

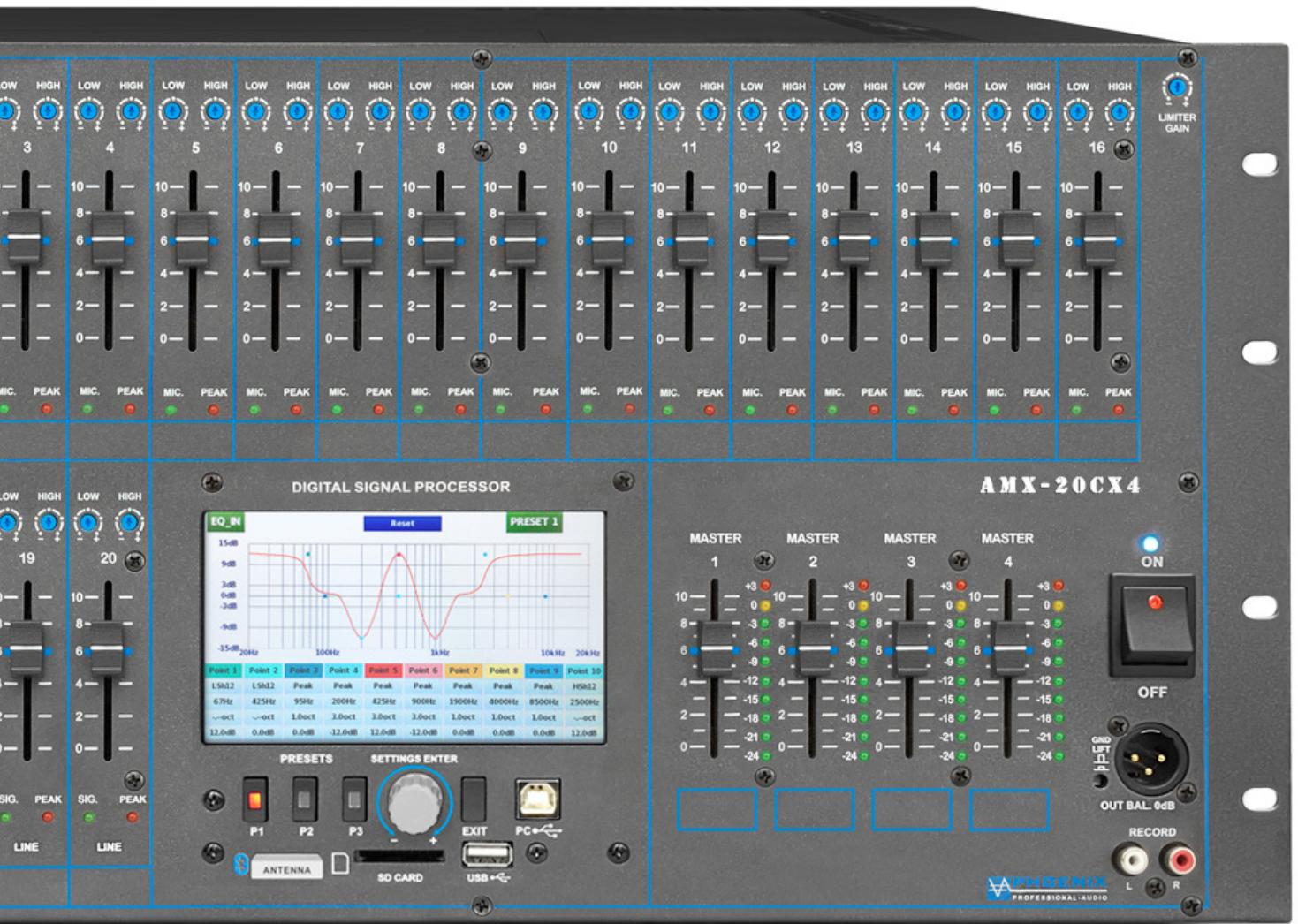
+30
YEARS of
Expertise

Made in EU



AMX-20CX4

DIGITAL DSP AUTOMATIC PREAMPLIFIER



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DOC-250320

Top features:

