

**MTHE**  
ELECTRIC TRAINS®  
HO TRAINS THAT DO MORE



**2019 - 20**

**HO GAUGE TRAINS**



# MTH

ELECTRIC TRAINS®  
HO TRAINS THAT DO MORE



The M.T.H. HO product line features locomotives sporting the absolute latest in cutting-edge digital electronics for the HO market. Our slogan “HO Trains That Do More” is no understatement. Our sound-equipped locomotives are compatible with all HO operating systems:

analog DC, NMRA-standard DCC, and M.T.H.’s Digital Command System (DCS). LED lighting, synchronized puffing smoke output and durable ABS or die-cast metal bodies ensure that M.T.H. HO locomotives and rolling stock are worthy additions to any HO roster.

Not all products depicted in this catalog are production models. In some cases, the items pictured may be models in HO scale, O scale, or another scale that have been altered digitally. Each item's graphic features and content are subject to change after publication. All product features may be verified on their retail packages.

M.T.H. Electric Trains is in no way affiliated with any of the railroads featured in this catalog.

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M.T.H.’s DCS Digital Command System has received U.S. Patent No. 6,457,681. M.T.H.’s Proto-Sound® 2.0 system has received U.S. Patent No’s 6,457,681 B1

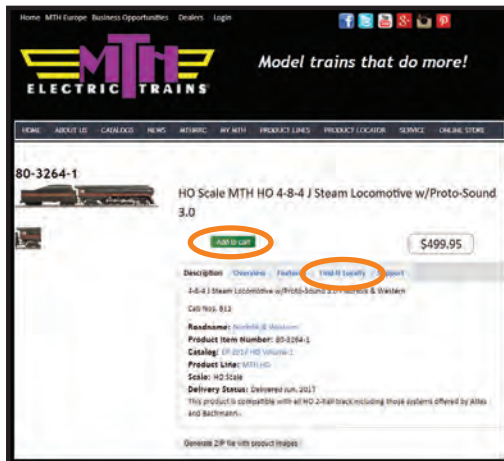
(sound system), 6,457,681 B1 (Proto-Speed Control™), 6,604,641 (Proto-Coupler™), 7,210,656 (Sound), 6,662,917 (2/3Rail), 7,210,656 (Internet Downloads, Music & Doppler), 6,655,640 (Smoke Synchronization), HO Coupler 7,694,834 Bi-Directional Communication 8262034

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# Contents



## M.T.H. HO Products Are In Stock And Ready To Purchase

Most items featured in this catalog are in-stock and available to buy as this catalog goes to press. You can learn more about them on our website, and purchase them at our online store or at more than 900 M.T.H. Authorized Retailers.

## Finding M.T.H. Products

To find products, go to the M.T.H. website ([www.mthtrains.com](http://www.mthtrains.com)), key in the product item number in our Search box and access the product's landing page. If the item is in stock, it can be purchased directly from M.T.H. by clicking on the Add to Cart button. Or click on the Find It Locally button to locate an M.T.H. Authorized Retailer near you and purchase through them. If your favorite retailer doesn't have the item in stock, let them know M.T.H. does and they'll order it for you.



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# Proto-Sound® 3.0

## THE RICHEST SET OF FEATURES IN MODEL RAILROADING

Whether you operate with a conventional transformer or in command mode with DCC or DCS™ (M.T.H.'s Digital Command System), the Proto-Sound 3.0 system available in every locomotive in this catalog offers more realism, more fun, and more variety than any other locomotive control system in any scale.

### STATION SOUNDS

Proto-Sound passenger engines offer Passenger Station Proto-Effects™, a complete arrival and departure sequence you can activate from your transformer or DCC or DCS controller. In most cases, the station sequence features an actual name train

### UNMATCHED SPEED CONTROL

The Proto-Speed Control™ built into Proto-Sound 3.0 acts like the cruise control on a car, keeping your train moving at the



### FULL COMPATIBILITY WITH ALL OPERATING SYSTEMS

Right out of the box, every Proto-Sound 3.0 engine is compatible with all operating systems: conventional DC, DCC, and our own Digital Command System (DCS).

### VIVID ENGINE SOUNDS

Proto-Sound features crystal-clear digital sounds. We strive to make our sounds as authentic as possible, using the characteristic whistle for a particular steam engine, for example, or motor sound for a particular diesel. With the optional DCS system, you can tune each engine to your preference by individually adjusting bell, horn or whistle, and steam chuff or diesel motor volume — and play a steam engine quillable whistle as if you were pulling the whistle cord!

pulled by that particular engine. Freight engines include Freight Yard Proto-Effects, a symphony of freight terminal sounds.

### ATMOSPHERIC SOUNDS

Crew conversations, the whoosh of a steam engine opening its cylinder cocks, and a host of other atmospheric sounds play automatically at random when using a conventional transformer — or can be activated manually from a DCC controller or the DCS handheld.

### EXTRAORDINARY SLOW SPEED CAPABILITY

Proto-Sound engines can throttle down as slow as three scale miles per hour, highball down the main line, and maintain any speed in between. With certain DCC controllers, and any DCS controller, you can set engine speed in one-scale-mile-per-hour increments up to 120 smph. Go ahead, get out your stop watch and ruler and see how accurate our scale speeds are.

speed you select, regardless of hills and curves. You can even switch off the speed control if you prefer.

### LIGHTING EFFECTS

Proto-Sound locomotives feature prototypical Rule 17 lighting, including a variety of realistic lighting effects. Depending on the locomotive, these may include constant-brightness headlights, illuminated number boards, lighted class and marker lamps, and alternating ditch lights. In DCS operation, many of these lighting effects can be individually controlled.

### MULTIPLE UNIT CAPABILITY

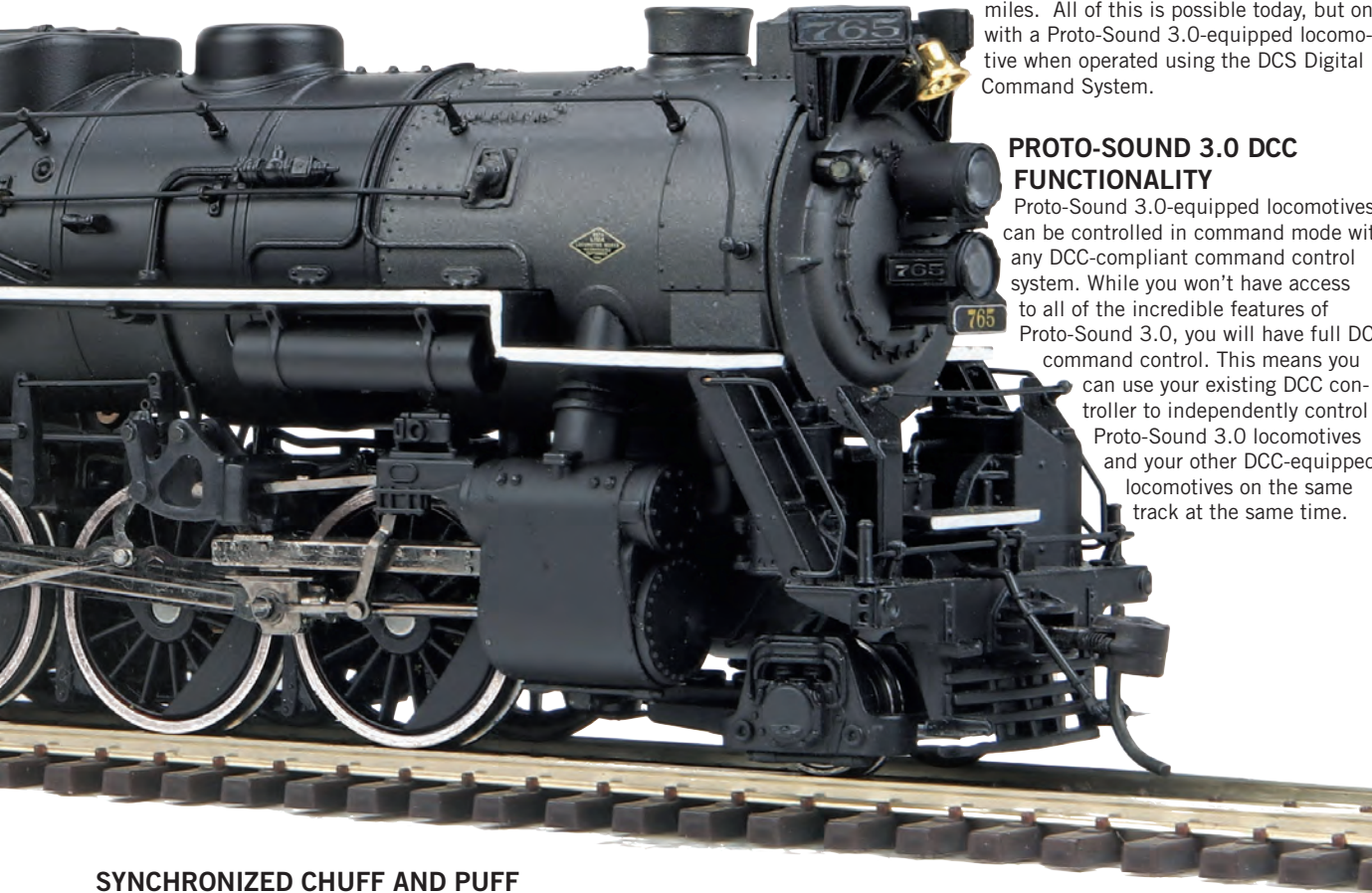
In DCS command mode, all locomotives set to the same throttle setting — 37 scale miles per hour, for example — will move at virtu-



ally the same speed. This makes it easy to double or even triple-head nearly any combination of Proto-Sound 3.0 locomotives.

## GREAT SMOKE

Proto-Sound steam engines feature fan-driven ProtoSmoke™, the most powerful smoke system in the hobby. You can vary the intensity with the smoke "volume" control on the locomotive or remotely with any DCC or DCS controller.



## SYNCHRONIZED CHUFF AND PUFF

Like a real steam engine, M.T.H. steamers feature puffs of smoke and steam chuff sounds synchronized with the drive wheels. Better than any other model train, an M.T.H. locomotive portrays the drama of a steam engine slowly chuffing and puffing as it pulls out of a station and gets up to speed.

## BRAKE SOUNDS

Engine brakes squeal whenever you throttle back sharply or pull into a station. In DCC or DCS mode, you can trigger the brake sounds manually with the press of a button.

## BI-DIRECTIONAL COMMUNICATION

Proto-Sound 3.0 engines not only receive commands from the DCS system, they can report back vital information, trigger other devices to operate, and diagnose your layout's wiring and signal quality. Query a Proto-Sound 3.0 locomotive to find out how many scale miles it's run or how many hours it's been powered up. Check out the strength of the DCS signal on the track or measure the track voltage at a trouble spot. Measure the length of your track in scale miles. All of this is possible today, but only with a Proto-Sound 3.0-equipped locomotive when operated using the DCS Digital Command System.

## PROTO-SOUND 3.0 DCC FUNCTIONALITY

Proto-Sound 3.0-equipped locomotives can be controlled in command mode with any DCC-compliant command control system. While you won't have access to all of the incredible features of Proto-Sound 3.0, you will have full DCC command control. This means you can use your existing DCC controller to independently control Proto-Sound 3.0 locomotives and your other DCC-equipped locomotives on the same track at the same time.

## OPERATE 'EM ALL

In DCS command mode, unlike any other command system available today, you can have optional one-touch control over every Proto-Sound 3.0-equipped locomotive at the same time. Imagine, with the ALL command, your DCS system will start-up every locomotive at the same time, making it simple to create a lashup of any combination of Proto-Sound 3.0 locomotives. Almost every DCS feature can be sent to all the active engines at once. Tell 'em to run at 10 scale miles per hour and they'll all start moving at the same time and at the same speed.

## DCC Features

Proto-Sound 3.0-equipped locomotives can be controlled in command mode with any DCC-compliant command control system. This means you can use your existing DCC controller to independently control your other DCC-equipped locomotives in addition to your Proto-Sound 3.0 locomotives on the same track at the same time.

When using a DCC controller, the following Proto-Sound 3.0 locomotive features are accessible:

### Steam Features\*

- Headlight/Backup light
- Bell
- Whistle
- Start-up/Shut-down
- Passenger Station/Freight Yard Sounds
- All Other Lights (On/Off)
- Master Volume
- Front Coupler
- Rear Coupler
- Forward Whistle Signal
- Reverse Whistle Signal
- Grade Crossing Signal
- Smoke On/Off
- Smoke Volume
- Idle Sequence 3
- Idle Sequence 2
- Idle Sequence 1
- Extended Start-up
- Extended Shut-down
- Labored Chuff<sup>1</sup>
- Drift Chuff<sup>1</sup>
- One-Shot Doppler
- Coupler Slack
- Coupler Close
- Single Horn Blast
- Engine Sounds
- Brake Sounds
- Cab Chatter
- Feature Reset
- Train Marker<sup>2</sup>
- Train Operation<sup>2</sup>

<sup>1</sup> Not Included On European Steam Locomotives

<sup>2</sup> Found Only On European Steam Locomotives

### Diesel/Electric Features\*

- Head Light/Backup Light
- Bell
- Horn
- Start-up/Shut-down
- Passenger Station/Freight Yard Sounds
- All Other Lights (On/Off)
- Master Volume
- Front Coupler
- Rear Coupler
- Forward Horn Signal
- Reverse Horn Signal
- Grade Crossing Signal
- Clickety Clack (On/Off)
- Idle Sequence 4<sup>1</sup>
- Idle Sequence 3<sup>2</sup>
- Idle Sequence 2
- Idle Sequence 1
- Extended Start-up
- Extended Shut-down
- Rev Up
- Rev Down
- One-Shot Doppler
- Coupler Slack
- Coupler Close
- Single Horn Blast
- Engine Sounds
- Brake Sounds
- Cab Chatter
- Feature Reset
- Smoke On/Off<sup>3</sup>
- Smoke Volume<sup>3</sup>
- Pantograph Auto/Manual<sup>4</sup>
- Front Pantograph Up/Down<sup>4</sup>
- Rear Pantograph Up/Down<sup>4</sup>

<sup>1</sup> Found Only On Diesel Locomotives w/o Smoke

<sup>2</sup> Not Included On Electrics

<sup>3</sup> Found Only On Diesel Locomotives w/Smoke

<sup>4</sup> Found Only On Electric Locomotives

\* Check your DCC Controller's manual to see how many features it can access.





# Simply the Best Way

DCS is the **EASIEST-TO-USE, MOST INTUITIVE** command control system you can buy.

It works with **ANY iOS OR ANDROID SMART PHONE OR TABLET** or the optional DCS Remote Control.

It can be **UPGRADED FOR FREE** over the Internet.

It can **DO MORE** for less money than other command control systems.

It's why you'll have **MORE FUN** operating your trains than ever before.

It can **RUN ALMOST 7800\* M.T.H. PROTO-SOUND® 2.0 & 3.0 LOCOMOTIVES** and every Lionel® TMCC®, EOB, or Legacy™ locomotive ever made — and run 99 of them at the same time, on the same track, independently, in command mode.

It can also **RUN ALL CONVENTIONAL AC LOCOMOTIVES** without the purchase of any additional hardware.

With the addition of an Accessory Interface Unit (AIU), it can **OPERATE ANY HO ACCESSORY OR SWITCH**. It can **CREATE SCENES AND ROUTES** that are triggered with one push of a button.

## What can your remote do?

\* Number of different Proto-Sound 2.0 and 3.0 engines cataloged through the 2019-20 M.T.H. HO Gauge Catalog. While all Lionel TMCC features can be accessed by the DCS App or handheld remote, at present some Legacy features cannot be accessed by the App or remote.



Learn More About It  
Shop Online at  
[www.mthtrains.com](http://www.mthtrains.com)



## Command Control Explained

In conventional model train operation, an AC or DC transformer varies track voltage to adjust engine speed and direction. Command systems such as DCS, however, put a constant voltage on the track (around 18 volts for DCS) and vary speed by telling each engine how much of that voltage to use.

**Unlike conventional control, command control allows different engines to do different things, even when they are on the same track** — like run at different speeds, go in different directions, or make different

sounds. You can even combine several engines into a "lashup," working together under a single throttle.

**How it works:** In the DCS system, commands such as speed, direction, and sound control are sent as radio signals from a smart device or handheld controller to a receiver, which translates those radio signals into digital information. That digital signal is sent through the rails and picked up only by the appropriate engine — telling it to go, for example, 37 miles per hour, blow the whistle, or smoke more heavily.





# to Run a Railroad™

## M.T.H. Railroading App

With the DCS App, any Apple or Android smart device can run trains on your layout — and control switches and accessories too, with the Premium version of the App and an Accessory Interface Unit (AIU).

When friends visit, they can download any version of the App on their phone or tablet and run trains as well. Each visitor can run their own train.

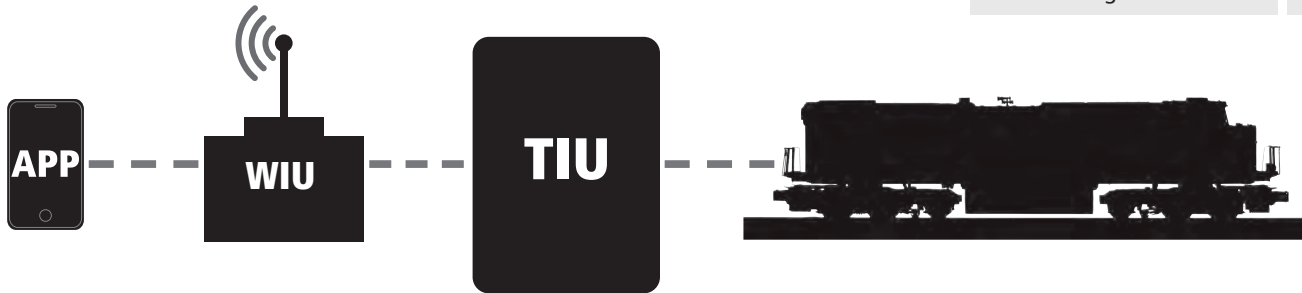
Our App isn't limited to just DCS control either. With it, you can access special pages on the M.T.H. website, see the latest news and catalogs, and shop for M.T.H. products.

Try the App for Free, Upgrade for \$5 or \$25

Download the Apple or Android App from iTunes or Google Play



Free Version	Standard Version (\$5)	Premium Version (\$25)
<ul style="list-style-type: none"> <li>- Control up to 3 locomotives simultaneously</li> <li>- Operate bell, whistle/horn and station sounds</li> <li>- Activate couplers</li> <li>- Control volume, smoke and headlights</li> </ul>	<ul style="list-style-type: none"> <li>- Control up to 99 locomotives simultaneously</li> <li>- Control all Free features</li> <li>- Adjust engine-specific sounds and features</li> <li>- Configure maximum speeds</li> </ul>	<ul style="list-style-type: none"> <li>- Control all Free and Standard features</li> <li>- Control switches and accessories with AIU</li> <li>- Build lashups</li> <li>- TMCC/Legacy control</li> <li>- Conventional control</li> </ul>



See How Easy It Is To Add APP Control To Your Layout

Check Out The Video: [www.mthtrains.com/dcs2018](http://www.mthtrains.com/dcs2018)

## Choose from THREE different DCS options

### 1. DCS Remote Commander: Get into DCS on a budget

Wireless infrared command control of one Proto-Sound 2.0 or later locomotive is simple when a DCS Remote Commander is added to an existing layout. Just plug your power supply into the DCS Remote Commander receiver and connect the output wires from the receiver to your track lockon. The receiver can accept any power input (AC or DC) up to 20 volts and 8 amps. The infrared remote provides control for eight different functions — perfect for small and moderately sized layouts.



DCS Remote Commander Set  
50-1033 \$59.95

Z-560 56 Watt DC Power Supply  
40-560 \$44.95





# Simply the Best Way

## 2. DCS Explorer

Use your smartphone or tablet to control your model railroad. Just connect the DCS Explorer to your track, plug in a separately sold power supply, download the free app and you're ready to run up to three Proto-Sound 2.0 or 3.0 locomotives on the same track at the same time! You'll have access to all the major Proto-Sound features from any Android or iOS smartphone or tablet.

Once configured, you can connect as many smart devices as you want to run trains. Multiple operators can control the same trains at the same time. The Explorer operates in stand-alone WiFi or home network modes.



