

TINPLATE TRADITIONS[®]

By MTH Electric Trains[®]

www.mth-railking.com

LeLand Detroit Monorail System

Operation Manual for
Traditional Version
And
Contemporary Version
(3VPS2)



Transit Announcement Stop

Thank you for purchasing this Tinplate Traditions product.
PLEASE READ BEFORE USE AND SAVE

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CAUTION: ELECTRICALLY OPERATED PRODUCT:

Not recommended for children under 10 years of age. M.T.H. recommends adult supervision with children ages 10 - 16. As with all electric products, precautions should be observed during handling and use to reduce the risk of electric shock.

WARNING: When using electrical products, basic safety precautions should be observed, including the following: Read this manual thoroughly before using this device.

- M.T.H. recommends that all users and persons supervising use examine the hobby transformer and other electronic equipment periodically for conditions that may result in the risk of fire, electric shock, or injury to persons, such as damage to the primary cord, plug blades, housing, output jacks or other parts. In the event such conditions exist, the train set should not be used until properly repaired.
- Do not operate your layout unattended. Obstructed accessories or stalled trains may overheat, resulting in damage to your layout.
- This train set is intended for indoor use. Do not use if water is present. Serious injury or fatality may result.
- Do not operate the hobby transformer with damaged cord, plug, switches, buttons or case.
- The transformer was designed to operate on regular US household current (120 volt, 50-60 Hertz). Do not connect to any other source of power.
- To avoid the risk of electrical shock, do not disassemble the transformer unit. There are no user-serviceable parts inside. If the unit is damaged contact M.T.H. Service for instructions.
- The transformer is equipped with an internal circuit protector. If the circuit protector trips, unplug the power cord from the electrical wall outlet, check your layout for any short circuits. The circuit breaker will reset automatically when the short is removed from the circuit.
- Unplug the transformer from the electrical wall outlet when not in use.
- Do not use this transformer for other than its intended purpose.

Transformer Ratings:

Input: 120 VAC, 60 Hz Only; Output: Z-750: 21VAC 3.75A 78VA; Z-1000: 14VAC 80W or 18VAC 100W

This product may be protected by one or more of the following patents: 6,019,289; 6,280,278; 6,281,606; 6,291,263; 6,457,681; 6,491,263; 6,604,641; 6,619,594; 6,624,537; 6,655,640.

Set up Checklist

- Assemble Rail System
- Lubricate the cars
- Place the cars on the rail and couple them together
- Check to see whether the battery needs to be charged for full sound effects (Contemporary Version Only)
- Apply power to run as described in the Basic Operation section of these instructions

Set Includes

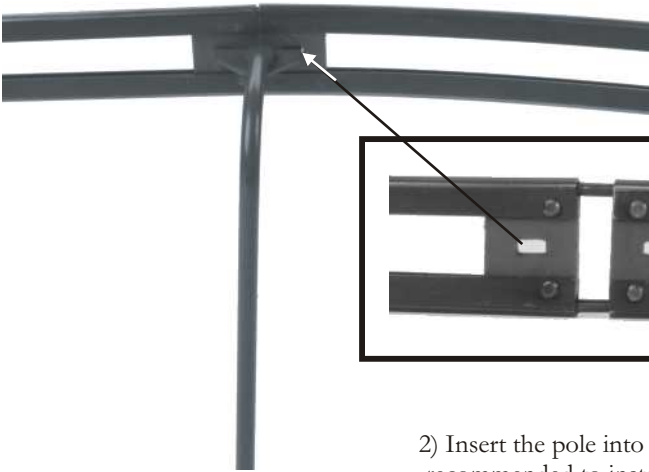
- 1 Powered Car
- 2 Non-powered cars
- 16-Rail Hangers
- 16-Rail Hanger Bases
- 8-Curved Rail Sections
- 8-Straight Rail Sections
- 1-Rail Lock-On
- 2-Drawbars

Getting Started

Assembling the Rail System



1) Connect the Rail



2) Insert the pole into rail (its is recommended to install the pole on the inside of the curve or loop)

3) Insert pole into base





4) Mounting Base to Layout optional
(Screws not included)

5) Connect Wires to Lock On

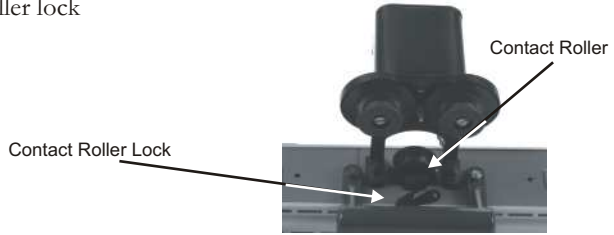


6) Install Lock-on by squeezing Lock-on fingers, inserting them between the rails and release. Connect wires to transformer with top rail wire to ground(-) and the bottom rail wire to positive (+). This wiring configuration is important for proper operation of the contemporary models when operating with the MTH DCS System.

