

# 2013

HO MODEL TRAINS



**EMT**  
ELECTRIC TRAINS®

HO TRAINS THAT DO MORE

# 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 found in every locomotive in this catalog offers more realism, more fun, and more variety than any other locomotive control system in any scale.

### VIVID ENGINE SOUNDS

Proto-Sound features digital recordings with CD-quality playback. We strive to make our sounds as authentic as possible, using the characteristic whistle for a particular steam engine, for example. With the optional DCS system, you can tune each engine to your preference by individually adjusting bell, horn or whistle, and chuff volume. And most steam engines have quillable whistles, which can be "played" like a real engineer does with the whistle cord.

### STATION SOUNDS

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

### 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 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 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 speed — 37 scale miles per hour, for example — will move at virtually 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 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 DCS mode, you can trigger the brake sound with the Brake button on the DCS handheld.

### FULL COMPATIBILITY WITH ALL HO OPERATING SYSTEMS

Right out of the box, every Proto-Sound 3.0 M.T.H. engine is compatible with all HO operating systems: conventional DC, DCC, and our own Digital Command System (DCS). No switches to flip or adjustments to make. Your Proto-Sound engine senses what kind of power is on the rails; just set it on the track and run it.

### 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.

### OPERATE 'EM ALL

In DCS command mode, unlike any other command system available today, you'll have 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! 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. Blow all their whistles at once, turn on or off their smoke, stop and reverse every active engine — all at the same time.

### EASY LASHUPS AND HELPER ENGINES

Want to run lashups of locomotives like the prototype, with double- or triple-headed diesels or steam engines — or even steamers and diesels working together? No other command control system does this as easily or reliably as the M.T.H. Digital Command System (DCS). With the DCS handheld controller, you can operate any combination of M.T.H. locomotives together as a lashup.

They'll run in perfect synchronization with each other at any speed. You can even set your lashup so only the lead engine's bell and whistle will sound, as in real life multiple-unit operation.

## DCC Features

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 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 steam locomotive features are accessible:

### Steam Features\*

- Headlight/Tail light
- Bell
- Whistle
- Start-up/Shut-down
- Passenger Station/Freight Yard Sounds
- All Other Lights (On/Off)
- Master Volume
- Front Coupler
- Rear Coupler
- Forward Signal
- Reverse Signal
- Grade Crossing
- Smoke On/Off
- Smoke Volume
- Idle Sequence 3
- Idle Sequence 2
- Idle Sequence 1
- Extended Start-up
- Extended Shut-down
- Labor 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 Features\*

- Head Light/Tail Light
- Bell
- Horn
- Start-up/Shut-down
- Passenger Station/Freight Yard Sounds
- All Other Lights (On/Off)
- Master Volume
- Front Coupler
- Rear Coupler
- Forward Signal
- Reverse Signal
- Grade Crossing
- 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>
- Panto Auto/Manual<sup>4</sup>
- Front Panto Up/Down<sup>4</sup>
- Rear Panto Up/Down<sup>4</sup>
- Train Marker
- Country Selection

<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

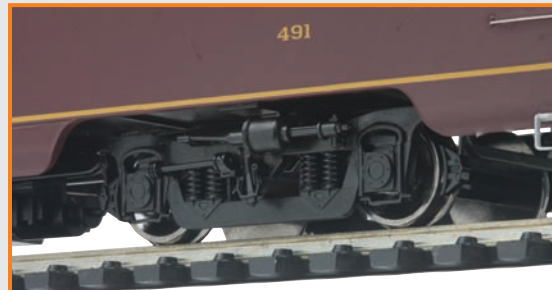
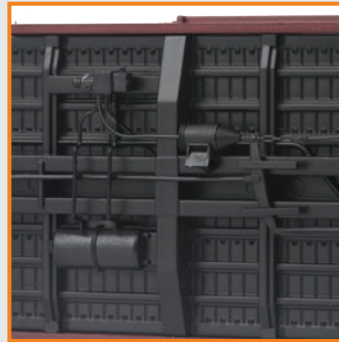
\* Check your DCC Controller's manual to see how many features it can access.

As the preceding page details, 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 car 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, and we've recreated ten cars from the New York Central's Dreyfuss train. All of our passenger cars feature the smoothest rolling passenger car trucks available today, and all are outfitted with flicker-free, constant voltage lighting. You just 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 that feature industry-leading details like separate grab irons, intricate undercarriage detail and crisp graphics or the Ready-2-Rail series, our durable and value-packed freight car line with opening box car doors, smooth-rolling trucks 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.



HO TRAINS THAT DO MORE

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



See and hear 'em in action: Visit our site to see videos of M.T.H. locomotives in action, locate your nearest dealer, or learn more about our products.

## Proto-Sound 3E+

For those who operate Märklin HO AC 3-rail trains, choosing any of the Proto-Sound 3E+ models featured in this catalog will give you an opportunity to run sound-equipped North American and European prototypes on your AC 3-rail HO railroad.

Outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies, each Proto-Sound 3E+ model contains a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power. Like their 3.0 counterparts, 3E+ models feature full digital sound, synchronized puffing steam locomotive smoke timed to the drive wheels' revolutions, speed control, 28 DCC functions, hundreds of DCS sounds and features, and command control receivers for use with Märklin DCC command control and Motorola 1 and 2 command control. In fact, Proto-Sound 3E+ models will automatically operate in six different modes without user interaction: AC or DC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode, DCS Digital Command System mode, and Motorola 1 and 2 Command Modes.

Because it partners our precision drive train — with its powerful 5-pole precision flywheel-equipped, skew-wound motor — with sophisticated software algorithms capable of managing locomotive speed in 1/87th scale increments and automatically sensing your layout's operating mode, an M.T.H. HO locomotive with Proto-Sound 3E+ is easily the most sophisticated, smoothest running, best sounding locomotive you can buy.

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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# S 3/6 Express



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. New for 2012, M.T.H. introduces this superbly detailed, smooth running model of one of Europe's favorite steam engines, offered 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 accented with incredible lighting effects - including 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.

See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)





**NEW TOOLING!** KBayStsB - 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+ \$529.95



**NEW TOOLING!** KBayStsB - 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+ \$529.95



**NEW TOOLING!** Deutsche Bundesbahn - Deutsche Reichsbahn 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+ \$529.95



**NEW TOOLING!** Deutsche Reichsbahn Class 18.4 Steam Locomotive (Era II; Black with Red Wheels)  
 80-3218-1 DCC/DCS Proto-Sound 3.0 \$529.95  
 80-3218-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$529.95



## Features

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Die-Cast Locomotive Trucks
- Metal Handrails and Whistle
- Sprung Bumpers
- NEM 310 Wheels
- NEM 340 Metal Wheels\*
- Sprung Drivers
- #18 U.S. Kadee® Coupler Compatible
- (2) NEM 360/362 Coupler & Pocket Assemblies
- (2) Hook & Chain Coupler Assemblies
- Constant Voltage Headlight
- Operating Running Lights
- Lighted Cab Interior
- Powerful 5-Pole Precision Flywheel
- Equipped Skew-Wound Motor
- Operating Tender Back-up Light
- Synchronized Puffing ProtoSmoke™ System
- 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

\*Available on Proto-Sound 3E+ Models

# K4s Pacific



On perhaps the greatest railroad ever, no steam locomotive was more revered than the legendary Pennsylvania K4s Pacific. Evolving from a program begun in 1914 to develop heavy freight and passenger classes utilizing common boiler designs, the K4s was an instant success. From 1917 to 1928, a total of 425 units were built at the Juniata and Baldwin Shops.

The 4-6-2 K4s became the Pennsylvania's principal passenger hauler, possessing a consummate blend of speed and power. Often double headed on east coast limiteds in front of a Pullman consist, the K4s was a common and beautiful sight on

the Pennsylvania's rails, and became synonymous with that railroad's steam power.

Later, after World War II concluded, the Pennsy's needs changed and the K4's appearance underwent a series of changes to better serve those needs. The most apparent changes showed up on the 1947 Postwar or Modern version of the K4s and included a solid drop-coupler pilot, repositioned boiler-top headlight, and moving the steam generator below the headlight.

M.T.H. Electric Trains is proud to return the Prewar 1927 version and an all-new 1947 Postwar rendition of this magnificent steam locomotive to life in all die-cast construction. Featuring all of the craftsmanship and detail that make an M.T.H. steam locomotive the industry's best value, your K4s will quickly find a home on your layout or in your collection for years to come.

## Did You Know?

No. 1737 was the first K4s produced for the Pennsylvania Railroad. No. 1361, formerly displayed at Horseshoe Curve currently resides in Scranton, Pennsylvania at Steamtown, awaiting a hoped-for restoration to operating condition.



Pennsylvania 4-6-2 K4s Steam Locomotive with DCC/DCS Proto-Sound 3.0, Cab No. 719  
 80-3236-1 DCC/DCS Proto-Sound 3.0 \$499.95  
 80-3236-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$529.95



Pennsylvania 4-6-2 K4s Steam Locomotive with DCC/DCS Proto-Sound 3.0, Cab No. 5497  
 80-3237-1 DCC/DCS Proto-Sound 3.0 \$499.95  
 80-3237-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$529.95



Pennsylvania 4-6-2 K4s Modern Steam Locomotive with DCC/DCS Proto-Sound 3.0, Cab No. 3681  
 80-3238-1 DCC/DCS Proto-Sound 3.0 \$499.95  
 80-3238-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$529.95



Pennsylvania 4-6-2 K4s Modern Steam Locomotive with DCC/DCS Proto-Sound 3.0, Cab No. 3752  
 80-3239-1 DCC/DCS Proto-Sound 3.0 \$499.95  
 80-3239-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$529.95

**All Models  
 Include  
 Onboard DCC  
 Receiver**

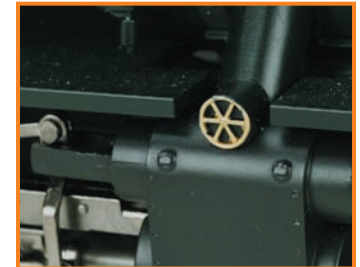
## Features

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Engineer and Fireman Figures
- Metal Handrails, Whistle and Bell
- RP25 Metal Wheels
- NEM 340 Metal Wheels\*
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- Sprung Drivers
- Operating Kadee Compatible Remote Controlled

- Proto-Coupler
- (2) #158 Scale Kadee Whisker Couplers
- NEM 360/362 Coupler and Pocket Assembly\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Operating Firebox Glow
- Lighted Cab Interior
- Operating Tender Back-up 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
- Operates On Code 70, 83 and 100 Track
- 1:87 Scale Proportions
- Proto-Sound 3.0 With The Digital Command System Featuring Passenger Station or Freight Yard Proto-Effects
- Unit Measures: 11 1/2" x 1 3/8" x 2 1/8"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R1 (360 mm) Radius Curves

\*Available on Proto-Sound 3E+ Models



# 2-8-8-8-2 Triplex Steam Engine



P. T. Barnum would have loved the Triplex. It was an engine of superlatives: more drivers than anything before or since, too big for the shops of its owner, the Erie Railroad, powerful enough to pull a train nearly five miles long. Ninety years ago, in the days before multiple-unit control allowed one throttle to control several locomotives, the Triplex was the ultimate attempt to put as much power as possible in the hands of a single engineer. In the end, it proved a noble, flamboyant, but less-than-successful experiment.

Baldwin Locomotive Works built three triplexes between 1914 and 1916 for pusher service on the Erie Railroad's daunting Susquehanna Hill (also known as Gulf Summit) near Deposit, N.Y. The cylinders of the Triplex's middle engine were powered by high pressure steam direct from the boiler, while the front and rear engines used low pressure steam exhausted from the middle cylinders.

Each triplex replaced three ordinary helper engines, and the new locomotives worked well enough to stay on the Erie roster for more than a decade. But the design proved a bit over the top and only one more Triplex was ever built, for the Virginian Railway. Even with their huge boilers, the locomotives could only make enough steam to go 10 mph. One reason was poor draft in the firebox, because only the front cylinders exhausted through the smokebox and created draft; the rear cylinders exhausted through a separate smokestack on the tender. Another inherent problem with the design was that traction from the rear engine decreased as the boiler used coal and water and the tender got lighter.

The M.T.H. Triplex recreates the flamboyance of the original design but runs much better than the prototype ever did. Only MTH engineering could make such a complex model run smoothly and steadily at speeds from a barely perceptible crawl to wide-open throttle — just ask any modeler who owns an

M.T.H. O scale, HO scale, or One Gauge Triplex. For 2013 the Triplex returns in our HO lineup, complete with a full range of engine sounds, puffing smoke, speed control, full Rule 17 lighting, and ready to run under conventional, DCC, M.T.H. Digital Command System (DCS), Märklin DCC Command, or Motorola 1 and 2 Command control.

## Did You Know?

The Triplex was engineered to haul 640 fifty-ton cars in a train almost five miles long. But the couplers and draft gear of the early twentieth century could not have handled such a load, so the 2-8-8-2 was used as a pusher and never put to a full test.

See it in action at [mthHOtrains.com](http://mthHOtrains.com) 



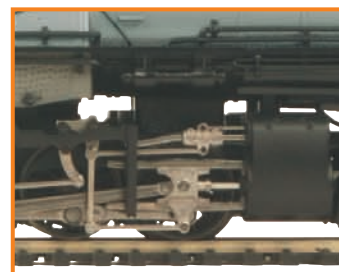


Erie (Russian Iron) - 2-8-8-2 Triplex Steam Engine with DCC/DCS Proto-Sound 3.0

80-3194-1	Cab No. 5015	\$649.95
80-3195-1	Cab No. 5016	\$649.95
80-3196-1	Cab No. 5014	\$649.95

Erie (Russian Iron) - 2-8-8-2 Triplex Steam Engine with DCC/DCS/Motorola 1/2 Proto-Sound 3E+

80-3194-5	Cab No. 5015	\$679.95
80-3195-5	Cab No. 5016	\$679.95
80-3196-5	Cab No. 5014	\$679.95



Erie (Black) - 2-8-8-2 Triplex Steam Engine with DCC/DCS Proto-Sound 3.0

80-3197-1	Cab No. 5015	\$649.95
80-3198-1	Cab No. 5016	\$649.95
80-3199-1	Cab No. 5014	\$649.95

Erie (Black) - 2-8-8-2 Triplex Steam Engine with DCC/DCS/Motorola 1/2 Proto-Sound 3E+

80-3197-5	Cab No. 5015	\$679.95
80-3198-5	Cab No. 5016	\$679.95
80-3199-5	Cab No. 5014	\$679.95

**All Models  
Include  
Onboard  
DCC Receiver**



Virginian 2-8-8-2 Triplex Steam Engine, Cab No. 700

80-3235-1	DCC/DCS Proto-Sound 3.0	\$649.95
80-3235-5	DCC/DCS/Motorola 1/2 Proto-Sound 3E+	\$679.95

**Add A Six-Car Hopper Set  
See Page 65**

## Features

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Die-Cast Locomotive Trucks
- Engineer and Fireman Figures
- Metal Handrails, Whistle and Bell
- RP25 Metal Wheels
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- NEM 340 Metal Wheels\*
- Sprung Drivers
- (2) #158 Scale Kadee Whisker Couplers
- NEM 360/362 Coupler and Pocket Assembly\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Lighted Cab Interior
- 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
- Proto-Sound 3.0 With The Digital Command System Featuring Quillable Whistle w/Freight Yard Proto-Effects
- Operates On Code 70, 83 and 100 Track
- Unit Measures: 15 1/4" x 1 9/16" x 2 1/4"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R2 (437.5 mm) Radius Curves

\*Available on Proto-Sound 3E+ Models

# 4-6-6-4 Challenger



**All Models Include  
Onboard DCC Receiver**

The first Challengers were conceived in 1936 to replace the Union Pacific's fleet of three-cylinder 4-12-2s. With a 50 mph top speed, the 4-12-2s had been the road's primary fast freight engines when built in 1926. But a decade later they were considered slow and difficult to maintain. So American Locomotive Works (ALCO) was commissioned to build what became one of the most successful fleets of articulated engines on any railroad. Forty Challengers were built in the 1930s. The pressure of wartime traffic brought an order for 65 more of these 70 mph greyhounds in 1942-44, with improvements based on lessons learned from the UP's 4-8-8-4 Big Boys. In service, the Challengers often complemented the Big Boys, speeding traffic over less rugged territory and handing it over to the Big Boys for the passage over Utah's Wasatch Mountains.

The Challengers were steam power at its zenith. They incorporated all the technology that represented super-power steam — including roller bearings on all axles and drive rods — but none

of the foolishness that characterized some of the desperate efforts to save steam in the post-war years. While most Challengers hauled freight, a number were assigned to passenger service in the Pacific Northwest, where they were converted to oil burners, equipped with smoke lifters ("wind wings" in UP parlance), and painted two-tone gray in 1946.

It was in a roundabout way that six Challengers ordered by the UP ended up hauling coal for the Clinchfield Railroad. In the midst of World War II, the War Production Board refused the Rio Grande's request to order new articulateds of its own design and instead diverted the last six Challengers in UP's order to the D&RGW — which turned up its nose at the locos and decided to lease them for the duration and return them after the war. In 1947, the War Assets Administration sold the orphan locos to the Atlantic Coast Line and Louisville & Nashville Railroads, which put the Challengers to work on their jointly-owned subsidiary, the Clinchfield, Carolina & Ohio. Thus six engines

intended to speed over western deserts and mountains ended up thundering through Appalachia.

The Challenger returns to the M.T.H. lineup for 2013 in oil burning versions and a new technology package offering for those who prefer the AC 3-Rail Märklin standard. While ours is not certainly the best, equipped with authentic articulated sounds, including the front and rear engines going in and out of sync; actual UP whistle sounds, which can be "quilled," just as a real engineer "plays" the whistle control; die-cast construction and optional traction tires for pulling power to match the prototype; slow-speed capability down to a steady 3 scale miles per hour; and dozens of added-on metal detail parts.

See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)





Union Pacific (Two-Tone Gray w/Silver Stripes) - 4-6-6-4 Challenger (Oil Burner) Steam Engine, Cab No. 3978  
 80-3200-1 DCC/DCS Proto-Sound 3.0 \$649.95  
 80-3200-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$679.95



Union Pacific (Two-Tone Gray w/Yellow Stripes) - 4-6-6-4 Challenger (Oil Burner) Steam Engine, Cab No. 3979  
 80-3201-1 DCC/DCS Proto-Sound 3.0 \$649.95  
 80-3201-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$679.95



Union Pacific (Black) - 4-6-6-4 Challenger (Oil Burner) Steam Engine, Cab No. 3975  
 80-3202-1 DCC/DCS Proto-Sound 3.0 \$649.95  
 80-3202-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$679.95

Union Pacific (Black) - 4-6-6-4 Challenger (Oil Burner) Steam Engine, Cab No. 3976  
 80-3203-1 DCC/DCS Proto-Sound 3.0 \$649.95  
 80-3203-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$679.95



Clinchfield (Black) - 4-6-6-4 Challenger Steam Engine, Cab No. 674  
 80-3204-1 DCC/DCS Proto-Sound 3.0 \$649.95  
 80-3204-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$679.95



Denver Rio Grande (Black) - 4-6-6-4 Challenger Steam Engine, Cab No. 3804  
 80-3205-1 DCC/DCS Proto-Sound 3.0 \$649.95  
 80-3205-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$679.95



## Features

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Engineer and Fireman Figures
- Metal Handrails and Bell
- Metal Whistle
- RP25 Metal Wheels
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- NEM 340 Metal Wheels\*
- Sprung Drivers
- (2) #158 Scale Kadee Whisker Couplers
- NEM 360/362 Coupler and Pocket Assembly\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Lighted Cab Interior
- Operating Tender Back-up 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 Proportions
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 With The Digital Command System Featuring Passenger Station Proto-Effects
- Unit Measures: 15 3/8" x 1 3/8" x 1 9/16"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R2 (437.5 mm) Radius Curves

\*Available on Proto-Sound 3E+ Models

# 4-8-8-4 Big Boy



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.

