



VOTER/2

A voting system to select the best received audio from between 2 to 10 radio receivers.

The equipment consists of an encoder located at the radio receiver site and a selector located at the central site.

The radio site voting encoder is available as a 19" rack mounting tray or mounted in a metal box.

The selector consists of a 19" rack mounting card sub frame into which a number of cards are fitted.

The system uses an encoded version of the receivers signal strength or AGC output to determine best quality signal. This makes selection and re-selection very fast.

VOTER/2 Chassis

A 3u high 19" rack mount card frame which holds up to 10 voter channel cards and a dual output audio selector card. The unit is designed for 1 or 2 channel operation such that voting groups can be 2+8, 3+7, 5+5 etc. up to 10+0 sites.

A power unit is built into the rear of the unit to give operation from 240 VAC (linkable 110 VAC) with an auxiliary input for 12 to 16 Volts DC.

Traditional Analogue Diversity Voting System

- Police and Fire Brigades
- Utility and Energy
- Railways and Airlines
- Forestry and Environmental Agencies

Signal connections to the unit are via terminal panels to the rear of the unit. These provide:

- Direct TX audio input per site (when voter used as line barrier or with RMS)
- Best voted audio outputs and common mutes for group A and B
- Unvoted audio and mute signal per site (can link to RMS to decode FFSK)
- Aux Tx tone keying per site
- Lines to/from site for all 10 channels

VOTER/2 Cards

ASC/1

The audio selector card for the VOTER2 rack is a plug in PCB, which selects the best signal from 2 to 10 channel cards. Independent audio and mute relay outputs are provided for vote group 1 and 2. This card can also distribute TX audio to all sites via a bus to the channel cards.

VCC/1

The voter channel card is a plug in PCB, which decodes the receiver signal strength reading and filters the encoded signal from the received audio path. This card also has a buffered send path so that lines can terminate at a common point. This card can provide a TX keying tone of 2970Hz.

LED indicators show power, CPU poll, line ok, vote tone active and site voted. Front panel switch excludes site from voting selection.

REMOTE SITE UNIT:

VENCODER/1

The *Vencoder/1* is a 19" 1U rack mounting voting encoder. This encodes the signal strength output of a radio receiver (0 to 5 volts, adjustable) for use with the voting selector. It also filters and mixes the RX audio with this signal and connects it to the line via a buffer.

The unit also has a TX path with tone detection and filtering for simple TX keying.

Operation is from 240 VAC (linkable 110 VAC) with an auxiliary input for 12 to 16 Volts DC.

VENCODER/3

Electrically as *Vencoder/2* but fitted in extruded metal box.

Will fit within some base stations (Tait T800 etc) or fix to wall etc 12 Volts DC only.

SPECIFICATION:

Physical	19" rack Mounted card frame 480mm wide, 134mm high (3u), 350mmdeep
Weight	Not Exceeding 8 Kg
Capacity	Up to 10 sites in one chassis, 15 sites with expansion unit. Can be cascaded for larger systems
Power	240 V AC single Phase 60 VA maximum or 12 V DC 2 watts per card
Voting Time	Better than 100msec. Typically 40msec.
Vote Method	Encoded Signal Strength comparison
Bandwidth	+/- 3dB 300Hz to 2500 Hz for selected audio
Tone attenuation	> -30dB at 2750 Hz, -50dB at 2900 Hz
Line	600 ohm balanced 2 wire RX 600 ohm balanced 2 wire TX Levels -26 to -6 dBm
System	600 ohm balanced 2 wire RX 600 ohm balanced 2 wire TX Levels -26 to -6 dBm Common Mute by Relay Contact

Warranty (Limited)

All Cyfas products are guaranteed against malfunction due to defects in materials and workmanship for one year, beginning at the date of original purchase. If such a malfunction occurs, the product will be repaired or replaced (at our option) without charge during the one year period, if delivered to the Cyfas factory.

Warranty does not extend to damage due to improper repairs, finish or appearance items, or malfunction due to abuse or operation under other than the specified conditions, nor does it extend to incidental or consequential damages.

Specifications are subject to change without notice.

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