

# PLN-2AIO120 BGM/Paging System

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Invented for life



- ▶ All-in-one solution for background music and paging
- ▶ DVD/CD-player for video and audio
- ▶ Supports MP3, JPEG, and multi-format video outputs
- ▶ FM/AM tuner with 10 presets and digital control
- ▶ Dual-zone 120 W mixer amplifier with volume control per zone

The Plena BGM/paging system is the versatile all-in-one solution to cover all needs for background music (BGM), making announcements and paging people. This high-performance yet affordable unit is very easy to install and operate.

It is typically used in shops, supermarkets, restaurants, bars, schools, canteens, gyms, garages and other places where BGM creates the right atmosphere, and also amplified speech needs to be heard clearly.

## Functions

### DVD/CD Player

The DVD/CD player provides up to a whole workweek of high quality uninterrupted music playback from a single MP3 DVD. It supports music organized on a disk in multiple folders. The player will automatically search and play all playable formats on a disk, and has repeat mode. Navigation is done on the multi lingual on screen display.

The unit plays normal audio and video DVD/CDs, as well as long-play MPEG2, MP3 encoded CDs. It can also play MP3s and display JPEGs on CD-R, DVD-ROM, DVD-R. MP3-files with bit-rates from 32 kbps to 320 kbps, mono/ stereo/joint-stereo, and both continuous bit-rates (CBR) and variable bit-rate (VBR)

are supported. Component, composite, and S-Video connectors are available for video output. The unit plays PAL and NTSC content in progressive scan as well as interleaved.

The disc part of the unit also has a Toslink optical output that supports S/P DIF as well as DST and Dolby Digital. It is possible to output S/P DIF regardless of the source and choose left/right, surround channels of Low frequency effects on this output.

Basic controls are on the unit itself, while navigation and configuration is done with the remote control and the on screen display. The unit supports most major languages, and it is possible to set regional preference, such as subtitle language preference.

### FM/AM Tuner

The digitally controlled FM/AM tuner uses a frequency synthesizer for accurate capture of radio stations and has 10 presets for each waveband to store favorite programs. An auxiliary (music) input and tape output provide connections for external equipment.

### Microphone Inputs

The announcement part of the unit has three balanced microphone inputs. Microphone input 1 has a DIN socket on the rear for a priority microphone (e.g. the

LBB 1950/00) with selectable priority, a two-tone chime to precede a priority announcement, a speech filter, phantom power. It also has a phone jack connector on the front with selectable VOX activation for a dynamic microphone, such as the LBC 2900/15, as well as presets for music ducking level and chime volume. Microphone inputs 2 and 3 have XLR sockets with selectable phantom power, and are mixed with the BGM. All microphone inputs and the music source have their own volume control, with a shared bass and treble tone control and a shared master volume control.

### Outputs

The powerful 120 W output section has two transformer-isolated, 100 V constant voltage outputs for driving 100 V-loudspeakers in two separate zones. The 100 V-technique reduces line losses on longer distances and allows easy parallel connection of multiple loudspeakers. Both zones can be selected individually from the front panel, and the output level for each zone can be individually set. Each zone also has a low-voltage output for connecting 8 ohm, transformerless loudspeakers (consumer-type). There is a separate, 100 V call-only output for addressing an area where announcements are necessary, but BGM is not desired. A voltage-free call-active contact is available for overriding local volume controls during priority calls, and for other purposes. An LED meter monitors the output.

### Controls and indicators

#### Front

- Power on/off
- Disc eject key
- Disc previous key
- Disc play key
- Disc next key
- Disc stop key
- Disc display
- Disc repeat key
- Disc pause key
- Tuner memory keys 1-5 and 6-10
- Tuner shift key to select memory 1-5 or 6-10
- Tuner program key
- Tuner scan key
- Tuner FM/AM selection key
- Tuner frequency up/down keys
- Tuner display

#### Back

- Mains voltage selection
- Chime selection DIP switch
- Phantom power switch

### Interconnections

#### Back

- FM antenna input
- AM antenna input
- Tape output (mono, 2 x)
- Aux input (stereo converted to mono)
- Call only output
- Zone 1 output

- Zone 2 output
- Call active output
- Component video output (3 x)
- Composite video output
- Digital optical output
- Earth connection screw
- Mains connection