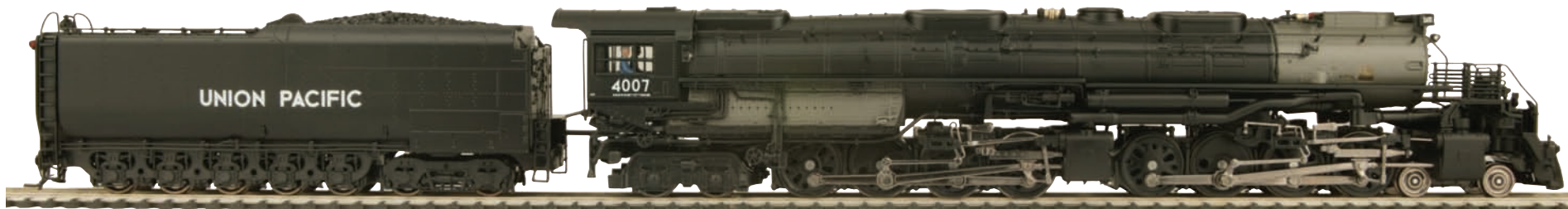
Writer Henry Comstock beautifully described the Big Boy's place at the apex of steam engine history: "A Union Pacific 'Big Boy' was 604 tons and 19,000 cubic feet of steel and coal and water, poised upon 36 wheels spaced no wider apart than those of an automobile. That it could thunder safely over undulating 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, complete with the industry-leading speed control, smoke output, and range of accurate sounds that characterize all MTH locomotives. Our model features a precision 12 volt 5-pole skew wound motor and die-cast metal construction for pulling power and speed that rival the original Big Boy — as well as authentic articulated chuffing sounds with the two engines drifting in and out of sync. New for 2013 is the addition of an AC 3-Rail Märklin system version for those who prefer to run their HO locomotives under the Märklin operating system.

See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)





Union Pacific - 4-8-8-4 Big Boy (Original) Steam Engine with DCC/DCS Proto-Sound 3.0

80-3206-1	Cab No. 4007	\$649.95
80-3207-1	Cab No. 4005	\$649.95
80-3208-1	Cab No. 4013	\$649.95
80-3209-1	Cab No. 4016	\$649.95
80-3210-1	Cab No. 4018	\$649.95

Union Pacific - 4-8-8-4 Big Boy (Original) Steam Engine with DCC/DCS/Motorola 1/2 Proto-Sound 3E+

80-3206-5	Cab No. 4007	\$679.95
80-3207-5	Cab No. 4005	\$679.95
80-3208-5	Cab No. 4013	\$679.95
80-3209-5	Cab No. 4016	\$679.95
80-3210-5	Cab No. 4018	\$679.95

**Add A Matching Six-Car Hopper Set — See Page 65**

## Features

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Engineer and Fireman Figures
- Metal Handrails and Decorative Bell
- Metal Whistle
- RP25 Metal Wheels
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- NEM 340 Metal Wheels\*
- Sprung Drivers
- (2) #158 Scale Kadee Whisker Couplers
- NEM 360/362 Coupler and Pocket Assembly\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Lighted Cab Interior
- Operating Tender Back-up 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 Proportions
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 With The Digital Command System Featuring Quillable Whistle With Freight Yard Proto-Effects
- Unit Measures: 18 11/16" X 1 9/16" X 2 1/4"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R2 (437.5mm) Radius Curves

*\*Available on Proto-Sound 3E+ Models*

### Proto-Sound 3E+

The Proto-Sound 3E+ models featured on this page come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies and contain a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This all-new version of Proto-Sound 3.0 can be operated in four different modes: AC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode, and Motorola 1 and 2 Command Modes.

**All Models Include Onboard DCC Receiver**



# 4-8-4 GS-4 / GS-6



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." Presenting

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

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Engineer and Fireman Figures
- Metal Handrails and Bell
- RP25 Metal Wheels
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- NEM 340 Metal Wheels\*
- Sprung Drivers
- (2) #158 Scale Kadee Whisker Couplers
- NEM 360/362 Coupler and Pocket Assembly\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Operating Marker Lights
- Operating Numberboard Lights
- Lighted Cab Interior
- Operating Tender Back-up Light
- Operating MARS Light on GS-4
- 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 w/Passenger Station Proto-Effects
- Unit Measures: 15 3/4" x 2 1/4" x 1 1/2"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R2 (437.5 mm) Radius Curves

\*Available on Proto-Sound 3E+ Models

See it in action at [mthHOtrains.com](http://mthHOtrains.com)





Southern Pacific (Daylight Colors, Large Lettering) - 4-8-4 GS-4  
 Steam Engine with DCC/DCS Proto-Sound 3.0  
 80-3213-1 Cab No. 4444 \$499.95  
 80-3214-1 Cab No. 4449 \$499.95

Southern Pacific (Daylight Colors, Large Lettering) - 4-8-4 GS-4  
 Steam Engine with DCC/DCS/Motorola 1/2 Proto-Sound 3E+  
 80-3213-5 Cab No. 4444 \$529.95  
 80-3214-5 Cab No. 4449 \$529.95

## All Models Include Onboard DCC Receiver



Southern Pacific Lines (Daylight Colors, Small Lettering) - 4-8-4 GS-4  
 Steam Engine with DCC/DCS Proto-Sound 3.0  
 80-3211-1 Cab No. 4434 \$499.95  
 80-3212-1 Cab No. 4449 \$499.95

Southern Pacific Lines (Daylight Colors, Small Lettering) - 4-8-4 GS-4  
 Steam Engine with DCC/DCS/Motorola 1/2 Proto-Sound 3E+  
 80-3211-5 Cab No. 4434 \$529.95  
 80-3212-5 Cab No. 4449 \$529.95



## Add a Matching Passenger Set — See Page 72



American Freedom - 4-8-4 GS-4 Steam Engine with DCC/DCS Proto-Sound 3.0  
 80-3229-1 Cab No. 4449 \$499.95  
 American Freedom - 4-8-4 GS-4 Steam Engine with DCC/DCS/Motorola 1/2 Proto-Sound 3E+  
 80-3229-5 Cab No. 4449 \$529.95



Western Pacific - 4-8-4 GS-6 Steam Engine with DCC/DCS Proto-Sound 3.0  
 80-3228-1 Cab No. 4461 \$499.95  
 Western Pacific - 4-8-4 GS-6 Steam Engine with DCC/DCS/Motorola 1/2 Proto-Sound 3E+  
 80-3228-5 Cab No. 4461 \$529.95



Southern Pacific (Black, Large Letters) - 4-8-4 GS-4 Steam Engine with DCC/DCS Proto-Sound 3.0  
 80-3226-1 Cab No. 4452 \$499.95  
 Southern Pacific (Black, Large Letters) - 4-8-4 GS-4 Steam Engine with DCC/DCS/Motorola 1/2 Proto-Sound 3E+  
 80-3226-5 Cab No. 4452 \$529.95



Southern Pacific (Black, Large Letters) - 4-8-4 GS-6 Steam Engine with DCC/DCS Proto-Sound 3.0  
 80-3227-1 Cab No. 4461 \$499.95  
 Southern Pacific (Black, Large Letters) - 4-8-4 GS-6 Steam Engine with DCC/DCS/Motorola 1/2 Proto-Sound 3E+  
 80-3227-5 Cab No. 4461 \$529.95

# 4-6-4 Empire State Express



Before it was eclipsed by the Twentieth Century Limited, the Empire State Express was the New York Central's flagship passenger run. In 1893, it was the Empire State Express, led by a hot-rod 4-4-0 with outlandishly large drivers, that became the first man-made vehicle to exceed 100 mph and made the New York Central famous around the world. Beyond the record-setting run, the Empire State Express gained recognition as a pioneer in high-speed rail service on its New York-Buffalo-Cleveland route. Scientific American noted in 1898 that the Empire State Express "opened the present remarkable era of fast, long distance express trains. [It] will always figure conspicuously in the annals of the world's railroads as being the first to maintain a regular schedule speed of over 52 miles an hour for an unprecedented distance and for runs of unprecedented length between stops."

But by the Roaring Twenties, most high-class rail travel was by Pullman, and coach trains on daytime runs, like the Empire

State Express, were often seen as a less desirable way to travel. High-quality coach travel made a comeback during the Depression, however, as railroads sought to attract customers by offering less-expensive fares combined with upgraded amenities. So it was that on December 7, 1941, with much fanfare, the New York Central launched a newly equipped Empire State Express with two Henry-Dreyfus-styled Hudsons and gleaming, streamlined Budd-built train sets. Passengers on the inaugural run were surprised at the scarcity of trackside observers - until they heard about the event halfway around the world that had overshadowed all other news that December Sunday.

The 1941 ESE was a train with one foot in the past and the other in the future. Its reserved-seat, stainless steel Budd coaches and parlor cars presaged the postwar streamliners, America's last hurrah of luxury passenger travel. But its two specially styled Hudsons, Nos. 5426 and 5429, were clearly a bridge —

albeit a beautiful one — between a dying technology and cars that belonged behind a diesel. Designer Henry Dreyfus blended the stainless fluting of Budd's streamliners with his design for the 1938 Twentieth Century Hudsons, arguably among the best-looking streamlined steamers ever built. After the war, however, more powerful Niagaras bumped the ESE Hudsons to lesser trains, and by 1949 their streamlining had been removed.

Relive the brief but glorious era of streamlined steam on the Water Level Route with these superbly detailed locomotives. With their fully featured sound systems, Empire State Express passenger station announcements, and ability to start your train so smoothly you won't spill a drop of water in the diner, we believe these are surely the best HO models of these Hudsons ever built.

See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)







New York Central - 4-6-4 Empire State Express Steam Engine with Proto-Sound 3.0  
 80-3230-1 Cab No. 5426 \$499.95  
 80-3231-1 Cab No. 5429 \$499.95

## Add a Matching Passenger Set — See Page 74

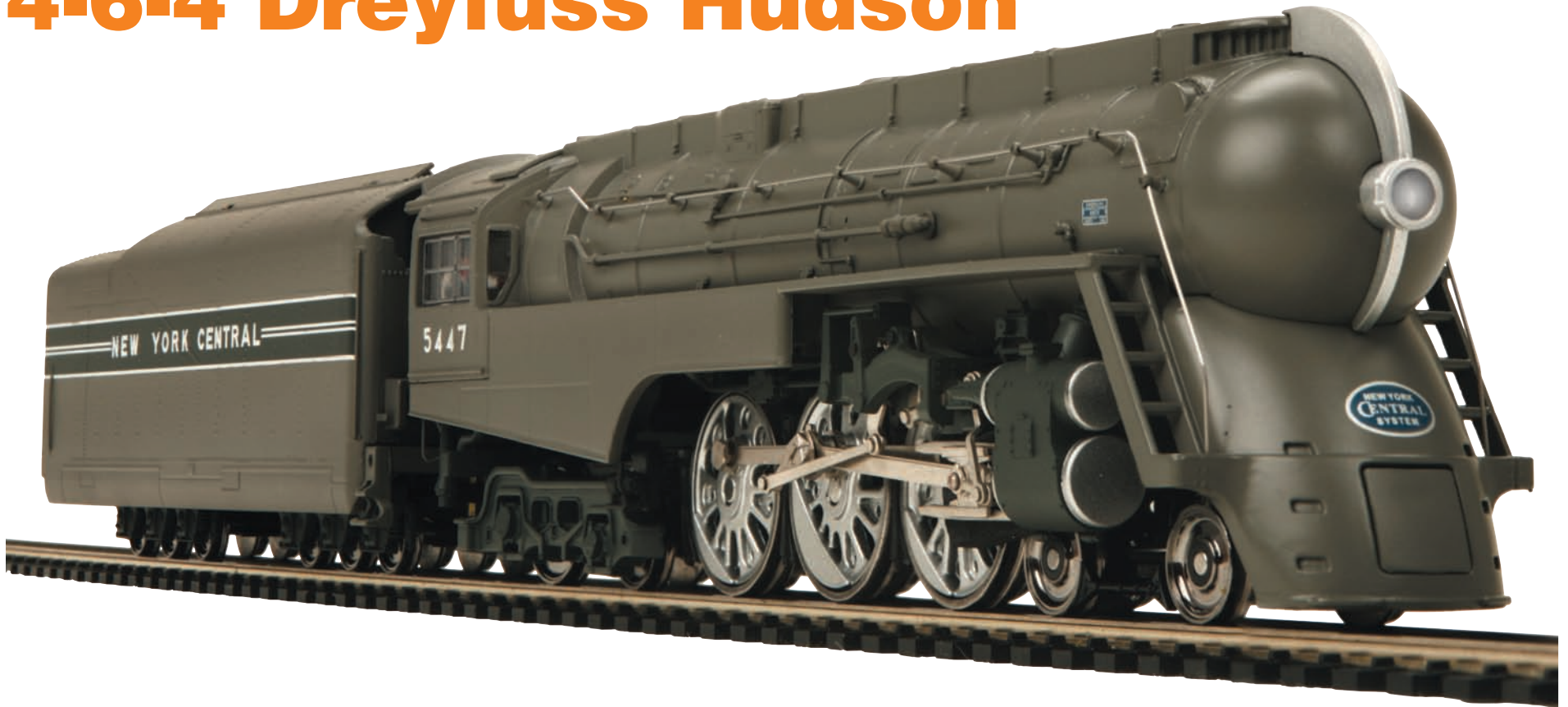


## Features

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Engineer and Fireman Figures
- Metal Handrails and Whistle
- RP25 Metal Wheels
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- Sprung Drivers
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Illuminated Driver Lights
- Lighted Cab Interior
- Operating Tender Back-up 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 Proportions
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 With The Digital Command System Featuring Passenger Station Proto-Effects
- Unit Measures: 13 1/2" x 1 1/2" x 2 1/8"
- Operates On 18" Radius Curves

**All Models  
 Include  
 Onboard DCC  
 Receiver**

# 4-6-4 Dreyfuss Hudson



The 1938 edition of the Twentieth Century Limited is often regarded as the high water mark of the American passenger train. Thirty-six years to the day after passengers strode down a red plush carpet to the first run of the Century — inspiring the phrase “red carpet treatment” — the new incarnation of America’s most famous train pulled out of Grand Central Station behind a homely boxcab electric. Thirty-three miles later, at Harmon, New York, the train was turned over to a streamlined Hudson with a prow reminiscent of a Roman gladiator’s helmet, and the effect was complete. From engine to observation car, in every detail down to the dining car china and matchbook covers, the train had been styled by Henry Dreyfuss, a giant in the then-new profession of industrial design. The design was so handsome and striking that it became a symbol of the New York Central railroad and, later, of the entire Art Deco era. Decades later, Time magazine selected the locomotive as its single symbol of the twentieth century.

Advertised as “the first all-room train in America, 16 hours between New York and Chicago,” the 1938 Century was the last word in luxury travel. Every afternoon the famous red carpet was unfurled in Grand Central Station, welcoming passengers aboard. Taking aim at Pennsy’s rival Broadway Limited, which had to cross the Allegheny Mountains to make the same trip, the New York Central promoted itself as “The Water Level Route... You Can Sleep.”

Leading the train was one of the best examples of streamlining ever applied to a locomotive. Unlike Raymond Loewy’s design for the Broadway Limited’s Pacifics, which largely hid the engine under a streamlined shroud, Dreyfuss’ styling clung tightly to the locomotive, glorifying rather than hiding its shape and boldly displaying the wheel and rod motion that make a steam engine so exciting. No wonder the Dreyfuss Hudson has been a favorite image of graphic artists ever since.

Returning to the M.T.H. lineup for 2013 is the most fun-to-operate HO model of this landmark locomotive ever made. Our Dreyfus Hudson is offered in several prototypical versions with either the original 1938 paint scheme with blue edging on the stripes, or the cleaner, more simplified 1940 scheme. Play the departure announcements for the Twentieth Century Limited and begin your trip so smoothly that your passengers won’t realize they’re moving. Listen to the chuff sounds and synchronized puffs of smoke accelerate as your train picks up speed. If you’re operating with the M.T.H. DCS system, you can even make your own signature sounds with the quillable whistle feature. In model railroading, it doesn’t get any better than this.

See it in action at [mthHOtrains.com](http://mthHOtrains.com)





New York Central - 4-6-4 Dreyfuss Steam Engine (Scullin drivers/roller bearings on side rods), Cab No. 5450  
80-3232-1 DCC/DCS Proto-Sound 3.0 \$499.95

New York Central - 4-6-4 Dreyfuss Steam Engine (Scullin drivers/roller bearings on side rods), Cab No. 5451  
80-3245-1 DCC/DCS Proto-Sound 3.0 \$499.95



New York Central - 4-6-4 Dreyfuss Steam Engine (Boxpox drivers/plain bearings on side rods), Cab No. 5446  
80-3233-1 DCC/DCS Proto-Sound 3.0 \$499.95  
New York Central - 4-6-4 Dreyfuss Steam Engine (Boxpox drivers/plain bearings on side rods), Cab No. 5445  
80-3246-1 DCC/DCS Proto-Sound 3.0 \$499.95

## Add a Matching Passenger Set - See Page 74



New York Central - 4-6-4 Dreyfuss Steam Engine (Boxpox drivers/plain bearings on side rods), Cab No. 5447  
80-3234-1 DCC/DCS Proto-Sound 3.0 \$499.95

## All Models Include Onboard DCC Receiver

### Features

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Engineer and Fireman Figures
- Metal Handrails and Whistle
- RP25 Metal Wheels
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- Sprung Drivers
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Lighted Cab Interior
- Operating Tender Back-up 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 Proportions
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 With The Digital Command System Featuring Passenger Station Proto-Effects
- Unit Measures: 13 1/2" x 1 1/2" x 2 1/8"
- Operates On 18" Radius Curves

# 2-8-0 H10



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 Line in switching, work train, branch line, and occasionally main line service.

The H10 debuts in the M.T.H. HO lineup in 2013, featuring the 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.

## Did You Know?

H10s No. 7688 was preserved by the Pennsy as part of its historical collection in Northumberland, PA. It resides today in the main exhibition hall of the Railroad Museum of Pennsylvania along with two earlier Consolidations: H3 No. 1187 and an H6sb.



**NEW TOOLING!**

Pennsylvania - H10 2-8-0 Steam Engine, Cab No. 7103	Pennsylvania - H10 2-8-0 Steam Engine, Cab No. 7099	Pennsylvania - H10 2-8-0 Steam Engine, Cab No. 7122
80-3240-1 DCC/DCS Proto-Sound 3.0 \$399.95	80-3241-1 DCC/DCS Proto-Sound 3.0 \$399.95	80-3242-1 DCC/DCS Proto-Sound 3.0 \$399.95
80-3240-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$429.95	80-3241-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$429.95	80-3242-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$429.95

**Add A Six-Car Hopper Set — See Page 65**



**NEW TOOLING!**

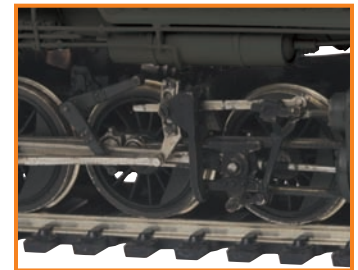
Long Island - H10 2-8-0 Steam Engine, Cab No. 103	Long Island - H10 2-8-0 Steam Engine, Cab No. 107
80-3243-1 DCC/DCS Proto-Sound 3.0 \$399.95	80-3244-1 DCC/DCS Proto-Sound 3.0 \$399.95
80-3243-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$429.95	80-3244-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ \$429.95

**All Models Include Onboard DCC Receiver**

**Features**

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Engineer and Fireman Figures
- Metal Handrails and Decorative Bell
- Decorative Metal Whistle
- RP25 Metal Wheels
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- NEM 340 Metal Wheels\*
- Sprung Drivers
- Operating Kadee Compatible Remote Controlled Proto-Coupler
- (2) #158 Scale Kadee Whisker Couplers
- NEM 360/362 Coupler and Pocket Assembly\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Operating Marker Lights
- Operating Numberboard Lights
- Lighted Cab Interior
- Operating Tender Back-up 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 With Freight Yard Proto-Effects
- Unit Measures: 9 1/16" x 1 1/2" x 2"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R1 (360mm) Radius Curves

*\*Available on Proto-Sound 3E+ Models*



# 4-8-4 Class J



## All Models Include Onboard DCC Receiver

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 passenger 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. 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*.

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.

