

EVID 4.2 Surface mount speaker 4"

- Line-array enhanced coverage control
- Magnetically shielded
- Strong-Arm-Mount for easy, flexible aiming
- Transformer versions
- Weather resistant - Conforms to Mil Spec 810 and IEC 529 IP 34



The EVID 4.2 is a very compact full range loudspeaker ideal for indoor and outdoor applications requiring high-quality sound. Its shape and size make it nearly invisible for use in background/foreground music systems for restaurants, bars, patios, retail, and other applications.

The 4.2's three-dimensional elliptical baffle symmetrically locates the 1" Ti high frequency element with a Coherent Coverage Waveguide in front of, and between the 4" low frequency drivers. This careful shaping, location, and 10° splaying of the lf units provides coverage control by the resulting line array. Lobing is controlled by physically "shadowing" the lf transducers from each other over the bandwidth they would normally exhibit interference. EVID's mounting system provides greater range of aiming angles in both horizontal and vertical planes than other types. The curved grille features designed-in weather resistance and a hidden leash for safety.

All models are available in black or white, and can easily be painted to match the décor. Transformer versions are also available for constant voltage systems.

Technical specifications

Frequency range (-10 dB) (Hz) ¹	65 Hz – 20,000 Hz
Power handling (program) (W) ²	200 W
Axial sensitivity (dB SPL 1W/1m) ³	90 dB SPL 1W/1m
Nominal impedance (Ω)	8 Ω
Maximum SPL (continuous) (dB)	110 dB
Maximum SPL (peak) (dB)	116 dB
Coverage angle HxV (°) ⁴	120° x 80°

LF transducer size (in)	4 in
LF transducer size (mm)	90 mm
HF transducer size (in)	1 in
HF transducer size (mm)	25 mm
Protection	Full system
Connector type	Phoenix (removable screw connector); 4-pin Phoenix
Material	Plastic (ABS) (paintable)
"t"-version wattage taps	70 V: 3.25 W 70 V/100 V: 7.5 W, 15 W, 30 W, 8 ohm Bypass
Dimensions (H x W x D) (in)	9.2 in x 5.1 in x 6.5 in
Dimensions (H x W x D) (mm)	234 mm x 127 mm x 165 mm
Weight (lb)	8.50 lb
Weight (kg)	3.90 kg
Shipping weight (lb)	19 lb
Shipping weight (kg)	8.60 kg
Included accessories	SAM, hex key

¹Half space (wall mounting)

²Continuous program rating: 3 dB greater than continuous pink noise rating (IEC-shaped pink noise with 6dB crest factor)

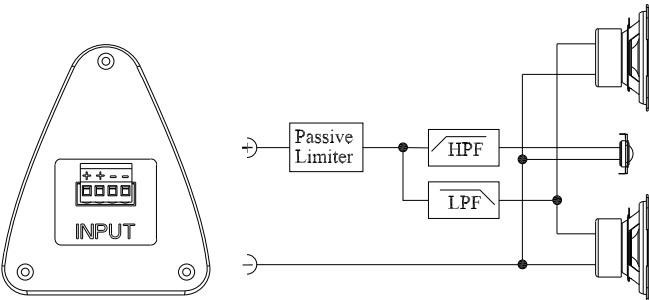
³Average half space (wall mounting)

⁴When mounted with long axis in vertical plane

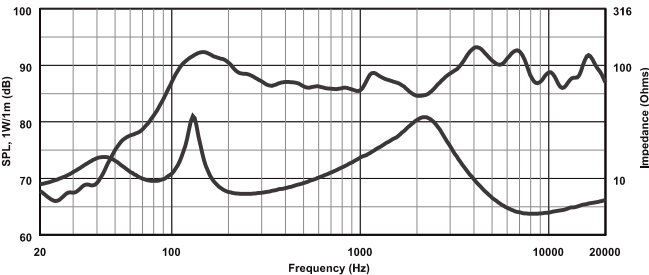
Architectural and engineering specifications

