



The Toro® Radio Interface Unit combines the functions of the OSMAC® Base Station and Hand-held Remote Interface (HHRI) in a single unit. Available in a dual radio configuration that performs both Base Station and HHRI functions, a single radio configuration that's programmable for either function, and a radio-less configuration that's programmable for either function and utilizes a user-supplied external radio for added flexibility.

Features & Benefits

Hand-held Radio Control

As a hand-held interface for most Toro golf irrigation platforms, the RIU provides control of your system while you're on the go. As a base station for OSMAC systems, the RIU provides both hand-held control and central-to-satellite communication.

Rugged Reliability

With 100% duty cycle capability, the Radio Interface Unit was designed to operate continuously, 24 hours per day, 7 days per week. As such, the RIU easily withstands the rigorous demands of a golf course irrigation system.

Lower Operating Cost

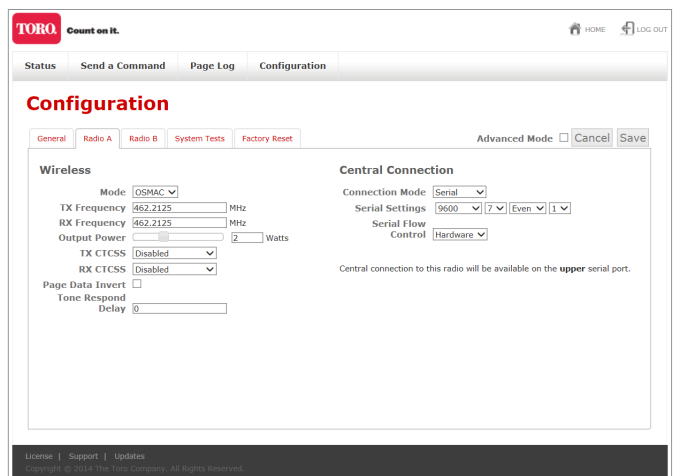
Using robust UHF radio technology, the RIU interfaces with your Lynx® or SitePro® central without the burden of recurring network costs.

Flexibility

The RIU can be tailored to fit your application with programmable selections for: OSMAC Base Station and Hand-held Remote Interface modes, independent transmit/receive UHF frequencies, independent transmit/receive private line settings (CTCSS) and transmit power.



Radio Interface Unit (RIU).



Radio Interface Unit (RIU) Graphical User Interface.



RADIO INTERFACE UNIT (RIU)



- Compatible with Lynx®* and SitePro®* central control software
- Supports Network VP®/VPE, OSMAC®, GDC, Network LTC®/LTC Plus, and Network 8000 field control hardware
- Integrated and external radio models
- Simple command set
- Audible confirmation tones
- Comprehensive area and hardware based control functions
- Intuitive graphical user interface
- Optional keyboard interface

*SitePro 7 and Lynx 3.0 or later software is recommended for use with the Radio Interface Unit (RIU).

Specifications

General

Frequency Range 450-480MHz
 Size..... 12.5" X 8.75" X 3"
 Weight (Single Radio) 6.8LBS (3.08kg)
 Weight (Dual Radio) 7.2LBS (3.27kg)
 Weight (No Radio)..... 6.4LBS (2.90kg)
 Voltage Input (Vin)..... 110VAC/220VAC 50/60 Hz
 Current Draw, Receiving/Idle <500mA
 Current Draw, TX (2W, 1-Radio) <600mA
 Current Draw, TX (4W, 1-Radio) <800mA
 Current Draw, TX (2W, 2-Radio) <800mA
 Current Draw, TX (4W, 2-Radio) <1000mA
 Operating Temperature Range.... 14°F/-10°C to +122°F/50°C
 Storage Temperature Range..... -4°F/-20°C to +122°F/50°C
 Relative Humidity..... 20-80%
 Power on Time to Operational..... <60s
 Paging Format..... POCSAG
 Serial Port Protocol TAP
 Pager Database Maximum Size..... 1000 Individual Pagers
 Maximum Page Length 250 Characters
 Maximum Number of Pages Buffered 150

Transmitter

Channel Spacing Narrow Band (12.5kHz)
 RF Power Output (Programmable)..... 1-4 watts
 (0.1W increments)
 Maximum Transmit Frequency Deviation ± 2.25kHz
 RF Bandwidth 8MHz No-Tune
 Occupied Bandwidth 11 kHz
 TX Spurious Outputs < -70dBc
 Emissions Designator 11K0F1D
 Maximum Page Rate..... 40 Pages per Minute
 @ 2W, 122°F/50°C Ambient or
 @ 4W, 104°F/40°C Ambient

Receiver

Typical RX Sensitivity (1% BER)
 4800bps, 2-Level -11 6dBm
 No-Tune Bandwidth 8MHz
 RX Selectivity -50dB (12.5kHz Channel Spacing)
 Spurious and Image Rejection..... -75dB
 RX Intermodulation Rejection -70dB
 Conducted Spurious Emissions <-53dBm

Input and Output Signals

Serial Port Baud Rates ..9600, 19200, 38400, 57600, 115200
 Voltage Levels..... RS-232 Complaint Levels
 RS232 Handshake Signals All Flow Control
 Transceiver RF 50 ohm BNC
 USB 1.0 and 2.0 (2-Front, 4-Back), USB Device (x1)
 Ethernet..... 802.3 10/100/1G Base

Specifying Information—Radio Interface Unit (RIU)

Model	Description
RIU-00	Radio Interface Unit – External Radio
RIU-01	Radio Interface Unit – Single Radio
RIU-02	Radio Interface Unit – Dual Radio

Note: FCC license required