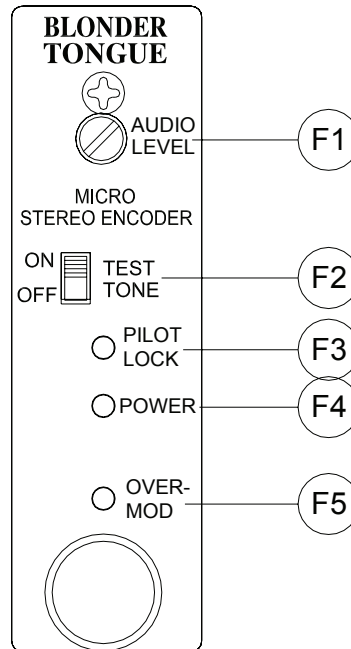


MISE - STEREO ENCODER

1. FRONT PANEL CONTROLS and INDICATORS



F1 : AUDIO LEVEL Control

The setting of this screwdriver adjustment determines the audio input signal level. After system audio modulation levels are properly set, and with left and right audio signals within the 250 mVrms to 2.5 V rms range, set this control to a point where the OVERMODULATION indicator just remains off (see item F5).

F2 : TEST TONE Switch

Switch to the 'ON' position to enable an internal test tone to aid system audio level setup. See the 'Installation' section of this manual for setup information. The normal position of this switch is the 'OFF' position.

F3 : PILOT LOCK Indicator

Lights to indicate that a video signal is applied to the rear panel VIDEO INPUT connector and that the STEREO ENCODER is locked to the video horizontal sync.

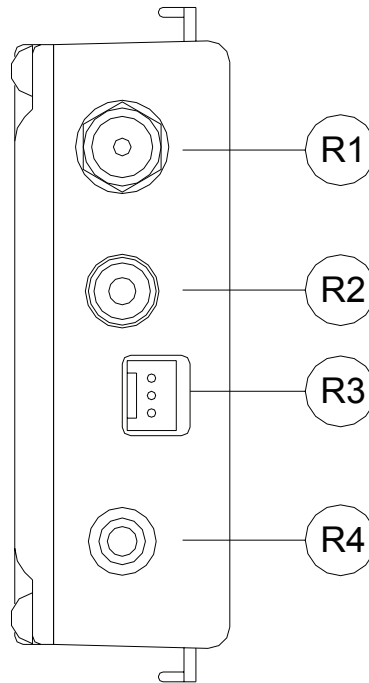
F4 : POWER Indicator

Lights when the unit is connected to the required source of DC power.

F5 : OVERMODULATION Indicator

Lights to indicate greater than 25 KHz of main channel deviation. After system audio modulation levels are properly set, and with left and right audio source input, adjust the AUDIO LEVEL control (see item F1) to a point where the OVERMODULATION indicator just remains off.

2. REAR PANEL CONNECTIONS / INTERNAL JUMPERS



R1 : VIDEO INPUT Connector

This is the baseband video input to the STEREO ENCODER which provides the encoder circuitry with the modulator horizontal sync information.

The baseband video to the modulator must be 'looped through' this input using an external 'F' type Tee (T) connector.

R2 : COMPOSITE AUDIO OUT Connector

This is the unbalanced composite BTSC format stereo signal output. The output from this RCA phono receptacle must be connected to the AUDIO INPUT of the modulator.

The connected modulator audio response must be set for 'Flat' (pre-emphasis defeated).

R3 : DC INPUT Connector

This 3-pin connector (Male) accepts the appropriate mating DC power cable. Observe proper orientation and wiring.

R4 : STEREO AUDIO INPUT Connector

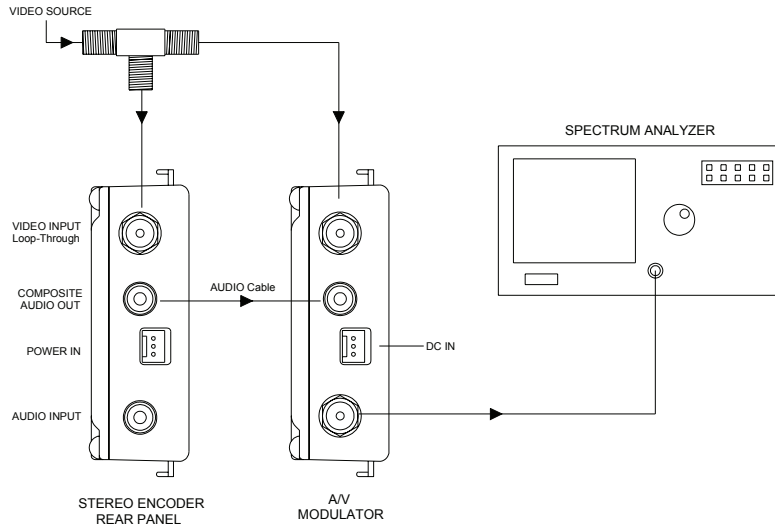
This is the left and right audio source input connector that accept the stereo L/R plug, 3.5mm

3. INSTALLATION – AUDIO LEVEL SETTINGS

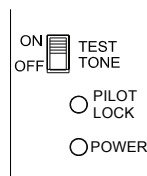
METHOD 1 :

Connect the STEREO ENCODER, Audio/Video Modulator, compatible DC power source, video source signal and test equipment as shown.

Make certain that the audio response of the A/V modulator is set for 'FLAT' (pre-emphasis defeated).

