Radio Frequency Control Switch for Tarp Motor

Quick Start Guides:

1. Safety Features
2. How to Operate System
3. Transmitter Pairing
4. Creating Multiple Transmitters
5. Maintenance and Troubleshooting

Part Number 105688
This Document Contains Five Quick Start Sections

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6. Understanding the 3 Modes of RF Operation
7. When to Use Each of the Operating Modes
8. Locking Out Tarp System During Driving
9. Transmitter “Auto Power Off” Function

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Failure to Read and Follow all instructions in the Product User Guide may result in serious injury or damage to property.

The information Icon shown above will be observed during the review of this Quick Start Guide. This information icon indicates that additional important information is in the Product User Guide (Roll Rite Instruction Part Number 105563).
Section One

SYSTEM SAFETY

AUTO-POWER-OFF FEATURE
SYSTEM LOCK-OUT FEATURE

WARNING

To prevent serious damage, do not operate the tarp system while the vehicle is on the road. The features described here have been included to prevent operation of the tarp system while the vehicle is in motion.

DO NOT use the remote control while while the vehicle is in motion

DO NOT operate the tarp from the receiver while the vehicle is in motion
Dual Trailer RF Switch System

**RECEIVER**

- **Status LED**
- **Uncover Open**
- **Cover Close**
- **Pair**

**TRANSMITTER**

- **Transmitter LED**
- **Transmitter ON**
- **Transmitter OFF**
- **Front Trailer Close / Cover**
- **Rear Trailer Close / Cover**
- **Front Trailer Open / Uncover**
- **Rear Trailer Open / Uncover**
Understanding the 3 Modes of RF Operation

1. Operate Tarp from Either Receiver or Transmitter

From Transmitter: Press On and Uncover for > 3 Seconds

From Transmitter: Press OFF
-OR-
Wait 5 Minutes

Unplug Trailer Power
-OR-
On Receiver: Press Cover + Uncover for > 3 Seconds

Plug Trailer Power In
-OR-
On Receiver: Press Cover + Uncover for > 3 Seconds

2. Lock Out Transmitter
   Operation from Receiver Only

3. Lock Out Receiver
   No Operation Will Occur

4. From Receiver:
   Press Cover + Uncover for > 3 Seconds

5. From Transmitter:
   Press OFF

6. Unplug Trailer Power
   -OR-
   On Receiver: Press Cover + Uncover for > 3 Seconds
### When to Use Each of the Operating Modes

<table>
<thead>
<tr>
<th>Mode 1, 2 or 3</th>
<th>Tarp Control</th>
<th>When to Use</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>Receiver Control is <strong>Enabled</strong>&lt;br&gt;Transmitter Control is <strong>Enabled</strong></td>
<td><strong>Use this mode when:</strong>&lt;br&gt;Operator wants to use Receiver (outside) or Transmitter (inside truck cab)</td>
</tr>
<tr>
<td><strong>Lock Out Transmitter</strong>&lt;br&gt;<img src="image" alt="Lock Out Transmitter" /></td>
<td>Receiver Control is <strong>Enabled</strong>&lt;br&gt;Transmitter Control is <strong>DISABLED</strong></td>
<td><strong>Use this mode when:</strong>&lt;br&gt;RF transmission is not allowed at a facility or within a fleet&lt;br&gt;-or-&lt;br&gt;The vehicle is in motion on private or public roads</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Receiver Control is <strong>DISABLED</strong>&lt;br&gt;Transmitter Control is <strong>DISABLED</strong></td>
<td><strong>Use this mode when:</strong>&lt;br&gt;The vehicle is in storage or in a service bay and it is not possible to disconnect power to the tarp system</td>
</tr>
</tbody>
</table>
### Locking Out the Tarp System During Driving

*There are two methods to prevent the tarp system from operating while the vehicle is on the road*

<table>
<thead>
<tr>
<th>Action</th>
<th>System Response</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unplug Power on Trailer to disconnect power to system</td>
<td>None</td>
<td>“Lock Out” System will not respond to receiver or transmitter commands until the system is powered</td>
</tr>
</tbody>
</table>

- *Or -*

<table>
<thead>
<tr>
<th>Action</th>
<th>System Response</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the Receiver + &gt; 3seconds</td>
<td><strong>Receiver LED</strong> Flashes 3 Times While Buttons are Pressed</td>
<td>“Lock Out” System will not operate from Receiver or Transmitter until the system is unlocked</td>
</tr>
</tbody>
</table>

### Unlocking the Tarp System After Driving

<table>
<thead>
<tr>
<th>Action</th>
<th>System Response</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the Receiver + &gt; 3seconds</td>
<td>After 3 Seconds Has Passed the <strong>Receiver LED</strong> Flashes 1 Time</td>
<td>“Operating” System will operate from Receiver or Transmitter until the system is unlocked</td>
</tr>
</tbody>
</table>
Transmitter “Auto Power Off” Mode

To prevent tarp system from running while on road, the Transmitter will lock out automatically after 5 minutes.

