



# SPECIFICATIONS

## Video Input

<b>Connector:</b>	"F" Female
<b>Input Level:</b>	1.0 volt Peak-to-Peak (87.5% depth of modulation)
<b>Frequency Response:</b>	1.5 dB Peak-to-Valley (fv-0.5 to fv+4.2 MHz)
<b>Video-to-RMS Hum Ratio:</b>	65 dB Peak-to-Peak
<b>Signal-to-Noise Ratio:</b>	58 dB (Weighted; at 4 MHz bandwidth)
<b>Differential Gain:</b>	2.0% (87.5% depth of modulation)
<b>Differential Phase:</b>	1.0 degree (87.5% depth of modulation)
<b>Over-modulation Indicator:</b>	87.5% ±2.5%
<b>Chrominance/Luminance Delay:</b>	Per FCC Requirements
<b>Impedance:</b>	75 Ω
<b>Return Loss:</b>	18 dB

## Main Audio Stereo Input

<b>Connector:</b>	Barrier Strip
<b>Input Sensitivity:</b>	350 mV rms for 55 kHz peak deviation (w/ pilot tone)
<b>Frequency Response</b>	(Decoder output Left or Right channel)
<b>L+ R (in-phase inputs):</b>	50 Hz to 10 kHz: 0.50 dB 50 Hz to 12 kHz: 0.75 dB
<b>L - R (out-of-phase inputs):</b>	50 Hz to 10 kHz: 2.50 dB 50 Hz to 12 kHz: 3.50 dB
<b>L or R (one grounded):</b>	50 Hz to 10 kHz: 1.50 dB 50 Hz to 12 kHz: 1.75 dB
<b>Separation:</b>	50 Hz to 10 kHz: 20 dB
<b>Harmonic Distortion @ 1 kHz</b>	(Decoder output Left or Right channel)
<b>L+ R (in-phase inputs):</b>	Less than 1%
<b>L - R (out-of-phase inputs):</b>	Less than 1%
<b>L or R (one grounded):</b>	Less than 1%

## SAP Audio Input

<b>Connector:</b>	RCA
<b>Input Level:</b>	0.5 to 5.0 volt peak-to-peak
<b>Frequency Range:</b>	50 Hz to 10 kHz
<b>Frequency Response:</b>	±2 dB
<b>Total Harmonic Distortion:</b>	1%
<b>Signal-to-Noise Ratio:</b>	80 dB
<b>Over Modulation Threshold:</b>	10 kHz, ±1 kHz peak deviation
<b>Input Impedance:</b>	Greater than 10 kΩ, unbalanced

## General

<b>Dimensions (WxDxH):</b>	19.0 x 14.25 x 1.75 in. (483 x 362 x 44 mm)
<b>Power:</b>	117 VAC ±10%; 60 Hz (Fuse: 0.40 Amp)
<b>Power Dissipation:</b>	28 W (max)
<b>Weight:</b>	7 lbs (3.18 kg)
<b>Operating Temperature:</b>	32 to 122 °F (0 to 50 °C)
<b>Storage Temperature:</b>	-13 to 158 °F (-25 to 70 °C)
<b>Operating Humidity:</b>	0 to 95% RH @ 35 °C max, non-condensation
<b>Storage Humidity:</b>	0 to 95% RH @ 35 °C max, non-condensation

## RF Output

<b>Connector:</b>	"F" Female
<b>Frequency Range:</b>	54 to 860 MHz
<b>NTSC Channel Modes:</b>	UHF, VHF, CATV (Standard, HRC, & IRC)
<b>Signal Level:</b>	+60 dBmV
<b>Signal Level Display Range:</b>	+48 to +62 dBmV (in 0.2 dB increments)
<b>Broadband Noise:</b>	-77 dBc (@ +60 dBmV output level, 4 MHz bandwidth)
<b>Spurious Outputs:</b>	-63 dBc
<b>Impedance:</b>	75 Ω
<b>Return Loss:</b>	12 dB
<b>Aural/Visual Carrier Ratio:</b>	-15 dB ±5 dB
<b>4.5 MHz Aural Inter-carrier Freq. Tolerance:</b>	±150 Hz; 32 to 122 °F (0 to 50 °C)
<b>Channel Selectivity</b>	
<b>Adjacent Aural &amp; Below:</b>	-40 dB
<b>Adjacent Picture &amp; Above:</b>	-40 dB ±5 dB
<b>Visual Carrier Freq. Tolerance</b>	
<b>Standard Channels:</b>	±20 kHz; 32 to 122 °F (0 to 50 °C)
<b>FCC Aeronautical Channels:</b>	±5 kHz; 32 to 122 °F (0 to 50 °C)

## IF (Intermediate Frequency)

<b>Input/Output Connector:</b>	"F" Female / "F" Female
<b>Aural Frequency:</b>	41.25 MHz
<b>Visual Frequency:</b>	45.75 MHz
<b>Composite IF Output</b>	
<b>Aural Carrier Level:</b>	+20 dBmV
<b>Visual Carrier Level:</b>	+35 dBmV
<b>Input/Output Impedance:</b>	75/75 Ω
<b>Input/Output Return Loss:</b>	16/15 dB
<b>EAS/Alternative IF</b>	
<b>Connector:</b>	"F" Female
<b>Input Level:</b>	+38 dBmV @ 45.75 MHz
<b>Switch Isolation:</b>	Greater than 60 dB

## Monitoring/Indicators

<b>Channel / Mode / RF Output:</b>	Front-panel; 3-Digit LED Display
<b>Video Overmodulation:</b>	Front-panel; Red LED
<b>Audio Overmodulation:</b>	Front-panel; Red LED
<b>SAP Audio Overmodulation:</b>	Front-panel; Red LED
<b>EAS/Alternative IF:</b>	Front-panel; Red LED
<b>Stereo:</b>	Front-panel; Green LED

## Controls

<b>Channel / Mode / RF Output:</b>	Front-panel; Key-pad
<b>Video Level:</b>	Front-panel; Potentiometer
<b>Audio Level:</b>	Front-panel; Potentiometer
<b>Aural Carrier Level:</b>	Front-panel; Potentiometer
<b>SAP Audio Level:</b>	Front-panel; Potentiometer