



MTH
ELECTRIC TRAINS®
HO TRAINS THAT DO MORE



2015
HO MODEL TRAINS



The M.T.H. HO product line features locomotives sporting the absolute latest in cutting-edge digital electronics for the HO market. Our slogan “HO Trains That Do More” is no understatement. Our sound-equipped locomotives are compatible with all HO operating systems: analog DC, NMRA-standard DCC, and M.T.H.’s Digital Command System (DCS). LED lighting, synchronized smoke output and durable ABS or die-cast metal bodies ensure that M.T.H. HO locomotives and rolling stock are worthy additions to any HO roster.





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www.mthHOtrains.com

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

STATION SOUNDS

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

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.



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 throttle setting — 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 2.0 and 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.

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 OPERATING SYSTEMS

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

BI-DIRECTIONAL COMMUNICATION

Proto-Sound 2.0 and 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 2.0 or 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 2.0 or 3.0-equipped locomotive when operated using the DCS Digital Command System.

PROTO-SOUND 3.0 DCC FUNCTIONALITY

Proto-Sound 3.0-equipped locomotives can be controlled in command mode with any DCC-compliant command control system. While you won't have access to all of the incredible features of Proto-Sound 3.0, you will have full DCC command control. This means you can

use your existing DCC controller to independently control your other DCC-equipped locomotives in addition to your Proto-Sound 3.0 locomotives on the same track at the same time.

OPERATE 'EM ALL

In DCS command mode, unlike any other command system available today, you'll have one-touch control over every Proto-Sound 2.0 or 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.

**RailKing locomotives require installation of a simple DCS/DCC switch in order to operate on DCC.*

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/Backup light
- Bell
- Whistle
- Start-up/Shut-down
- Passenger Station/Freight Yard Sounds
- All Other Lights (On/Off)
- Master Volume
- Front Coupler
- Rear Coupler
- Forward Whistle Signal
- Reverse Whistle Signal
- Grade Crossing Signal
- Smoke On/Off
- Smoke Volume
- Idle Sequence 3
- Idle Sequence 2
- Idle Sequence 1
- Extended Start-up
- Extended Shut-down
- Labored Chuff¹
- Drift Chuff¹
- One Shot Doppler
- Coupler Slack
- Coupler Close
- Single Horn Blast
- Engine Sounds
- Brake Sounds
- Cab Chatter
- Feature Reset
- Train Marker²
- Train Operation²

¹ Not Included On European Steam Locomotives

² Found Only On European Steam Locomotives

Diesel/Electric Features*

- Head Light/Backup Light
- Bell
- Horn
- Start-up/Shut-down
- Passenger Station/Freight Yard Sounds
- All Other Lights (On/Off)
- Master Volume
- Front Coupler
- Rear Coupler
- Forward Horn Signal
- Reverse Horn Signal
- Grade Crossing Signal
- Clickety Clack (On/Off)
- Idle Sequence 4¹
- Idle Sequence 3²
- 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/Off³
- Smoke Volume³
- Pantograph Auto/Manual⁴
- Front Pantograph Up/Down⁴
- Rear Pantograph Up/Down⁴

¹ Found Only On Diesel Locomotives w/o Smoke

² Not Included On Electrics

³ Found Only On Diesel Locomotives w/Smoke

⁴ Found Only On Electric Locomotives

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



Simply the Best Way

DCS is **SIMPLE** to use.

It's **ACCESSABLE** from any iOS or Android smart phone, tablet or the included remote.

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

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

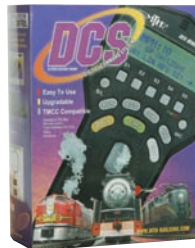
It's why you'll have **MORE FUN** operating your trains than ever before.

It can run over 5500* Proto-Sound® 2.0 & 3.0 engines and every TMCC®, EOB, or Legacy™ engine ever made — and run 99 of them at the same time, on the same track, independently, in command mode.