DCS Explorer  
Track Interface Unit  
50-1035 \$149.95



Z-560 56 Watt DC Power Supply  
40-560 \$44.95

### FREE DCS APP

Download the free DCS app for your smart phone or tablet



Check Out The Video:  
[www.mthtrains.com/50-1035](http://www.mthtrains.com/50-1035)



### DCS Explorer Operating Features

#### Locomotive Features

- Speed and Direction Control
- Horn/Whistle
- Bell
- Front Coupler Activation (if equipped)
- Rear Coupler Activation (if equipped)
- Smoke On/Off (if equipped)
- Headlight On/Off
- Locomotive Sound Volume
- Sound Mute
- Passenger Station/Freight Yard Sounds
- Doppler Effect
- Locomotive Factory Reset

#### Additional Features

- Up to 100' range
- Easily and quickly switch between locomotives
- Fast bi-directional communication
- Auto-programming of locomotives, no engine IDs to remember

**Control locomotive lights, sounds, action**

**Run multiple trains:** Control up to 3 trains on the same track at the same time

**Use multiple controllers:** Operate with multiple Apple and Android smartphones and tablets at the same time

**Invite your friends:** With our free App and their own smart device, they can run trains with you

**Choose from nearly 7,800 locomotives:** Run any M.T.H. Proto-Sound 2.0 or 3.0 engine ever built

**Walk around:** The DCS WiFi signal has up to 100' range, far greater than Bluetooth

**Faster than Bluetooth:** In addition to extended range, WiFi is much faster, allowing for seamless and fast switching between locomotives



# to Run a Railroad™

## 3. Full DCS Digital Command System

The full DCS Digital Command System is an all-encompassing network of components that brings true interactive wireless control to a model railroad. Users can choose between a walk-around wireless remote control or an intuitive app residing on their own smart device to run multiple tracks, hundreds of trains and control switches and accessories. Bi-directional communication between locomotives and the system's TIU Track Interface Unit makes adding and programming locomotives simple and easy. No more ID numbers to remember and no complex icons to decipher. It's fast, it's easy and it's fun!



DCS WiFi Remote Control System (TIU and WIU)  
50-1036 \$369.95



DCS WiFi Module (WIU)  
50-1034 \$179.95



DCS Track Interface Unit (TIU)  
50-1003 \$229.95



DCS Accessory Interface Unit (AIU)  
50-1004 \$119.95  
*Operates switches and accessories*



DCS Remote Control - Handheld Unit  
50-1002 \$169.95

- TIU/Barrel Jack Female Adapter Cable  
50-1017 \$10.95
- Transformer/Barrel Jack Male Adapter Cable  
50-1037 \$10.95
- 6' Mini-to-Mini Cable  
50-1009 \$9.95
- 12-Port Terminal Block  
50-1014 \$27.95
- 24-Port Terminal Block  
50-1020 \$37.95
- Z-DC24 24-Watt Power Supply  
50-240 \$17.95
- DCS WiFi Companion Digital Book - 2nd Edition  
60-1406 \$29.95

As the preceding pages detail, our Proto-Sound 3.0 locomotives possess the richest set of features in model railroading, and we've taken the same approach with our freight and passenger rolling stock.

Many of our passenger cars possess railroad specific details and are unique in appearance from each other. Our *Daylight* cars, for example, have some of the best operating end-of-car diaphragms found in any scale. All of our passenger cars feature the smoothest rolling passenger trucks available today, and all are outfitted with flicker-free, constant voltage lighting. You won't find better looking and operating HO passenger cars than those from M.T.H.

M.T.H. HO freight cars come in two varieties. Our top-of-the-line models feature industry-leading details like separate grab irons, intricate undercarriage detail and crisp graphics. The Ready-2-Rail series is our durable and value-packed freight car line, with opening box car doors, smooth-rolling trucks and equally crisp and colorful graphics.

Regardless of your choice, all M.T.H. HO freight and passenger car rolling stock comes ready-to-run and features industry-leading Kadee® couplers.







## Proto-Sound 3.0 DCC Upgrades

Like all modern electronics, Proto-Sound 3.0 continues to evolve, thanks to its software-based heritage. All of our latest locomotive models are equipped with upgraded software that enhances their operating characteristics. Improvements include new DCC features such as Advanced Consisting, Feature Mapping and Speed Mapping. Changes also include the ability of the locomotive — in command mode — to immediately start its sounds upon movement of the locomotive, eliminating the previous requirement to press Startup or F-3 to turn on sounds and lighting.

DCC operators will find these new features on all of our steam and diesel locomotives cataloged since 2016, including every engine in this catalog.

Owners of earlier diesel models can upgrade their software using the full DCS Digital Command System. The software is free and is available from [www.mthtrains.com](http://www.mthtrains.com).



See and hear 'em in action! When you see this symbol next to an item, visit our website and search on that item's number to see video of that item in action, locate your nearest dealer, or learn more about our products.

**MTH**  
ELECTRIC TRAINS®

HO TRAINS THAT DO MORE

[www.mthHOtrains.com](http://www.mthHOtrains.com)

# UP 4-8-8-4 Big Boy



## Die-Cast Metal

Just months before Pearl Harbor, the American Locomotive Company delivered the first Big Boy to the Union Pacific Railroad. The UP's Department of Research and Mechanical Standards had designed the locomotive for a specific task: to pull a 3600-ton train unassisted over the Wasatch Mountains in Utah. While the Big Boy is often cited as the biggest steam locomotive ever built, in fact it is not. The Norfolk & Western's Y6 and A, the Duluth Missabe & Iron Range's Yellowstones, and the Chesapeake and Ohio's Alleghenys were all in the same league, and some exceeded the Big Boy's weight and power.

But in the battle for hearts and minds, the Big Boy won. Perhaps it was the name, simple and direct, scrawled on a locomotive under construction by an Alco shop worker. Maybe it was timing, as the Big Boys hit the road just when America needed symbols to rally around. Maybe the UP's publicity

department just did a better job of telling the world what great equipment they had. Whatever the reason, the Big Boy captured the imagination of railfans and the American public over the ensuing years, perhaps more than any other steam engine. In many ways it is the symbolic locomotive of the American West, as big and powerful as the country it sped through.

Writer Henry Comstock beautifully described the Big Boy's place at the apex of steam engine history: "A Union Pacific 'Big Boy' was 604 tons and 19,000 cubic feet of steel and coal and water, poised upon 36 wheels spaced no wider apart than those of an automobile. That it could thunder safely over undulating and curved track at speeds in excess of 70 miles an hour was due in large measure to the efforts of two long-forgotten pioneers. As early as 1836, the basic system that held its wheels in equalized contact with the rails was patented by a Philadelphian named Joseph Harrison; and a French

technical writer, Anatole Mallet, first thought to couple two driving units heel to toe below one boiler in 1874."

This enduring symbol of American railroading returns to the rails for 2019 featuring our industry-leading speed control and synchronized puffing smoke output, as well as authentic articulated chuffing sounds with the front and rear engines drifting in and out of sync.

If you're a steam-era fan, model the fleet of coal-burning Big Boys that conquered the UP's legendary Sherman Hill. But if your layout has a modern theme, you can still prototypically add a Big Boy to your roster. After a five-year restoration, including modifying the firebox to burn oil, No. 4014 is currently touring the Union Pacific system, allowing a new generation to appreciate the majesty in motion of the largest operating steam engine on Earth.





## Features Include:

- Intricately Detailed, Die-Cast Boiler and Chassis
- Intricately Detailed, Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load (Excl. #4014)
- Handpainted Engineer and Fireman Figures
- Metal Handrails, Whistle and Bell
- RP-25 Metal Wheels, Metal Axles and Metal Gears
- Interchangeable Drivers With and Without Traction Tires
- Sprung Drivers
- (2) #158 Scale Kadee® Whisker Couplers
- Prototypical Rule 17 Lighting
- Constant Voltage LED Headlight
- LED-Illuminated Cab Interior
- LED-Illuminated Class Lights
- LED-Illuminated Number Boards
- LED-Illuminated Tender Backup Light and Emergency Stop Light
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Motor
- Synchronized Puffing ProtoSmoke System
- Quillable, Variable Intensity Steaming Whistle\*
- Locomotive Speed Control In Scale MPH Increments
- Wireless Drawbar
- 1:87 Scale Dimensions
- Onboard 28-Function DCC/DCS Decoder
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 with the Digital Command System Featuring Quillable Whistle and Freight Yard Proto-Effects
- Measures: 18 11/16" X 1 9/16" X 2 1/4"
- Operates on 18" Radius Curves

\* Requires DCS Digital Command System



# UP 4-8-8-4 Big Boy



Union Pacific - 4-8-8-4 Big Boy (Modified w/Oil Tender) Steam Engine, Cab No. 4014  
80-3287-1 DCC/DCS Proto-Sound 3.0 \$599.95

Like the restored locomotive currently touring the UP system, our model of 4014 features additional water gauge markings on the rear of the tender and a replica of the Alco shop worker's scrawl on the boiler front that gave the Big Boy its name. M.T.H. was there for 4014's public debut in Ogden, Utah on May 8-12, 2019; view our blogs on its coming-out party at [mthtrains.com/blog](http://mthtrains.com/blog)



Union Pacific - 4-8-8-4 Big Boy (Modified) Steam Engine, Cab No. 4004  
80-3280-1 DCC/DCS Proto-Sound 3.0 \$599.95

**All Models Feature Quillable, Variable Intensity Steaming Whistle\***

*\* Requires DCS Digital Command System*



Union Pacific - 4-8-8-4 Big Boy (Modified) Steam Engine, Cab No. 4005  
80-3281-1 DCC/DCS Proto-Sound 3.0 \$599.95

Original version models feature the prominent radiators on the pilot deck that were used for cooling brake system air. They were later replaced by more efficient Wilson After-Cooler radiators, installed behind a grille lower down on the pilot deck — as depicted in our Modified version Big Boys.





Union Pacific - 4-8-8-4 Big Boy (Original) Steam Engine, Cab No. 4014  
80-3282-1 DCC/DCS Proto-Sound 3.0 \$599.95



Union Pacific - 4-8-8-4 Big Boy (Original) Steam Engine, Cab No. 4012  
80-3283-1 DCC/DCS Proto-Sound 3.0 \$599.95



Union Pacific - 4-8-8-4 Big Boy (Original) Steam Engine, Cab No. 4000  
80-3284-1 DCC/DCS Proto-Sound 3.0 \$599.95

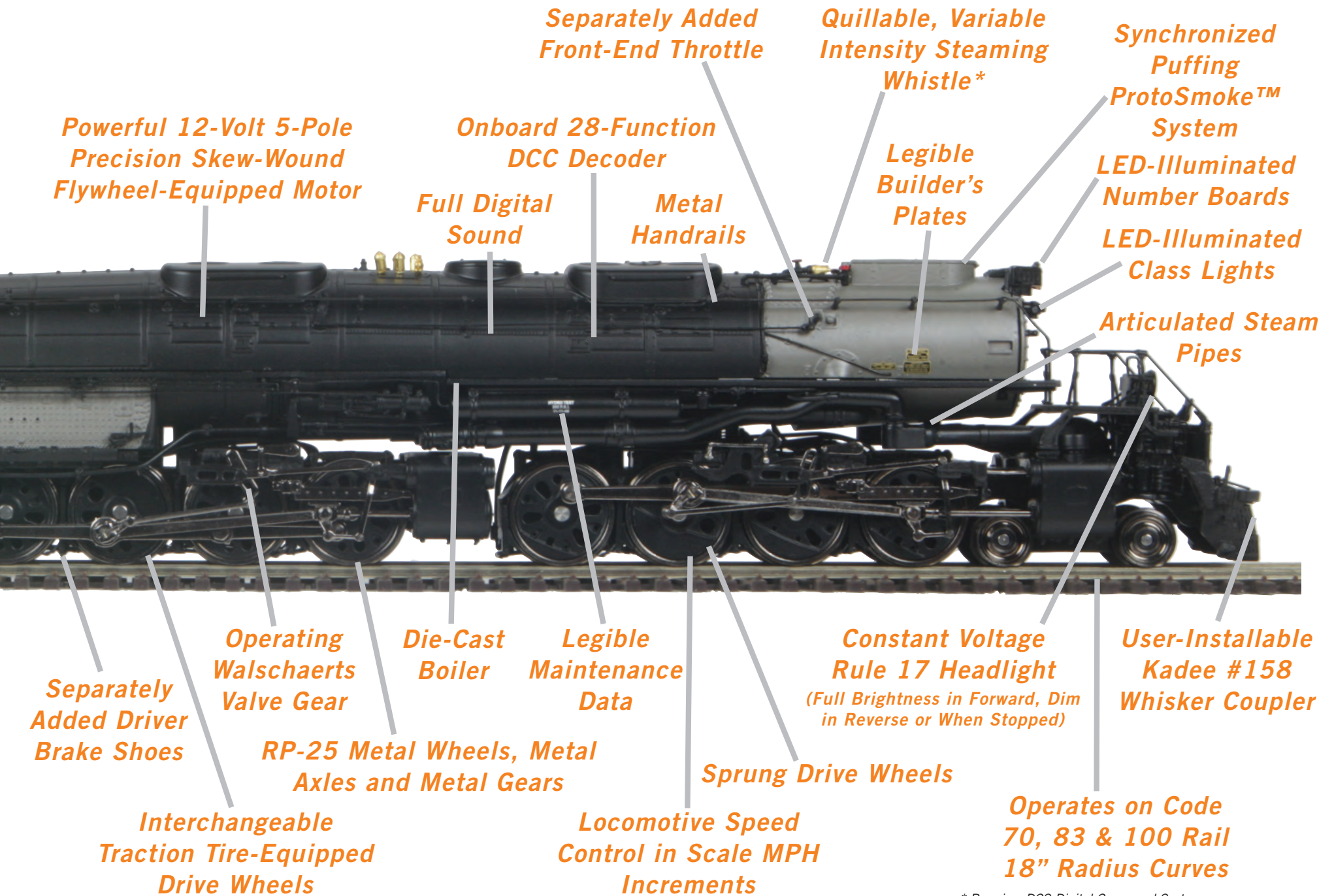


Union Pacific - 4-8-8-4 Big Boy (Modified) Steam Engine, Cab No. 4024  
80-3285-1 DCC/DCS Proto-Sound 3.0 \$599.95

# Anatomy of a 4-8-8-4 Big Boy







**Powerful 12-Volt 5-Pole Precision Skew-Wound Flywheel-Equipped Motor**

**Onboard 28-Function DCC Decoder**

**Full Digital Sound**

**Metal Handrails**

**Separately Added Front-End Throttle**

**Quillable, Variable Intensity Steaming Whistle\***

**Legible Builder's Plates**

**Synchronized Puffing ProtoSmoke™ System**

**LED-Illuminated Number Boards**

**LED-Illuminated Class Lights**

**Articulated Steam Pipes**

**Separately Added Driver Brake Shoes**

**Operating Walschaerts Valve Gear**

**Die-Cast Boiler**

**Legible Maintenance Data**

**Constant Voltage Rule 17 Headlight**  
*(Full Brightness in Forward, Dim in Reverse or When Stopped)*

**User-Installable Kadee #158 Whisker Coupler**

**RP-25 Metal Wheels, Metal Axles and Metal Gears**

**Sprung Drive Wheels**

**Interchangeable Traction Tire-Equipped Drive Wheels**

**Locomotive Speed Control in Scale MPH Increments**

**Operates on Code 70, 83 & 100 Rail 18" Radius Curves**

*\* Requires DCS Digital Command System*

# GS-4 4-8-4 Northern



## Die-Cast Metal

In 1937 the Southern Pacific trumpeted a new train in full-page magazine ads:

*Let us stand by the tracks of Southern Pacific's Coast Line, as thousands now do every day and listen...*

*Suddenly from far off comes a musical note, rising. Round a curve flashes a streak of color. Here comes the Daylight, the most beautiful train in the West!*

The *Daylights* linked Los Angeles and San Francisco "in a glorious daylight trip, streaking along the Pacific Ocean for more than a hundred breathless miles." Travelers were invited to "Step inside the *Daylight* and see the beauty and luxury that have already won the West. Notice the wide, soft seats in the coaches. They are cushioned with sponge rubber and turn to face the extraordinarily large windows." Present-

ing a glorious streak of orange and red from locomotive to observation car, the *Daylights* were a sharp departure from the SP's normal dark olive passenger cars.

Leading the trains were the Southern Pacific's class GS (for "Golden State") Northern, arguably among the handsomest steam engines ever built. Constructed by Lima Locomotive Works, inventor of the super-power concept, the *Daylight* 4-8-4s had the combination of power and speed that characterized steam power at its zenith. Class GS-4 engines, delivered in 1941 and 1942, were among the last and best-looking of the breed, with tall 80" drivers and enclosed all-weather cabs. In addition to handling premier passenger trains, the Golden State 4-8-4s were regularly used in high-speed freight service on the San Francisco-Los Angeles *Overnight*.

## Features Include:

- Die-Cast Boiler and Chassis
  - Die-Cast Tender Body
  - Authentic Paint Scheme
  - Detailed Locomotive and Tender Trucks
  - Handpainted Engineer and Fireman Figures
  - Metal Handrails and Bell
  - RP-25 Metal Wheels, Metal Axles and Metal Gears
  - Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
  - Sprung Drivers
  - (2) #158 Scale Kadee Whisker Couplers
  - Prototypical Rule 17 Lighting
  - Constant Voltage LED Headlight
  - LED-Illuminated Flashing MARS Light
  - LED-Illuminated Class Lights
  - LED-Illuminated Number Boards
  - LED-Illuminated Cab Interior
  - Directionally Illuminated LED Tender Backup Light
  - Quillable, Variable Intensity Steaming Whistle\*
  - Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Motor
  - Synchronized Puffing ProtoSmoke System
  - Locomotive Speed Control In Scale MPH Increments
  - Wireless Drawbar
  - 1:87 Scale Proportions
  - Operates On Code 70, 83 and 100 Track
  - Proto-Sound 3.0 with the Digital Command System Featuring Quillable Whistle with Passenger Station Proto-Effects
  - Measures: 15 3/4" x 1 1/2" x 2 1/4"
  - Operates on 18" Radius Curves
- \* Requires DCS Digital Command System





Southern Pacific Lines (Daylight - Small Lettering) - 4-8-4 GS-4 Steam Engine, Cab No. 4449  
 80-3275-1 DCC/DCS Proto-Sound 3.0 \$499.95

**All Models Feature Quillable, Variable Intensity Steaming Whistle\***

*\* Requires DCS Digital Command System*



Southern Pacific (Daylight - Large Lettering) - 4-8-4 GS-4 Steam Engine, Cab No. 4438  
 80-3277-1 DCC/DCS Proto-Sound 3.0 \$499.95

Southern Pacific (Daylight - Large Lettering) - 4-8-4 GS-4 Steam Engine, Cab No. 4449  
 80-3276-1 DCC/DCS Proto-Sound 3.0 \$499.95

Southern Pacific (Daylight - Large Lettering) - 4-8-4 GS-4 Steam Engine, Cab No. 4441  
 80-3278-1 DCC/DCS Proto-Sound 3.0 \$499.95

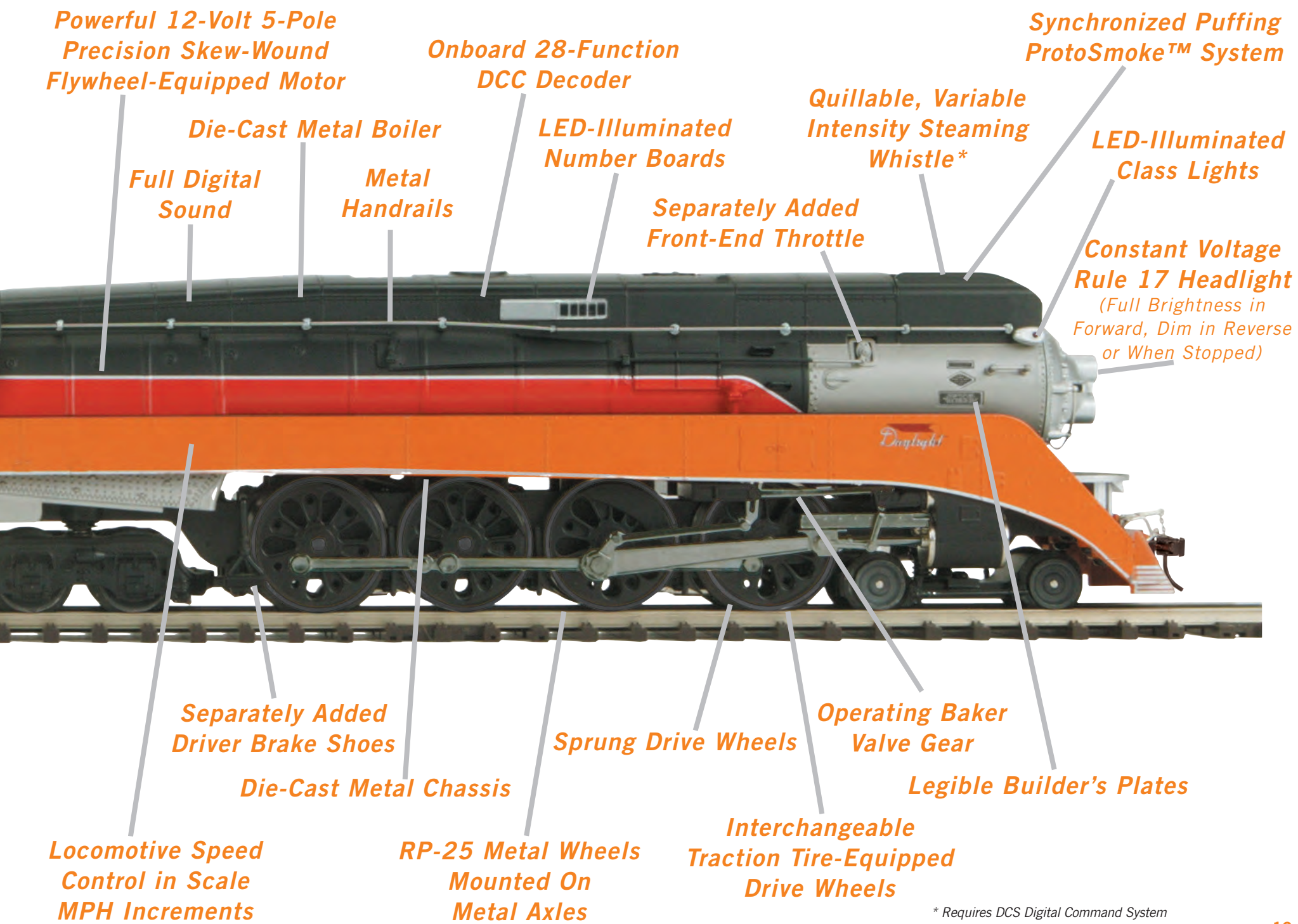


American Freedom - 4-8-4 GS-4 Steam Engine, Cab No. 4449  
 80-3279-1 DCC/DCS Proto-Sound 3.0 \$499.95

# Anatomy of a GS-4 4-8-4 Northern







**Powerful 12-Volt 5-Pole Precision Skew-Wound Flywheel-Equipped Motor**

**Onboard 28-Function DCC Decoder**

**Synchronized Puffing ProtoSmoke™ System**

**Die-Cast Metal Boiler**

**LED-Illuminated Number Boards**

**Quillable, Variable Intensity Steaming Whistle\***

**LED-Illuminated Class Lights**

**Full Digital Sound**

**Metal Handrails**

**Separately Added Front-End Throttle**

**Constant Voltage Rule 17 Headlight**  
*(Full Brightness in Forward, Dim in Reverse or When Stopped)*

**Separately Added Driver Brake Shoes**

**Sprung Drive Wheels**

**Operating Baker Valve Gear**

**Die-Cast Metal Chassis**

**Legible Builder's Plates**

**Locomotive Speed Control in Scale MPH Increments**

**RP-25 Metal Wheels Mounted On Metal Axles**

**Interchangeable Traction Tire-Equipped Drive Wheels**

*\* Requires DCS Digital Command System*

# Van Sweringen 2-8-4 Berkshire



The Nickel Plate's 2-8-4 Berkshires belonged to one of steam's finest family trees. The first 2-8-4, Lima Locomotive Works A-1, inaugurated the superpower era in 1925. A four-wheel trailing truck allowed the A-1 to have a larger firebox and boiler, producing a combination of power and speed never seen before in a steam locomotive. Initially tested on the Boston and Albany Railroad, the new wheel arrangement was dubbed the Berkshire after the mountain range it conquered on the B&A.

