RD_11

**Multi Channel
Radio Control
Transmitter**

BRADLEY

www.bradeng.com

Instructions

Made in the UK

RD - 11
Operating Instructions

Contents

Power: 9 - 24v @ 2W max.

Data In/Out: RS232, TTL, RS485, RS422,
4,800 baud, 9,600baud, 19,200baud, 38,400baud

Over Air: 4,800baud, 9,600baud or 38,400baud, depending on channel

Outputs: RS232, TTL, RS485, RS422,
4,800 baud, 9,600baud, 19,200baud, 38,400baud

Options: Custom Yagi antenna
Lens driver modules
Servo driver modules
CCU protocol modules, Sony, Ikegami, Panasonic, Toshiba, JVC,

Dimensions: 124mm x 93mm x 12.7mm

Connections: 1 x Lemo 4pin, 1 x Lemo 7pin.

Custom Yagi Antena

B R A D L E Y from BR Remote Ltd.
Units 14 - 20 Setley Ridge Vineyard
Lymington Road
Brockenhurst
Hampshire
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UK

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Web: www.br-remote.com

Introduction:

The **RD_11** is a latest generation, multi channel, radio data transceiver. It operates in the license-free 868Mhz band for Europe and other regions, or 915Mhz for USA.
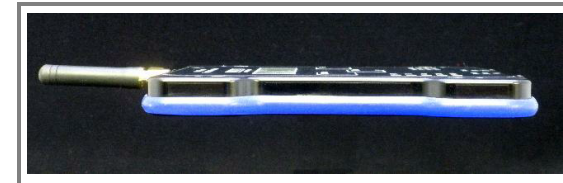
It is very rugged. The case is machined from solid aluminium, anodized, and sealed with a custom silicone seal. Only 12mm thick and fitted with Lemo connectors. All the functions are set via the simple LCD menu with no requirement to connect it to a computer for setups.

There are 10 (8 in USA) user selectable channels.

Channels 1 - 9 can be selected from 30mW to 100mW output power.
Channel 0 can be up to 500mW output power.

The units are selectable to be either transmitters or receivers with the data input and output configurable to suit most requirements.

'Add - on' modules can be attached to interface with remote equipment, eg. Lens drivers, servo drivers, CCU controllers etc.

INPUT
Data and Power input is via the 4 pin Lemo connector.   A 4 pin Lemo plug is supplied - terminated with an XLR4 connector.

Pin 1:	Gnd	Blue
Pin 2:	Data A (RS 485)	Green
Pin 3:	Data B (RS 485)	Yellow
Pin 4:	12v	Red

OUTPUT
Outputs are via the 7pin Lemo connector.   A 7 pin Lemo plug is supplied, terminated in an XLR4 connector.   If you use this cable on a receiver and the input cable on a transmitter the same data that is sent to the transmitter will be output on the same pins at the receiver.

Pin 1:	Gnd	Blue	- connected to XLR4
Pin 2:	Data A (RS 485)	Green	- connected to XLR4
Pin 3:	Data B (RS 485)	Yellow	- connected to XLR4
Pin 4:	12v	Red	- connected to XLR4
Pin 5:	TTL out		
Pin 6:	TTL return		
Pin 7:	Trigger out		

LED Indicators

5 LEDs indicate the immediate status of the unit.

RX -   If the unit is set to be a receiver this indicates when receiving a transmission.

TX -   If the unit is set to be a transmitter this indicates when it is transmitting. It should be noted that this will flash at varying rates. The unit only transmits when there is data to transmit or periodically (1 sec) if the input data has not changed.

Aux -   This indicates when the remote trigger is activated. (see remote trigger)

Data -   Flashes as each data packet is received or transmitted.

Power -   Illuminates when power is applied.
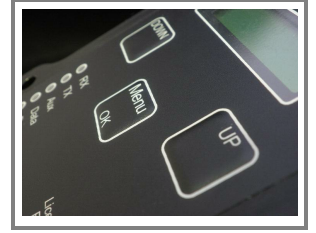
LCD display

This display will default to indicating the status of the unit (Transmitter or Receiver), the selected channel and the power output.

When the Menu is active it will guide you through the options.

LCD Menu

Holding the '*Menu'* button for a few seconds will unlock the Menu as indicated by the timed display.

Using the '*DOWN'* and '*UP'* buttons will step through the menu options. Upon reaching the desired menu option, push '*OK'* to change the settings of that option. When changed, push '*OK'* again to return to the menu step mode.

Operating Mode Swaps unit from Transmitter to Receiver.

Radio Channel Changes the working channel. When changed it will give the option to 'broadcast' the change on the original channel or just change the channel on that unit. Broadcasting the change will also change the channel of any receivers that are listening on the original channel. This is used to remotely change the channel of a reciever(s).

RF TX Power Set the transmitter output power. (Ch.0 up to 500mW).

Adjust Backlight Adjusts the backlighting level of the buttons.

Trigger Mode Sets the parameters of Trigger Mode. (see Trigger Mode)

Trigger Ident Sets the ident for Trigger Mode. (see Trigger Mode)

RD12 Mode Sets an **RD_12** reciever to *CCU* or *Bradley D** mode.

The Menu Mode will return to default screen after a timeout with no activity or by selecting exit.

Trigger Mode

This is a built-in method of triggering remote equipment such as recorders or lamps etc. It will activate when the '*REC'* command is sent from a controller.

3 types of triggering can be set;

1. 12v output on pin 7 when active.
2. 5v output on pin 7 when active.
3. 'Open collector' grounded when active.

Also the triggering can be global or ident selective.

Global - All receivers on the channel will activate the trigger when commanded.

Idented - The trigger activates only when the camera ident matches.

Other Functions

Other functions will become available as customer demand dictates. When available, the units can be returned to BRADLEY for upgrades.