

Master Amplifier Panel

ViUV-MAP



Unicorn Voice is a unique distributed wallmounted, panel based voice alarm and fire telephone solution that is compliant to EN54-16.

- Modern 7" touch screen user interface
- Unique 1st fix enclosure/2nd fix chassis
- Optional integral fire telephone handset
- Efficient 25W/50W/100W amplifier modules
- Integral microphone for live announcements
- 4 x audio panel outputs
- Distributed digital network-64 panels
- 256 audio outputs across network
- NAC/FAD output for VADs, vibrating pillows etc
- Up to 64 messages as standard

Overview

Unicorn Voice simplifies the specification and installation of voice alarm and fire telephone systems by offering a one cabinet solution. Comprising a range of master amplifier panels, distributed amplifier panels, desk microphones, wall microphones and remote volume controls. Additionally, the system can be supplied without EVC capability.

The Unicorn Voice system is suitable for a wide range of applications from small standalone buildings through to multistorey and campus style building complexes. The MAP is equipped with everything required for a voice alarm system including amplifiers, message module, power supply, space for integral standby batteries and a microphone so live announcements can be made.

System Architecture

A Unicorn Voice system would typically consist of a master amplifier panel for site control, networked with either further MAP/MAP-T panels or distributed amplifier panels DAP/DAP-T. This system architecture provides for expansion for small to large sites with ease.

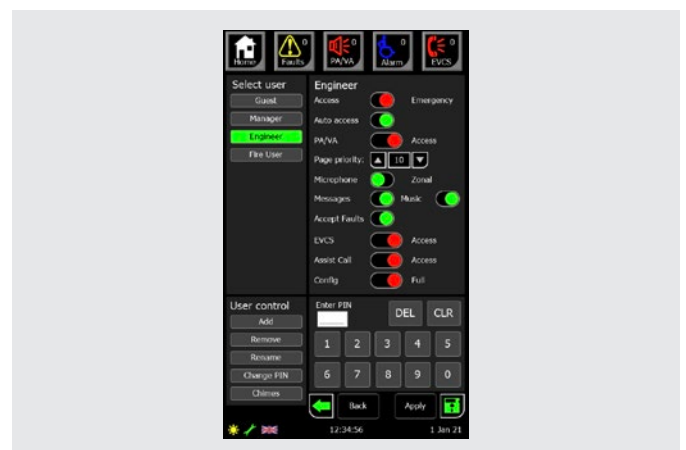
Networking

Unicorn Voice can be networked using either copper, multimode fibre or single mode fibre, this is simply achieved by adding din rail modules. This provides flexibility as for instance copper may be used to network within a building, then fibre could be used for longer lengths between buildings.

The network is dual redundant fault tolerant which uses 6 x audio channels for VA and 2 channels for EVC functions, this enables simultaneous automatic broadcast of evacuate, alert messages and live announcements without any interruption.

Touch Screen User Interface

Control and indication functions utilise a 7" TFT touch screen, this intuitive user interface makes use of icons wherever possible, which simplifies the user experience. Different user permissions mean the system can be customised dependent on user level. Extensive logging of all functions can be accessed via the screen, this information is stored on the micro SD card and can be analysed in a daily spreadsheet format.



Master Amplifier Panel

ViUV-MAP

Amplification and NAC/FAD Outputs

The master amplifier panel can be specified with or without amplifier modules to suit customer requirements. The amplifier modules are available as 100-watt, 50-Watt and 25-watt, the MAP can be specified in a dual or quad format up to a maximum size of 400 Watts in a single cabinet. See Ordering Information for standard configurations. The use of individual amplifiers per loudspeaker output allows for equalization of sound in difficult acoustic spaces which can be broadcast over any of the six available channels. This enables simultaneous alert, evacuate messages with live announcements without interruption, something not achievable with relay switched amplifier designs.

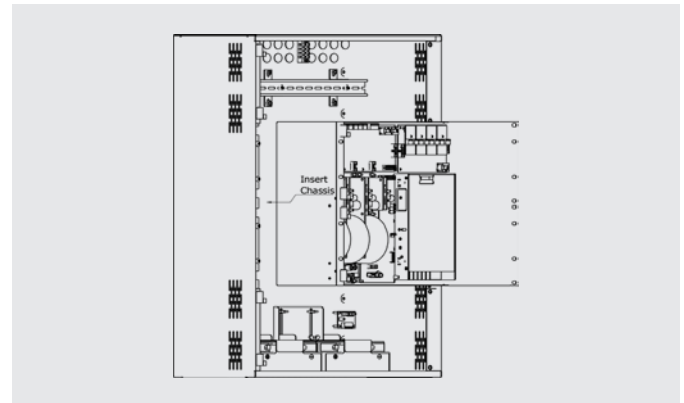
In addition, one standby amplifier can be specified per cabinet to back up any of the four amplifier modules. A NAC/FAD output for driving visual alarm devices or similar is provided per amplifier. This enables VADs to alert people who are hard of hearing during a live announcement, which may be difficult to achieve if VADs are driven from the fire alarm system. If additional loudspeaker circuits are required an A/B speaker splitter module can provide 2 x independently protected outputs per amplifier.