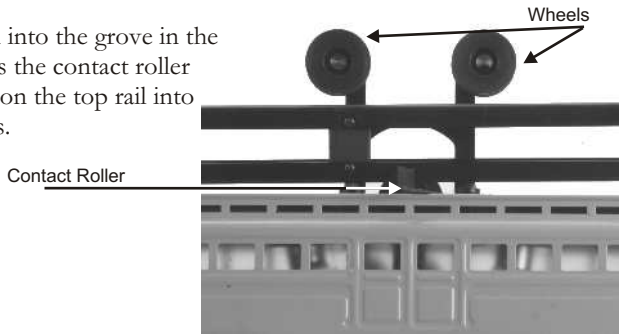


Putting the Cars on the Rail

1) Release the contact roller lock



2) Position bottom rail into the groove in the contact roller. Depress the contact roller and rotate car to position the top rail into the groove in the wheels.



3) Release tension from contact roller and latch contact roller lock.



Powered Car



Non-Powered Car



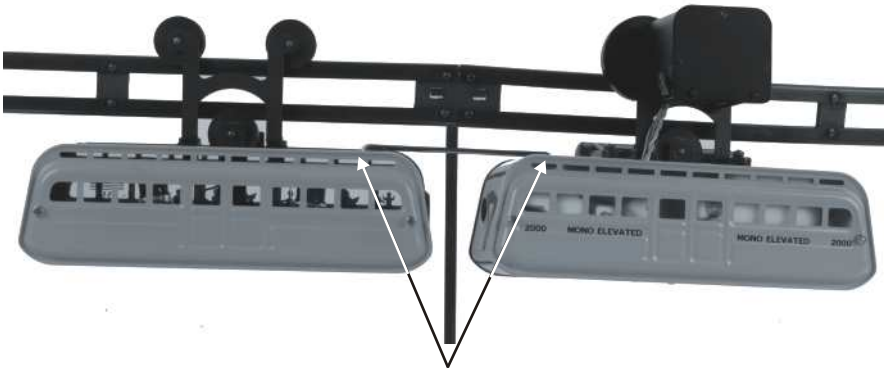
The above show correct installation of the cars onto the rail.

Lubricating the Cars

Before operating, lubricate the wheels and contact rollers on the powered and non-powered cars as per the instructions and figures shown on page 17.



Coupling the Cars



To couple or connect the cars together insert ends of the drawbar into the drawbar holes on the roof of each car

Checking the Battery (Contemporary Version)

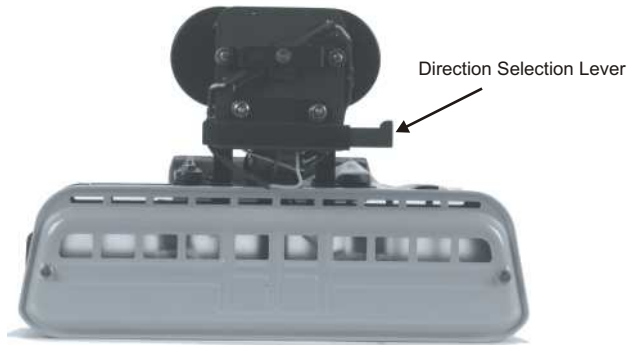
You may find, if your set was built several months before you set it up, that the rechargeable battery has run down and needs to be charged before operating. If you notice that the sounds are garbled, test and charge the engine as described in the "Self-Charging Battery Back-Up" on page 20..

