

with your name, address, daytime phone number, and a detailed description of the problem you are experiencing. Please also include a check or a money order for \$11.00 for smaller items, and \$15.00 for power packs, to cover return shipping and handling. If the product is no longer considered under warranty, then please contact Model Rectifier Corp. for a price quote to cover the cost of repair or replacement of the product, and return shipping and handling.

Customers outside the continental United States, including; Hawaii, Alaska, Canada and Mexico, have to contact MRC for exact return shipping rates for both warranty and non-warranty repairs. Contact [rrtech@modelrectifier.com](mailto:rrtech@modelrectifier.com). Be certain to return the M.R.C. product only.

Any questions regarding Warranty Policy can be directed to our Customer Service Department by calling 732-225-6360 between the hours of 8:30am and 6:00pm EST, or by emailing: [rrtech@modelrectifier.com](mailto:rrtech@modelrectifier.com)

Send the product to:

Model Rectifier Corporation  
Attn: Parts & Service  
80 Newfield Avenue  
Edison, NJ 08837-3817 U.S.A

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## TECH 6 SOUND CONTROLLER 6.0

Item: 0001201

### INTRODUCTION

Thank you for purchasing this MRC train controller. This pack will provide 6 amps of power and will allow you to access all of the sounds and lighting features available in any locomotives that are equipped with DCC (NMRA spec) sound decoders. **Please note: If you use Blue Line locomotives you will need to install a power decoder.**

### SPECIFICATIONS

|                         |          |
|-------------------------|----------|
| Input:                  | 15-18VDC |
| Maximum Current Rating: | 6.0 amps |
| Total Output:           | 100VA    |

### CONNECTION

The unit comes with a base unit, power supply, and a handheld. Connect the power supply's red wire to the terminal marked with "+" and the black wire to the terminal marked with "-". Use 18 gauge wire to connect your layout to the terminals marked "Track". Plug the handheld into either of receptacles labeled "Cab Jack". You are now ready to operate your layout.

### PLEASE NOTE

You can install multiple cab jacks around your layout for walkaround operation using item #0001501 extension plate. However, only **one** tethered handheld can be used at any one time. Never plug any other handheld into the base unit. Doing so may damage the base unit or handheld.

### OPERATION

The TECH 6 can operate as a normal DC power pack, or, as a controller that can operate your locomotive with sounds and activate all of the sounds in your locomotive if it has a DCC sound decoder installed. It has two modes of operation, "STANDARD" mode for analog, or DC locomotives (LCD will display **Loco** in this mode), and "DUAL" mode for operating sound equipped, or DCC locomotives (LCD will display **Loc** and a number in this mode. For example, **Loc3** means Dual mode controlling loco # 3). By pressing "**Loco**" and then press "**Shift**" you can toggle between the two modes.

### STANDARD MODE

This is the traditional DC operational mode to operate a standard, non decoder equipped loco. Before operating a standard DC loco, make sure

“Loco” appears on the screen. If it doesn’t, press “Loco” and then “Shift” to switch modes. The throttle knob can then be used like a conventional power pack to control speed, and the direction button to change the direction of the locomotive. To program momentums, press **P** and press **Enter** twice to skip **Adr** and **SV**. **ACC** will prompt you to program acceleration rate. Enter a value from 0-32, with 0 being no momentum on acceleration, and 32 being maximum momentum, and then press **Enter**. Next, **dEC** will prompt you for programming deceleration rate. Enter a value of 0-32 and press **Enter**. And then press **Enter** to exit program mode. Once programmed these rates will be stored in the base until you change them. *Standard Mode can be used for Blue Line locomotives if they do not have a power decoder, but you will not be able to control the sounds.*

## DUAL MODE

This is the power and sound control mode to run your train and control the sounds in your decoder equipped loco. Since most decoders are factory default address #3, you should select loco #3 to operate them by pressing “Loco”, press “3” and then press “Enter”. You should be able to control your loco with the throttle knob and change the loco’s direction with the direction key. If it does not respond, press the “SHIFT” key and then press “9, 9”. In 5 seconds this will reset your loco to factory default address # 3. You can turn on/off the headlight by pressing “0”. You can turn on/off the Bell by pressing “1”. To blast the horn press, “2”. To control functions F3 through F9, press “3” to “9”. To control F10 to F28, press “SHIFT” and then press the desired two digit number.