At about the same time, the Van Sweringen brothers of Cleveland, Ohio assembled a group of railroads under their control, including the Chesapeake & Ohio, the Nickel Plate Road, the Pere Marquette, and the Erie Railroad. Under the leadership of talented designer John Black, an Advisory Mechanical Committee was formed to design engines for the Van Sweringen roads. The group turned out some of the finest locomotives of the super power era, and perhaps its crowning achievement was the "Nickel Plate Berk," a 2-8-4 introduced in 1934 and called by steam historian Eugene Huddleston "the greatest 2-8-4 ever to take to the rails." Alco won the bid to construct the initial 15 S-Class Berks in 1934. But the Pere Marquette's 1937 order for near-identical engines went to Lima, which also built subsequent orders in the 1940s for 65 more Nickel Plate 2-8-4s, classes S-1 through S-3. Delivered in 1949, the final engine in the group, No. 779, would also prove to be the last Lima-built steamer.

Engineers as well as railfans loved the 700-series Berkshires for their looks, speed, power, and wonderful sound.

As one engineer recalled, "It was a thrill to operate them." Intended for fast freight, they could also take off with an 18-20 car WWII troop train. After the war, the eighty S-Class steamers played a major role in transforming the Nickel Plate into a highly efficient railroad known for fast speeds and high traffic density. Officially known as the New York, Chicago, and St. Louis, the road offered the shortest route between the Chicago area and Buffalo, with lots of flat, straight track where the Berks could just buckle down and run.

Six of the Nickel Plate engines and two Pere Marquette Berks have survived into preservation, the most prominent being Nickel Plate 765. Lovingly restored and maintained by the Fort Wayne (Indiana) Railroad Historical Society, 765 operates in excursion service and has appeared alongside sister Pere Marquette 1225 — the prototype for the locomotive in the movie *Polar Express*.

The Van Sweringen Berks re-join the M.T.H. lineup in 2020. The Nickel Plate version is modeled as it appeared in the 1950s, sporting illuminated number boards and a Mars light added above the headlight. While these are not the first HO models of these iconic steamers, we believe they are surely the best, with superb detailing, die cast construction for great pulling power, synchronized puffing smoke, steady speeds down to three scale miles per hour, and great sounds that include the actual bell and whistle from restored No. 765.

## Die-Cast Metal

### Features Include:

- Intricately Detailed, Die-Cast Boiler and Chassis
- Intricately Detailed, Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Detailed Locomotive and Tender Trucks
- Handpainted Engineer and Fireman Figures
- Metal Handrails, Whistle and Bell
- RP-25 Metal Wheels, Metal Axles and Metal Gears
- Sprung Drivers
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Constant Voltage LED Headlight
- LED-Illuminated Flashing MARS Light (Where Prototypical)
- LED-Illuminated Class and Marker Lights
- LED-Illuminated Number Boards
- LED-Illuminated Cab Interior
- Directionally Illuminated LED Tender Backup Light
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Motor
- Synchronized Puffing ProtoSmoke System
- Locomotive Speed Control In Scale MPH Increments
- Wireless Drawbar
- 1:87 Scale Dimensions
- Onboard DCC/DCS Decoder
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 with the Digital Command System Featuring Quillable Whistle with Passenger Station or Freight Yard Proto-Effects
- Measures: 15 3/8" x 1 1/2" x 2 1/4"
- Operates On 18" Radius Curves

Learn more about No. 765 at the Fort Wayne Railroad Historical Society's Web site, [www.765.org](http://www.765.org)





Nickel Plate Road - 2-8-4 S-2 Berkshire Steam Engine,  
Cab No. 765  
80-3292-1 DCC/DCS Proto-Sound 3.0 \$499.95

Nickel Plate Road - 2-8-4 S-2 Berkshire Steam Engine,  
Cab No. 763  
80-3293-1 DCC/DCS Proto-Sound 3.0 \$499.95  
Nickel Plate Road - 2-8-4 S-2 Berkshire Steam Engine,  
Cab No. 755  
80-3294-1 DCC/DCS Proto-Sound 3.0 \$499.95



Nickel Plate Road - 2-8-4 S-2 Berkshire Steam Engine,  
Cab No. 765  
80-3295-1 DCC/DCS Proto-Sound 3.0 \$499.95

Nickel Plate Road - 2-8-4 S-2 Berkshire Steam Engine,  
Cab No. 766  
80-3296-1 DCC/DCS Proto-Sound 3.0 \$499.95  
Nickel Plate Road - 2-8-4 S-2 Berkshire Steam Engine,  
Cab No. 768  
80-3297-1 DCC/DCS Proto-Sound 3.0 \$499.95



Pere Marquette (Large Lettering) - 2-8-4 N1 Berkshire  
Steam Engine, Cab No. 1225  
80-3288-1 DCC/DCS Proto-Sound 3.0 \$499.95  
Pere Marquette (Large Lettering) - 2-8-4 N1 Berkshire  
Steam Engine, Cab No. 1222  
80-3289-1 DCC/DCS Proto-Sound 3.0 \$499.95

Pere Marquette (Small Lettering) - 2-8-4 N1 Berkshire  
Steam Engine, Cab No. 1223  
80-3290-1 DCC/DCS Proto-Sound 3.0 \$499.95  
Pere Marquette (Small Lettering) - 2-8-4 N1 Berkshire  
Steam Engine, Cab No. 1227  
80-3291-1 DCC/DCS Proto-Sound 3.0 \$499.95



# Pennsylvania H10 2-8-0 Consolidation



The H10 was the last and largest in a line of Pennsy Consolidations that stretched back to 1875. Nearly 500 H10s constructed by Alco, Baldwin, Lima, and the railroad's own shops represented Pennsy's premier fast freight power in the era just before World War I. With a good engine crew, an H10 could hustle about 50 cars along level track, or considerably more cars in drag service hauling coal or iron ore.

When the H10 engines were constructed, the Pennsy was still divided into Lines West — all of its affiliated railroads west of Pittsburgh — and Lines East. The H10 was strictly a Lines West phenomenon, built from a standard boiler common to the H8, H9, and H10 classes, but possessing the largest cylinders of any Pennsy "Consol." When a 1920 reorganization abolished the division between Lines East and West, the railroad owned over three

thousand 2-8-0's, a majority of them having a common boiler design. It was a measure of the Pennsylvania Railroad's conservative management that in the early 1920s, its entire front line freight fleet consisted of a wheel arrangement deemed obsolete by other railroads. By the mid- and late-1920s, however, the H10s and their older siblings were pushed into secondary and branch line service by the arrival of larger, more modern power: Mikados, Decapods, and Mountains. Many Consolidations sat out the Depression years in storage, until recalled to service by the crush of World War II traffic. From the war years through the end of steam, H10s could be found all over the Pennsy, the Long Island Railroad, and the Pennsylvania Reading Seashore Lines in switching, work train, branch line, and occasionally main line service.

Our die-cast H-10 features the extraordinary level of detail you've

come to expect in an M.T.H. HO steamer. Virtually all piping and boiler appliances are separate, added-on parts. Rods and valve gear have a prototypically darkened, grimy appearance, and the ProtoSound 3.0 sound and control system features an accurate Pennsy whistle. If you model any period from the Woodrow Wilson era to the Eisenhower years, there's an appropriate chore on your railroad for this rugged, muscular-looking steamer.

**All Models  
Include Onboard  
28-Function  
DCC Decoder**





Pennsylvania - H10 2-8-0 Steam Engine,  
Cab No. 7103  
80-3240-1 DCC/DCS Proto-Sound 3.0 \$399.95

Pennsylvania - H10 2-8-0 Steam Engine,  
Cab No. 7099  
80-3241-1 DCC/DCS Proto-Sound 3.0 \$399.95

Pennsylvania - H10 2-8-0 Steam Engine,  
Cab No. 7122  
80-3242-1 DCC/DCS Proto-Sound 3.0 \$399.95

## Die-Cast Metal



Long Island - H10 2-8-0 Steam Engine, Cab No. 103  
80-3243-1 DCC/DCS Proto-Sound 3.0 \$399.95

Long Island - H10 2-8-0 Steam Engine, Cab No. 107  
80-3244-1 DCC/DCS Proto-Sound 3.0 \$399.95

### Features Include:

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Hand-Painted Crew Figures
- Metal Handrails, Whistle and Bell
- RP-25 Metal Wheels, Metal Axles and Metal Gears
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- Sprung Drivers
- Operating Kadee-Compatible Remote Controlled Proto-Coupler on Tender
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Constant Voltage LED Headlight
- LED-Illuminated Class and Marker Lights
- LED-Illuminated Number Boards
- LED-Illuminated Cab Interior
- LED-Illuminated Tender Backup Light
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Motor
- Synchronized Puffing ProtoSmoke System
- Locomotive Speed Control In Scale MPH Increments
- Wireless Drawbar w/Close Coupling Option
- 1:87 Scale Proportions
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 with the Digital Command System Featuring Quillable Whistle and Freight Yard Proto-Effects
- Unit Measures: 9 1/16" x 1 1/2" x 2"
- Operates On 18" Radius Curves

# Bavarian Class S 3/6 Express

## Die-Cast Metal



In 1871, Germany became the last major European country to unify, combining a hodgepodge of kingdoms and duchies. But it would be another 50 years before the 11 provincial railroads were nationalized into the German Imperial Railway Company (DRG, with the logo DR). In the meantime, each road continued to develop its own locomotive designs. One of the best was the Class S 3/6 of the Royal Bavarian State Railways (abbreviated K. Bay. Sts. B. in German).

Regarded by European enthusiasts as one of the most beautiful and successful of all steam locomotives, the Class S 3/6 ("S" for *schnellzugloek*, indicating an express passenger engine, and 3/6 to indicate 3 powered axles, 6 axles total) was built by A G Maffei beginning in 1908 and showcased the talent of that firm's chief designer, Heinrich Leppla. The stylish conical smokebox front of the S 3/6 was complemented by a handsome holly green paint scheme. Two inboard high pressure cylinders and two outboard low pressure cylinders drove the center axle. The S 3/6 was one of the first European engines to follow the American practice of casting the cylinders and smoke box saddle as one huge casting, which gave the engine a distinctive look. The majority of the class were fitted with 74" drivers to conquer Bavaria's mountainous terrain. A smaller group of S 3/6 engines, however, was built with 79" drivers for high-speed service on flatter routes and acquired the nickname "High Steppers."

After nationalization in 1920, the engines were painted in the black and red Deutsche Reichsbahn (DR) scheme and became classes 18.3 through 18.5. While the DR intended to develop new standard engines of its own, the S 3/6 was deemed so good that the DR continued to order new engines of this 1908 design through 1931. The relatively light axle loading of the S 3/6, 18 tons, was also a plus, as the DR was behind schedule in upgrading main lines to its new 20-ton standard. So successful were the Bavarian Pacifics that they were chosen over more modern power to lead the glorious cream and blue *Rheingold Express* on part of its scenic route down the Rhine Valley, both before and after WWII. An S 3/6 could also be seen often on the point of the *Orient Express*.

Even after World War II, the aging engines continued to be great performers. A large number were modernized with new boilers and became the most economical steamers on the Deutsche Bundesbahn (DB), the new name for West Germany's railroad system. By the 1960s however, the S 3/6 class, which originally numbered 159 locomotives, had been retired, with a number of engines preserved in museums or in operating condition. M.T.H. is proud to offer this superbly detailed, smooth running model of one of Europe's favorite steam engines, in original Royal Bavarian paint schemes and post-nationalization black and red.

Each of these locomotives is available in DC-powered 2-rail or AC-powered 3-rail versions. Two-rail versions come equipped with Proto-Sound 3.0, M.T.H.'s full digital sound and command control onboard system capable of operating in analog conventional mode, under DCS command control, or under DCC command control using any DCC controller. The 3-rail versions add additional command control capability under Motorola 1 and 2 command protocols and, like their 2-rail counterparts, can also run conventionally or under DCC or DCS command modes.

Sophisticated sound effects recorded from the real-life S 3/6 prototype and bi-directional running lights ensure that the M.T.H. HO S 3/6 will provide owners with an operating experience unmatched in any model railroad scale.

### Did You Know?

As reparations after World War I, three S 3/6 steamers went to Belgium and 16 were given to France.





K. Bay. Sts. B. - Bavarian S 3/6 Express Steam Locomotive (Era I; Blue with Black Wheels), Cab # 3632  
 80-3215-1 DCC/DCS Proto-Sound 3.0 \$529.95  
 80-3215-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ (3-Rail) \$529.95



K. Bay. Sts. B. - Bavarian S 3/6 Express Steam Locomotive (Era I; Green with Red Wheels), Cab # 3641  
 80-3216-1 DCC/DCS Proto-Sound 3.0 \$529.95  
 80-3216-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ (3-Rail) \$529.95



Deutsche Bundesbahn - Class 18.4 Steam Locomotive (Era III; Black with Red Wheels), Cab # 18451  
 80-3217-1 DCC/DCS Proto-Sound 3.0 \$529.95  
 80-3217-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ (3-Rail) \$529.95



Deutsche Reichsbahn Class 18.4 Steam Locomotive (Era II; Black with Red Wheels), cab # 18447  
 80-3218-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ (3-Rail) \$529.95



### Features Include:

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Metal Handrails and Whistle
- Sprung Buffers
- NEM 340\* or RP-25 Metal Wheels, Metal Axles and Metal Gears
- #18 U.S. Kadee® Coupler Compatible
- (2) NEM 360/362 Coupler & Pocket Assemblies
- (2) Hook & Chain Coupler Assemblies
- Directional, LED-Illuminated White Headlights and Red Marker on Engine and Tender
- Additional Front and Rear LED Beacon Lights on Era 1 Models
- Synchronized Puffing ProtoSmoke System
- LED-Illuminated Cab Interior
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Motor
- Locomotive Speed Control
- Wireless Drawbar w/Close Coupling Option
- 1:87 Scale Proportions
- CE Rated
- Proto-Sound 3.0 with the Digital Command System Featuring Quillable Whistle with Passenger Station Proto-Effects
- Unit Measures: 264.2mm x 38.2mm x 52.7mm
- Operates On 18" Radius Curves
- 3E+ Model Operates On R1 (360mm) Radius Curves

\*Proto-Sound 3E+ Models Only

# N&W Class J 4-8-4 Northern



## Die-Cast Metal

A visit to the Norfolk & Western in the early 1950s was like a scene from *Jurassic Park*: prehistoric beasts romping in their natural mountain habitat. At a time when other roads were letting their remaining steam engines rot away and giving them minimal service in dirty, dingy, soon-to-close facilities, the N&W was still running a first-class steam operation and even building new power. With its main line through some of the nation's richest coalfields, it was still betting on the future of steam; as late as 1955, the N&W didn't roster a single diesel. The majority of traffic was handled by what N&W fans call the "holy trinity of steam": the massive Y6 2-8-8-2; the articulated Greyhound Class A; and the N&W's glamour girl, the streamlined Class J.

The Class J 4-8-4 was an engine of quiet superlatives. Handsome, powerful (5100 hp), and, as a test on the Pennsylvania Railroad proved, capable of hauling 15 cars at 110 mph, it was designed and styled not by one of the big three builders (Alco, Baldwin, and Lima) or a famous designer like Raymond Loewy or Henry Dreyfuss, but by the N&W's home-grown team of designers and craftsmen at the road's Roanoke, Virginia shops. For power and quick acceleration through mountainous territory, and to make room for the largest possible boiler, they equipped the streamlined J with 70" drivers — unusually small for a 4-8-4 and

fully 10" smaller than the Southern Pacific's *Daylight* GS-4 of the same wheel arrangement.

Built in several groups between 1941 and 1950, a mere fourteen J's were able to handle 80% of the N&W's passenger traffic, because their designers addressed one of steam power's key weaknesses: down time for maintenance and repairs. Equipped with Timken roller bearings on all axles and rods, Timken-designed lightweight pistons and rods, and an automatic lubrication system that reached more than 200 points including the bell bearings, the Js were designed to go a quarter-million miles between scheduled shop visits. And like a race car, they were engineered for quick pit stops: in less than an hour, a J could be fully serviced, lubricated, filled with coal and water and ready for its next dash over the road's 676-mile main line between Norfolk and Cincinnati, hauling the deluxe daylight *Powhatan Arrow* or the overnight *Pocahontas*.

Returning in 2019, our N&W J is more fun to operate than any previous version of this magnificent locomotive, with its N&W whistle, passenger station announcements, synchronized chuff and puffing smoke, and speed control so smooth you won't spill the water in the diner.



## Fire Up 611

In 2013, the Virginia Museum of Transportation formed the Fire Up 611 Committee to restore the lone remaining Class J, No. 611, to operation. Thanks to their efforts, today you can ride behind the "Queen of Steam," arguably one of the best steam engines ever designed. To learn more, visit [fireup611.org](http://fireup611.org)







Norfolk & Western - 4-8-4 J Steam Locomotive, Cab No. 603  
80-3267-1 DCC/DCS Proto-Sound 3.0 \$499.95



Norfolk & Western - 4-8-4 J Steam Locomotive, Cab No. 607  
80-3268-1 DCC/DCS Proto-Sound 3.0 \$499.95

## Features Include:

- Intricately Detailed, Die-Cast Boiler and Chassis
- Intricately Detailed, Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Intricately Detailed Locomotive and Tender Trucks
- Handpainted Engineer and Fireman Figures
- Metal Handrails and Whistle
- RP25 Metal Wheels, Metal Axles and Metal Gears
- Sprung Drivers
- Interchangeable Drivers With and Without Traction Tires
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Constant Voltage LED Headlight
- LED-Illuminated Class Lights
- LED-Illuminated Number Boards
- LED-Illuminated Cab Interior
- LED-Illuminated Tender Backup Light
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Motor
- Synchronized Puffing ProtoSmoke System
- Locomotive Speed Control In Scale MPH Increments
- Wireless Drawbar w/Close Coupling Option
- 1:87 Scale Dimensions
- Onboard DCC/DCS Decoder
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 with the Digital Command System Featuring Quillable Whistle and Passenger Station Proto-Effects
- Measures: 15 3/8" x 1 1/2" x 2 1/4"
- Operates On 18" Radius Curves



# 4-8-8-2 AC-6 Cab Forward



**Die-Cast  
Metal**

Part of the first transcontinental railroad, the Southern Pacific's passage over the Sierra Nevadas, from Sparks, Nevada to Roseville, California, has always been a challenge for man and machine. Grades in both directions approximate 2.5%. Thirty-nine tunnels and nearly 40 miles of snow sheds protect the track from snowdrifts and avalanches — Sierra Nevada, after all, is Spanish for "snow covered." Seeking more muscle for this route, the SP took delivery of two Baldwin articulated 2-8-8-2s in 1908. Initial trials, however, revealed that heat and exhaust gases in the tunnels and snowsheds made life nearly unbearable for the engine crew. Although cab forwards had been tried before in Italy and northern California, legend has it the SP cab forwards were inspired by an engineer who turned a Baldwin articulated around and ran it tender-first, putting the smoke behind him so he could breathe while he did his job.

