**FreeSpace IZA 2120-HZ integrated zone amplifier**

ARCHITECTS’ & ENGINEERS’ SPECIFICATIONS

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The mixer/amplifier shall employ Class-D amplification together with a digital signal processing architecture running at 48 kHz / 24-bit. The mixer/amplifier shall incorporate a switch-mode power supply allowing normal operation from AC outlets ranging from 100–240 V (±10%) at 50/60 Hz. The amplifier shall have an IEC 320-C14 electrical power inlet and shall be equipped with a removable power supply cord. A power switch shall be located on the front panel. The product shall include protection from shorted loads and general overheating. The mixer/amplifier’s physical size shall be 1RU in height by 1RU in width and be capable of rack mounting. The product shall have venting with a single fan, continuous left-to-right airflow. Each output channel shall have output trim controls.

The mixer/amplifier shall have two output channels with a frequency response of 55 Hz to 20 kHz (+0/–3 dB) and drive 70/100 V distributed audio systems. The mixer/amplifier shall have THD+N at rated power less than or equal to 0.3%. Output connections shall be made via 2-pin touch-proof Euroblock connectors.

The mixer/amplifier shall meet or exceed the following performance specifications: channel separation (crosstalk) less than or equal to -60 dB below rated power at 1 kHz and dynamic range of 88 dB. The mixer/amplifier shall incorporate 3 line-level inputs (two RCA stereo, one 3.5 mm stereo) and one microphone input for paging applications. Two of the line level inputs shall be selectable via a switch on the front panel while the third input shall override line input channels upon connection. The nominal input sensitivity shall be 0 dBV for line level inputs and -40 dBV for microphone inputs. The microphone input shall be mounted on the rear, support dynamic microphones and select telephone systems with PTT switching. The microphone input shall bypass master volume control via a selector switch on the rear panel. All inputs shall have individual input gain controls with the exception of the 3.5 mm priority input connector on the front panel. Three LEDs shall be visible on the front panel – one (blue) for power/standby indication, the second (red) for input level over 9 dBV, and the third (red) for output level over -2 dBFS. The mixer/amplifier shall have an auxiliary line-output via two RCA connectors. The digital signal processor shall enable a user-selectable loudspeaker preset (High-Pass Filter (HPF), FreeSpace FS2C/SE/P, FS4CE/SE, DesignMax DM2C-LP/S, and SUB (55–100 Hz)) to be applied to the loudspeaker output and (via selector) the auxiliary output connectors. The front panel shall also have user-accessible treble, bass and master volume controls. The mixer/amplifier shall have two remote control inputs intended for use with the Bose Professional Volume control with A/B switch user interface or third-party switches/10k ohm linear taper potentiometers. The mixer/amplifier shall offer a master mute connection for use with external dry contacts to mute output of the amplifier and auxiliary output.

The mixer/amplifier chassis shall be constructed of painted steel. The dimensions of the mixer/amplifier shall allow for 19.0-inch (483 mm) EIA standard rack mounting. The mixer/amplifier shall be 1.7 inches (44 mm) in height, 19.0 inches (483 mm) in width and 12.8 inches (324 mm) in depth. The mixer/amplifier shall weigh 9.0 pounds (4.1 kg).

The mixer/amplifier shall be the FreeSpace IZA 2120-HZ integrated zone amplifier.