



## TECH 6 SOUND CONTROLLER 2.0

Item: 0001200

### SPECIFICATIONS

INPUT: 15 VDC  
OUTPUT: 0 to 15 VDC (Standard mode) / Constant 15VAC (Dual mode)  
MAXIMUM CURRENT RATING: 2.0 amps  
TOTAL OUTPUT: 30 VA

### INTRODUCTION

Thank you for purchasing the Tech 6 Sound Controller 2.0. This high-powered pack will provide plenty of power. It can control two types of locomotives: standard analog DC loco and locomotives that are equipped with DCC NMRA compatible sound or non-sound decoders. The Tech 6 will tap into all the sounds and lighting features available in any locomotives that are equipped with DCC (NMRA compatible) sound decoders. *Please note if you use Blue Line locomotives you will need to install a power decoder.*

### POWER PACK SETUP

Strip approximately 1/8 inch from your Main Track layout wires and tin the ends. Use 18 AWG or heavier. Insert the two wires into the green two-terminal right-angle plug. Using a small flat-bladed screwdriver, tighten the screws on the green plug to hold the wires in place. Make sure that the green plug is firmly inserted into the receptacle on the right-hand side of the cabinet. The two screws on the green plug will face down.

Note: When connecting to any terminal, care must be taken that wires do not touch more than one terminal at a time. Loose wires are a danger to your Tech 6 Sound Controller 2.0 and layout. Be certain wires are properly inserted into the terminals before tightening screws. Also note that the output terminal screws can get hot during periods of peak use.

### OPERATION

The TECH 6 operates as a normal DC power pack. It is also a sound controller that can operate all the sounds in your locomotive if it contains a DCC sound decoder. It has two modes of operation, STANDARD (STD) DC for non-sound equipped locomotives and DUAL for operating DCC (NMRA compatible) sound and non-sound equipped locomotives.

#### MODE I (STD): TRADITIONAL DC OPERATION MODE

If you wish to operate a standard, non-decoder equipped loco, press the **Mode** button to select **STD** mode. You can use the throttle knob to control speed and the direction <> button to change the locomotive direction. *You can use this mode for Blue line locomotives if they do not have a power decoder, but you will not control all the sounds*

For the advanced user, you may want to adjust the Start Voltage, Acceleration Momentum, Deceleration Momentum, and Top Voltage. You can do so quite easily; just follow the steps shown in "Adjusting Feature Variables".

#### MODE II (DUAL): POWER AND SOUND CONTROL MODE

This mode is to run and control the sounds in your decoder equipped loco.

***Do not run a standard, analog DC loco in the DUAL mode, as this puts constant AC voltage to the track rails and can damage the motor in your locomotive.***

Press the **Mode** button to select **Dual** (power with sound) mode. You should be able to control your loco with the throttle knob and change locomotive direction with the direction button. Whenever the locomotive does not respond, press the **SHIFT** button and then press **9, 9**. This will reset your loco to factory default address # 3 within 5 seconds.

Notes:

- *If you plan to use a locomotive with a DCC system, you will need to re-program the loco address using the DCC system, if the address is other than # 3.*
- *Older Atlas HO scale locos that are equipped with a standard Lenz DCC decoder usually came from the factory set at an address that matched the first two digits of the road number printed on the sides of the locomotive. These locos must have their addresses reassigned to address #3 before running them with the Tech 6.*

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 to F9, press 3 to 9. To control F10 to F28, press **SHIFT** and then press the desired two-digit number.

#### ADJUSTING FEATURE VARIABLES – BOTH MODES

1. Press **P**, all LEDs will turn on.
  2. Press any one of the numbered buttons listed below to adjust the individual feature:
    - Button **2** is used to set **Start Voltage**
    - Button **3** is used to set **Acceleration momentum**
    - Button **4** is used to set **Deceleration momentum**
    - Button **5** is used to set **Top voltage**And then press **ENTER**, all LEDs will turn off.
  3. Using the keypad input a value range from 0-32\*.
  4. Finish the process by pressing **ENTER** again. The Tech 6 will return to run mode and will memorize your setting until you wish to make another change.
- If you wish to make another adjustment, repeat the above steps.

*\*If you are using a standard locomotive with no sound decoder installed or your locomotive has an MRC decoder installed, the range of adjustment is from 0 to 32. "0" is the lowest value, while "32" is the maximum value. Some other brand sound decoders may have a different range of adjustments (some are 0 to 255). Please read your loco manual or decoder instructions and refer to CV numbers 2,3,4,5 for their range of adjustments.*

#### ADJUSTING CVs (Configuration Variables)

If you are an advanced user, you may wish to adjust the decoder CVs. Refer to your locomotive or decoder manual for information on CV definitions and their values.

