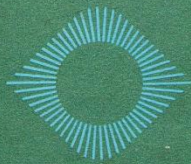


# New Dimension in EXCELLENCE of Professional Communications—



The Superb GALAXY R-530  
Communications Receiver

# galaxy R-530

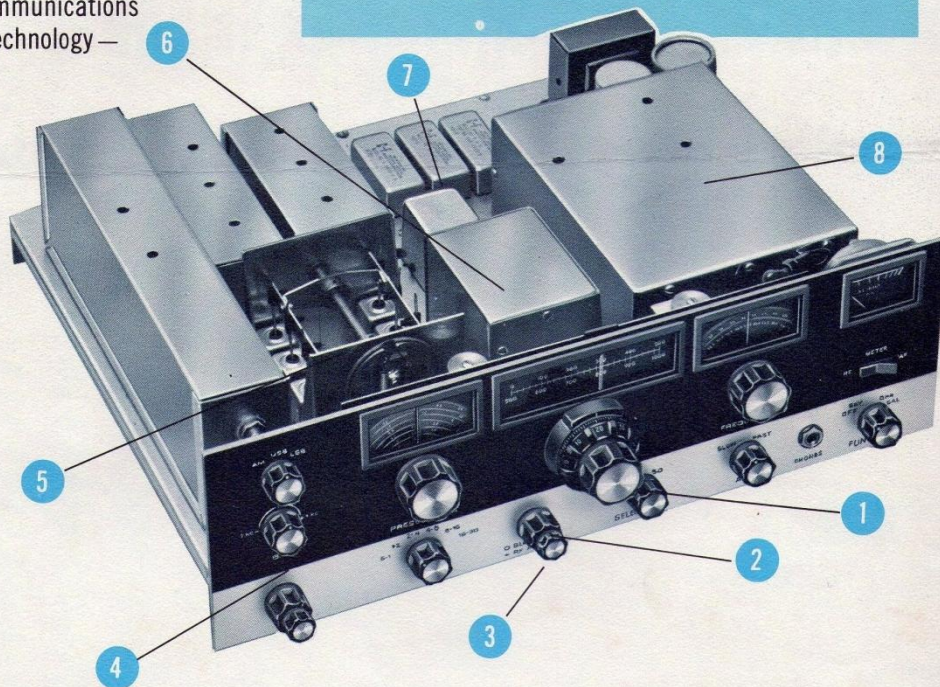
## SOLID STATE RECEIVER

A New Dimension  
in EXCELLENCE  
in the field of  
Communications  
Technology —

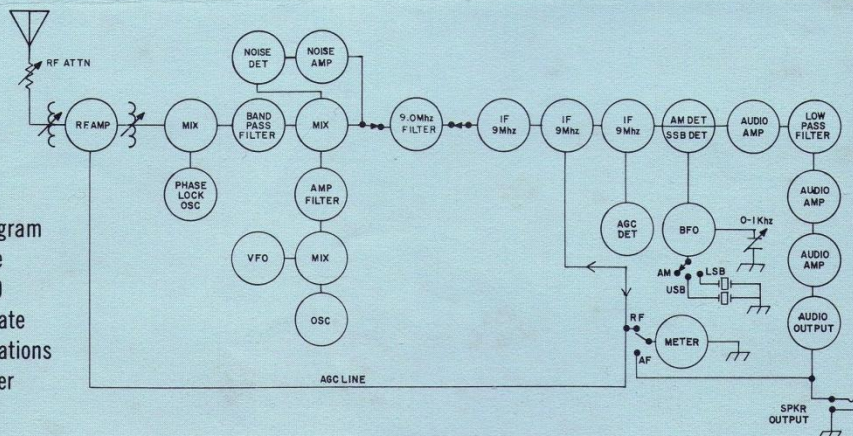
■ CONTINUOUS COVERAGE  
(0.5-30 MHz)

■ SOLID STATE  
MODULAR CONSTRUCTION

— are the result of three years  
of exhaustive research!



Block Diagram  
of the  
R-530  
Solid-State  
Communications  
Receiver



## Some of the Outstanding Features of the R-530



**1 MAIN TUNING DIAL**— Visual resolution of frequency is accurate to 1KHz. A unique fiducial provides calibration and tuning dial correction each 50 KHz...throughout entire receiver frequency range.

**2 NOISE BLANKER**—A newly designed circuit ...effective in reduction of unwanted background noise and interference. Especially useful when receiving SSB and CW signals.

**3 RF ATTENUATOR**—Variable attenuation at antenna terminal, improves front-end overload characteristics. Permits positive control of cross-modulation especially during monitoring use.

**4 VARIABLE BFO**—Operative in USB, LSB, CW and RTTY modes of reception. Provides proper adjustment of BFO for line and RTTY operation.

**5 PRE-SELECTOR**—Permeability tuned insures optimum performance across entire frequency spectrum. Reduces cross-modulation and insures minimum gain variation over entire spectrum.

**6 PTO**—The Permeability-Tuned-Oscillator provides outstanding linearity, stability and frequency reset capability.

**7 CRYSTAL LATTICE FILTER**—The standard 2.1 KHz filter gives a near-rectangular IF bandpass, insuring optimum selectivity. Optional 0.5 and 5.0 KHz filters are available.