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

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

* Number of different Proto-Sound 2.0 and 3.0 engines cataloged through the 2015 Volume 2 Catalog. While all Lionel TMCC features can be accessed by the DCS handheld remote, at present some Legacy features cannot be accessed by a DCS remote.



DCS Remote Control System
50-1001 \$349.95
Includes handheld and TIU

DCS Remote Control Handheld Unit
50-1002 \$169.95



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



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



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

to Run a Railroad™

Command Control Explained

In conventional operation, an AC or DC transformer varies track voltage to adjust engine speed and direction. Command systems such as DCS, however, put a constant voltage on the track (around 18 volts for DCS) and vary speed by telling each engine how much of that voltage to use. Command control allows different engines to do different things — like run at different speeds, go in different directions, or make different sounds — even when they are on the same track.

In the DCS system, commands such as speed, direction, and sound control are sent as radio signals from the handheld throttle to a TIU (track interface unit). The TIU translates those radio signals into digital information that is sent through the rails and picked up by a receiver in the appropriate engine — telling it to go, for example, 37 miles per hour, blow the whistle, smoke more heavily, or any other command. DCS locomotives can also send information back to the handheld to let the operator know what they're doing.



Learn More About It

Request a Complimentary DVD on DCS and M.T.H. technology. Log on to the DCS Web site, www.protosound2.com

TRY IT at your local DCS Demo Center

Take your favorite Proto-Sound 2.0 or 3.0 engine to any DCS Demo Center and experience the additional features your engine has with DCS control. To find your nearest demo center or request your complimentary DVD, visit www.mthtrains.com.

DCS COMMANDER: Get into DCS on a budget

Ideal for small layouts running two or three Proto-Sound 2.0 or 3.0 locomotives. Learn more about it using our online Product Search feature to see more information and read the instruction manual.



DCS Commander System w/100 Watt Power Supply
50-1029 \$259.95

DCS Commander Controller (without power supply)
50-1028 \$179.95



DCS Remote Commander Set
50-1033 \$59.95

WHAT CAN YOUR REMOTE DO?

M.T.H. Railroading App

Technology continues to expand in all aspects of our lives; we believe it must continue to do so in our products and our control systems if we want our hobby to remain relevant in the world of smart phones, tablets and wearable technology.



Why put a remote control in the hands of an operator when he or she probably has an even more powerful device in their pocket? Why shouldn't a modeler control their layout with their phone, when they can already use that phone to run their television, adjust their thermostat, and activate their home alarm system? More importantly, how many new members can we attract into our hobby when we bundle that hobby with technology they use every day?



Enter our first model railroading app

In 2015, M.T.H. will release smart phone and tablet apps that will allow operators to run their trains from Apple iOS or Android phones or tablets. That means your Apple iPhone or Samsung Galaxy can do one more thing we only dreamed about fifteen years ago when we introduced DCS. Your favorite Android tablet or Apple iPad will bring the DCS Digital Command System to life in a way you never thought possible when you first picked up a DCS remote control. Any of these smart devices can run our new app. That means anybody who visits your layout can run trains — the days of fighting over the remote control are over!

Whether you're running Android or iOS, our DCS app will allow you to control your entire layout in command or conventional modes without using a DCS handheld remote. You'll still need a TIU (Track Interface Unit) along with a new, separately sold DCS WiFi module. Simply plug the module into the TIU, search for its WiFi signal on your phone or tablet, and you'll be running your layout in command mode in no time. Everything the DCS handheld remote can do, the app can do — but your experience will be better and in full color!

Our new app isn't limited to just DCS control either. With it, you'll be able to access special pages on the M.T.H. website, see the latest catalogs and news articles, and shop for M.T.H. products. Look for the app this year — it's gonna be fun.



See A Demo At www.mthtrains.com

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 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 1938 *Twentieth Century Limited*. All of our passenger cars feature the smoothest rolling passenger trucks available today, and all are outfitted with flicker-free, constant voltage lighting. You won't find better looking and operating HO passenger cars than those from M.T.H.