The loudspeaker shall be a two-way system consisting of two 4-inch (102 mm) low-frequency transducers, 1-inch (25 mm) high-frequency transducer with a Coherent Coverage Waveguide, and frequency-dividing network installed in a vented, line array enclosure. The network shall include a passive limiter for both the low frequency and high frequency transducers. The loudspeaker system shall meet the following performance criteria: Power handling, 200 watts of EIA RS-426A continuous pink noise (6 dB crest factor); Frequency response, 65 Hz - 20 kHz (-10 dB from rated sensitivity); Pressure sensitivity, 90 dB at one watt, 200 Hz - 10 kHz at one meter; Impedance, 8 ohms nominal, 6 ohms minimum. The high frequency transducer shall drive a waveguide to evenly cover 120° horizontally by 80° vertically. The enclosure shall be molded of acrylic butyl styrene. The enclosure shall be 12.2-inch (310 mm) high, 6.9-inch (175 mm) wide, 8.5-inch (216 mm) deep. The finish shall be a paintable black or white. The grille shall be zinc plated, powder coated for corrosion resistance, and restrained with a safety leash. The loudspeaker shall be adjustable over a range of 120° horizontally and 80° vertically. The support bracket shall be low profile and integral with the enclosure. The system shall be weather resistant to MIL Spec 810 and IEC 529 IP 34 test conditions. The surface mount loudspeaker shall be the Electro-Voice® EVID model 4.2.