Basic Operation (Traditional Version)

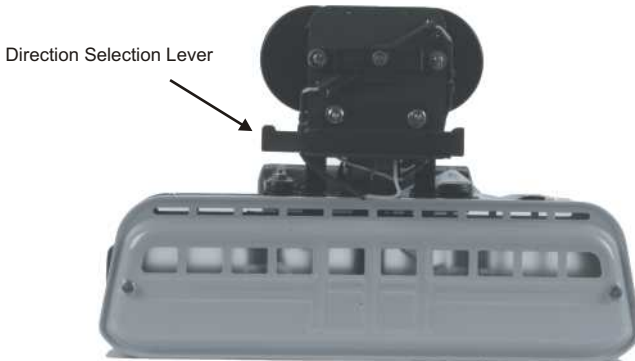
The throttle knob on your transformer controls how fast your monorail will travel. The throttle knob also controls the starting and stopping of your monorail.

The forward and reverse direction of your monorail is controlled by the position of the “Direction Selection Lever”.

The below figures show the general positions of the lever and the direction within which the monorail will travel. When changing direction of the monorail, turn off power at the transformer, slide “Direction Selection Lever” into position for desired direction, reapply power.



Monorail Travels in this direction



Monorail Travels in this direction



Basic Operation

(Contemporary Version Proto-Sound 2.0)

The Throttle knob controls how fast your monorail will travel.

- Turn the throttle knob up ½-way, until the car lights shine bright.
- Put the engine into motion by pressing the Direction button on your transformer once. (hold it for approximately 1 second)

If the powered car does not begin to move as soon as you firmly press the Direction button, you may not have sent enough voltage to the track to make the monorail move. Turn the throttle up a bit higher until the train begins to move.

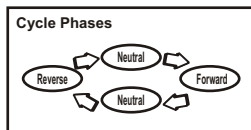
Activating Features

Throttle To increase or decrease rail voltage, and therefore monorail speed, turn the throttle control knob. Turning it clockwise will increase voltage and speed, while turning it counterclockwise will decrease voltage and speed. The monorail will maintain the speed you set after you release the throttle until you turn it again to change the voltage and speed.

Horn/Whistle - To sound the whistle, firmly press the Horn/Whistle button. The horn will sound for as long as you continue to depress the button. It will stop when you release the button.

Bell - To sound the bell, firmly press the bell button. The bell sound will continue until the bell button is firmly pressed a second time.

Direction Your monorail is programmed to start in neutral. The train will always cycle neutral-forward-neutral-reverse with each press and release of the direction button. The monorail is programmed to restart in neutral each time the rail voltage is turned off for 25 seconds or more.



Manual Volume Control

To adjust the volume of all sounds made by the Proto-Sound 2.0 system in the monorail, turn the master volume control knob located under the powered car clockwise to increase the volume and counter-clockwise to decrease the volume.



Proto-Sound 2.0 Operating Instructions (Contemporary Version)

This manual contains the operating instructions for Proto-Sound 2.0 in conventional mode only. Instructions for accessing DCS command mode features accompany the DCS Remote Control System equipment.

Activating Proto-Sound 2.0 Conventional Mode Features

Because Proto-Sound 2.0 is an all-new system developed by M.T.H.'s own research and development team, it operates differently from original Proto-Sound. Most Proto-Sound 2.0 features are automatically enabled, and Reset has been eliminated, so there is no need to program features as with original Proto-Sound. Although the new system is easier to operate than original Proto-Sound, you should read these instructions thoroughly before using Proto-Sound 2.0 features in order to prevent harm to yourself or your equipment.

Proto-Sound 2.0 features are activated by sequences of Bell and Horn button pushes described below. Please read the full descriptions of each feature before using it. To use these buttons to activate features rather than to blow the horn or ring the bell, you should tap the buttons very quickly with a 1/2-second pause between button presses. You may need to practice your timing to make this work smoothly.

Timing Chart				
Press Horn Short & Firm	1/2 Sec. Pause	Press Bell Short & Firm	1/2 Sec. Pause	Press Bell Short & Firm
Total Time Lapse: 1 1/2 Seconds				

Operating Modes

1. Manual Mode

Upon initial power application, the engine will start up in manual mode. The chart below lists the features available to the operator when in Manual Mode. Different features are available when operating in Learn and Auto Modes, which are described later.

