


BiNTRAC[®]

RM200 LoRa Radio



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Setup

Prior to installation, the unit must be configured to operate as either a BASE or REMOTE radio. Additionally, the radio channel can be changed if there are others in your area that are using RM200s on the default channel. These functions are accessed via the set of dip switches inside the unit as shown below.

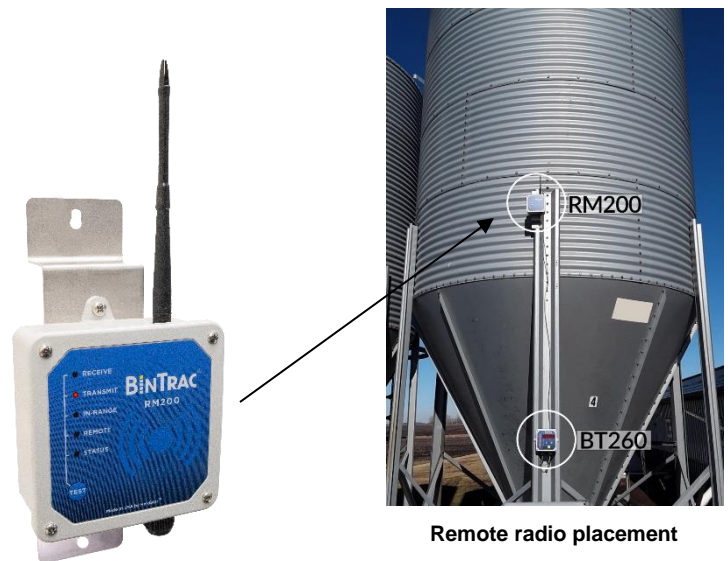


Description	Switch #	Default	Function
Channel #	1	Off	Allows 8 different radio channels to be used depending on how these are set. Must match on Base and Remote(s). Can leave at default unless multiple Base radios are in the area.
	2	Off	
	3	Off	
Normal/Test	4	Off	HerdStar Internal use only - Leave at default
Mode	5	On	HerdStar Internal use only - Leave at default
	6	Off	
	7	Off	
Remote/Base	8	Off	Used to set unit as Base or Remote radio. Off-Remote On-Base

Mounting

Mount the RM200 outdoors using the mounting holes on the top and bottom of the attached bracket (See **Appendix A – Dimensions**). The Remote radio(s) should be mounted within 100 feet of the BinTrac Indicator(s) it will be connected to. The Base radio should be mounted within 100 feet of where the Communication Hub or HouseLink will be placed.

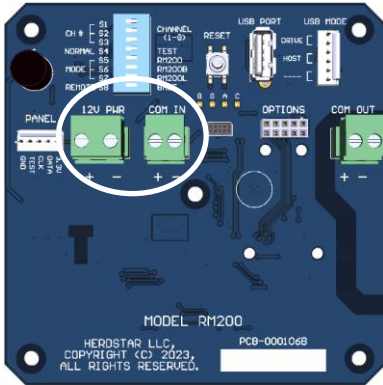
IMPORTANT: Position each unit in a location where it will have the best line of sight with the other radio(s) it will be communicating with.



Remote radio placement

Base Radio Wiring

Insert the Conxall connector into the port on the Communication Hub marked Base Radio, then wire the RM200 to the Base Radio using the information below. The relevant terminals on each unit are circled. There is a limit of 100 feet between the RM200 and the Base Radio. Ensure that dip switch S8 is ON for the Base Radio.



Wire Color	RM200 (12V PWR and COM IN)
GREEN	12V PWR +
WHITE	COM IN +
RED	COM IN -
BLACK	12V PWR -



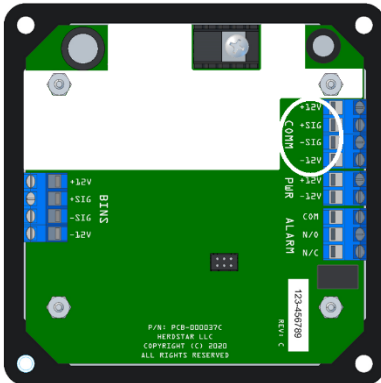
Remote Radio Wiring

Determine which BinTrac Indicator you have, either the BT200 (smaller, 5-digit display) or the BT260 (larger, 6-digit display) and wire the RM200 to the BinTrac Indicator using the information below. The relevant terminals on each unit are circled. There is a limit of 100 feet between the RM200 and the Indicator that it is wired to. Ensure that dip switch S8 is OFF for the Remote Radio.