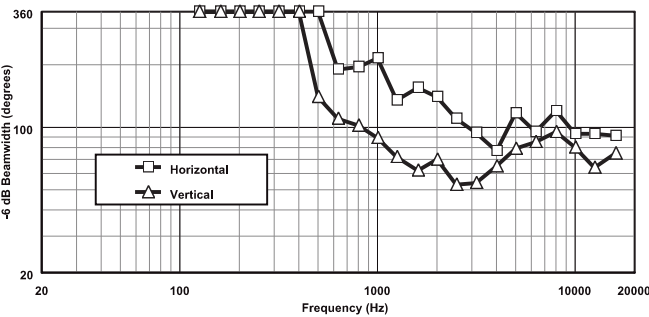
Block diagram



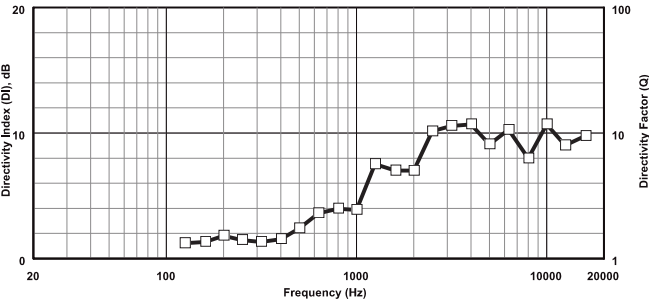
Frequency response



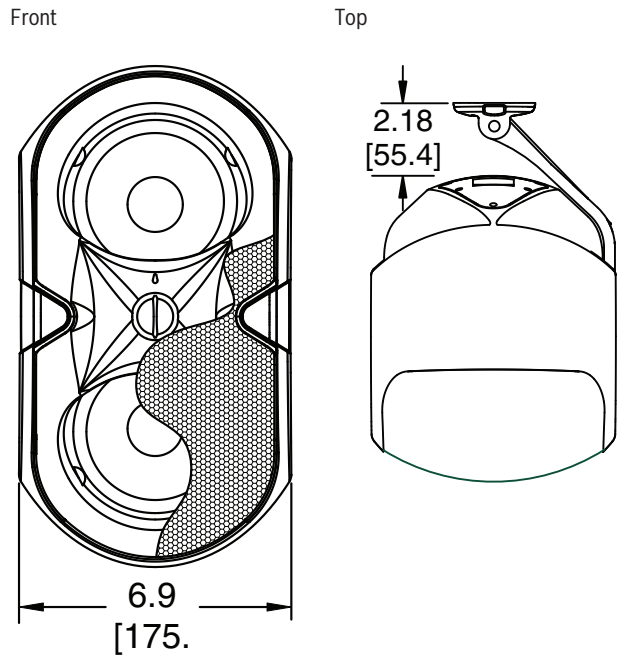
Beamwidth



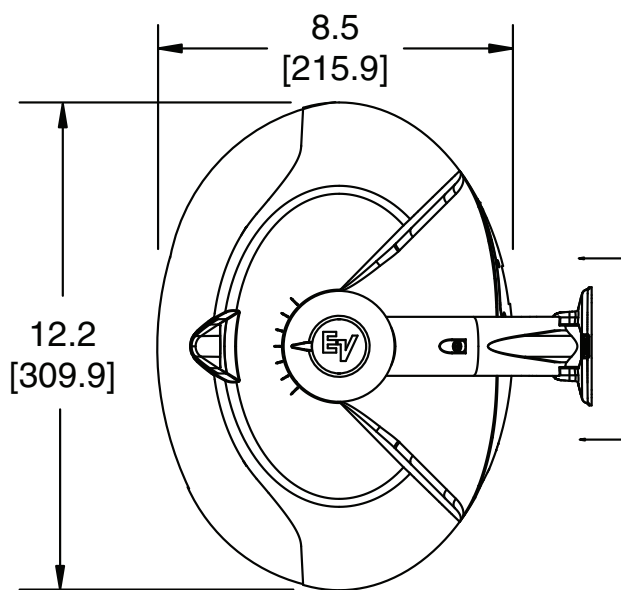
Directivity



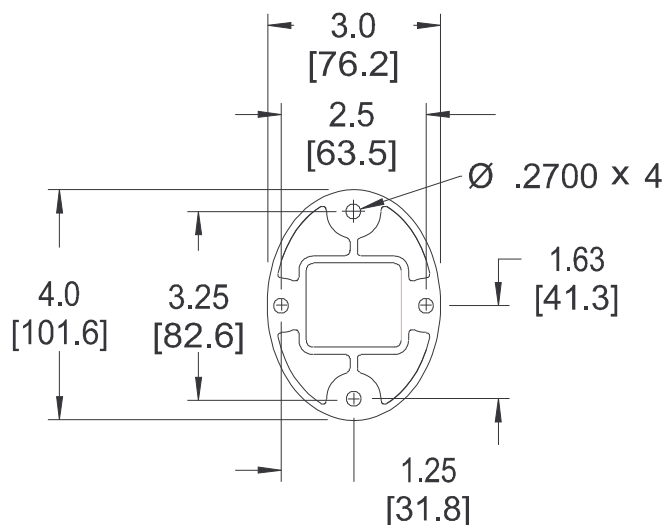
Dimensions



Side



Wall plate



View A-A

Ordering information

EVID 4.2 Surface mount speaker 4" 8 Ohm bk pair
 2x4" / 1", 100 W, 90 dB, 120° x 80°, in/outdoor, black, price per pair
 Order number **EVID 4.2 | F.01U.117.528**

EVID 4.2W Surface mount speaker 4" 8 Ohm wh pair
 2x4" / 1", 100 W, 90 dB, 120° x 80°, in/outdoor, white, price per pair
 Order number **EVID 4.2W | F.01U.117.529**

EVID 4.2T Surface mount speaker 4" 70/100V bk pair
 100 V version of 4.2, (7,5/15/30W), black, price per pair
 Order number **EVID 4.2T | F.01U.117.530**

EVID 4.2TW Surface mount speaker 4" 70/100V wh pair
 100 V version of 4.2W, (7,5/15/30W), white, price per pair
 Order number **EVID 4.2TW | F.01U.117.531**

EVID 12.1 EVID 12.1 BLACK SUB LOUDSPEAKER SYSTEM
 12-inch subwoofer, black
 Order number **EVID 12.1 | F.01U.117.536**

EVID 12.1W EVID 12.1 WHITE SUB LOUDSPEAKER SYSTEM
 12-inch subwoofer, white
 Order number **EVID 12.1W | F.01U.117.537**

Accessories

HS-3 HS-3 HRZNTL DSK STND,EVID 3.2/4.2 SER,PR
 Horizontal mount desk stand for EVID 3.2 and EVID 4.2
 Order number **HS-3 | F.01U.117.553**

VS-4 VS-4 VERTICAL MOUNT DESK STAND FOR EVID
 Vertical mount desk stand for EVID 4.2
 Order number **VS-4 | F.01U.117.551**

AB-ZE-LB Array bracket adaptor for 2 or 4 ZX1i
 Array bracket adaptor for 2 or 4 ZX1i or EVID systems, black
 Order number **AB-ZE-LB | F.01U.274.382**

