



Satellite Systems Corporation
 101 Malibu Drive Virginia Beach, VA 23452 USA
 Voice (757) 463-3553 FAX (757) 463-3891
info@satsyscorp.com

Model 3434-L

L-Band Beacon Tracking Receiver

Version 4

A tracking receiver for antenna step tracking and automatic uplink power control with Accu-trac for high drift LNB applications.

The Model 3434-L Version 4 is the latest release of our reliable series of 3434 Beacon Receivers. With Version 4 firmware we now offer the full L-band range of **930 to 2300 MHz**, Digital Level reference setting, Ethernet connectivity with M&C control interface, and power up temperature compensation for rapid signal acquisition. The 3434 series now offers our proprietary Accu-trac search and acquire AFC feature with several search bandwidths up to ± 800 kHz. Frequency selection on 10 kHz steps may be accomplished from the front panel or via remote control. Pre-detection noise bandwidth of 50 kHz (or factory option of 25 kHz) facilitates accurate tracking at very low C/N levels for use with either CW or BPSK carriers.

- ★ AFC disable option for wide data carrier applications
- ★ Digital level reference setting, -40 to -100 dBm on 0.5 dB steps
- ★ BPSK Modulation compatible
- ★ Accu-trac signal tracking feature for high drift LNB applications with selectable acquisition bandwidths up to ± 800 kHz
- ★ RS-232/422/485 and Ethernet, control interface, all Standard
- ★ Dual signal strength output / 2 identical analog outputs for simultaneous antenna tracking and UPC control

The output of the Beacon Receiver is a DC voltage proportional to the input signal level to facilitate both antenna tracking control and automatic power control. A Loss of Carrier indicator is provided in the event the tracking signal is lost. Form "C" relay contacts provide an external Loss of Carrier Alarm. A front panel VFD or SSC GUI (via your computer) displays operating frequency, relative signal level, carrier lock or alarm, and input level.

Specifications

Input Frequency	930 - 2300 MHz
Input Level	-40 to -100 dBm typical
Level Adjust	Digital, 0.5 dB steps
Level Accuracy	± 0.4 dB per step
 ± 4 dB over entire range
Tracking Slope	0.5 V/dB
Tracking Linearity	± 0.25 dB
Frequency Selection	10 kHz steps
Min. input level for Lock	-110 dBm
Input Connector	Type "N" Female, 50 ohm*
Threshold	4 dB C/N for acquisition
	< 1 dB C/N for carrier lock
Tracking Response	0 to +10 VDC over 20 dB input range standard
	other ranges optional****
Alarms	Form-C relay contacts
AFC	± 25 kHz**
AFC disable	For Wide data carrier applications
Accu-trac sweep widths	disable & user selectable bandwidths from ± 50 kHz to ± 800 kHz
Noise Bandwidth	50 kHz
Modulation type	CW or BPSK up to 8kbps
Output – dual signal strength analog output	Modular socket & plug
M&C	RS-232 or RS-422/485
	Ethernet 10/100 Base T
..... Continuous Data Streaming option/ streaming signal strength output via a dedicated RS-232 DB 9 connector	
M&C Connector	DB-9 Female & RJ 45 Connector
	Dedicated DB9 with CDS option
MECHANICAL:	
Output Connector	Modular socket & plug
Dimensions	1 RU, 19" x 16" x 1.75"
POWER:	
Prime Input Power	90-260 VAC, 47-63 Hz, auto-sensing, 45 Watts max
LNB Power	+24 Volts @ 1 Amp available on center conductor Selectable In/Out****

* Other input connectors available please contact SSC
 *** Other power options available please contact SSC

** Other AFC options available please contact SSC
 **** Other ranges available please contact SSC



Satellite Systems Corporation
 101 Malibu Drive Virginia Beach, VA 23452 USA
 Voice (757) 463-3553 FAX (757) 463-3891
info@satsyscorp.com

Model 3434-L

L-Band Beacon Tracking Receiver

Version 4

Sweep Widths for Accu-trac signal tracking feature for high drift LNB applications.
Accu-trac features can be selected from the front panel or via remote mode. Disabled or active selected by user.

