
MiTek[®]

SERVICE BULLETIN

Document ID:
SB254

Title:
Receiver Retrofit for Programmable Remote

Affected machinery: *RailRider Pro*[®] Floor Truss Press

Distribution: Customers upon order

Applies to: All machines with frequency-specific remotes 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.

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Purpose and Scope

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



If the package containing the receiver and remotes contains any other installation instructions, **please disregard those instructions and follow the steps in this service bulletin.**

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 remotes (transmitters)	537011
1	Service bulletin document	SB254

Table 2: Parts in SB254KIT-B

Quantity	Description	Part #
1	Custom kit with 1 receiver and 2 remotes (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

	 WARNING
	<p>ELECTROCUTION HAZARD.</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 stand-alone electrical enclosure and see sub-steps to determine which wiring chart to follow:
 - a) If you have a machine with only remotes (see Figure 5) disconnect the wires shown in Table 3 for receivers 1 and 2.

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

Figure 2: Pushbutton Example

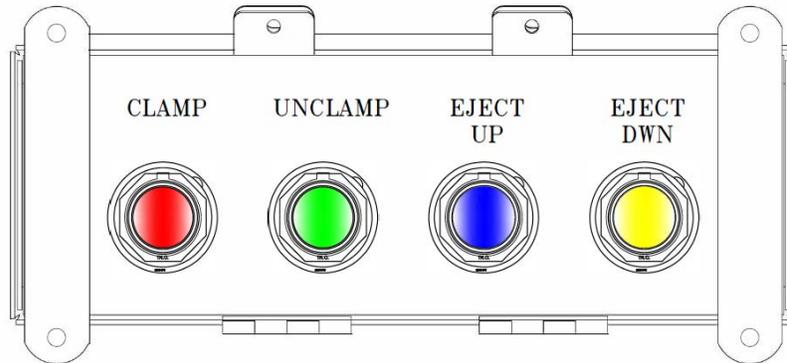


Table 3: Wiring Chart for Receivers 1 and 2 (remotes only setup)

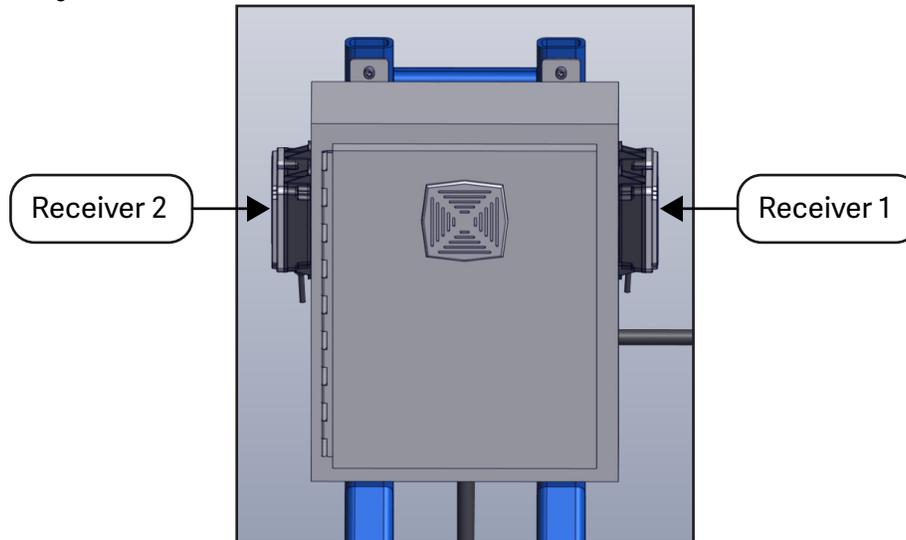
Wiring Chart for Receiver 1 Cable		Wiring Chart for Receiver 2 Cable	
Color	Terminal	Color	Terminal
Red	TB-51	Red	TB-50
Black	TB 52-2	Black	TB 52-1
Green	I:6	Green	I:1
Yellow	I:7	Yellow	I:2
Brown	I:8	Brown	I:3
Blue	I:9	Blue	I:4
White	I:10	White	I:5

Table 4: Wiring Chart for Single Receiver (pushbuttons and remote 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 Remotes

