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YEARS of
Expertise

Made in EU



PHOENIX
PROFESSIONAL-AUDIO

AMX-9CX4

DIGITAL DSP AUTOMATIC PREAMPLIFIER

FRONT
5"
DISPLAY

BT
RECEIVER



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DOC-250319

Top features:



Fig.: AMX-9CX4 front and rear panel



AMX-9CX4

Digital DSP automatic preamplifier with 5" LC front display

9 IN / 4 OUT **DSP4** **COMPRESSOR / LIMITER / EXPANDER** **DIGITAL DE-ESSER** **3 PRESETS**

Digital automatic preamp with 5" front display, DSP4, phantom power, HPF filter (100Hz), 10 input / 5 output PEQ, MIC/LINE, digital automatic system (DSDF), audio matrix, dynamic compressor / limiter / expander, digital de-esser with bypass function, 3 digital frequency shifters with output select, 3 presets, BT receiver and much more. 9 inputs (incl. 8 universal XLR inputs (MIC / LINE via DIP switches)), 4 outputs.

The new digital preamplifier **AMX-9CX4** was developed for professional use in acoustically demanding buildings (building acoustics), such as churches and cathedrals.

The digital automatic preamp is 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.

The new AMX-9CX4 offers innovative technical features, such as a **digital de-esser with bypass function**.

The amplifier also features **three digital frequency shifters as feedback suppressors with output select** for outputs 1, 2, and 3. This allows **three outputs to be programmed simultaneously** with digital frequency shifters if required.

Other new features are **three PRESETS P1 / P2 / P3** with plain



Direct programming on the large 5" LCD front display



Digital de-esser with bypass function



3 digital frequency shifters as feedback suppressors with output select for outputs 1, 2 and 3



BT system with high-performance external antenna and password-protected BT pairing



SD / USB player with title display



Three presets P1 / P2 / P3 can be saved (with plain text and calendar function)

text as well as a calendar function and selection button on the front as well as a new **SD / USB player with title display**.

With the **redesigned front panel**, the AMX digital automatic preamplifiers from Phoenix Professional Audio 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.

FRONT
5"
DISPLAY

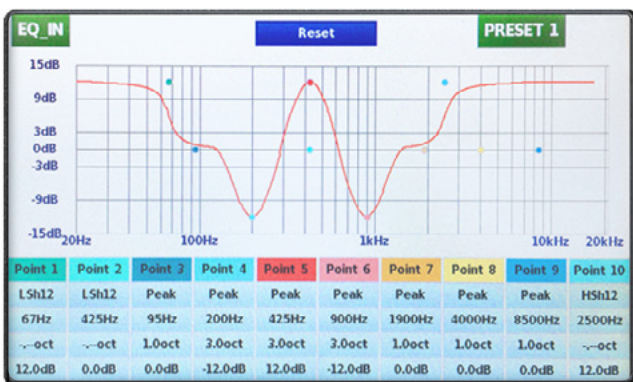
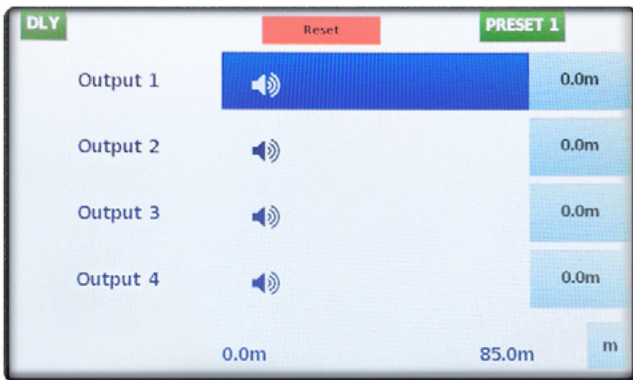
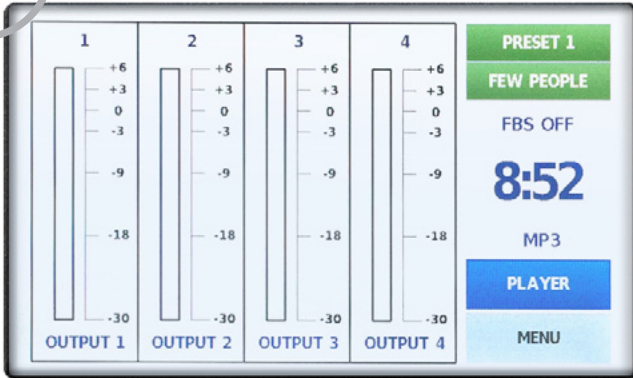


