2240A AUDIO / PTT PANEL - LAN CONTROLLABLE

The 2240A provides a compact means of combining and distributing audio and Push to Talk (PTT) signals to as many as 12 base stations. In addition, it provides manual PTT override for individual transmitters. 12 lighted front panel switches permit each radio to be keyed, disabled, or track normal console or voter control. A LAN Port permits the PTT to be remotely controlled. Remote or manual PTT control is used for installation and management of radio networks. It is also used to align simulcast networks by enabling one transmitter at a time to measure delay.

The 2240A is packaged in a 1U high, rack mount panel. Power options include AC, ±12, ±24, or ±48 Volt DC Supplies. Redundant power modules are provided with front panel LEDs that indicate the status of each power module. A contact closure is provided across pins 25 and 50 of the Audio Connector on the rear panel to alarm in the event of a power module failure.

Audio / PTT Combining is configured by 4 internal switches (S8 - S11) which can be set to sum or combine the 12 inputs to one, two, three or four separate input buses. Further, the gain of all Audio Inputs can be adjusted +/- 6 dB using multi-turn controls on the front panel. Input Monitor Jacks are provided so that input gain adjustments can be measured and set independent of output gain settings.

Pre-emphasis (2240A-2) response is provided for Audio Inputs: 1, 4, 7, and 10. Switches (S4 - S7) permit the pre-emphasis filter to be switched in or out. Limiters are linear to -10 dBm for 2/3 deviation setup. Peaks approximately limited to that of a -6.5 dBm sinewave.

Two CTCSS (2240A-2C) or DCS (2240A-2D) Squelch Tone Encoders added. (Details: com-spec.com SS-64 or DCS-23)

Audio / PTT Distribution is configured by 3 internal switches (S1-S3) which can be set to fan out 3 inputs to up to 12 outputs, 6 inputs to 6 outputs, or various other configurations.

Combiner Capacity: Up to 12 Audio Inputs with individual gain controls
Up to 12 PTT Inputs can be OR’d

Distribution Capacity: 12 Audio Outputs per 2240A
12 PTT Outputs per 2240A

PTT BUFFERING High current PTT Outputs permit direct drive of equipment requiring up to 100 mA keying current.

PTT LOGIC CONVERSION Independent Input and Output Logic Selectors permit logic conversion among: E&M, TTL, and Digitac logic types.

SPECIFICATIONS

AUDIO COMBINER / DISTRIBUTION AMPS
Frequency Range: 4 Hz to 5000 Hz
Response Variation: Less than 0.1 dB, 4 to 5000 Hz
Inputs / Outputs: Floating, Balanced, 600 Ohm
Gain: 0 dB, +/- 6 dB / 24 FP controls
I/O Return Loss: Greater than 26 dB
Input/Output Level: +10 dBm maximum
Noise: Less than -60 dBmC

PTT CIRCUITS
Outputs: 12 High Current (100 mA) Outputs
E/M, TTL / Digitac Relay Closure
Inputs: 12 E&M Type 1-5, TTL/ Digitac
M Type I,II,III: Key <-20 V / Idle ->-20 V
E or M Type IV, V: Key >-20 / Idle <-20 V
TTL / Digitac: Key < +2.5 V / Idle > +2.5

AUDIO / PTT COMBINER / DISTRIBUTION CONTROL
4 Switches: 1 to 12 Inputs can be combined, or 2 blocks of 1 to 6 Inputs can be combined, or various other options.

PRE-EMPHASIS: 4 inputs have “Pre-emphasis” response
4 Switches control pre-emphasis in / out.

LIMITER
Linear to -10 dBm for 2/3 deviation setup.

PTT CONTROL Manual / Remote
PTT Switches 12 (3 Position) Front Panel Switches
KEY: Keys transmitter / Lit Red
NORMAL: Source control / Lit Green = PTT
DISABLE: Disables PTT / Lit Red

LAN Port Ethernet 10 Base-T / Control via Telnet Session ( Windows Hyperterminal )
Link / Activity LEDs
Comm. Simple Menu displays status of all PTTs
Select a PTT to be Keyed or Disabled

ENVIRONMENT: -30 to 60º C, 95% R.H.
I/O CONNECTORS: Two 50 pin Telco Connectors
DIMENSIONS: 1.7” H x 10.4” D x 19” W. / 5 lbs.
POWER: 20 Watts maximum
Options: AC, 12, 24, 48 VDC, Order 2240A-2x-XX

WARRANTY All Convex Products are warranted to be free of manufacturing defects for a period of one year.

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