

## RP Series Radio Receiver

### Model: RP100

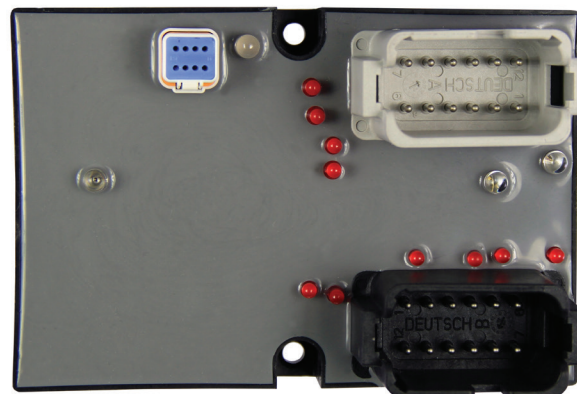
### P/N: RP01000002

### 10 Digital Outputs



#### FEATURES:

- ✓ Engineered and manufactured in the USA
- ✓ FCC, IC, CE certified by accredited independent laboratory
- ✓ RoHS Compliant
- ✓ 2.4 GHz with Extended Range and DSSS ( Direct Sequence Spread Spectrum )
- ✓ Worldwide license free operation
- ✓ 32-bit ARM-Core Digital Microprocessor
- ✓ Simple, straight forward, easy to install
- ✓ Encapsulated waterproof control package
- ✓ 1,600 ft. range line of sight
- ✓ LED diagnostic indicators
- ✓ Reverse polarity protection
- ✓ Wireless pairing function
- ✓ Loss of signal timeout
- ✓ Universal for 12VDC or 24VDC systems
- ✓ No perceivable delay between transmitter and receiver
- ✓ Multiple systems may operate within the same area in close proximity without interfering with each other
- ✓ Factory configurable for custom applications\*
- ✓ Factory custom wire/cable harnesses available\*



**2.4GHz**  
Extended Range

**Sealed to**  
**IP67**

**32-bit**  
Microprocessor

#### APPLICATION:

The RP Series radio receiver is used to control the ON/OFF functions of hydraulic valves for cylinders and motors from a remote location. This series can also be used to control other devices that meet the electrical requirements. Ex. lights, horns, contactors, relays.

#### APPLICATION EXAMPLES:

- |                    |                       |                    |
|--------------------|-----------------------|--------------------|
| • Tow Trucks       | • Service Truck Crane | • Grain Carts      |
| • Winches          | • Stump Grinders      | • Turf Equipment   |
| • Boat Lifts       | • AG Equipment        | • Paving Equipment |
| • Gates            | • Power units         | • Door Lifts       |
| • Conveyor Systems | • Automobile Carriers | • Lighting/Horns   |

#### DESCRIPTION:

The fully encapsulated RP Series are compact, durable, sealed and easy to install radio receivers. All exposed components on the receiver are made from non corrosive materials. This receiver is designed with Direct Sequence Spread Spectrum (DSSS) modulation for superior performance. It is a perfect complement to the Brand Series 21, Series 36 and Series 38 stackable directional control valves. Other control valves or solenoids meeting the appropriate specifications may be controlled as well.



## SAFETY:

Our RP Series radio receivers are built with high quality long life components that are designed for use in harsh environments. We use the latest wireless and microprocessor technology including a 32-bit ARM-Core microprocessor to give these small controls some serious digital muscle. Our unique network design allows for operation of multiple units in the same location without interfering with each other.