Feature to Be Activated	Button Code:
Transit Announcement Sounds (TAS)	1 Bell (depress button approx. 2 secs.)
Speed Control On/Off	1 Horn, 2 Bells (from neutral only)
Lock into a Direction	1 Horn, 3 Bells
Reset to Factory Defaults (including	1 Horn, 3 Bells
default Auto Mode route settings)	1 Horn, 5 Bells (from neutral only)

Transit Announcement Sounds (TAS)

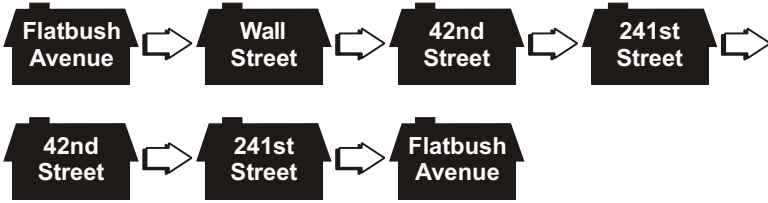
Your Proto-Sound 2.0 street car is equipped with operator controlled Transit Announcement Sounds, hereafter known as TAS. This easy-to-use feature plays digitally reproduced transit announcements and platform action sounds whenever you activate and stop your engine. No additional wires or modifications are needed on your layout to enjoy these amazing sound effects. These different sounds are heard each time you give a long bell button press. The entire TAS sequence is designed to simulate the arrival, disembarking, embarking, and departure of a transit stop. The sounds include the driver announcing the stop and the upcoming stop, passenger disembarking and embarking sounds, driver to passenger requests, door openings and closing and general transit stop sounds. After the station sounds have finished, the engine will shift back into gear and, if the throttle is set high enough, will pull away from the station. To activate the TAS, press and hold the bell button for approximately 2 seconds.

If you do not wish to stop at the station that is announced after activating TAS, press and hold the bell button again without throttling down the train.

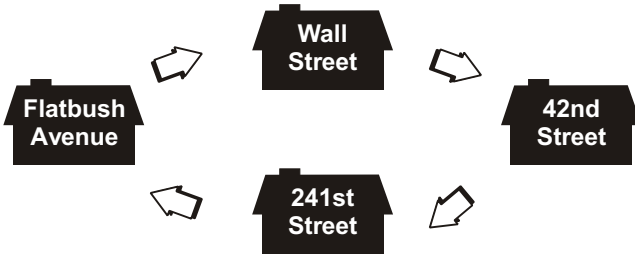
2. Manual Mode

In Learn Mode, the engine may be programmed with either an "Out & Back" route or a "Loop" route. An "Out & Back" route begins at the 1st station (as programmed by the operator), stops at intermediate stations, ends at the last station, then reverses its route until it reaches the 1st station. A "Loop" route begins at the 1st station (as programmed by the operator), stops at intermediate stations, ends at the last station, and then begins the route over again at the 1st station.

Example of an Out and Back:



Example of a Loop:



To Program Stations:

1. Running in Forward, stop the unit at the desired location for the first stop by pressing the direction button. Note: if you stop the engine with the throttle control, you must re-apply power so that the engine goes into neutral and does not shut down.

2. Enter Learn Mode by pressing Horn Bell Bell Bell - Bell. The train will then announce that you have entered Learn Mode.
3. Press and hold the Bell button to scroll through the available stations until you hear the one that you would like to be your first stop. Release the button quickly as soon as you have heard the desired stop name.
4. Press and hold the Horn button until a "saved" response confirms that station's location and name are saved in memory.
5. Proceed to the next stop by pressing the Direction button.
6. Press the Direction button to stop the train again when you have reached the next desired station location.
7. Using the Bell button, select the name of the station, then save using the Horn button.
8. Repeat steps 5-7 until you are ready to program the last stop in the route.
9. The manner of saving the last station in the route determines whether the route will be an "Out & Back" or "Loop" route.

"Out & Back"

Follow steps 5-7 to save the last station. After you press the Horn button and the sound system plays the "Saved" confirmation, press the Horn button again. Another "Saved" confirmation will play and the car will exit Learn Mode and enter Manual Mode.

"Loop"

Follow steps 5-7 to save the last station. Press the Direction button once to start the car in forward and stop the car at the location of the first stop by pressing the Direction button. Press the Bell button as many times as is necessary to hear the name of the first stop. Press the Horn button until the "Saved" confirmation is played. The car will then automatically exit Learn Mode and enter Manual Mode.

Notes:

Always approach a desired station stop location while running in Forward. Learn mode counts distance traveled, not actual physical locations. However, unlike an automobile's odometer, Proto-Sound 2.0 Learn Mode does erase distance when traveling in reverse. If you operate your car past the desired stop location, you may back it up to the desired stop location, however you must put the car into forward and then neutral again before saving the stop name and location into memory.

