M.T.H. Electric Trains
RailKing® Remote Control
Operating Instructions

The RailKing® Remote Control uses wireless infrared technology, much like a television remote control, to allow users remote control of their trains from up to 15 feet away. The Remote and Remote Lock-On replace the control box found with M.T.H.’s Z-500™ and Z-750® transformers, and are designed for use with moderately powered transformers such as these. In order to operate the system, you need a Remote handheld (batteries not included), a Remote Lock-On for each loop of track you wish to control, and a section of M.T.H. RealTrax®.

Please read the instructions completely before operation.
Set Up and Operation of Remote Control

Setting Up your Remote Control Unit for the First Time:

1. Ensure the transformer is unplugged.

2. Insert batteries (2 “AA” batteries, not included) into the remote handheld.

3. Each RealTrax® segment (excluding switches and uncoupling sections) has at least one knock-out tab in the roadbed (on either end of the segment) that can be removed to reveal an opening for the lock-on. See figures 1a and 1b for how to remove the tabs.

4. Making sure the lock-on is aligned with the opening, firmly slide the lock-on into place until it is fully plugged into the track section (see figures 1c and 1d).

5. Plug the Z-500 or Z-750 into the lock-on’s center port, marked “Power.”

6. Plug the Z-500 or Z-750 into any 110 volt AC wall outlet. There is no need to connect the controller part of the transformer for remote control operation with Remote Lock-On.

7. Press the upper end of the handheld’s throttle control rocker switch to send voltage to the track. Because this is an infrared line-of-sight remote, you must aim it at the lock-on in order to send signals to the track. The green LED atop the lock-on will come on, indicating the track is receiving power. Subsequent pushes of any buttons on the remote will cause the LED to blink, indicating it is receiving the signal.

Note: You cannot use the Remote Control and Remote Lock-on with pre-1997 versions of Proto-Sound™ or with Proto-One™, Proto-Plus™, Proto-Deluxe II™, whatever the date.
Knock Out must be removed before Remote Lock On can be installed.

Remove Knock Out by Holding and Twisting with a pair of pliers.

Fig. 1a-1d: Installation of Remote Lock On

Fig. 2: Overview of the Remote controls

Fig. 3: Overview of the Inputs on the Remote Lock On
Operating Train Features Using the Remote Handheld:

Operation Buttons:

**Throttle Control** – To increase or decrease track voltage, and therefore train speed, press the throttle control rocker switch. Pressing the top end of the rocker will increase voltage and speed. Pressing the bottom end of the rocker will decrease voltage and speed. The engine will maintain the speed you set after you release the throttle control until you press it again to change the voltage and speed.

**Horn/Whistle** – To sound the horn or whistle, firmly press the Horn/Whistle button. The longer you hold the button down the longer the horn or whistle will sound. The horn/whistle will stop when you release the button.

**Bell** – To sound the bell (if the engine is so equipped), firmly press and release the Bell button. To turn the bell off, press and release the Bell button again. The bell will continue to ring from the time your turn it on until you press and release the button again to turn it off.

**Direction** – To change the direction of the train, or to put it in neutral, firmly press and release the Direction button. With the reverse units used in M.T.H. and most other model trains, the direction will not go directly from forward to reverse. If a train has been going forward, the first press will put the train from forward into neutral, the second press into reverse, the third press back into neutral, and the fourth back into forward. Please refer to your locomotive’s operating instructions for more information on changing engine direction.

**Emergency Stop** – To drop track voltage instantly to 0, firmly press the Emergency Stop button. All trains on the track controlled by the Remote will stop until you reapply voltage.
**Speed Control:**

M.T.H. engines equipped with Loco-Sound and Proto-Sound 2.0 have speed control capabilities that allow them to operate in two different modes: Conventional Mode and Legacy Mode.

**Conventional Mode:** The engine will start up in Conventional Mode, with the speed control feature activated. This means that the engine will maintain a constant speed up and down grades and around curves. You can add or drop cars on the run, and the engine will maintain the speed you set.

