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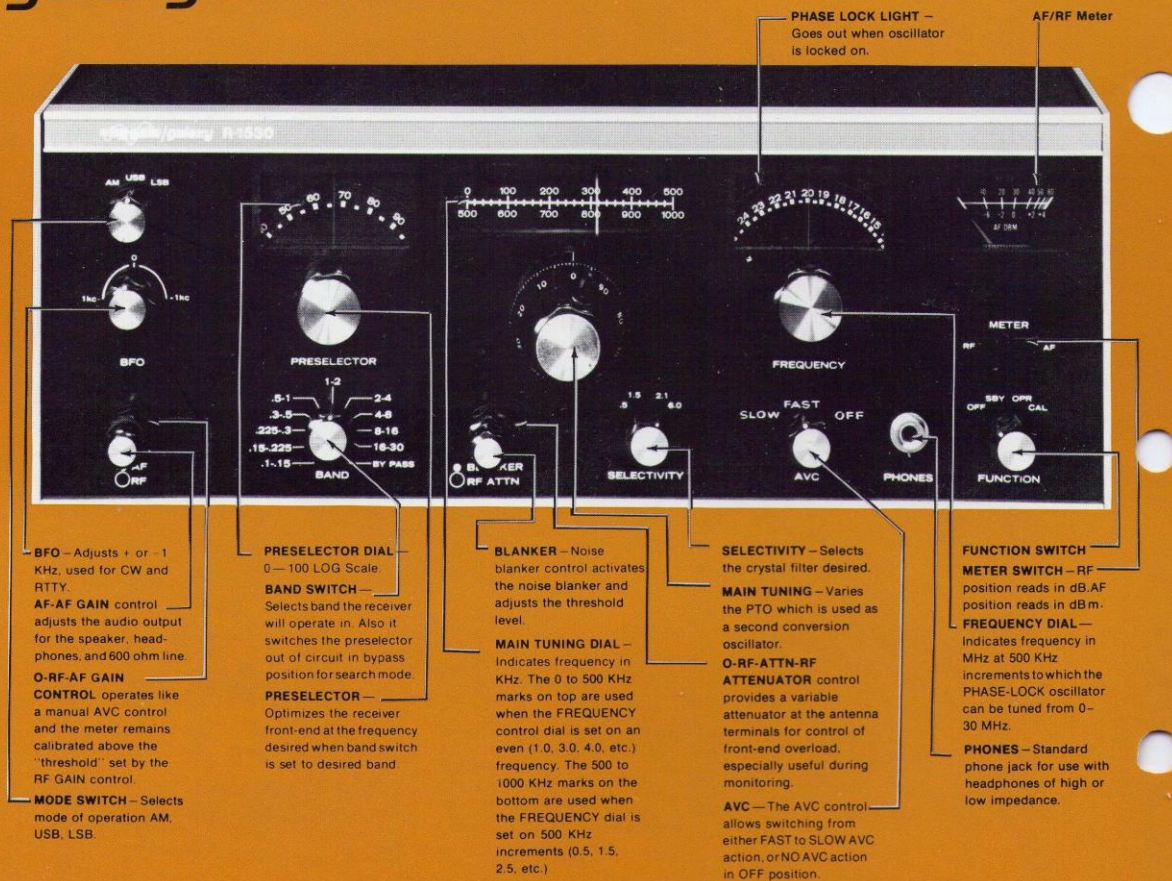


**galaxy
R-1530
communications receiver**



GALAXY ELECTRONICS A Subsidiary of HY-GAIN ELECTRONICS CORPORATION
8601 N.E. Highway 6, Lincoln, Nebraska 68507 Telephone (402) 434-9151 Telex: 48-6424

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BFO — Adjusts + or - 1 KHz, used for CW and RTTY.
AF-AF GAIN control adjusts the audio output for the speaker, headphones, and 600 ohm line.
O-RF-AF GAIN CONTROL operates like a manual AVC control and the meter remains calibrated above the "threshold" set by the RF GAIN control.
MODE SWITCH — Selects mode of operation AM, USB, LSB.

PRESECTOR DIAL — 0 — 100 LOG Scale
BAND SWITCH — Selects band the receiver will operate in. Also it switches the preselector out of circuit in bypass position for search mode.
PRESECTOR — Optimizes the receiver front-end at the frequency desired when band switch is set to desired band.

BLANKER — Noise blanker control activates the noise blanker and adjusts the threshold level.
MAIN TUNING DIAL — Indicates frequency in KHz. The 0 to 500 KHz marks on top are used when the FREQUENCY control dial is set on an even (1.0, 3.0, 4.0, etc.) frequency. The 500 to 1000 KHz marks on the bottom are used when the FREQUENCY dial is set on 500 KHz increments (0.5, 1.5, 2.5, etc.)