M.T.H. HO freight cars come in two varieties; our top-of-the-line models 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 equally crisp and colorful graphics.

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





Proto-Sound 3.0 Advancements and Improvements

Like all modern electronics, Proto-Sound 3.0 continues to evolve, thanks to its software-based heritage. In 2013, many of our diesel models began shipping with new software that changed and improved some of their operating characteristics. Improvements included the presence of new DCC features including Advanced Consisting, Feature Mapping and Speed Mapping. Changes included the ability of the locomotive — in command mode — to immediately start its sounds upon movement of the locomotive, eliminating the previous requirement to press Startup or F-3 to turn on sounds and lights.

Operators will find these new features on all of our 2014 diesels, including the ES44AC, Dash-9 and GP38-2 models featured in this catalog. Steam locomotives sporting the new features include the Allegheny, 2-8-0 H10, 4-6-2 K4s and the German S3/6. Owners of earlier diesel models can upgrade their software using a DCS Digital Command System.

Proto-Sound 3E+ Explained

If you 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 intervention: 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.



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.



HO TRAINS THAT DO MORE

www.mthHOtrains.com

4-8-8-4 Big Boy



Die-Cast Metal

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

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

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

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

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

This enduring symbol of American railroading returns to the rails for 2015 featuring our industry-leading speed control and synchronized puffing smoke output, as well as authentic articulated chuffing sounds with the front and rear engines drifting in and out of sync. And when the Union Pacific Railroad finishes its restoration of prototype Big Boy No. 4014, which is currently taking place, we'll record No. 4014 in action and issue a free replacement sound set that you can download into our 2015 model.





Union Pacific - 4-8-8-4 Big Boy (Modified),
Cab No. 4023
80-3255-1 Proto-Sound 3.0 \$599.95

Union Pacific - 4-8-8-4 Big Boy (Modified),
Cab No. 4018
80-3256-1 Proto-Sound 3.0 \$599.95

Union Pacific - 4-8-8-4 Big Boy (Modified),
Cab No. 4005
80-3257-1 Proto-Sound 3.0 \$599.95



Union Pacific - 4-8-8-4 Big Boy (Modified w/Oil Tender),
Cab No. 4014
80-3254-1 Proto-Sound 3.0 \$599.95



Union Pacific - 4-8-8-4 Big Boy Speciality Passenger Set
80-3258-1 Proto-Sound 3.0 \$749.95
Set Features: Union Pacific 4-8-8-4 Big Boy Steam Engine (Cab No. 4014),
Combine, Tavern Car, Coach and Observation

Union Pacific -2-Car Parlor Add-On Set
80-60055 \$189.95
Not Shown



Features Include:

- Intricately Detailed, Die-Cast Boiler and Chassis
- Intricately Detailed, Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load (Excl. #4014)
- Handpainted Engineer and Fireman Figures
- Metal Handrails, Whistle and Bell
- RP25 Metal Wheels
- Sprung Drivers
- #158 Scale Kadee Whisker Coupler
- Remote Controlled Proto-Coupler
- Prototypical Rule 17 Lighting
- Constant Voltage LED Headlight
- Operating LED Firebox Glow
- Operating LED Marker Lights
- Operating LED Numberboard Lights
- Lighted LED Cab Interior
- Operating Tender LED 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 Dimensions
- Onboard DCC/DCS Decoder
- Operates On Code 70, 83 and 100 Track
- Proto-Sound 3.0 With The Digital Command System Featuring Quillable Whistle With Freight Yard Proto-Effects
- Measures: 18 11/16" X 1 9/16" X 2 1/4"
- Operates On 18" Radius Curves