To adjust CVs:

1. Press **P**; all LEDs will turn on.
  2. Input the CV number to adjust and then press **ENTER**; all LEDs will turn off.
  3. Input the CV value.
  4. Finish the process by pressing **ENTER** again. Two LEDs will light showing the Tech 6 has reverted to DUAL mode and ready to resume running.
- To adjust another CV, repeat the above 4 steps.

## WALKAROUND

The Tech 6 Sound Controller 2.0 has a built-in jack for a handheld controller. The optional handheld controller will provide mobility around your layout. You will also be able to operate multiple decoder equipped locomotives on the same track. For more information on this feature and possible upgrades, please visit our website: [www.modelrectifier.com](http://www.modelrectifier.com).

## FOR YOUR PROTECTION

- 1 Never reverse a locomotive without stopping it first. To do so may damage the locomotive motor.
- 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.

## SERVICE

Your Tech 6 Sound Controller 2.0 has been thoroughly tested before leaving our facility. If for some reason you are having problems with your Tech 6, please contact MRC Customer Support using the contact information below **prior to** sending the unit for service.

The unit carries a three-year limited warranty\* If it should become necessary to return the Tech 6 for warranty repair/replacement, be sure to contact MRC technical support beforehand. Contact customer support *before* returning the unit to ensure you receive the correct fees for service. This also gives us the opportunity to troubleshoot issues which may be solved with technical phone support.

The three-year limited warranty\* does not include return shipping for customers outside of the continental United States (including Hawaii, Alaska, Canada, and Mexico). Customers outside of the continental United States must contact us for return shipping rates.

Questions regarding the three-year limited warranty\* policy or troubleshooting issues can be directed to MRC Customer Support by calling 1-732-225-6360 from Monday to Friday between 8:00am and 5:00pm EST or by emailing [mrctsupport@modelrectifier.com](mailto:mrctsupport@modelrectifier.com).

In order to receive warranty service, we require a copy of the original sales receipt to validate the warranty period. Include a note briefly describing the issues along with your name, address, phone number, and email address.

Our return mailing address is:

Model Rectifier Corporation  
360 Main St. STE # 2  
Matawan, NJ 07747 USA

## \*THREE YEAR LIMITED WARRANTY

Model Rectifier Corporation (MRC) will, subject to the conditions explained and set forth below, repair at its expense, within three calendar years from the date of sale, any component of this MRC product which is proven defective by reason of improper workmanship or materials. MRC will repair said component(s) without charge for necessary parts or labor. If the unit cannot be repaired, it will be replaced with another unit or similar product of equal or greater value.

## CONDITIONS

1. Limitation to original purchaser and proof of date of purchase: The obligations of MRC set forth herein shall only extend to the original purchaser. The burden of proof as to the date of purchase is on the purchaser, thus it is recommended that you retain your bill of sale or sales receipt and include it with the return of your product, keeping a copy of the same for your records. This bill of sale or sales receipt must have the date of purchase and the name and address of the dealer.
2. Validation of the Warranty: The validity of the above state warranty is contingent upon the original purchaser possessing an original copy of the sales receipt that shows the product's name and/or model number, purchase date, name of the dealer, and the address of the dealer. The burden of proof rests with the purchaser of the product.
3. Exclusions from Warranty: The warranty does not apply to (a) any marring, scratching, or defects in decoration and/or finish, (b) any damage or defect resulting from misuse, abnormal service, water, or weather damage, (c) any damage incurred in shipping and handling, (d) any incidental or consequential damage(s) caused by or resulting from a defect in material or workmanship or other equipment failure, (e) any damage arising from the product not being used in accordance with the instructions provided. Your sole remedy shall be repair or replacement as herein above expressed. Under no circumstances shall MRC be liable for any losses or damage, direct or consequential, arising out of the use of or inability to use this MRC product. No implied warranty shall continue beyond the three years from the date of purchase. Further, any modification, alteration, or tampering with the MRC product or any repair other than that done at the factory automatically voids the warranty.
4. Notice: Some states do not allow limitations on how long an implied warranty lasts or the inclusion of limitation of incidental or consequential damages, so the above state limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.
5. Customers outside the continental United States, including; Hawaii, Alaska, Canada and Mexico, must contact MRC for return shipping rates for both warranty and non-warranty repairs. Contact us via email: [mrctsupport@modelrectifier.com](mailto:mrctsupport@modelrectifier.com)

**Model Rectifier Corporation**  
**360 Main St. STE # 2**  
**Matawan, NJ 07747 USA**  
**Telephone 1-732-225-6360**  
**[www.modelrectifier.com](http://www.modelrectifier.com)**