**Legacy Mode:** You can opt to set the engines to Legacy Mode. This is the non-speed control mode previous M.T.H. and other locomotives operate in. The engine’s speed will fall as it labors up a hill and rise as it travels downward. It is also affected by the addition or releasing of cars while on the run.

**Proto-Cast and Proto-Dispatch:**

When used with the Remote Lock-On, Loco-Sound-equipped engines gain Proto-Cast™ and Proto-Dispatch™ features.

**Proto-Cast:** This feature allows you to play recorded music through your engine’s speakers. You must supply the audio source (a small portable is sufficient) and a male-to-male mini cable (1/8”) (like that used for the headset with a portable CD/tape player) to connect your audio source to the Remote Lock-On. To use Proto-Cast, simply plug the mini-cable into your audio source and into the “CAST” jack on the right side of the lock-on and adjust the volume.

**Proto-Dispatch:** This feature allows you to broadcast your own voice through your engine’s speakers. You must supply the microphone and the mini cable (1/8”, like that used for the headset with a portable CD/tape player) to connect your microphone to the Remote Lock-On. To use Proto-Dispatch, simply plug the mini-cable into the microphone and into the “DISPATCH” jack on the left side of the Lock-On and speak into the microphone.
When these features are in use, the locomotive’s own sounds (engine sounds and bells, whistles, and horns) will be muted so that only the sounds you broadcast will be heard. Because these two features are voice activated, there will be a 10-15 second delay after you stop speaking into the microphone or turn off the stereo before the engine sounds resume. To stop using the feature and return to normal operation, unplug the cable from the lock-on jack.

**Note:** **M.T.H. does not recommend using Proto-Cast and Proto-Dispatch at the same time. Such usage may generate undesired audio feedback.**

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**CARE AND MAINTENANCE**

Your RailKing Remote Control System should offer years of trouble-free service. There are a few things you can do to ensure trouble-free operation:

1. If your Train responds inconsistently, replace old batteries with fresh ones.

2. Remove batteries before storing.

3. Do not drop the remote. It may damage the electronics inside.

4. Any attempt by anyone other than an authorized M.T.H. repair person to open and repair the Remote Control Handheld Transmitter or Remote Lock-on may result in the loss of warranty protection.
How to Get Service Under the Terms of the Limited One-Year Warranty

For warranty repair, do not return your product to the place of purchase. Instead, follow the instructions below to obtain warranty service, as our dealer network is not prepared to service the product under the terms of this warranty.

1. First, write, call or FAX M.T.H. Electric Trains, 7020 Columbia Gateway Drive, Columbia, MD 21046, (Tel: 410-381-2580; FAX : 410-423-0009; e-mail: service@mth-railking.com), stating when it was purchased and what seems to be the problem. You will be given a return authorization number to assure that your merchandise will be properly handled upon its receipt.

2. CAUTION: Make sure the product is packed in its original factory packaging including its foam and plastic wrapping material so as to prevent damage to the merchandise. The shipment must be prepaid and we recommend that it be insured. A cover letter including your name, address, daytime phone number, e-mail address (if available), Return Authorization number, a copy of your sales receipt and a full description of the problem must be included to facilitate the repairs. Please include the description regardless of whether you discussed the problem with one of our service technicians when contacting M.T.H. for your Return Authorization number.

3. Please make sure you have followed the instructions carefully before returning any merchandise for service.

Limited One-Year Warranty

All M.T.H. products purchased from an Authorized M.T.H. Train Merchant are covered by this warranty.

See our website at or call 1-888-640-3700 to identify an Authorized M.T.H. Train Merchant near you.

M.T.H. products are warrantied for one year from the date of purchase against defects in material or workmanship, excluding light bulbs and traction tires. We will repair or replace (at our option) the defective part without charge for the parts or labor, if the item is returned to M.T.H. Electric Trains within one year of the original date of purchase. This warranty does not cover damages caused by improper care, handling, or use. Transportation costs incurred by the customer are not covered under this warranty.

Items sent for repair must be accompanied by a return authorization number, a description of the problem, and the original sales receipt from an Authorized M.T.H. Train Merchant, which gives the date of purchase. Call 410-381-2580, fax 410-423-0009, or e-mail the Service Department at to obtain a return authorization number.