To start transmitter do the following 3 steps:

1. Make Sure the Receiver is NOT in LOCK OUT mode see “Locking Out Tarp System Receiver”

2. Press On + Uncover for greater than 3 seconds, then release. The Transmitter RED LED will flash once buttons are pressed, then again after 3 seconds have elapsed.

3. The Receiver will flash 5 times, indicating the system is ready for Operation from Transmitter
Section Two
OPERATING THE SYSTEM
When the transmitter is operating, the RED LED flashes rapidly when a button is pressed. *This indicates that communication is working between the transmitter and receiver.*

If the RED LED does not flash when a button is pressed, *the transmitter is not communicating.* Place Receiver in Operating Mode first, then place Transmitter in Operating Mode to continue.
Using the Transmitter for the First Time

1. **DO NOT pair the Transmitter to the Receiver.** When transmitter and receiver are shipped together, they have been paired by Roll Rite prior to shipping.

2. Connect the Receiver to the Motor Controller per the instruction document 105563. When power is connected to the receiver, the **RED LED will FLASH ONCE.** The Receiver is **ON.**

3. On the Transmitter:
   - Remove the plastic battery tab.
   - Press and hold the GREEN and YELLOW button for 3 seconds, then release.
   - The **RED LED** will flash as soon as you press the buttons and again after 3 seconds have passed.
   - The Receiver **RED LED** will flash 5 times, indicating the system is ready to run from the transmitter.
### Operating Tarp System from the TRANSMITTER

<table>
<thead>
<tr>
<th>ACTION</th>
<th>Receiver LED &amp; Transmitter LED</th>
<th>TARP SYSTEM MODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Plug in Nose Plug on Trailer to connect power to system</td>
<td><strong>Receiver LED Flashes 1 Time</strong></td>
<td>“Operating” System is now ready for command</td>
</tr>
<tr>
<td>2. PRESS AND HOLD + &gt; 3 Seconds</td>
<td><strong>Transmitter LED flashes once</strong> when pressed then flashes again after 3 seconds <strong>Receiver LED flashes 5 times</strong></td>
<td>“Operating” System is ready to take commands from Transmitter</td>
</tr>
<tr>
<td>Press Cover</td>
<td><strong>Transmitter LED will flash rapidly</strong> <strong>Receiver LED will flash 5 times</strong></td>
<td>“Cover/Close”</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Press Uncover</td>
<td><strong>Transmitter LED will flash rapidly</strong> <strong>Receiver LED will flash 5 times</strong></td>
<td>“Uncover/Open”</td>
</tr>
<tr>
<td>Press Transmitter Off &gt; 1 sec</td>
<td>No LED Lights</td>
<td>“Transmitter OFF” Tarp System will Not Operate Using Transmitter</td>
</tr>
</tbody>
</table>
### Operating the Tarp System from RECEIVER

<table>
<thead>
<tr>
<th>ACTION</th>
<th>RECEIVER LED INDICATOR</th>
<th>TARP SYSTEM MODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Plug in Nose Plug on Trailer to connect power to system</td>
<td>Receiver LED Flashes once indicating power is ON</td>
<td>“Operating” System is now ready for command</td>
</tr>
<tr>
<td>Press the Cover Button</td>
<td>Receiver LED Illuminated SOLID while system is operating</td>
<td>“Covering” System Follows One-Touch Operation if connected to One-Touch Motor Relay</td>
</tr>
<tr>
<td>Press the Uncover Button</td>
<td>Receiver LED Illuminated SOLID while system is operating</td>
<td>“Uncovering” When Used System Follows One-Touch Operation if connected to One-Touch Motor Relay</td>
</tr>
<tr>
<td>3 PRESS and HOLD For 3 seconds</td>
<td>Receiver LED Flashes 3 Times while the buttons are pressed</td>
<td>“Lock Out” System will not operate from Receiver or Transmitter</td>
</tr>
<tr>
<td>4 PRESS and HOLD &gt; 3 seconds</td>
<td>After 3 seconds, the Receiver LED Flashes 1 Time</td>
<td>“Operating” System will respond to Receiver or Transmitter commands</td>
</tr>
</tbody>
</table>
Section Three
PAIRING A REPLACEMENT TRANSMITTER

CAUTION

Use this section only when replacing an old RF Transmitter with a new RF Transmitter

When Receiver and Transmitter are purchased as a set, they are paired prior to shipping
Pairing the Tarp Motors to the Transmitter

IMPORTANT NOTE: When Transmitter and Receiver shipped together they have been paired prior to shipping.