### Certifications and approvals

Safety	acc. to EN 60065
Immunity	acc. to EN 55103-2
Emission	acc. to EN 55103-1

Region	Certification
Europe	CE

### Parts included

Quantity	Component
1	PLN-2AIO120 PLENA BGM/Paging System
1	Power cord
1	Remote control
1	Installation and User Instructions
1	Plena CD

### Technical specifications

#### Electrical

Mains power supply	
Voltage	230/115 VAC, ±10%, 50/60 Hz
Inrush current	8 A @ 230 VAC / 16 A @ 115 VAC
Max power consumption	400 VA
Max/rated output power	180 W / 120 W
Performance	
Frequency response	60 Hz to 18 kHz (+1/-3 dB @ ref. rated output)
Distortion	<1% @ rated output, 1 kHz
Bass control	-8/+8 dB @ 100 Hz
Treble control	-8/+8 dB @ 10 kHz
Mic input	
Connectors	5-pin DIN, balanced, 6.3 mm jack
Sensitivity	1 mV
Impedance	>1 kohm
S/N (flat at max volume)	63 dB
S/N (flat at min volume/muted)	75 dB

Headroom	25 dB
Speech Filter	-3 dB @ 315 Hz, high-pass, 6 dB/oct
Phantom power supply (on 5-pin DIN)	12 V
VOX (on 6.3 mm jack)	Attack time 200 ms, release time 2 s, ducking level adjustable
<b>Mic input</b>	2 x
Connector	3-pin XLR, balanced
Sensitivity	1m V
Impedance	>1 kohm
S/N (flat at max volume)	63 dB
S/N (flat at min volume/ muted)	75 Db
Headroom	25 dB
Phantom power supply	12 V
<b>Auxiliary input</b>	
Connector	Cinch, converted to mono
Sensitivity	200 mV
Impedance	22 kohm
S/N (flat at max volume)	70 dB
S/N (flat at min volume/ muted)	75 dB
Headroom	25 dB
<b>Tuner</b>	
Tuning range	F M 87.5 to 108 MHz (Europe, 50 kHz; Asia / USA, 100 kHz)
	A M 531 to 1602 kHz(Europe, 9 kHz) 530 to 1610 kHz(Asia / USA, 10 kHz)
FM sensitivity	2 µV (26 dB S/N)
AM sensitivity	30 µV (20 dB S/N)
Frequency response	30 Hz to 15 kHz (+1 / -3 dB, FM)
Distortion	<1%
S/N	>63 dB (1 mV, FM)
<b>Tuner output</b>	1 x
Connector	Cinch, (RCA) stereo
Nominal level	200 mV
<b>DVD-Player</b>	
Frequency response	20 Hz to 20 kHz (+1/-3 dB)
Distortion	<0.1%

S/N	>96 dB
<b>General</b>	
MP3 bit rates	CBR 32 kbps to 320 kbps and VBR, mono and stereo
Data buffer shock protection	16 MB
<b>DVD/CD player output</b>	1 x
Optical output	TOSlink (PCM, multi channel)
<b>Supported Formats</b>	DVD, CD, (re-)writables MP3, MP4, JPEG
<b>Video outputs</b>	
Component connectors	3 x cinch
Composite connector	1 x cinch
S-video connector	1 x mini-DIN
<b>General</b>	
Data buffer	8 MB (shock protection)
Lifetime	>10.000 CD play cycles
Max number of titles	999 (MP3), 99 (audio CD)
<b>Tape output</b>	
Connector	Cinch, 2x mono
Nominal level	350 mV
Impedance	1 kohm
<b>Loudspeaker outputs</b>	6 x 2
Connector	Screw, floating
100 V outputs	120 W rated (all zones together)
Zone output attenuation taps	100/70/50/35/25/18 V for 0/-3/-6/-9/-12/-15 dB (120/60/30/15/8/4 W)
8 ohm outputs	18 V (40 W rated per zone)
<b>Call-active</b>	1 x
Connector	Screw
Relay	Voltage free, max 100 V, 2 A
<b>Mechanical</b>	
Dimensions (H x W x D)	144 x 430 x 320 mm (19" wide, 3U high)
Weight	Approx. 11.6 kg
Mounting	Standalone (rack mounting not recommended)
Color	Charcoal

**Environmental**

Operating temperature	-10 °C to +45 °C (14 °F to +113 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	<95%
Acoustic noise level of fan	<35 dB SPL at 1 m, temperature controlled

**Ordering information****PLN-2AIO120 BGM/Paging System**

all-in-one solution to cover background music (BGM),  
announcements and paging people

Order number **PLN-2AIO120**

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