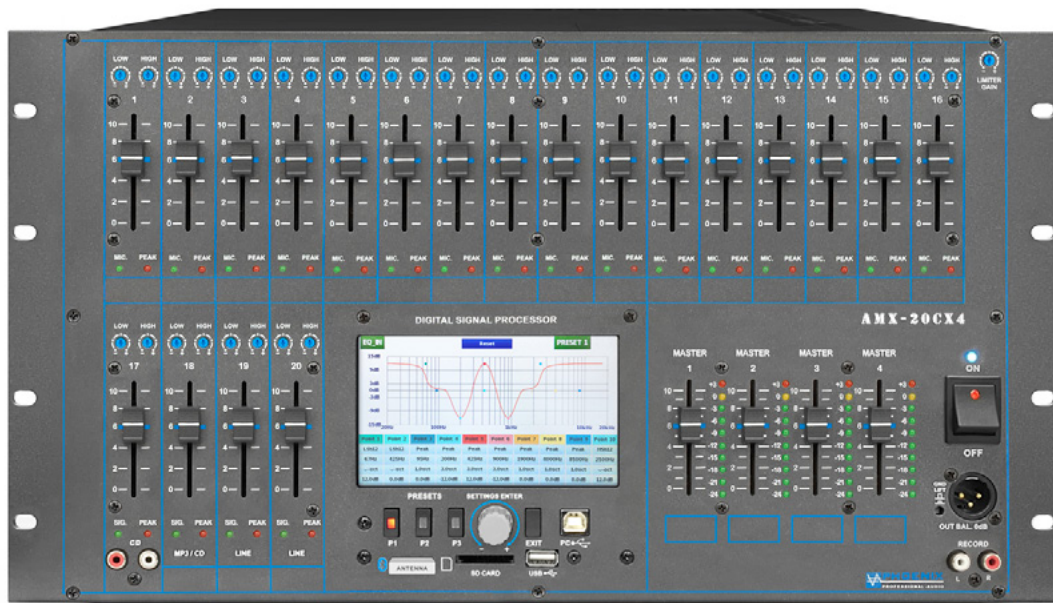


Fig.: Model AMX-20CX4 front side

AMX-20CX4

Digital DSP automatic preamplifier with 5" LC front display

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

Digital automatic preamplifier with 5" front display, DSP4, phantom power, HPF filter (100Hz), 10 input / 5 output PEQs, 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 more. 20 inputs (16 MIC/LINE + 2 RCA + 2 XLR), 4 outputs.

The new digital preamplifier **AMX-20CX4** 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-20CX4 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 text as well as a calendar function and selection button on



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)

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.



The new 5" LC front display makes adjusting the numerous parameters even more intuitive and easier.