Safety and protection features:

- Watchdog monitor
- Single bit change redundancy
- Windowing watchdog monitor
- Over-current protection
- Short circuit protection
- Loss of signal timeout
- Reverse polarity protection
- Load dump protection
- Back EMF protection on all outputs
- Back-feed protected outputs

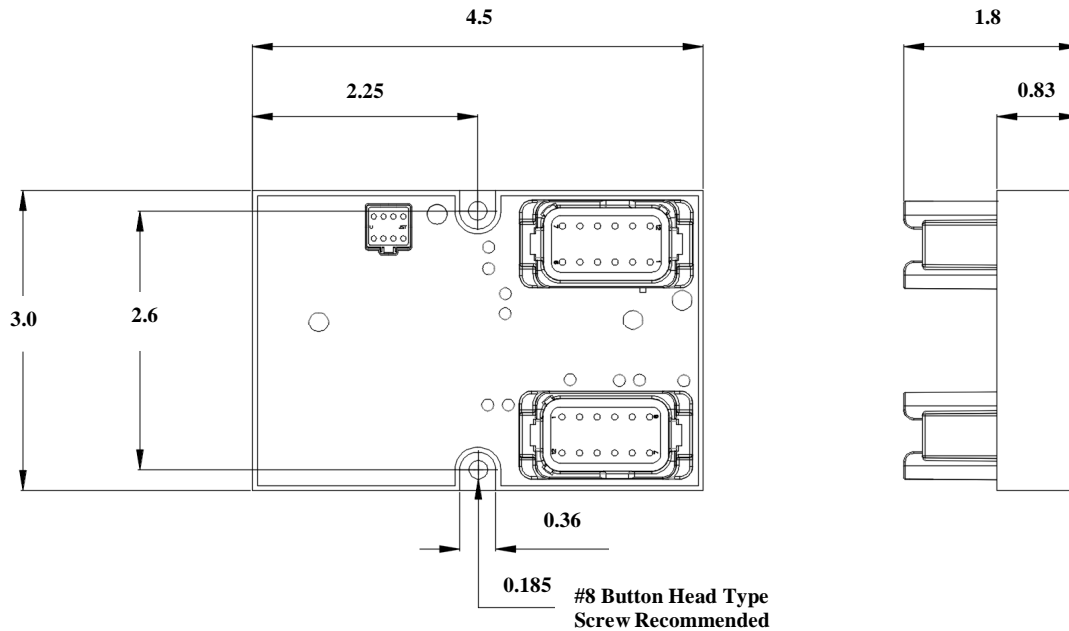
## RELIABILITY:

All Brand Hydraulics Co. products are backed by lifetime technical support from the engineers at the Brand Hydraulics Co. manufacturing facility. Our electrical engineers are ready to assist you before and after the sale with technical support. Brand Hydraulics Co. products are backed by a 2 year Limited Warranty Policy. Please visit our website at [www.brand-hyd.com](http://www.brand-hyd.com) for more information.

SPECIFICATIONS:	
Digital Outputs	10 – ( 1 ON at a time ) Consult factory for other options
Back EMF Protection	Yes
Output Switching Type	Automotive Grade, High side switch
Output current per output	3 Amps
Total Maximum current	6 Amps
Short Circuit Protection Shutdown	10A
Supply Voltage, DC Only	8-30VDC
LED Indicators	Transmit, Reset, Power Good, Reverse Polarity, Output Active (one for each output)
Antenna	Internal
Range	1,600 ft. (Aprox. 500m) Line of sight. Depends on environment
Operating Temperature	-40°C - 85°C (-40°F - 185°F)
Storage Temperature	-40°C - 85°C (-40°F - 185°F)
Ingress Protection	IP67
Frequency	2.4 – 2.483 GHz
Modulation	DSSS (Direct Sequence Spread Spectrum)
Weight	10 oz, less any connector plug assemblies
Enclosure Material	Glass filled plastic
Approvals	USA – FCC Part 15.109 European Union – CE (EN ETSI 301 489-1, V1.9.2) Canada – ICES-003

