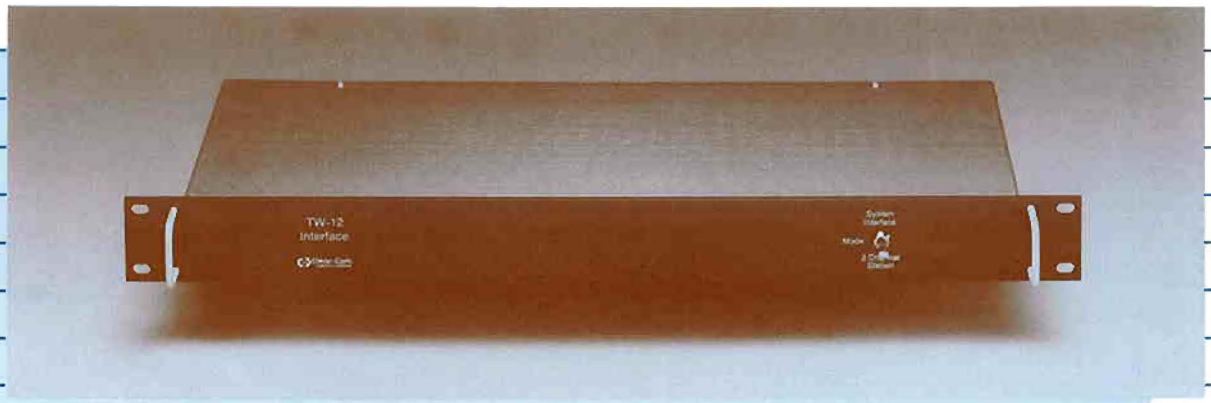
SYSTEM INTERFACE



TW-12 UNIVERSAL TWO-WIRE INTERFACE

FEATURES

- Interfaces Clear-Com to two-wire ("TW") intercom systems such as RTS
- Allows standard mic cable to carry two separate channels
- Uses minimal rack space
- Simple set-up
- Easy to interconnect
- Transparent to user
- Powered by Clear-Com line

DESCRIPTION

The TW-12 is a transparent device that acts as an interface between the Clear-Com Intercom System and a two-wire ("TW," e.g. RTS) intercom system. Alternately, the TW-12 can support up to six TW-type intercom stations with visual signalling (Clear-Com CP-300, RTS BP-300, or the equivalent), or 12 TW intercoms without signalling.

The standard Clear-Com System uses two-conductor shielded mic cable to support one channel of two-way communications, and two or more channels are transmitted via multi-pair cable. Other intercom systems, such as RTS, put **two** intercom channels on the **one** mic cable. The TW-12 Interface translates line levels and supply voltages from two separate Clear-Com channels to provide a combined two-channel, two-wire output. The interface receives its power through the connection to the Clear-Com System. It also translates signalling between the two systems (tone to DC and vice versa).

The TW-12 provides one male and one female 3-pin, XLR connector for each of the Clear-Com Channels A and B, and a 3-pin XLR connector for the two-channel/two-wire output. The TW-12, once set up, is transparent to the user. It has only one control on the front panel: a toggle switch to select between the internal termination (for TW belt packs) or termination by RTS-type power supply (System Interface).

An auto-termination feature prevents oscillation in partially connected systems.

Clear-Com® intercom systems

SPECIFICATIONS

LINE CHARACTERISTICS, CLEAR-COM SIDE
Level: −15dBv nominal, 0dBv max before clipping*
Impedance: 200Ω AC termination, 5000ΩDC

LINE CHARACTERISTICS, TW SIDE
Level: −5dBv nominal, +3dBv max
Impedance: 200Ω AC

Gain, Clear-Com to TW: +12dB
Gain, TW to Clear-Com: −12dB
Frequency Response: 200-10kHz (±3dB)

SIGNALLING, TW SIDE
Frequency: 20,000Hz
Frequency Tolerance: ±100Hz send, ±500Hz receive
Tone Level: −6dBv minimum send, −30dBv maximum receive*

SIGNALLING, CLEAR-COM SIDE
4vdc maximum receive, 11vdc minimum send

POWER REQUIREMENTS: 12-32vdc, 50 ma quiescent plus current for TW stations

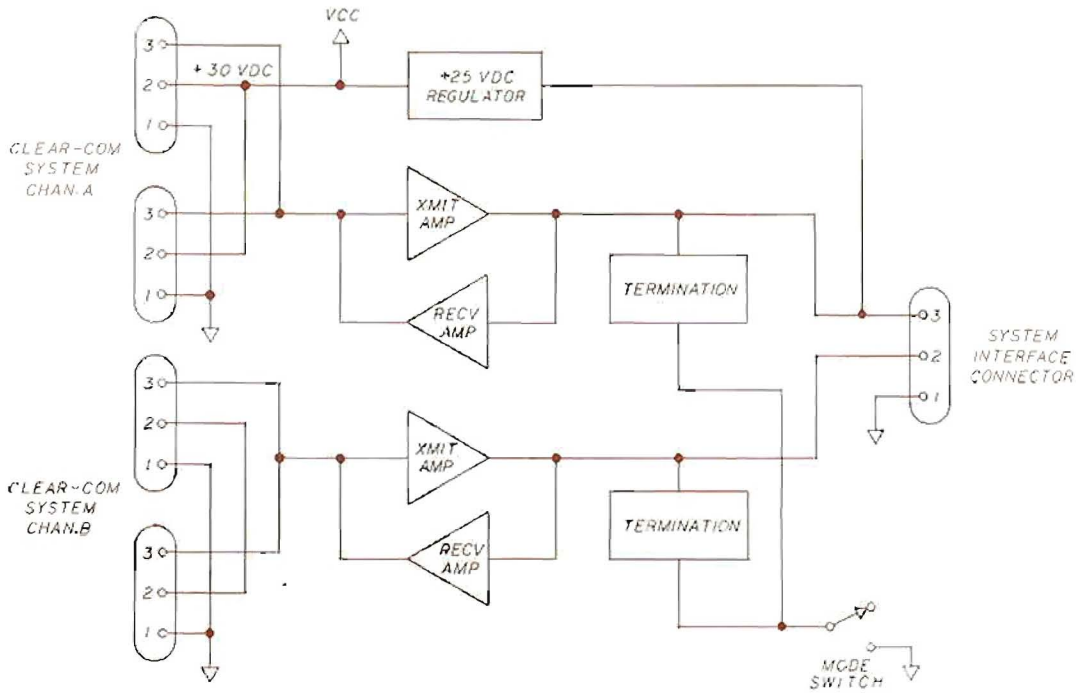
TW POWER CAPACITY: 500 ma maximum (6-12 stations)

DIMENSIONS: 1.75"H x 19"W x 6"D
44mmH x 483mmW x 152mmD

Specifications subject to change without notice

*0 dBv is referenced to 0.775 volts rms.

TW-12 BLOCK DIAGRAM



1111 17th St • San Francisco, CA 94107 • 415/861-6666 • TWX 910-372-1087 • Exp Div: Box 302 • Walnut Creek, CA 94596 • 415/932-8134 • TELEX 176340 CLEAR COM WNCK