

OTM-3550

FREQUENCY AGILE TELEVISION MODULATOR

Features / Benefits

- Any output channel from Ch.2 (55.35MHz) through Ch.ppp (547.25MHz)
- Available with remote control and sub-band output
- 60dB spurious free dynamic range
- Greater than 80dB out-of-band carrier to noise ratio
- BTSC stereo compatible
- Dual IF loops
- Saw IF filtering for the ultimate in adjacent channel performance
- Low power consumption for reliable long term operation
- Available in four standards NTSC, PAL, B/G, PAL I and PAL D



The agile **OTM-3550** modulator is a full feature, SAW filtered unit that is available in four standards; NTSC, PAL B/G, PAL I and PAL D. The **OTM-3550** provides high level (+60dBmV) outputs on any channel from ch. 2 (55.25MHz) through ch. PPP (547.25MHz). Sub-Band output capabilities are offered as options. All channels are selectable by front panel DIP switches including F.C.C offsets. Features such as >80dB out-of-band C/N ratio; (which allows unlimited numbers of the **OTM-3550** to be combined without the need for external bandpass filters), BTSC stereo compatibility, along with low power consumption (14 watts typical) all combine to make the **OTM-3550** Series a modulator that offers not only high performance, but excellent reliability as well.

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SPECIFICATIONS

Output frequency range	. 54MHz (ch. 2) 547.25MHz (ch. PPP). Selectable in 1MHz increments
RF output level	. +60dBmV typical, +55dBmV minimum
	. <±5KHz of selected channel frequency
	. >80dB as measured in a 4.0MHz noise bandwidth
Spurious outputs	. >60dB below output visual carrier level @ 55dBmV output
	. Visual Carrier +40dBmV @ 45.75MHz
	Aural Carrier +20dBmV to +28dBmV @ 41.25MHz
Video carrier level	. Adjustable downward by 10dB minimum
Video performance	. Measured @ 80% modulation. Differential gain <6%.
	Differential phase $<3^{\circ}$. Video input 1 volt p-p(75 Ω)
Audio intercarrier stability	<±1KHz.
Audio deviation	. 25KHz – 75 msec pre-emphasis.
BTSC stereo/mono	. Internal defeat of audio pre-emphasis for BTSC baseband input.
Audio/video ratio	. Adjustable from 12dB to 20dB below video carrier.
Front panel controls	. Channel/F.C.C. offset selectable by DIP switch. Video/Audio modu-
	lation, A/V ratio and R.F. level by pot adjustment.
Front panel indicators	. LED's for video/audio overmodulation.
Rear panel connectors	. Type F video input (75 Ω input Z), RF output, -20dB test and video/
	audio i.f. loops. Audio input terminal strip (600 Ω input Z). balanced.
	3-wire power cord U.S.A. plug.
Power consumption	. 100-240 VAC @ 50/60Hz 13 watts.
Size	. 1.75" H x 19" W x 8" D.

MODEL OPTIONS

OTM-3550-SW......Same features as OTM-3550 but with sub-band output channels T-7 (7MHz) through channel PPP (547.25MHz) including all HRC/IRC channels. Selectable in 0.25 increments.