

+30
YEARS of
expertise

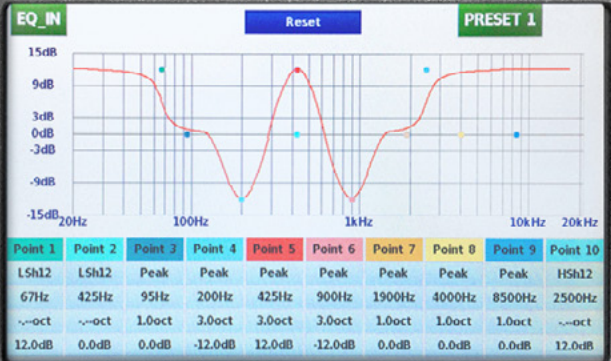
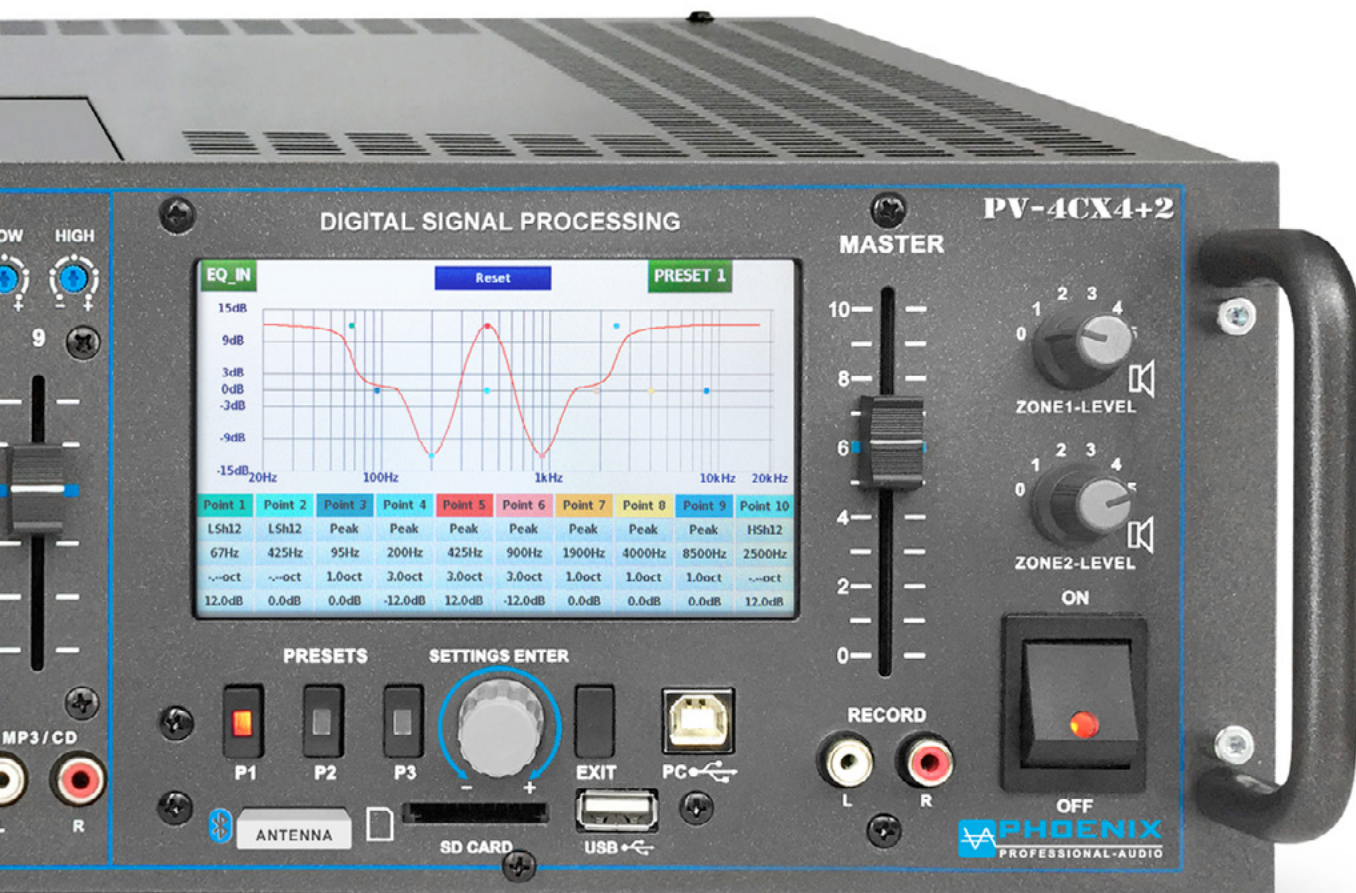
Made in EU



