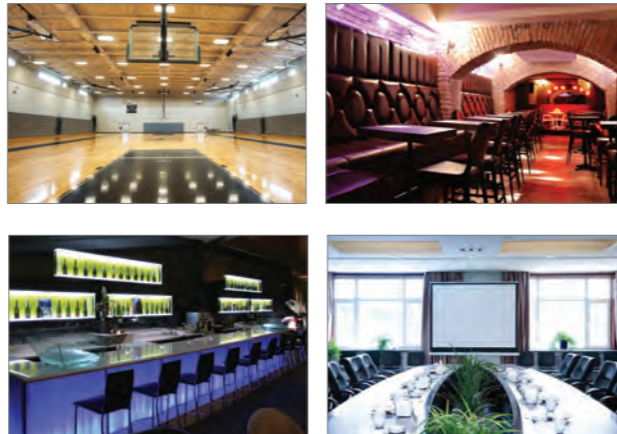


**Ideal for multi-zone paging
and music distribution in
room-combining applications.**

CP-9550M2 & CP-9500M2

Matrix Mixer Amplifier

- The compact solution for conference rooms, gymnasiums or restaurants.
- Designed for a multitude of applications including audiovisual, zone paging, room combining and many more.
- Can be used in conjunction with optional modules as mixer or paging amplifier by settings, depending on the application.



- Enhanced GUI programming interface for PC configuration and uploading/downloading of settings.
- 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, Ducker, NOM (Automix)
- Output channels only:
 - Delay, TOA Speaker EQ Presets
- 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.

FEATURES

- Dual Channel Power Amplifier
 - CP-9550M2: 550 W (4 Ω) or 350 W (8 Ω)
 - CP-9500M2: 500 W (100V line, high impedance 20 Ω)
- Efficient – digital power amplifier efficiency as high as 80% to 90%, more than 60% reduction in energy consumption compared to analog power amplifier.
- High stability – provide comprehensive protection circuitry in response to excessive current load, abnormal short circuit, DC voltage output & 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.
- Multiple Input Priority Modes sets priority order when multiple inputs with the same priority level and output assignment are broadcast.
- 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.
- 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.

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.

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.

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.

Cross Points Settings

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

ACCESSORIES

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|---|---|---|--|--|--|---|
| <p>D-001T
Dual Mic/Line Input Module with DSP</p> <ul style="list-style-type: none"> ■ Two Balanced Mic / Line Inputs ■ Digital Signal Processing <ul style="list-style-type: none"> • 10-Band Parametric EQ • Bass / Treble • Loudness • High and Low Pass Filters • Compressor | <p>D-001R
Line Input Module with DSP</p> <ul style="list-style-type: none"> ■ 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 | <p>AN-001T
Ambient Noise Controller Module</p> <ul style="list-style-type: none"> ■ Automatically adjusts output gain to compensate for changes in ambient noise level ■ Each input can be assigned to control a specific output | <p>ZP-001T
Telephone Zone Paging Module</p> <ul style="list-style-type: none"> ■ 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 | <p>T-001T
Dual Line Output Module</p> <ul style="list-style-type: none"> ■ Two Balanced Line Outputs ■ Digital Signal Processing <ul style="list-style-type: none"> • 10-Band Parametric EQ • Bass / Treble • Loudness • High and Low Pass Filters • Compressor • TOA speaker EQ presets | <p>C-001T
Input/Output Control Module</p> <ul style="list-style-type: none"> ■ 8 assignable control inputs for activating Event, Volume Up/Down, Mute, Emergency Mute or Sync On/Off ■ Eight assignable control outputs for activating external relays ■ Removable Terminal Block ■ Maximum one per chassis | <p>RC-001T
RS-485 Control Module</p> <ul style="list-style-type: none"> ■ 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

Model	CP-9550M2	CP-9500M2
Power Supply	220 - 240 VAC (50 / 60 Hz)	
Power Consumption	253 W (according to IEC/EN 60065)	220 W (according to IEC/EN 60065)
Audio Input	Max. 8 channels, modular construction (modules optional)	
Speaker Output	550 W x 2 (4 Ω), 350 W (8 Ω), Connector: Neutrik NL4MD-H-1 x 2	500 W x 2 (20 Ω), Connector: M4 screw terminal
Amplifier	Class D (100V)	
Module Slot	Analog input (slot 1 - 8): -10dB*, 10k Ω, unbalanced	
Control Input/Output	RS-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)	
Signal processing	24 bit / 48 kHz	
Cross Talk	> 60 dB (20 kHz)	
Functions	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	
Frequency Response	20 Hz ... 20 000 Hz	
THD	< 0,008 %	< 0.3 %
S/N Ratio	90 dB	85 dB
Operating Temperature	-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 (B x H x T)	420 x 107.6 x 415 mm	
Weight	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 with RC-001T on the 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-9012

Speaker Selector

- Two amplifier inputs for Paging/BGM applications
- Requires optional 24VDC power supply(AD-246)

