



RescueLine Signal Booster

UHF Series

Bird Technologies, TX RX Systems Brand RescueLine Signal Booster, the first signal-booster system that fully complies with the IFC 2009 and NFPA 1 2009 codes, which makes it the electronic lifeline for first responders inside a building.

To comply with the new International Fire Code and National Fire Protection Association (IFC/NFPA) standards, the Bird RescueLine delivers on a key objective: ensuring that first responders have reliable radio communications in large structures. It features 24-hour battery back-up capability and an alarm interface providing all five required alarm conditions, including antenna system failure (up or down link) and 70-percent low battery. The Bird RescueLine is compatible with standard fire-alarm panels.

OUTPUT LEVEL CONTROL (OLC) CIRCUIT MONITORS AND CONTROLS RF OUTPUT POWER

- ▶ Maintains maximum required output power while preventing damage and excessive emissions per FCC requirements
- ▶ Easy-to-read LED bar graph
- ▶ Unique OLC DataLog feature facilitates system maintenance and optimization

DECOUPLED RF TEST POINTS FOR SIMPLIFIED SERVICE

- ▶ Allow fast system measurements in both uplink and downlink directions
- ▶ Monitor signals for performance optimization
- ▶ Integrated design facilitates non-intrusive measurements

SECURE, NON-VENTED NEMA ENCLOSURE SUITABLE FOR EXTREME INDOOR AND OUTDOOR ENVIRONMENTS

SIMPLE SETUP IS ACHIEVED VIA AN INTEGRAL, MAN-MACHINE INTERFACE

- ▶ No Tools Required

OPTIONAL FEATURES AVAILABLE

- ▶ Comm Card II for remote communications and control
- ▶ Fiber optic link interface*
- ▶ Redundant PA configuration*
- ▶ -48 VDC input*
- ▶ Automatic Voice / Pager Dialer

DC BACKUP INTERFACE ACCEPTS +24 TO +27 VDC AND OPTIONAL -48 VDC

MICROPROCESSOR CONTROLLED FAULT MONITORING AND ALARMING ENSURES RELIABLE OPERATION AND FLEXIBLE CONFIGURATION

- ▶ Control system continuously monitors parameters including voltage, current, temperature and OLC activity
- ▶ LEDs on each module quickly annunciate source of fault
- ▶ Simple, back-lit liquid crystal display (LCD) and switch control
- ▶ Fault triggers annunciation on panel, alarm contact closure and internal recording of failed subsystem

CARD CAGE MODULARITY

- ▶ Easy "slide-in" replacement process
- ▶ Facilitates ease of service and system configuration

HIGH PERFORMANCE BANDPASS FILTERS

- ▶ Configured to customer requirements and addresses many specifications requiring custom passbands
- ▶ Standard models available with a variety of passbands*

PROGRAMMABLE GAIN SETTING

- ▶ Ease of initial configuration via front panel
- ▶ When used in conjunction with OLC DataLog, simplifies post installation adjustments

THREE MAJOR GAIN RANGES AVAILABLE

- ▶ Low: +45 dB, Medium: +60 dB, High: +80 dB

* Contact Factory for these models

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SPECIFICATIONS

Frequency Range	See chart below
Passbands	See chart below
Minimum Gain (dB)	+45 dB +60 dB +80 dB (depending on model)
Gain Adjustment	Programmable attenuation, 0-30 dB, 0.5 dB steps
3rd Order Output Intercept Point	+55 dBm minimum, with no attenuation
Maximum Input Level	0 dBm
Maximum Output Power	32 dBm (single carrier)
RF Sampler	PA Output sampler (-30 dB)
Noise Figure (without attenuation)	8 dB max for Medium Gain, High Gain (Head end) 11 dB max for Low Gain (in Line)
Propagation Delay	<0.5 μ s
Operating Temperature Range	-30°C to +50° C
Nominal impedance	50 ohms, <1.5:1 VSWR
Input/Output connectors	N female
RF Sampler Connectors	BNC female
AC Power Input	100-240 VAC; 50-60 Hz
DC Input Voltage	+24 to +27 VDC -48 VDC optional
Unit Power Consumption (AC/DC)	<100 VA
Housing*	Modified NEMA 4 enclosure painted red
FCC Certification**	EZZ5PI616850
Industry Canada Certification**	1940A-P616850

* Housing Options = XX: G1:Painted Steel NEMA 4, G2:Stainless Steel NEMA 4X. (Frequencies MUST be provided with order.)