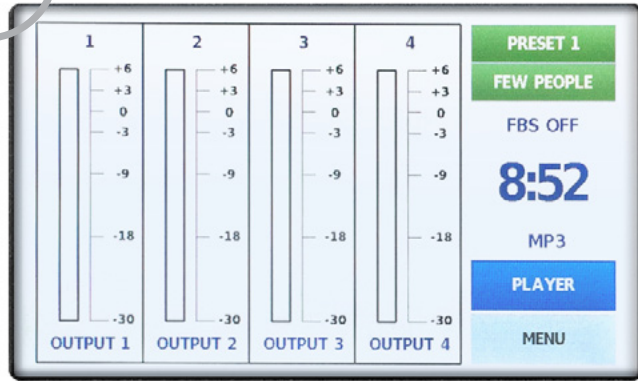


Fig.: AMX-20CX4 Example settings on the 5" front display



- 16 inputs on XLR (MIC-LINE), 4 LINE inputs (LINE 17-18), on RCA (LINE 19-20), on XLR
- 16 inputs with automatic microphone system DIGITAL SIGNAL DELAY FIELD (DSDf)
- 1 x De-esser with FULL/SPLIT and AIR function (Master)
- Compressor-Expander-Limiter
- 10 input parametric EQs
- 4 x 5 output parametric EQs, 4 delays, 4 volume controls & automatic feedback limiter
- 4 DSP MASTER 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 input noise gate & signal limiter (software)
- Two input groups IN-1 (inputs 1-20 with routing to outputs 1-3) and IN-2 (inputs 17-20 with routing to output 4 (switching matrix))
- Freely programmable calendar function
- INFO-OUT (PRESET-2) potential-free relay; additional speaker lines can i.e. be connected to preset 2
- PRE-MASTER & EQ output (signal output before MASTER and audio DSP)
- Optional: PV-CX-PRESET remote control for remote switching between the 3 presets P1/P2/P3

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Fig.: Model AMX-20CX4 rear panel

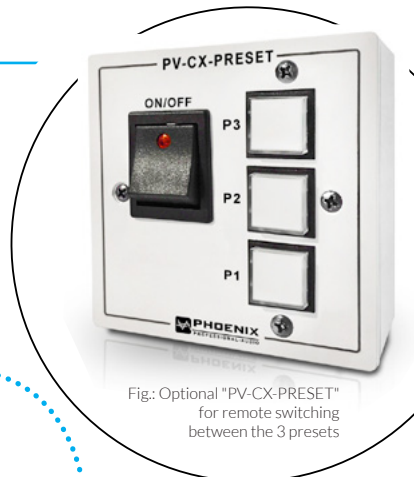
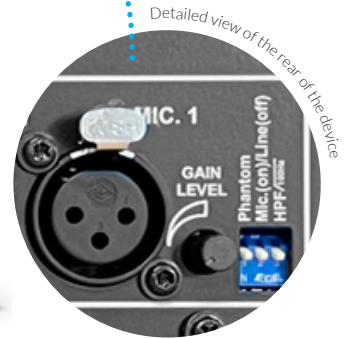


Fig.: Optional "PV-CX-PRESET" for remote switching between the 3 presets



Detailed view of the rear of the device



AMX-20CX4 - Continued from previous page

AMX-20CX4

DIGITAL DSP AUTOMATIC PREAMPLIFIER

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-20CX4 automatic preamplifier offers state-of-the-art technology for a wide range of applications in professional sound reinforcement.

The 16 universal inputs are switchable between MIC and LINE sensitivity via DIP switches. Each of the 16 universal inputs features switchable phantom power and a HPF filter (100 Hz).

The universal inputs are also equipped with a switchable automatic DIGITAL SIGNAL DELAY FIELD (DSDf) microphone system with BARRIER GATE, GATE OPEN and GAIN CONTROL. The release of all microphones being addressed is automatic and controlled and monitored by the processor system (DSDf).

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All unnecessarily open microphone channels are closed.

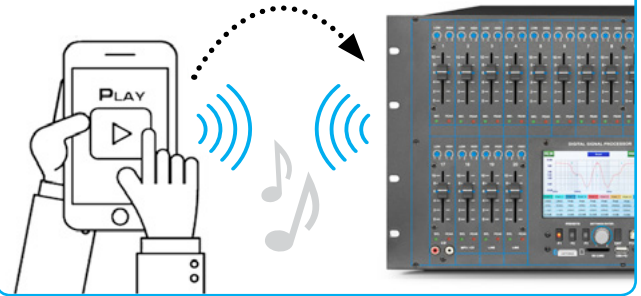
Using the input matrix (DIP switches), the input channels 1-16 can be assigned to the MAINSUM-2 outputs and / or the MAINSUM-3 output.

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



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.