The first true Southern Pacific Cab Forwards were delivered in March of 1910 and proved so successful that the SP eventually bought 254 more in various classes. Because the firebox and tender were at opposite ends of the locomotive, the cab forwards burned oil, piped under pressure from the tender to the firebox. The cab in front gave the engineer the best forward visibility of any steam locomotive.

While many railfans are familiar with the AC-12 Cab Forward preserved at the California State Railroad Museum — the last new steam engine delivered to the Southern Pacific in 1944 — our model depicts the earlier AC-6 with its distinctive flat cab front and rounded Vanderbilt tender. Delivered in 1930-31, the AC-6 class set the pattern for all future Cab Forwards, with higher boiler pressure, more tractive effort, and the air compressors

moved to the boiler front for better weight distribution. Several AC-6s were later modernized with a tapered cab front, and that version is also offered here.

Our Cab Forward showcases all the features that distinguish an M.T.H. steamer: fully die-cast construction for durability, detail and pulling power; Proto-Sound 3.0 with 28-function DCC and articulated sounds, including the front and rear engines going in and out of sync; speed control for smooth, steady speeds from a crawl to full throttle; interchangeable drivers with and without traction tires; puffing smoke synchronized with the drivers; a full complement of LED lighting; and superb detailing right down to legible builder's plates.





Southern Pacific - 4-8-8-2 AC-6 Cab Forward Steam Engine (Modern Cab), Cab No. 4138  
 80-3271-1 DCC/DCS Proto-Sound 3.0 \$599.95  
 Southern Pacific - 4-8-8-2 AC-6 Cab Forward Steam Engine (Modern Cab), Cab No. 4131  
 80-3272-1 DCC/DCS Proto-Sound 3.0 \$599.95



Southern Pacific (Silver Face) - 4-8-8-2 AC-6 Cab Forward Steam Engine (Original Cab), Cab No. 4130  
 80-3274-1 DCC/DCS Proto-Sound 3.0 \$599.95

## Features

- Die-Cast Boiler and Tender Body
- Die-Cast Metal Chassis
- Authentic Paint Scheme
- Hand-Painted Engineer and Fireman Figures
- Metal Handrails, Whistle and Bell
- RP25 Metal Wheels, Metal Axles and Metal Gears
- Sprung Drivers
- Interchangeable Drivers With and Without Traction Tires
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Constant Voltage LED Headlight
- LED-Illuminated Number Boards
- LED-Illuminated Class Lights
- LED-Illuminated Cab Interior
- LED-Illuminated Tender Backup Light
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Motor
- Synchronized Puffing ProtoSmoke System
- Locomotive Speed Control In Scale MPH Increments
- Wireless Drawbar w/Close-Coupling Option
- 1:87 Scale Proportions
- Onboard 28-Function DCC/DCS Decoder
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 with the Digital Command System Featuring Quillable Whistle and Freight Yard Proto-Effects
- Measures: 16 3/4" x 1 1/2" x 2 5/16"
- Operates On 18" Radius Curves

# EMD SD70ACe



Electro-Motive Diesel's SD70ACe, along with its General Electric rival, the ES44AC, inaugurated the fourth generation of diesel power. By the turn of the 21st century, the horsepower race was over and the third generation of freight diesels had found its sweet spot: a six-axle, computer-assisted, 4000–4400 horsepower locomotive with a wide, comfortable cab. Railroads viewed this as the perfect building block for multi-engine lashups to power virtually any size train. Development of the next generation of power would be born not out of railroad needs, but due to government regulations.

On January 1, 2005, the Environmental Protection Agency's Tier 2 emissions requirements for railroad locomotives went into effect, significantly reducing the pollutants that diesels could exhaust into the atmosphere. Rather than just upgrade its existing SD70MAC to meet Tier 2 requirements, EMD took the opportunity to design a new locomotive from the rails up.

Emissions turned out to be the easy part. Only slight modifications were needed to make EMD's 4300 horsepower model 710 motor meet new emission standards. With 5000 such motors in service worldwide and a reputation for dependability, EMD reasoned that shop crews would prefer familiar technology.

Other than the prime mover, however, virtually every element of the SD70ACe was re-thought to create a 21st century locomotive. Ergonomics were a prime consideration. The engine's angular nose offers the crew far better visibility than most other locomotives, and the cab is comfortable for engineers of almost any size. Digital screens provide a range of information on what is happening both inside the locomotive and out on the road. The cab easily accommodates a crew of three — an important factor in a modern world without cabooses. And there is, of course, a cupholder for the engineer.

The SD70ACe also offers, in EMD's words, "outstanding improvements in maintainability." All electrical wires are on the right side of the locomotive and all piping is on the left, with most pipes and wires routed under the frame so they can be serviced by a person standing outside the engine — rather than crawling around at the bottom of the engine room.

After a year of testing on the road and at the Association of American Railroads' test track in Pueblo, CO, the first SD70ACe's ('e' stands for "enhanced") were delivered to CSX Transportation in 2004. Six of North America's seven major Class 1 railroads, along with a number of smaller lines, ponied up to buy the new locomo-

tives. When stricter Tier 3 emissions rules went into effect in 2012, compliance was relatively easy. By the end of production in 2014 — after new Tier 4 requirements dictated a new locomotive design — nearly 2000 SD70ACe's were and still are hauling freight across the U.S., Canada and Mexico.

Our accurate, full 1:87 scale model of this fourth-generation pioneer is loaded with added-on details, including separate grab irons and windshield wipers, hand-painted crew figures, see-through metal grilles and moveable roof fans.

Under the hood is a powerful 5-pole flywheel-equipped skew-wound balanced motor and our Proto-Sound 3.0 sound and control system, featuring sounds recorded from an actual Union Pacific SD70ACe; conventional and DCS control as well as full 28-function DCC operation; cruise control with speeds as slow as 3 scale miles per hour; and LED lighting effects that include directionally controlled headlights, cab illumination, and flashing ditch lights. If you're looking for realism and a lot of fun in a modern locomotive, it doesn't get any better than this!





George H.W. Bush - SD70ACe Diesel Engine, Cab No. 4141  
 80-2396-1 DCC/DCS Proto-Sound 3.0 \$309.95  
 80-2396-0 DCC-Ready \$219.95

On October 18, 2005, at the George Bush Presidential Library and Museum in College Station, Texas, the Union Pacific Railroad unveiled locomotive 4141. It was only the sixth time in UP history that a diesel had been decorated in colors other than the road's signature Armour Yellow paint.

Based on the paint scheme of Air Force One, the brand-new EMD SD70ACe engine honored the 41st president and his library, on the occasion of a new exhibit celebrating America's railroads, *Tracks of the Iron Horse*. Among the artifacts on display was the original golden spike that had marked the completion of the first trans-continental railroad in 1869.

In the ensuing ceremonies, the former president himself took a turn at the throttle, and 4141 later pulled freight across the UP system. When rail traffic declined in the 2008 financial crisis, 4141 went into storage as part of the UP's Heritage Fleet.

After George Herbert Walker Bush passed away on November 30, 2018, UP 4141 came out of storage to bring him back to College Station on December 6, assisted by SD70ACe No. 9096. Baggage car *Council Bluffs* carried his flag-draped casket, with the doors open to allow the thousands at trackside to pay their respects. To allow others to honor the former president, vice-president, congressman, ambassador, CIA director and naval aviator, engine 4141 later went on a system-wide Union Pacific tour.



Union Pacific (Flag) - SD70AH Diesel Engine Cab No. 9096  
 80-2397-1 DCC/DCS Proto-Sound 3.0 \$309.95  
 80-2397-0 DCC-Ready \$219.95



Union Pacific (Bush Funeral Casket Car) - Streamlined Baggage Car (Smooth-Sided)  
 80-60088 \$99.95



### Features Include:

- Intricately Detailed, Durable ABS Body
- Die-Cast Metal Chassis
- Metal Handrails and Horn
- Moveable Roof Fans
- Metal Body Side Grilles
- Detachable Snow Plow
- (2) Engineer Cab Figures
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant Voltage LED Headlights
- LED-Illuminated Number Boards
- LED-Illuminated Flashing Ditch Lights
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor
- Locomotive Speed Control In Scale MPH Increments
- Operates On Code 70, 83 and 100 Track
- 1:87 Scale Proportions
- Proto-Sound 3.0 with the Digital Command System Featuring Freight Yard Proto-Effects
- NMRA-Compliant 7-Pin DCC Decoder Plug (DCC-Ready Models Only)
- Measures: 10 9/16" x 1 7/16" x 2 3/16"
- Operates On 18" Radius Curves



# SD70ACe



Union Pacific (Employee Pride) - SD70ACe Diesel Engine, Cab No. 1111  
 80-2399-1 DCC/DCS Proto-Sound 3.0 \$309.95  
 80-2399-0 DCC-Ready \$219.95

Unveiled in Omaha on June 6, 2019, Employee Pride Locomotive No. 1111 was created to honor the men and women of the Union Pacific Railroad. Learn more about the prototype at [www.up.com/heritage/fleet/commemorative/employee-pride-1111](http://www.up.com/heritage/fleet/commemorative/employee-pride-1111)



Union Pacific (UP Spirit) - SD70ACe Diesel Engine, Cab No. 1943  
 80-2380-1 DCC/DCS Proto-Sound 3.0 \$309.95  
 80-2380-0 DCC-Ready \$219.95



Union Pacific (Army) - 40' PS-1 Box Car  
 85-74163 \$26.99



Union Pacific (Navy) - 40' PS-1 Box Car  
 85-74160 \$26.99

In 1943, in the midst of World War II, thousands of Union Pacific employees voluntarily increased their War Bond payroll deductions to fund the construction of a heavy bomber. To honor their efforts, a new Boeing B-17 was christened *Spirit of the Union Pacific*. Nearly three-quarters of a century later, in October 2017, the Union Pacific unveiled SD70AH diesel No. 1943 (an SD70ACe with extra weight to improve traction), in tribute to the United States armed forces.

Named after that original B-17, No. 1943's paint scheme was created in collaboration with UP veterans and honors every branch of the U.S. armed forces. The front of the locomotive is painted in Air Force Silver, emblazoned with the blue "nose sash" of the former Strategic Air Command. The lettering inside the sash is the original hand-drawn font used on the Spirit B-17. In contrast, all engine numbers are in a military-style block font. Behind the cab is the Coast Guard's "Racing Stripe," followed by the Navy's Battleship Gray, framing the Union Pacific's traditional American flag. The military camouflage in the radiator area honors the Army and Marines, and the final message on the rear of the engine is the POW/MIA symbol and its motto, "You Are Not Forgotten."



# Spirit OF THE Union Pacific



Union Pacific (Coast Guard) - 40' PS-1 Box Car  
85-74159 \$26.99



Union Pacific (Marines) - 40' PS-1 Box Car  
85-74161 \$26.99



Union Pacific (Air Force) - 40' PS-1 Box Car  
85-74158 \$26.99

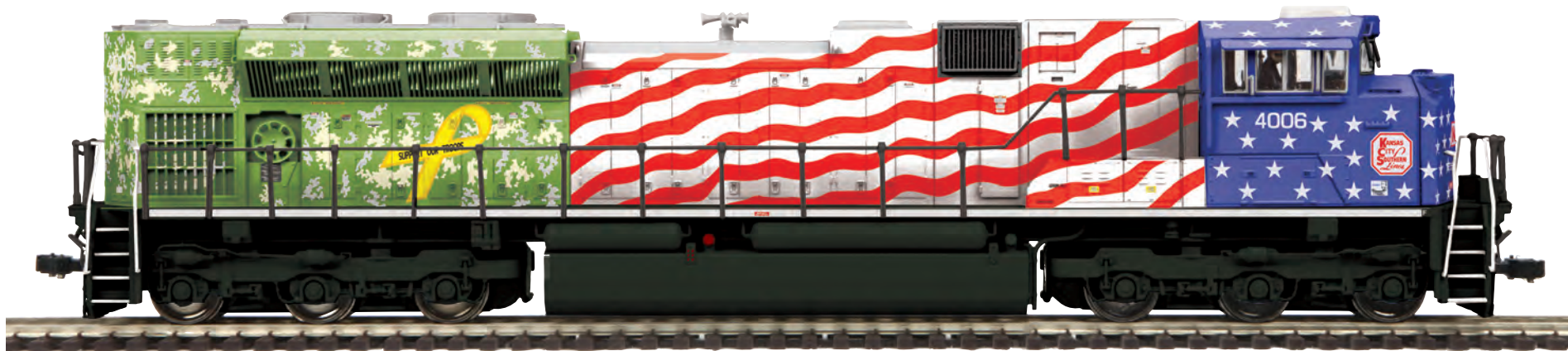


Union Pacific (Matches Spirit SD70ACe) - Steel Caboose  
85-77012 No. 1943 \$26.99



Union Pacific (P.O.W.) - 40' PS-1 Box Car  
85-74162 \$26.99

# SD70ACe



Kansas City Southern (Veterans) - SD70ACe Diesel Engine, Cab No. 4006

80-2398-1 DCC/DCS Proto-Sound 3.0 \$309.95

80-2398-0 DCC-Ready \$219.95



Kansas City Southern (Veterans - U.S. Navy) - 40' PS-1 Box Car

85-74173 \$26.99



Kansas City Southern (Veterans - U.S. Army) - 40' PS-1 Box Car

85-74172 \$26.99





Kansas City Southern (Veterans - U.S. Coast Guard) - 40' PS-1 Box Car  
85-74175 \$26.99



Kansas City Southern (Veterans - U.S. Air Force) - 40' PS-1 Box Car  
85-74176 \$26.99



Kansas City Southern (Veterans - U.S. Marines) - 40' PS-1 Box Car  
85-74174 \$26.99



Kansas City Southern (Veterans - U.S. POW-MIA) - 40' PS-1 Box Car  
85-74177 \$26.99



Kansas City Southern (Veterans) - Steel Caboose  
85-77017 \$26.99

# Anatomy of an SD70ACe

Onboard 28-Function  
DCC/DCS Receiver or  
DCC-Ready

Powerful 12-Volt 5-Pole  
Precision Flywheel-  
Equipped Skew-Wound  
Balanced Motor

Authentically  
Detailed  
ABS Body

See-Through Metal  
Body Side Grilles

Legible  
Warning  
Placards

Metal  
Multi-Chime  
Horn

Constant Voltage  
LED Rule 17  
Rear Headlights

(Full Brightness in Re-  
verse, Dim in Forward or  
When Stopped)

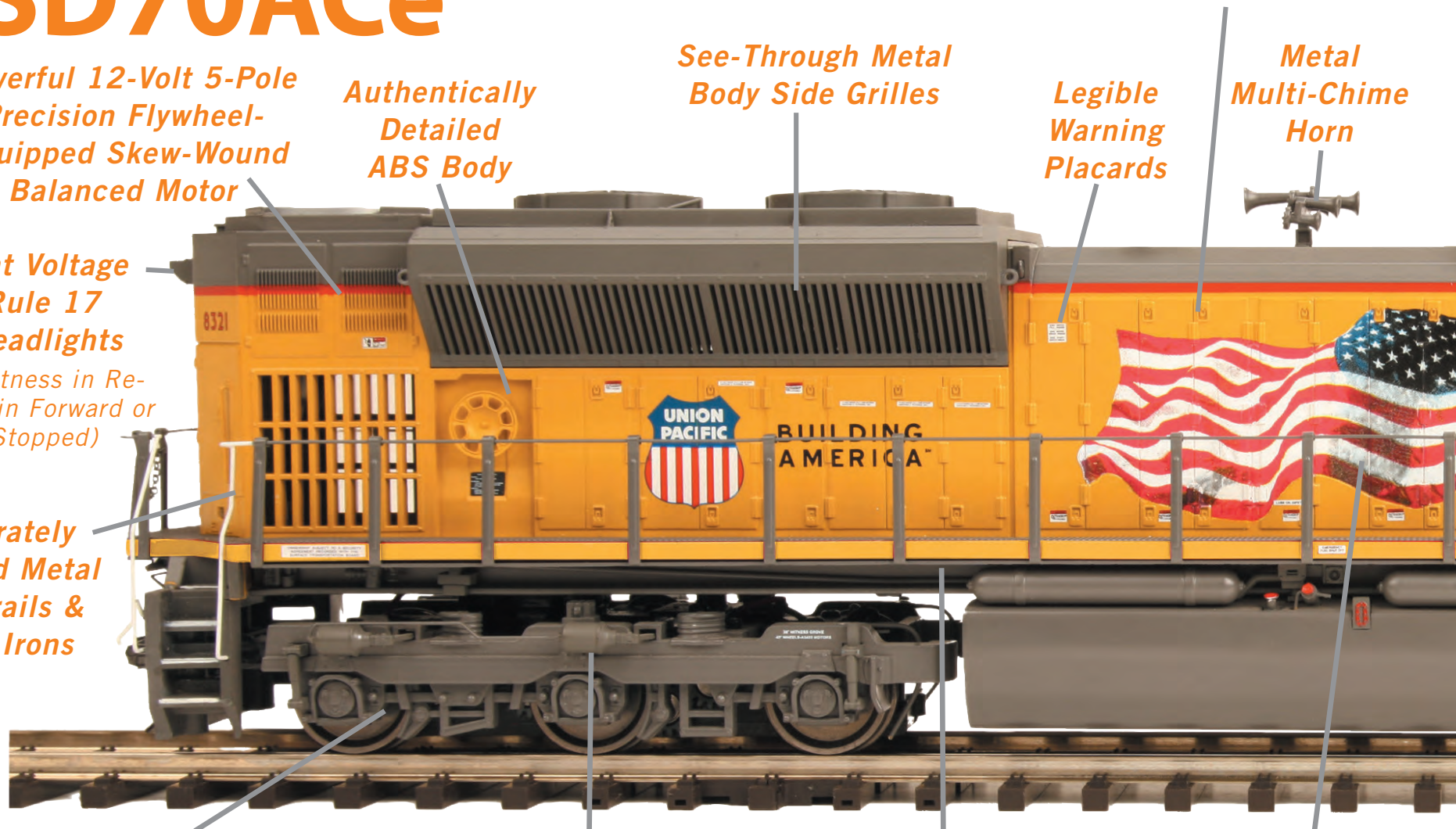
Separately  
Applied Metal  
Handrails &  
Grab Irons

RP-25 Metal Wheels  
Mounted On Metal Axles

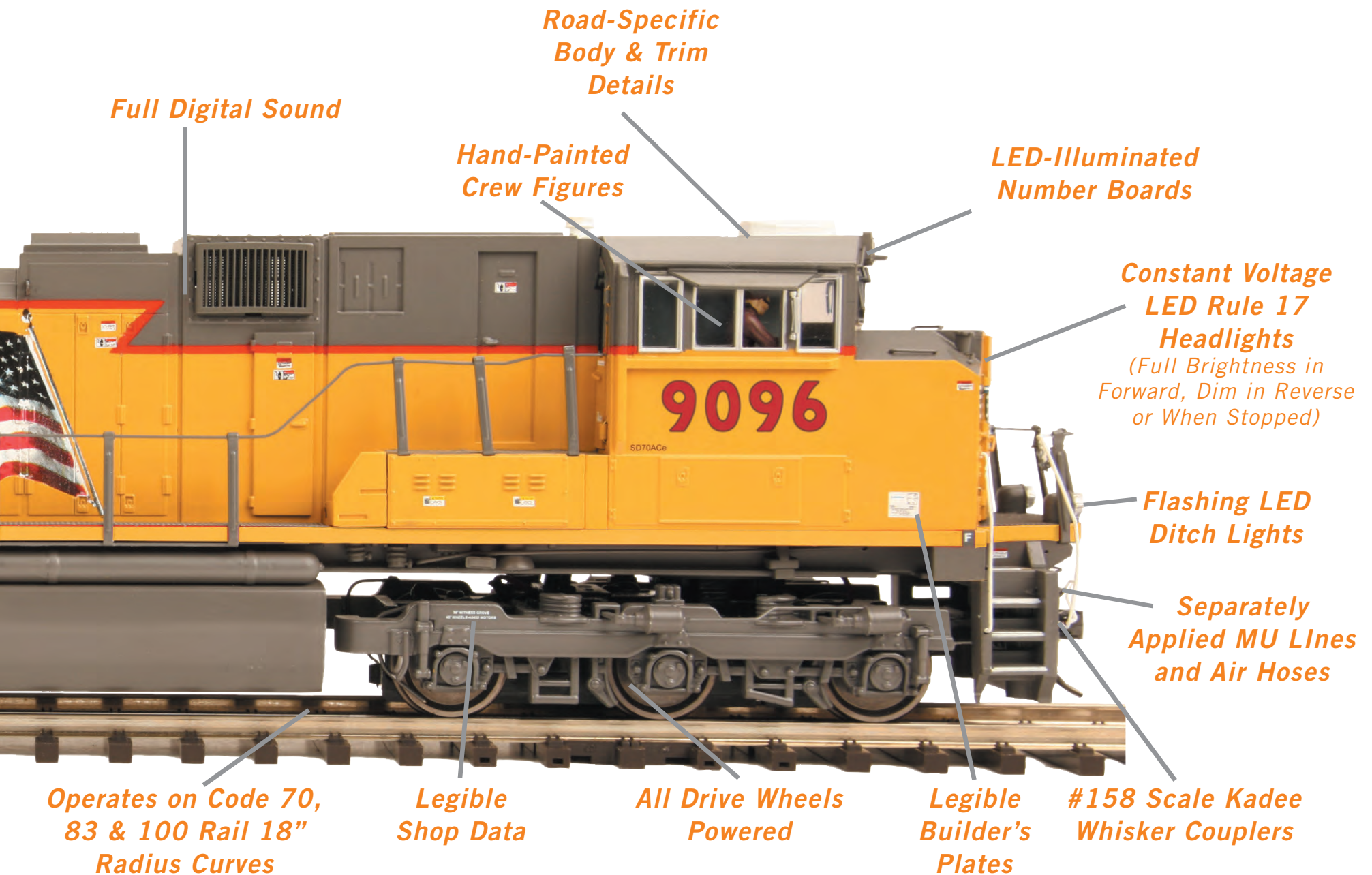
Separately Applied  
Brake Cylinders  
and Air Pipes

Locomotive Speed  
Control in One-Scale-MPH  
Increments

Authentic  
Paint Scheme







# General Electric ES44AC



## Flexible mold design allows for 4 different road-specific body configurations

With a wave of consolidation behind it, North American railroading is once again a good business to be in — despite a recent downturn in coal and oil traffic. The horsepower race that characterized much of the diesel era is over, with 4300-4400 hp now the standard for main line power. Over the past decade, much of the locomotive fleet has been replaced with so-called fourth generation diesels, computer-controlled and built to the latest Environmental Protection Agency emissions requirements. And the two remaining diesel builders are locked in a battle to become *the* locomotive supplier for the 21st century. Caterpillar®- owned EMD, no longer a division of General Motors, is represented by the SD70ACe. General Electric's standard bearer is the Evolution Series ES44AC.