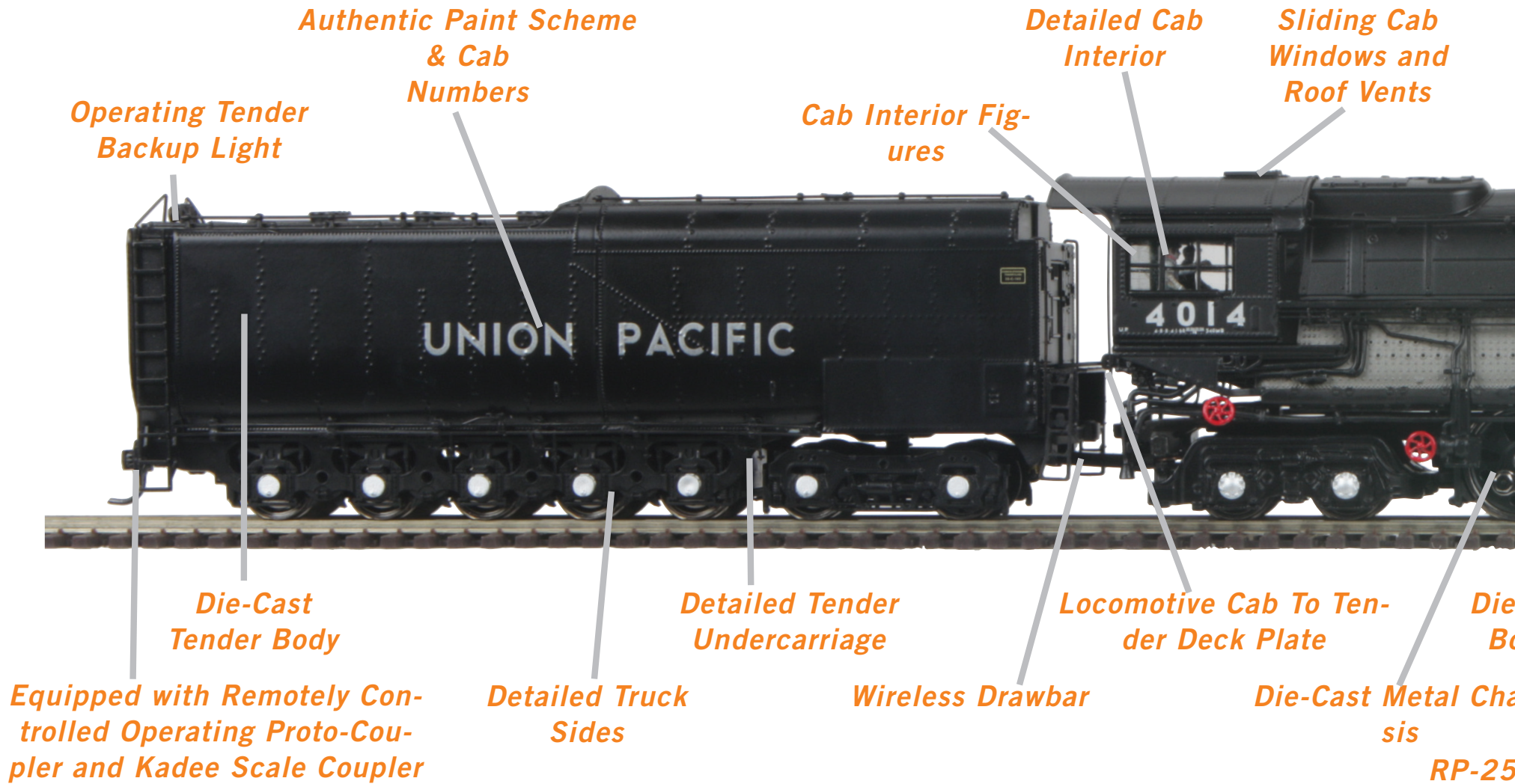
M.T.H. Electric Trains
Signature Series

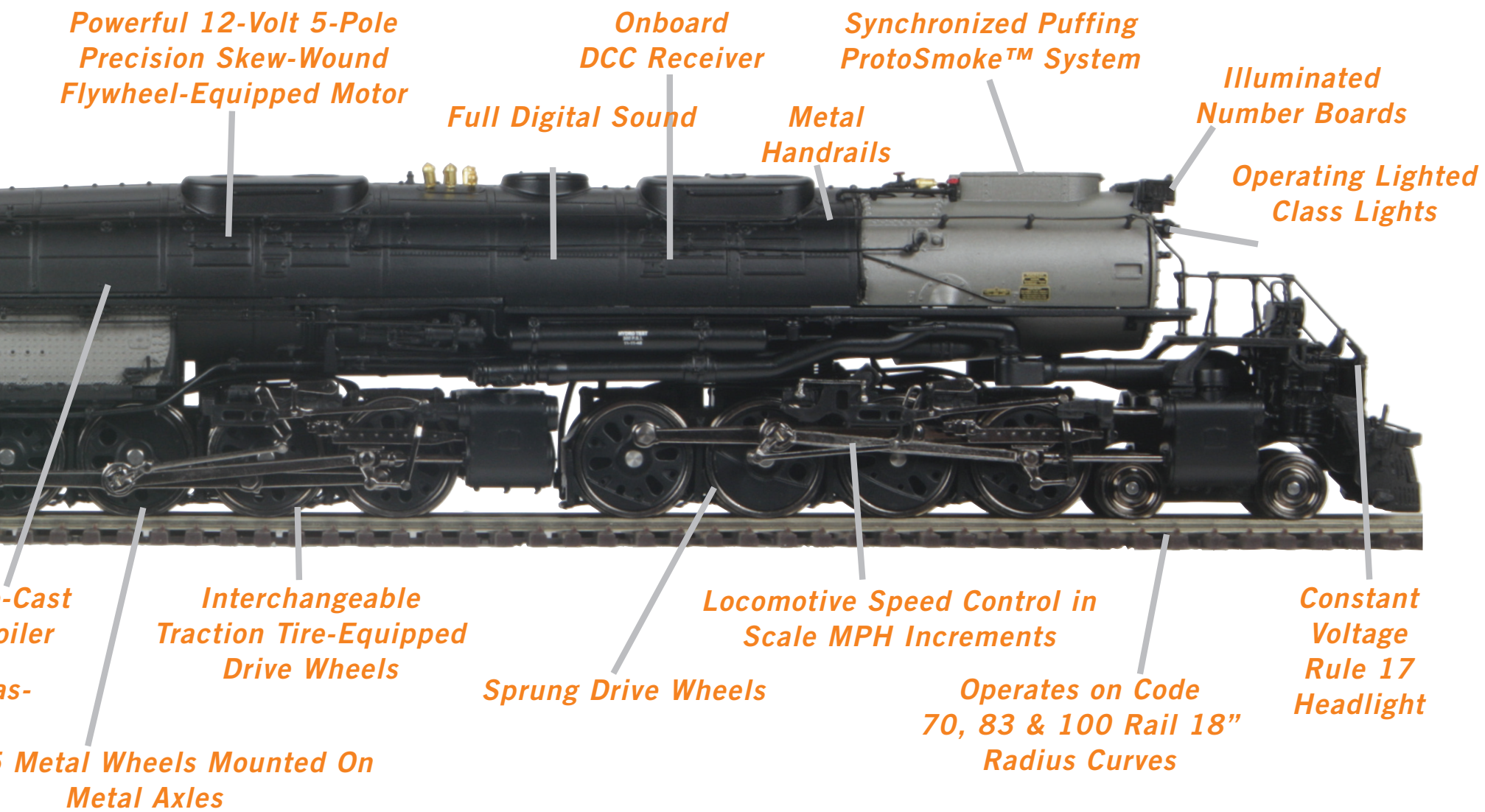
Union Pacific - Signature Series 4-8-8-4 Big Boy (Modified w/Oil Tender), Cab No. 4014
80-3263-1 Proto-Sound 3.0 \$749.95

Like all M.T.H. Signature Series models, each Signature Series Big Boy is individually airbrush-weathered by a master modeler with more than 30 years of professional experience, using proprietary techniques that capture the subtle natural wear and tear produced by road dust, rain, rust, wind and everything else that railroad equipment experiences in real life.