TC-4B Terminal cover 4" black
 Weatherized terminal cover for EVID 4.2; black
 Order number **TC-4B | F.01U.117.559**

TC-4W Terminal cover 4" white
 Weatherized terminal cover for EVID 4.2, white
 Order number **TC-4W | F.01U.117.560**



<https://www.electrovoice.com>

U120:1M Mixer amplifier 120W, 1 channel



- Versatile inputs: 4 inputs - 2 aux and 2 mic/line options with phantom power support
- Full power output supporting 4Ω, 8Ω, 70 V and 100 V
- EMG override input, ensuring critical messages are heard clearly
- Contact override for call station with 2-tone chime for attention-grabbing alerts
- Selectable 120 Hz high-pass filters to customize audio output and eliminate unwanted low-frequency noise
- Space-saving compact ½ rack design, providing versatility without compromising performance
- Voice-over ducking that automatically adjusts background music volume for clear voice communication
- Remote power OFF (Stand by), enhancing energy efficiency

Introducing the U120:1M, a 120 W mixer amplifier designed to cater to the demands of small to medium-sized installations, where paramount considerations include quality, performance, and unwavering reliability. This mixer amplifier is ideal for background music and crystal-clear voice announcement applications, making it a perfect fit for diverse environments such as bars, restaurants, retail outlets, educational institutions, houses of worship, museums, galleries, transport hubs, and conference centers. Thanks to its compact size, standing just one rack unit high and half rack wide, the U120:1M presents numerous installation possibilities, even in space-constrained settings. Included brackets facilitate both single and dual rack-mount configurations, while desktop and under-counter installations are equally viable. When rack-mounted side by side, two

amplifiers can seamlessly inhabit a single rack unit, optimizing space utilization and effectively doubling both channel count and output power.

Functions

Advanced amplification technology

Incorporates class-D amplification topology for superior energy efficiency, product quality, and reliability compared to traditional linear power supply and class-AB amplification.

Compact form factor

Half rack, 1U enclosure ensures space-saving installation without compromising performance.

Full power at low and high impedance

Supports 70V, 100V, 4Ω, and 8Ω speaker systems, offering versatility in system design.

Phantom power

Facilitates microphone operation with power supplied to both microphone inputs.

VOX Ducking

Prioritizes voice input, enhancing clarity during announcements or speeches.

Remote power

Enables remote power ON/OFF functionality via contact closure, enhancing operational convenience.

Bass and treble adjustment

Allows fine-tuning of audio output with dedicated bass and treble adjustment controls.

High-pass filter

Available 120 Hz high-pass filters to tailor audio output according to application requirements.

Flexible mounting options

Offers versatile mounting possibilities including rack mount, side-by-side rack mount, table-top, or under-table mounting, facilitated by included brackets and accessories.

Emergency input

Features 100 V and Line In emergency input with level selection, ensuring critical messages are delivered clearly.

Protection

Equipped with overload and short circuit protection, along with a limiter to safeguard both the amplifier and loudspeaker against accidental overdriving. A temperature-controlled fan ensures optimal cooling without generating acoustic noise at lower output levels.

Accessible front controls

Conveniently adjust output gain, input gain per channel, and bass and treble settings directly from the front panel for effortless customization.

Technical specifications

Electrical

Mains power supply	
U120:1M	
Voltage	100 VAC - 240 VAC, 50/60 Hz
Power consumption	
• Standby (Remote OFF active)	1.25 W
• Idle mode LoZ amp mode (4 Ω / 8 Ω)	9 W / 12 W

Mains power supply	
• Idle mode HiZ amp mode (70 V / 100 V)	14 W / 18 W
• 1/8 rated output power	40 W
Remote power (ON/OFF Stand by)	2-pin, Eurostyle, contact closure

Performance	
Frequency response, -3 dB ref. 1 kHz	
• Any input to output	<20 Hz – 20 kHz
• EMG input to output	<20 Hz – 15 kHz
• Any input to LINE output	<10 Hz – 60 kHz
Distortion	<0.5% @rated output power, 1 kHz
Output stage topology	Class D
Equalization	
• Bass shelving	±12 dB / 100 Hz
• Treble shelving	±12 dB / 10 kHz
Filter	
• LO-CUT permanently	f=20 Hz, 12 dB/oct.
• HI-PASS (HPF) switchable, can be activated	f=120 Hz, 12 dB/oct.