PV-CX series

PV-4CX4+2 | PV-4CX4+4 | PV-4CX6+2

DIGITAL AUTOMATIC MIXING AMPLIFIERS



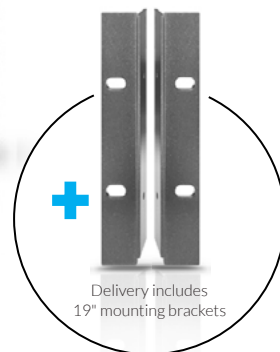
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Top features:



Fig.: PV-4CX4+2 front and rear panel



PV-CX series

Digital DSP automatic mixing amplifiers with 5" LC front display

DIGITAL POWER AMPS **DSP4** **COMPRESSOR / LIMITER / EXPANDER** **DIGITAL DEESSER**

Digital automatic mixing amplifier with 5" front display, DSP4, 2 x digital power amplifiers (Class-D), phantom power, HPF filter (100 Hz), parametric EQ, digital automatic system, audio matrix, conference configuration / priority, dynamic compressor / limiter / expander function, digital de-esser with bypass function, 3 x digital frequency shifters with output select, 3 presets, BT receiver and more. 9 inputs (MIC-LINE), 4 outputs. 3U.

The fully digital automatic mixing amplifiers of the new **POWERVOICE PV-CX series** were developed for professional use in acoustically demanding buildings (building acoustics), such as churches and cathedrals.

The **ALL-IN-ONE systems** are used where most devices do not produce any positive outcome or where an entire rack of system components would have to be built to achieve a reasonable acoustic result.

Models

PV-4CX4+2	Digital automatic mixing amplifier Output: 400W+200W/100V
PV-4CX4+4	Digital automatic mixing amplifier Output: 400W+400W/100V
PV-4CX6+2	Digital automatic mixing amplifier Output: 600W+200W/100V

- NEW**
- 5" Direct programming on the large 5" LC front display
 - SSSS Digital de-esser with bypass function
 - 3 digital frequency shifters as feedback suppressors with output select for outputs 1, 2 and 3
 - BT BT system with high-performance external antenna and password-protected BT pairing
 - SD / USB player with title display
 - P1 P2 P3 Three presets P1 / P2 / P3 can be saved (with plain text and calendar function)

Depending on the model, the automatic mixing amplifiers have an output of 400W+200W/100V (❶) or 400W+400W/100V (❷) or 600W+200W/100V (❸).

The PV-CX series offers numerous innovative technical features, such as a digital de-esser with bypass function and three digital frequency shifters as feedback suppressors with output select for outputs 1, 2, and 3.



PV-CX series - Continued from previous page

Thus, the **three outputs** can be programmed **simultaneously** with a **digital frequency shifter** if required.

With the **redesign of the front panel**, Phoenix Professional Audio's POWERVOICE digital automatic mixing amplifiers have not only received a facelift. The new models now allow **direct programming on the large 5" front display** via the **SETTINGS ENTER** button. This makes adjusting the numerous parameters even **more intuitive and easier**.

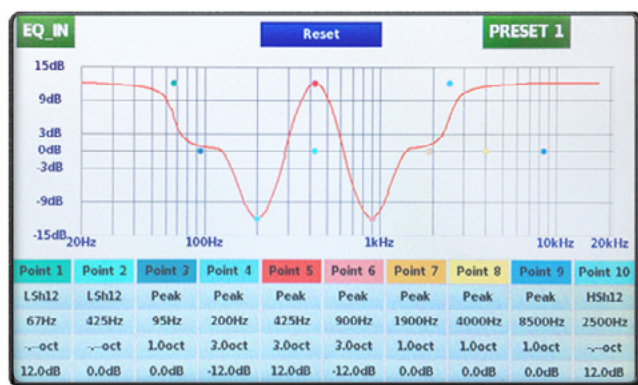
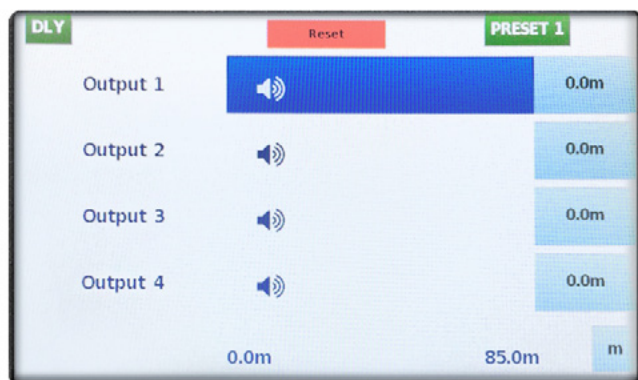
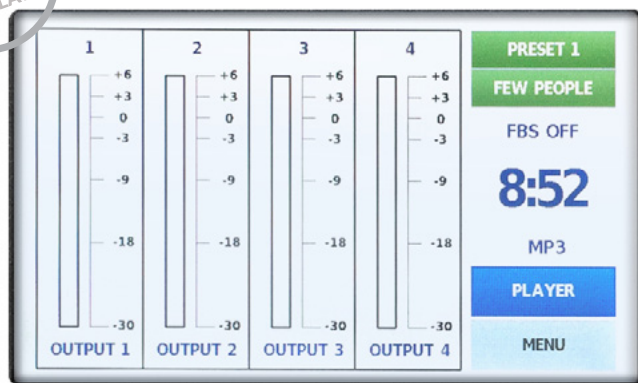