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



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

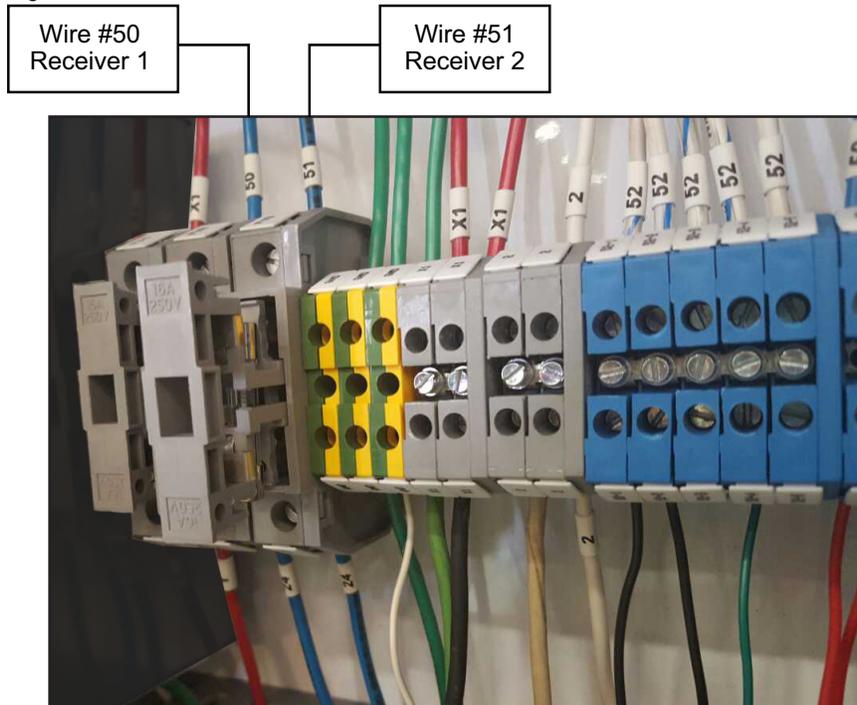
Pairing the 1st Remote to a Receiver

	 WARNING
	<p>ELECTROCUTION HAZARD.</p> <p>All electrical work must be performed by a qualified electrician.</p> <p>Follow NFPA 70E for proper procedures and personal protective equipment.</p>

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 remotes to the other receiver.

Figure 4: Receiver Fuse Location



2. Select the first remote to be paired with the receiver.
3. At the same time, press and hold **STOP (RED)** + **SET (GREEN)** until the LED on the remote turns off (the LED will turn back on after a few seconds).

See Figure 5 for a depiction of the remote buttons to be used during the pairing procedure.

Figure 5: Remote Pairing Buttons



- All references to the buttons in the following instructions refer to only the remote. No buttons on the receiver will be utilized.
 - Your remote may have a different label with different function descriptions. The pairing procedure is still the same for all remote types.
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 receiver circuit board flashing with each button press (see Figure 6).

Figure 6: Receiver Example



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 Remote to the Same Receiver

Ensure the 1st remote has been successfully paired and is turned on– the 2nd remote 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 remote.
 - On the 2nd remote, at the same time press and hold **STOP (RED)** + **SET (GREEN)** until the LED turns off (the LED will turn back on after a few seconds).

See Figure 5 for a depiction of the remote buttons to be used during the pairing procedure.
2. *On the 2nd remote, press and release **SET**.*
3. Reconnect power to the receiver via fuse.
4. *On the 2nd remote, Press and hold **SET** until the receiver LED stops flashing.*
5. 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.
6. Disconnect power to the receiver via fuse.
7. Reconnect power to the receiver via fuse.
8. *In quick succession on the 2nd remote, press **SET** and then **F1**, holding both until the receiver LED stops flashing.*
9. *In quick succession, release **F1** and then **SET**.*
10. *As soon as the receiver LED starts flashing again, in quick succession on the 1st remote, press **SET** and then **F1**, holding both until the receiver LED stops flashing.*
11. *In quick succession, release **F1** and then **SET**.*
12. Check if pairing was successful by testing the **STOP** and **SET** buttons on both remote. You should be able to see the faint reflection of the LED behind the receiver circuit board flashing with each button press (see Figure 6). Note that only one remote can be active at a time.

13. Repeat the pairing process for the other receiver (and 2 remotes) if necessary.

Operating the Hand-Held Remote and Keypad

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

	 CAUTION
	A hand-held 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 remote 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.

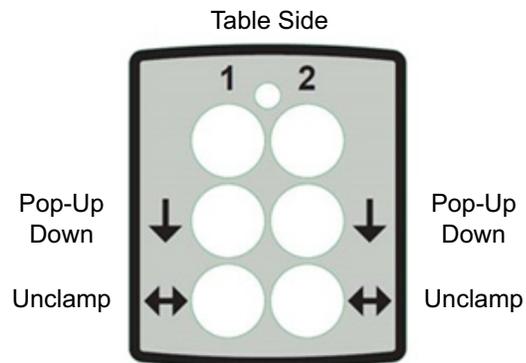
2. Press the yellow button that corresponds to the desired action, using these rules:
- Press once and release. Press again within 5 seconds and hold for 1 second, then the operation will begin.
 - If the operator does not press the 2nd press within the 5 second window, the process starts again at the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

Figure 7: Operating the Remote



Standard Remote Functions



Custom Remote Functions

END OF SERVICE BULLETIN