General	
Front status LEDs	
• Protect (Red)	Protection
• Peak (Red)	1 dB before clip (input and output)
• Signal (Green)	Input and output signal
• Call (Green)	EMG / priority trigger / Vox input active
• Power (Green)	Power on condition
DIP switches	EMG (HiZ/Line level), Two-tone Chime (ON/OFF), HPF (120 Hz), VOX (ON/OFF), Phantom power (+48 V/OFF) Output (HiZ/LoZ), Amp mode (70 V/100 V; 4Ω/8Ω)

Protections	
• Amplifier	Audio limiters, high temperature, DC, HF, short circuit, over current protection
• Switching mode power supply	Mains over/under voltage protection, inrush current limiter, mains over current, high temperature
• Remote power OFF	Contact closure

Inputs	
Number of inputs	2 mic/line, 2 aux, EMG (priority input)
Sensitivity with all level controls in max. position	
• MIC / Call station	-68 dBu (300 µV)
• AUX (only L or R)	-11.8 dBu (200 mV)
• AUX (Stereo) (L and R)	-17.8 dBu (100 mV)
Maximum input level	
• LINE / MIC	+7.5 dBu
• AUX (L or R)	+22 dBu
• AUX (L and R)	+16 dBu
• EMG (EMG line)	+11.5 dBu
• EMG (HiZ 100 V)	+44.5 dBu
Input impedances	
MIC / Call station	10 kΩ
AUX	4.7 kΩ
EMG (Line)	>15 kΩ
EMG (HiZ)	>470 kΩ
LINE / MIC1 input	
Type	LINE / MIC, call station, contact override with chime
Connector	3-pin XLR, balanced / 5-pin Eurostyle, balanced (3 pin for input, 2 pin for trigger)
Dynamic range	60 dB (Mic gain min — max)
Equivalent input noise	<-115 dBu
Phantom power supply, switchable	48 V DC
LINE / MIC2 input	
Type	Mic/Line, VOX ducker override
Connector	3-pin XLR, balanced
VOX Ducking	Ducking control 0 dB — 45 dB
VOX Threshold	-60dBu — +8 dBu, adjustable via MIC2 level control
Dynamic range	60 dB (Mic gain min — max)
Equivalent input noise	<-115 dBu
Phantom power supply, switchable	48 V DC
AUX1 input	
Type	Line
Connector	RCA (cinch), stereo converted to mono, unbalanced
AUX2 input	
Type	Line
Connector	RCA (cinch), stereo converted to mono, unbalanced
EMG Input	
Type	Line; 100 V
Connector	2-pin, balanced