NOTE: The BinTrac Indicator must have software version **3.16** or later. Only one COM connection at a time (COM IN or COM OUT) can be used on the RM200. They cannot be used simultaneously.

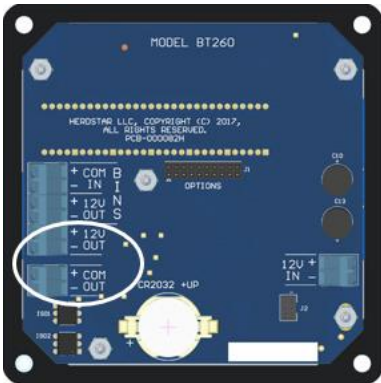
Standard/Master Wiring (Most Common) – This is used when the BinTrac Indicator is either a standalone unit, or when it is the MASTER in a MASTER/REMOTE configuration.

BT200



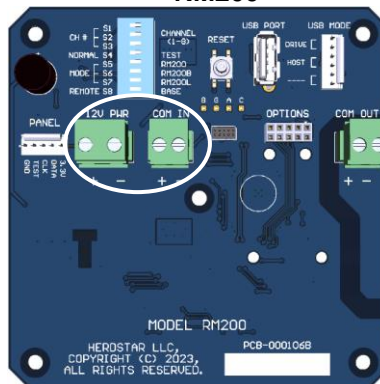
BinTrac BT200 (COMM)	Wire Color	RM200 (12V PWR and COM IN)
+12V	GREEN	12V PWR +
+SIG	WHITE	COM IN +
-SIG	RED	COM IN -
-12V	BLACK	12V PWR -

BT260



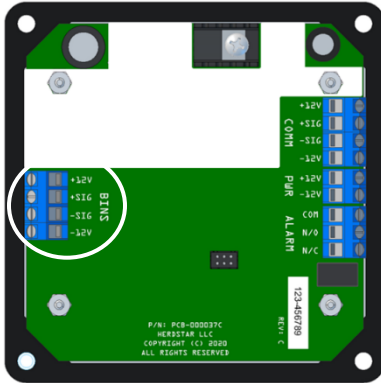
BinTrac BT260 (12V & COM OUT)	Wire Color	RM200 (12V PWR and COM IN)
+12V OUT	GREEN	12V PWR +
-12V OUT	BLACK	12V PWR -
COM OUT +	WHITE	COM IN +
COM OUT -	RED	COM IN -

RM200



Remote Display Wiring (Optional) - This is used when the BinTrac Indicator is the REMOTE in a MASTER/REMOTE configuration. The COM wires in the RM200 will need to be moved from the COM IN to the COM OUT.

BT200



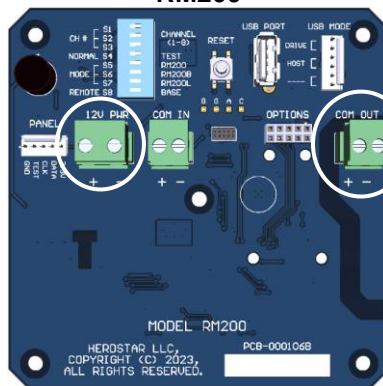
BinTrac BT200 (BINS)	Wire Color	RM200 (12V PWR and COM OUT)
+12V	GREEN	12V PWR +
+SIG	WHITE	COM OUT +
-SIG	RED	COM OUT -
-12V	BLACK	12V PWR -

BT260

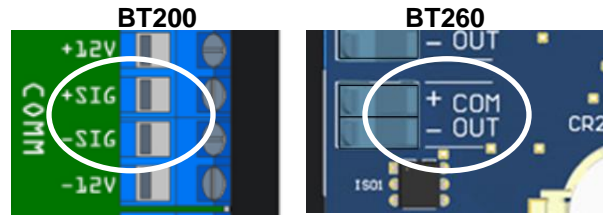


BinTrac BT260 (BINS)	Wire Color	RM200 (12V PWR and COM OUT)
+COM IN	WHITE	COM OUT +
-COM IN	RED	COM OUT -
+12V OUT	GREEN	12V PWR +
-12V OUT	BLACK	12V PWR -

RM200



Wiring Multiple BinTrac Indicators to a Single RM200 - Multiple BinTrac Indicators can be wired to a single RM200 by daisy chaining on the communication port that the RM200 is wired to (+/- SIG on the BT200 and +/- COM OUT on the BT260 – see below). When using multiple Indicators in this fashion, each Indicator needs to be set to a unique ID. See the [BinTrac BT260/BT200 Operation Manual](#) for more details or contact HerdStar support.