Fig.: PV-CX series example settings on the 5" front display

Other new features are **three PRESETS P1 / P2 / P3** with plain text as well as a **calendar function** and selection button on the front as well as a new **SD / USB player** with title display.



- 2 x CLASS-D digital power amplifiers
- 8 x inputs on XLR (MIC-LINE via DIP selector switch)
- LINE input (LINE-9 IN) on RCA
- 8 x input GAIN controls + 1 x digital input GAIN
- 1 x de-esser with FULL / SPLIT and AIR functions (master)
- 8 x dynamic compressor / expander circuits
- 2 x digital noise gates (software) for groups 1 and 2 [LEVEL/ATTACK/RELAY] -90dB/-3dB (300us-5000us) (1ms-3000ms)
- 10 x input parametric EQs
- 4 x 5 output parametric EQs
- 4 DSP outputs (output 4 can be configured as a X-over SUB output)
- Digital signal matrix for groups 1 and 2
- 2-channel audio matrix (DIP)
- Automatic feedback limiter or digital SHIFTER per output channel
- Digital automatic system DIGITAL SIGNAL DELAY FIELD with BARRIER GATE, GATE OPEN & GAIN CONTROL with TIME & ATTACK adjustment
- PRE / POST GATE routing function
- 10 x 2 LOW & 2 x HIGH parametric broadband filters (PEAKING PEQ, LoSH6, LoSH12, HiSH6, HiSH12)
- 4 x digital delay outputs
- 4 x digital volume control (main volume)
- 1 x separate 100V line output with 6-point volume control
- MAINSUM2 matrix output / INSERT
- POST-MASTER, SUM + EQ output
- PRE-MASTER output
- REC OUT output
- Speaker outputs COM, 4 and 8 Ohm, 50V, 70V, 100V
- 3 x 100V/LS line outputs (1st controllable zone, AMP-1, 400W; 2nd controllable zone, AMP-2, 100W)
- Potential-free contacts with automatic switching (activation) via the presets-2 position
- Log Output: Documentation of all software settings
- Optional: PV-CX-PRESET remote control for remote switching between the 3 presets P1/P2/P3
- Limiter in the amplifier and DSP input area
- Conference setting programmable