Emergency Voice Communication

Where phased evacuation is specified, voice alarm and fire telephone systems are needed therefore a system which can meet both requirements is advantageous. Unicorn Voice master amplifier panels can be specified with a telephone handset and an integral EVC module to provide eight lines per panel for fire telephone, disabled refuge and emergency assistance alarms. All amplifier panels can be specified with an EVC module which gives a system capacity of 512 lines across the network, a full range of compatible outstations is available.

Innovative Cabinet Design

As Unicorn Voice is a wall mounted system, weight and ease of installation are big considerations. Vox Ignis designers have a unique solution. The MAP is supplied in two parts whereby the cabinet is supplied empty other than a din rail. Thereby the installation of the back box, including all the cabling, can be carried out without any risk of damage to the electronics. The amplifiers, motherboard, battery charger and power supply are contained within a secondary chassis which is fitted at commissioning stage alongside the display module which houses the touch screen.

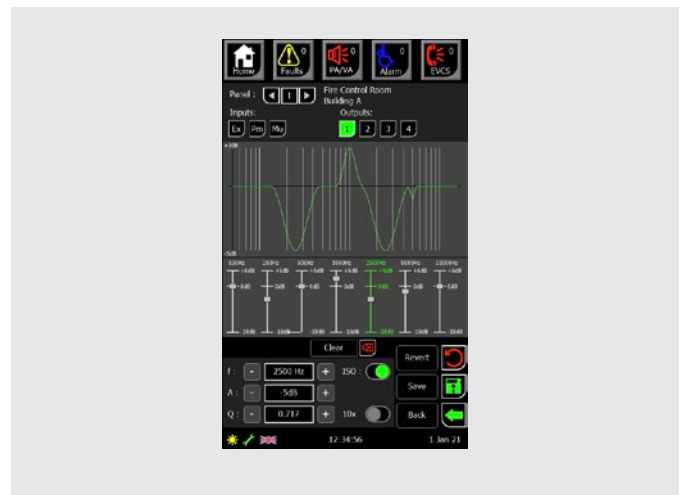


Multifunction Switch Modules

Master Amplifier panels can be specified with optional switch modules in banks of 16. They are multifunctional and configurable on site to cover paging, messages, music and EVCS. The switches can provide simplified control for those less familiar with the system such as fire and rescue.

Digital Signal Processing

At the heart of Unicorn Voice there is a powerful Digital Signal Processor. All audio is processed here providing compression, limiting and gating. Five band parametric EQ is provided on all inputs and seven band parametric EQ on the outputs. It also features an 11x10 digital audio matrix.



Easy Configuration

The touch screen display allows for extensive configuration menus. An engineer can configure VA and EVC functions from a single panel through to a multi-panel network all from one position without the need for a PC, all configuration being held on a micro SD card.

Master Amplifier Panel

ViUV-MAP

Technical Specification

Details	ViUV-MAP	ViUV-MAP-T
Power		
AC supply voltage	100-240V AC + or -10%	
AC supply frequency	50/60Hz	
Batteries		
Capacity	2× 12V 7Ah, 12Ah, 17Ah, 24Ah VRSLA	
Standby time	Perform battery calculation using Unicorn Voice battery sizing calculator	
Controls and Indications		
Statutory Indicators	AC, DC, PSU Status	
	General, CPU fault	
	VA, EVC Status	
Touchscreen	All controls via 7" TFT touchscreen	
Audio Inputs		
BGM	1	
Front panel microphone	1	
External microphone	1	
Fire input-opto- isolated sounder circuit with optional pull up	4	
Reset input	1	
Auxiliary inputs	4	
Input sensitivity	OdBV	
Max input level	+3dBV	
EQ	5 band parametric	
Dynamics	Gate / Compressor / Limiter	
Messages		
Message module	Fitted as standard	
Storage	64 total messages (8 Evacuate, 8 Alert, 8 Test, 40 General purpose)	
	16-bit sample 32K WAV file (512kbs)	
	Monitored store held on Micro SD card	
Amplification		
Quantity	Up to 4	
Power	25W, 50W, 100W Type D Max power per panel 400W	
Efficiency	25W 50W >85%	100W >81%
Loudspeaker line monitoring	DC EOL resistor 22kΩ	
Loudspeaker voltage	70V /100V	
Frequency response	70Hz to 14kHz	
SNR	>72dBA	
THD	0.1% at rated power	

