

TSIP AMPLIFIED IP MATRIX



TSIP is a double IP audio decoder which integrates 2 x 100 Volts mono outputs with built-in 120 Watts amplifiers. This amplified IP matrix is directly linked to the speaker line which enables reduction of costs and clutter.

Thanks to its standard RJ45 interface, the TSIP is directly connected to the network. A built-in web browser interface allows simplified control and programming of the unit. The DSP based architecture enables management of new codecs. SIP protocol enables compatibility with the standards of digital telephony. TSIP is fully programmable via a VNB control protocol, the event scheduler, commands and variables.

TSIP is perfect for applications such as:

- An IP audio decoder for up to 3 zones
- A source selector by combining it to a RAC wallmount remote controller
- An amplified message reader triggered by a contact input

In addition, using Vox@Net audio software enables TSIP to act as a 2 zones matrix. Connected to an external amplifier, the 0 dB output enables to manage 3 independent zones (third zone is not monitored). TSIP can also be used as a standard matrix to route a 0 dB input thanks to a contact input, such as a pre-amplified single zone paging microphone PM1. Audio inputs can work with modulation detection and support powered microphones (electret for input 1, phantom for input 2). Each input is fitted with configurable AGC and Noise Gate. TSIP can store up to 60 minutes of messages in PCM 16 bits 16k Hz or 240 minutes in mp3 64 kbps. All messages are monitored. Broadcast priority is configurable for each source (audio inputs, IP streams, messages). The monitoring module detects power supply failure, contact faults, amplification faults (gain), 100 V line faults (open circuit, short circuit, impedance, leakage). Contact inputs can be programmed as logic, selector or analog mode for actions triggering, source selection or gain adjustment. Contact inputs and relay outputs are fully programmable and can be managed locally or via a VNB control protocol. RS232 connexion allows third party control (IP gateway or control interface). System will be capable of status report on contact outputs (faults, evacuation, ...). TSIP can be powered by 230 V or 24 VDC power supply with automatic switching in case of power supply loss.

A touchscreen front panel allows:

- Lines and amplifiers monitoring
- Test message broadcasting
- Audio sources listening from the speaker located on front panel
- Status and history checking
- Faults display

CHARACTERISTICS

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| <ul style="list-style-type: none"> • 2 mono line/mic balanced inputs
Sensitivity: from 8 to 14 dBu
In1 electret
In2 48 V phantom power
Frequency response: 20 Hz - 20 kHz • 2 x 100V mono outputs with built-in 120 W amplifiers • 1 mono balanced line output
Maximum level: 10 dBu
Frequency response: 20 Hz - 20 kHz • 1 x 8 ohms / 4 W speaker output
Frequency response: 23 Hz - 20 kHz • 2 monitored Class D 120 W amplifiers • 1 built-in loudspeaker • 2 IP audio encoders, 4 IP audio decoders (Unicast, Broadcast, Multicast) • 4 message readers • Internal 100 MB storage for message and music playback • SIP user agent • VNB Framework control protocol for interaction with other devices (including HTTP) • Event scheduler • Automatic level control • Vox@ range and Vox@Net compatible | <ul style="list-style-type: none"> • Ethernet interface: RJ45 10/100 Mbits/s with PoE (Power over Ethernet) • RS232 for third party control • 2 contact inputs (contact, monitored, selector or analog) • 2 isolated voltage inputs (activation between 18 and 30 VDC) • 2 relay outputs N.O. + N.C.
Limits: 30V, 2A • 3.5" front panel color touchscreen • LEDs: Power, Ethernet Link, Faults (General, Line monitoring, Evacuation by line, Power supply monitoring, monitoring disabling) • Main power supply: 230 VAC 50Hz 2.4A • Back-up power supply: 24 VDC 15A (not provided) • Electrical protection by fuse • 24 VDC 0.5A output • 230 VAC power consumption: max 280 W, stand-by mode: 20 W • Operating temperature: -20 °C / +55 °C • MTBF: 140000 h • Active cooling: 2 x 60 mm ventilators, aspiration on front panel, extraction on rear panel • Mounting: 19" – 2U • Dimensions (D x H x W): 435 x 90 x 420 mm • Weight: 10 kgs |
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SUPPORTED CODECS	SUPPORTED PROTOCOLS	
Linear PCM 16 bits G.711, G.722, G.729ab Speex Wideband MP3	802.1 - Ethernet 802.3af Power over Ethernet (15.4 W) RFC 1157 - SNMP v1 RFC 1213 - MIB II	RFC 1945 - HTTP 1.0 RFC 2236 - IGMP v2 RFC 5506 – RTP RFC 3261, 3264, 4566 - SIP 2.0 and SDP



REAR PANEL