

---

# MiTek®

# SERVICE BULLETIN

---

Document ID:

## SB254

Title:

## Receiver Retrofit for Programmable Transmitter

Affected machinery: *RailRider Pro*® Floor Truss Press

Distribution: Customers upon order

Applies to: All machines with frequency-specific transmitters and matching receivers built before April 2022

---

**CAUTION:**

MiTek recommends printing this manual in high resolution using color ink. Many of the graphics may be unclear and may create an unsafe condition if this recommendation is not followed.

MiTek Automation  
Phone: 800-523-3380  
Fax: 636-328-9218  
[www.mitek-us.com](http://www.mitek-us.com)

Part # and Rev.	SB254
Print Date	2023 February 21
Revision Date	
Revised By	
Orig. Release Date	2022 December 9
Created By	A. McIntire
Approved By	R. Tucker

## Purpose and Scope

This service bulletin instructs how to install new receivers on the *RailRider Pro* to enable compatibility with new transmitter (remote) types. It also covers how to program a transmitter to a specific receiver.

## Overview

### Parts Included

The parts included in this kit are shown in Table 1. Please make sure all parts and supplies are present before starting the procedure. Note that all steps remain the same whether you receive SB254KIT-A or SB254KIT-B.

Table 1: Parts in SB254KIT

Quantity	Description	Part #
1	Kit with 1 Receiver and 2 Transmitters	537011
1	Service bulletin document	SB254

Table 2: Parts in SB254KIT-B

Quantity	Description	Part #
1	Custom kit with 1 Receiver and 2 Transmitters	537014
1	Service bulletin document	SB254

If you have any questions, call MiTek Automation Support at 1-800-523-3380.



### Supplies Needed

- Phillips screwdriver
- Wire stripper



## Procedure

### Electrical Lockout/Tagout Procedure

	 <b>WARNING</b>
	<p><b>ELECTROCUTION HAZARD.</b></p> <p>All electrical work must be performed by a qualified electrician.</p> <p>Verify that all power to the machine has been turned off and follow approved lockout/tagout safety procedures before performing any maintenance.</p> <p>If it is absolutely necessary to troubleshoot an energized machine, follow NFPA 70E for proper procedures and personal protective equipment.</p>

1. Engage an E-stop on the machine.
2. Turn the machine's disconnect switch to the Off position. This is usually required to open the main electrical enclosure's door.
3. Shut the power to the machine off at the machine's power source, which is usually an electrical service entry panel on the facility wall. One example of a locked-out power source panel is shown in Figure 1.
4. Attach a lock and tag that meet OSHA requirements for lockout/tagout to the electrical service entry panel.
5. Open the door to the enclosure to which you need access. Using a multimeter, verify that the power is off.

Figure 1: Lockout/Tagout on the Power Source Panel



### Installing the New Receivers

This section covers how to install one or more new receivers for a *RailRider Pro*.

1. With the power locked out as previously described, access the main electrical enclosure and see sub-steps to determine which wiring chart to follow:
  - a) If you have a machine with only transmitters (see Figure 6) disconnect the wires shown in Table 3 for receivers 1 and 2.

- b) If you have a machine with pushbuttons and a transmitter (see Figure 2) disconnect the wires shown in Table 4 for the single receiver.

Figure 2: Pushbutton Example

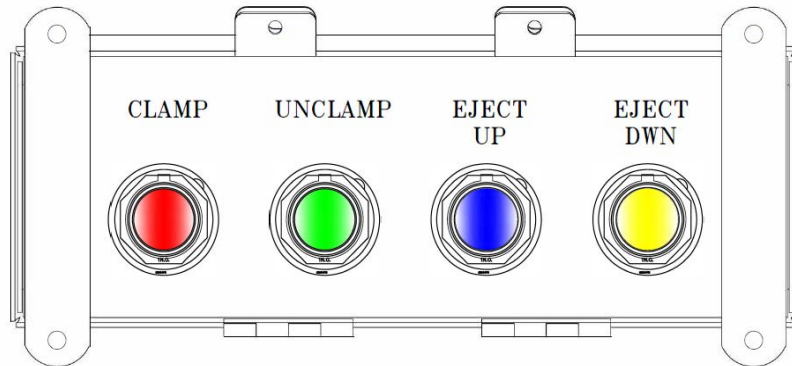


Table 3: Wiring Chart for Receivers 1 and 2 (transmitters only setup)