See it in action at  
[mthHOTrains.com](http://mthHOTrains.com)





Norfolk & Western - 4-8-4 Class J Steam Locomotive, Cab Number 603  
80-3149-1 DCC/DCS Proto-Sound 3.0 \$499.95

**Add A Six-Car Hopper Set — See Page 65**



Norfolk & Western - 4-8-4 Class J Steam Locomotive, Cab Number 604  
80-3150-1 DCC/DCS Proto-Sound 3.0 \$499.95

**Add a Matching Passenger Set — See Page 70**



## Features

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Engineer and Fireman Figures
- Metal Handrails and Decorative Whistle
- RP25 Metal Wheels
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- Sprung Drivers
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Operating Marker Lights
- Operating Numberboard Lights
- Lighted Cab Interior
- Operating Tender Back-up 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 Proportions
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 With The Digital Command System Featuring Quillable Whistle With Freight Yard Proto-Effects
- Unit Measures: 15 3/8" x 1 1/2" x 2 1/4"
- Operates On 18" Radius Curves

# EMD GP35



Produced from 1963 to 1966, the EMD GP35, along with its six-axle SD35 sibling, marked both an end and a beginning. They were the last road diesels to use the EMD 567 motor that had powered switchers, F-units, and Geeps since 1939 (so named because each cylinder displaced 567 cubic inches). For the horsepower race of the 1960s, EMD tweaked the 567 to a turbocharged V-16 delivering 2500 hp. That was it for the 567, however, and in 1966 the baton was passed to the more powerful model 645. But while the “35 line” diesels ushered out an old motor, they inaugurated a new look. Their angled cab roofs and the clean, squared-off lines of their car bodies established the look of EMD power for the next three decades.

In what we believe is the finest ready-to-run HO GP35 diesel ever produced, HO modelers will find the best combination of detail, realism, and performance of any 1/87 scale GP35. Added-on detail parts include windshield wipers, metal see-thru body grilles, lift rings, metal grab irons and handrails, see-thru rooftop fan housings, and brake cylinders, air pipes, and swing hangers on our super-detailed Blomberg trucks.

Our highly detailed model includes a broader range of features than you'll find on any other HO scale diesel, including lighted number boards; 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. DCS Digital Command System; and a full range of

sounds recorded from a prototype GP35. If you're looking for durable motive power that's accurately detailed, smooth running, and a great deal of fun to operate, it doesn't get any better than this.

## Proto-Sound 3E+

The Proto-Sound 3E+ models featured on this page come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies and contain a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This all-new version of Proto-Sound 3.0 can be operated in four different modes: AC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode and Motorola 1 and 2 Command Modes.

## Features

- Intricately Detailed ABS Body
- Metal Chassis
- Moveable Roof Fans
- Metal Handrails and Horn
- Metal Body Side Grilles
- (2) Engineer Cab Figures
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- NEM 340 Metal Wheels\*
- (2) #158 Scale Kadee Whisker Couplers
- (2) Operating Kadee Compatible Remote Controlled Proto-Couplers
- (2) NEM 360/362 Coupler & Pocket Assemblies\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Lighted Cab Interior
- Directionally Controlled Constant Voltage LED Headlights
- Illuminated Number Boards
- Lighted Marker 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
- Unit Measures: 8 1/8" x 1 3/4" x 2 1/8"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R1 (360mm) Radius Curves

*\*Available on Proto-Sound 3E+ Models*





- Chessie - GP35 Diesel with DCC/DCS Proto-Sound 3.0
- 80-2230-1 Cab No. 3545 \$279.95
  - 80-2231-1 Cab No. 3546 \$279.95
  - 80-2232-1 Cab No. 3551 \$279.95
- Chessie - GP35 Diesel with DCC/DCS Proto-Sound 3E+
- 80-2230-5 Cab No. 3545 \$299.95
  - 80-2231-5 Cab No. 3546 \$299.95
  - 80-2232-5 Cab No. 3551 \$299.95
- Chessie - GP35 Diesel (DCC Ready)
- 80-2230-0 Cab No. 3545 \$179.95
  - 80-2231-0 Cab No. 3546 \$179.95
  - 80-2232-0 Cab No. 3551 \$179.95



Penn Central - GP35 Diesel with DCC/DCS Proto-Sound 3.0

- 80-2233-1 Cab No. 2372 \$279.95
- 80-2234-1 Cab No. 2382 \$279.95
- 80-2235-1 Cab No. 2387 \$279.95

Penn Central - GP35 Diesel with DCC/DCS Proto-Sound 3E+

- 80-2233-5 Cab No. 2372 \$299.95
- 80-2234-5 Cab No. 2382 \$299.95
- 80-2235-5 Cab No. 2387 \$299.95

Penn Central - GP35 Diesel (DCC Ready)

- 80-2233-0 Cab No. 2372 \$179.95
- 80-2234-0 Cab No. 2382 \$179.95
- 80-2235-0 Cab No. 2387 \$179.95



## All Proto-Sound Models Include Onboard DCC Receiver



- Chesapeake & Ohio - GP35 Diesel with DCC/DCS Proto-Sound 3.0
- 80-2236-1 Cab No. 3520 \$279.95
  - 80-2237-1 Cab No. 3534 \$279.95
  - 80-2238-1 Cab No. 3536 \$279.95
- Chesapeake & Ohio - GP35 Diesel with DCC/DCS Proto-Sound 3E+
- 80-2236-5 Cab No. 3520 \$299.95
  - 80-2237-5 Cab No. 3534 \$299.95
  - 80-2238-5 Cab No. 3536 \$299.95
- Chesapeake & Ohio - GP35 Diesel (DCC Ready)
- 80-2236-0 Cab No. 3520 \$179.95
  - 80-2237-0 Cab No. 3534 \$179.95
  - 80-2238-0 Cab No. 3536 \$179.95



Conrail - GP35 Diesel with DCC/DCS Proto-Sound 3.0

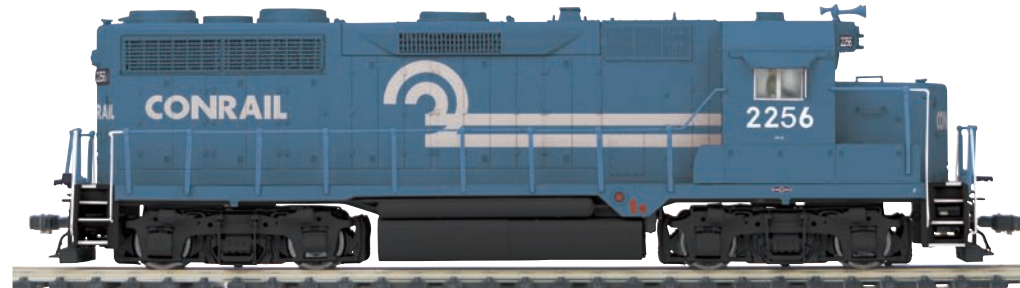
- 80-2239-1 Cab No. 2256 \$279.95
- 80-2240-1 Cab No. 2257 \$279.95
- 80-2241-1 Cab No. 2266 \$279.95

Conrail - GP35 Diesel with DCC/DCS Proto-Sound 3E+

- 80-2239-5 Cab No. 2256 \$299.95
- 80-2240-5 Cab No. 2257 \$299.95
- 80-2241-5 Cab No. 2266 \$299.95

Conrail - GP35 Diesel (DCC Ready)

- 80-2239-0 Cab No. 2256 \$179.95
- 80-2240-0 Cab No. 2257 \$179.95
- 80-2241-0 Cab No. 2266 \$179.95



# EMD GP35

New York Central GP35 Diesel with DCC/DCS Proto-Sound 3.0

80-2163-1	Cab Number 6131	\$279.95
80-2164-1	Cab Number 6133	\$279.95
80-2165-1	Cab Number 6142	\$279.95

New York Central GP35 Diesel with DCC/DCS Proto-Sound 3E+

80-2163-5	Cab Number 6131	\$299.95
80-2165-5	Cab Number 6142	\$299.95

New York Central GP35 Diesel DCC-Ready

80-2163-0	Cab Number 6580	\$179.95
80-2164-0	Cab Number 6133	\$179.95
80-2165-0	Cab Number 6142	\$179.95



Union Pacific GP35 Diesel with DCC/DCS Proto-Sound 3.0

80-2172-1	Cab Number 750	\$279.95
80-2173-1	Cab Number 756	\$279.95
80-2174-1	Cab Number 759	\$279.95

Union Pacific GP35 Diesel with DCC/DCS Proto-Sound 3E+

80-2172-5	Cab Number 750	\$299.95
80-2173-5	Cab Number 756	\$299.95
80-2174-5	Cab Number 759	\$299.95

Union Pacific GP35 Diesel DCC-Ready

80-2172-0	Cab Number 750	\$179.95
80-2173-0	Cab Number 756	\$179.95
80-2174-0	Cab Number 759	\$179.95



Pennsylvania GP35 Diesel with DCC/DCS Proto-Sound 3.0

80-2160-1	Cab Number 2258	\$279.95
80-2161-1	Cab Number 2268	\$279.95
80-2162-1	Cab Number 2273	\$279.95

Pennsylvania GP35 Diesel with DCC/DCS Proto-Sound 3E+

80-2160-5	Cab Number 2258	\$299.95
80-2161-5	Cab Number 2268	\$299.95

Pennsylvania GP35 Diesel DCC-Ready

80-2160-0	Cab Number 2258	\$179.95
80-2161-0	Cab Number 2268	\$179.95
80-2162-0	Cab Number 2273	\$179.95



Baltimore & Ohio GP35 Diesel with DCC/DCS Proto-Sound 3.0

80-2157-1	Cab Number 3541	\$279.95
80-2158-1	Cab Number 3544	\$279.95
80-2159-1	Cab Number 3555	\$279.95

Baltimore & Ohio GP35 Diesel with DCC/DCS Proto-Sound 3E+

80-2157-5	Cab Number 3541	\$299.95
80-2158-5	Cab Number 3544	\$299.95
80-2159-5	Cab Number 3555	\$299.95

Baltimore & Ohio GP35 Diesel DCC-Ready

80-2157-0	Cab Number 3541	\$179.95
80-2158-0	Cab Number 3544	\$179.95
80-2159-0	Cab Number 3555	\$179.95





Southern Pacific GP35 Diesel with DCC/DCS Proto-Sound 3.0		
80-2175-1	Cab Number 6580	\$279.95
80-2176-1	Cab Number 6582	\$279.95
80-2177-1	Cab Number 6587	\$279.95
Southern Pacific GP35 Diesel with DCC/DCS Proto-Sound 3E+		
80-2175-5	Cab Number 6580	\$299.95
80-2176-5	Cab Number 6582	\$299.95
80-2177-5	Cab Number 6587	\$299.95
Southern Pacific GP35 Diesel DCC-Ready		
80-2175-0	Cab Number 6580	\$179.95
80-2176-0	Cab Number 6582	\$179.95
80-2177-0	Cab Number 6587	\$179.95

Norfolk & Western GP35 Diesel with DCC/DCS Proto-Sound 3.0		
80-2166-1	Cab Number 1304	\$279.95
80-2167-1	Cab Number 1305	\$279.95
80-2168-1	Cab Number 1307	\$279.95
Norfolk & Western GP35 Diesel with DCC/DCS Proto-Sound 3E+		
80-2167-5	Cab Number 1305	\$299.95
Norfolk & Western GP35 Diesel DCC-Ready		
80-2166-0	Cab Number 1304	\$179.95
80-2167-0	Cab Number 1305	\$179.95
80-2168-0	Cab Number 1307	\$179.95



**All Proto-Sound Models  
Include Onboard  
DCC Receiver**



Santa Fe GP35 Diesel with DCC/DCS Proto-Sound 3.0		
80-2178-1	Cab Number 1438	\$279.95
80-2179-1	Cab Number 1441	\$279.95
80-2180-1	Cab Number 1449	\$279.95
Santa Fe GP35 Diesel with DCC/DCS Proto-Sound 3E+		
80-2178-5	Cab Number 1438	\$299.95
80-2179-5	Cab Number 1441	\$299.95
80-2180-5	Cab Number 1449	\$299.95
Santa Fe GP35 Diesel DCC-Ready		
80-2178-0	Cab Number 1438	\$179.95
80-2179-0	Cab Number 1441	\$179.95
80-2180-0	Cab Number 1449	\$179.95

Erie Lackawanna GP35 Diesel with DCC/DCS Proto-Sound 3.0		
80-2169-1	Cab Number 2551	\$279.95
80-2170-1	Cab Number 2552	\$279.95
80-2171-1	Cab Number 2554	\$279.95
Erie Lackawanna GP35 Diesel with DCC/DCS Proto-Sound 3E+		
80-2170-5	Cab Number 2552	\$299.95
Erie Lackawanna GP35 Diesel DCC-Ready		
80-2169-0	Cab Number 2551	\$179.95
80-2170-0	Cab Number 2552	\$179.95
80-2171-0	Cab Number 2554	\$179.95



# Alco FA-1



## All Proto-Sound Models Include Onboard DCC Receiver

The American Locomotive Company, one of the nation's premier steam locomotive builders, joined forces with Schenectady, New York neighbor General Electric to build the first standardized diesel-electric locomotives in the 1920s. But when the diesel revolution began in earnest after World War II, dependability problems with Alco's model 244 prime mover doomed the company to forever playing second fiddle to industry leader EMD.

The brawny good looks of Alco's FA and PA cab units, however, have endeared them to railfans and modelers for more than half a century. Designed to compete with EMD's FT four axle freight locomotive, the FA-1 contained many of the same design elements but used a new 12-cylinder 244 engine. Many would argue that Alco's FA-1 and successor FA-2 diesels were both handsomer and more powerful looking than their major competitors, EMD's

F3 and F7 "covered wagons." A signature feature of Alco cab units was the striking ribbed grille surrounding the headlight. And while FAs were sold primarily as freight haulers, like EMD's F-units they had room for a passenger-service steam generator at the rear of the engine compartment.

M.T.H. is proud to present the HO FA-1 FA-1 in classic first-generation diesel paint schemes. These streamlined diesels will bring beauty and power to any HO layout. Each Alco FA-1 AB diesel set includes one twin-motored A unit and twin-motored B unit. The A unit has full directional lighting and both the A and B units feature 2 Scale Operating Kadee Compatible Coupler. Like all HO diesel locomotives, the set is equipped with the legendary power and performance of Proto-Sound 3.0.

### Proto-Sound 3E+

The Proto-Sound 3E+ models featured on this page come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies and contain a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This all-new version of Proto-Sound 3.0 can be operated in four different modes: AC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode and Motorola 1 and 2 Command Modes.

## Features

- Intricately Detailed ABS Bodies
- Metal Chassis
- Moveable Roof Fans
- Metal Body Side Grilles
- (2) Engineer Cab Figures
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- NEM 340 Metal Wheels\*
- (2) Operating Kadee Compatible Remote Controlled Proto-Couplers
- (2) NEM 360/362 Coupler & Pocket Assemblies\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant Voltage LED Headlights
- Lighted Cab Interior
- Illuminated Number Boards
- Lighted Marker Lights
- Operating MARS Light\*\*
- 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
- Unit Measures: 14" x 1 3/8" x 2 1/16"
- Operates On 22" Radius Curves
- 3E+ Model Operates On R2 (437.5mm) Radius Curves

\*Available on Proto-Sound 3E+ Models  
\*\* Where Prototypical





Soo Line - Alco FA-1 A/B Set, A Unit No. 2221A & 2221B  
 80-2200-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2200-5 DCC/DCS Proto-Sound 3E+ \$529.95  
 80-2200-0 DCC Ready \$309.95

Soo Line - Alco FA-1 A Unit, Cab No. 2222A  
 80-2201-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2201-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2201-0 DCC Ready \$169.95

Soo Line - Alco FB-1 B Unit, Cab No. 2222B  
 80-2202-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2202-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2202-0 DCC Ready \$169.95



Erie - Alco FA-1 A/B Set, A Unit No. 725A, B Unit No. 725B  
 80-2212-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2212-5 DCC/DCS Proto-Sound 3E+ \$529.95  
 80-2212-0 DCC Ready \$309.95

Erie - Alco FA-1 A Unit, Cab No. 729A  
 80-2213-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2213-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2213-0 DCC Ready \$169.95

Erie - Alco FB-1 B Unit, Cab No. 729B  
 80-2214-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2214-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2214-0 DCC Ready \$169.95



New Haven - Alco FA-1 A/B Set, A Unit No. 0419, B Unit No. 0459  
 80-2203-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2203-5 DCC/DCS Proto-Sound 3E+ \$529.95  
 80-2203-0 DCC Ready \$309.95

New Haven - Alco FA-1 A Unit, Cab No. 0424  
 80-2204-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2204-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2204-0 DCC Ready \$169.95

New Haven - Alco FB-1 B Unit, Cab No. 0464  
 80-2205-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2205-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2205-0 DCC Ready \$169.95



New York Central - Alco FA-1 A/B Set, A Unit No. 1030, B Unit No. 2320  
 80-2209-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2209-5 DCC/DCS Proto-Sound 3E+ \$529.95  
 80-2209-0 DCC Ready \$309.95

New York Central - Alco FA-1 A Unit, Cab No. 1010  
 80-2210-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2210-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2210-0 DCC Ready \$169.95

New York Central - Alco FB-1 B Unit, Cab No. 2300  
 80-2211-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2211-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2211-0 DCC Ready \$169.95



Canadian Pacific - Alco FA-1 A/B Set, A Unit No. 4025, B Unit No. 4410  
 80-2206-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2206-5 DCC/DCS Proto-Sound 3E+ \$529.95  
 80-2206-0 DCC Ready \$309.95

Canadian Pacific - Alco FA-1 A Unit, Cab No. 4016  
 80-2207-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2207-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2207-0 DCC Ready \$169.95

Canadian Pacific - Alco FB-1 B Unit, Cab No. 4406  
 80-2208-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2208-5 DCC/DCS Proto-Sound 3E+ \$289.95  
 80-2208-0 DCC Ready \$169.95



# Alco FA-1



Pennsylvania- Alco FA-1 A/B Set, Cab Numbers 9600-A & 9600-B  
 80-2277-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2092-0 DCC Ready \$309.95

Pennsylvania - Alco FA-1 A Unit, Cab Number 9601-A  
 80-2278-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2093-0 DCC Ready \$169.95

Pennsylvania - Alco FB-1 B Unit, Cab Number 9601-B  
 80-2094-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2094-0 DCC Ready \$169.95



Union Pacific- Alco FA-1 A/B Set, Cab Numbers 1501A & 1525B  
 80-2103-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2103-0 DCC Ready \$309.95

Union Pacific - Alco FA-1 A Unit, Cab Number 1500A  
 80-2104-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2104-0 DCC Ready \$169.95

Union Pacific - Alco FB-1 B Unit, Cab Number 1524B  
 80-2105-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2105-0 DCC Ready \$169.95





Lehigh Valley - Alco FA-1 A/B Set, Cab Numbers 530 & 531  
 80-2098-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2098-0 DCC Ready \$309.95

Lehigh Valley - Alco FA-1 A Unit, Cab Number 542  
 80-2099-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2099-0 DCC Ready \$169.95

Lehigh Valley - Alco FB-1 B Unit, Cab Number 543  
 80-2100-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2100-0 DCC Ready \$169.95



Great Northern- Alco FA-1 A/B Set, Cab Numbers 310A & 310B  
 80-2101-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2101-0 DCC Ready \$309.95

Great Northern - Alco FA-1 A Unit, Cab Number 310C  
 80-2102-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2102-0 DCC Ready \$169.95

## All Proto-Sound Models Include Onboard DCC Receiver



Reading - Alco FA-1 A/B Set, Cab Numbers 300A & 300B  
 80-2095-1 DCC/DCS Proto-Sound 3.0 \$489.95  
 80-2095-0 DCC Ready \$309.95  
 Reading - Alco FA-1 A Unit, Cab Number 301A  
 80-2096-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2096-0 DCC Ready \$169.95  
 Reading - Alco FB-1 B Unit, Cab Number 301B  
 80-2097-1 DCC/DCS Proto-Sound 3.0 \$269.95  
 80-2097-0 DCC Ready \$169.95

# Alco PA



## All Proto-Sound Models Include Onboard DCC Receiver

The PA was Alco's glamour girl. While Electro-Motive's E-units easily outsold Alco's passenger engine, the PA is widely regarded as the most beautiful first-generation diesel — period. Perhaps no other locomotive looked so right at the head of the streamlined trains of the late forties and fifties that were the last hurrah of American long-distance passenger service. The 294 PA's and cabless PB's built between 1946 and 1953 powered some of America's most famous name trains, from the Southern Pacific's Daylight to the New York Central's Empire State Express.

