

AMWL9DSP4 SERIES



9 INPUT DSP PROCESSOR DIGITAL AMPLIFIER

9 Inputs & 4 Outputs

DSP Processor with De-Esser



A modern amplifier designed & tested for church acoustic needs equipped with a DSP signal processor, which enables precise sound properties equalization in spaces with very hard acoustic conditions. The amplifier activates only those microphones that are being used at the moment, which eliminates the influence of the surrounding sound coming out of unnecessarily opened microphone channels. The amplifier is equipped with an MP3 player with remote control, liturgical clock that switches presets according to pre-defined dates and times and in the "DE-ESSER" who eliminate sibilance during speech.

Equipment of Amplifier with DSP processor:

- eight XLR programmable, symmetrical microphone or linear inputs with sensitivity, gain, soprano, and bass control, as well as overdrive signaling;
- choice of two recorded settings (preset for small or big amount of people in a building);
- Automatic reverb elimination;
- RCA (Cinch) universal input with gain, soprano and bass control;
- 10-point input parametric equalizer:
 - frequency control from 20 Hz to 20 kHz,
 - bandwidth control from 0,05 to 3 dB/oct.
 - band depth control from -12 dB to +12 dB;
- 4 symmetrical outputs 0 dB (1 x Jack + 3 x XLR):
 - Gain- control
 - Delay (from 0 to 85m),
 - 5-point parametric equalizer: (frequency control from 20 Hz to 20 kHz, bandwidth control from 0,05 to 3 dB/oct, band depth control from -12 dB to +12 dB);
- DE-ESSER
- MP3-Player USB SD
- Power terminal protection devices: temperature, anti-short-circuit, current, anti high frequency and limiter;
- can be made as a table type or built in a 19" rack cabinet

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GENERAL SPECIFICATION

Technical Data	AMWL-9DSP4D/400	AMWL-9DSP4D/600	AMWL-9DSP4D/1000
Output power (sinus)	400W	600W	1000W
Microphone and linear inputs, programmable, symmetrical and electronic	input XLR: 1-8	input XLR: 1-8	input XLR: 1-8
- MIC/LINE switch	Yes	Yes	Yes
- MIC sensitivity control	-40dB -15dB	-40dB -15dB	-40dB -15dB
- LINE-sensitivity control	-15dB +5dB	-15dB +5dB	-15dB +5dB
- Impedance	1,6k Ω	1,6k Ω	1,6k Ω
- Phantom power	24V DC	24V DC	24V DC
- HPF-Filter	100 Hz, 6dB/oct.	100 Hz, 6dB/oct.	100 Hz, 6dB/oct.
- Timbre control: bass, soprano	± 12 dB, 100 Hz, 10 kHz, shelving filter	± 12 dB, 100 Hz, 10 kHz, shelving filter	± 12 dB, 100 Hz, 10 kHz, shelving filter
- Signalling	green diode - active channel, red diode - clipping	green diode - active channel, red diode - clipping	green diode - active channel, red diode - clipping
Universal input (mono)	input RCA: 9	input RCA: 9	input RCA: 9
- Input sensitivity	-10dB +12dB	-10dB +12dB	-10dB +12dB
- Impedance	10k Ω	10k Ω	10k Ω
- Timbre control: bass, soprano	± 12 dB, 100 Hz, 10 kHz, shelving filter	± 12 dB, 100 Hz, 10 kHz, shelving filter	± 12 dB, 100 Hz, 10 kHz, shelving filter
Limiter	double, peak, on DSP input and on power amplifier	double, peak, on DSP input and on power amplifier	double, peak, on DSP input and on power amplifier
10-point parametric equalizer on DSP Input	± 12 dB, 0,05 3oct. 20Hz 21,2kHz	± 12 dB, 0,05 3oct. 20Hz 21,2kHz	± 12 dB, 0,05 3oct. 20Hz 21,2kHz
5-point parametric equalizer in 4 output channels	± 12 dB, 0,05 3oct. 20Hz 21,2kHz	± 12 dB, 0,05 3oct. 20Hz 21,2kHz	± 12 dB, 0,05 3oct. 20Hz 21,2kHz
Acoustic feedback suppressor	adaptive, phase shifter	adaptive, phase shifter	adaptive, phase shifter
MP3 Player	yes	yes	yes
Delay	0 - 85 m	0 - 85 m	0 - 85 m
De-esser	800Hz - 8kHz 0dB - -20dB	800Hz - 8kHz 0dB - -20dB	800Hz - 8kHz 0dB - -20dB
Non-grounded symmetrical output	100V, 70V, 50V, 8 Ω , 4 Ω	100V, 70V, 50V, 8 Ω , 4 Ω	100V, 70V, 50V, 8 Ω , 4 Ω
Loudspeaker zone	6-step 0-100V	6-step 0-100V	6-step 0-100V
Frequency range	40 - 22 000 Hz	40 - 22 000 Hz	40 - 22 000 Hz
Harmonic distortion	<0,1%	<0,1%	<0,1%
Measurements: width/height/depth [mm]	443 x 135 x 340	443 x 135 x 340	443 x 135 x 340
Weight [kg]	13,5	17,2	19,2