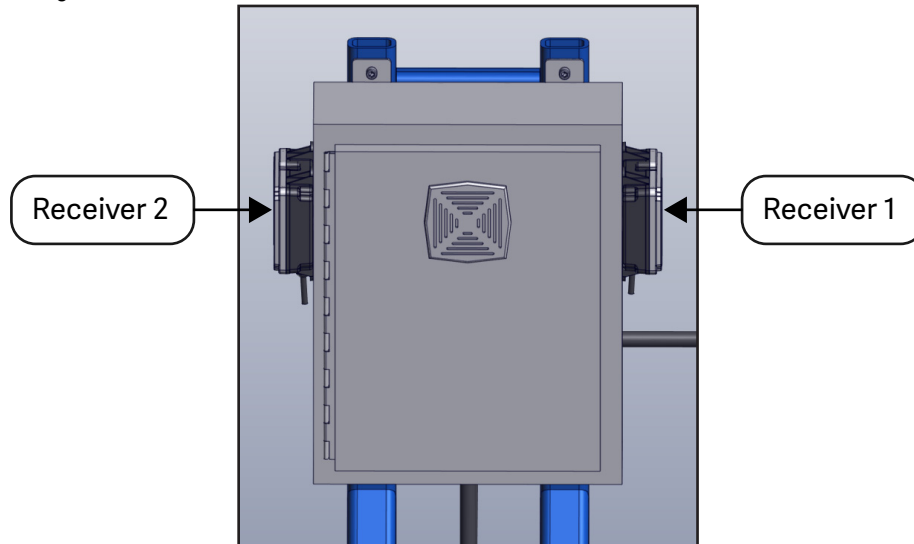
Wiring Chart for Receiver 1 Cable		Wiring Chart for Receiver 2 Cable	
Color	Terminal	Color	Terminal
Red	TB-51	Red	TB-50
Black	TB 52-2	Black	TB 52-1
Green	I:6	Green	I:1
Yellow	I:7	Yellow	I:2
Brown	I:8	Brown	I:3
Blue	I:9	Blue	I:4
White	I:10	White	I:5

Table 4: Wiring Chart for Single Receiver (pushbuttons and transmitter setup)

Wiring Chart for Receiver Cable	
Color	Terminal
Brown	IN:1
Blue	IN:2
Green	IN:3
Yellow	IN:4
White	IN:

2. Remove receivers 1 and 2 (4 bolts each) from each side of the enclosure and retain all bolts for a later step.
  - Note that some setups may have only 1 receiver.

Figure 3: Receivers on Electrical Enclosure



3. Attach the new supplied receivers to each side of the enclosure and route the cables into the enclosure.
  - Note that either receiver can be installed as receiver 1 or 2.
4. Use a wire stripper to expose the wires in each cable and connect receivers according to Table 3 or Table 4 (depending on setup).
5. Remove lockout/tagout and restore power to the machine.
6. Once power is restored, the red LED on the receiver should begin to flash.

## Pairing Procedure for Transmitters

Before starting this procedure, install the AAA batteries included with the receiver packaging in each transmitter. Two transmitters will be paired with each receiver.