3. Auto Mode

When you have finished programming your stations in Learn the car will be in Manual Mode. Running in Forward, stop the car at the location of the first programmed station by pressing the Direction button. Press Bell Horn Horn to put the train into Auto Mode. Press the Direction button again to begin operation in Auto Mode. Because Auto Mode operation begins at the first stop, the next stop announced will be the second stop.

Function Learn Mode	Button Code:
To Enter Learn Mode	1 Horn, 4 Bells
To Stop at Each Station	Direction
To Scroll through the Station Names	Bell (hold to scroll and release as soon as you hear the desired station name)
To Save Station	Horn (hold for "Saved" response)
Function Auto Mode	Button Code:
To Enter Auto Mode from Manual Mode	1 Bell, 2 Horn at the location of the first programmed station stop
To Begin Programmed Run	Direction
Function Manual Mode	Button Code:
To Enter Manual Mode from Auto Mode	1 Bell, 2 Whistles

Notes:

The engine will always power up in Manual Mode

Speed Control

M.T.H. engines equipped with Proto-Sound 2.0 have speed control capabilities that allow the engine to maintain a constant speed up and down grades and around curves, much like an automobile cruise control. You can add or drop cars on the run, and the engine will maintain the speed you set.

While the engine is programmed to start with the speed control feature activated, you can opt to turn it off. This means the engine's speed will fall as it labors up a hill and increase as it travels downward. It is also affected by the addition or releasing of cars while on the run. Because the engine will run more slowly at a given throttle voltage when speed control is on than when it is off, you should adjust the throttle to a lower power level for operation with speed control off to avoid high-speed derailments. When speed control is off, the volume will drop to allow for better low voltage operation.

To turn speed control on and off, put the engine in neutral, then quickly tap the transformer's Whistle/Horn button one time then quickly tap the Bell button two times, allowing approximately 1/2 second to lapse between each quick button press. Two horn blasts will indicate that the engine has made the change. Repeat the 1 Whistle/Horn, 2 bells code to return it to the other condition. You will want to do this during the initial neutral upon start-up if you ever couple this engine to another engine that is not equipped with speed control to avoid damaging the motors in either engine. Each time you shut down the engine completely, it will automatically turn speed control on.



Lock Into A Direction

You can lock your engine into a direction (forward, neutral, or reverse) so that it will not change directions. To do this, put the engine into the direction you want (or into neutral to lock it into neutral), run it at a very slow crawl (as slowly as it will move without halting), and quickly but firmly tap the Whistle/Horn button once followed by three quick taps of the Bell button, allowing approximately ½ second to lapse between each quick button press. Two horn blasts will indicate that the engine has made the change. The engine will not change direction (including going into neutral) until you repeat the 1 Whistle/Horn, 3 bells code to return the engine to its normal condition, even if the engine is kept without power for extended periods of time.



Reset To Factory Default

To override the settings you currently have assigned to the engine and reset it to its factory defaults, while in Neutral tap the Horn button quickly once, followed by five quick taps of the Bell button, allowing approximately ½ second to lapse between each quick button press. Two Whistle/Horn blasts will indicate that the engine has made the change.



Automatic Sound Effects

Certain Proto-Sound 2.0 sound effects automatically play in programmed conventional mode conditions:

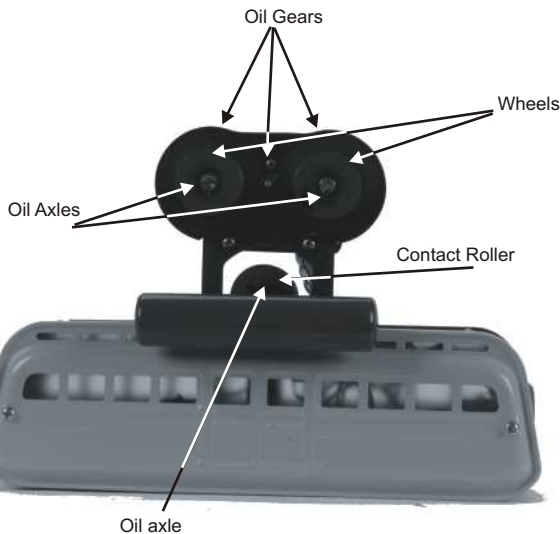
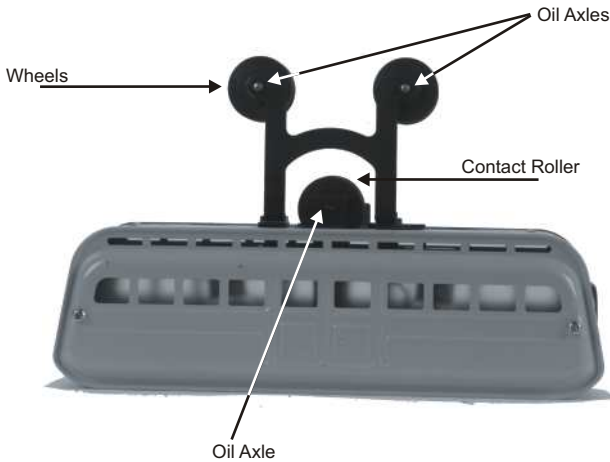
- Squealing Brakes play any time the engine's speed decreases rapidly.
- Cab Chatter plays at random intervals when the engine idles in neutral.
- Engine Start-up and Shut-down sounds play when the engine is initially powered on or is powered off for five seconds or more.