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



Further details - in the online shop



AMX-20CX4 >>

Accessories (optional)

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

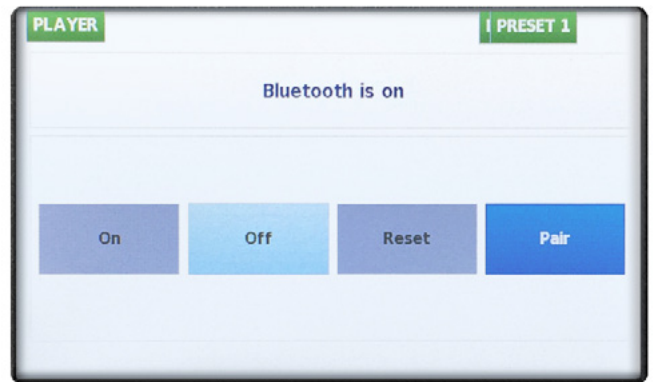


Fig.: AMX-20CX4 Example settings on the 5" front display

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AMX-20CX4 - Continued from previous page

Technical Details	AMX-20CX4
10-point parametric EQ on DSP input	±12dB, 0.05 3oct; 20Hz 21.2kHz
5-point parametric EQ on 4 outputs	±12dB, 0.05 3oct; 20Hz 21.2kHz
Audio input	16 x MIC.-LINE + 2 x RCA + 2 x XLR
Audio output	6 x Process audio OUT
Automatic mixer	DIGITAL SIGNAL DELAY FIELD
Automatic modes	Yes, automatic activation via presets P1, P2, P3, daily/weekly/monthly/yearly programs
Automatic noise gate	Yes
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
Control LEDs	yes
DeEsser	Digital DeEsser with BYPASS function; FULL, SPLIT und AIR function; 800Hz - 8kHz; 0dB - -20dB
Delay on 4 outputs	0 - 85 m
Dimensions	483 mm (W) x 270 mm (H) x 340 mm (D)
Display	5" LC display
Expander / compressor / limiter	yes
Feedback limiter	Adaptive or phase shift
Frequency response	40 Hz to 22,000 Hz @-3dB
Frequency shifter	3 x digital frequency shifters as feedback lock with output select for outputs 1, 2, and 3
Gain (input)	yes
Gain (system)	yes
Gain / filter	yes
Gain control	For all MIC. LINE inputs, analog on the rear panel, digital in the device configurator
Gate attack	yes
Gate level	yes
Gate release	yes
LED indicators	Yes
Line inputs	yes
Line outputs	yes
MIC inputs	yes
Mounting	Integrated 19" mounting brackets
MP3 player	MP3 player with title display; with USB/SD ports; with BT receiver (direct connection (direct connection via Bluetooth-enabled devices)
Operating temperature	-5°C to +40°C
Parametric EQ equalization	yes
PEQ (system)	yes

Phantom power	switchable 48VDC (DIP switch)
Presets	Three PRESETS P1, P2, P3 with select button on the front panel, with plain text
Priority input (LINE)	Yes (conference configuration)
Programmed balanced microphone / line inputs	XLR input: 1-16
- MIC / LINE switch	Yes
- MIC sensitivity	-40dB -15dB
- LINE sensitivity	-15dB +5dB
- Impedance	1.6 kΩ
- HPF filter	100 Hz, 6dB/oct.
- Bass, soprano adjustment	±12dB, 100 Hz, 10 kHz, shelving filter
- Signaling LED	Green LED - channel active, Red LED - overload
PRO-OUT output	Yes
Protection circuits	Limiter, short circuit, overheating, overload, soft start, subsonic
Power supply	230 VAC - 50 / 60 Hz
Subwoofer output	Assigned channel 16 and universal inputs 17-20
REC OUT	Yes
Remote control	Optional: PV-CX-PRESET for remote preset activation
Settings	SETTINGS ENTER control for direct programming/adjustment; visibility of all relevant information on the 5" front display
Signal-to-noise ratio	Adjustable in the device configurator @ NOISE GATE/ON
THD	<0.08%
Tone control	yes
Universal input (mono)	RCA input: 17 and 18; XLR: 19.20
- Input sensitivity	-10dB +12dB
- Impedance	10 kΩ
- Bass, soprano adjustment	±12dB, 100 Hz, 10 kHz, shelving filter
Weight	12.5 kg



ONLINE SHOP *link:*



[AMX-20CX4 >>](#)



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