



V22a PRO Hearing Loop Driver

V22a-UK / V22a-EU /
V22a-AUS / V22a-USJ

Our highly efficient and powerful V22a PRO is a constant current hearing loop driver with dual output for phased array. It is designed for medium-sized facilities and venues.

It has a Class-D amplifier output stage and an audio subsystem built around advanced digital systems including an ARM Cortex processor and dual DSPs. Combined with a powerful CPU to ensure peak performance, the V22a PRO provides self-monitoring and email alerts, remote setup over local area networks, guided hearing loop setup to make installation simple, and excellent speech and music reproduction.

Features

- Inbuilt guided hearing loop setup utilising an integral test signal generator
- Intelligent self-monitoring system supplies status emails on changes to driver functions
- Dual-DSP controlled automatic gain control and high frequency compensation for metal loss
- Class-D amplifier output stage capable of delivering $2 \times >22.6$ VRMS @ 8A RMS
- Highly-rated custom heat-sinks and active cooling
- Integrated universal switch mode power supplies provide ultra-efficient power utilisation (up to 90% efficient)
- Constant current output stage
- Adjustable audio time delay for large distance audio syncing
- Intuitive and sleek user interface on a full colour LCD
- Adjust both drive and loop output levels using an embedded LAN service, minimizing installation time
- Settings/profiles saved to a USB storage device
- Continuous self-testing
- Integrated protection circuits with temperature, voltage, short circuit and DC detection
- Full width 1U 19" rack mount

Applications

Suitable for medium-sized facilities and venues such as:

- Meeting & conference rooms
- Lecture halls
- Places of worship
- Nursing & care homes
- Reception & waiting areas
- Gyms & sports halls
- Educational establishments

Voltage and Current

- $2 \times >22.6$ VRMS @ 8A RMS

Standards

- EN 62368-1
- UL 62368-1
- EN 55032 EMC
- EN 55035 EMC

Talk to us now:
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Physical Data

Dimensions	Height – 44mm (1.73") Width – 433mm (17.04") Depth – 301mm (11.85")
Construction	Mild Steel
Finish	Black Powder Coated



Technical Data

Audio Inputs	2 X line/microphone inputs (switchable) XLR or Euroblock	Line (optimised for -10dBV to 0dBv)
		Microphone (12V phantom power via 680Ω optimised for levels above -45dBv)
Loop Outputs	Outputs Voltage	2 x 22.66Vrms (64.09V pk-pk)*
	Output Current	2 x 8Arms @ 1KHz (22.62A pk-pk) >1200 seconds (20 minutes)*
	Loop Connector	2 x NL4
Audio System	Frequency Response	100Hz to 5KHz
	Distortion	THD<1% (-40dB) full current both channels driven
	Automatic Gain Control	DSP controlled, peak detecting
	High Frequency Compensation	7 DSP controlled, optimised stages
	Audio Signal Delay	10ms to 40ms
Display	Backlit TFT 480 x 128 pixels (95mm x 25mm)	
Control	Single Rotary Push Control	
Mains Input	Voltage	100V-120V / 200V-240V AC (universal auto switching with PFC)
	Frequency	50Hz/60Hz
	Connection	IEC
Cooling	Custom heatsink with temperature-controlled fan	

*Z= 2.83Ω @ 1.6KHz (250.63uH +1.294Ω) equivalent to 192.85m of 25mm flat copper cable.

Driver Area Coverage

	Area		
	1:1	1:2	1:3
Phased array (no metal loss)	1024.00m ²	1104.50m ²	1160.33m ²
Phased array (medium metal loss)	441.00m ²	480.50m ²	588.00m ²

All phased array loop areas calculated under the following conditions: Area at maximum driver current without voltage clipping at 1.6KHz * 3 metre segment width * calculated with 25mm x 0.1mm flat copper tape * loop cable installed on floor * listening plane 1.2m * medium metal loss = 6dB

Rear Connections



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