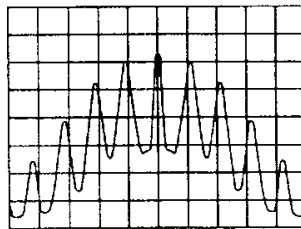


1. Set the 'Test Tone' switch on the front panel of the STEREO ENCODER to the 'ON' position.



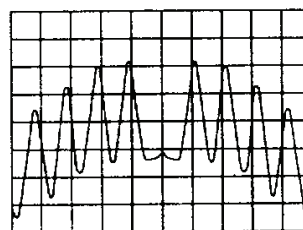
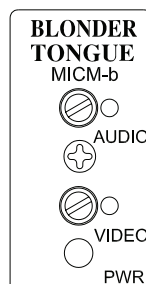
2. Using the connected spectrum analyzer, tune the aural carrier to the center of the screen.
Spectrum Analyzer Settings.

SPAN : 100 KHz
Res BW : 1 KHz
SWEEP : 300 mSec.
VBW : 1 KHz



Aural Carrier Centered

3. Adjust the 'Audio' control on the front panel of the connected A/V modulator for a setting that nulls the aural carrier. If more than one null is found, use the lowest audio gain setting that produces a null of the aural carrier.



Aural Carrier Null

4. INSTALLATION – AUDIO LEVEL SETTING, continued

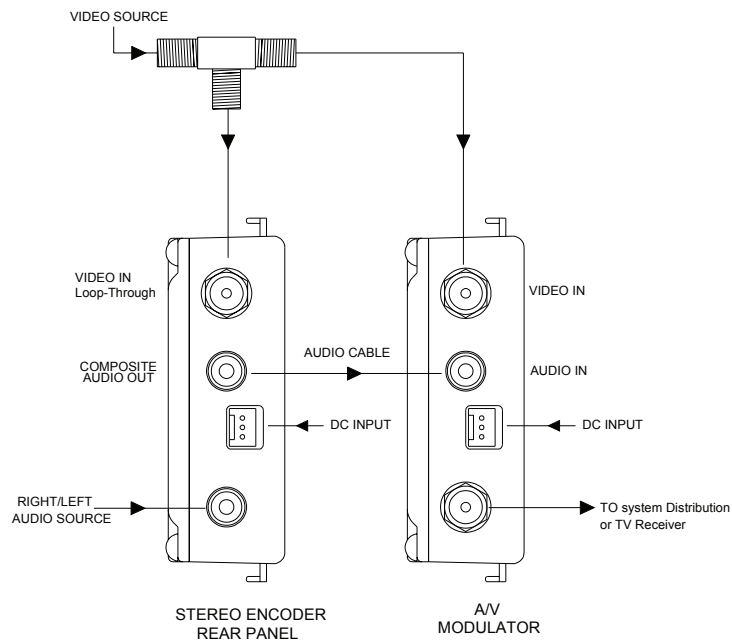
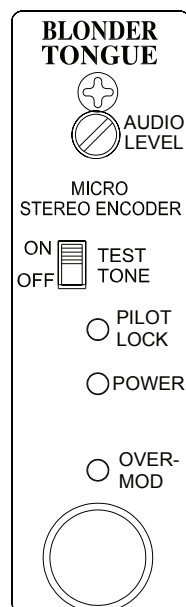
4. Set the STEREO ENCODER TEST TONE switch to the 'OFF' position. Connect Left and Right audio source signals to the STEREO ENCODER.
5. Set the 'Audio LEVEL' control on the STEREO ENCODER to a point where the 'OVERMODULATION' indicator just remains off or flashes occasionally.
The system audio levels are now properly set.
Disconnect the test equipment.

METHOD 2 : (If a spectrum analyzer is not available)

1. Connect the STEREO ENCODER, A/V modulator, compatible DC power source, and video source signal as shown on this page. Keep the 'TEST TONE' switch 'OFF' for this procedure.
2. Connect a TV receiver (with MTS stereo capability) to the A/V modulator. Tune the TV receiver to the same channel as the modulator output.

NOTE : Make certain that the audio response of the A/V modulator is set for 'FLAT' (pre-emphasis defeated).

3. Connect the audio source signal (not a tone) to either the LEFT or the RIGHT Audio Input of the STEREO ENCODER.
4. Set the 'Audio LEVEL' control on the STEREO ENCODER to a point where the 'OVERMODULATION' indicator just remains off or flashes occasionally.
5. While monitoring the opposite audio channel from the TV receiver audio output, set the 'Audio' level control on the A/V modulator for a maximum (stereo) separation condition.



5. SPECIFICATIONS

AUDIO INPUT

Input Impedance : 20K Ohms unbalanced.
Input Level : 250 mVrms ~ 2.5 Vrms, Adjustable

VIDEO INPUT

Input Impedance : 10 Kohm min.
Input Level Range : 0.5 Vp-p to 2 Vp-p

COMPOSITE OUTPUT

Output Impedance : 100 Ohms
Output Level : 1.1 Vp-p @100% modulation

STEREO PERFORMANCE

Stereo Separation : 20 dB.
Total Harmonic Distortion : 0.25% Max.
S/N Ratio : 65 dB. Min.
Frequency Response : ± 1 dB @50 Hz to 12 KHz.
Spurious Subcarrier : -50 dBc typ.

TEST TONE

Frequency : 10.396 KHz ± 50 Hz.
Amplitude : 0.5 Vp-p $\pm 10\%$

GENERAL

DC Power Input : +12V $\pm 5\%$ @ 200 mA
Operating Temperature Range : 0°C to + 50°C ambient.
Size : 2.6 (L) \times 8.0 (H) \times 23.4 (W) cm
Weight : 0.33 kg



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