** Class B Type Booster. Certification under FCC Rules Part 90 and Industry Canada Certification Part RSS-131.

6160-H-24-NG Battery, High Capacity, 24 VDC Output, NFPA, Gray

6160-H-48-NG Battery, High Capacity, 48 VDC Output, NFPA, Gray

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UHF SERIES RESCUELINE SIGNAL BOOSTER II MODEL MATRIX

Model Number*	Frequency Range	Passbands	Min. Guardband	Gain	Nominal Size	Net Weight
61-70-60-A0.15-N	450-470 MHz	0.15 MHz	4.85 MHz	80 dB	30" x 24" x 12"	130 lbs
61-70-60-A0.5-N	450-470 MHz	0.5 MHz	4.5 MHz	80 dB	30" x 24" x 12"	130 lbs
61-70-60-A0.75-N	450-470 MHz	0.75 MHz	4.25 MHz	80 dB	30" x 24" x 12"	130 lbs
61-70-60-A1.0-N	450-470 MHz	1.0 MHz	4.00 MHz	80 dB	30" x 24" x 12"	130 lbs
61-70-60-A1.25-N	450-470 MHz	1.25 MHz	3.75 MHz	80 dB	30" x 24" x 12"	130 lbs
61-70-60-A2.0-N	450-470 MHz	2.0 MHz	3.0 MHz	80 dB	36" x 30" x 12"	210 lbs
61-70-60-B0.15-N	450-470 MHz	0.15 MHz	4.85 MHz	60 dB	30" x 24" x 12"	130 lbs
61-70-60-B0.5-N	450-470 MHz	0.5 MHz	4.5 MHz	60 dB	30" x 24" x 12"	130 lbs
61-70-60-B0.75-N	450-470 MHz	0.75 MHz	4.25 MHz	60 dB	30" x 24" x 12"	130 lbs
61-70-60-B1.0-N	450-470 MHz	1.0 MHz	4.00 MHz	60 dB	30" x 24" x 12"	130 lbs
61-70-60-B1.25-N	450-470 MHz	1.25 MHz	3.75 MHz	60 dB	30" x 24" x 12"	130 lbs
61-70-60-B2.0-N	450-470 MHz	2.0 MHz	3.0 MHz	60 dB	36" x 30" x 12"	210 lbs
61-70-60-C0.15-N	450-470 MHz	0.15 MHz	4.85 MHz	45 dB	30" x 24" x 12"	130 lbs
61-70-60-C0.5-N	450-470 MHz	0.5 MHz	4.5 MHz	45 dB	30" x 24" x 12"	130 lbs
61-70-60-C0.75-N	450-470 MHz	0.75 MHz	4.25 MHz	45 dB	30" x 24" x 12"	130 lbs
61-70-60-C1.0-N	450-470 MHz	1.0 MHz	4.00 MHz	45 dB	30" x 24" x 12"	130 lbs
61-70-60-C1.25-N	450-470 MHz	1.25 MHz	3.75 MHz	45 dB	30" x 24" x 12"	130 lbs
61-70-60-C2.0-N	450-470 MHz	2.0 MHz	3.0 MHz	45 dB	36" x 30" x 12"	210 lbs
61-71-60-A0.15-N	470-490 MHz	0.15 MHz	2.85 MHz	80 dB	30" x 24" x 12"	130 lbs
61-71-60-A0.5-N	470-490 MHz	0.5 MHz	2.5 MHz	80 dB	30" x 24" x 12"	130 lbs
61-71-60-A0.75-N	470-490 MHz	0.75 MHz	2.25 MHz	80 dB	30" x 24" x 12"	130 lbs
61-71-60-B0.15-N	470-490 MHz	0.15 MHz	2.85 MHz	60 dB	30" x 24" x 12"	130 lbs
61-71-60-B0.5-N	470-490 MHz	0.5 MHz	2.5 MHz	60 dB	30" x 24" x 12"	130 lbs
61-71-60-B0.75-N	470-490 MHz	0.75 MHz	2.25 MHz	60 dB	30" x 24" x 12"	130 lbs
61-71-60-C0.15-N	470-490 MHz	0.15 MHz	2.85 MHz	45 dB	30" x 24" x 12"	130 lbs
61-71-60-C0.5-N	470-490 MHz	0.5 MHz	2.5 MHz	45 dB	30" x 24" x 12"	130 lbs
61-71-60-C0.75-N	470-490 MHz	0.75 MHz	2.25 MHz	45 dB	30" x 24" x 12"	130 lbs
61-72-60-A0.15-N	490-512 MHz	0.15 MHz	2.85 MHz	80 dB	30" x 24" x 12"	130 lbs
61-72-60-A0.5-N	490-512 MHz	0.5 MHz	2.5 MHz	80 dB	30" x 24" x 12"	130 lbs
61-72-60-A0.75-N	490-512 MHz	0.75 MHz	2.25 MHz	80 dB	30" x 24" x 12"	130 lbs
61-72-60-B0.15-N	490-512 MHz	0.15 MHz	2.85 MHz	60 dB	30" x 24" x 12"	130 lbs
61-72-60-B0.5-N	490-512 MHz	0.5 MHz	2.5 MHz	60 dB	30" x 24" x 12"	130 lbs
61-72-60-B0.75-N	490-512 MHz	0.75 MHz	2.25 MHz	60 dB	30" x 24" x 12"	130 lbs
61-72-60-C0.15-N	490-512 MHz	0.15 MHz	2.85 MHz	45 dB	30" x 24" x 12"	130 lbs
61-72-60-C0.5-N	490-512 MHz	0.5 MHz	2.5 MHz	45 dB	30" x 24" x 12"	130 lbs
61-72-60-C0.75-N	490-512 MHz	0.75 MHz	2.25 MHz	45 dB	30" x 24" x 12"	130 lbs



Bird Technologies®



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