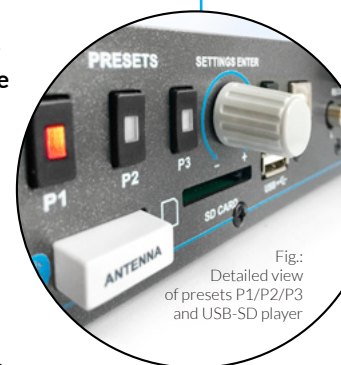


Fig.: Detailed view of presets P1/P2/P3 and USB-SD player



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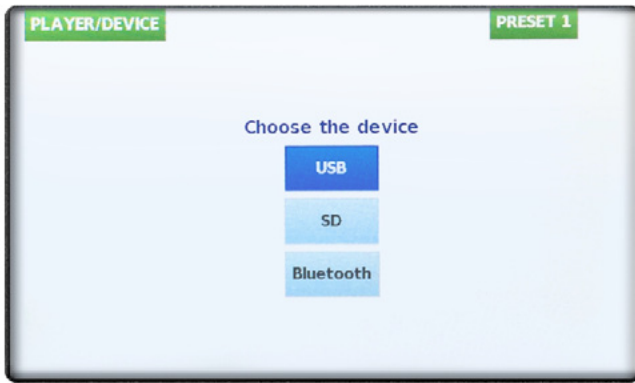
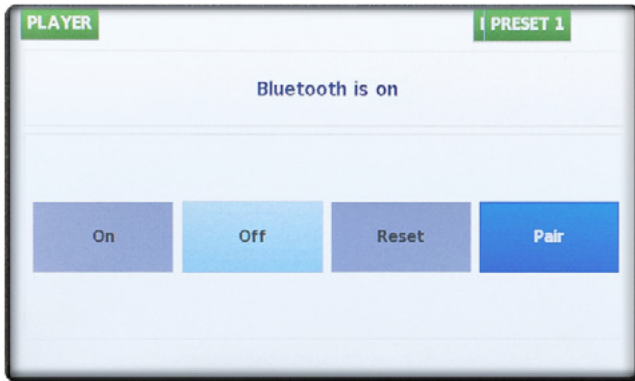


Fig.: PV-CX series example settings in the player on the 5" front display



Energy efficient: At full power, the PV-CX amplifiers have an **efficiency of over 90%**, making them particularly energy-efficient.

Each of the **8 universal inputs** can be switched between **MIC and LINE** sensitivity via **DIP selector switches**. All inputs feature **switchable phantom power (24VDC)** and a **HPF filter (100Hz)**.

All 8 inputs are also equipped with a switchable **digital automatic system, DIGITAL SIGNAL DELAY FIELD with BARRIER GATE, GATE OPEN and GAIN CONTROL** – meaning only the microphones being addressed are active. The activation of all addressed microphones is automatic and managed by the processor system.

The automatic mixer amplifiers feature an **additional speaker line (100V)** with separate volume control and **SOFT START** for improved speaker protection.

The automatic mixers feature a built-in **two-stage line filter** to protect against external interference (e.g., bell ringing).

The fans are temperature-controlled, operating very quietly.

The devices are suitable for **both desktop and 19" rack installation** (incl. mounting brackets).

For enhanced performance, the **WM-DT series digital power amplifiers** and the **DIGIVOICE digital DSP beam steering line arrays** are available as options.



Accessories (optional)

- PV-CX-PRESET** Remote switching between 3 presets
- LI-1** LINE-INPUT, adjustable
- SPL-1** Passive splitter system

The **BT system** integrated in the SD / USB player (direct connection via Bluetooth-enabled devices) has been supplemented by a **powerful external antenna** and a security function, which now enables **BT pair with password protection**.

The **numerous setting options** of the digital POWERVOICE PV-CX automatic mixing amplifiers ensure **even more precise room equalization** and **excellent adaptation to the room acoustics**.

With its integrated **compressor / expander function** for dynamic processing of audio signals and recordings, as well as its integrated **de-esser for dynamically reducing unwanted "ess" and sibilant sounds**, the PV-CX series offers state-of-the-art technology for a wide range of applications in professional sound reinforcement.





PV-CX series - Continued from previous page

Technical details	PV-CX series
Accessories	19" mounting brackets
Ambient temperature	-5° to + 40° C
Amplifier	Dual amplifier system
Analog / digital gain	For all analog MIC LINE inputs on the rear panel and one digital MAIN VOLUME in the device configurator
Audio input	8+1
Audio input line	Unbalanced LINE IN on RCA (Input 9) or jack LINE IN, (0.1V-1.5V)
Audio output	4 DSP output channels
Automatic mixer	DIGITAL SIGNAL DELAY FIELD, BARRIER GATE, GATE OPEN CONTROL
Automatic modes	Yes, automatic activation via Presets P1, P2, P3, daily/weekly/monthly/yearly programs
Automatic system input (GATE)	Fully automatic digital system
BT / bluetooth	BT receiver (direct connection via Bluetooth-enabled devices); BT device pairing with password protection; BT system with powerful external antenna
Color	Graphite
Conference configuration / priority	Yes through hardware configuration (DIP switch) for inputs 1 to 8
De-esser	Digital de-esser with BYPASS function; FULL, SPLIT and AIR functions; 800Hz to 8kHz, 0dB to -20dB
Delay	4 x delays (OUT 1-4) and internal power amplifiers ranging from 0.0 to 249.75 mS, 85 m
Dimensions	443 mm (W) x 135 mm (H) x 340 mm (D) table housing, 19" installation via mounting bracket
Digital & analog volume controls	Analog for channels 1 to 9, digital for outputs 1 to 4
Display	5" LC display
DSP version	DSP4
Equalization EQ	LF/HF (+/-12 dB)
Expander / compressor / limiter	Switchable for all 8 microphone inputs (adjustable via trimmer (internal))
Feedback limiter	MODES: Automatic (ADAPTABILITY) with 10 notch filters, MODES: PHASE SHIFTER with freq. 1.7 Hz, 2.0 Hz, 3.0 Hz
Frequency response	40 Hz to 22,000 Hz @-3dB
Frequency shifter	3 x digital frequency shifters as feedback suppressors with output select for outputs 1, 2, and 3
Gain (system)	yes
Gain control	For all MIC LINE inputs, analog on the rear panel, digital in the device configurator
Gate attack yes	yes
Gate level yes	yes
Gate release	yes
Graphic EQ equalization	Yes