The muscular PA profile and its elegant nose, with the characteristic grille around the headlight, were designed by Ray Patten, General Electric's head of industrial design. At the time, GE and Alco were partners in the locomotive business, with GE making the electrical equipment for all Alco diesels. Patten's design was described as "a locomotive so distinctive and so powerful looking that it actually helps railroads sell their services to passengers

and shippers." While Alco would later fall by the wayside, GE went on to become America's largest locomotive builder by the early 1990's.

Under the hood of the PA beat a 16-cylinder model 244 prime mover that developed 2000 hp. Depending on their gearing, PA's could hustle a passenger consist along at up to 100 mph. Railfans gave the PAs and other Alcos the tongue-in-cheek title of "honorary steam locomotives" in recognition of the black smoke they produced when starting or accelerating, until the turbo-charger came up to speed.

Recreate the excitement of first-class passenger travel in the middle of the last century, with these Alco PA locomotives and matching passenger sets. Our ProtoSound 3.0 sound and control system brings you the authentic sounds of an Alco prime mover and station announcements for name trains of the 1940s and

'50s — along with the ability to start your train so gently you won't spill the water in the diner and then accelerate up to scale speeds of over 100 mph, just like the prototype.

### Proto-Sound 3E+

The Proto-Sound 3E+ models featured on this page come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies and contain a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This all-new version of Proto-Sound 3.0 can be operated in four different modes: AC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode and Motorola 1 and 2 Command Modes.

## Features

- Intricately Detailed ABS Bodies
- Metal Chassis
- Moveable Roof Fans
- Metal Body Side Grilles
- (2) Engineer Cab Figures In Each A Unit
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- NEM 340 Metal Wheels\*
- (2) Operating Kadee Compatible Remote Controlled Proto-Couplers

- (2) NEM 360/362 Coupler & Pocket Assemblies\*
- #18 U.S. Kadee® Coupler Compatible\*
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant Voltage LED Headlight
- Lighted Cab Interior
- Illuminated Number Boards
- Lighted Marker Lights
- Operating MARS Light\*\*
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor

- Operating Smoke Unit
- 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 Passenger Station Proto-Effects
- A Unit Measures: 9 1/4" x 1 3/8" x 2 1/8"
- B Unit Measures: 8 3/4" x 1 3/8" x 2 1/8"
- Operates On 22" Radius Curves
- 3E+ Model Operates On R2 (437.5mm) Radius Curves

\*Available on Proto-Sound 3E+ Models

\*\* Where Prototypical

See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)







Pennsylvania - Alco PA A/B Set, A Unit No. 5756,  
B Unit No. 5756B

80-2215-1	DCC/DCS Proto-Sound 3.0	\$529.95
80-2215-5	DCC/DCS Proto-Sound 3E+	\$569.95
80-2215-0	DCC Ready	\$349.95

Pennsylvania - Alco PA A Unit, Cab No. 5755

80-2216-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2216-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2216-0	DCC Ready	\$189.95

Pennsylvania - Alco PA B Unit, Cab No. 5752B

80-2217-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2217-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2217-0	DCC Ready	\$189.95



Missouri Pacific - Alco PA A/B Set, A Unit No. 8013,  
B Unit No. 8017

80-2224-1	DCC/DCS Proto-Sound 3.0	\$529.95
80-2224-5	DCC/DCS Proto-Sound 3E+	\$569.95
80-2224-0	DCC Ready	\$349.95

Missouri Pacific - Alco PA A Unit, Cab No. 8008

80-2225-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2225-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2225-0	DCC Ready	\$189.95

Missouri Pacific - Alco PA B Unit, Cab No. 8010

80-2226-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2226-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2226-0	DCC Ready	\$189.95



Union Pacific - Alco PA A/B Set, A Unit No. 600,  
B Unit No. 600B

80-2218-1	DCC/DCS Proto-Sound 3.0	\$529.95
80-2218-5	DCC/DCS Proto-Sound 3E+	\$569.95
80-2218-0	DCC Ready	\$349.95

Union Pacific - Alco PA A Unit, Cab No. 602

80-2219-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2219-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2219-0	DCC Ready	\$189.95

Union Pacific - Alco PA B Unit, Cab No. 602B

80-2220-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2220-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2220-0	DCC Ready	\$189.95



Lehigh Valley - Alco PA A/B Set, A Unit No. 607,  
B Unit No. 608

80-2221-1	DCC/DCS Proto-Sound 3.0	\$529.95
80-2221-5	DCC/DCS Proto-Sound 3E+	\$569.95
80-2221-0	DCC Ready	\$349.95

Lehigh Valley - Alco PA A Unit, Cab No. 610

80-2222-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2222-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2222-0	DCC Ready	\$189.95

Lehigh Valley - Alco PA B Unit, Cab No. 614

80-2223-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2223-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2223-0	DCC Ready	\$189.95



Nickel Plate Road - Alco PA A/B Set, A Unit Nos. 180 & 186

80-2227-1	DCC/DCS Proto-Sound 3.0	\$529.95
80-2227-5	DCC/DCS Proto-Sound 3E+	\$569.95
80-2227-0	DCC Ready	\$349.95

Nickel Plate Road - Alco PA A Unit, Cab No. 187

80-2228-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2228-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2228-0	DCC Ready	\$189.95

Nickel Plate Road - Alco PA B Unit, Cab No. 190

80-2229-1	DCC/DCS Proto-Sound 3.0	\$289.95
80-2229-5	DCC/DCS Proto-Sound 3E+	\$309.95
80-2229-0	DCC Ready	\$189.95



# Alco PA



New Haven - Alco PA A-A Set, Cab Number 0760 & 0767  
80-2083-0 DCC Ready \$349.95

New Haven - Alco PA A Unit, Cab Number 0785  
80-2084-1 DCC/DCS Proto-Sound 3.0 \$289.95  
80-2084-0 DCC Ready \$189.95



Denver & Rio Grande - Alco PA A-B Set With DCC/DCS Proto-Sound 3.0  
80-2270-1 DCC/DCS Proto-Sound 3.0 \$529.95  
80-2077-0 DCC Ready \$349.95

Denver & Rio Grande - Alco PA A Unit With DCC/DCS Proto-Sound 3.0  
80-2271-1 DCC/DCS Proto-Sound 3.0 \$289.95  
80-2078-0 DCC Ready \$189.95

Denver & Rio Grande - Alco PA B Unit With DCC/DCS Proto-Sound 3.0  
80-2079-1 DCC/DCS Proto-Sound 3.0 \$289.95  
80-2079-0 DCC Ready \$189.95



Santa Fe - Alco PA A-B Set, Cab Number 70 & 70A  
80-2272-1 DCC/DCS Proto-Sound 3.0 \$529.95  
80-2272-0 DCC Ready \$349.95

Santa Fe - Alco PA A Unit, Cab Number 62  
80-2081-1 DCC/DCS Proto-Sound 3.0 \$289.95  
80-2273-0 DCC Ready \$189.95

Santa Fe - Alco PA B Unit, Cab Number 62A  
80-2082-1 DCC/DCS Proto-Sound 3.0 \$289.95  
80-2279-0 DCC Ready \$189.95



Delaware & Hudson - Alco PA A-B Set, Cab Number 16 & 18  
 80-2089-1 DCC/DCS Proto-Sound 3.0 \$449.95  
 80-2089-0 DCC Ready \$349.95

Delaware & Hudson - Alco PA A Unit, Cab Number 19  
 80-2090-1 DCC/DCS Proto-Sound 3.0 \$289.95  
 80-2090-0 DCC Ready \$189.95

**Featuring Stainless Steel Finish**



Erie - Alco PA A-A Set, Cab Number 854 & 858  
 80-2086-1 DCC/DCS Proto-Sound 3.0 \$449.95  
 80-2086-0 DCC Ready \$349.95

Erie - Alco PA A Unit, Cab Number 856  
 80-2087-1 DCC/DCS Proto-Sound 3.0 \$289.95  
 80-2087-0 DCC Ready \$189.95

**All Proto-Sound Models Include Onboard DCC Receiver**



**Featuring Stainless Steel Finish**

# EMD F3



## All Proto-Sound Models Include Onboard DCC Receiver

From 1942-1945, Electro Motive Division's F-unit was the only road freight diesel built in America. While the War Production Board limited competitors Alco and Baldwin to diesel switcher and steam locomotive production during World War II, EMD's 1,350 hp FT became a runaway best-seller. By war's end, Electro Motive had a lead over its competitors that would last until they closed their doors.

With production restrictions lifted and the U.S. economy humming with pent-up demand, railroads clamored for new diesels to replace a steam fleet exhausted by wartime traffic. In July 1946, EMD introduced a new model F-unit, the F3. Horsepower was upgraded to 1,500 and lessons learned on the FT gave the F3 better reliability and lower maintenance. Under the hood throbbed

an improved 567-series V-12 engine. With 567 inches of displacement per cylinder, this same engine would power virtually the entire first generation of EMD diesel locomotives.

M.T.H. is proud to offer the drama of this postwar locomotive in HO scale. The M.T.H. HO F3 Diesel Sets include Proto-Sound 3.0 offering authentic EMD 567 prime mover sounds, first generation diesel horn and bell, crew station sounds, break sounds, and cab chatter. The F3 features superb detailing that characterizes all M.T.H. HO diesels, with added-on details that include legible builder's plates, grab irons, multiple-unit hoses, rooftop lift rings, see-through rooftop fans, steam generator exhaust stack (for passenger versions), windshield wipers, and trucks with separately-applied spring hangers, brake cylinders, and air pipes.

### Proto-Sound 3E+

The Proto-Sound 3E+ models featured on this page come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies and contain a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This all-new version of Proto-Sound 3.0 can be operated in four different modes: AC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode and Motorola 1 and 2 Command Modes.

## Features

- Intricately Detailed ABS Bodies
- Metal Chassis
- Moveable Roof Fans
- Metal Body Side Grilles
- (2) Engineer Cab Figures In Each A Unit
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- (2) Operating Kadee Compatible Remote Controlled Proto-Couplers
- (2) #158 Scale Kadee Whisker Couplers
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant Voltage LED Headlight
- Lighted Cab Interior
- Illuminated Number Boards
- Lighted Marker Lights
- Operating MARS Light\*\*
- 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 Passenger Station Proto-Effects
- A Unit Measures: 7" x 1 7/16" x 2 3/8"
- B Unit Measures: 7" x 1 7/16" x 2 3/8"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R1 (360mm) Radius Curves

\*Available on Proto-Sound 3E+ Models

\*\* Where Prototypical



Denver & Rio Grande - F3 A/B Set, A Unit No. 5524,  
B Unit No. 5523  
80-2197-1 DCC/DCS Proto-Sound 3.0 \$489.95  
80-2197-5 DCC/DCS Proto-Sound 3E+ \$529.95  
80-2197-0 DCC Ready \$309.95

Denver & Rio Grande - F3 A Unit, Cab No. 5531  
80-2198-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2198-5 DCC Proto-Sound 3E+ \$289.95  
80-2198-0 DCC Ready \$169.95

Denver & Rio Grande - F3 B Unit, Cab No. 5532  
80-2199-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2199-5 DCC/DCS Proto-Sound 3E+ \$289.95  
80-2199-0 DCC Ready \$169.95



Southern Pacific - F3 A/B Set, A Unit No. 6103, B Unit No. 8039  
80-2191-1 DCC/DCS Proto-Sound 3.0 \$489.95  
80-2191-5 DCC/DCS Proto-Sound 3E+ \$529.95  
80-2191-0 DCC Ready \$309.95

Southern Pacific - F3 A Unit, Cab No. 6139  
80-2192-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2192-5 DCC/DCS Proto-Sound 3E+ \$289.95  
80-2192-0 DCC Ready \$169.95

Southern Pacific - F3 B Unit, Cab No. 8039  
80-2193-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2193-5 DCC/DCS Proto-Sound 3E+ \$289.95  
80-2193-0 DCC Ready \$169.95



Union Pacific - F3 A/B Set, A Unit No. 1404A, B Unit No. 1442B  
80-2188-1 DCC/DCS Proto-Sound 3.0 \$489.95  
80-2188-5 DCC/DCS Proto-Sound 3E+ \$529.95  
80-2188-0 DCC Ready \$309.95

Union Pacific - F3 A Unit, Cab No. 1441A  
80-2189-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2189-5 DCC/DCS Proto-Sound 3E+ \$289.95  
80-2189-0 DCC Ready \$169.95

Union Pacific - F3 B Unit, Cab No. 1471B  
80-2190-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2190-5 DCC/DCS Proto-Sound 3E+ \$289.95  
80-2190-0 DCC Ready \$169.95



Santa Fe - F3 A/B Set, A Unit No. 18, B Unit No. 18A  
80-2185-1 DCC/DCS Proto-Sound 3.0 \$489.95  
80-2185-5 DCC/DCS Proto-Sound 3E+ \$529.95  
80-2185-0 DCC Ready \$309.95

Santa Fe - F3 A Unit, Cab No. 18C  
80-2186-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2186-5 DCC/DCS Proto-Sound 3E+ \$289.95  
80-2186-0 DCC Ready \$169.95

Santa Fe - F3 B Unit, Cab No. 18B  
80-2187-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2187-5 DCC/DCS Proto-Sound 3E+ \$289.95  
80-2187-0 DCC Ready \$169.95



Pennsylvania - F3 A/B Set, A Unit No. 9501, B Unit No. 9501B  
80-2194-1 DCC/DCS Proto-Sound 3.0 \$489.95  
80-2194-5 DCC/DCS Proto-Sound 3E+ \$529.95  
80-2194-0 DCC Ready \$309.95

Pennsylvania - F3 A Unit, Cab No. 9505  
80-2195-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2195-5 DCC/DCS Proto-Sound 3E+ \$289.95  
80-2195-0 DCC Ready \$169.95

Pennsylvania - F3 B Unit, Cab No. 9505B  
80-2196-1 DCC/DCS Proto-Sound 3.0 \$269.95  
80-2196-5 DCC/DCS Proto-Sound 3E+ \$289.95  
80-2196-0 DCC Ready \$169.95



# EMD F7



## All Proto-Sound Models Include Onboard DCC Receiver

The F7 was the zenith of the “covered wagon,” or carbody-style diesel. With 3,849 units built between 1949 and 1953, the F7 was both the most popular carbody diesel and its last hurrah. By 1954 U.S. railroads had virtually stopped ordering F-units in favor of hood units like EMD’s GP9 and Alco’s RS-3. The side walkways of hood units offered better access for maintenance and better visibility for backup moves, making them truly universal locomotives useful for both mainline runs and road switching.

Externally, the F7 was very similar to the earlier F3. The key spotting features that distinguished an F7 were its stainless steel upper body grilles that replaced the “chicken wire” worn by most F3s, and the rooftop dynamic brake fan that replaced the F3’s rectangular roof vents just behind the cab. Internally, the F7 was also an

evolution of the F3. While horsepower was the same, new D27 traction motors allowed the F7 to handle a heavier load.

Capture the excitement of the first-generation diesel era with our superbly detailed, smooth-running F7s. Throttle down as low as 3 scale miles per hour with any load or roll along at the prototype’s maximum speed of 102 mph with passenger gearing. Proto-Sound 3.0 offers authentic EMD 567 prime mover sounds, a first-generation diesel horn and bell, and crew and station sounds. Added-on details include legible builder’s plates, grab irons, multiple-unit hoses, rooftop lift rings, see-through side grilles and rooftop fan housings, steam generator exhaust stack (for passenger versions), windshield wipers, and our super-detailed Blomberg trucks.

### Proto-Sound 3E+

The Proto-Sound 3E+ models featured on this page come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies and contain a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This all-new version of Proto-Sound 3.0 can be operated in four different modes: AC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode and Motorola 1 and 2 Command Modes.

## Features

- Intricately Detailed ABS Body
- Metal Chassis
- Metal Handrails and Decorative Horn
- Moveable Roof Fans
- Metal Body Side Grilles
- (2) Engineer Cab Figures
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- NEM 340 Metal Wheels\*
- (2) Operating Kadee Compatible Remote Controlled Proto-Couplers
- (2) #158 Scale Kadee Whisker Couplers
- (2) NEM 360/362 Coupler & Pocket Assemblies\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant Voltage LED Headlight
- Lighted Cab Interior
- Illuminated Number Boards
- Lighted Marker Lights
- Operating MARS Light\*\*
- 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 Passenger Station Proto-Effects
- A-Unit Measures: 7" x 1 7/16" x 2 3/8"
- B-Unit Measures: 6 7/8" x 1 7/16" x 2 3/8"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R1 (360mm) Radius Curves

\*Available on Proto-Sound 3E+ Models

\*\* Where Prototypical

See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)





Northern Pacific - F7 A/B Set, Cab Numbers 6511A & 6511B		
80-2120-1	DCC/DCS Proto-Sound 3.0	\$489.95
80-2120-0	DCC Ready	\$309.95
Northern Pacific - F7 A Unit, Cab Number 6511C		
80-2121-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2121-0	DCC Ready	\$169.95
Northern Pacific - F7 B Unit, Cab Number 6512B		
80-2122-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2122-0	DCC Ready	\$169.95

Erie Lackawanna - F7 A/B Set, Cab Numbers 6111 & 6112

80-2123-1	DCC/DCS Proto-Sound 3.0	\$489.95
80-2123-0	DCC Ready	\$309.95
Erie Lackawanna - F7 A Unit, Cab Number 6351		
80-2124-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2124-0	DCC Ready	\$169.95
Erie Lackawanna - F7 B Unit, Cab Number 6332		
80-2125-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2125-0	DCC Ready	\$169.95



Western Maryland - F7 A/B Set, Cab Numbers 60 & 59B		
80-2111-1	DCC/DCS Proto-Sound 3.0	\$489.95
80-2111-0	DCC Ready	\$309.95
Western Maryland - F7 A Unit, Cab Number 54		
80-2112-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2112-0	DCC Ready	\$169.95
Western Maryland - F7 B Unit, Cab Number 53B		
80-2113-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2113-0	DCC Ready	\$169.95

Santa Fe - F7 A/B Set, Cab Numbers 304 & 342B

80-2114-1	DCC/DCS Proto-Sound 3.0	\$469.95
80-2114-0	DCC Ready	\$309.95
Santa Fe - F7 A Unit, Cab Number 315		
80-2115-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2115-5	DCC/DCS Proto-Sound 3E+	\$289.95
80-2115-0	DCC Ready	\$169.95
Santa Fe - F7 B Unit, Cab Number 345B		
80-2116-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2116-5	DCC/DCS Proto-Sound 3E+	\$289.95
80-2116-0	DCC Ready	\$169.95



Chesapeake & Ohio - F7 A/B Set, Cab Numbers 7016 & 7508		
80-2108-1	DCC/DCS Proto-Sound 3.0	\$489.95
80-2108-0	DCC Ready	\$309.95
Chesapeake & Ohio - F7 A Unit, Cab Number 7017		
80-2109-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2109-0	DCC Ready	\$169.95
Chesapeake & Ohio - F7 B Unit, Cab Number 7509		
80-2110-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2110-0	DCC Ready	\$169.95

Santa Fe - F7 A/B Set, Cab Numbers 39L & 39A

80-2117-1	DCC/DCS Proto-Sound 3.0	\$489.95
80-2117-0	DCC Ready	\$309.95
Santa Fe - F7 A Unit, Cab Number 39C		
80-2118-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2118-0	DCC Ready	\$169.95
Santa Fe - F7 B Unit, Cab Number 39B		
80-2119-1	DCC/DCS Proto-Sound 3.0	\$269.95
80-2119-0	DCC Ready	\$169.95



# SD70ACe



The SD70ACe is Electro-Motive Diesel's hope for the future. While designed to meet the Environmental Protection Agency's Tier-2 emissions requirements that took effect on January 1, 2005, this replacement for the SD70MAC also has a higher purpose: to recapture the lead in North American locomotive sales that EMD lost to General Electric in 1987.

Other than the prime mover, however, virtually every element of the SD70ACe has been 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 caboosees. 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 man standing outside the engine — rather than crawling around at the bottom of the engine room. And the time between service intervals has been doubled, from every three months to every six months.

