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## LCM-550x12

### TWELVE AGILE MODULATORS AND/OR DEMODULATORS

#### Features / Benefits

- Space saving chassis design accommodates up to 12 frequency agile modulators and/or 8 frequency agile demodulators
- Frequency agile modulators featuring 54MHz to 550MHz output range, or a agile sub-band version featuring 7MHz (T-7) to 300MHz output range
- >80dB out-of band c/n ratio
- +45dBmV typical output level
- Agile demodulators feature 54 to 801.25MHz frequency range
- Front panel channel selection
- Universal power supply with low power consumption for long term reliability
- Built in high isolation 12 port combiner (optional)
- Available in pal standards



The **LCM-550x12** System consists of a 3.5"H x 19"W rack mountable chassis, Model **LCM-550-RKA**, which houses a universal power supply module and wiring harness with room to accommodate up to 12 agile modulators or up to 8 agile demodulators.

The frequency agile modulator module, Model **OTM-550x1**, has a frequency output range from 55.25MHz to 547.25MHz, selectable by front panel DIP switches. Each modulator features -45dBmV typical output level, >60dB spurious performance and >80dB out-of-band carrier to noise ratio.

Modulator model **LCM-300-S** offers all the features of the **LCM-550x1** but with sub-band T-7 (7MHz) to Channel W (300MHz) output capability.

The frequency agile demodulator module, Model **LCD-550x1**, is capable of selecting, by front panel rotary switch, any VHF, UHF, Cable, HRC and IRC input from 55.25MHz to 801.25MHz. This unit also features selectable baseband audio, multiplex or subcarrier outputs. Two (2) **LCD-550x1** demodulators, (with front panel face plate), would occupy the space where three (3) modulators would normally be.

Quality / Engineering / Innovation

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# LCM-550x12

## LCM-550x1 & LCM-300-S Agile Modulators



<p>Freq. Range..... 55.25MHz through 547.25MHz. Selectable by front panel DIP switches in 2MHz increments (250KHz internal adjustment).</p> <p>F.C.C. Offsets..... +12.5 tunable by front panel adjustment</p> <p>Output Level..... +45dBmV typical, +40dBmV minimum</p> <p>Freq. Stability..... &lt;±5KHz</p> <p>Spurious Output..... &gt;60dB below visual carrier</p> <p>Out-of-band C/N.... &gt;80dB</p> <p>In-Band C/N..... &gt;60dB</p> <p>Audio Video Ratio.. Adjustable from 13dB to 20dB below video carrier</p>	<p>Audio Performance..... 500mV P-P for 25KHz deviation, front panel adjustable. 10K input Z</p> <p>Audio Stability..... 4.5MHz within ±1KHz</p> <p>BTSC Stereo/Mono.... Internal defeat of audio pre-emphasis for BTSC baseband inputs. Shipped in mono mode</p> <p>Front Panel Controls... RF output adjust, A/V ratio adjust, FCC offsets, Channel select DIP switches, A/V modulation</p> <p>Rear Connectors..... RCA type A/V input, F type RF output</p> <p>Power Requirements... Power provided by <b>LCM-550-RKA</b></p> <p>Size..... chassis 1.6”H x 1”W x 6.2</p>
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**LCM-300-S** Same features as the LCM-550x1 but with 7MHz (T-7) to 300MHz output capabilities

## LCD-550x1 Agile Demodulator



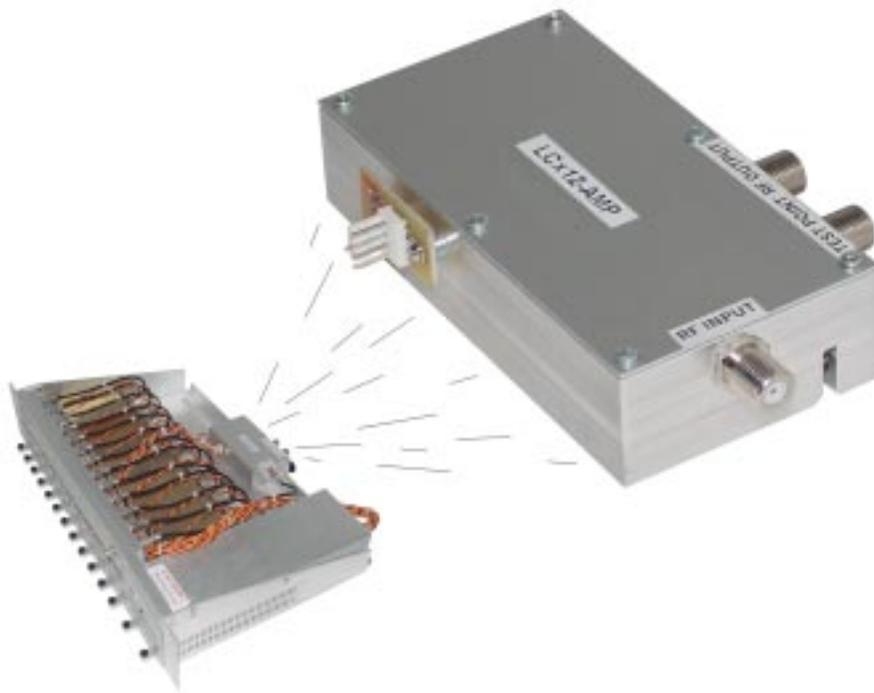
<p>RF Input..... 54.25MHz to 801.25MHz in 0.25MHz increments. Selected by front panel rotary switches. HRC channels can be selected by internal switch. PAL Standards available.</p> <p>RF Input Level..... -10dBmV to +25dBmV off-air -10dBmV to +10dBmV off-cable</p> <p>Video Output..... 1V p-p (75 Ω) ± 5 IRE</p> <p>Video Performance..... Differential Gain &lt;5% Differential Phase &lt;3%</p> <p>Audio Output..... 500mV p-p (600 Ω unbalanced) minimum</p> <p>Selectable Audio..... Outputs-Baseband, MPX and</p> <p>MPX Output..... Subcarrier</p> <p>Audio Sub-Carrier Output... 500mV p-p (100 Ω unbalanced) +40dBmV @ 75 Ω</p>	<p>Front Panel Controls..... On/Off Switch CATV/Broadcast selection switch Channel select rotary switches</p> <p>Front Panel Indicator..... Loss of video LED</p> <p>Rear Panel Connectors.... Type “F” for RF input/video output RCA connectors for audio, MPX and subcarrier outputs</p> <p>Power Requirement..... &lt;6 Watts per channel. Universal input power provided by <b>LCM-550-RKA</b> chassis</p> <p>Size..... 0.7”H x 3”W x 6”D</p>
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# LCx12-AMP

## High Performance 55 to 870MHz Distribution Amplifier

### Features / Benefits

The **OLSON TECHNOLOGY INC. LCM-550x12 Series Amp** is a high performance 55 to 870MHz distribution amplifier designed to work with the output of the 12-port combiner. It is easily attached to the back of the **LCM-550x12** chassis by two thumb screws. It will provide +45dBmV of output per channel when connected to the output of the 12 port combiner.



### SPECIFICATIONS

Frequency Range.....	48MHz to 870MHz
Gain.....	22dB minimum
Gain Variation.....	±1dB minimum
Input Return Loss.....	15dB minimum
Output Return Loss.....	16dB minimum
CTB/CSO with 12 Carriers.....	>65dB below 12 output carriers at +45dBmV
Power Requirements.....	Operates from LCM-550x12 power supply. < 4 watts