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





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

Onboard DCC Receiver

Synchronized Puffing ProtoSmoke™ System

Full Digital Sound

Metal Handrails

Illuminated Number Boards

Operating Lighted Class Lights

Cast Boiler

Interchangeable Traction Tire-Equipped Drive Wheels

Sprung Drive Wheels

Locomotive Speed Control in Scale MPH Increments

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

Constant Voltage Rule 17 Headlight

5 Metal Wheels Mounted On Metal Axles

2-6-6-6 Allegheny

The biggest engines east of the Mississippi were not rostered by the biggest railroads. There were no legendary articulateds racing along the NYC's Water Level Route or charging over the Pennsy's Horseshoe Curve. It was the smaller, scrappier eastern roads dedicated to wrestling coal out of Appalachia — the C&O, N&W, Virginian, Clinchfield, Western Maryland — that owned articulateds rivaling anything in the West. And the king of them all was the Chesapeake & Ohio's Class H-8 Allegheny.

With four fewer drivers than a Union Pacific Big Boy, an Allegheny could deliver nearly a thousand more horsepower to the rails. Its massive firebox was big enough to host a board meeting — so big it required a unique 6-wheel trailing truck to support it. Its drivers carried the highest axle load of any steam engine, ever. To make the Allegheny fit the C&O's existing 115-foot turntables, its tender was made taller at the rear, to accommodate 25 tons of coal and 25,000 gallons of water. This required a unique 4-wheel rear truck on the tender.

The Allegheny was the brainchild of Lima Locomotive Works, where the superpower steam concept had been invented in the 1920s. Like the Big Boy, it was designed to lift monstrous loads over one specific piece of railroad: the 80 miles between Hinton, West Virginia and Clifton Forge, Virginia, a coal route from the mines over the summit of the Allegheny Mountains toward tidewater ports. The engine took its name from the mountain range it traversed. Delivery of the initial order of 10 locomotives began just days after Pearl Harbor and a few months after the first Big Boy; the C&O was so pleased with the giant engines that it ordered 50 more over the next seven years. Fellow coal hauler Virginian took delivery of eight copies in early 1945, naming them Class AG Blue Ridge types.

Our die-cast model replicates all the features that made the prototype Allegheny as powerful visually as it was physically: high pilot deck for access to its smokebox-mounted air pumps; huge twin sandboxes located fore and aft of the steam dome; massive steam delivery pipes for both front and rear engines; torpedo-like air tanks ahead of the cab; and more. Like all M.T.H. articulateds, our Allegheny features puffing smoke and authentic articulated chuff sounds, with the front and rear engines going in and out of sync. It senses what type of power is on the rails and automatically adjusts to operate on analog DC, DCC command control, our own DCS digital command system, or (in the 3E+ version), Märklin command control. And when operating with DCS, just a few keystrokes will setup two H-8s to operate together as a lashup, with one at the head of your train and one at the rear, just like the prototype heading east over the Alleghenies.



Chesapeake & Ohio - 2-6-6-6 Allegheny Steam Engine, Cab No. 1601
 80-3249-1 Proto-Sound 3.0 \$649.95
 80-3249-5 Proto-Sound 3E+ (3-Rail) \$679.95



Chesapeake & Ohio - 2-6-6-6 Allegheny Steam Engine, Cab No. 1604
 80-3250-1 Proto-Sound 3.0 \$649.95
 80-3250-5 Proto-Sound 3E+ (3-Rail) \$679.95

Chesapeake & Ohio - 2-6-6-6 Allegheny Steam Engine, Cab No. 1610
 80-3251-1 Proto-Sound 3.0 \$649.95
 80-3251-5 Proto-Sound 3E+ (3-Rail) \$679.95