Status Lights

The status lights on the RM200 indicate the following:

- Receive – Lights when the unit is receiving data.
- Transmit – Lights when the unit is transmitting data.
- In Range – (REMOTE ONLY) Lights when the unit is communicating with a BASE radio.
- Remote – Lights when the unit is configured as a REMOTE. When off, the unit is configured as a base.
- Status – The Status LED will light when the unit has power.

Test Button

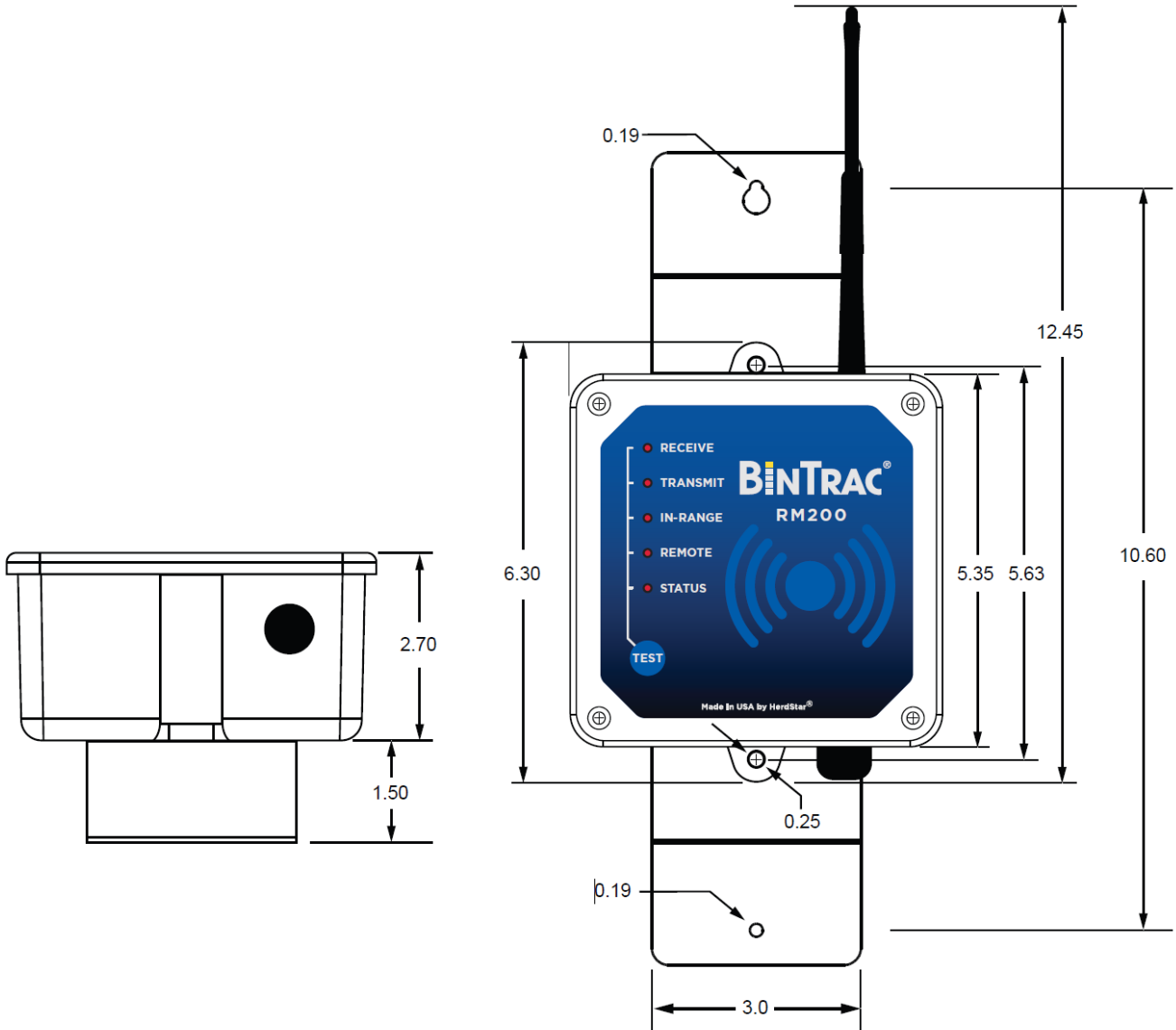
When set to Remote Radio (dip switch 8 OFF) - Pressing the TEST button will briefly display the signal strength between the Remote Radio and the Base Radio it is connected to using the 5 LEDs on the display:

- 1 LED – RSSI < -110 (worst)
- 2 LEDs – RSSI < -105
- 3 LEDs – RSSI < -95
- 4 LEDs – RSSI < -90
- 5 LEDs – RSSI > -90 (best)

When set to Base Radio (dip switch 8 ON) - TEST button disabled.

Appendix A

Dimensions



HerdStar BinTrac® Warranty

HerdStar, LLC (“**HerdStar**”) warrants to original purchaser (“**Buyer**”) that goods manufactured solely by HerdStar, LLC (“**Products**”) will be free from defects in material or workmanship under normal and intended use and service for a period of one year from delivery date of the Products. Used and/or refurbished parts sold shall carry a 90-day warranty on material and workmanship. All warranty claims must be submitted within ten (10) days of discovery of defects within the warranty period, or shall be deemed waived. Furthermore, HerdStar, LLC warrants the load cell (“Load cell” is defined as the s-shaped component and any cabling and connectors) against lightning damage for 12 months or the term of any extended warranty.

In the event of a defect in any Products constituting a breach of the warranty provided herein, HerdStar, LLC will at its option either (i) repair or replace such Product free of charge, or (ii) in lieu of repair or replacement, refund to Buyer the original purchase price less the reasonable value of Buyer’s use of the Products. HerdStar, LLC shall furnish to Buyer instructions for the disposition of the defective goods. HerdStar, LLC shall have the option of requiring the return of the defective goods, transportation prepaid, and proof that the goods were not used, installed or altered or subject to misuse or abuse to establish the claim. No goods shall be returned to HerdStar, LLC without its prior consent. The acceptance of any goods returned to HerdStar, LLC shall not be deemed an admission that the goods are defective or in breach of any warranty, and if HerdStar, LLC determines that the goods are not defective they may be returned to Buyer at Buyer’s expense. This warranty sets forth Buyer’s sole and exclusive remedies for any defect in the goods. The rights and obligation under this warranty may not be assigned or delegated to a third party by Buyer without the prior written permission of HerdStar, LLC. Neither Buyer nor any other person may modify or expand the warranty provided herein, waive any of the limitations, or make any different or additional warranties with respect to the Products. Any statements to the contrary are hereby rendered null and void unless expressly agreed to in writing by an authorized officer of HerdStar, LLC.

EXCEPT AS STATED IN ABOVE, HERDSTAR, LLC DOES NOT MAKE ANY WARRANTY AS TO THE GOODS OR SERVICES AND, IN PARTICULAR, DOES NOT MAKE ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, AND BUYER IS SOLELY RESPONSIBLE FOR DETERMINING THE PROPER APPLICATION AND USE OF THE GOODS.

HerdStar, LLC makes no representation or warranty that individual animals, or any given population of animals, will utilize any of HerdStar, LLC’s goods in the manner for which the goods were intended or designated. Any component parts that are not manufactured by HerdStar, LLC, such as electrical motors and controls, are excluded from any warrant by HerdStar, LLC, although such parts may be covered by separate warranties of the respective manufacturers. This warranty set forth above does not apply if all components of a system are not supplied by HerdStar, LLC or if the goods are not purchased from and installed by an authorized distributor or company warehouse, or installed and operated in accordance with HerdStar LLC’s specifications and instructions.

HERDSTAR, LLC SHALL NOT HAVE ANY TORT LIABILITY TO BUYER OR ANY OTHER PERSON WITH RESPECT TO ANY OF THE GOODS OR SERVICES AND SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL, EXEMPLARY, INDIRECT OR PUNITIVE DAMAGES ARISING FROM ANY PRODUCT DEFECT, DELAY, NONDELIVERY, RECALL OR OTHER BREACH. BUYER SHALL NOT HAVE ANY RIGHT OF REJECTION OR OF REVOCATION OF ACCEPTANCE OF THE GOODS.