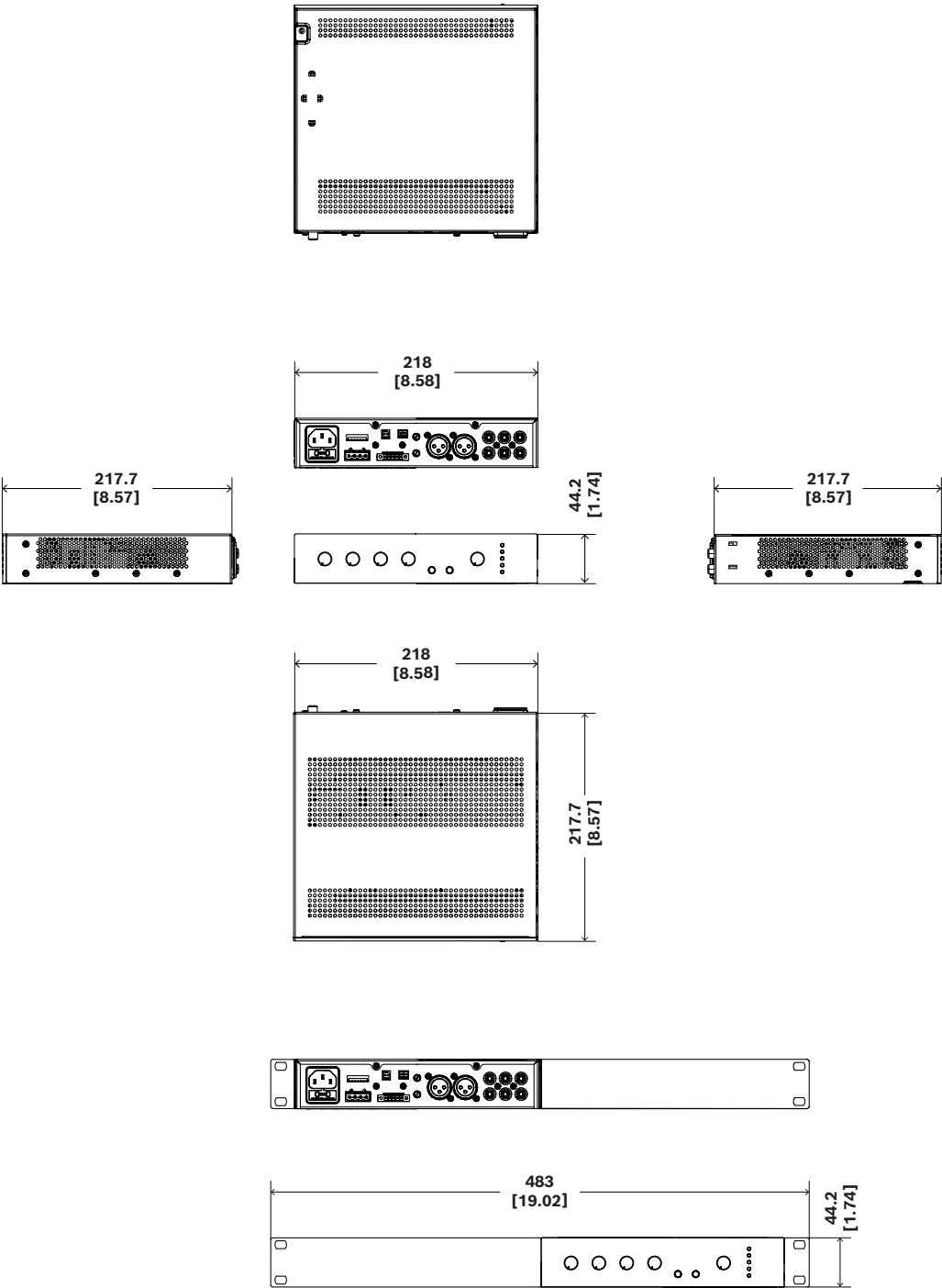
Loudspeaker output				
Connector	4-pin Eurostyle (2 pin for LoZ, 2 pin for HiZ)			
Output power according IHF-A-202 (Dynamic-Headroom, burst 1kHz / 20ms on / 480ms off / low level -20dB)	120 W			
Max output voltage, 1 kHz, THD=0.5%, no load	4 Ω	8 Ω	70 V	100 V
	22 V _{RMS}	32 V _{RMS}	71 V _{RMS}	102 V _{RMS}
Signal to noise ratio (A-weighted, ref. to rated output power)	>100 dB			

Mechanical

Enclosure	
IEC protection class	Class I (grounded)
Dimensions (HxWxD), without accessories	44.2 mm x 218 mm x 217.7 mm (1.74 in x 8.6 in x 8.57 in)
Color in RAL	RAL 9017 Traffic black
Net weight (without accessories)	1.9 kg (4.18 lb)
Net weight (with accessories)	2.4 kg (5.29 lb)
Shipping weight	2.8 kg (6.17 lb)
Mounting	Stand-alone; 19" rack; rack side-by-side; half 19" rack; table-top; under-table