Fig.: AMX-9CX4 Example settings on the 5" front display

More
specials

- Input audio matrix "MAINSUM-1" and "MAINSUM-2"
- 8 inputs on XLR (MIC.-LINE via DIP switch)
- LINE input (LINE-9 IN on RCA)
- 8 x input GAIN controls
- Universal inputs with automatic microphone system DIGITAL SIGNAL DELAY FIELD (DSDF)
- De-esser with FULL/SPLIT and AIR function (master)
- COMPRESSOR / EXPANDER / LIMITER function
- 10 input parametric EQs
- 4 x 5 output parametric EQs, 4 delays, 4 volume controls & automatic feedback limiter
- 4 DSP outputs 1 to 4; output 4 can be configured as a X-over SUB output
- MP3 player module with USB port, SD card reader and BT receiver
- Digital NOISE GATE & LIMITER (software)
- CROSSOVER (assignment of inputs 1 to 7 to output 4, or inputs 8 to 9 to output 4)
- Freely programmable calendar function
- Connection for wired remote control INPUT PANEL PRESET (RJ 45)
- INFO OUT PRESET-2 (control with 2 x N/O contacts), e.g., for connecting additional speaker lines to PRESET 2
- PRE-MASTER EQ output (balanced on XLR)
- 4 x POST-MASTER DSP outputs (balanced on XLR)
- PRE-MASTER input (balanced on 3-pin jack)
- Optional: PV-CX-PRESET remote control for remote switching between the 3 presets P1/P2/P3
- RECORD output for recording devices



Fig. up: Optional "PV-CX-PRESET"



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

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



AMX-9CX4 - Continued from previous page

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 AMX-9CX4 automatic preamplifier offers state-of-the-art technology for a wide range of applications in professional sound reinforcement.

The **8 universal inputs** are switchable between **MIC** and **LINE** sensitivity via **DIP switches**. Each of the 8 universal inputs features **switchable phantom power (24 VDC)** and a **HPF filter (100 Hz)**.

The universal inputs are equipped with a switchable **automatic microphone system**, the **Digital Signal Delay Field (DSDF)**. The release of all microphones being addressed is **automatic** and controlled and monitored by the processor system (DSDF).

Using the **input matrix (DIP switches)**, all 8 input channels can be assigned to the MAINSUM-1 DSP outputs 1 to 3 and MAINSUM-2 to DSP outputs 1 to 3 and 4.

Fig. left: Details AMX-9CX4 amplifier rear panel

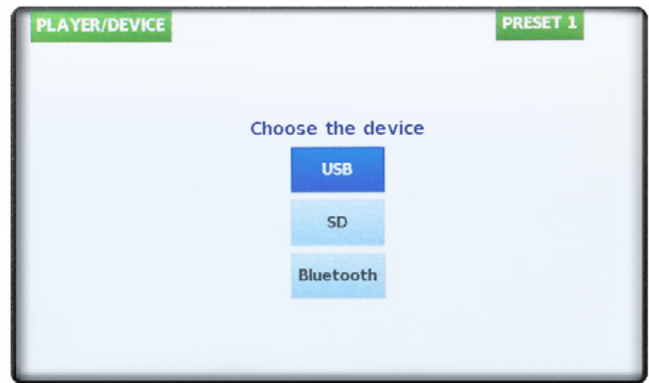
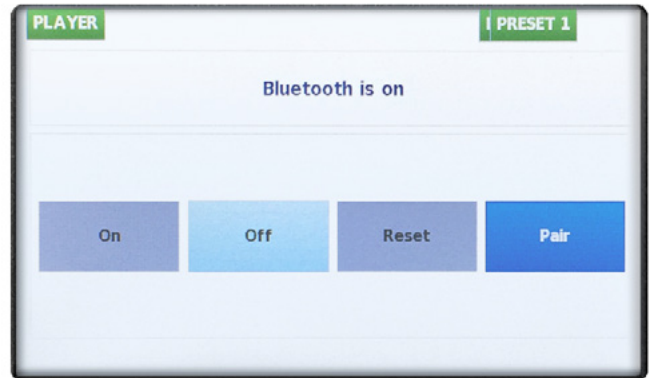


Fig.: AMX-9CX4 Example settings on the 5" front display



The built-in **MP3 player** with integrated **BT receiver** has inputs for a **USB flash drive** and an **SD memory card**, making it the perfect companion during use. The Bluetooth receiver **supports all common Bluetooth-enabled devices** and allows you to **wirelessly transfer music** or pre-recorded lyrics from your mobile phone, PC, or MP3 player to the amplifier and play them back.