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. Today they are rostered by nearly every North American Class 1 railroad. At the present time, mainline American railroads generally maintain dual fleets of locomotives. AC power is used for heavy coal hauling and hotshot intermodal traffic because AC traction motors offer higher starting tractive effort with the same horsepower. Less expensive, traditional DC power is used

for more mundane duties. But with the SD70ACe, Electro-Motive hopes it may have the 21st Century successor to its 1949 Geep — a locomotive that can be nearly all things to all railroads.

## Proto-Sound 3E+

The Proto-Sound 3E+ models featured on this page come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies and contain a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This all-new version of Proto-Sound 3.0 can be operated in four different modes: AC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode and Motorola 1 and 2 Command Modes.





Union Pacific - SD70ACe Diesel Engine Comfort Cab, Cab No. 8627

80-2250-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2250-5	DCC/DCS Proto-Sound 3E+	\$319.95
80-2250-0	DCC Ready	\$199.95

Union Pacific - SD70ACe Diesel Engine Comfort Cab, Cab No. 8634

80-2251-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2251-5	DCC/DCS Proto-Sound 3E+	\$319.95
80-2251-0	DCC Ready	\$199.95

Union Pacific - SD70ACe Diesel Engine Comfort Cab, Cab No. 8640

80-2252-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2252-5	DCC/DCS Proto-Sound 3E+	\$319.95
80-2252-0	DCC Ready	\$199.95



CSX - SD70ACe Diesel Engine Comfort Cab, No. 4842

80-2256-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2256-5	DCC/DCS Proto-Sound 3E+	\$319.95
80-2256-0	DCC Ready	\$199.95

CSX - SD70ACe Diesel Engine Comfort Cab, No. 4845

80-2257-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2257-5	DCC/DCS Proto-Sound 3E+	\$319.95
80-2257-0	DCC Ready	\$199.95

CSX - SD70ACe Diesel Engine Comfort Cab, No. 4847

80-2258-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2258-5	DCC/DCS Proto-Sound 3E+	\$319.95
80-2258-0	DCC Ready	\$199.95



BNSF - SD70ACe Diesel Engine Comfort Cab, No. 9185

80-2253-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2253-5	DCC/DCS Proto-Sound 3E+	\$319.95
80-2253-0	DCC Ready	\$199.95

BNSF - SD70ACe Diesel Engine Comfort Cab, No. 9189

80-2254-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2254-5	DCC/DCS Proto-Sound 3E+	\$319.95
80-2254-0	DCC Ready	\$199.95

BNSF - SD70ACe Diesel Engine Comfort Cab, No. 9199

80-2255-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2255-5	DCC/DCS Proto-Sound 3E+	\$319.95
80-2255-0	DCC Ready	\$199.95

## Features

- Intricately Detailed ABS Body
- Die-Cast Metal Chassis
- Metal Handrails and Decorative 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
- NEM 340 Metal Wheels\*
- (2) Operating Kadee Compatible Remote Controlled Proto-Couplers
- (2) #158 Scale Kadee Whisker Couplers
- (2) NEM 360/362 Coupler & Pocket Assemblies\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting

- Directionally Controlled Constant voltage LED Headlights
- Lighted Cab Interior
- Illuminated Number Boards
- Operating 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
- Measures: 10 9/16" x 1 7/16" x 2 3/16"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R2 (437.5mm) Radius Curves

\*Available on Proto-Sound 3E+ Models

## All Proto-Sound Models Include Onboard DCC Receiver

# SD70ACe



- EMD Demonstrator - SD70ACe Diesel Engine, Cab No. GM70
- 80-2259-1 DCC/DCS Proto-Sound 3.0 \$299.95
- 80-2259-5 DCC/DCS Proto-Sound 3E+ \$319.95
- 80-2259-0 DCC Ready \$199.95
- EMD Demonstrator - SD70ACe Diesel Engine, Cab No. GM71
- 80-2260-1 DCC/DCS Proto-Sound 3.0 \$299.95
- 80-2260-5 DCC/DCS Proto-Sound 3E+ \$319.95
- 80-2260-0 DCC Ready \$199.95
- EMD Demonstrator - SD70ACe Diesel Engine, Cab No. GM73
- 80-2261-1 DCC/DCS Proto-Sound 3.0 \$299.95
- 80-2261-5 DCC/DCS Proto-Sound 3E+ \$319.95
- 80-2261-0 DCC Ready \$199.95



- Western Pacific - SD70ACe Diesel Engine, Cab No. 1983
- 80-2264-1 DCC/DCS Proto-Sound 3.0 \$299.95
- 80-2264-5 DCC/DCS Proto-Sound 3E+ \$319.95
- 80-2264-0 DCC Ready \$199.95



- Kansas City Southern - SD70ACe Diesel Engine, Cab No.'s 4030
- 80-2002-1 DCC/DCS Proto-Sound 3.0 \$299.95

**All Proto-Sound  
Models Include  
Onboard DCC Receiver**

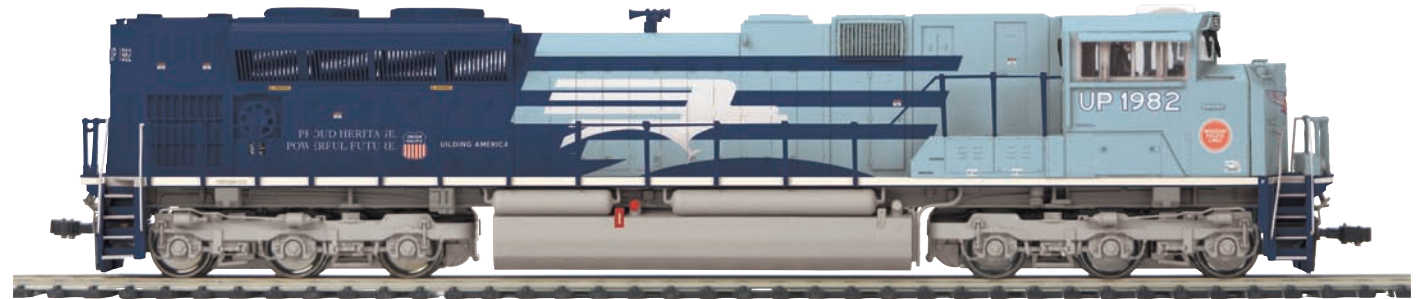


- George H. Bush - SD70ACe Diesel Engine, Cab No. 4141
- 80-2282-1 DCC/DCS Proto-Sound 3.0 \$299.95
- 80-2282-5 DCC/DCS Proto-Sound 3E+ \$319.95
- 80-2282-0 DCC Ready \$199.95



Chicago NorthWestern - SD70ACe Diesel Engine, Cab No. 1995

- 80-2262-1 DCC/DCS Proto-Sound 3.0 \$299.95
- 80-2262-5 DCC/DCS Proto-Sound 3E+ \$319.95
- 80-2262-0 DCC Ready \$199.95



Missouri Pacific - SD70ACe Diesel Engine, Cab No. 1982

- 80-2263-1 DCC/DCS Proto-Sound 3.0 \$299.95
- 80-2263-5 DCC/DCS Proto-Sound 3E+ \$319.95
- 80-2263-0 DCC Ready \$199.95



Katy - SD70ACe Diesel Engine, Cab No. 1988

- 80-2280-1 DCC/DCS Proto-Sound 3.0 \$299.95
- 80-2280-5 DCC/DCS Proto-Sound 3E+ \$319.95
- 80-2280-0 DCC Ready \$199.95



BNSF - SD70ACe Diesel Engine (Comfort Cab), Cab No. 9168

- 80-2138-5 DCC/DCS Proto-Sound 3E+ \$319.95

# SD70ACe



Denver Rio Grande Western - SD70ACe Diesel Engine, Cab No. 1989  
 80-2281-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2281-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2281-0 DCC Ready \$199.95



BNSF - SD70ACe Diesel Engine, Cab No. 9370  
 80-2069-0 DCC Ready \$199.95

BNSF - SD70ACe Diesel Engine, Cab No. 9374  
 80-2070-0 DCC Ready \$199.95

# SD70M-2



Norfolk Southern - SD70M-2 Diesel Engine with DCC/DCS Proto-Sound 3.0  
 80-2265-1 Cab No. 2657 \$299.95  
 80-2266-1 Cab No. 2662 \$299.95  
 80-2267-1 Cab No. 2668 \$299.95

Norfolk Southern - SD70M-2 Diesel Engine with DCC/DCS Proto-Sound 3E+  
 80-2265-5 Cab No. 2657 \$319.95  
 80-2266-5 Cab No. 2662 \$319.95  
 80-2267-5 Cab No. 2668 \$319.95

Norfolk Southern - SD70M-2 Diesel Engine (DCC Ready)  
 80-2265-0 Cab No. 2657 \$199.95  
 80-2266-0 Cab No. 2662 \$199.95  
 80-2267-0 Cab No. 2668 \$199.95

# SD70M-2

**All Proto-Sound  
Models Include  
Onboard DCC Receiver**



Florida East Coast - SD70M-2 Diesel Engine, Cab No. 102  
 80-2021-0 DCC Ready \$199.95  
 Florida East Coast - SD70M-2 Diesel Engine, Cab No. 103  
 80-2022-0 DCC Ready \$199.95



Canadian National - SD70M-2 Diesel Engine, Cab No. 8023  
 80-2028-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2028-0 DCC Ready \$199.95  
 Canadian National - SD70M-2 Diesel Engine, Cab No. 8010  
 80-2027-0 DCC Ready \$199.95



Florida East Coast - SD70M-2 Diesel Engine, Cab No. 106  
 80-2029-0 DCC Ready \$199.95



Florida East Coast - SD70M-2 Diesel Engine, Cab No. 105  
 80-2030-0 DCC Ready \$199.95  
 Florida East Coast - SD70M-2 Diesel Engine, Cab No. 107  
 80-2031-0 DCC Ready \$199.95

# NORFOLK SOUTHERN



Celebrate Norfolk Southern's 30th Anniversary with your favorite heritage railroads in select HO SD70ACe models from M.T.H. Electric Trains. Each of the ten different railroads featured in the real-life series created by Norfolk Southern and used on their fleet of SD70ACe locomotives has been recreated in M.T.H.'s HO roster of our best selling diesel.

New slides have been developed for our SD70ACe tooling, allowing for needed modifications to the model so that the Heritage models will match the real-life appearance of Norfolk

Southern's latest roster additions. The modifications include new grills, nose detail changes, fuel tank filler modifications and a completely new GPS roof antennae.

Like our regular HO SD70ACe model, the Norfolk Southern Heritage units will be available in a variety of configurations, including DCC-Ready, Proto-Sound 3.0 equipped and Proto-Sound 3E+ equipped for 3-Rail HO enthusiasts. No HO manufacturer gives you as many options as those found in our Norfolk Southern Heritage series.

## Proto-Sound 3E+

The Proto-Sound 3E+ models featured on this page come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies and contain a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This all-new version of Proto-Sound 3.0 can be operated in four different modes: AC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode and Motorola 1 and 2 Command Modes.

# HERITAGE SERIES



Virginian - SD70ACe Diesel Engine (Comfort Cab), Cab No.  
 80-2246-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2246-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2246-0 DCC Ready \$199.95



Illinois Terminal - SD70ACe Diesel Engine (Comfort Cab), Cab No.  
 80-2249-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2249-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2249-0 DCC Ready \$199.95

**All Proto-Sound Models Include Onboard DCC Receiver**

## Features

- Intricately Detailed ABS Body
- Die-Cast Metal Chassis
- Metal Handrails and Decorative 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
- NEM 340 Metal Wheels\*
- (2) #158 Scale Kadee Whisker Couplers
- (2) Operating Kadee Compatible Remote Controlled Proto-Couplers
- (2) NEM 360/362 Coupler & Pocket Assemblies\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant voltage LED Headlights
- Lighted Cab Interior
- Illuminated Number Boards
- 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
- Measures: 10 9/16" x 1 7/16" x 2 3/16"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R2 (437.5mm) Radius Curves

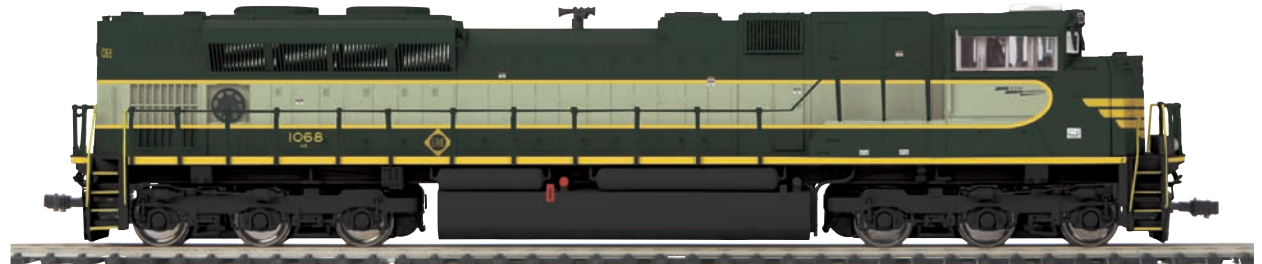
\*Available on Proto-Sound 3E+ Models



# NORFOLK SOUTHERN HERITAGE



Jersey Central - SD70ACe Diesel Engine (Comfort Cab), Cab No.  
 80-2248-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2248-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2248-0 DCC Ready \$199.95



Erie - SD70ACe Diesel Engine (Comfort Cab), Cab No. 1068  
 80-2245-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2245-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2245-0 DCC Ready \$199.95



Savannah & Atlanta - SD70ACe Diesel Engine (Comfort Cab), Cab No. 1065  
 80-2242-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2242-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2242-0 DCC Ready \$199.95

**All Proto-Sound  
 Models Include  
 Onboard DCC Receiver**



Reading - SD70ACe Diesel Engine (Comfort Cab), Cab No. 1067  
 80-2244-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2244-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2244-0 DCC Ready \$199.95



# SERIES SD70ACe



Lackawanna - SD70ACe Diesel Engine (Comfort Cab), Cab No.  
 80-2269-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2269-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2269-0 DCC Ready \$199.95



New York Central - SD70ACe Diesel Engine (Comfort Cab), Cab No. 1066  
 80-2243-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2243-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2243-0 DCC Ready \$199.95



Penn Central - SD70ACe Diesel Engine (Comfort Cab), Cab No.  
 80-2268-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2268-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2268-0 DCC Ready \$199.95



Wabash - SD70ACe Diesel Engine (Comfort Cab), Cab No.  
 80-2247-1 DCC/DCS Proto-Sound 3.0 \$299.95  
 80-2247-5 DCC/DCS Proto-Sound 3E+ \$319.95  
 80-2247-0 DCC Ready \$199.95

# 4500hp Gas Turbine



See it in action at [mthH0trains.com](http://mthH0trains.com)



Returning in 2013, MTH is proud to introduce the UP “Baby” 4500 turbine locomotives, with all the same detailing and features of its bigger brother, the Veranda. Variable intensity smoke, a broad range of sounds, turbine crew conversations, remotely controlled couplers, operating Mars light, built in DCC decoder, and die-cast metal construction, twin flywheel-equipped motors, and four traction tires to provide pulling power all culminate in a model that rivals the prototype.

In the late 1940s, even as it was building diesels in partnership with Alco, General Electric was experimenting with ways to apply its aircraft jet engine technology to railroading. Its gas turbine electric (GTTEL) was basically a diesel engine with a large turbine replacing the diesel as the prime mover. In a turbine, intake air is compressed by spinning turbine blades and fed into combustion chambers, where fuel is added and ignited, as in a jet engine. The hot exhaust gases spin the blades of another turbine that powers one or more generators, which produce electricity to power diesel-type traction motors. Compared with diesels of the period, GE’s GTTEL put three times as much power (4500hp) in one locomotive, had significantly fewer moving parts, and did not vibrate like a diesel. The major drawback was a voracious appetite for fuel.

Undeterred by the failure of its steam turbine prototypes, GE pursued the development of a gas turbine engine, and in June of 1949 UP added the prototype to their roster for further testing. Locomotives #51-60 were then ordered by UP in March of 1951. In their first year of operation the locomotives averaged approximately 4.2 gallons of total fuel per 1,000 gross ton-miles. Union Pacific’s president A.E.(Art) Stoddard referred to the locomotives as “jet propulsion on wheels”, claiming the turbine gas engines “might well revolutionize American railroading”. The Baby 4500hp turbines demonstrated the locomotives’ ability to go faster than diesel engines and appeared, at the time, to be the more economical choice.

While not intended for passenger use, on occasion the gas turbine 4500 locomotive pulled in a streamlined passenger train after a diesel engine would break down. Although the locomotive was not designed for multiple unit operation, they were occasionally double headed, even through long tunnel routes where recirculation of exhaust gases could pose problems. After two years of testing GE’s prototype, the Union Pacific ordered its first ten GTTELs in 1951. The engines were designed to burn Bunker C oil, a byproduct of petroleum distillation that was almost considered waste material.

The low cost of Bunker C more than compensated for the turbines’ high consumption, although the oil was so thick it had to be heated to 240 degrees Fahrenheit to flow through the fuel system. In 1955 auxiliary fuel tenders were added to the locomotives. This additional 24,000 gallons of oil allowed the engines to make longer runs, increasing monthly mileage.

Averaging around 10,000 miles a month (400 turbine operating hours), the locomotive also contained a 250hp diesel engine, which was used to bring the turbine engine up to its firing speed of 700RPM. This allowed the engine to then run fans, pumps, cooling motors, auxiliaries, and allowed the locomotive to move around terminals when running light. Unfortunately, by the early 1960s, the turbines’ use of Bunker C fuel had changed from an advantage to a problem. The plastics industry had found new uses for the former waste product and its price skyrocketed. At the same time, the corrosive nature of the fuel led many of the turbines to develop engine problems. The Verandas were retired in 1963-64 in favor of newer 8500hp Big Blows, and the UP’s entire turbine program was finished by 1970.



Union Pacific - 4500hp Gas Turbine & Tender Set, Cab No. 52  
80-2130-0 DCC Ready \$489.95

## All Proto-Sound Models Include Onboard DCC Receiver



Union Pacific - 4500hp Gas Turbine, Cab No. 52  
80-2126-1 DCC/DCS Proto-Sound 3.0 \$469.95

Union Pacific - 4500hp Gas Turbine, Cab No. 57  
80-2127-1 DCC/DCS Proto-Sound 3.0 \$469.95



## All Models Feature Die-Cast Locomotive & Tender Bodies



Union Pacific - 4500hp Gas Turbine, Cab No. 59  
80-2128-1 DCC/DCS Proto-Sound 3.0 \$469.95

Union Pacific - 4500hp Gas Turbine, Cab No. 55  
80-2129-1 DCC/DCS Proto-Sound 3.0 \$469.95



## Features

- Detailed Die-Cast Locomotive Body
- Die-Cast Metal Chassis
- Authentic Paint Scheme & Cab Numbers
- RP-25 Metal Wheels Mounted On Metal Axles
- Constant Voltage, Directional Headlights
- Prototypical Rule 17 Lighting
- Detailed Truck Sides
- Detailed Cab Interior
- (2) Powerful 12-Volt 5-Pole Precision Skew-Wound Flywheel Equipped Motors
- (1) Scale Kadee Compatible Remotely Controlled Proto-Coupler On Locomotive
- (1) User-Installed Kadee Compatible Magnetic Coupler
- Detailed Handrails and Decorative Bell
- Decorative Detailed Horn
- (2) Engineer Cab Figures
- Operating ProtoSmoke™ System
- Locomotive Speed Control In Scale MPH Increments
- On-Board DCC Receiver
- Operates On Code 70, 83, & 100 Rail Curves
- Proto-Sound 3.0 With The Digital Command System Featuring Freight Yard Proto-Effects™
- Unit Measures: 12 3/4" x 1 3/8" x 2 7/16"
- Operates On 18" Radius Curves

# GG1

## Automatic Directionally Controlled Pantographs



### All Models Include Onboard DCC Receiver

For more than two decades, the Pennsylvania Railroad experimented with locomotive designs in search of a high-speed, mainline passenger electric. That search ended in 1934 with the GG1, a cooperative effort by the PRR, Baldwin, Westinghouse, and General Electric, based largely on neighbor New Haven's successful EP3 juice jack. Industrial designer Raymond Loewy cleaned up the original riveted body to create a design that looked contemporary for half a century.