GE claims the EVOs are “the most fuel-efficient, most environmentally friendly diesel locomotives in history... If every freight train in North America were pulled by an Evolution Series Locomotive,

the reduction of smog-producing pollutants would be like removing 48 million cars from the road each year.” Everything about these locomotives has been examined, questioned, and re-thought, generating 25 new U.S. patents in the process. Before they went on sale in 2005, 52 preproduction units were tested in revenue service across the continent for more than a year. Every U.S. Class 1 railroad has ponied up to buy the ES44, with the BNSF rostering the largest EVO fleet. Around the world, over 3,700 Evolution Series diesels are operating in 10 countries.

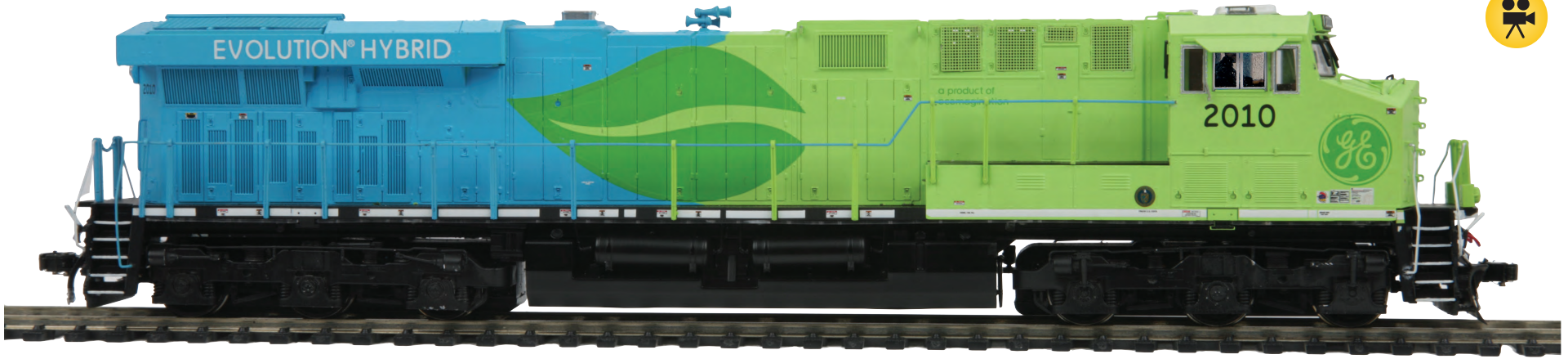
Like all M.T.H. locomotives, our ES44AC offers HO scale's finest combination of detail, realism, and performance. Listen to the chant of an authentic GEVO-12 motor in the Proto-Sound 3 versions, and throttle down as low as three scale miles per hour so you can admire the details as the Evolution Series glides by: see-through fans and grilles, walkways with safety tread, flashing ditch lights, windshield wipers,

body and truck air brake piping, and a host of other separately applied details. Activate the couplers from anywhere on the layout using any DCC controller or the DCS Digital Command System. For the ultimate in power and sound, operate these diesels in multiple-unit lashups under DCC or DCS digital command control. If you're running under the M.T.H. DCS system, you can double- or even triple-head the ES44AC with virtually any combination of Proto-Sound 3.0 locomotives.

### Prototypical Charging Lights Explained

The real life GEVO Hybrid was an experimental engine equipped with batteries to store energy normally dissipated as heat during dynamic braking. That stored energy could be used for short bursts of “free” power, to lower fuel consumption and emissions. Chase lights below the walkways flashed in sequence and changed direction to indicate charging or discharging activity, a feature portrayed in our model.





G.E. Evolution - ES44AC Diesel Engine, Cab No. 2010  
80-2350-1 DCC/DCS Proto-Sound 3.0 \$319.95

Features Prototypical Flashing Underbody Charging Lights



### Features Include:

- Intricately Detailed, Durable ABS Body
- Die-Cast Metal Chassis
- Metal Handrails and Horn
- Metal Body Side Grilles
- Detachable Snow Plow
- (2) Hand-Painted Crew Figures
- Authentic Paint Scheme
- RP-25 Metal Wheels, Metal Axles and Metal Gears
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant Voltage LED Headlights
- LED-Illuminated Number Boards
- Flashing LED Ditch Lights
- Flashing Underbody LED Charging Lights\*\*
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor
- Locomotive Speed Control In Scale MPH Increments
- Onboard 28-Function DCC Receiver\*\*\*
- NMRA-Compliant 7-Pin DCC Decoder Plug\*
- Operates On Code 70, 83 and 100 Track
- 1:87 Scale Proportions
- Proto-Sound 3.0 with the Digital Command System Featuring Freight Yard Proto-Effects\*\*\*
- Unit Measures: 10 9/16" x 1 7/16" x 2 3/16"
- Operates On 18" Radius Curves

\* DCC-Ready Model Only    \*\* Evolution Hybrid, Christmas and Halloween Models Only    \*\*\* Proto-Sound 3.0 Models Only



CSX (First Responders) - ES44AC Diesel Engine, Cab No. 911  
 80-2400-1 DCC/DCS Proto-Sound 3.0 \$309.95  
 80-2400-0 DCC-Ready \$219.95



CSX (Veterans) - ES44AC Diesel Engine, Cab No. 1776  
 80-2401-1 DCC/DCS Proto-Sound 3.0 \$309.95  
 80-2401-0 DCC-Ready \$219.95





Christmas - ES44AC Diesel Engine, Cab No. 1225  
80-2351-1 DCC/DCS Proto-Sound 3.0 \$319.95

Features Flashing Red Underbody Charging Lights  
and Christmas Sounds



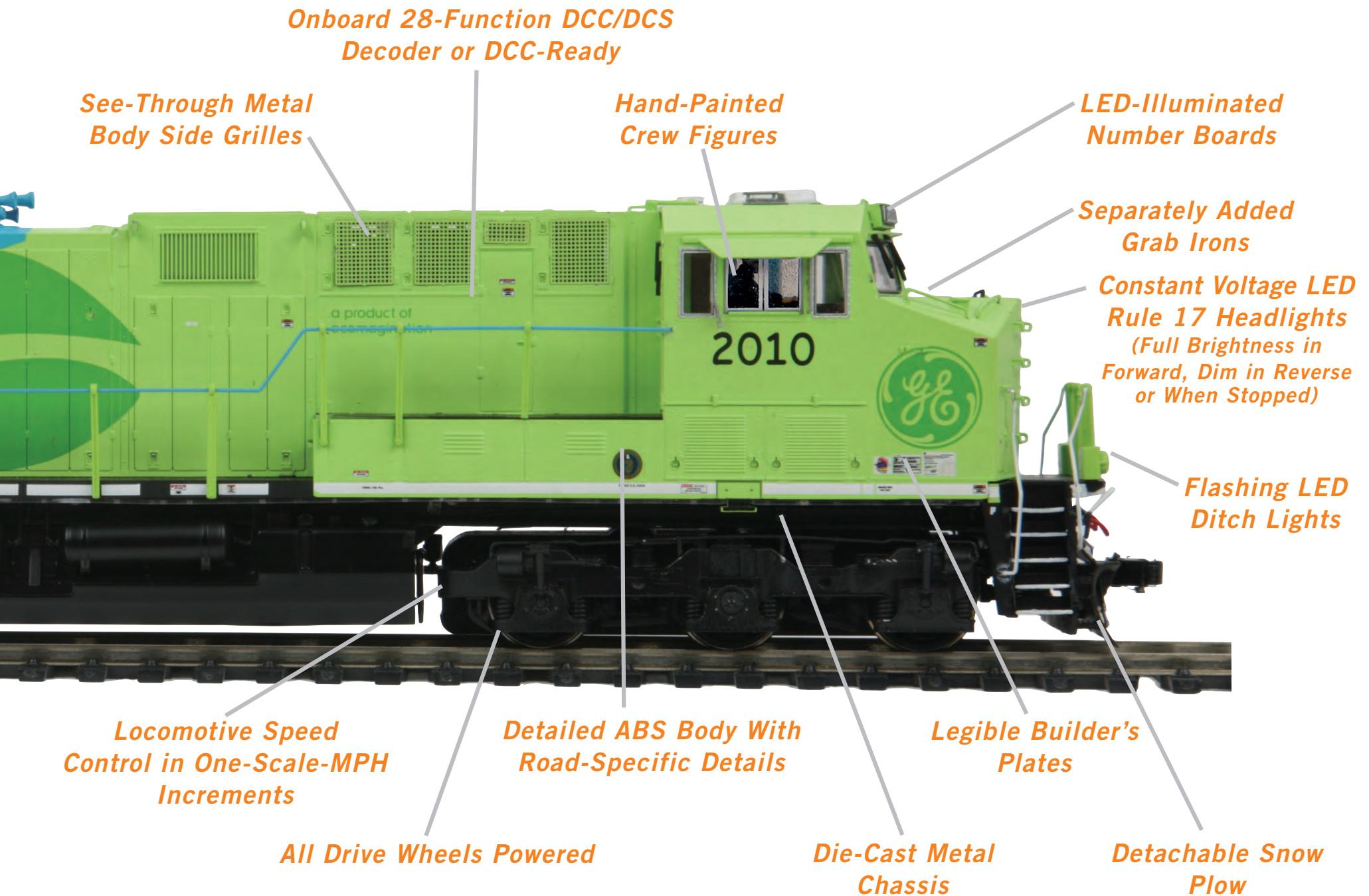
Halloween - ES44AC Diesel Engine, Cab No. 1031  
80-2352-1 DCC/DCS Proto-Sound 3.0 \$319.95

Features Flashing Orange Underbody Charging Lights  
and Halloween Sounds

# Anatomy of an ES44AC







# General Electric Dash 9-44CW

Flexible mold design allows for  
10 different road-specific body  
configurations



For the first six decades of the diesel era, the main goal of locomotive design was higher horsepower. Introduced in 1993, GE's 4400 hp Dash 9 and its AC-motored sibling, the AC4400CW, were three times as powerful as a typical first-generation diesel and had 10% more horsepower than their immediate predecessor, the Dash 8. A couple years later, GE and then EMD introduced 6000 hp engines, the first single-unit diesels to equal the power of the last and best steamers.

But what was thought to be a breakthrough turned out to be a flop. By the late 1990s, North American railroads had rejected the 6000 hp concept and concluded that the 4300-4400 hp diesel was the Goldilocks locomotive — not too big, not too small, but a versatile, just-right building block for multiple-unit lashups. The horsepower race was over.

The Dash 9, accordingly, turned out to be a best-seller. More than 3600 engines were sold by the end of production in 2004, and most are still hauling freight today. The Dash 9 was the last

and best of GE's third-generation diesels, the generation in which computers were integrated into nearly every locomotive function, from engine management to traction control to spotting and reporting maintenance issues. Instead of looking at dials and gauges, a modern engineer monitors computer screens. The Dash 9's successor, today's GE Evolution Series, helped usher in the diesel era's fourth generation: still 4400 hp, but a 21st century "green machine" with a much smaller carbon footprint.

The Dash 9 exemplified the modern locomotive at the turn of the 20th century, with microprocessors ensuring that its 4400 horses were working as efficiently and as often as possible. It rode on GE's brand-new HiAd™ trucks (for high adhesion), with computerized wheelslip control. Also new was a split cooling system that reduced temperatures and prolonged engine life. The Dash 9's wide-nosed North American cab, an option on earlier diesels, was

standard equipment, solidifying the new look in road diesels.

While this model is not the first HO replica of the Dash 9, we believe it is the best. From the shock absorbers and brake lines on its HiAd trucks, to its windshield wipers, MU hoses, and metal grilles, our Dash 9 is loaded with accurate, added-on detail parts. Proto-Sound 3 models include flashing ditch lights; smooth performance from a three-scale-mile-per-hour crawl to full throttle; "cruise control" for steady speeds regardless of curves, switches and grades; built-in decoders for DCC and the M.T.H. Digital Command System (DCS); and a full range of sounds recorded from actual prototype engines — making our Proto-Sound engines more fun to operate than any other HO locomotives.





Union Pacific (Red Stripe) - Dash 9 Diesel Engine,  
Cab No. 9800  
80-2309-0 DCC-Ready \$199.95

Union Pacific (Red Stripe) - Dash 9 Diesel Engine,  
Cab No. 9812  
80-2310-1 DCC/DCS Proto-Sound 3.0 \$299.95  
80-2310-0 DCC-Ready \$199.95

Union Pacific (Red Stripe) - Dash 9 Diesel Engine,  
Cab No. 9820  
80-2311-1 DCC/DCS Proto-Sound 3.0 \$299.95  
80-2311-0 DCC-Ready \$199.95



Southern Pacific - Dash 9 Diesel Engine,  
Cab No. 8101  
80-2305-1 DCC/DCS Proto-Sound 3.0 \$299.95

Southern Pacific - Dash 9 Diesel Engine,  
Cab No. 8116  
80-2306-1 DCC/DCS Proto-Sound 3.0 \$299.95  
80-2306-0 DCC-Ready \$199.95

Southern Pacific - Dash 9 Diesel Engine,  
Cab No. 8121  
80-2307-1 DCC/DCS Proto-Sound 3.0 \$299.95  
80-2307-0 DCC-Ready \$199.95

## Features Include:

- Intricately Detailed, Durable ABS Body
- Die-Cast Metal Chassis
- Metal Handrails and Horn
- Metal Body Side Grilles
- Detachable Snow Plow
- (2) Hand-Painted Engineer Figures
- Authentic Paint Scheme

- RP-25 Metal Wheels, Metal Axles & Metal Gears
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant Voltage LED Headlights
- LED-Illuminated Number Boards
- Flashing LED Ditch Lights

- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor
- Locomotive Speed Control In Scale MPH Increments
- Onboard 28-Function DCC Receiver\*\*
- 7-Pin DCC Decoder Plug\*
- Operates On Code 70, 83 and 100 Track

- 1:87 Scale Proportions
- Proto-Sound 3.0 with the Digital Command System Featuring Freight Yard Proto-Effects\*\*
- Unit Measures: 10 9/16" x 1 7/16" x 2 3/16"
- Operates On 18" Radius Curves

\* DCC-Ready Model Only  
\*\* Proto-Sound 3.0 Models Only



Canadian National - Dash 9 Diesel Engine, Cab No. 2604  
 80-2290-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2290-0 DCC-Ready \$199.95

Canadian National - Dash 9 Diesel Engine, Cab No. 2610  
 80-2291-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2291-0 DCC-Ready \$199.95

Canadian National - Dash 9 Diesel Engine, Cab No. 2617  
 80-2292-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2292-0 DCC-Ready \$199.95



*\*Features prototypical notched "gull wing" cab roof unique to Santa Fe and BNSF Dash 9s*

Santa Fe - Dash 9 Diesel Engine, Cab No. 620\*  
 80-2302-0 DCC-Ready \$199.95

Santa Fe - Dash 9 Diesel Engine, Cab No. 624\*  
 80-2303-0 DCC-Ready \$199.95

Santa Fe - Dash 9 Diesel Engine, Cab No. 629\*  
 80-2304-0 DCC-Ready \$199.95





BNSF (Warbonnet) - Dash 9 Diesel Engine,  
Cab No. 4719\*  
80-2288-1 DCC/DCS Proto-Sound 3.0 \$299.95

BNSF (Warbonnet) - Dash 9 Diesel Engine,  
Cab No. 4707\*  
80-2289-1 DCC/DCS Proto-Sound 3.0 \$299.95



Chicago & North Western - Dash 9 Diesel Engine, Cab No. 8669	Chicago & North Western - Dash 9 Diesel Engine, Cab No. 8672	Chicago & North Western - Dash 9 Diesel Engine, Cab No. 8676
80-2294-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2295-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2296-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2294-0 DCC-Ready \$199.95	80-2295-0 DCC-Ready \$199.95	80-2296-0 DCC-Ready \$199.95



Chicago & North Western (OPLS logo) - Dash 9 Diesel Engine, Cab No. 8727  
80-2293-1 DCC/DCS Proto-Sound 3.0 \$299.95  
80-2293-0 DCC-Ready \$199.95

# EMD GP38-2

READY<sup>2</sup>RAIL



Chessie - GP38-2 Diesel, Cab No. 4801	
85-2042-1 DCC/DCS Proto-Sound 3.0	\$199.95
Chessie - GP38-2 Diesel, Cab No. 4804	
85-2043-1 DCC/DCS Proto-Sound 3.0	\$199.95
85-2043-0 DCC-Ready	\$129.95
Chessie - GP38-2 Diesel, Cab No. 4817	
85-2044-1 DCC/DCS Proto-Sound 3.0	\$199.95
85-2044-0 DCC-Ready	\$129.95



## Features Include:

- Intricately Detailed Durable ABS Body
- Detailed Truck Sides & Pilots
- Metal Chassis
- Metal Handrails and Horn
- Authentic Paint Scheme
- Hand-Painted Crew Figures
- With or Without Dynamic Brakes, Per Prototype
- Large or Small Fuel Tank, Per Prototype
- RP-25 Metal Wheels, Metal Axles and Metal Gears
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant Voltage LED Headlights
- LED-Illuminated Class and Marker Lights
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor
- Onboard DCC/DCS Decoder
- Locomotive Speed Control In Scale MPH Increments
- Operates On Code 70, 83 and 100 Track
- 1:87 Scale Proportions
- Proto-Sound 3.0 with the Digital Command System  
Featuring: Freight Yard Proto-Effects
- NMRA 7-Pin DCC Socket (DCC-Ready Versions Only)
- Measures: 8" x 1 3/8" x 2.5"
- Operates On 18" Radius Curves

Produced from 1972 to 1986, the GP38-2 helped inaugurate Electro-Motive's "Dash-2" series of locomotives and became one of EMD's all-time best sellers. With over 2200 engines sold throughout North America, rare was the railroad that did not roster these reliable, second-generation EMD workhorses.