The BT system integrated into the MP3 player has been enhanced in the new "CX" amplifier version with a **powerful external antenna** and a security feature that enables **BT pairing with password protection**.



Further details - in the online shop



AMX-9CX4 >>

Accessories (optional)

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





AMX-9CX4 - Continued from previous page

Technical details	AMX-9CX4
Ambient temperature	-5° to +40° C
Audio input line	Unbalanced LINE IN on RCA (input 9) or jack LINE IN, (0.1V-1.5V)
Audio output	MIX OUT, POST-MASTER, PRE-MASTER, REC OUT
Automatic mixer	DIGITAL SIGNAL DELAY FIELD, BARRIER GATE, GATE OPEN CONTROL
Automatic modes	Yes, automatic activation via presets P1, P2, P3, day / week / month / year programs
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 via hardware configuration (DIP switch) for inputs 1 to 8
Construction	The amplifier is suitable for both table and 19" rack mount (3U) installation
DeEsser	Digital de-esser with BYPASS function; FULL, SPLIT, and AIR function
Delay	4 delays (OUT 1-4) and internal power amplifiers ranging from 0.0 to 249.75 mS, 84 m
Delay (system)	up to 170 meters
Digital & analog volume controls	Analog for channels 1 to 9, digital for outputs 1 to 4
Dimensions	443 mm (W) x 135 mm (H) x 340 mm (D) table housing, 19" rack mountable via mounting bracket
Display	5" LCD display
DSP Version	DSP4
Equalization parametric EQ	20-20kHz / -20+12dB / 0.05-3db(oct)
Equalization parametric EQ @ Input	10 x PEQs, 20Hz-21.0kHz, +-12dB, @ 0.05oct-3.00oct
Equalization parametric EQ @ output	4 x 5 PEQs, 20Hz-21.00Hz, +-12dB, @ 0.05oct-3.00oct
Expander / compressor / limiter	Switchable for all 8 microphone inputs (adjustable internally via trimer)
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)	-60dB to +6dB
Gain control	For all MIC LINE inputs, analog on the rear panel, digital in the device configurator
HPF filter	100 Hz, 6 dB/oct.
IN1 / IN2 to OUT4 matrix	yes in the device configurator
Input automatic system (GATE)	Fully automatic digital system
Input sound control	LOW 100 Hz, HIGH 10 kHz, +-12 dB (Q filter)
Interface	USB master (PC), RJ-45 remote control

LF / HF filter (EQ)	per input @+/-12 dB, 100 Hz, 10 kHz
Limiter: SLOW / NORMAL / FAST	IN1 and IN2 signal limiter (-30dB to +6dB) 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 (L/R)
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]	-90dB/-3dB (300us-5000us) (1ms-3000ms)
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 power	switchable 24VDC (DIP switch)
Power supply	230 VAC / 50 Hz / 60 Hz
Presets	Three presets P1, P2, P3 with selection button on the front panel, with plain text
Priority input (MIC / LINE)	yes
REC OUT	yes
Remote control	Optional: PV-CX-PRESET for remote preset activation
Settings	SETTINGS ENTER control for direct programming/adjustment; visibility of all related information on the 5" front display
Signal contacts	yes
Signal-to-noise ratio	better than 90dB @, software NOISE GATE adjustment
System software	Yes
THD	better than 0.1%
Time synchronization	Settings are configured in the device configurator (RTC)
Weight	approx. 4 kg



ONLINE SHOP *link:*



[AMX-9CX4 >>](#)



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Tel.: +49 (0) 8062 - 908 49 84 | Fax: +49 (0) 8062 - 728 37 37 | E-Mail: info@phoenix-pa.com

PHOENIX PROFESSIONAL AUDIO GMBH

Hermann-Oberth-Str. 12
83052 Bruckmühl
Germany