Maintenance

Lubricating Monorail Cars Instructions

The monorail cars should be well oiled in order to run properly.

You should regularly lubricate the wheels, contact rollers, and gears to prevent them from squeaking. Use light household oil and follow the lubrication points marked below. Do not over-oil. Use only a drop or two on each point.



Cleaning the Wheels, Contact Rollers and Rail

Periodically check the monorail wheels and contact rollers for dirt and buildup, which can cause poor electrical contact and traction. Wheels and contact rollers can be cleaned using denatured (not rubbing) alcohol applied with a cotton swab.

To clean the rail, use a clean rag and RailKing Track Cleaning Fluid or denatured (not rubbing) alcohol. Unplug the transformer and wipe the rails, turning the rag frequently to ensure that you are using clean cloth on the rails. Because the manufacturing process leaves a coating on the rail, you should clean the rails after the first 30 minutes of use (you may notice an electrical smell during initial use as the coating wears off; this is normal). Thereafter, keep an eye on the rail and clean it when it gets dirty to ensure good electrical contact.

Car Light bulb Replacement Instructions

The lightbulbs are easy to remove and replace when they burn out. See the diagrams and directions below for instructions on accessing and replacing the light bulbs.

You can obtain replacement bulbs directly from the M.T.H. Parts Department (order online: www.mth-railking.com, e-mail: parts@mth-railking.com; mail: 7020 Columbia Gateway Drive, Columbia MD 21046-1532, FAX: 410-423-0009).



To access the light bulb remove the body side screws and be careful to watch for the screw nuts on the opposite side of the body.



Remove one or both body sides. The light bulbs are bayonette style. Twist the light bulb to remove. Install the new light bulb and reassemble the model in reverse.



Self-Charging Battery Back-Up (Contemporary Version Only)

The special NiCad 2.4v self-charging battery pack recharges continuously during monorail operation and should last for up to five years. The battery is a dry battery that should not leak or cause any damage to your engine. **Depending upon when your monorail was built, it may need to be charged right out of the box.** If monorail sounds seem distorted or garbled at low voltages or become silent when power from the transformer is turned off, test the battery to determine whether it should be recharged or replaced.

- **Test:** Put the monorail in neutral and leave the rail voltage at 10-12 volts (high enough for the lights to shine brightly) for 15 minutes.
- **Recharge:** If the sounds are improved at the end of the 15-minute test charge, the battery charge has run down and can be recharged. There are a number of ways you can do this:
 - Leave the monorail in neutral with rail voltage at 10-12 volts for 6-7 hours so the battery can fully recharge.
 - Use M.T.H.'s battery recharger (sold separately) that plugs into a wall outlet and a special port under the powered car to recharge the battery overnight without leaving it on the rail.



Replace: If the sounds are not improved at the end of the 15-minute test charge, it is time to replace the battery. Available through M.T.H. Parts.

DO NOT substitute alkaline batteries for these NiCad batteries. Using alkaline batteries in this system can result in damage to the PS 2.0 circuit board and/or the batteries.

****Do not use alkaline batteries for testing or checking purposes for the 3-Volt PS2 boards. Using alkaline batteries will damage the 3-Volt battery charging circuit.****



To gain access to replace the battery please follow the body side remove instructions under the car light bulb replacement instruction section on page 19.