Building on the success of the GP38 introduced in 1966, the Dash-2 model looked almost identical on the outside but incorporated a host of internal upgrades that lowered exhaust emissions and improved reliability, ease of maintenance, and tractive effort. Most significant was the replacement of the maze of hard-wired circuits, switches, interlocks, and relays — which had characterized first-generation diesels and had been the source of many of their service issues — with modular, solid-state electronics. Other improvements toughened the pistons, rings, and bearings of the 2000-horsepower, non-turbocharged model 645 prime mover.

The result was an engine so hard working and dependable that it became as common on American railroads as the F-unit was in the 1950s and '60s. *Trains* magazine recognized this in 1982 by designating B&O GP38 #3802 (a pre-Dash-2 model) as the All American Diesel; the engine now resides at the Baltimore & Ohio Railroad Museum, repainted in its 1982 Chessie System colors.

While today many GP38-2s have moved on to second careers on short line and regional railroads, others have soldiered on for more than three decades with their original owners. As of late 2013, for example, Union Pacific and Norfolk Southern still rostered more than 500 GP38-2s apiece.

This accurately modeled GP38-2 joins our economically priced Ready2Rail lineup in 15 prototypical paint schemes. Our versatile tooling includes provisions for inclusion of dynamic brakes where prototypical. All Proto-Sound 3.0 versions feature the prototypical sounds and 28-function DCC capability found in every Proto-Sound 3.0 engine in the M.T.H. lineup. DCC-Ready versions feature an NMRA 7-pin DCC socket.

In command mode, you can operate this second-generation stalwart with any other DCC or M.T.H. DCS-equipped models. With the DCS system, you can create a lashup with just a few keystrokes, combining one or more GP38-2s with other Proto-Sound 3.0 first-, second-, third-, or fourth-generation diesels — and run them all from a single throttle just like the prototype.



Southern Pacific - GP38-2 Diesel, Cab No. 4850		
85-2051-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2051-0	DCC-Ready	\$129.95
Southern Pacific - GP38-2 Diesel, Cab No. 4848		
85-2052-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2052-0	DCC-Ready	\$129.95
Southern Pacific - GP38-2 Diesel, Cab No. 4846		
85-2053-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2053-0	DCC-Ready	\$129.95



CSX - GP38-2 Diesel, Cab No. 2722		
85-2019-0	DCC-Ready	\$129.95
CSX - GP38-2 Diesel, Cab No. 2736		
85-2020-0	DCC-Ready	\$129.95
CSX - GP38-2 Diesel, Cab No. 2729		
85-2021-0	DCC-Ready	\$129.95

CSX - GP38-2 Diesel, Cab No. 2651		
85-2055-1	DCC/DCS Proto-Sound 3.0	\$199.95
CSX - GP38-2 Diesel, Cab No. 2653		
85-2056-1	DCC/DCS Proto-Sound 3.0	\$199.95
CSX - GP38-2 Diesel, Cab No. 2656		
85-2057-1	DCC/DCS Proto-Sound 3.0	\$199.95

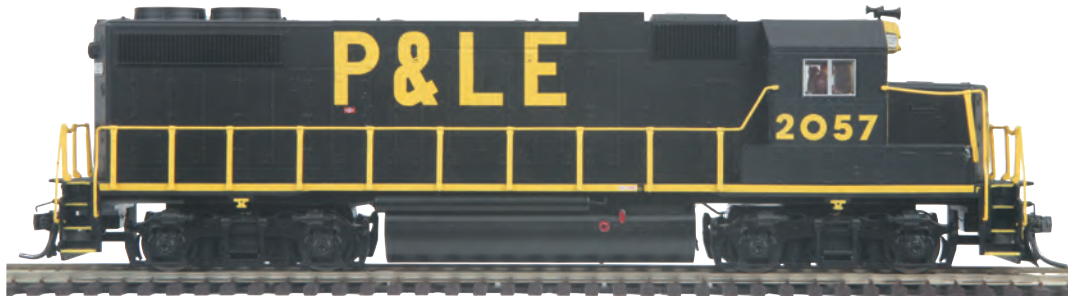


Norfolk Southern (First Responders) - GP38-2 Diesel, Cab No. 5642		
85-2054-1	DCC/DCS Proto-Sound 3.0	\$199.95



Maryland Midland - GP38-2 Diesel, Cab No. 301	
85-2025-1	DCC/DCS Proto-Sound 3.0 \$199.95
Maryland Midland - GP38-2 Diesel, Cab No. 305	
85-2026-1	DCC/DCS Proto-Sound 3.0 \$199.95
85-2026-0	DCC-Ready \$129.95
Maryland Midland - GP38-2 Diesel, Cab No. 303	
85-2027-1	DCC/DCS Proto-Sound 3.0 \$199.95
85-2027-0	DCC-Ready \$129.95

Norfolk Southern - GP38-2 Diesel, Cab No. 5304	
85-2030-0	DCC-Ready \$129.95
Norfolk Southern - GP38-2 Diesel, Cab No. 5296	
85-2031-0	DCC-Ready \$129.95
Norfolk Southern - GP38-2 Diesel, Cab No. 5291	
85-2032-0	DCC-Ready \$129.95



Pittsburgh & Lake Erie - GP38-2 Diesel, Cab No. 2057	
85-2033-1	DCC/DCS Proto-Sound 3.0 \$199.95
Pittsburgh & Lake Erie - GP38-2 Diesel, Cab No. 2059	
85-2034-1	DCC/DCS Proto-Sound 3.0 \$199.95
Pittsburgh & Lake Erie - GP38-2 Diesel, Cab No. 2060	
85-2035-1	DCC/DCS Proto-Sound 3.0 \$199.95
85-2035-0	DCC-Ready \$129.95

Florida East Coast - GP38-2 Diesel, Cab No. 510	
85-2061-1	DCC/DCS Proto-Sound 3.0 \$199.95
Florida East Coast - GP38-2 Diesel, Cab No. 505	
85-2062-1	DCC/DCS Proto-Sound 3.0 \$199.95
Florida East Coast - GP38-2 Diesel, Cab No. 502	
85-2063-1	DCC/DCS Proto-Sound 3.0 \$199.95



CP Rail - GP38-2 Diesel, Cab No. 4404	
85-2058-1	DCC/DCS Proto-Sound 3.0 \$199.95
CP Rail - GP38-2 Diesel, Cab No. 4406	
85-2059-1	DCC/DCS Proto-Sound 3.0 \$199.95
CP Rail - GP38-2 Diesel, Cab No. 4437	
85-2060-1	DCC/DCS Proto-Sound 3.0 \$199.95



Union Pacific - GP38-2 Diesel, Cab No. 307		
85-2036-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2036-0	DCC-Ready	\$129.95
Union Pacific - GP38-2 Diesel, Cab No. 315		
85-2037-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2037-0	DCC-Ready	\$129.95
Union Pacific - GP38-2 Diesel, Cab No. 322		
85-2038-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2038-0	DCC-Ready	\$129.95



Canadian National - GP38-2 Diesel, Cab No. 4704		
85-2039-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2039-0	DCC-Ready	\$129.95
Canadian National - GP38-2 Diesel, Cab No. 4715		
85-2040-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2040-0	DCC-Ready	\$129.95
Canadian National - GP38-2 Diesel, Cab No. 7507		
85-2041-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2041-0	DCC-Ready	\$129.95

Indiana Rail Road - GP38-2 Diesel, Cab No. 3806		
85-2022-1	DCC/DCS Proto-Sound 3.0	\$199.95
Indiana Rail Road - GP38-2 Diesel, Cab No. 3802		
85-2023-1	DCC/DCS Proto-Sound 3.0	\$199.95
Indiana Rail Road - GP38-2 Diesel, Cab No. 3803		
85-2024-1	DCC/DCS Proto-Sound 3.0	\$199.95



BNSF - GP38-2 Diesel, Cab No. 2007		
85-2016-0	DCC-Ready	\$129.95
BNSF - GP38-2 Diesel, Cab No. 2015		
85-2017-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2017-0	DCC-Ready	\$129.95
BNSF - GP38-2 Diesel, Cab No. 2019		
85-2018-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2018-0	DCC-Ready	\$129.95

Conrail - GP38-2 Diesel, Cab No. 8042		
85-2045-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2045-0	DCC-Ready	\$129.95
Conrail - GP38-2 Diesel, Cab No. 8044		
85-2046-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2046-0	DCC-Ready	\$129.95
Conrail - GP38-2 Diesel, Cab No. 8056		
85-2047-1	DCC/DCS Proto-Sound 3.0	\$199.95
85-2047-0	DCC-Ready	\$129.95



# NYC R-17 Subway



On June 1, 1940, the City of New York acquired the two subway systems it didn't already own — the IRT (Interborough Rapid Transit Co.) and the BMT (Brooklyn-Manhattan Transit Corp.) — and consolidated them with the city-owned IND (Independent Subway System). It was readily apparent that the city's fleet of aging subway cars was desperately in need of replacement, and immediately after World War II, management began to develop a new car that would be standard throughout the system and incorporate the latest advances in subway design. This effort was complicated by the fact that portions of the IRT had tighter clearances than the IND and BMT, so all future designs would incorporate a shorter, narrower IRT version.

Beginning with contract R-10, and IRT-sized contract R-12 delivered in 1948, the new cars featured welded steel bodies, fluorescent lighting that made them considerably brighter than prewar cars, and seating made of foam rubber covered with velon, a new plastic material that replaced the rattan seating of older cars. A major improvement was a new type of brake system known as Straight Air Motor Car Electric-Pneumatic Emergency (SMEE), which combined ordinary air brakes with dynamic braking, in which a car's electric motors, by having their polarities reversed, were converted to generators in order to slow the car. This significantly reduced brake shoe wear and maintenance costs. Beginning with the R-12, the postwar IRT cars were known as the SMEE fleet.

The 400 cars built under contract R-17 were part of the 1950s expansion of the SMEE fleet, which also included the similar-looking R-15, R-21 and R-22 cars. As was normal practice at the time, the 400 R-17 cars delivered by St. Louis Car Co. in 1955-1956 were evenly split between General Electric and Westinghouse electrical gear, with each company equipping half the cars. The R-17s could be operated independently or with any other SMEE cars, and various SMEE types were often intermixed in trains. Ten of the R-17s were delivered with factory-installed air conditioning. The experiment proved unsuccessful, however, and the AC was later removed. Also removed were the comfortable velon seats, which proved an easy mark for vandals and were replaced by hard fiberglass benches.

Delivered in a maroon paint scheme, the R-17s were repainted in the MTA's new blue and silver colors in the 1970s. A less-than-successful white scheme, intended to discourage taggers, followed in the 1980s. And just a few years before their retirement in 1988, 16 cars were painted in the "fox red" used on the Redbird cars, although the R-17s were never officially part of the Redbird fleet.

## Preservation and Movie Roles

You can still ride an R-17 today in New York and Connecticut. Both the New York Transit Museum in Brooklyn and the Shore Line Trolley Museum in East Haven, Connecticut have a restored, operational R-17. In fact, the Shore Line's Car 6688 appears in the movie *The Amazing Spider Man 2*. Other film appearances by R-17s include *The French Connection*, Ron Howard's *Night Shift*, and an interior shot in the opening credits of Oliver Stone's *Wall Street*.







Metropolitan Transportation Authority (Red) - R-17 4-Car Subway Set,  
Car Nos. 6643, 6505, 6679, 6553

80-2369-1 Southbound Express Proto-Sound 3.0 \$379.95  
80-2369-0 Southbound Express DCC-Ready \$279.95

Metropolitan Transportation Authority (Red) - R-17 2-Car Subway Add-On Set, Car Nos. 6511, 6652  
80-2369-3 Southbound Non Powered \$119.95

Metropolitan Transportation Authority (Red) - R-17 4-Car Subway Set,  
Car Nos. 6634, 6509, 6580, 6674

80-2370-1 Northbound Express Proto-Sound 3.0 \$379.95  
80-2370-0 Northbound Express DCC-Ready \$279.95



Metropolitan Transportation Authority (MOW) - R-17 2-Car Subway Set,  
Car Nos. 36740, 36895

80-2371-1 Proto-Sound 3.0 \$279.95  
80-2371-0 DCC-Ready \$179.95

Metropolitan Transportation Authority (MOW) - R-17 2-Car Subway Add-On Set,  
Car Nos 36725, 36742

80-2371-3 Non Powered \$119.95

## Features

### Set Includes:

- 4-Car Consist with (1) Powered Car, (3) Non-Powered Cars

### Powered Car Features:

- Intricately Detailed, Durable ABS Body
- Detailed Car Undercarriage
- Metal Chassis
- Authentic Paint Scheme
- Detailed 4-Wheel Trucks
- RP25 Metal Wheels, Metal Axles and Metal Gears

- (2) Remote Controlled Proto-Couplers
- (2) #158 Scale Kadee Whisker Couplers
- Directionally Controlled Constant-Voltage LED Headlights and Rear Markers
- LED-Illuminated Local or Express Signs
- LED-Illuminated Route and Destination Signs
- LED-Illuminated Side Destination Signs
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor
- Locomotive Speed Control in Scale MPH Increments

- Operates On 18" Radius Code 70, 83 or 100 Track
- 1:87 Scale Proportions
- Onboard DCC Receiver or DCC-Ready with 7-Pin Socket
- Equipped with Proto-Sound 3.0 Featuring Station Stop Proto-Effects Sounds and Optional Automatic Operation (Proto-Sound Version Only)

### Non-Powered Car Features:

- Intricately Detailed, Durable ABS Body
- Detailed Car Undercarriage
- Metal Chassis
- Authentic Paint Scheme
- Detailed Interior with Constant-Voltage Overhead LED Lighting
- LED-Illuminated Side Destination Signs
- Detailed 4-Wheel Trucks
- RP25 Metal Wheels on Metal Axles
- (2) #158 Scale Kadee Whisker Couplers

# Anatomy of an R-17 Subway

*LED-Illuminated Local or Express Sign, Route Sign, and Destination Sign*

*Authentic Paint Scheme*

*Proto-Sound 3.0 with 28-Function DCC Decoder and the DCS™ Digital Command System*

*Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor*

*Intricately Detailed, Durable ABS Body*



*Directionally Controlled Constant Voltage LED Headlights*

*RP-25 Metal Wheels Mounted On Metal Axles*

*Detailed Undercarriage*

*Metal Chassis*

*Supplied with (2) Remotely Controlled Operating Kadee-Compatible Proto-Couplers and (2) Kadee #158 Whisker Couplers*

*Locomotive Speed Control in Scale MPH Increments*

*Operates on Code 70, 83 and 100 Track*



**Enjoy Station Stop Proto-Effects available only from M.T.H.**

Program the Proto-Sound version of the R-17 to stop automatically at designated station stops, broadcasting the name of the stop and the hustle and bustle of passengers coming and going. When configured to run on automatic, the R-17 will stop itself at locations you define and call out prototypical station names from a northbound or southbound route; the train will essentially run itself.

And for a full prototypical 10-car R-17 train, combine a northbound and southbound set with a 2-car add-on set. Depending on the direction of travel, your train will broadcast correct northbound or southbound station announcements.

**Overhead Constant Voltage LED Interior Lighting**

**Non-Powered Cars Feature Detailed Interior**

**1:87 Scale Proportions**

**LED-Illuminated Side Destination Signs**



# NYC R-21 / R-22 Subways



Delivered from 1956–1958, the cars built to contracts R-21 and R-22 were near-identical copies of the R-17s that immediately preceded them on the assembly line at St. Louis Car Co. Like the earlier cars, the R-21s and R-22s were sized for the smaller clearances of the former Interborough Rapid Transit (IRT) lines of New York City's subway system.

The main visual differences between the later cars and the R-17s were a rectangular drop-sash window in the end doors, compared with a round window in the R-17s, and a new delivery color of kale green, replacing the maroon used on the earlier cars. All three classes accommodated 44 seated riders and had a top speed of 55 mph, and

all three could be found intermixed in IRT trains. They were among the last single-unit cars that New York would purchase, with most later classes being permanently married pairs or sets. As with the R-17s, a few R-21s and R-22s would eventually become movie stars, appearing in *The Taking of Pelham One Two Three* (1974) and *Money Train* (1995).



## Features

### Set Includes:

- 4-Car Consist with (1) Powered Car, (3) Non-Powered Cars

### Powered Car Features:

- Intricately Detailed, Durable ABS Body
- Detailed Car Undercarriage
- Metal Chassis
- Authentic Paint Scheme
- Detailed 4-Wheel Trucks
- RP25 Metal Wheels, Metal Axles and Metal Gears

- (2) Remote Controlled Proto-Couplers
- (2) #158 Scale Kadee Whisker Couplers
- Directionally Controlled Constant-Voltage LED Headlights and Rear Markers
- LED-Illuminated Local or Express Signs
- LED-Illuminated Route and Destination Signs
- LED-Illuminated Side Destination Signs
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor
- Locomotive Speed Control in Scale MPH Increments

- Operates On 18" Radius Code 70, 83 or 100 Track
- 1:87 Scale Proportions
- Onboard DCC Receiver or DCC-Ready with 7-Pin Socket
- Equipped with Proto-Sound 3.0 Featuring Station Stop Proto-Effects Sounds and Optional Automatic Operation (Proto-Sound Version Only)

### Non-Powered Car Features:

- Intricately Detailed, Durable ABS Body
- Detailed Car Undercarriage
- Metal Chassis
- Authentic Paint Scheme
- Detailed Interior with Constant-Voltage Overhead LED Lighting
- LED-Illuminated Side Destination Signs
- Detailed 4-Wheel Trucks
- RP25 Metal Wheels on Metal Axles
- (2) #158 Scale Kadee Whisker Couplers





Metropolitan Transportation Authority (Green) - R-22 4-Car Subway Set,  
Car Nos. 7581, 7662, 7701, 754

80-2378-1 Southbound Express Proto-Sound 3.0 \$379.95

80-2378-0 Southbound Express DCC-Ready \$279.95

Metropolitan Transportation Authority (Green) - R-21 2-Car Subway Add-On Set ,  
Car Nos. 7525, 7749

80-2378-3 Southbound Non-Powered \$119.95

Metropolitan Transportation Authority (Green) - R-22 4-Car Subway Set,  
Car Nos. 7556, 7559, 7610, 7737

80-2379-1 Northbound Express Proto-Sound 3.0 \$379.95

80-2379-0 Northbound Express DCC-Ready \$279.95



Metropolitan Transportation Authority (Red w/Silver Roof) - R-21 4-Car Subway Set,  
Car Nos. 7053, 7064, 7102, 7157

80-2374-1 Southbound Express Proto-Sound 3.0 \$379.95

80-2374-0 Southbound Express DCC-Ready \$279.95

Metropolitan Transportation Authority (Red w/Silver Roof) - R-21 2-Car Subway Add-On Set,  
Car Nos. 7052, 7114

80-2374-3 Southbound Non-Powered \$119.95

Metropolitan Transportation Authority (Red w/Silver Roof) - R-21 4-Car Subway Set,  
Car Nos. 7062, 7063, 7125, 7126

80-2375-1 Northbound Express Proto-Sound 3.0 \$379.95

80-2375-0 Northbound Express DCC-Ready \$279.95



Metropolitan Transportation Authority (Green w/Silver Roof) - R-21 4-Car Subway Set,  
Car Nos. 7155, 7160, 7169, 7172

80-2372-1 Southbound Express Proto-Sound 3.0 \$379.95

80-2372-0 Southbound Express DCC-Ready \$279.95

Metropolitan Transportation Authority (Green w/Silver Roof) - R-21 2-Car Subway Add-On Set,  
Car Nos. 7099, 7048

80-2372-3 Southbound Non-Powered \$119.95

Metropolitan Transportation Authority (Green w/Silver Roof) - R-21 4-Car Subway Set,  
Car Nos 7161, 7075, 7095, 7110

80-2373-1 Northbound Express Proto-Sound 3.0 \$379.95

80-2373-0 Northbound Express DCC-Ready \$279.95



Metropolitan Transportation Authority (Silver & Blue) - R-21 4-Car Subway Set,  
Car Nos. 7150, 7087, 7112, 7094

80-2376-1 Southbound Express Proto-Sound 3.0 \$379.95

80-2376-0 Southbound Express DCC-Ready \$279.95

Metropolitan Transportation Authority (Silver & Blue) - R-21 2-Car Subway Add-On Set,  
Car Nos. 7050, 7174

80-2376-3 Southbound Non-Powered \$119.95

Metropolitan Transportation Authority (Silver & Blue) - R-21 4-Car Subway Set,  
Car Nos. 7166, 7070, 7138, 7085

80-2377-1 Northbound Express Proto-Sound 3.0 \$379.95

80-2377-0 Northbound Express DCC-Ready \$279.95

# Rolling Stock



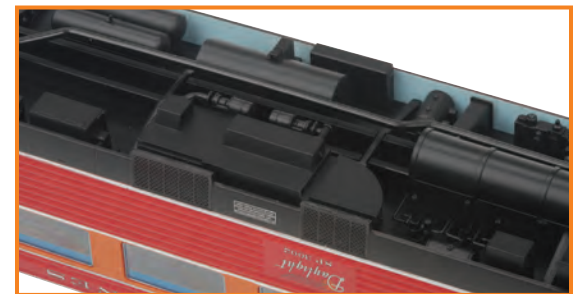
M.T.H. Electric Trains has a long history of developing expansive offerings throughout our product line categories, and HO rolling stock — both freight and passenger — is certainly no exception.

