


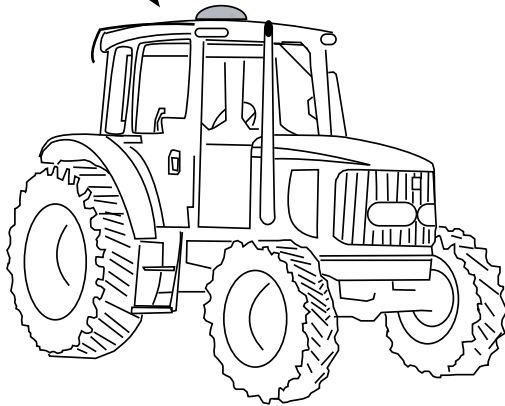
# RX375P RECEIVER

## INSTALLATION AND SPECIFICATIONS

### Mounting Considerations

1. When mounting the RX375P Receiver, a space of at least 6 inches (15 cm) between the receiver and any bend in the cable is required. Any length shorter than 6 inches puts undue stress on the cable and the enclosure for the RX375P.
2. The Receiver should not be mounted where water can pool around it. The receiver housing is designed to withstand rain and splashing, but not submersion in liquids for sustained periods of time.
3. Mount the receiver above all other metal objects to avoid multipath. Satellite signals received by the GPS receiver by a reflection from an object can decrease positioning accuracy. For example, roof racks, large headlight enclosures, etc., can cause multipath that may result in a jump in GPS position.

 Mount antenna at a minimum of 6 inches (15 cm) before applying a bend to the cable



### RX375P Receiver Installation

1. Make sure the surface of the vehicle is clean, dry, and free of dust particles.
2. To magnetically mount the RX375P, attach the black magnetic base unit to the underside of the receiver and mount it to a metal surface.
3. To mount the receiver to a fiberglass surface, remove the adhesive pad and attach it to the vehicle. Adhere the metal disk to the other side of the adhesive pad, holding firmly in place for 10 seconds to ensure a secure connection. Magnetically mount the RX375P to the disk.



LED Status Indicator  
 Red - power is ON  
 Amber - GPS lock  
 Green - DGPS solution

Deutsch connector

Port A: 4800 GGA 1Hz  
 VTG 1Hz

Port B: 19200 GGA 5Hz  
 VTG 1Hz

## SPECIFICATIONS

### Calibration Numbers

TeeJet Technologies Products	Typical Speed Calibration Number
Radion	8590
IC18	8590
Legacy PCM/DCM	1064
TASC/ARC	1064
TeeJet 844/854/834	859 (With RAD "ON")
LH 70 Series	8590
LH 85	8590
LH 500 Series	8590
LH 5000	8590
LH 6000	8590
LH IC 24	8590 or 1.064 cm per pulse*
LH IC 34	8590

\* Depending on the application can operate in Autonomous Mode

### Electrical Connection Specifications

#### Deutsch Connector's Pin-outs

1. Manual mark in
2. TxB
3. RxB
4. CAN high
5. Signal Ground
6. TxA
7. One PPS
8. RxA
9. CAN low
10. Power in (12V)
11. Power Ground
12. Speed out

### GPS Sensor Specifications

Receiver Type	L1, C/A code with carrier phase smoothing ...(Patented COAST technology during differential signal outage)
Channels	12-channel, parallel tracking ..... (10-channel when tracking SBAS) (WAAS)
Update Rate	1 - 20 Hz Positions
Horizontal Accuracy	< 2.0 ft / 60 cm 95% confidence (DGPS) <sup>1</sup> * ..... < 8.2 ft / 2.5 m 95% confidence (Autonomous, no SA) <sup>2</sup> **
Differential Options	SBAS (WAAS, EGNOS, MSAS), e-Dif, L-Dif SBAS (WAAS) Tracking..... 2-channel, parallel tracking
Start Up Time	Cold Start: < 60 s (no almanac and RTC) ..... Warm Start: < 30 s (almanac and RTC) ..... Hot Start: < 10 s typical (almanac, RTC and position)
Satellite Reacquisition	< 1 s

\* Depends on multipath environment, number of satellites in view, satellite geometry, baseline length (for local services), and ionospheric activity.

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### Communication Specifications

Serial Ports	2 Full Duplex RS232
CAN	NMEA 2000 broadcast
Pulse Output	1 PPS (CMOS, active low, falling edge sync)
Baud Rates	4800 - 115200
Differential Correction I/O Protocol	RTCM SC-104 v2.x
Data I/O Protocol	NMEA 0183, SLX Binary and NMEA 2000

#### Ground Speed Output

Range:	0.5 -> 200 mph / 0.8 -> 322 km/h
Signal:	Pulse Out
Frequency Conversion:	94 Hz/m/s ..... (28.65 Pulse Per Foot Traveled)
Event Mark Output	CMOS, Active Low, ..... Falling Edge Sync, 10 K-ohm, 10pF Load

### Part Numbers

#### Kits and Components

45-05495	Cable, RX370P or RX375P Speed Only
45-05338	Cable, GPS Data w/12 position Deutsch
45-05496	Cable, RX370P or RX375P DB9, Speed, Power
45-05340	Cable, Deutsch to DB9
45-05350	Cable, Com 1 & 2 w/Power In
78-50203	Receiver, GPS RX375P SBAS

### Environmental Specifications

Operating Temperature	-22°F - +158°F / -30°C - +70°C
Storage Temperature	-40°F - +185°F / -40°C - +85°C
Humidity	95% Non-Condensing
Enclosure	Waterproof and Dustproof
Compliance	FCC, CE
Shock	EP455 Section 5.14.1 Operational
Vibration	EP455 Section 5.15.1 Random
EMI Certification	CE (ISO 14982 Emissions and Immunity), ..... FCC Part 15, ..... Subpart B, CISPR 22

### Power Specifications

Input Voltage	7 - 32 VDC
Power Consumption	< 3 W @ 12VDC (typical)
Current Consumption	249 mA @ 12VDC (typical)
Power Connector	Cable Mount and Environmentally Sealed

### Physical Specifications

Height	4.1 in / 10.4 cm
Width	5.7 in / 14.5 cm
Weight	<19.7 oz / <558 g
Mounting Options	Magnetic Mount ..... Fixed Mount (5/8 inch or no. 8-32 screws); 1" mounting hole



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