Troubleshooting Proto-Sound® Problems (Contemporary Version)

Although Proto-Sound 2.0 has been designed and engineered for ease of use, you may have some questions during initial operation. The following table should answer most questions. If your problem cannot be resolved with this table, contact M.T.H. for assistance (telephone: 410-381-2580; fax: 410-423-0009; service@mth-railking.com, 7020 Columbia Gateway Drive, Columbia MD 21046-1532).

Starting Up	Remedy
When I press the horn button, the bell comes on instead.	That is normal for this model.
I can't get any sound to play when I press the horn button.	You may be pressing the button too quickly to trigger the bell. Try pressing the horn button more slowly, taking approximately one full second to fully depress the button.
Bell	Remedy
When I press the bell button, I get a station stop announcement, not the bell.	You are holding the bell button too long. Press it for only about one second to trigger the bell.
Platform Action Sounds	Remedy
Sometimes the Platform Action Sounds don't play.	Platform Action Sounds play only in neutral at random intervals.
Lock-out	Remedy
I can't get the engine to run after I power up the transformer. It sits still with the diesel and compressor sounds running.	The engine is locked into the neutral position. Follow the procedure in the "Lock into a Direction" section.
The engine won't lock into forward, neutral, or reverse.	Engine speed must be below 10 scale mph (approx. 10 volts or less in conventional mode).
Volume	Remedy
The sounds seem distorted, especially when the bell is activated.	Proto-Sound 2.0 volume is set too high. Turn the volume control knob on the bottom of the chassis counter-clockwise to reduce the volume.
No Sound	Volume is set too low, adjust volume control knob on the bottom of the chassis clockwise to increase the volume or check connector to speaker.
Battery	Remedy
The engine will not leave the initial neutral setting.	Check to be sure the battery is installed and fully charged. See the "Self-Charging Battery Back-Up" section.
I get no sounds when the engine shifts between directions.	The battery may be dead or need to be charged. See the "Self-Charging Battery Back-Up" section.
After I turn off my transformer, my engine continues to make sounds before quitting.	Proto-Sound 2.0 is designed to continue to sound for a few seconds after power to the track has been shut off to allow for a more realistic shut-down.
PSA	Remedy
The TAS sounds occasionally repeat themselves.	Proto-Sound 2.0 has a built-in random number generator that randomly selects each sound clip to play. Because there are a limited number of sound clips available in each TAS sequence, it is probable that some of these sound clips will be repeated from time to time.

Transformer Compatibility and Wiring Chart

Note that many of the operational commands described in these instructions require a bell button, so if you are using a transformer other than the one included in this set and your transformer does not have its own bell button, you should consider adding one to get the full benefit of the system.

Transformer Model	Center Rail	Outside Rail	Min/Max. Voltage	Power Rating	Transformer Type
MTH Z-500	Red Terminal	Black Terminal	0-18v	50-Watt	Electronic
MTH Z-750	Red Terminal	Black Terminal	0-21v	75-Watt	Electronic
MTH Z-1000	Red Terminal	Black Terminal	0-14v 0-18v	80-Watt 100-Watt	Electronic
MTH Z-4000	Red Terminal	Black Terminal	0-22v	390-Watt	Electronic
Lionel 1032	U	A	5-16v	90-Watt	Standard
Lionel 1032M	U	A	5-16v	90-Watt	Standard
Lionel 1033	U	A	5-16v	90-Watt	Standard
Lionel 1043	U	A	5-16v	90-Watt	Standard
Lionel 1043M	U	A	5-16v	90-Watt	Standard
Lionel 1044	U	A	5-16v	90-Watt	Standard
Lionel 1053	U	A	8-17v	60-Watt	Standard
Lionel 1063	U	A	8-17v	60-Watt	Standard
All-Trol	Left Terminal	Right Terminal	0-24v	300-Watt	Electronic
Dallee Hostler	Left Terminal	Right Terminal			Electronic
Lionel LW	A	U	8-18v	75-Watt	Standard
Lionel KW	A or B	U	6-20v	190-Watt	Standard
Lionel MW	Outside Track Terminal	Inside Track Terminal	5-16v	50V.A.	Electronic
Lionel RS-1	Red Terminal	Black Terminal	0-18v	50V.A.	Electronic
Lionel RW	U	A	9-19v	110-Watt	Standard
Lionel SW	U	A	Unknown	130-Watt	Standard
Lionel TW	U	A	8-18v	175-Watt	Standard
Lionel ZW	A,B,C or D	U	8-20v	275-Watt	Standard
Lionel Post-War Celebration Series ZW	A,B,C or D	Common	0-20v	135/190 Watt	Electronic