Our selection of premium freight and passenger cars is certain to appeal to the most serious HO modeler. As expected, our HO premium cars are true 1/87 scale models of North American freight cars. Abundantly detailed with separate grab irons, steps, hatches and brake wheels, these models will hold up to even the most discriminating eye. Outfitted with smooth-rolling trucks and Kadee couplers, they are a favorite of operators who enjoy long consists of colorful liveries.

Sporting crisp graphics in prototypical and colorful liveries, M.T.H. HO premium rolling stock is offered in multiple car numbers so that modelers can recreate real-life consists. Many of the same paint schemes are also offered in six-car sets in up to 12 car numbers, making it easy and affordable to build really long trains.

Passenger car fans have long known that it is hard to match the excitement and beauty of a long, sleek passenger train speeding down the rails. M.T.H.'s HO scale streamlined passenger cars and sets bring exactly the right look to your model railroad with features and pricing unmatched in the HO marketplace.

No other manufacturer matches the quality and value found inside and outside an M.T.H. HO passenger car. Using an intricately detailed, yet durable ABS body atop smooth-rolling trucks results in a lightweight car that won't bog down a locomotive struggling to pull heavy passenger cars. What's more, each HO passenger car features a detailed car interior, flashing end lights (on observation cars), flexible end-of-car diaphragms, Kadee couplers and overhead, constant voltage flicker-free LED lighting for a realistic and authentic appearance.







Ready 2 Rail™ rolling stock from M.T.H. Electric Trains provides the superior quality and detailing you've come to expect from M.T.H. HO rolling stock, coupled with a competitive price point for the entry-level HO hobbyist. These cars offer the same construction and body detailing as their more expensive M.T.H. HO counterparts, but are designed for the budget-minded model railroader. They're the perfect way to expand a Ready-To-Run set or to introduce someone new to the hobby.

Whether you're a freight or passenger fan, or both, M.T.H. Electric Trains has the HO rolling stock for your model railroad.



# R40-2 Woodside Reefer



Brookside Fresh Milk - R40-2 Woodside Reefer  
 80-94054 No. 1834 \$34.99  
 80-94055 No. 1836 \$34.99



Hummel Brothers - R40-2 Woodside Reefer  
 80-94060 No. 65151 \$34.99  
 80-94061 No. 65152 \$34.99

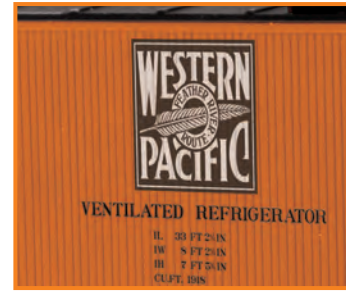


Columbia Soups - R40-2 Woodside Reefer  
 80-94056 No. 7502 \$34.99  
 80-94057 No. 7501 \$34.99

## Features Include;

- Intricately Detailed Durable ABS Body
- RP-25 Metal Wheels Mounted on Metal Axles
- Detailed Brake System
- Separate Metal Grab Irons
- 1:87 Scale Dimensions
- (2) #158 Scale Kadee Whisker Couplers
- Detailed Undercarriage
- Detailed 4-Wheel Trucks
- Measures: 6 1/4" x 1 1/2" x 2 1/8"
- Operates On 18" Radius Curves





Opposite Side Logo

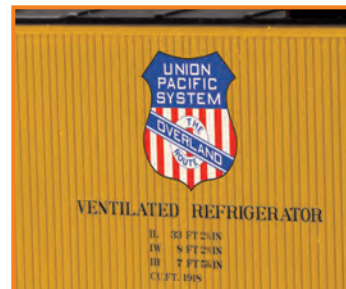
Pacific Fruit Express - R40-2 Woodside Reefer  
 80-94058 No. 38552 \$34.99  
 80-94059 No. 38540 \$34.99



Ralston Purina - R40-2 Woodside Reefer  
 80-94064 No. 5590 \$34.99  
 80-94065 No. 5592 \$34.99



Monarch - R40-2 Woodside Reefer  
 80-94062 No. 14292 \$34.99  
 80-94063 No. 14294 \$34.99



Opposite Side Logo



Pacific Fruit Express - R40-2 Woodside Reefer  
 80-94066 No. 37565 \$34.99  
 80-94067 No. 37569 \$34.99

# USRA 55-Ton Steel Twin Hopper



Chesapeake & Ohio - USRA 55-Ton Steel Twin Hopper

80-97086	No. 300520	\$34.95
80-97087	No. 300522	\$34.95
80-97088	No. 300526	\$34.95



Pennsylvania - USRA 55-Ton Steel Twin Hopper

80-97098	No. 220220	\$34.95
80-97099	No. 220236	\$34.95
80-97100	No. 220242	\$34.95

**All Cars Feature  
(2) #158 Die-Cast Scale  
Kadee® Whisker Couplers**



Canadian National - USRA 55-Ton Steel Twin Hopper

80-97064	No. 116508	\$34.95
80-97065	No. 116522	\$34.95
80-97066	No. 116539	\$34.95



Pittsburgh & Lake Erie - USRA 55-Ton Steel Twin Hopper

80-97053	No. 37848	\$34.95
80-97054	No. 37852	\$34.95



## Features Include:

- Intricately Detailed, Durable ABS Body
- RP-25 Metal Wheels Mounted on Metal Axles
- Detailed Brake System
- Separate Metal Grab Irons
- 1:87 Scale Dimensions
- (2) #158 Scale Kadee Whisker Couplers
- Detailed Undercarriage
- Detailed 4-Wheel Trucks
- Unit Measures: 4 3/4" x 1 3/8" x 1 1/2"
- Operates On 18" Radius Curves



Keystone - USRA 55-Ton Steel Twin Hopper

80-97089	No. 1588	\$34.95
80-97090	No. 1501	\$34.95
80-97091	No. 1520	\$34.95

Keystone - 6-Car USRA 55-Ton Steel Twin Hopper Set

80-90101	No. 1550, 1542, 1533, 1528, 1515, 1504	\$199.95
80-90102	No. 1558, 1545, 1536, 1524, 1519, 1503	\$199.95



Western Maryland - USRA 55-Ton Steel Twin Hopper

80-97051	No. 15542	\$34.95
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Norfolk & Western - USRA 55-Ton Steel Twin Hopper

80-97095	No. 87280	\$34.95
80-97096	No. 87285	\$34.95
80-97097	No. 87289	\$34.95

Norfolk & Western - 6-Car USRA 55-Ton Steel Twin Hopper Set

80-90106	No. 87282, 87272, 87270, 87263, 87265, 87268	\$199.95
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Southern Pacific - USRA 55-Ton Steel Twin Hopper

80-97092	No. 91331	\$34.95
80-97093	No. 91342	\$34.95
80-97094	No. 91350	\$34.95

Southern Pacific - 6-Car USRA 55-Ton Steel Twin Hopper Set

80-90103	No. 91332, 91336, 91348, 91343, 91355, 91357	\$199.95
80-90104	No. 91333, 91338, 91349, 91345, 91352, 91354	\$199.95

# 40' PS-1 Box Car



Norfolk Southern (Veterans) - 40' PS-1 Box Car  
85-74151 No. 490011 \$26.99



Norfolk Southern (First Responders) - 40' PS-1 Box Car  
85-74152 No. 490411 \$26.99



Delaware & Hudson - 40' PS-1 Box Car  
85-74153 No. 50074 \$26.99  
85-74154 No. 50000 \$26.99  
85-74155 No. 50045 \$26.99



Southern Pacific - 40' PS-1 Box Car  
85-74139 No. 97650 \$26.99  
85-74140 No. 97663 \$26.99  
85-74141 No. 97684 \$26.99

READY **2** RAIL





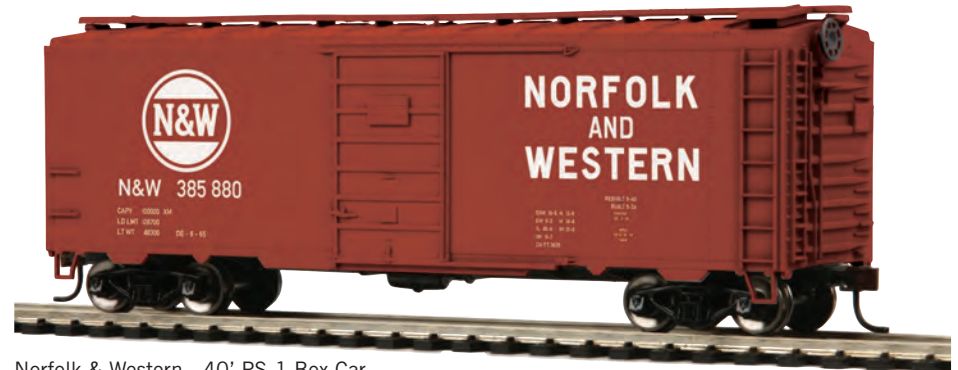
Chesapeake & Ohio - 40' PS-1 Box Car  
 85-74145 No. 4229 \$26.99  
 85-74146 No. 4246 \$26.99  
 85-74147 No. 4254 \$26.99



Pennsylvania - 40' PS-1 Box Car  
 85-74142 No. 105020 \$26.99  
 85-74143 No. 105023 \$26.99  
 85-74144 No. 105028 \$26.99



Pullman Standard - PS-1 - 40' PS-1 Box Car  
 85-74138 No. PSX-1 \$26.99



Norfolk & Western - 40' PS-1 Box Car  
 85-74148 No. 385880 \$26.99  
 85-74149 No. 385888 \$26.99  
 85-74150 No. 385895 \$26.99

### Features Include:

- Intricately Detailed Durable ABS Body
- RP-25 Metal Wheels Mounted on Metal Axles
- Detailed Brake Wheel
- 1:87 Scale Dimensions
- (2) #158 Scale Kadee Whisker Couplers
- Detailed Undercarriage
- Detailed 4-Wheel Trucks
- Sliding Car Doors
- Unit Measures: 6 1/4" x 1 1/2" x 2 1/8"
- Operates On 18" Radius Curves

# 70-Ton Center Discharge Ore Car



Union Pacific - 70-Ton Center Discharge Ore Car

80-97043	No. 27045	\$34.95
80-97044	No. 27052	\$34.95
80-97045	No. 27068	\$34.95



Bessemer & Lake Erie - 70-Ton Center Discharge Ore Car

80-97028	No. 20069	\$34.95
80-97029	No. 20090	\$34.95
80-97030	No. 20093	\$34.95



Milwaukee Road - 70-Ton Center Discharge Ore Car

80-97037	No. 75565	\$34.95
80-97038	No. 75568	\$34.95
80-97039	No. 75570	\$34.95



Great Northern - 70-Ton Center Discharge Ore Car

80-97034	No. 89401	\$34.95
80-97035	No. 89405	\$34.95
80-97036	No. 89420	\$34.95



Canadian National - 4-Car 70-Ton Center Discharge Ore Car Set

80-90084	Car No. 341127, 341130, 341142, 341158	\$129.95
80-90085	Car No. 341125, 341136, 341143, 341154	\$129.95
80-90086	Car No. 341120, 341135, 341146, 341155	\$129.95





Canadian Pacific - 70-Ton Center Discharge Ore Car

80-97031	No. 377120	\$34.95
80-97032	No. 377135	\$34.95
80-97033	No. 377142	\$34.95



Long Island - 70-Ton Center Discharge High Extension Ore Car

80-97025	No. 4064	\$34.95
80-97026	No. 4062	\$34.95
80-97027	No. 4044	\$34.95



Soo Line - 70-Ton Center Discharge Ore Car

80-97040	No. 81950	\$34.95
80-97041	No. 81956	\$34.95
80-97042	No. 81968	\$34.95

Soo Line - 6-Car 70-Ton Center Discharge Ore Car Set

80-90048	No. 81975, 81972, 81964, 81967, 81988, 81983	\$199.95
80-90049	No. 81977, 81973, 81962, 81965, 81986, 81981	\$199.95



Burlington Northern - 70-Ton Center Discharge High Extension Ore Car

80-97022	No. 95590	\$34.95
80-97023	No. 95595	\$34.95
80-97024	No. 95583	\$34.95

### Features Include:

- Intricately Detailed Durable ABS Body
- RP-25 Metal Wheels Mounted on Metal Axles
- Detailed Brake System
- 1:87 Scale Dimensions
- (2) #158 Scale Kadee Whisker Couplers
- Separate Metal Grab Irons
- Detailed Undercarriage
- Detailed 4-Wheel Trucks
- Unit Measures: 6 1/4" x 1 1/2" x 2 1/8"
- Operates On 18" Radius Curves

# 60' Wood Deck Flat Car



CSX - 60' Wood Deck Flat Car  
80-98037 No. 603540 \$29.95  
80-98038 No. 603547 \$29.95



Norfolk Southern - 60' Wood Deck Flat Car  
80-98035 No. 101571 \$29.95  
80-98036 No. 101502 \$29.95

## Features Include:

- Intricately Detailed, Durable ABS Body
- RP-25 Metal Wheels Mounted on Metal Axles
- Detailed Brake System
- Separate Metal Grab Irons
- 1:87 Scale Dimensions
- Simulated Wood Decking
- (2) #158 Scale Kadee Whisker Couplers
- Detailed Undercarriage
- Detailed 4-Wheel Roller Bearing Trucks with Rotating Axle End Caps
- Unit Measures: 8 7/8" x 1 1/2" x 3/4"
- Operates On 18" Radius Curves



# Steel Caboose

READY **2** RAIL



G.E. Evolution - Steel Caboose  
85-77015 No. 2015 \$26.99



Norfolk Southern (First Responders) - Steel Caboose  
85-77013 No. 911 \$26.99



Norfolk Southern (Veteran's) - Steel Caboose  
85-77014 No. 6920 \$26.99

## Features Include:

- Intricately Detailed, Durable ABS Body
- Colorful, Attractive Paint Scheme
- RP25 Metal Wheels
- (2) #158 Scale Kadee Whisker Couplers
- Detailed Brake Wheel
- Separate Metal Handrails
- Unit Measures: 4 3/4" x 1 5/16" x 2 1/8"
- Operates On 18" Radius Curves

# Streamlined Passenger Cars



Lehigh Valley - 2-Car Parlor Passenger Set (Smooth-Sided)  
80-60047 \$189.95



Lehigh Valley - Streamlined Baggage Car (Smooth-Sided)  
80-60080 \$94.95



Lehigh Valley - 5-Car Passenger Set (Smooth-Sided)  
80-60046 \$469.95



Pennsylvania - 5-Car Passenger Set (Smooth-Sided)  
80-60048 \$469.95



Pennsylvania - Streamlined Baggage Car (Smooth-Sided)  
80-60084 \$94.95



Nickel Plate Road - 2-Car Parlor Passenger Set (Ribbed-Sided)  
80-60066 \$189.95



Nickel Plate Road - 5-Car Passenger Set (Ribbed-Sided)  
80-60065 \$469.95



Norfolk Southern - 5-Car Passenger Set (Smooth-Sided)  
80-60067 \$469.95



Norfolk Southern - Streamlined Baggage Car (Smooth-Sided)  
80-60069 \$94.95



Norfolk Southern - Coach  
80-60068 \$94.95





Southern Pacific - Chair/Chair De-Skirted Passenger Car Set  
80-60100 Car No. 2485,2486 \$185.95



Southern Pacific - Streamlined Baggage Car (Smooth-Sided)  
80-60101 \$94.95



Southern Pacific - Chair Passenger Car  
80-60099 Car No. 2486 \$95.95



Southern Pacific - 5-Car De-skirted Passenger Set  
80-60097 Car No. 3303, 3003, 10315, 2439, 2951 \$469.95

Southern Pacific Lines - 5-Car Passenger Set (Not Shown)  
80-60094 Car No. 3303, 3003, 10315, 2439, 2951 \$469.95



Southern Pacific Lines - 3-Car Diner/Kitchen/Coffee Passenger Set  
80-60095 Car No. 10259, 10260, 10261 \$279.95



Southern Pacific Lines - Articulated Chair/Chair Passenger Car Set  
80-60010 Car No. 2458, 2457 \$189.95  
80-60011 Car No. 2460, 2459 \$189.95

**All Cars Feature (2) #158 Die-Cast Scale  
Kadee® Whisker Couplers**



Southern Pacific Lines - Articulated Chair/Chair Passenger Car Set w/Antenna  
80-60009 Car No. 2474, 2473 \$189.95  
Southern Pacific - Articulated Chair/Chair Passenger Car Set w/Antenna  
80-60098 Car No. 2466, 2465 \$189.95

Southern Pacific Lines - Articulated Chair/Chair Passenger Car Set w/Antenna  
80-60008 Car No. 2462, 2461 \$189.95

**Features Include:**

- Intricately Detailed, Durable ABS Body
- RP-25 Metal Wheels Mounted on Metal Axles
- Detailed Car Interior
- Overhead Interior LED Lighting
- Detailed 4-Wheel Trucks
- Authentic Paint Scheme
- Operating End-of-Car Diaphragms
- Separate Metal Handrails
- (2) #158 Scale Kadee Whisker Couplers
- Detailed Car Undercarriage
- 5-Car Sets (Except SP) Feature:
  - (1) Combine, (1) Coach, (1) Tavern Car,
  - (1) Parlor Car, (1) Observation Car
- Each Car Measures:
  - 11 1/2" x 1 7/16" x 1 7/8"
- Operates On 22" Radius Curves



Union Pacific - 5-Car Passenger Set (Smooth-Sided)  
80-60086 \$469.95



Union Pacific - 2-Car Parlor Passenger Set (Smooth-Sided)  
80-60087 \$189.95



Union Pacific (Yellow) - Streamlined Baggage Car (Smooth-Sided)  
80-60092 \$94.95



Union Pacific (Flag) - Streamlined Baggage Car (Smooth-Sided), Car No. 5779  
80-60089 \$94.95  
Union Pacific (Flag) - Streamlined Baggage Car (Smooth-Sided), Car No. 5769  
80-60090 \$94.95



Union Pacific (Yellow) - Streamlined Baggage Car (Smooth-Sided)  
80-60091 \$94.95



Erie - Streamlined Baggage Car (Smooth-Sided)  
80-60077 \$94.95  
Erie - Streamlined Baggage Car (Smooth-Sided)  
80-60078 \$94.95



Erie Lackawanna - Streamlined Baggage Car (Smooth-Sided)  
80-60079 \$94.95



Denver & Rio Grande Western - Streamlined Baggage Car (Smooth-Sided)  
80-60076 \$94.95



Northern Pacific - Streamlined Baggage Car (Smooth-Sided)  
80-60083 \$94.95







Missouri Pacific - Streamlined Baggage Car (Smooth-Sided)  
80-60081 \$94.95



New Haven - Streamlined Baggage Car (Smooth-Sided)  
80-60082 \$94.95



Norfolk & Western (Blue) - Streamlined Baggage Car (Smooth-Sided)  
80-60075 \$94.95

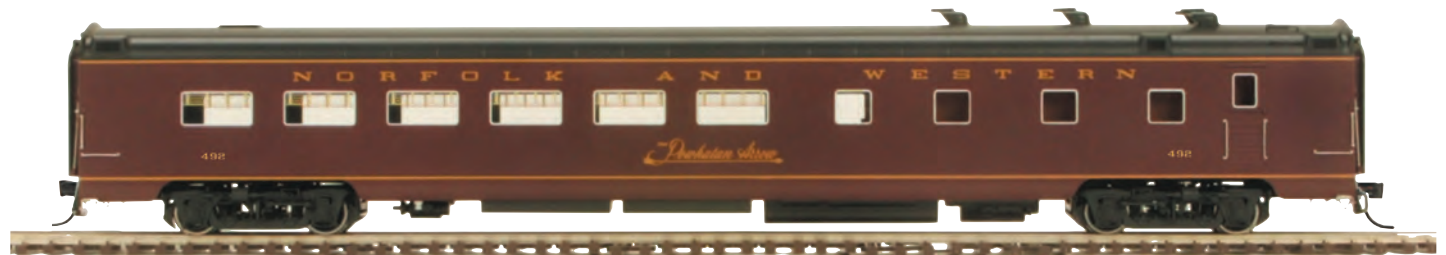


Norfolk & Western - Streamlined Baggage Car (Smooth-Sided)  
80-60074 \$94.95



Norfolk & Western - Coach, Car No. 536  
80-60071 \$94.95

Norfolk & Western - Coach, Car No. 539  
80-60072 \$94.95



Norfolk & Western - Diner, Car No. 493  
80-60073 \$94.95

Norfolk Southern - Diner, No. NS 19 Kentucky (Not Shown)  
80-60064 \$94.95



Norfolk & Western - 5-Car Passenger Set  
80-60070 Car No.s 534, 512, 502, 494, 582 \$469.95