The GG1 fleet hustled passenger traffic of all types along the Pennsy's multi-track raceway from New York to Washington and west to Harrisburg, including the famed Congressional and Broadway Limited. With 18 Pullmans in tow, a GG1 could hit 100 mph. Regearred for freight service and run as double-head-ers, a pair of GG1s delivered about the same tractive effort as a Union Pacific Big Boy, with virtually no noise, no smoke, much less wear on the track, and significantly less maintenance. Many GG1s racked up more than five million miles of service, outlast-

ing the railroad that built them and serving its two successors, the Penn Central and Conrail. If there were a Locomotive Hall of Fame, the Pennsylvania Railroad GG1 would surely be one of the first inductees.

#### Automatic Pantograph Operation Explained

Users operating the GG1 in conventional mode will find that by depressing the transformer's direction button to stop the locomotive, the rear pantograph will remain in the up position while the lead pantograph slowly rises up. Once the lead pantograph is in its up position, the rear pantograph will slowly lower into the down position. At this point another press of the direction button will cause the locomotive to reverse making the lead pantograph now the rear pantograph and in the up position.

In command operation two operating modes will be offered; auto and manual. Auto mode will behave similar to conventional

mode with the rear pantograph in the up position when moving. The up and down movement of the pantograph will be direction controlled using the DCS Digital Command Control System. In Manual mode, the user will have to raise and lower both pantographs via the DCS System or any 28-Function DCC system as they wish regardless of directional state.

#### Proto-Sound 3E+

The Proto-Sound 3E+ models featured on this page come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies and contain a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This all-new version of Proto-Sound 3.0 can be operated in four different modes: AC Powered Analog/Conventional, DCC Command Mode with any DCC Controller, Märklin DCC Command Mode and Motorola 1 and 2 Command Modes.



Pennsylvania (Tuscan 5-Stripe) - GG1 Electric, Cab No. 4911  
 80-2147-1 DCC/DCS Proto-Sound 3.0 \$469.95  
 80-2147-5 DCC/DCS Proto-Sound 3E+ \$489.95



Pennsylvania (Tuscan Single-Stripe) - GG1 Electric, Cab No. 4916  
 80-2148-1 DCC/DCS Proto-Sound 3.0 \$469.95  
 80-2148-5 DCC/DCS Proto-Sound 3E+ \$489.95



Pennsylvania (Brunswick Green 5-Stripe) - GG1 Electric, Cab No. 4842  
 80-2149-1 DCC/DCS Proto-Sound 3.0 \$469.95  
 80-2149-5 DCC/DCS Proto-Sound 3E+ \$489.95



Pennsylvania (Brunswick Green Single-Stripe) GG1 Electric, Cab No. 4900  
 80-2150-1 DCC/DCS Proto-Sound 3.0 \$469.95  
 80-2150-5 DCC/DCS Proto-Sound 3E+ \$489.95



Pennsylvania (Silver) - GG1 Electric, Cab No. 4866  
 80-2151-1 DCC/DCS Proto-Sound 3.0 \$469.95  
 80-2151-5 DCC/DCS Proto-Sound 3E+ \$489.95



Penn Central - GG1 Electric, Cab No. 4893  
 80-2154-1 DCC/DCS Proto-Sound 3.0 \$469.95  
 80-2154-5 DCC/DCS Proto-Sound 3E+ \$489.95



Conrail - GG1 Electric, Cab No. 4898  
 80-2153-1 DCC/DCS Proto-Sound 3.0 \$469.95  
 80-2153-5 DCC/DCS Proto-Sound 3E+ \$489.95



Amtrak - GG1 Electric, Cab No. 924  
 80-2152-1 DCC/DCS Proto-Sound 3.0 \$469.95  
 80-2152-5 DCC/DCS Proto-Sound 3E+ \$489.95

## Features

- Intricately Detailed Die-Cast Body
- Metal Chassis
- Metal Handrails and Decorative Horn
- Metal Body Side Grilles
- (2) Engineer Cab Figures
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- NEM 340 Metal Wheels\*

## All Models Feature Die-Cast Body

- (2) Operating Kadee Compatible Remote Controlled Proto-Couplers
- (2) #158 Scale Kadee Whisker Couplers
- (2) NEM 360/362 Coupler & Pocket Assemblies\*
- #18 U.S. Kadee® Coupler Compatible\*
- Prototypical Rule 17 Lighting
- Directionally Controlled Constant voltage LED Headlights
- Lighted Cab Interior

- Illuminated Number Boards
- Lighted Marker Lights
- Powerful 5-Pole Precision Flywheel Equipped Skew-Wound Balanced Motor
- Operating Pantographs
- 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 Passenger Station Proto-Effects
- Unit Measures: 11 5/16" x 1 3/8" x 2 7/16"
- Operates On 18" Radius Curves
- 3E+ Model Operates On R2 (437.5mm) Radius Curves

\*Available on Proto-Sound 3E+ Models

# Bi-Polar Electric

**Directionally  
Controlled Operating  
Pantographs!**



See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)

Chicago Milwaukee, St. Paul, and Pacific. The Milwaukee Road's full name described its route perfectly — from the Midwest to the Northwest with not much in between. After Chicago and the Twin Cities, a passenger on the road's Olympian saw virtually nothing but farms, ranches, and mountains for 1500 miles. But in 1919, this sparsely traveled mountainous route seemed the ideal place for the General Electric Company and the Milwaukee Road to prove a point: electric power was the Future of American Railroading. And the five EP-2 Bi-Polars were going to be the engines to do it.

Officially called Bi-Polar Gearless Types, they were vastly superior to the steam locomotives of their day. With 3,200 continuous horsepower, an EP-2 could pull 13 Pullmans up a 2.2% grade, an incredibly steep hill in real-life railroading. When the Bi-Polars were young, their owners and builders delighted in staging pulling contests such as a 1924 "Battle of the Giants," in which a Bi-Polar easily won a tug-of-war against a pair of steam locomotives, a 2-8-0 and a 2-6-6-2.

Unfortunately, the source of the Bi-Polar's advantages was also their chief drawback: that darn overhead wire, which was incredibly expensive to put up. The Milwaukee Road's original plan was to electrify 870 miles of track from central Montana to Puget Sound. But a 1923 bankruptcy left the road without funds to string wire over the middle part of the route. As a result, the Bi-Polars spent most of their lives on the 214-mile Coast Division, hauling passengers between the farming town of Othello and the ports of Tacoma and Seattle.

With prototypical rule 17 lighting, remotely controlled, directionally activated operating pantographs, and the excitement of Proto-Sound 3.0, our die-cast model of this iconic locomotive is certain to make a prized addition to any collection.

**All Models Include  
Onboard DCC Receiver**

## Features

- Die-Cast Body
- Authentic Paint Scheme & Cab Numbers
- RP-25 Metal Wheels Mounted On Metal Axles
- Constant Voltage, Directional Headlights
- Prototypical Rule 17 Lighting
- Remotely Controlled, Directionally Activated Operating Pantographs
- Detailed Truck Sides
- Detailed Cab Interior
- Powerful 12-Volt 5-Pole Precision Skew-Wound Flywheel Equipped Motor
- (2) Scale Kadee® Compatible Remotely Controlled Proto-Couplers
- (2) User-Installed Kadee® Compatible Magnetic Couplers
- Metal Handrails and Decorative Bell
- Decorative Metal Horn
- Locomotive Speed Control In Scale MPH Increments
- Interchangeable Traction Tire-Equipped Drive Wheels
- On-Board DCC Receiver
- Operates On Code 70, 83, & 100 Rail Curves
- Proto-Sound 3.0 With The Digital Command System Featuring Freight Yard Proto-Effects™
- Unit Measures (Pantograph Up): 11 5/16" x 1 3/8" x 3 9/16"
- Operates On 18" Radius Curves



Milwaukee Road (Cat Whiskers - 5 Silver stripes)  
 Bi-Polar Electric With DCC/DCS Proto-Sound 3.0  
 80-2143-1 Cab Number E-4 \$499.95

Milwaukee Road (1948 Olympian)  
 Bi-Polar Electric With DCC/DCS Proto-Sound 3.0  
 80-2141-1 Cab Number E-1 \$499.95



## All Models Feature Die-Cast Body



Milwaukee Road (Yellow & Gray) - Bi-Polar Electric With DCC/DCS Proto-Sound 3.0  
 81-2007-1 Cab Number E-4 \$499.95  
 Milwaukee Road (Yellow & Gray) - Bi-Polar Electric With DCC/DCS Proto-Sound 3.0  
 81-2008-1 Cab Number E-5 \$499.95



# F3



## READY<sup>2</sup>RAIL

The EMD F-unit, built by the Electro-Motive Division of General Motors, was “the diesel that did it” - vanquished the steam engine from American railroads.

In 1939-40, a quartet of F-units barnstormed across 35 states, logging 83,764 miles on 20 railroads and proving once and for all that diesels were the wave of the future. One of EMD’s largest customers was the Pennsylvania Railroad. On Pennsylvania mainlines from the east Coast to Chicago, new EMD diesels displaced the Pennsy-designed steamers that had been the symbols of the “P Company.” While other diesel manufacturers competed with EMD, the various versions of the ubiquitous F unit — FT, F3, and F7 — became the icons of the diesel revolution.

## Features

- Intricately Detailed ABS Body
- Metal Chassis
- 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 Headlight
- 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
- Unit Measures: 7" x 1 7/16" x 2 3/8"
- Operates On 18" Radius Curves





New York Central - F3 Powered A-Unit, Cab No. 1609  
 85-2013-1 Proto-Sound 3.0 \$189.95  
 85-2013-0 DCC-Ready \$109.95



Santa Fe - F3 Powered A-Unit, Cab No. 22  
 85-2014-1 Proto-Sound 3.0 \$189.95  
 85-2014-0 DCC-Ready \$109.95



Union Pacific - F3 Powered A-Unit, Cab No. 1402  
 85-2015-1 Proto-Sound 3.0 \$189.95  
 85-2015-0 DCC-Ready \$109.95



# M.T.H. HO Ready-To-Run Train Sets



**Proto-Sound Sets  
Include Remote Control**

See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)



M.T.H. HO sets are fully compatible with all other brands of HO trains and can serve as the foundation of an HO empire. With an M.T.H. set, you'll experience more fun because it features the sights and sounds that make real trains dramatic and exciting - features that you can control from the handheld Remote Digital Commander as you walk around your layout:

## Speed Control

Many toy trains have two speeds: fast and faster. M.T.H. sets equipped with Proto-Sound sound and control systems allow our engines to throttle down to a s-l-o-w crawl, highball down the main line, or maintain any speed in-between. The Proto-Speed Control built into Proto-Sound locomotives acts like the cruise control on a car, keeping your train moving at the speed you select, regardless of hills and curves.

## Vivid Engine Sounds

Proto-Sound features crystal clear digital sounds: the wail of a diesel horn; the bell alerting passengers to your arrival or departure; diesel roar, and crew conversations.

## Proto-Effect Sounds

Freight engines include Freight Yard Proto-Effects, a symphony of freight terminal sounds.

M.T.H. Ready-to-Run HO train sets include track, power supply, remote\* or controller.

*\*Remote found in Proto-Sound 3.0 sets only.*

## Features

### HO Scale Sets include:

- Locomotive
- 3-Car freight consist with hopper, gondola, and lighted caboose, all with metal wheels and axles
- Kadee®-compatible operating knuckle couplers on engine and cars
- 14-Piece, 36" x 45" RealTrax Oval with removable roadbed
- Proto-Sound 3.0 sets include UL-approved 24-watt transformer with DCS Remote Commander handheld remote control
- Non-Proto-Sound sets include UL-approved 24-watt transformer with Controller
- Track re-railer with track-to-transformer wire harness

### HO Scale F3 Diesel Engines Feature:

- Intricately detailed, durable ABS body
- Powerful 12-Volt 5-Pole Precision Skew-Wound Flywheel-Equipped Motor driving all eight wheels
- All-metal wheels and gears
- Operating headlight
- Kadee®-compatible operating knuckle couplers
- Proto-Sound 3.0 locomotives include sound and control system featuring locomotive speed control and CD-quality digital sounds that include horn, bell, authentic EMD diesel motor, Passenger or Freight Station Proto-Effects, crew conversations, and atmospheric sounds.
- Non-Proto-Sound equipped locomotives feature a powerful motor and are DCC ready



Santa Fe - F3 Diesel R-T-R Deluxe Freight Train Set  
 81-4001-1 DCC/DCS Proto-Sound 3.0 \$259.95  
 81-4001-0 DCC Ready \$189.95



Pennsylvania - F3 Diesel R-T-R Deluxe Freight Train Set  
 81-4002-1 DCC/DCS Proto-Sound 3.0 \$259.95  
 81-4002-0 DCC Ready \$189.95



M&M'S® Brand - F3 Diesel R-T-R Deluxe Freight Train Set  
 81-4004-1 DCC/DCS Proto-Sound 3.0 \$259.95  
 81-4004-0 DCC Ready \$189.95



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# 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, each available in multiple car numbers.

Sporting crisp graphics in prototypical and colorful liveries, M.T.H. HO premium rolling stock cars are offered individually 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, realistic 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-of-car observation lights, 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. It's the perfect way to expand a Ready-To-Run set or to introduce someone new to the hobby.

And what would model railroading be without a little fun? Our HO operating action and aquarium cars take their inspiration from popular O gauge cars issued in the 1950's. There were in fact a number of prototype cars built to carry live fish, perhaps the most famous being the Nautilus owned by Chicago's John G. Shedd Aquarium - but of course none had glass sides! M.T.H. HO Operating Action cars feature LED powered backlit scenes that move as the car rolls by. The aquatic-themed cars feature wavy glass to simulate water, while the action cars utilize clear glass for an unobstructed view of the moving scene.

Each unique car features a backlit moving animation strip visible through each of the car's four large viewing windows. Utilizing a quiet and efficient motorized player and bright LED lighting, the animated action really shines bright and is often the star attraction on an HO layout.

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

# Operating Action Cars

See it in action at  
[mthHOTrains.com](http://mthHOTrains.com)



Christmas - Operating Action Car  
 81-99014 \$54.95



M&M'S® Brand - Operating Action Car  
 81-99004 \$54.95



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Sharks - Operating Action Car  
 81-99007 \$54.95



Tropical Fish - Operating Action Car  
 81-99005 \$54.95

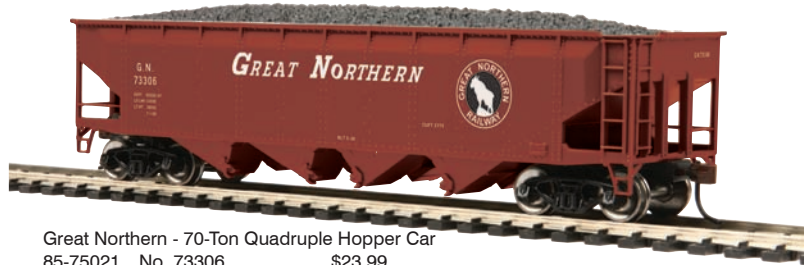


Large Mouth Bass - Operating Action Car  
 81-99008 \$54.95

**Each Car Features  
 Bright, Backlit Moving Scenes**

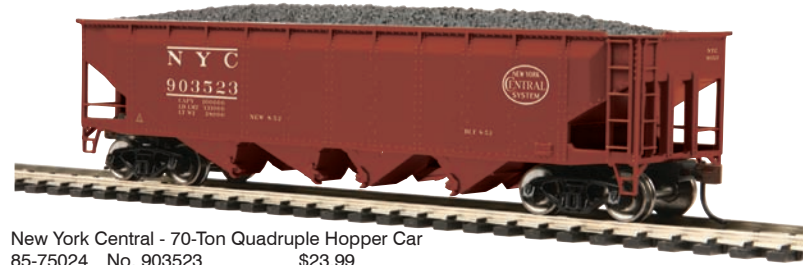
# 70-Ton Quadruple Hopper

READY **2** RAIL



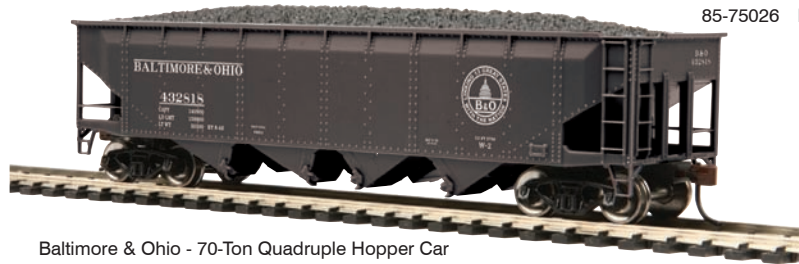
Great Northern - 70-Ton Quadruple Hopper Car

- 85-75021 No. 73306 \$23.99
- 85-75022 No. 73308 \$23.99
- 85-75023 No. 73300 \$23.95



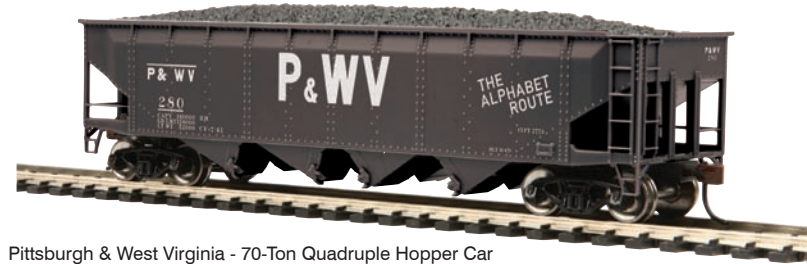
New York Central - 70-Ton Quadruple Hopper Car

- 85-75024 No. 903523 \$23.99
- 85-75025 No. 903527 \$23.99
- 85-75026 No. 903520 \$23.99



Baltimore & Ohio - 70-Ton Quadruple Hopper Car

- 85-75027 No. 432818 \$23.99
- 85-75028 No. 432822 \$23.99
- 85-75029 No. 432830 \$23.99



Pittsburgh & West Virginia - 70-Ton Quadruple Hopper Car

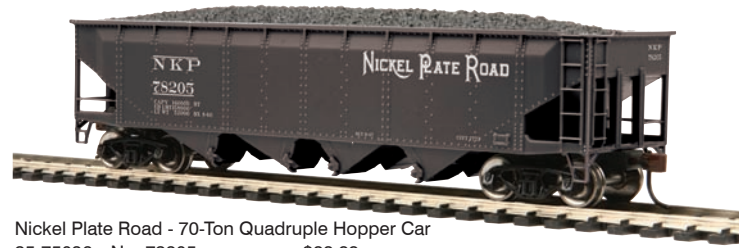
- 85-75030 No. 280 \$23.99
- 85-75031 No. 289 \$23.99
- 85-75032 No. 285 \$23.99

**All Cars Feature  
Kadee® Couplers**



Southern Pacific - 70-Ton Quadruple Hopper Car

- 85-75033 No. 440253 \$23.99
- 85-75034 No. 440250 \$23.99
- 85-75035 No. 440258 \$23.99



Nickel Plate Road - 70-Ton Quadruple Hopper Car

- 85-75036 No. 78205 \$23.99
- 85-75037 No. 78223 \$23.99
- 85-75038 No. 78237 \$23.99



Norfolk & Western - 70-Ton Quadruple Hopper Car

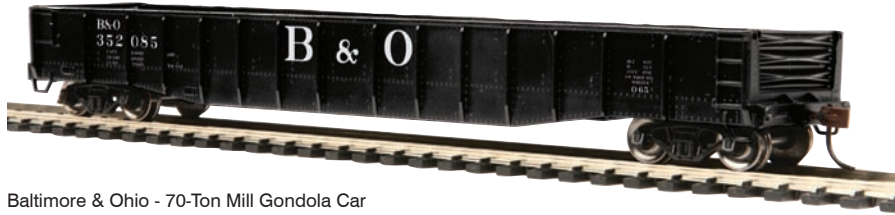
- 85-75039 No. 279506 \$23.99
- 85-75040 No. 279504 \$23.99
- 85-75041 No. 279507 \$23.99



Pittsburgh & Lake Erie - 70-Ton Quadruple Hopper Car

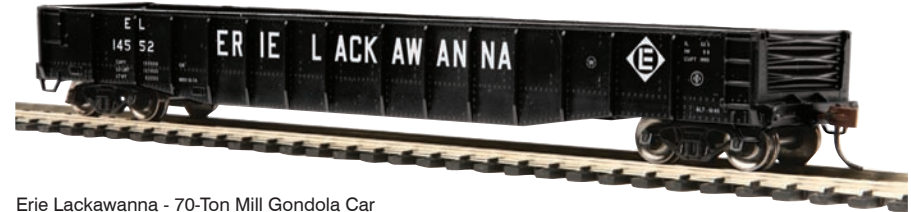
- 85-75042 No. 3452 \$23.99
- 85-75043 No. 3463 \$23.99
- 85-75044 No. 3458 \$23.99

