



The axxent AMV7240DSC is an analog automatic powermixer, with digital processing and sound adjustment. It has been developed for applications in churches, schools, conferences, meetings, etc.

All new is an advanced technology dsp unit that allows detailed sound processing including delays up to 290 ms/99.5 m, multiple equalization: bell, shelving, allpass, variQ, filters with Butterworth, Linkwitz-Riley, Bessel characteristics with 6/12/18/24/30/36/42/48 dB slopes, limiter and gain function, auto level control.

The integrated dsp features two channels. Since the AMV7240DSC is a monaural mixer/amplifier, one channel of the dsp can be applied to the main amplifier output and the second channel for one of the remaining line level outputs to drive separate amplifiers. All functions of the dsp are accessible from the front panel as well as from external computers (Windows) via the usb port with B-type usb connector. Two-line 2x16 character LCD display eases adjustments and preset selection. Critical adjustments are protected by password function.

5 inputs, microphone or line level, and 2 additional inputs for compact disc player, tuner or other high level sources. Accessible to the installer, by removing a small steel plate on the front top of the unit, are various controls such as up to 40 dB gain, high pass filter (150 Hz), compressor, limiter, three band eq, and threshold control of the noise gate.



Master Section

The latter enables automatic mixing function, each with engage/disable function from the front panel. The input section is analog, with Neutrik combo (xlr/phone jacks) with 48V phantom voltage to the microphones.

In addition to the 5 Microphone/line inputs, there are two auxiliary RCA inputs for music sources as well as RCA connector for recording. Music source can be switched to aux 1 or aux 2 and is ducked by microphone/line inputs. Ducking depth and gain aux as well as ducking gate can be adjusted by removing a steel plate as described before.



Input Mix Section

Factory presets are in most applications suitable for standard installations.

Power amplifier section features 240 W rms to the 50/70/100 V outputs as well as the 4 Ohms output. Constant voltage outputs are galvanic isolated by a high quality audio transformer. The power amplifier is driven by the channel 1 of the dsp.

In addition to the power amplifier output, the AMV7240DSC features three xlr line level outputs.

- In its standard factory configuration, line level **output 1** is parallel to the power amplifier input section with identical sound settings.
- Line level **output 2** is driven by the channel 2 of the dsp, allowing complete different sound settings for separate amplifiers/loudspeakers.
- Line level **output 3** in its factory preset receives its level post master, in front of the dsp. I.e. this output is not affected by the dsp control. However, jumpers on the main board allow settings to pre master or after the dsp - same as the output 1.

Input section with line out 3 and recording rca connector



Rear Side

Line level output 1 and 2, amplifier output and a/c power socket



Rear Side

The most important features

- Automatic mixer with built in amplifier, 240 watts.
- Automatic mixer function (gating) switchable separately for each input
- Outputs 4 Ohms and 50/70/100 V transformer isolated
- 5 microphone/line inputs with xlr combo connectors
- 48 V phantom power
- 2 auxiliary inputs, RCA, switchable
- Input limiter, input gain, internally adjustable
- 3 band eq, compressor, internally adjustable
- Input high pass filter 150 Hz, switchable

2 channel dsp with advanced features such as:

- Delay up to 99.5 m/290 ms
- Input routing
- Multiband eq with bell, hi-shelf, lo-shelf, notch filter
- Butterworth, Linkwitz/Riley/Bessel Filters
6/12/18/24/30/36/42/48 dB slopes
- Auto level, limiter, gain.
- Front usb connector for connection to Windows computer
- Current sound control software supplied on an usb stick.
- Front preset selector with display allows all dsp control settings
- Password protection for sensitive settings.
- 20 presets possible
- Default factory preset for a start



Specifications

Output power

200 W sine wave, 240 W rms

Frequency response

35...20,000 Hz

Total Harmonic Distortion

<0.15%

Signal to noise ratio

mic inputs >68 dB, aux inputs > 98 dB

Power output

50/70/100 V transformer isolated, 4 Ohms direct

XLR outputs

+6 dB, balanced

Inputs

2 aux, unbalanced rca connectors, switchable,
5 mic/line inputs, 3 pin xlr combo connectors

Input sensitivity

mic/line 0.7 mV - 460 mV/2.6 kOhms;
aux inputs 7 mV - 4.6 V/26 kOhms

Phantom power

48 V/10 mA, internally switchable on each input

Power consumption

40 VA idle, full load 370 VA

Mains voltage

230 V AC

Mains connector

IEC, detachable

Dimensions

430x88x335 mm without rack ears.
Width with rack ears 483 mm

Weight

net 10.15 kg, Shipping 13 kg



Architects' Specifications

Automatic mixer with integrated amplifier; typical applications: churches, schools, conferences, etc.; 5 balanced xlr/phone combo inputs (mic-/line, cd, computer/tuner, etc.); internal separate presets per channel for gain, hi/mid/low equalization, compressor and gate; all mic-/line inputs with automatic mix function, separately switchable on front side; 48 V phantom power, limiter circuit; 240 watts output power at 50/70/100 v constant voltage and low impedance. Constant voltage transformer isolated; recording output. Digital sound processing for the master sound control with signal delay time up to 290 ms/99.5 m. Three xlr outputs for connection to separate amplifiers for additional loudspeakers or induction loop amplifiers. Digital sound processing adjustments directly on the mixer/amplifier and via usb connector on connected Windows computers. 20 presets for various projects. Password protection of sensitive settings. 19" steel rack with 2 RU. The automatic mixer/amplifier should be the model axxent AMV7240DSC.

Block diagram DSP



Block diagram AMV7240DSC