SELECTIVITY — Selects the crystal filter desired.
MAIN TUNING — Varies the PTO which is used as a second conversion oscillator.
O-RF-ATTN-RF ATTENUATOR control provides a variable attenuator at the antenna terminals for control of front-end overload, especially useful during monitoring.
AVC — The AVC control allows switching from either FAST to SLOW AVC action, or NO AVC action in OFF position.

FUNCTION SWITCH
METER SWITCH — RF position reads in dB, AF position reads in dBm.
FREQUENCY DIAL — Indicates frequency in MHz at 500 KHz increments to which the PHASE-LOCK oscillator can be tuned from 0-30 MHz.
PHONES — Standard phone jack for use with headphones of high or low impedance.

Whether your application is monitoring specific frequencies, commercial communications, military communications or just plain ordinary shortwave listening, the R-1530 is for you.

DESCRIPTION:

The Galaxy R-1530 is a new dimension in .01-30 Mhz general coverage receivers. All solid state circuitry and modular construction place the R-1530 in a category of excellence unmatched by other units. The R-1530 contains several outstanding features that were previously available only on military receivers costing three times as much.

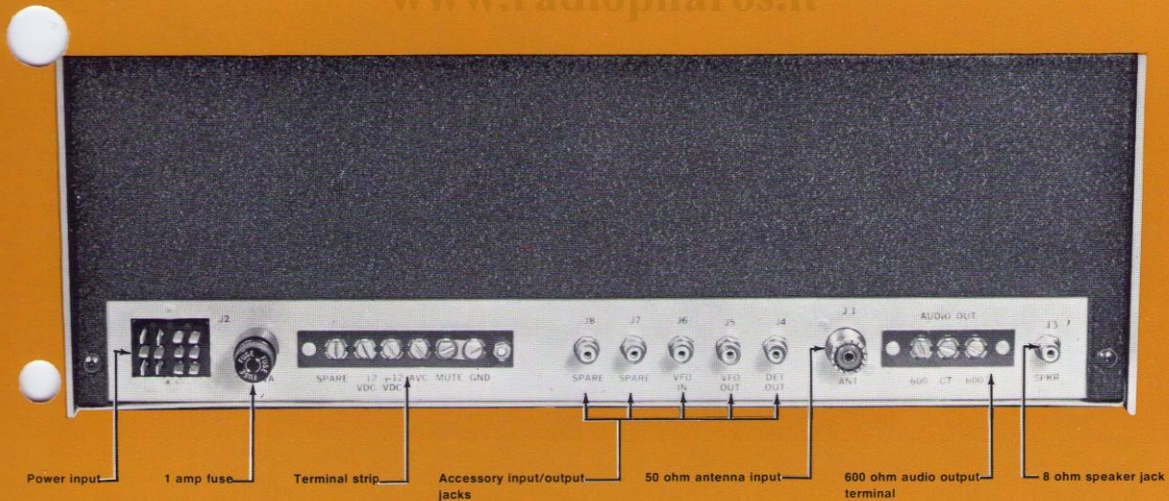
A unique fiducial design provides calibrations and frequency correction every 50 KHz throughout the entire frequency range of the R-1530. A highly effective built-in noise blanker permits reduction of interference while a variable attenuator at the antenna terminal allows positive control over cross modulation.

OUTSTANDING FEATURES:

- Variable BFO for precise adjustment during CW and RTTY operation.
- Permeability tuned preselector for maximum cross modulation reduction and minimum gain variation.
- Extremely stable permeability tuned oscillator for outstanding linearity and frequency resetability.
- Switchable crystal filters for instant selectivity selection.
- Phase lock oscillator, a unique advancement in design and frequency determination, gives the R-1530 its professional grade frequency stability.
- Dual gate MOSFET RF amplifier in the preselector.
- Hot carrier diodes in the first mixer.
- J-FET second mixer.
- Superb dynamic range and signal handling capability.

R-1530 Solid State Communications Receiver

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R-1530 SPECIFICATIONS

RECEIVER TYPE: RF Superheterodyne, dual conversion, solid state.

FREQUENCY RANGE: 0.01 to 30 MHz continuous.

FREQUENCY READOUT: 1 KHz over entire 500 KHz tuning range of PTO.

FREQUENCY STABILITY: From turn-on better 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, SLOW, and OFF—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.