# 70-Ton Mill Gondola



Baltimore & Ohio - 70-Ton Mill Gondola Car

85-72012	No. 352085	\$22.99
85-72013	No. 352080	\$22.99
85-72014	No. 352089	\$22.99



Erie Lackawanna - 70-Ton Mill Gondola Car

85-72015	No. 14552	\$22.99
85-72016	No. 14558	\$22.99
85-72017	No. 14554	\$22.99

**All Cars Feature  
Kadee® Couplers**



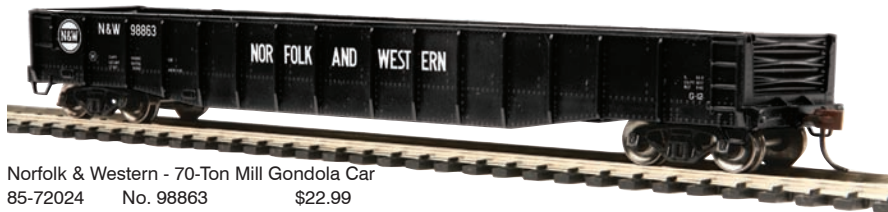
Western Maryland - 70-Ton Mill Gondola Car

85-72018	No. 54450	\$22.99
85-72019	No. 54453	\$22.99
85-72020	No. 54459	\$22.99



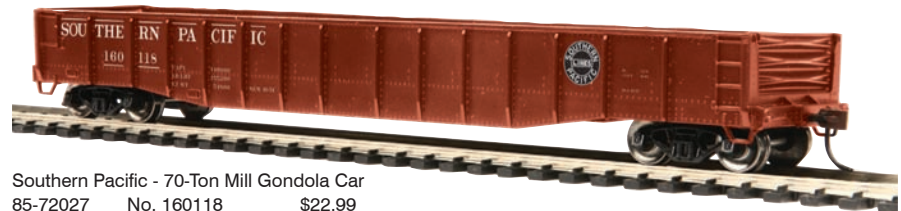
Bessemer & Lake Erie - 70-Ton Mill Gondola Car

85-72021	No. 36805	\$22.99
85-72022	No. 36809	\$22.99
85-72023	No. 36802	\$22.99



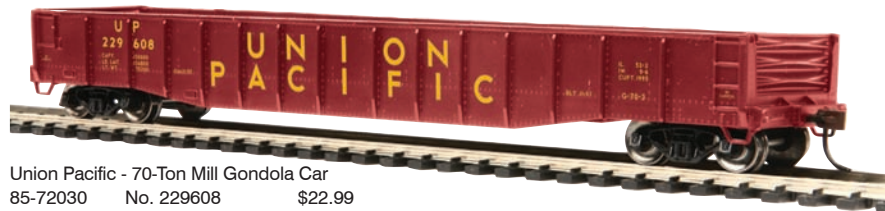
Norfolk & Western - 70-Ton Mill Gondola Car

85-72024	No. 98863	\$22.99
85-72025	No. 98860	\$22.99
85-72026	No. 98868	\$22.99



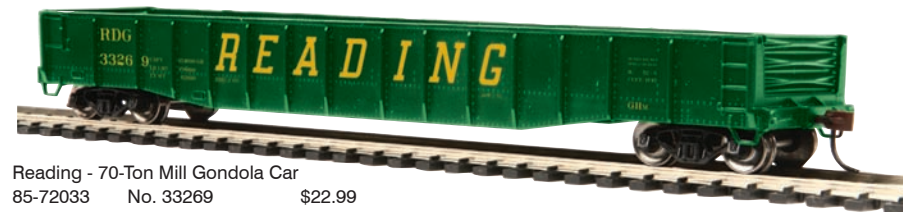
Southern Pacific - 70-Ton Mill Gondola Car

85-72027	No. 160118	\$22.99
85-72028	No. 160113	\$22.99
85-72029	No. 160115	\$22.99



Union Pacific - 70-Ton Mill Gondola Car

85-72030	No. 229608	\$22.99
85-72031	No. 229600	\$22.99
85-72032	No. 229604	\$22.99



Reading - 70-Ton Mill Gondola Car

85-72033	No. 33269	\$22.99
85-72034	No. 33265	\$22.99
85-72035	No. 33263	\$22.99

# 40' PS-1 Box Car

READY **2** RAIL



New York Central - 40' PS-1 Box Car  
 85-74086 No. 174362 \$24.99  
 85-74087 No. 174368 \$24.99  
 85-74088 No. 174375 \$24.99



Milwaukee Road - 40' PS-1 Box Car  
 85-74098 No. 39962 \$24.99  
 85-74099 No. 39957 \$24.99  
 85-74100 No. 39953 \$24.99



Santa Fe - 40' PS-1 Box Car  
 85-74107 No. 38527 \$24.99  
 85-74108 No. 38526 \$24.99  
 85-74109 No. 38524 \$24.99



Erie Lackawanna - 40' PS-1 Box Car  
 85-74092 No. 84432 \$24.99  
 85-74093 No. 84430 \$24.99  
 85-74094 No. 84435 \$24.99



Burlington Northern - 40' PS-1 Box Car  
 85-74104 No. 127843 \$24.99  
 85-74105 No. 127855 \$24.99  
 85-74106 No. 127868 \$24.99



Western Maryland - 40' PS-1 Box Car  
 85-74089 No. 29127 \$24.99  
 85-74090 No. 29182 \$24.99  
 85-74091 No. 29165 \$24.99

**All Cars  
 Feature  
 Kadee®  
 Couplers**



Illinois Central - 40' PS-1 Box Car  
 85-74101 No. 400356 \$24.99  
 85-74102 No. 400350 \$24.99  
 85-74103 No. 400354 \$24.99

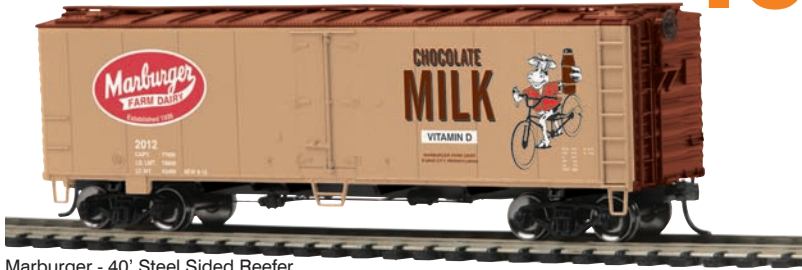


Chessie - 40' PS-1 Box Car  
 85-74095 No. 23784 \$24.99  
 85-74096 No. 23789 \$24.99  
 85-74097 No. 23795 \$24.99



# 40' Steel Sided Reefer

READY **2** RAIL



Marburger - 40' Steel Sided Reefer

- 85-78024 No. 2012 \$24.99
- 85-78025 No. 2013 \$24.99
- 85-78026 No. 2014 \$24.99



Burlington - 40' Steel Sided Reefer

- 85-78027 No. 74208 \$24.99
- 85-78028 No. 74207 \$24.99
- 85-78029 No. 74220 \$24.99



Santa Fe - 40' Steel Sided Reefer

- 85-78030 No. 34920 \$24.99
- 85-78031 No. 34923 \$24.99
- 85-78032 No. 34927 \$24.99



Western Fruit Express - 40' Steel Sided Reefer

- 85-78033 No. 68310 \$24.99
- 85-78034 No. 68318 \$24.99
- 85-78035 No. 68314 \$24.99



Merchant's Despatch - 40' Steel Sided Reefer

- 85-78036 No. 13036 \$24.99
- 85-78037 No. 13027 \$24.99
- 85-78038 No. 13020 \$24.99



Milwaukee Road - 40' Steel Sided Reefer

- 85-78039 No. 37055 \$24.99
- 85-78040 No. 37059 \$24.99
- 85-78041 No. 37063 \$24.99

**All Cars  
Feature  
Kadee®  
Couplers**



Northern Pacific - 40' Steel Sided Reefer

- 85-78042 No. 91256 \$24.99
- 85-78043 No. 91280 \$24.99
- 85-78044 No. 91264 \$24.99



American Refrigerator - 40' Steel Sided Reefer

- 85-78045 No. 24370 \$24.99
- 85-78046 No. 24375 \$24.99
- 85-78047 No. 24378 \$24.99

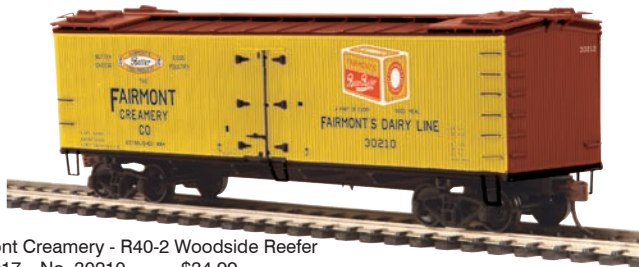
# R40-2 Woodside Reefer



Gerber Products - R40-2 Woodside Reefer  
 80-94013 No. 1004 \$34.99  
 80-94014 No. 1008 \$34.99  
 Gerber Products - 6-Car R40-2 Reefer Set  
 80-90025 Numbers: 1002, 1006, 1007, 1005, 1009, 1000 \$199.95



Great Falls Beer - R40-2 Woodside Reefer  
 80-94015 No. 63250 \$34.99  
 80-94016 No. 63253 \$34.99  
 Great Falls Beer - 6-Car R40-2 Reefer Set  
 80-90026 Numbers: 63252, 63254, 63256, 63251, 63258, 63259 \$199.95



Fairmont Creamery - R40-2 Woodside Reefer  
 80-94017 No. 30210 \$34.99  
 80-94018 No. 30212 \$34.99  
 Fairmont Creamery - 6-Car R40-2 Reefer Set  
 80-90027 Numbers: 30215, 30218, 30219, 30211, 30224, 30222 \$199.95

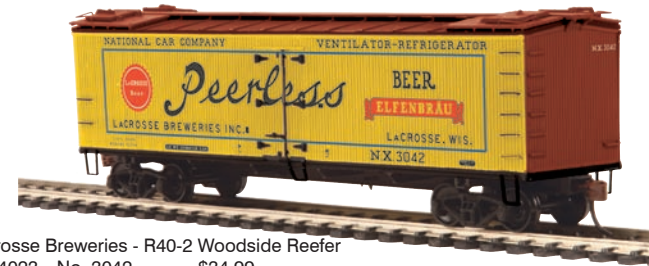
**All Cars  
 Feature  
 Kadee®  
 Couplers**



OTOE Food Products - R40-2 Woodside Reefer  
 80-94019 No. 4001 \$34.99  
 80-94020 No. 4003 \$34.99  
 OTOE Food Products - 6-Car R40-2 Reefer Set  
 80-90028 Numbers: 4002, 4004, 4005, 4006, 4007, 4008 \$189.95



M.K. Goetz Brewing - R40-2 Woodside Reefer  
 80-94021 No. 14310 \$34.99  
 80-94022 No. 14313 \$34.99  
 M.K. Goetz Brewing - 6-Car R40-2 Reefer Set  
 8-90029 Numbers: 14312, 14314, 14315, 14319, 14311, 14316 \$199.95



LaCrosse Breweries - R40-2 Woodside Reefer  
 80-94023 No. 3042 \$34.99  
 80-94024 No. 3045 \$34.99  
 LaCrosse Breweries - 6-Car R40-2 Reefer Set  
 80-90030 Numbers: 3048, 3046, 3043, 3044, 3040, 3049 \$199.95



Nickel Plate Road - R40-2 Woodside Reefer  
 80-94027 No. 701 \$34.99  
 80-94028 No. 700 \$34.99  
 Nickel Plate Road - 6-Car R40-2 Reefer Set  
 80-90032 Numbers: 903, 904, 708, 705, 907, 900 \$199.95



Skyland Eggs - R40-2 Woodside Reefer  
 80-94025 No. 6002 \$34.99  
 80-94026 No. 6004 \$34.99  
 Skyland Eggs - 6-Car R40-2 Reefer Set  
 80-90031 Numbers: 6000, 6003, 6006, 6005, 6007, 6008 \$199.95

# USRA 55-Ton Steel Twin Hopper



New York Central - USRA 55-Ton Steel Twin Hopper Car  
 80-97007 No. 420511 \$34.95  
 80-97008 No. 420527 \$34.95  
 New York Central - 6-Car USRA 55-Ton Steel Twin Hopper Car Set  
 80-90014 Nos. 420536, 420529, 420555, 420549, 420543, 420530 \$199.95



Pennsylvania - USRA 55-Ton Steel Twin Hopper Car  
 80-97009 No. 220149 \$34.95  
 80-97010 No. 220158 \$34.95  
 Pennsylvania - 6-Car USRA 55-Ton Steel Twin Hopper Car Set  
 80-90015 Nos. 220166, 220138, 220105, 220109, 220184, 220173 \$199.95



Union Pacific - USRA 55-Ton Steel Twin Hopper Car  
 80-97011 No. 88806 \$34.95  
 80-97012 No. 88828 \$34.95  
 Union Pacific - 6-Car USRA 55-Ton Steel Twin Hopper Car Set  
 80-90016 Nos. 88823, 88835, 88839, 88840, 88842, 88854 \$199.95

**All Cars  
 Feature  
 Kadee®  
 Couplers**



Baltimore & Ohio - USRA 55-Ton Steel Twin Hopper Car  
 80-97013 No. 220706 \$34.95  
 80-97014 No. 220722 \$34.95  
 Baltimore & Ohio - 6-Car USRA 55-Ton Steel Twin Hopper Car Set  
 80-90017 Nos. 220723, 220725, 220739, 220746, 220757, 220701 \$199.95



Erie - USRA 55-Ton Steel Twin Hopper Car  
 80-97015 No. 26545 \$34.95  
 80-97016 No. 26548 \$34.95  
 Erie - 6-Car USRA 55-Ton Steel Twin Hopper Car Set  
 80-90018 Nos. 26538, 26543, 26555, 26530, 26546, 26532 \$199.95



Norfolk & Western - USRA 55-Ton Steel Twin Hopper Car  
 80-97019 No. 22072, 22076 \$34.95  
 80-97020 No. 22095, 22097 \$34.95  
 Norfolk & Western - 6-Car USRA 55-Ton Steel Twin Hopper Car Set  
 80-90033 Nos. 22052, 22056, 22068, 22063, 22075, 22070 \$199.95

# Passenger Cars



Northern Pacific - 5-Car Passenger Set  
81-60008 \$399.95

**All Cars Feature  
Constant-Voltage, Flicker-Free  
Interior Lighting**



Santa Fe - 5-Car Passenger Set (Ribbed)  
81-60003 \$399.95



Santa Fe - 2-Car Parlor Passenger Set  
81-60011 \$179.95



Denver & Rio Grande - 5-Car Passenger Set  
81-60005 \$399.95



Northern Pacific - 2-Car Parlor Passenger Set  
81-60016 \$179.95



## Industry-Leading Smooth Rolling Trucks



Denver & Rio Grande - 2-Car Parlor Passenger Set  
81-60013 \$179.95

# Passenger Cars



Erie Lackawanna - 5-Car Passenger Set  
81-60006 \$399.95



Delaware & Hudson - 5-Car Passenger Set  
80-60004 \$399.95



Delaware & Hudson - 2-Car Parlor Passenger Set  
81-60012 \$179.95



Erie - 5-Car Passenger Set  
80-60007 \$399.95



Erie - 2-Car Parlor Passenger Set  
81-60015 \$179.95



Erie Lackawanna - 2-Car Parlor Passenger Set  
81-60014 \$179.95



New Haven - 2-Car Parlor Passenger Set  
81-60010 \$179.95

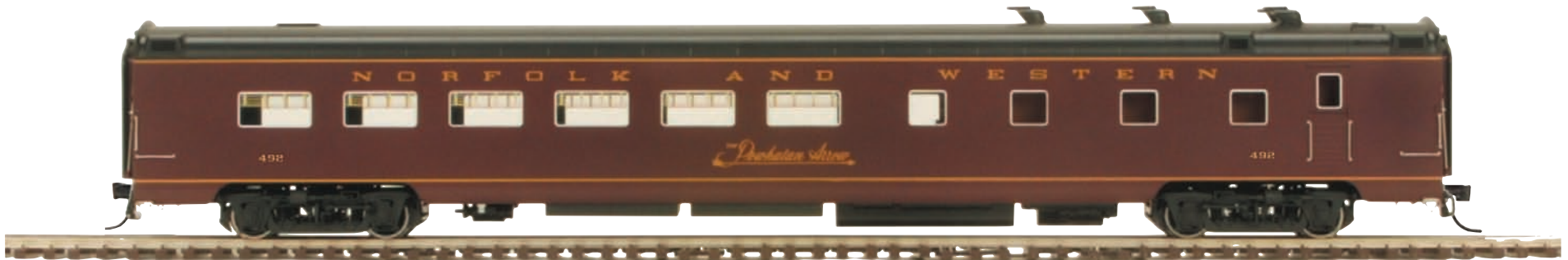


Pennsylvania - 2-Car Parlor Passenger Set  
81-60009 \$179.95

# Passenger Cars - Norfolk & Western



Norfolk & Western - 5-Car Passenger Set  
80-60013 \$469.95



Norfolk & Western - Dining Car  
80-60015 \$95.95



Norfolk & Western (Blue) - 5-Car Passenger Set  
80-60039 \$469.95

**Diesel Era Passenger Train**



See it in action at  
[mthHOTrains.com](http://mthHOTrains.com)



## Prototypically Designed To Match Real-Life Prototypes



Norfolk & Western (Blue) - Coach Car  
80-60040 \$95.99

Norfolk & Western (Blue) - Coach Car  
80-60045 \$95.99



# Passenger Cars - Southern Pacific



Southern Pacific - 5-Car De-skirted Passenger Set

80-60035 \$469.95  
80-69035 (HO 3-Rail) \$499.95



## Prototypically Designed To Match Real-Life Prototypes

### Features

- Durable ABS Intricately Detailed Bodies
- Metal Wheels and Axles
- Overhead Interior LED Lighting
- Detailed 4-Wheel Trucks
- Authentic Paint Scheme
- Operating End-of-Car Diaphragms
- Separate Metal Handrails
- Detailed Car Interiors
- Kadee-Compatible Couplers
- Detailed Car Undercarriage
- 5-Car Sets Feature: (1) Combine, (1) Coach, (1) Tavern Car, (1) Parlor Car, (1) Observation Car
- Measures: 11 1/2" x 1 7/16" x 1 7/8"
- Operates On 22" Radius Curves



Southern Pacific - Chair/Chair De-skirted Passenger Set  
80-60043 \$189.95



Southern Pacific - Chair Car  
80-60006 \$95.95

Southern Pacific Lines - Chair Car  
80-60012 \$95.95

Southern Pacific - Chair Car  
80-60037 \$95.95



See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)



Southern Pacific - 5-Car Passenger Set  
 80-60029 \$469.95  
 80-60029-5 (HO 3-Rail) \$499.95

Southern Pacific Lines - 5-Car Passenger Set  
 80-60041 \$469.95  
 80-69041 (HO 3-Rail) \$499.95

## Soft, Flexible End-of-Car Diaphragms



Southern Pacific - 3-Car Diner/Kitchen/Coffee Passenger Set  
 80-60030 \$279.95  
 80-60030-5 (HO 3-Rail) \$299.95

Southern Pacific Lines - 3-Car Diner/Kitchen/Coffee Passenger Set  
 80-60042 \$279.95  
 80-69042 (HO 3-Rail) \$299.95



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

Southern Pacific - Articulated Chair/Chair Passenger Car Set  
 80-60004 Car No. 2464, 2463 \$189.95  
 80-60005 Car No. 2466, 2465 \$189.95



Southern Pacific Lines - Articulated Chair/Chair Passenger Car Set w/Antenna  
 80-60009 Car No. 2474, 2473 \$189.95  
 80-60008 Car No. 2462, 2461 \$189.95

Southern Pacific - Articulated Chair/Chair Passenger Car Set w/Antenna  
 80-60002 Car No. 2470, 2469 \$189.95  
 80-60003 Car No. 2476, 2475 \$189.95