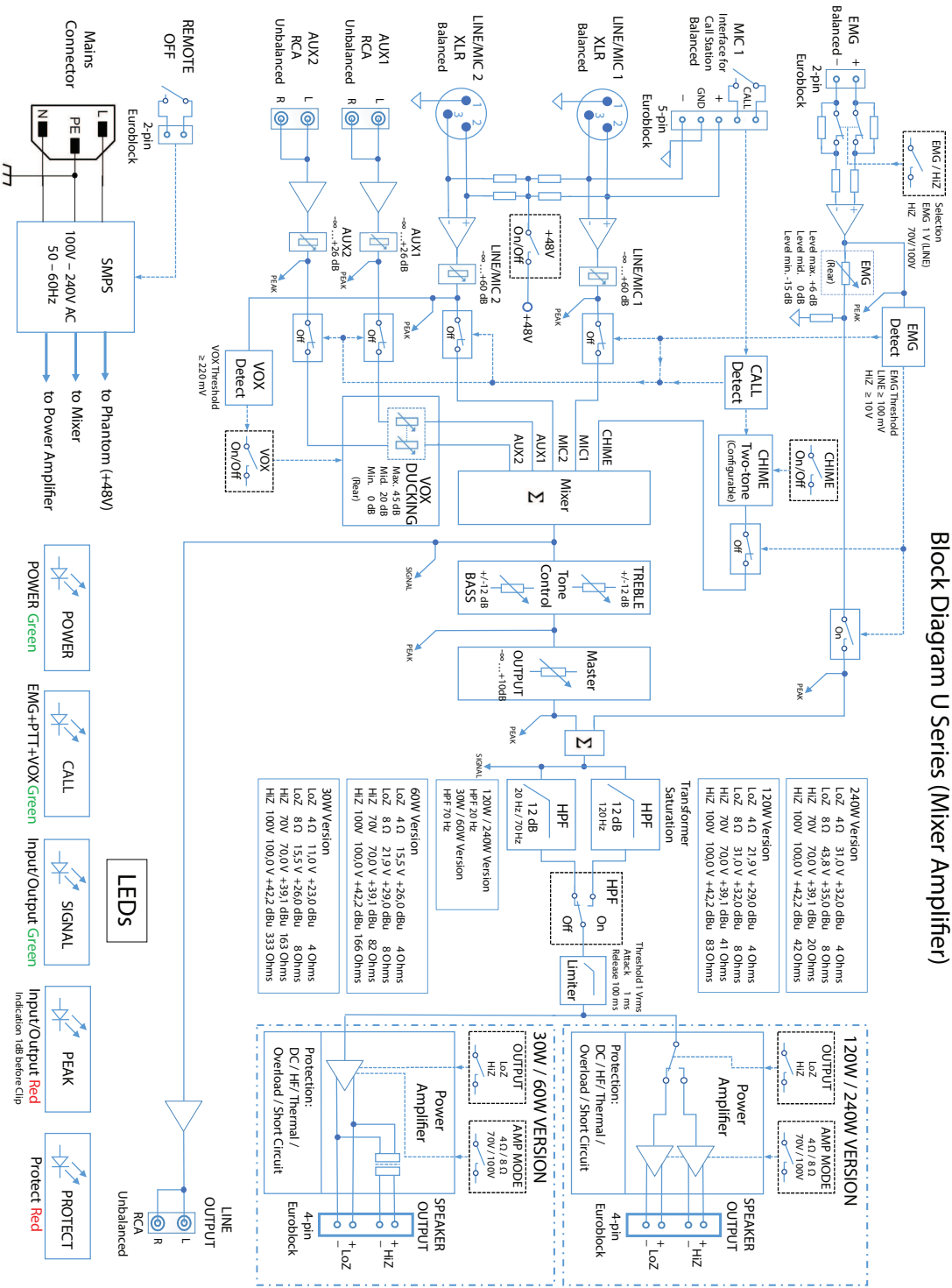
Environmental

Climatic conditions	
Cooling concept	Four-stage-fans (Off / Slow / Medium / Fast)
Operating temperature	-5°C — 45°C (23°F — 113°F)
Storage temperature	-40°C — 70°C (-40°F — 158°F)



mm [in]

Fig. 1: Dimensions



Ordering information

U120:1M-CN Mixer amplifier 120W 1 channel, CN

1-channel, 120 W mixer amplifier

Order number **U120:1M-CN | F.01U.425.756**

U120:1M-EU Mixer amplifier 120W 1 channel, EU

1-channel, 120 W mixer amplifier

Order number **U120:1M-EU | F.01U.425.748**

U120:1M-US Mixer amplifier 120W 1 channel, US

1-channel, 120 W mixer amplifier

Order number **U120:1M-US | F.01U.425.752**

Accessories

PLE-1CS Call station, all-call

An all-zone call station with 2 m cable and lockable Euro style connector.

Order number **PLE-1CS | F.01U.066.940**

Represented by:

Bosch Security Systems B.V.
Torenallee 49
5617 BA Eindhoven
Netherlands
www.dynacord.com