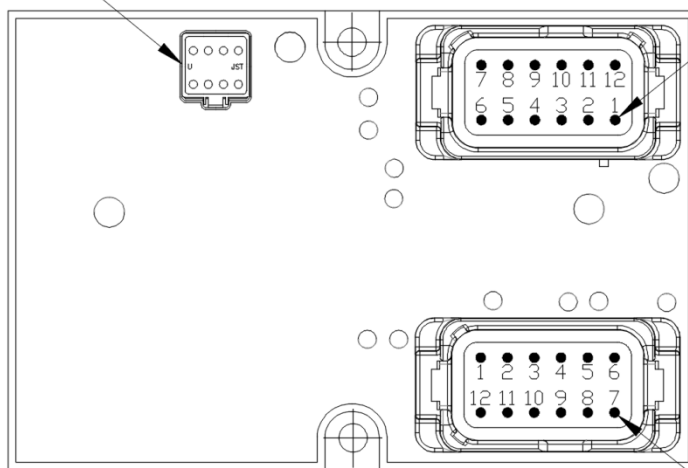


### RP100 Dimensions Details:



### RP100 Connector Details:

**For factory use only. Do NOT remove this plug or make connections at this location.**



#### Receptacle – A

Deutsch DT Series

Keyed – A, Gray

P/N: DTF15-12PA

- PIN 1 – Power Input
- PIN 2 – N/C
- PIN 3 – Output 4
- PIN 4 – Output 3
- PIN 5 – Output 2
- PIN 6 – Output 1
- PIN 7 – Ground
- PIN 8 – Ground
- PIN 9 – Ground
- PIN 10 – Ground
- PIN 11 – Spare Ground
- PIN 12 – System Ground