	Preselector By-Pass Mode	Preselector
IMAGE REJECTION:		
Image at 1 MHz	80 db	80 db
Image at 5 MHz	80 db	90 db
Image at 10 MHz	86 db	90 db
Image at 20 MHz	86 db	100 db
IF rejection: at 42 MHz	50 db	90 db
BLOCKING: 1000uV wanted	0.1V unwanted ± 20Kc/s causes audio to drop 2 db	Same as By-Pass
CROSS MODULATION:	90 db above 1 uV produces output less than 30 db below standard output	84 db above 1 uV for less than 30 db below stand- ard output
INTERMODULATION:		
2nd order	80 db	90 db
3rd order	2 × 10mV = 1uV 2 × 30mV = 18uV 2 × 100mV = 200 uV	2 × 3mV = 2uV 2 × 10mV = 100uV
AGC RANGE: Audio output change less than 5 db	10 uV to 0.1 V	1 uV to 0.1 V
SENSITIVITY: with 2.1 KHz filter for 10 db SN		
FREQ		
.010 MHz	15uV	
0.05 MHz	5 uV	
0.1 MHz	3.2 uV	1.5
0.5MHz	1.6 uV	0.5
1 MHz	1.7 uV	0.25
2 MHz	1.7 uV	0.25

	Preselector By-Pass Mode	Preselector
4 MHz	1.7 uV	0.25
10 MHz	1.7 uV	0.25
20 MHz	1.7 uV	0.25
30 MHz	1.7 uV	0.25
16 MHz	0.6 uV CW 1.2 uV SSB 2 uV AM	0.1 uV CW 0.2 uV SSB 1.5 uV AM

FRONT END OVERLOAD:

for 10% distortion 0.1 volts
SPURIOUS RADIATION: Maximum 1 microvolt throughout the band
10KHz-30MHz except for 125 KHz where spurious equals 3 micro-
volts.

SELECTIVITY: 2.1 KHz crystal lattice filter, 1.8:1 shape factor, SSB.
Optional filters for CW (0.5 KHz) and Am (6.0 KHz) are available
and all are front panel selected RTTY (1.5KHz).

RF SIGNAL ATTENUATOR: Variable line attenuator provides 0-20
db attenuation of signal before reaching receiver frontend.

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 on front panel.

CALIBRATOR: 50 KHz.

ANTENNA INPUT: 50 ohms unbalanced.

FRONT PANEL CONTROLS: AM, USB, LSB, BFO Frequency tun-
ing; Preselector Tuning; Main Tuning; Frequency Synthesizer Tun-
ing; Meter Switch (AF/RF); AF/RF Gain Control; Band Switch;
Blanker/RF Attenuator Control; Selectivity; AGC (Fast/Slow/Off)
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 7" H x 19" W x
14" D.

WEIGHT: 25 lbs. (Shipping weight BCP 32 lbs.) Weight in kilograms
11.33961.

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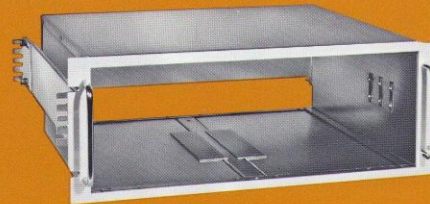
www.radiopharos.it **Accessories**



SC-1530 SPEAKER CONSOLE
The SC-1530 speaker console is designed for high quality audio reproduction and matches the R-1530 in appearance. The SC-1530 comes complete with connecting cable.
PART NO. 876.



CRYSTAL FILTERS
The R-1530 contains a 2.1 KHz crystal filter as standard equipment. Optional plug-in filters are available for 0.5, 1.5 and 6.0 KHz. These filters plug directly into chassis receptacle adjacent to the standard filter.
FL-5305 (500Hz) FL-53015 (1.5 KHz)
PART NO. 820 PART NO. 821
FL-5306 (6.0 KHz)
PART NO. 822



RPA-1530 RACK PANEL ADAPTOR
The R-1530 can be rack mounted in a standard 19" rack by using the RPA-1530 rack panel adaptor. Only 7" of rack panel space is required. Ball-bearing slides and push button chassis tilt provide easy access for maintenance.
PART NO. 818A.

Other Internationally Famous Galaxy Products.



FFR-230/6
2-30 MHz. six channel HF strip receiver



COMM 1C
3.0 to 15 MHz. four channel (within 5% B.W) HFSSB transceiver with 95 or 200 watts PEP



COMM-1A
3.0 to 8.3 MHz. four channel HF SSB transceiver with 95 or 200 watts PEP



FFR-230
2 to 30 MHz. single channel HF strip receiver

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