HPF filter	100 Hz, 6 dB/oct.
IN1/IN2 to OUT4 matrix	Yes in the device configurator
Input tone control	LOW 100 Hz, HIGH 10 kHz, +/-12 dB (QFilter)
Input tone control and master	Yes
Inputs	8 x MIC (-40 dB to -15 dB, 1.6 kOhm) or LINE (-15 dB to +5 dB, 10 kOhm), PRE-MASTER EQ INPUT, balanced on XLR Neutrik, 1 x LINE CD1 on RCA
Insert	On jack (Neutrik)
Interface	USB master (PC), RJ-45 port
LED indicators	GREEN LED: Channel active; RED LED: Overload; Error, Temp, Power + Measurement
Limiter: SLOW /NORMAL/FAST	IN1 and IN2 signal limiter (-30 dB to +6 dB) in the device configurator
Line outputs (process DSP)	DSP-OUT: 1 to 4 signal processing outputs, balanced on XLR-Neutrik, 100 mV-1 V, 10 K
Mains filter	yes
Mounting	19" mounting bracket
Mounting height	3U
MP3 player	MP3 player with title display; with USB/SD ports; with Bluetooth receiver (direct connection via Bluetooth-enabled devices)
Noise gate [LEVEL/ATTACK/RELAY]	-90 dB/-3 dB (300 µs-5000 µs) (1 ms-3000 ms)
On board	2 x digital power amplifiers (Class-D); MP3 player with USB/SD ports and BT receiver
Output 1/2 (ZONE 1/2)	3 zones
Output power	400W + 200W / 100V (model ❶); 400W + 400W / 100V (model ❷); 600W + 200W / 100V (model ❸)
Parametric EQ equalization	Yes
Parametric EQ equalization @ Input	10 x PEQs, 20Hz-21.2kHz, +/-12dB, @ 0.05oct-3.00oct
Parametric EQ equalization @ Output	4 x 5 PEQ, 20 Hz-21.2 kHz +/-12dB, @ 4 x 5 PEQs, 20Hz-21.2kHz, +/-12dB, @ 0.05oct-3.00oct
Password protection	Yes, in the device configurator
PEQ filter (input)	PEAKING EQ, LoSH6, LoSH12, HiSH6, HiSH12
PEQ filter (Output)	PEAKING EQ, LoSH6, LoSH12, HiSH6, HiSH12
Phantom	24VDC power, switchable to any input (1-8), DIP switch
Power supply	230 V AC / 50 Hz / 60 Hz
Presets	Three presets P1, P2, P3 with selection button on the front panel
Priority	Yes
Priority input (MIC/LINE)	Yes
Protection circuits	Current limit (short circuit), Overtemperature protection, Soft Start



PV-CX series - Continued from previous page

REC-OUT	Yes
Remote control	Optional: PV-CX-PRESET for remote preset activation
Settings	SETTINGS ENTER control for direct programming/adjustment; visibility of all associated information on the 5" front display
Signal contacts	yes
Signal-to-noise ratio	better than 90dB@, software NOISE GATE adjustment
Software	Yes
Speaker outputs, floating	100 V - 70 V - 50 V - 4 ohms, separate 100 V output SPK-ZONE-LEVEL with 6-step control from 0 V to 100 V, load is the maximum power of the amplifier
Temperature (AMP) monitoring	Display information
Time Synchronization	Settings are configured in the device configurator (RTC)
THD	Less than 0.1%
Weight	14 kg (model ❶); 15.2 kg (model ❷); 17.8 kg (model ❸)



Further details -
in the online shop



[PV-CX series >>](#)





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