#### Receptacle – B

Deutsch DT Series

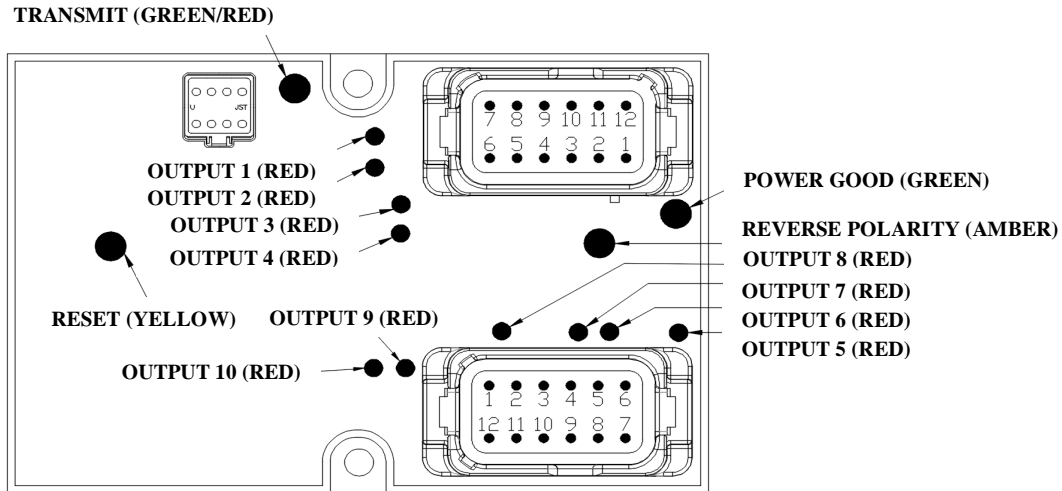
Keyed – B, Black

P/N: DTF15-12PB

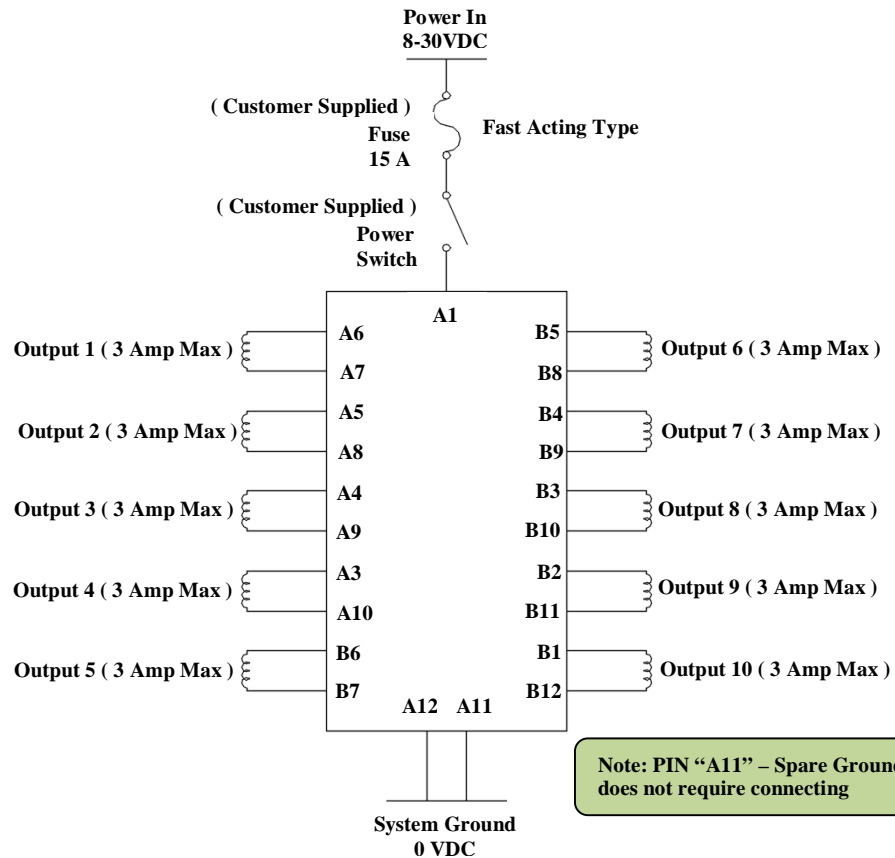
- PIN 1 – Output 10
- PIN 2 – Output 9
- PIN 3 – Output 8
- PIN 4 – Output 7
- PIN 5 – Output 6
- PIN 6 – Output 5
- PIN 7 – Ground
- PIN 8 – Ground
- PIN 9 – Ground
- PIN 10 – Ground
- PIN 11 – Ground
- PIN 12 – Ground



## RP100 Diagnostic Indicators:



## TYPICAL SYSTEM CONFIGURATION:





**MATING BRAND HYDRAULICS TRANSMITTER MODELS:**

- V100
- V200
- V300
- V400
- V500

**OPTIONAL PARTS AND ACCESSORIES:**

- E2365 – Deutsch 12-contact flying lead connector assembly, A-Key, 12 – 12” leads
- E2366 – Deutsch 12-contact flying lead connector assembly, B-Key, 12 – 12” leads
- E2368 – Deutsch 12-contact plug body, A-Key, Gray – Deutsch P/N: DT06-12SA
- E2369 – Deutsch 12-contact plug body, B-Key, Black – Deutsch P/N: DT06-12SB
- E2371 – Wedge lock for 12-contact plug, Orange – Deutsch P/N: W12S
- E1827 – Terminal, socket, size 16 – Deutsch P/N: 0462-201-16141
- E2024 – Sealing Plug, Locking, Size 16, White – Deutsch P/N: 0413-217-1605
- E2401 – 8-Contact plug ( *For sealing receptacle on RP100 only* )

Contact your local Brand Hydraulics distributor for pricing

**What is Included:**

Quantity	Description
1	RP100 Series, 10 – Digital Output Radio Receiver

\*Some options and custom changes may require minimum quantities.

It is the purchaser's responsibility to determine the suitability of any Brand Hydraulics product for an intended application, and to insure that it is installed in accordance with all federal, state, local, private safety, health regulations, and codes and standards. Due to the unlimited variety of machines, vehicles, and equipment on which our products can be used, it is impossible for Brand Hydraulics to offer expert advice on the suitability of a product for a specific application. We believe that it is our customer's responsibility to undertake the appropriate testing and evaluation to prevent injury to the end user.

*All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.*