**8 PHASE-LOCK OSCILLATOR**—Frequency determination in the R-530 is accomplished with a Phase-Locked Frequency Oscillator. Eliminates the necessity of multiple crystals and band-switch problems as well as insuring the optimum in stability.

## SPECIFICATIONS:

Receiver Type: RF Superheterodyne, dual conversion, solid state.

Frequency Range: 0.5 to 30 MHz *continuous*

Frequency Readout: 1 KHz over entire 500 KHz tuning range of PTO

Frequency Stability: From turn-on no more than 100 Hz, including 20% line voltage variation

Calibration Accuracy: 1 KHz with 50 KHz calibrator

Backlash: Less than 100 Hz.

Metering: RF calibrated 0 to 80 db above 1 microvolt, AF calibrated -6 to +4 dbm (600 ohm balanced line)

AGC: Selectable FAST or SLOW—Attack time less than 5 milliseconds, with slow release time 2 seconds; fast release time 500 milliseconds. Less than 6 db output change from 1 to 30,000 microvolts.

Sensitivity: 0.1 microvolts for 6 db signal plus noise to noise ratio SSB; 0.05 microvolts for 6 db signal plus noise to noise ratio CW; 0.5 microvolts for 6 db signal plus noise to noise ratio AM

Selectivity: 2.1 KHz crystal lattice filter, 1.8:1 shape factor, SSB. Optional filters for CW (0.5 KHz) and AM (5.0 KHz) are available and all are front panel selected

Inter-Modulation Distortion: 3rd order suppressed more than 50 db

Front-end Overload: 0.1 volt for 10% distortion (On Signal)

RF Signal Attenuator: Variable line attenuator provides 0-20 db attenuation of signal before reaching receiver front-end.

Harmonic/Spurious Response: All spurious and harmonic suppressed more than 50 db.

Noise Blanker: Adjustable for optimum performance on SSB and CW

Functional Service: AM, CW, SSB (Selectable USB & LSB) and RTTY. Variable BFO utilized in CW mode tunable plus or minus 1 KHz.

Audio Output Level: More than 1 watt with less than 10% distortion.

Audio Response: 250 to 3.0 KHz plus or minus 3 db.

Audio Output Provisions: Speaker (8 ohms)  
Line (600 ohms balanced) Headphone

Calibrator: 50 KHz

Antenna Input: 50 ohms unbalanced

Front Panel Controls: AM, USB, LSB; BFO Frequency Tuning; Preselector Tuning; Main Tuning; Frequency Synthesizer Tuning; Meter Switch (AF/RF); AF/RF Gain Control; Band Switch; Blanker/RF Attenuator Control; Selectivity; AGC (Fast/Slow) Switch; Headphone Jack; Function Switch (OFF, STBY, OPR, CAL).

Rear Panel: Antenna input, 50 ohms unbalanced; Battery Connections; External Mute; AGC Output; Detector Output; VFO Input/Output; Line Output 600 ohms balanced; Speaker Output 8 ohms.

Power Requirements: 115/230 VAC, 50-60 Hz at 24 watts or 18 VDC maximum source drain 600 ma.

Size: 6" H x 17" W x 14" D Cabinet; Rack Panel 8 3/4" H x 19" W x 14" D.

Weight: 25 lbs. (Shipping weight BCP 32 lbs.)



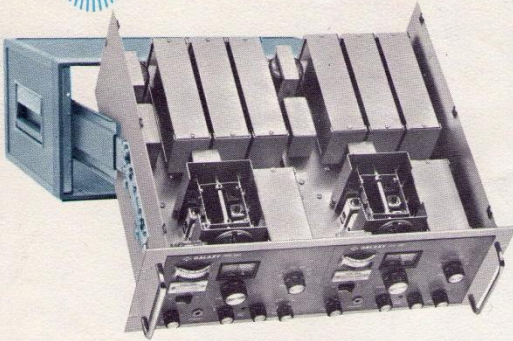
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# galaxy electronics

"Pacesetter in Commercial / Amateur Equipment Design"



# GALAXY R-530 ACCESSORIES



### RPA-530 Rack Panel Adapter

Shown here with the FFR-Receiver. The Rack Panel Adapter not only provides top and bottom dustcovers for the R-530 but facilitates servicing of the unit as well.



### SPK-530 Speaker Console

Beautiful matching Speaker Console for the R-530 Receiver. Designed for High Quality Audio reproduction. Complete with cables.

### FILTERS (Not Illustrated)

The addition of these crystal lattice filters allows the operator to select the proper filter for optimum reception dependent on the mode.

FL-5305 (500Hz) • FL-53015 (1.5 KHz) • FL-5306 (6.0 KHz)

## —OTHER WELL KNOWN GALAXY EQUIPMENT—



### Galaxy FFR-230

A highly stable (1 ppm) fixed frequency Receiver with extremely versatile features.



### Galaxy COMM-2

Single sideband Transceiver designed for Commercial and Military applications. 2-channels, will operate on lower or upper sideband. 2 to 20 MHz frequency range. Operates on  $\pm 12$  VDC. 117/230 VAC available.

**Galaxy COMM-1A**  
A four-channel crystal controlled Transceiver with upper and lower selectable sideband. 3.0 to 7.5 MHz.



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