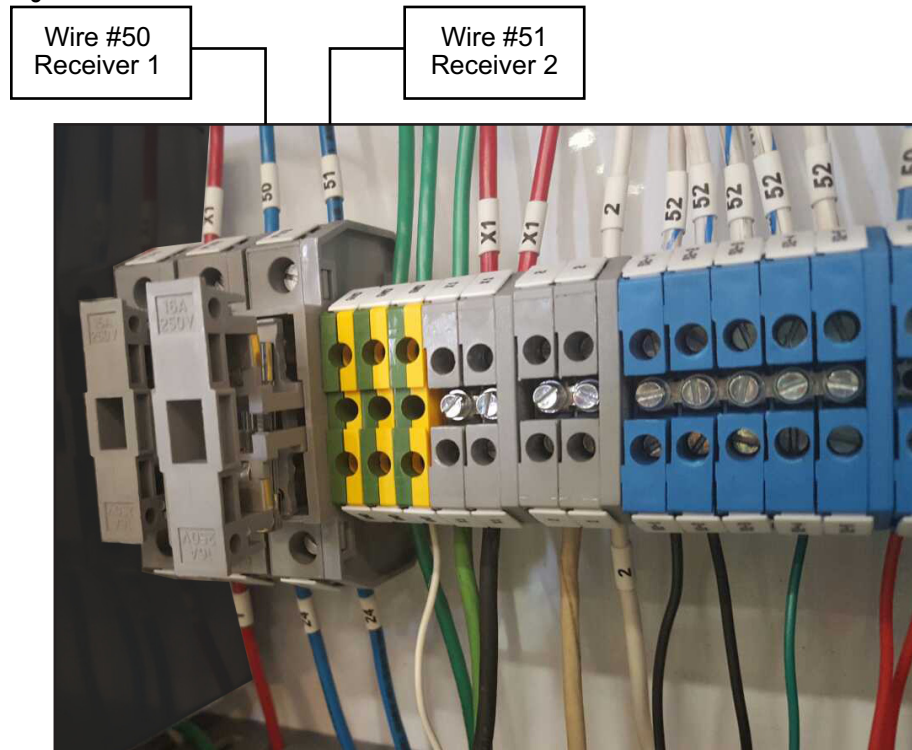
*Italicized steps are time-sensitive and MUST be started within a few seconds of the previous step*

### Pairing the 1st Transmitter to a Receiver

1. Disconnect power to one of the receivers by removing the fuse from the *RailRider Pro* main electrical enclosure (see Figure 4).

Make note which fuse is pulled as the other fuse must be pulled to pair the second pair of transmitters to the other receiver.

Figure 4: Receiver Fuse Location



2. Select the first transmitter to be paired with the receiver.
3. At the same time, press and hold **STOP** (RED) + **SET** (GREEN) until the LED on the transmitter turns off. See Figure 5 for a depiction of the transmitter buttons to be used during the pairing procedure.
  - All references to the buttons in the following instructions refer to only the transmitter. No buttons on the receiver will be utilized.
  - Your transmitter may have a different label with different function descriptions. The pairing procedure is still the same for all transmitter types.

Figure 5: Transmitter Pairing Buttons



4. Reconnect power to the receiver by reinserting the fuse that was removed in step 1.
5. *Quickly press and hold **SET** until the receiver LED stops flashing.*
6. Alternate pressing **STOP** and **SET** a few times – you should be able to see the faint reflection of the LED behind the circuit board flashing with each button press.
7. Disconnect power to the receiver via fuse.
8. Reconnect power to the receiver via fuse.
9. *In quick succession, press **SET** and then **F1**, holding both until the receiver LED stops flashing.*
10. *In quick succession, release **F1** and then **SET**.*
11. Check if pairing was successful by testing the **STOP** and **SET** buttons.

### Pairing the 2nd Transmitter to the Same Receiver

Ensure the 1st transmitter has been successfully paired and is turned on– the 2nd transmitter cannot be paired without it. The steps listed below are identical to the steps listed above, except for those in **red**.