Additional Features Accessible with the DCS Remote Control System: (additional equipment required) **(Contemporary Version)**

While conventional mode operation of a Proto-Sound 2.0 engine yields wonderfully realistic sound and several train control features, command mode operation allows the user to access a world of command functions never before accessible to O Gauge railroaders. With the addition of the DCS Remote Control System (including a DCS remote handheld and Track Interface Unit) users gain many advanced features, including:

- DCS Proto-Speed Control - Establishes desired monorail speed in scale miles per hour increments via a thumbwheel control and allows operator to set maximum speed and acceleration/deceleration rates
- Emergency Stop-Single button push stops all Proto-Sound 2.0 trains but does not turn off the power
- One Touch Global Mute/UnMute-Single button mutes or unmutes all DCS-controlled locomotives' user-defined actions, including sound
- Proto-Dispatch Operation-Public Address-like feature allows users to speak through monorail speaker during operation
- Proto-Cast-Allows users to play audio recordings through monorail speaker during operation
- Proto-Doppler Sound Effects Set Up-Users can configure monorail for Doppler Operation, including setting distance points for Doppler start, repeat, and stop modes
- Independent Volume Control of monorail Sounds, Bell, Horn & Whistle for each monorail
- Control up to 50 different DCS-Equipped Locomotives at one time with multiple TIUs
- Query monorail Information-User can query locomotive programming to learn monorail address and engine data information, including scale miles traveled
- User Can Query, Set and Operate Track and Accessory Interface Units for Programming Digital Command Operations for up to 250 Accessories and 250 Individual Switches
- User Can Script, Record and Playback Train Routes

Operating instructions for all DCS Command features will accompany the DCS remote control equipment.

Service & Warranty Information

How to Get Service Under the Terms of the Limited One-Year Warranty

When you suspect an item is defective, please check the operator's manual for standard operation and trouble-shooting techniques that may correct the problem. Additional information may be found on the M.T.H. Website. Should you still require service, follow the instructions below to obtain warranty service.

First, e-mail, write, call or fax a M.T.H. Authorized Service Center (ASC) in your area to obtain Repair Authorization. You can find the list of ASCs on the M.T.H. Website, www.mth-railking.com. Authorized Service Centers are required to make warranty repairs on items sold *only* from that store; all other repairs may-- or may not be done at the store's own discretion. If you did not purchase the item directly from the ASC, you will need to select a National Authorized Service Center (NASC). These centers are compensated by M.T.H. to perform warranty service for any customer whose repair qualifies for warranty service. A list of NASC retailers can be located on the M.T.H. Website or by calling 410-381-2580. Should the warranty no longer apply, you may choose either an ASC or NASC retailer to service your M.T.H. Product. A reasonable service fee will be charged.

CAUTION: Make sure the product is packed in its original factory packaging including its foam and plastic wrapping material to prevent damage to the merchandise. There is no need to return the entire set if only one of the components is in need of repair *unless otherwise instructed by the Service Center*. **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 (if required by the service center, 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 a service technician when contacting the Service Center for your Return Authorization.**

Please make sure you have followed the instructions carefully before returning any merchandise for service. Authorized M.T.H. Service Centers are independently owned and operated and are not agents or representatives of M.T.H. Electric Trains. M.T.H. assumes no responsibility, financial or otherwise, for material left in their possession, or work done, by privately owned M.T.H. Authorized Service Centers.

If you need assistance at any time email MTH Service at service@mth-railking.com, or call 410 381-2580.

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 www.mth-railking.com or call 410-381-2580 to identify an Authorized M.T.H. Train Merchant near you.

M.T.H. products are warranted for one year from the date of purchase against defects in material or workmanship, excluding wear items such as light bulbs, pick-up rollers, batteries, smoke unit wicks, 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 an M.T.H. Authorized Service Center (ASC) or M.T.H. National Authorized Service Center (NASC) 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 **a copy of the original sales receipt from an Authorized M.T.H. Train Merchant**, which gives the date of purchase. If you are sending this product to an Authorized Service Center, contact that Center for their return authorization.

This warranty gives you specific legal rights, and you may have other rights that vary from state to state. Specific questions regarding the warranty may be forwarded to M.T.H. Directly

Service Department:
M.T.H. Electric Trains
7020 Columbia Gateway Drive
.Columbia MD 21046-1532