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GENERAL SPECIFICATION

Technical Data	AMWL-9DSP4D/400+200	AMWL-9DSP4D/400+400	AMWL-9DSP4D/600+200
Output power (sinus)	400W + 200W	400W + 400W	600W + 200W
Microphone and linear inputs, programmable, symmetrical and electronic	input XLR: 1-8	input XLR: 1-8	input XLR: 1-8
- MIC/LINE switch	Yes	Yes	Yes
- MIC sensitivity control	-40dB -15dB	-40dB -15dB	-40dB -15dB
- LINE-sensitivity control	-15dB +5dB	-15dB +5dB	-15dB +5dB
- Impedance	1,6k Ω	1,6k Ω	1,6k Ω
- Phantom power	24V DC	24V DC	24V DC
- HPF-Filter	100 Hz, 6dB/oct.	100 Hz, 6dB/oct.	100 Hz, 6dB/oct.
- Timbre control: bass, soprano	± 12 dB, 100 Hz, 10 kHz, shelving filter	± 12 dB, 100 Hz, 10 kHz, shelving filter	± 12 dB, 100 Hz, 10 kHz, shelving filter
- Signalling	green diode - active channel, red diode - clipping	green diode - active channel, red diode - clipping	green diode - active channel, red diode - clipping
Universal input (mono)	input RCA: 9	input RCA: 9	input RCA: 9
- Input sensitivity	-10dB +12dB	-10dB +12dB	-10dB +12dB
- Impedance	10k Ω	10k Ω	10k Ω
- Timbre control: bass, soprano	± 12 dB, 100 Hz, 10 kHz, shelving filter	± 12 dB, 100 Hz, 10 kHz, shelving filter	± 12 dB, 100 Hz, 10 kHz, shelving filter
Limiter	double, peak, on DSP input and on power amplifier	double, peak, on DSP input and on power amplifier	double, peak, on DSP input and on power amplifier
10-point parametric equalizer on DSP Input	± 12 dB, 0,05 3oct. 20Hz 21,2kHz	± 12 dB, 0,05 3oct. 20Hz 21,2kHz	± 12 dB, 0,05 3oct. 20Hz 21,2kHz
5-point parametric equalizer in 4 output channels	± 12 dB, 0,05 3oct. 20Hz 21,2kHz	± 12 dB, 0,05 3oct. 20Hz 21,2kHz	± 12 dB, 0,05 3oct. 20Hz 21,2kHz
Acoustic feedback suppressor	adaptive, phase shifter	adaptive, phase shifter	adaptive, phase shifter
MP3 Player	yes	yes	yes
Delay	0 - 85 m	0 - 85 m	0 - 85 m
De-esser	800Hz - 8kHz 0dB - -20dB	800Hz - 8kHz 0dB - -20dB	800Hz - 8kHz 0dB - -20dB
Non-grounded symmetrical output	100V, 70V, 50V, 8 Ω , 4 Ω	100V, 70V, 50V, 8 Ω , 4 Ω	100V, 70V, 50V, 8 Ω , 4 Ω
Loudspeaker zone	6-step 0-100V	6-step 0-100V	6-step 0-100V
Frequency range	40 - 22 000 Hz	40 - 22 000 Hz	40 - 22 000 Hz
Harmonic distortion	<0,1%	<0,1%	<0,1%
Measurements: width/height/depth [mm]	443 x 135 x 340	443 x 135 x 340	443 x 135 x 340
Weight [kg]	14	15,2	17,8