Prior to Pairing a new FIRST REPLACEMENT transmitter to the Receiver, make sure the Transmitter is configured as a MASTER TRANSMITTER, see next section
Configuration of Receivers for Dual Trailer Application

1 – Front Trailer
2 – Rear Trailer
Pairing the Front Trailer Receiver

1 – Front Trailer
2 – Rear Trailer
1. Pairing the Transmitter with Front Trailer Receiver

1. Connect Receiver to FRONT TRAILER System

   Connect terminals to their corresponding color.  
   - Cover = Blue  
   - Uncover = Yellow  
   - BAT+ = Red  
   - GND = Black

2. Place FRONT TRAILER Receiver in Pairing Mode

   Hold the pair button and uncover button the receiver until the LED flashes six times (about seven seconds).  
   LED will continue to flash after buttons are released, indicating pairing mode has started.

3. Place GTX Transmitter in Pairing Mode

   Use a paper clip to tap the pairing button on the transmitter for less than one second. A blue LED will begin flashing rapidly, indicating pairing mode has started.
1. Pairing the Transmitter with Front Trailer Receiver

4. Pair FRONT TRAILER Control Buttons to Receiver

   Once Red LED and Blue LED stop flashing (about 30 seconds), press the FRONT TRAILER COVER button on the transmitter to associate the receiver with the transmitter Tarp function. The receiver LED will blink TWICE, indicating Front Trailer.

5. Check FRONT TRAILER Receiver Power On Function

   Hold the ON and FRONT TRAILER OPEN buttons for three seconds to turn on transmitter and receiver. The receiver will blink 5 times.

6. Check FRONT TRAILER Motor Operation

   While Covering or Uncovering the Front Trailer, the LED will be solid. After the action is complete, the receiver will blink 5 times.
Pairing the Rear Trailer Receiver

1 – Front Trailer
2 – Rear Trailer

[Image of truck with two trailers]
2. Pairing the Transmitter with Rear Trailer Receiver

1. Connect Receiver to REAR TRAILER System

   Connect terminals to their corresponding color.
   - Cover = Blue
   - Uncover = Yellow
   - BAT+ = Red
   - GND = Black

2. Place REAR TRAILER Receiver in Pairing Mode

   Hold the pair button and uncover button the receiver until the LED flashes six times (about seven seconds).
   *LED will continue to flash after buttons are released, indicating pairing mode has started.*

3. Place Transmitter in Pairing Mode

   Use a paper clip to tap the pairing button on the transmitter for less than one second. A *blue LED will begin flashing rapidly, indicating pairing mode has started.*
2. Pairing the Transmitter with Rear Trailer Receiver

4. Pair REAR TRAILER Control Buttons to Receiver

Once Red LED and Blue LED stop flashing (about 30 seconds), press the REAR TRAILER COVER button on the transmitter to associate the receiver with the transmitter Tarp function. The receiver LED will blink three times, indicating REAR Hopper.

5. Check REAR TRAILER Receiver Power On Function

Hold the ON and REAR TRAILER UNCOVER buttons for three seconds to turn on transmitter and receiver. The receiver will blink 5 times.

6. Check REAR TRAILER Motor Operation

While Uncovering or Covering the REAR Trailer, the LED will be solid. After the action is complete, the receiver will blink 5 times.

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Section Four
CREATING MULTIPLE TRANSMITTERS

CAUTION

Use this section only when creating two or more transmitters for one receiver

NOTE: When Receiver and Transmitter are purchased as a set, they are paired prior to shipping
**Master and Copy Transmitter Configurations**

*Standard Systems Include One Paired Transmitter and One Receiver*

In this configuration, the transmitter will always be set up as a MASTER transmitter.

It is possible to have multiple transmitters with one receiver.