*NOTE: If you plan to use the locomotive with a DCC system, you will need to re-program the loco to its original address using the DCC system after it was used with the Tech 6.*

## PROGRAMMING YOUR LOCO IN DUAL MODE

You have the ability to run multiple decoder equipped locos on your track at one time. Initial programming of the loco address should be done one loco at a time by following the steps below. Keep a log to remind you which loco is assigned to which address. You will need to know the correct address to do any programming to the loco later on. All programming must be done with the current (or the last) loco. First press “SHIFT, 9, 9” to reset the loco to the default address #3. Operate the loco before performing any programming to ensure it’s on address #3. **Note: Locos must be programmed one at a time, remove all other programmed locos from the track before doing this, or else they will all revert back to address #3.**

1. Press “P”, **Loc\_ Adr** will appear on the screen. If you don’t want to change the address press “Enter” to skip this step. If you want to change the address you can enter a number between 1 and 6 and then press “Enter”. If you wish to run multiple locos you should program them with different addresses. **Note: Do not enter a number larger than 6. This unit only allows you control up to 6 locos.**
2. Next, **SV** will prompt you for programming Start Voltage. To skip, press “Enter”. To program, enter the desired value and press “Enter”.
3. Next, **ACC** will prompt you for programming acceleration rate. To skip, press “Enter”. To program, enter the desired value and press “Enter”.
4. Next, **dEC** will prompt you for programming deceleration rate. To skip, press “Enter”. To program, enter the desired value and press “Enter”.
5. Next, **CV#** will prompt you for programming a CV. To skip, press “Enter”. To program a CV enter the CV number and press “Enter”. Then, enter the desired value for the CV and press “Enter”. **CV#** will prompt again for programming another CV. To exit the program press “Enter”.

**Note: Your decoder must have “program on the main/ops mode” capability to perform any programming steps outlined above. Refer to the decoder/loco’s instruction manual’s CV Chart for range of values that are associated with the CV’s inside the loco.**

Once you have all your locos programmed to an address, Press the “Loco” button, select an address, press “Enter”, then run your loco. You can leave this loco running, and then select another loco to operate at the same time. You can operate up to all 6 addresses at the same time.

## RECALL STACK

Whenever you select a loco, the Tech 6 will automatically store the loco into the recall stack for you to recall later. To save the stack for the next session press “Loco” twice. To recall the loco simply press the “Recall” button to scroll through the available loco addresses. To delete the current loco from your stack, press and hold “Del” for 2 seconds, and then press “Loco” twice to save.

## EMERGENCY STOP

Press “STOP” to stop the current loco. To stop all locos, press and hold “STOP” for 2 seconds. To restore operation, press and hold “STOP” again for 2 seconds.

## UPGRADES

This unit comes with a 15V/10amp DC power supply. If you operate G or N scale and you find the top speed is too low/high, send in the power supply with a \$39.00 check or money order and we will upgrade the power supply for you. We can also upgrade your base unit to 8 amps for an additional cost of \$29.00.

A Wireless Conversion Set (0001212) will also be available. With the wireless conversion you can operate with **two** wireless handhelds, so multiple people to operate on the same layout.

## FOR YOUR PROTECTION:

1. Never reverse a locomotive without stopping it first. To do so may damage the locomotive motor or drive train.
2. Unplug your power supply at the end of the day’s operation.
3. Avoid prolonged overloads and short circuits. Your Tech 6 is equipped with safety devices to prevent accidental damage due to short circuits and overloads but it is unwise to subject the unit to these frequently.
4. Children under the age of 14 should be supervised by an adult when operating this product.

## RETURN PROCEDURE/SERVICE

All M.R.C. products have been thoroughly tested before leaving our facility. If for some reason you are having problems with any M.R.C. product, please contact our Customer Service Department using the contact information below

**All M.R.C. products carry a 6 month warranty against factory defects. This warranty does not include abuse, misuse, neglect, improper installation, non-intended use, or any modifications made to the product, including but not limited to the removal of the NMRA plug on decoders, if applicable. If it should become necessary to return any M.R.C. product for warranty repair/replacement, please include a copy of the original sales receipt. Please include a letter (printed clearly),**