# Passenger Cars - New York Central



Empire State Express - 5-Car Passenger Set  
80-60025 \$469.95



Empire State Express - 2-Car Parlor/Diner Passenger Set  
80-60028 \$189.95



Empire State Express - 2-Car Coach Passenger Set  
80-60027 \$189.95

**Prototypically  
Designed To Match  
Real-Life Prototypes**



Empire State Express - Baggage Tavern Car  
80-60026 \$95.95

**Soft, Flexible  
End-of-Car  
Diaphragms**



New York Central (1940) - 5-Car Passenger Set  
80-60017 \$469.95

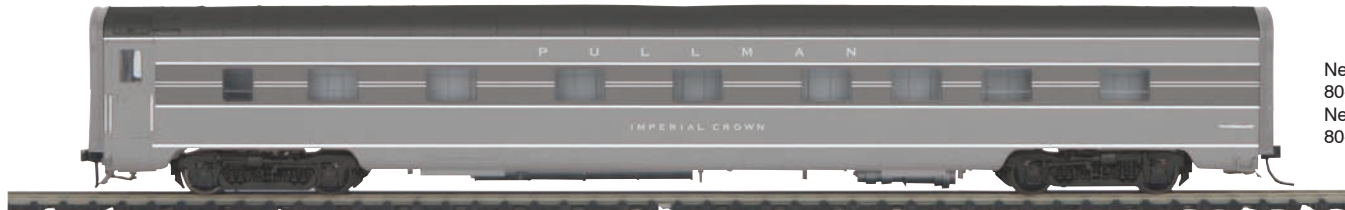


New York Central (1938) - 5-Car Passenger Set  
80-60021 \$469.95



New York Central (1940) - 2-Car Sleeper Passenger Set  
 80-60019 \$189.95  
 New York Central (1940) - 2-Car Sleeper Passenger Set  
 80-60020 \$189.95

New York Central (1938) - 2-Car Sleeper Passenger Set  
 80-60023 \$189.95  
 New York Central (1938) - 2-Car Sleeper Passenger Set  
 80-60024 \$189.95



New York Central (1940) - 4-4-2 Sleeper Passenger Car  
 80-60018 \$95.95  
 New York Central (1938) - Sleeper Passenger Car  
 80-60022 \$95.95



# Track & Accessories

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

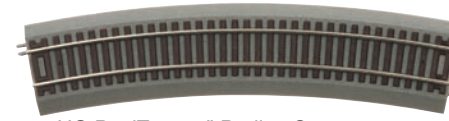
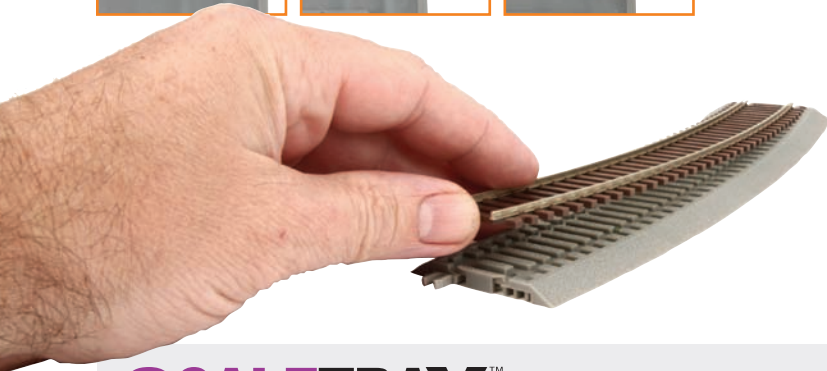
At M.T.H. Electric Trains, we believe a track system should allow your model railroad empire to grow. The RealTrax system includes 18" and 22" curves as well as 9" straight lengths that make a perfect solution for your first model railroad empire. And every piece of RealTrax is rugged, realistic, and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



See it in action at [mthHOtrains.com](http://mthHOtrains.com)



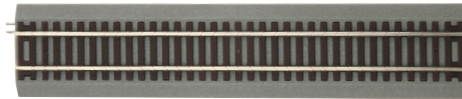
Compatible with Atlas® HO Track using 81-1011 Adapters



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



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



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

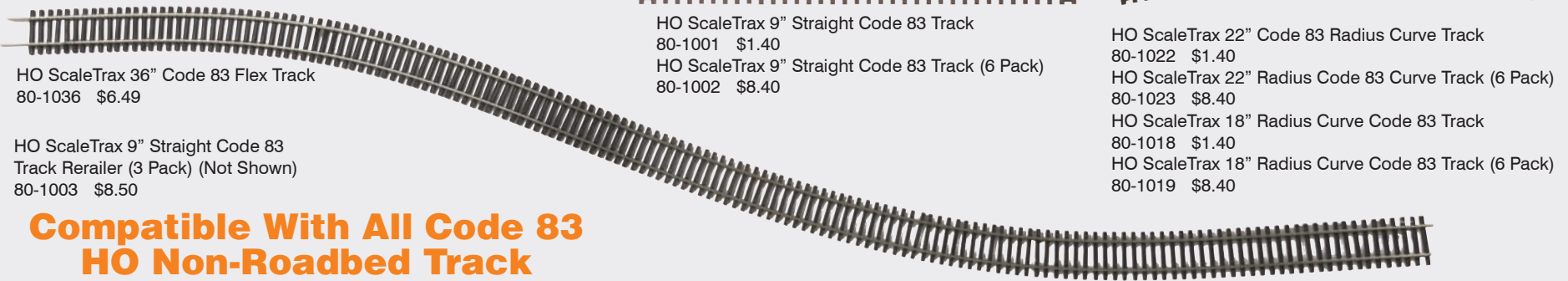


HO RealTrax Track Terminal Pack (2 Ct)  
81-1003 \$3.99



HO RealTrax Track Railjoinder Pack (48 Ct)  
81-1014 \$2.99

**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



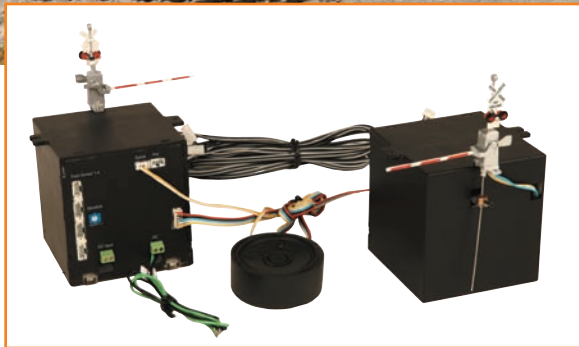
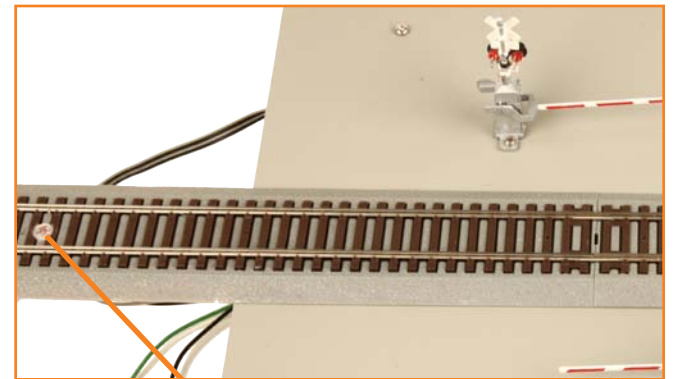
HO ScaleTrax 9" Straight Code 83 Track  
80-1001 \$1.40  
HO ScaleTrax 9" Straight Code 83 Track (6 Pack)  
80-1002 \$8.40



HO ScaleTrax 22" Code 83 Radius Curve Track  
80-1022 \$1.40  
HO ScaleTrax 22" Radius Code 83 Curve Track (6 Pack)  
80-1023 \$8.40  
HO ScaleTrax 18" Radius Curve Code 83 Track  
80-1018 \$1.40  
HO ScaleTrax 18" Radius Curve Code 83 Track (6 Pack)  
80-1019 \$8.40

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

# Operating Crossing Signal



Operating Crossing Signals  
80-10001 \$179.95

- Flashing warning lights
- Slow-motion crossing gates
- Ringing warning bell
- Guards up to four tracks

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!

## Features

- 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
- Unit Measures: 2 1/8" High

See it in action at  
[mthHOtrains.com](http://mthHOtrains.com)



Optical Track Sensors

# 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 \$79.95

## 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 1 for the complete list)

## DCS Commander

Insert a DCS Commander in the wires from your existing DCC system to the track and you can switch back and forth between DCC and DCS with the push of a button. Or use the Commander alone with your own DC power supply.

The DCS Commander offers intuitive control of multiple Proto-Sound engines; for each locomotive, more than 32 functions are available at the touch of a single, clearly-labeled button, including:

- Speed adjustment in one-scale-mile-per-hour steps
- Independent feature control: tune your engines' sound, lights, smoke and acceleration/deceleration settings
- Smoke on/off
- Doppler sounds: simulate the classic sound effect of a train approaching and then whizzing past
- Accent sounds: activate any one of 7 individual sounds, including forward and reverse signal sounds and more
- Activate Passenger Station and Freight Yard Sounds
- Individual locomotive control: control up to 10 Proto-Sound 3.0 engines at the same time, on the same track
- Selectable control configurations: choose between analog DC, DCC\* and DCS modes

\* Customer-supplied DCC system required



DCS Commander Controller  
50-1028 \$149.95

DCS Commander Controller  
w/ 100 watt power supply  
50-1029 \$229.95

## DCS Remote Control System

Run your entire layout from one wireless handheld — or several. With a DCS Remote Control System, you can operate up to 99 Proto-Sound 3.0 engines in command mode at the same time, with full access to all locomotive functions. Add an optional Accessory Interface Unit (AIU) and the same handheld controls hundreds of switches or accessories. For group operating sessions, equip each guest with their own full-featured handheld.

\*\*Unlike the DCS Commander, the DCS Remote Control System is not compatible with DCC systems.



DCS Remote Control System  
50-1001 \$329.95  
(requires separate power supply)



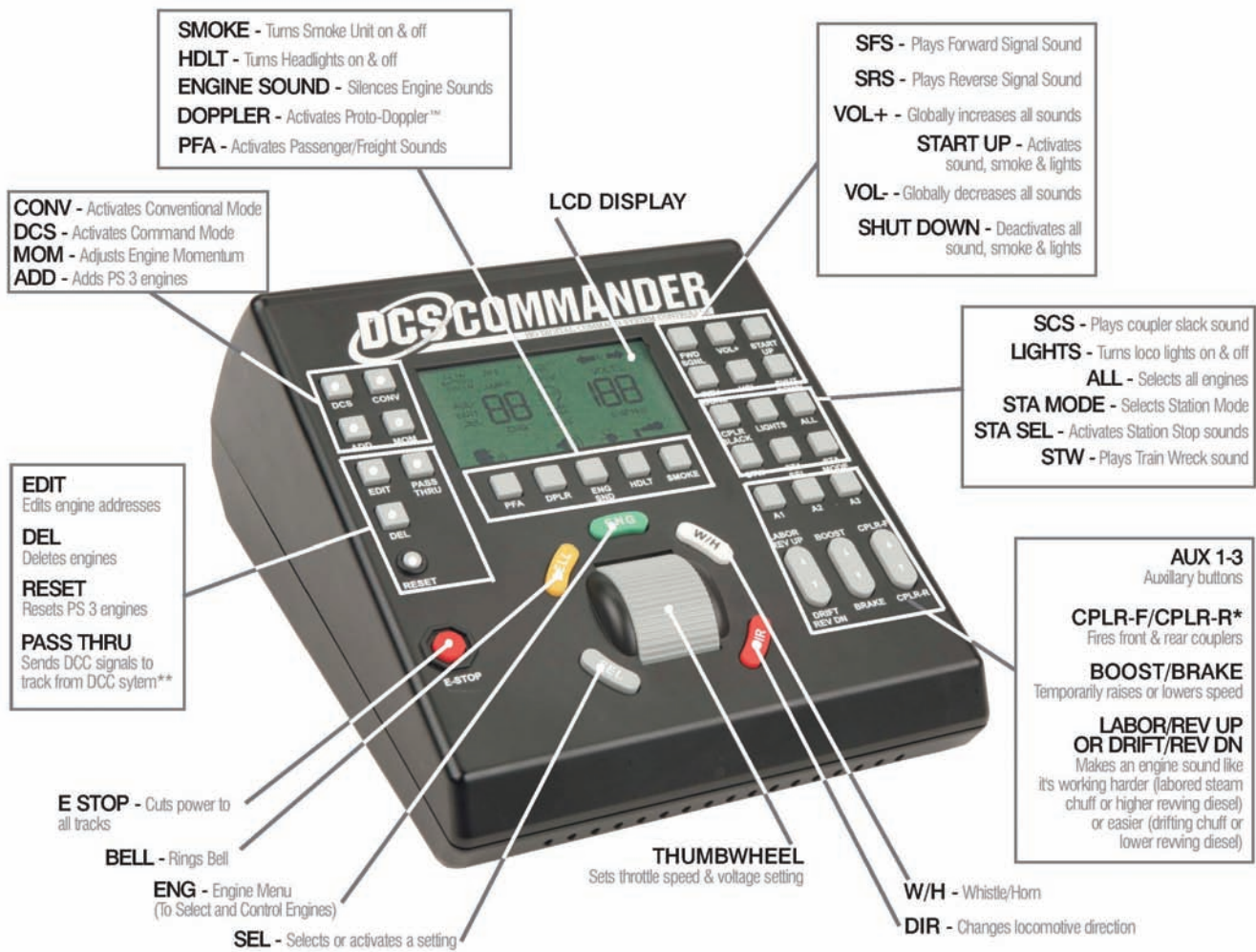
DCS Accessory  
Interface Unit (AIU)  
50-1004 \$99.95

Your Proto-Sound engine senses what kind of power is on the rails. **Just set it on the track and run it!**



# DCS COMMANDER

BY MTH ELECTRIC TRAINS  
MTH DIGITAL COMMAND SYSTEM  
HO DIGITAL COMMAND SYSTEM CONTROLLER



## More Features Than Analog DC or DCC Command Control

The DCS Commander is the easiest way to access the dozens of command control functions already programmed into your M.T.H. HO locomotive. The Commander features clearly-labeled, one-button control of more than 32 engine functions; no function keys or special codes to remember; and more features than any DCC system made today. Use the engine menu to select and control up to 10 different DCS engines from a single Commander at the same time on the same track — or switch back to DCC or analog DC operation with the push of a button.



In DCS mode, the large LCD screen identifies your locomotive's number and provides readouts for scale speed and active features.



In conventional mode, the LCD provides track voltage and amperage level readouts, making the Commander a full-featured DC controller.

Adding a DCS Commander to your existing layout is simple: just insert it into the wires that connect your DC transformer or DCC system to the track. The Commander can accept any power input (AC, DC or DCC) and output analog DC with volt and current display. The Commander also acts as a passive conduit for your DCC signal until you press the button to switch to DCS or conventional operation.

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.

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DCS™ Simply The Best Way To Run A Railroad™  
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)  
M.T.H.'s RealTrax® has received U.S. Patent No. 6,019,289.  
M.T.H.'s Z-4000® Transformer has received U.S. Patent No's. 6,281,606 & 6,624,537.  
HO Coupler 7,694,834 , Bi-Directional Communication 8262034

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\* Operating couplers are available only on diesels at this time.  
\*\* Customer supplied DCC system Required

# Join The Club!

There are **NINE** different types of memberships, based on the style of model railroading that most interests you.



MTHRRC Farmer's Cooperative R40-2 Woodside Reefer Car  
**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 (RailKing, Premier, Tinplate Traditions or One Gauge) and have the option to collect other Club cars as well.

## RailWare™ Software



Use your computer to design track layouts, search the database of all M.T.H. products, look at our past catalogs, listen to Proto-Sound 2.0 train effects, & much more. This Interactive DVD retails for \$79.95, but is yours **FREE** as a Club member.

## 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 2.0 Upgrade Kits

Club members can save an additional 15% on these 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

### MTH Promotional DVD

This interactive DVD is packed full of sights & sounds guaranteed to make you rethink how far the hobby of model railroading has come. You'll learn about some of the most innovative products ever produced & marvel at the sophistication of a product line unmatched by other model train manufacturers.



### 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!



### A Toy Train Story

This comprehensive book is a must for collectors & other lovers of toy trains. 350 pages & 1900 color photos, hard cover. Add this book to your membership for only \$25.00 (50% off the \$49.95 cover price)!



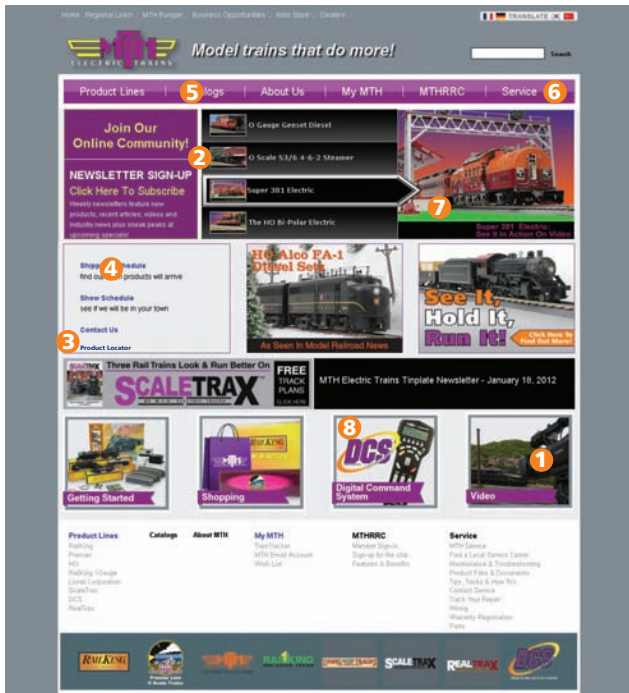
**GET THE MOST FROM MODEL RAILROADING**

JOIN ONLINE! IT'S EASY — JUST GO TO

**WWW.MTHTRAINS.COM**

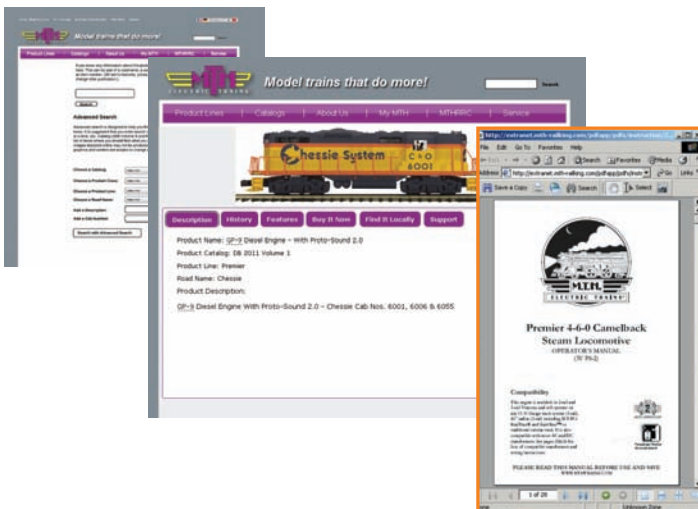
We don't think we're exaggerating when we say M.T.H. has the most useful train manufacturer's site on the Internet. Here's just a sample of the answers you can find online.

# M.T.H. Online



## 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.



### ① CAN I SEE AND HEAR IT IN ACTION ...?

Click on Video — only M.T.H. gives you the chance to see and hear locomotives and other products in action, before you buy.

### ② 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 21,000 items we've made in the past 33 years, for your favorite road name, engine, or type of rolling stock.

### ③ 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.

### ④ WHEN IS IT COMING?

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

### ⑤ ARE YOU GOING TO MAKE .....?

View the last several M.T.H. Catalogs online.

### ⑥ 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.

### ⑦ WHAT'S NEW?

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

### HOW CAN I BE AMONG THE FIRST TO KNOW?

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!

### ⑧ HOW CAN I LEARN MORE ABOUT DCS?

Follow the link to the protosound2.com 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 the protosound2.com Web site for DCS and Proto-Sound downloads.



# ...SIMPLY THE BEST WAY TO RUN A RAILROAD™

**TRY IT** at your local DCS Demo Center or learn more with a complimentary DVD on DCS & M.T.H. technology.



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