Disabled	±50 kHz	±75 kHz	±100 kHz	±150 kHz	±200 kHz	±250 kHz
±300 kHz	±400 kHz	±500 kHz	±600 kHz	±700 kHz	±800 kHz	

Valid Options

AFC and Filtering

- 0 Standard AFC and Standard 0.4 Hz output smoothing filter
- A No AFC – Use for tracking Wide Data Carriers. Standard 0.4 Hz output smoothing filter
- S No AFC and No 0.4 Hz output smoothing filter.
- T No 0.4 Hz output smoothing filter. Standard AFC

Bandwidth

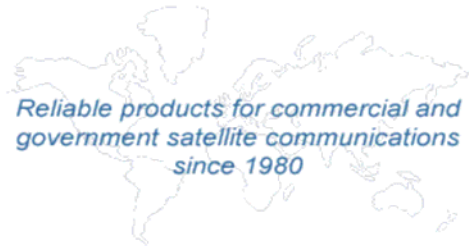
- 0 50 kHz pre-detection bandwidth
- 5 25 kHz pre-detection bandwidth

Input Connector on Rear of BTR

- N 50 ohm N female connector
- B 50 ohm BNC female connector
- Q 50 ohm TNC female connector
- S 50 ohm SMA female connector

Options

- Blank No CDS
- C Optional Continuous Data Streaming



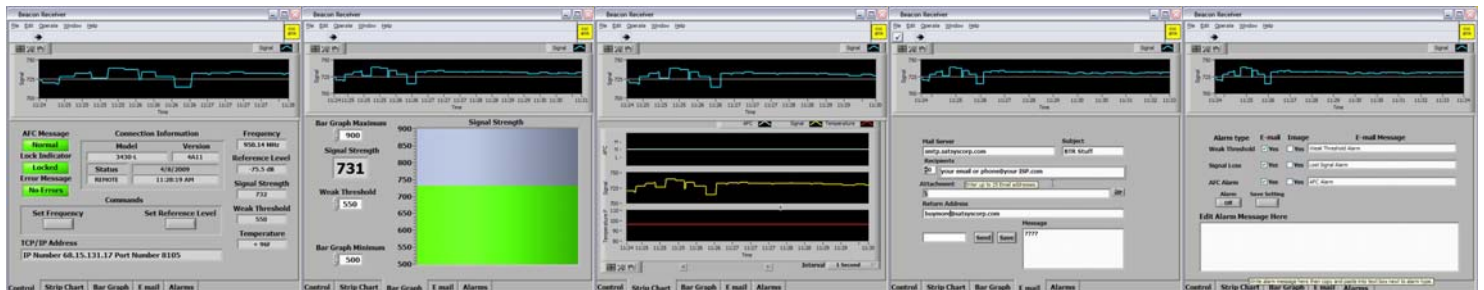
Part Numbering Typical part number 3434-L00NC

Frequency Range	Base Model	BAND	AFC & Filtering	Band-width	Input Connector	M&C
930 to 2300 MHz	3434	L	0, A, S, or T	0 or 5	N, B, Q, or S	Blank or -C

Other Frequency Ranges are available.

Please see <http://www.satsyscorp.com> for more information.

Satellite Systems announces the new control GUI version **2.0** for our Beacon Receiver Product line. Enhanced control features and additional monitoring tools are included along with strip charting for signal strength, AFC, and temperature. Version 2.0 also includes a new event-triggered alarm feature that allows for email notification to your laptop or cell phone. Alarms are triggered via signal strength, loss of signal, and AFC conditions.



Satellite Systems Corporation 101 Malibu Drive, Virginia Beach, Virginia 23452 USA
 757.463.3553 Phone 757.463.3891 Fax www.satsyscorp.com info@satsyscorp.com