

Wireless Button Accessories Reference Manual

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1. Introduction

The wireless button accessories can be used in Rinstrum indicator products to send signals to indicators wirelessly. Two RF frequencies are available to suite various regions. Two variants are available depending on mounting requirements.

- Non housing version suitable for mounting directly in X320's or ABS cabinets.
- ABS Housing with M12 version suitable for outdoor use.

1.1. Overview

- 315 MHz and 433.92 MHz options
- DC Power
- RS232 serial output
- 1 button and 4 button transmitters
- ABS housing for outdoor use
- Non housing version
- M12 connection

1.2. Receivers



ABS housing version



Non housing version

1.3. Transmitters



Single button



4 buttons

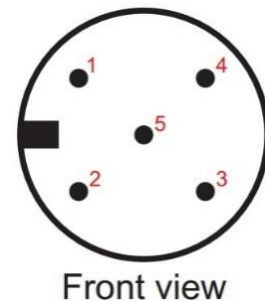
2. Specifications

Power input	9V – 28V DC
RF frequency	2 available model families: 315 MHz 433.92 MHz
Serial communication	RS232 with 9600 baud rate, No parity, 8 data bits and 1 stop bit
Protocol	Format 1 - Unique identifier for each transmitter and each button Format 2 – Short and long press of keys for R300/X320/R400 indicators: <ul style="list-style-type: none"> - Zero – Button 1 - Tare – Button 2 - Select – Button 3 - Print or f1 – Button 4

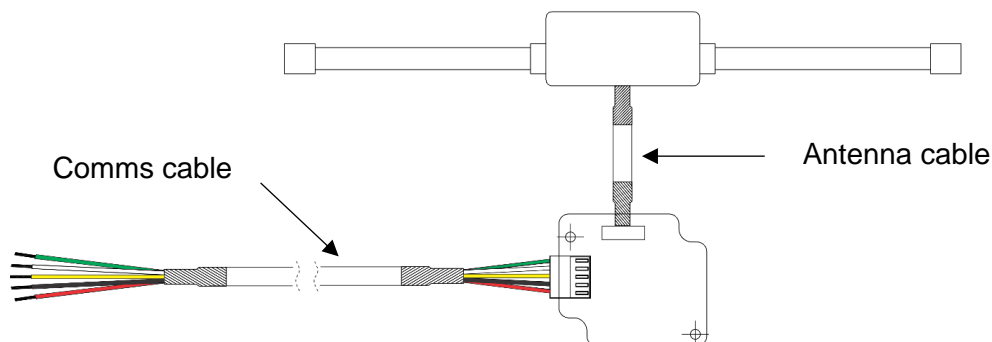
2.1. Connections

2.1.1. ABS housing version M12 Male pinout

Pin	Connection
1	DC+
2	TXD
3	GND
4	RXD
5	SHIELD



2.1.2. Non housing version cable colours



Comms cable Colour	Connection
Red	DC+
Green	TXD
Black	GND
White	RXD
Yellow	SHIELD

3. Communication Protocol

RF receiver supports two output protocols.

3.1. Format 1

Character Number	0	1	2	3	4	5	6	7	8	9	10	11	12
Description	SerialNo	SerialNo	SerialNo	SerialNo	SerialNo	SerialNo	SerialNo	SerialNo	SerialNo	Button	Button	CR	LF

Description	
SerialNo	Serial number of the transmitter
Button	Button number Button 1: 45 Button 2: 15 Button 3: 51 Button 4: 54
CR	Carriage Return character
LF	Line Feed character

Example:

Button 1 press: 0AFFF45F0**45**<CR><LF>

3.2. Format 2 (Factory default)

Format 2 is compatible with Rinstrum R300/X320/R400 series indicators. Pressing each button will execute following functions.

Short press of buttons

Button	Description	Serial
1	Zero	00120008:0B<CR><LF>
2	Tare	00120008:0C<CR><LF>
3	Select	00120008:0D<CR><LF>
4	Print or f1	00120008:0E<CR><LF>

Long press of button

Button	Description	Serial
1	Long press Zero	00120008:8B<CR><LF>
2	Long press Tare	00120008:8C<CR><LF>
3	Long press Select	00120008:8D<CR><LF>
4	Long press Print or f1	00120008:8E<CR><LF>

3.3. Changing output formats

You can change the output format of the receiver as follows. The factory default format is **Format 2**.

3.3.1. Set output Format 1

Command: SF1<CR><LF>

Response: OK<CR><LF>

3.3.2. Set output Format 2

Command: SF2<CR><LF>

Response: OK<CR><LF>

3.3.3. Read output format

Command: ROF<CR><LF>

Response if format 1 is selected: F1<CR><LF>

Response if format 2 is selected: F2<CR><LF>

4. Dimensions