# Heavyweight Passenger Cars



Pennsylvania - 5-Car Heavyweight Passenger Set  
80-40001 \$469.95

**All Cars Feature (2) #158 Die-Cast Scale  
Kadee® Whisker Couplers**



Pennsylvania - 2-Car Heavyweight Baggage/Sleeper Passenger Set  
80-40002 \$189.95



Pennsylvania - 2-Car Heavyweight Sleeper/Sleeper Passenger Set  
80-40003 \$189.95



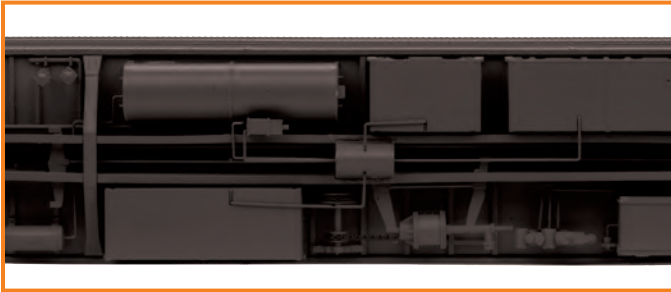
Union Pacific - 2-Car Heavyweight Sleeper/Sleeper Passenger Set  
80-40006 \$189.95



Union Pacific - 2-Car Heavyweight Baggage/Sleeper Passenger Set  
80-40005 \$189.95







## All HO Passenger Cars Feature Constant Voltage Overhead LED Lighting



Milwaukee Road - 2-Car Heavyweight Baggage/Sleeper Passenger Set  
80-40011 \$189.95



Milwaukee Road - 2-Car Heavyweight Sleeper/Sleeper Passenger Set  
80-40012 \$189.95

### Features Include:

- Intricately Detailed, Durable ABS Body
- RP-25 Metal Wheels Mounted on Metal Axles
- Detailed Car Interior
- Constant Voltage Overhead LED Interior Lighting
- Detailed 6-Wheel Trucks
- Authentic Paint Scheme
- Separate Metal Handrails
- (2) #158 Scale Kadee Whisker Couplers
- Detailed Car Undercarriage
- 5-Car Sets Feature: (1) Baggage Car, (3) Sleeping Cars, (1) Observation Car
- 2-Car Sets Feature: (1) Baggage Car, (1) Sleeping Car or (2) Sleeping Cars
- Each Car Measures: 11 3/4" x 1 3/8" x 2"
- Operates On 22" Radius Curves



Milwaukee Road - 5-Car Heavyweight Passenger Set  
80-40010 \$469.95

# No Matter How You Run It

Your new Proto-Sound 3.0 locomotive has more features than any engine you've ever owned

## Analog DC

With just an ordinary DC transformer, you get operating features unmatched by any other HO locomotives:

- Synchronized puffing smoke and chuffing sounds: billowing smoke correctly synchronized with the drivers at four puffs per revolution; at rest, smoke wafts out of the stack steadily, just like the prototype. As with smoke, chuffs are correctly timed, in sync with smoke puffs at four per driver revolution
- Squealing brakes: slow down quickly and hear the squeal of a brake application
- Idle sounds: at track voltages between about 6-8 volts, your engine idles and plays random maintenance sounds — like the whoosh of steam cocks being opened
- Prototypical Rule 17 lighting: the headlight dims automatically when the engine comes to a stop, and the tender light illuminates for backup moves
- Speed control: set any speed and your engine maintains it, regardless of load, hills, or curves
- Automatically smooth reversing: flip your transformer's reversing switch at any speed and watch your engine gradually come to a stop, turn on the appropriate directional lighting, and smoothly accelerate up to speed in the opposite direction



Z-DC300 30 Watt  
DC Transformer  
40-300 \$89.95

## DCC

If you operate with Digital Command Control (DCC), you'll find Proto-Sound 3.0 locomotives take full advantage of the capabilities of DCC and are completely compatible with all DCC motive power. In fact, Proto-Sound engines are already equipped to use DCC functions 0 through 28, to take full advantage of newer DCC controllers that use the full range of NMRA standard functions.

With today's standard DCC controllers, your Proto-Sound 3.0 engine has all the features available with analog DC and these additional functions activated by your controller:

- Full command control
- Bell: listen for the realistic last half ring when you release the bell button
- Whistle/Horn: depending on how long you blow the whistle or horn, you'll hear one of several different end signatures
- PFA (Passenger and Freight Announcements): passenger engines offer a complete passenger station arrival and departure sequence that you can activate on command; freight engines allow you to play a symphony of freight terminal sounds
- Startup and shut down sounds
- Volume control
- Sound mute
- Smoke on/off
- Lighting on/off
- Plus 19 others



(see page 3 for the complete list)

## DCS Remote Commander

The DCS Remote Commander is an inexpensive wireless solution capable of accessing the most popular command control functions programmed into Proto-Sound locomotives.\* The DCS Remote Commander handheld controller features clearly labeled, one-button control of 9 engine functions.

There are no function keys or special codes to remember. Access the locomotive whistle or horn, bell, smoke, direction and speed with just a single button push. You can also access Passenger Station or Freight Yard Proto-Effects, engine startup and shutdown sounds and control the front or rear Proto-Couplers with this lightweight, easy-to-use remote.

Adding a DCS Remote Commander to your existing layout is simple: just plug your power supply into the DCS Remote Commander receiver and the output wires from the receiver to your track lockon. The DCS Remote Commander can accept any power input (AC or DC) up to 20 volts and 8 amps making it a perfect choice for small and moderately sized layouts.

- Speed adjustment in one-scale-mile-per hour steps
- Volume Control
- Smoke on/off
- Front & Rear Proto-Coupler Control
- Engine Start-up & Shutdown Sounds
- Activate Passenger Station and Freight Yard Sounds
- Whistle/Horn Control
- Bell On/Off
- Locomotive Direction Control
- Wireless Communication With DCS Remote Commander Receiver
- LED Power On Lamp (Receiver Only)
- AC or DC Power Input
- Remote Requires (2) AA Batteries (not included)
- Unit Measures: 6" Long



DCS Remote Commander Set  
50-1033 \$59.95



Z-560 56 Watt  
DC Power Supply  
40-560 \$44.95



## DCS Remote Control System

Choose to run your entire layout from a wireless handheld — or several or even your smart phone or tablet. There are three different DCS Remote Control configurations to choose from, any of which will unlock a wide range of exclusive and fun Proto-Sound 3.0 functions found in your M.T.H. HO locomotives. With a DCS Remote Control System, you can operate up to 99 Proto-Sound

3.0 engines in command mode at the same time on the same track. Build lashups, access Proto-Sound Proto Effects and customize locomotive settings with just a touch of a button or a swipe of a touch screen. Add an optional Accessory Interface Unit (AIU) and the same handheld or smart device can control hundreds of switches or accessories. For group operating ses-

sions, equip each guest with their own full-featured handheld or let them attach to your layout's wifi interface unit.

\*The DCS Remote Control System is not compatible with DCC systems.

## DCS Wi-Fi

Use your smart phone or tablet to control your model railroad. Just connect the DCS WIU to the DCS TIU, download the free app and you're running your layout with modern day wireless control. Take advantage of your smart device's full color, touch screen and see how easy it is to run trains using a device you operate every day. Connect as many smart devices as you want. Operate in stand-alone wifi or home network modes.

\* requires separate DC power supply



DCS Track Interface Unit (TIU)  
50-1003 \$199.95



DCS Wi-Fi Interface Unit (WIU)  
50-1034 \$179.95



DCS Accessory Interface Unit (AIU)  
50-1004 \$119.95



Z-560 56 Watt  
DC Power Supply  
40-560 \$44.95



Z-DC1 Transformer  
40-200 \$29.95

## DCS Wi-Fi Explorer

Use your smart phone or tablet to control your model railroad. Just connect the DCS Explorer to your track, plug in a separately sold DC power supply, download the free app and you're running your layout with a limited set of the DCS functions and features found in the more expensive DCS Track Interface Unit (TIU) and the DCS WiFi Interface Unit. Connect as many smart devices as you want. Operate in stand-alone wifi or home network modes.

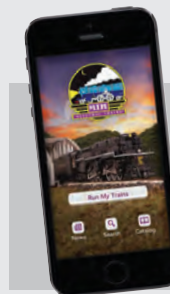
\* requires separate DC power supply



Z-560 56 Watt  
DC Power Supply  
40-560 \$44.95



DCS Explorer  
Track Interface Unit  
50-1035 \$129.95



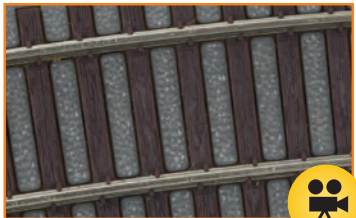
### FREE DCS APP

Download the free DCS app for your smart phone or tablet



# Track & Accessories

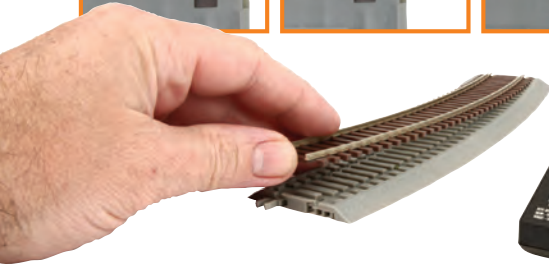
**REALTRAX**  
BY M.T.H. ELECTRIC TRAINS



At M.T.H. Electric Trains, we believe a track system should allow your model railroad empire to grow. The RealTrax system includes 18" and 22" curves as well as 9" straight lengths that make a perfect solution for your first model railroad empire. And every piece of RealTrax is rugged, realistic, and reliable so you can have fun running your trains.



**Compatible with Atlas® HO Track using 81-1011 Adapters**

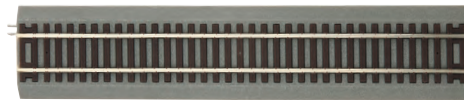


Z-DC300 30 Watt DC Transformer  
40-300 \$89.95

**30 Watts**



HO RealTrax 22" Radius Curve Code 83 Track w/Roadbed - 4 Pack  
81-1022 \$7.29



HO RealTrax 9" Straight Code 83 Track w/Roadbed - 4 Pack  
81-1001 \$7.29



HO RealTrax 18" Radius Curve Code 83 Track w/Roadbed - 4 Pack  
81-1018 \$7.29



HO RealTrax Track Adapter Pack (24 Ct)  
81-1011 \$7.99



HO RealTrax Track Terminal Pack (2 Ct)  
81-1003 \$3.99



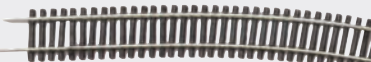
HO RealTrax 9" Straight Code 83 Track Rerailer with Terminal Joiner Wire Harness  
81-1015 \$7.99



7 oz. ProtoSmoke™ Fluid  
60-1045 Unscented \$15.95  
60-1046 Christmas \$15.95

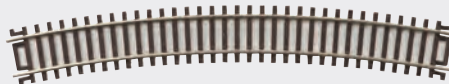
2 oz. ProtoSmoke™ Fluid Bottles  
60-1051A Christmas \$5.29  
60-1051B Coal \$5.29  
60-1051C Diesel \$5.29  
60-1051D Wood Burning (Hickory) \$5.29  
60-1051E Coffee \$5.29  
60-1051G Vanilla \$5.29  
60-1051H Candy Cane \$5.29  
60-1051J Pipe Smoke \$5.29  
60-1051K Cinnamon Roll \$5.29  
60-1051L Apple Pie \$5.29  
60-1051M Unscented \$5.29  
60-1051N Lemon \$5.29

**SCALETRAX**  
BY M.T.H. ELECTRIC TRAINS



HO ScaleTrax 36" Code 83 Flex Track  
80-1036 \$6.49

HO ScaleTrax 9" Straight Code 83 Track Rerailer (3 Pack) (Not Shown)  
80-1003 \$8.50



HO ScaleTrax 22" Radius Curve Code 83 Track  
80-1022 \$1.40  
HO ScaleTrax 22" Radius Curve Code 83 Track (6 Pack)  
80-1023 \$8.50  
HO ScaleTrax 18" Radius Curve Code 83 Track  
80-1018 \$1.40  
HO ScaleTrax 18" Radius Curve Code 83 Track (6 Pack)  
80-1019 \$8.50



HO ScaleTrax 9" Straight Code 83 Track  
80-1001 \$1.40  
HO ScaleTrax 9" Straight Code 83 Track (6 Pack)  
80-1002 \$8.50

**Compatible With All Code 83  
HO Non-Roadbed Track**



# Operating Crossing Signal



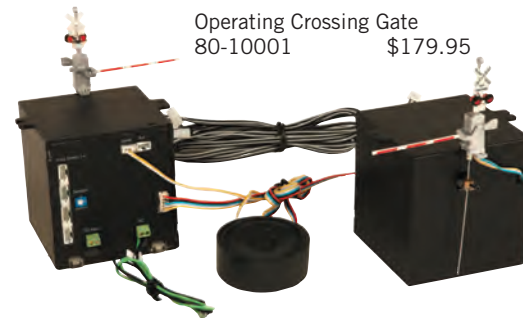
For the first time, operating crossing signals come to the HO marketplace in an easy-to-install package that can be up and running in short order! Each die-cast crossing signal features flashing LED warning lights and the set includes warning bell sounds.

Each crossing signal is fully decorated and ready-to-install with just two mounting screws. The signals are controlled by a modular harness and activation lever that extend down through the base of the layout to easily installed control boxes. Like the signals themselves, each control box attaches to the underside of the platform with just two

screws and features modular plugs to accept the harness from the signal.

Activation of the signals is handled through two sensors for each track. The crossing signal set can handle up to four tracks at once. The sensors are installed in the base of each track before and after the grade crossing by drilling a small hole through the track and platform. Insert the sensors up through the underside of the platform, plug in each sensor set to the master control box and you're ready to run!

- Die-Cast Construction
- Fully Assembled
- Fully Painted
- Motorized Under-Table Control Boxes
- Controls 1 to 4 Tracks
- Multi-Direction Functionality
- Easily Installed In-Track Train Sensors
- Operating Bell with Volume Adjustment
- Flashing LED Warning Lights
- Modular Plug Connections for Easy Setup
- Installs on Benchwork Up to 1 1/2 Inches Thick
- Includes User-Installed Track Signs For 1 to 4 Tracks
- Signal Measures: 2 1/8" High

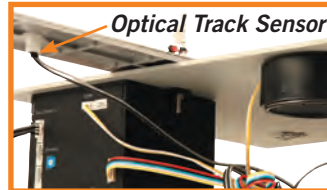


Operating Crossing Gate  
80-10001 \$179.95

- Flashing warning lights
- Smooth operating motorized gates
- Ringing warning bell
- Guards up to four tracks



Optical Track Sensor



Optical Track Sensor

## Bridge Kits

These easy-to-assemble bridge kits make layout expansion easy. Molded in silver or black and mounted atop molded gray stone pillars, the ABS components can be painted in a color of your choice and are ready to install in minutes.

Snap-together design and screw-based mounts ensure that these kits go together easily and last a lifetime. Track can be quickly integrated via the slide channels in the roadbed. The roadbed accepts both regular tie track and roadbed-equipped track from Atlas®, Bachmann® or M.T.H.

- Intricately Detailed ABS Construction
- Easy-to-Assemble Kit
- Includes Two Molded Gray Stone Pillars, Molded Black or Silver Bridge Sides, and Molded Black or Silver Track Base
- Accepts Roadbed-Equipped Track and Regular Tie Track
- Arch and Girder Bridges Mate Easily to Model Longer Spans
- Arch Bridge Accepts Optional Flashing Red LED Beacon (powered by separately sold AC or DC power supply)
- Arch Bridge Measures: 18" x 2 5/8" x 9 1/2"
- Girder Bridge Measures: 9" x 2 5/8" x 6 3/4"



Silver - HO Girder Bridge Kit  
80-1043 \$12.95  
Black - HO Girder Bridge Kit  
80-1041 \$12.95



Black Version Shown

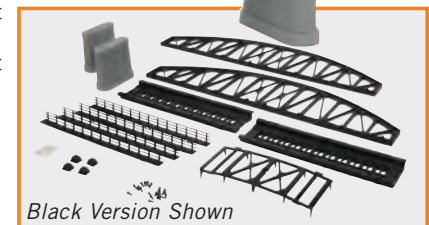


Flashing Warning Beacon Kit  
80-1044 \$12.95

This easy-to-install operating beacon light will quickly bring your M.T.H. HO Arch Bridge to life. The flashing LED is powered by a small circuit board that quickly wires up to any AC or DC power source.



Silver - HO Arch Bridge Kit  
80-1042 \$32.95  
Black - HO Arch Bridge Kit  
80-1040 \$32.95



Black Version Shown

# MTH Railroaders Club

Join The M.T.H. Railroaders Club



85-77016 Santa Fe (MTHRRC)  
Steel Cabooses  
HO Membership is \$30.00

60-1000 - The Basic Club Membership does not include a club car  
Basic Membership is \$25.00

As a member of the M.T.H. RailRoders Club you'll receive:

## Limited-Edition Club Car



Each year we produce beautifully decorated cars exclusively for our Club members. Members automatically receive the car that matches their Club membership (HO gauge, S gauge, RailKing, Premier, Tinplate Traditions or One Gauge) and have the option to collect other Club cars as well.

## The CrossingGate™ Club Magazine

You will receive our full-color Club magazines, jam-packed with product news, ideas from other members, rail history, & step-by-step articles explaining how M.T.H. technology can bring your railroad to life.

## 1st Class Mailing of M.T.H. Catalogs

Club Members get all M.T.H. catalogs earlier than other mailing list members, via First-Class mailings, so they can order from their local train store before the best items are sold out.



## Club Card & Lapel Pin



Show the world your membership in this elite group of model railroaders with your high-quality embossed membership card & beautiful enameled lapel pin.

## Proto-Sound 3.0 Upgrade Kits

Club members can save an additional 15% on these O Gauge kits by visiting the MTHRRC web page.

## Club Web Site

Visit [www.mthtrains.com](http://www.mthtrains.com) and type in your member number to gain access to the Club web site. Here you can exchange messages with other Club members, keep up with the latest news, and even build your own homepage.

## CARRY ON THE M.T.H. TRADITION WITH MEMORABILIA AND COLLECTIBLES

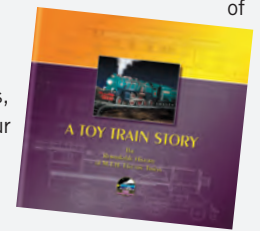
### Previous Year Club Cars

MTHRRC members can still obtain earlier produced MTHRRC cars by visiting the MTHRRC pages on the website. Only MTHRRC members can get these cars!



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# M.T.H. Online

We don't think we're exaggerating when we say M.T.H. has the most useful train manufacturer's site on the Internet. Here's just a sample of the answers you can find online.



## WHAT'S NEW?

New arrivals and other news are posted frequently on our home page.

## WHAT'S THE LATEST INFO ON ...?

Use Product Search to find the latest info on new products before they're delivered — sound sets, cab numbers, feature and paint scheme updates, and other information that arrived after the catalog was published.

## DID YOU EVER MAKE ....?

Use Product Search to search through nearly all of the 15,000 items we've made in the past 33 years, for your favorite road name, engine, or type of rolling stock.

## WHEN IS IT COMING?

Our online Shipping schedule is updated frequently to let you know what's coming soon to your hobby shop.

## ARE YOU GOING TO MAKE ....?

View the last several M.T.H. Catalogs online. Or click on Video to see M.T.H. products in action.

To get the news as it happens, sign up for our free weekly electronic newsletter, with information on new M.T.H. products, industry news, and sneak peeks at upcoming specials!

**Just go to [mthtrains.com](http://mthtrains.com) and click on Newsletter Signup.**

## HOW CAN I FIX...?

The Service area of our site allows you to email a question to our factory technicians or find which of our 150+ local service centers is closest to you.

## WHAT REPAIR PART DO I NEED?

Use Product Search to find exploded diagrams and parts lists for M.T.H. locomotives and accessories, and then order the parts online or by phone.

## HOW DOES IT WORK?

Misplaced an instruction manual or just want to know how a product works? Use Product Search to look up the item and view its instruction manual.



## DOES ANY DEALER STILL HAVE ...?

Locate hard-to-find items with our Product Locator, which searches the inventories of M.T.H. dealers across the country.



## HOW CAN I LEARN MORE ABOUT DCS?

Follow the link to the [mthtrains.com/dcs](http://mthtrains.com/dcs) Web site for DCS and Proto-Sound information — and a list of Authorized DCS Demo Centers where you can try DCS hands-on.

## HOW CAN I UPDATE MY DCS SYSTEM OR CHANGE A SOUND SET?

Only M.T.H. allows you to update your control system or change an engine's sound set right over the Internet. Follow the link to [mthtrains.com/dcs](http://mthtrains.com/dcs) for DCS and Proto-Sound downloads.

[www.mthHOtrains.com](http://www.mthHOtrains.com)





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