1. Disconnect power via fuse to the receiver paired with the 1st transmitter.
2. On the 2nd transmitter, at the same time press and hold **STOP** (RED) + **SET** (GREEN) until the LED turns off (see Figure 5).
3. *On the 2nd transmitter, press and release **SET**.*
4. Reconnect power to the receiver via fuse.
5. *On the 2nd transmitter, Press and hold **SET** until the receiver LED stops flashing.*
6. Alternate pressing **STOP** and **SET** a few times – you should be able to see the faint reflection of the LED behind the circuit board flashing with each button press.
7. Disconnect power to the receiver via fuse.
8. Reconnect power to the receiver via fuse.
9. *In quick succession on the 2nd transmitter, press **SET** and then **F1**, holding both until the receiver LED stops flashing.*
10. *In quick succession, release **F1** and then **SET**.*
11. *As soon as the receiver LED starts flashing again, in quick succession on the 1st transmitter, press **SET** and then **F1**, holding both until the receiver LED stops flashing.*
12. *In quick succession, release **F1** and then **SET**.*
13. Check if pairing was successful by testing the **STOP** and **SET** buttons on both transmitter (you should be able to see the faint reflection of the LED

behind the circuit board flashing with each button press). Note that only one transmitter can be active at a time.

14. Repeat the pairing process for the other receiver if necessary.

## Operating the Hand-Held Transmitter and Keypad

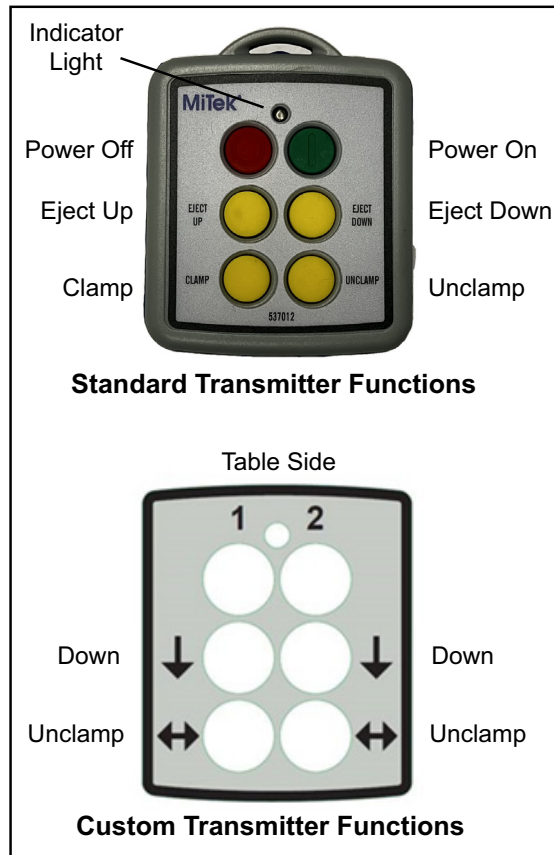
This procedure applies to both the hand-held transmitter and the keypad located on the receiver. They both transmit a signal to the receiver.

	 <b>CAUTION</b>
	A hand-held transmitter (remote) should only be used within line-of-sight of the machine and at a maximum distance no greater than 100 ft.

1. Power up the hand-held transmitter or receiver keypad by pressing the green POWER ON button.
  - The indicator light comes on, and then slowly blinks once it is communicating with the receiver.
  - If no other buttons are pressed within 1 minute, it times out and shuts itself off. Press the green POWER ON button again to continue operating.

Figure 6: Operating the Transmitter

2. Press the yellow button that corresponds to the desired action, using these rules:
  - Press once and release. Press again within 5 seconds and hold for 1 second, then the operation will begin.
  - If the operator does not press the 2<sup>nd</sup> press within the 5 second window, the process starts again at the beginning.
  - If the operator presses the wrong button for the 2<sup>nd</sup> press, the process starts again at the beginning.





Once the correct button pressing sequence has been acknowledged, the horn sounds and the movement requested begins.

**END OF SERVICE BULLETIN**