In this configuration, there is one MASTER transmitter. All other transmitters will be configured as Copies (copies) configured from the MASTER transmitter.
Determining if the Transmitter is a MASTER OR Copy

1. Press the pairing button 1 time and release
2. Watch the BLUE LED. The BLUE LED will flash 1 or 2 pattern flashes repeatedly for about 10 seconds

   One Flash Pattern on LED Indicates the Transmitter is a Copy
   Two Flash Pattern on LED Indicates the Transmitter is a Master

Note: All transmitters are shipped by Roll Rite as MASTER Transmitters
Changing a MASTER Transmitter to a Copy Transmitter

1. Press the pairing button on the MASTER transmitter for 5 times and hold on the 5th time until the BLUE LED flashes twice. The configuration will change from MASTER to Copy.

2. Check to be sure the transmitter is now a Copy: Press the pairing button once. The blue LED will flash one time and repeat single flash pattern for 10 seconds.

3. Continue to directions on creating a Copy Transmitter by copying the pairing data from the MASTER Transmitter
1. Set the two transmitters side by side on flat surface as shown.
2. Press the MASTER pairing button for less than one second.
3. Observe the MASTER transmitter BLUE LED will begin to flash.
4. Press the Copy pairing button for less than one second.
5. Observe the Copy transmitter BLUE LED will begin to flash.
6. After the flashing stops on both transmitters, the Copy pairing is complete. Both transmitters will now operate the same receiver.
Section Five
MAINTENANCE AND TROUBLESHOOTING
Removing the Rubber Protective Cover from the RF Transmitter

1. Remove the Rubber Protective Cover from the RF Transmitter.

2. Remove the Battery Cover from the Transmitter. Press at the center and slide down.

3. Remove the Battery from the Battery Bracket by sliding the battery downward.

Replace the Key FOB battery when transmitter performance is inconsistent or the transmitter Red LED becomes dim.

Battery Specification:
- CR2032 Coin Cell
- Voltage = 3 Volts when battery is new
- Positive Terminal Faces Upward in Battery Bracket

Note: Changing the Battery DOES NOT AFFECT STORED PAIRING. It is not necessary to pair the transmitter to receiver after changing the battery.
## Troubleshooting the Receiver

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>System does not operate from Receiver switches</td>
<td>Truck Battery has low voltage</td>
<td>Turn off all vehicle accessories and running lights. Disconnect negative terminal from truck batteries. Wait 10 minutes. Check the vehicle battery voltage. If vehicle battery voltage is less than 12.0 Volts, replace vehicle batteries.</td>
</tr>
<tr>
<td>System does not operate from Receiver switches</td>
<td>Truck - to - Trailer harness or plug issue</td>
<td>With trailer plug inserted, using a multi-meter, check the Voltage between the BAT+ and GND terminals of the Motor Relay. It should be greater than 12V. Compare this value to battery voltage. If the motor relay input voltage is more than 2V lower than the battery voltage, isolate the problem to one or more components in the Truck to Trailer circuit and replace that circuit component.</td>
</tr>
<tr>
<td>System does not operate from Receiver switches</td>
<td>Motor Relay internal fault</td>
<td>With trailer plug inserted, using a multi-meter, check the Voltage between the BAT+ and GND terminals of the Motor Relay. This value should be greater than 12V. Next, check the voltage between the RF power Spade Terminals BAT+ and GND. The value at the RF power terminals should be the same as the value of the BAT+ and GND. If they are not, replace the Motor Relay.</td>
</tr>
<tr>
<td>System does not operate from Receiver switches</td>
<td>After running the first three tests presented in this table, the possible cause is the RF Receiver</td>
<td>Check all Power and Ground connections between vehicle battery and RF Receiver. Check motor relay operation. Assure the device is being powered up properly – see “Starting the System”. If the receiver LED does not flash once when power is connect, replace the RF Receiver</td>
</tr>
</tbody>
</table>
### Troubleshooting the Transmitter

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>System operates from receiver switches but does not operate from transmitter</td>
<td>Transmitter is not in operational mode</td>
<td>Turn the transmitter on</td>
</tr>
<tr>
<td>System operates from the Transmitter intermittently</td>
<td>Transmitter Battery is low</td>
<td>Change Transmitter Battery</td>
</tr>
<tr>
<td>System operates from the Transmitter intermittently</td>
<td>Transmitter turned OFF while in use</td>
<td>Do not turn the transmitter off while running the system</td>
</tr>
<tr>
<td>Transmitter does not power up</td>
<td>Transmitter Battery</td>
<td>Change Transmitter Battery</td>
</tr>
<tr>
<td>Transmitter does not power up</td>
<td>Receiver is in Lock Out Mode</td>
<td>Turn receiver on to Operating mode</td>
</tr>
<tr>
<td>Transmitter does not power up</td>
<td>Transmitter is not paired</td>
<td>Pair transmitter to receiver.</td>
</tr>
</tbody>
</table>