Details	ViUV-MAP	ViUV-MAP-T
Audio Output Processing		
EQ	7 band parametric	
Dynamics	Compressor/Limiter	
Outputs		
Fault Relay	1 x Volt free NC, Com	
Relay 1	Programmable Volt free NO, Com - Default operation-VA	
Relay 2	Programmable Volt free NO, Com - Default operation-EVC	
EVC Module		
Number of EVC Lines	N/A	8 per panel (512 lines total system capacity)
Cabling	N/A	1 x 2 core 1.5mm screened fire rated
Line Monitoring	N/A	10kΩ 0.5W resistor
Network		
Max no of amplifier panels	64	
Channels	6× Audio, 2× EVC	
Max distance between panels	Copper 250m	
	Single-mode fibre 4km	
	Multi-mode fibre 1.6km	
Speed	4.096 M Baud	
Network cables	Copper - 2× 2 core 1.5mm screened fire rated	
	Single-mode fibre - 9/125µm	
	Multi-mode fibre - 62.5/125µm	
Environmental		
Operating temperature	-5°C to +40° C	
Humidity range	0 to 80% non-condensing	
Ingress protection	IP3X	
Environmental		
Back box finish	RAL 7026 Graphite Grey	
Dimensions (H×W×D)	740mm × 500mm × 220mm	
Entries	30× knockouts top, 24× rear, 2× mains	
Weight without batteries	Max 30KGs	

Master Amplifier Panel

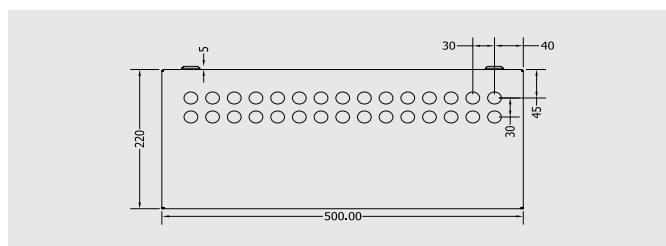
ViUV-MAP

Technical Specification

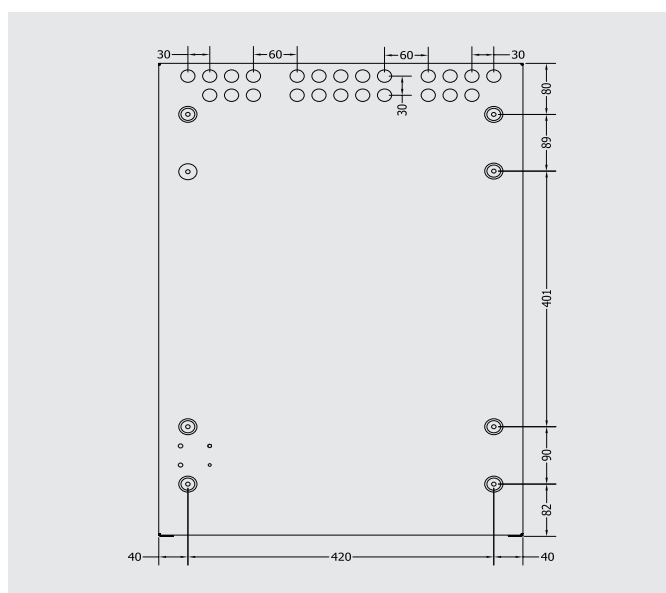
Part Code	Description
Distribute Amplifier Panels	
ViUV-MAP-SO	Master panel – 0 switches
ViUV-MAPSO-D25	Master panel – 0 switches, dual 25W amplifiers
ViUV-MAPSO-Q25	Master panel – 0 switches, quad 25W amplifiers
ViUV-MAPSO-D50	Master panel – 0 switches, dual 50W amplifiers
ViUV-MAPSO-Q50	Master panel – 0 switches, quad 50W amplifiers
ViUV-MAPSO-D100	Master panel – 0 switches, dual 100W amplifiers
ViUV-MAPSO-Q100	Master panel – 0 switches, quad 100W amplifiers
ViUV-MAP-T-SO	Master panel – fire telephone, 0 switches
ViUV-MAP-TSO-D25	Master panel – fire telephone, 0 switches, dual 25W amplifiers
ViUV-MAP-TSO-Q25	Master panel – fire telephone, 0 switches, quad 25W amplifiers
ViUV-MAP-TSO-D50	Master panel – fire telephone, 0 switches, dual 50W amplifiers
ViUV-MAP-TSO-Q50	Master panel – fire telephone, 0 switches, quad 50W amplifiers
ViUV-MAP-TSO-D100	Master panel – fire telephone, 0 switches, dual 100W amplifiers
ViUV-MAP-TSO-Q100	Master panel – fire telephone, 0 switches, quad 100W amplifiers
MAP Factory Fit Options	
Add -HS to end of part code	To add hot swap (standby) amplifier to a MAP
Replace -SO with the following:	
-S16	To add 16 switches to master panel
-S32	To add 32 switches to master panel
-S48	To add 48 switches to master panel
-S64	To add 64 switches to master panel
-S80	To add 80 switches to master panel
-S96	To add 96 switches to master panel
-S128	To add 128 switches to master panel
For example-ViUV-MAP-T-S128-Q100-HS	
Optional Modules	
VIUV-SPT	A-B loudspeaker splitter module (max 1 per amplifier)
VIUV-CMI	Galvanically isolated copper network interface
VIUV-SMI	Single-mode fibre interface network module
VIUV-MMI	Multi-mode fibre interface network module
VIUV-AMP-25	25W complete amplifier assembly
VIUV-AMP-50	50W complete amplifier assembly
VIUV-AMP-100	100W complete amplifier assembly

Mechanical Details

Top view



Rear view



ISO view