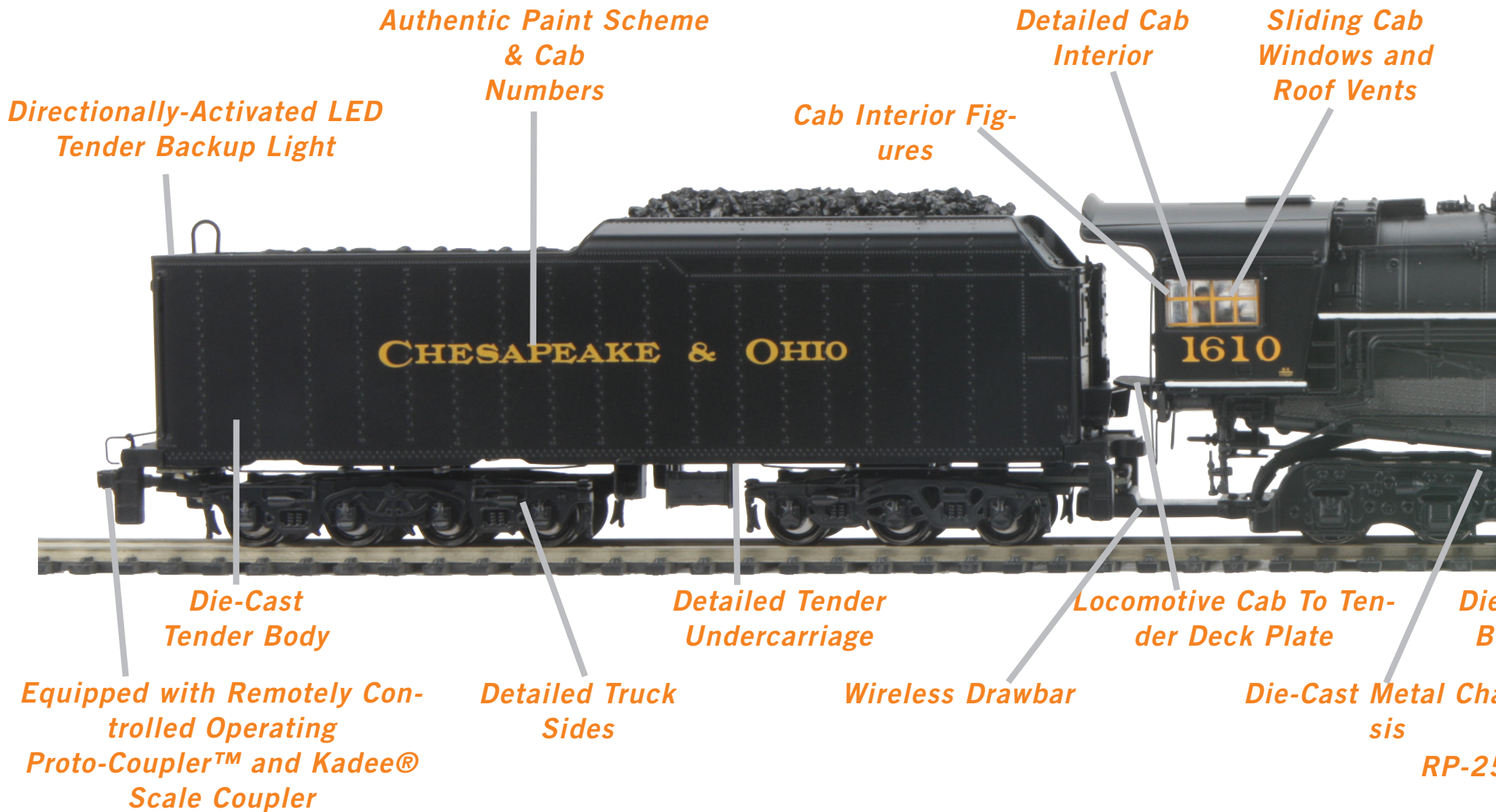


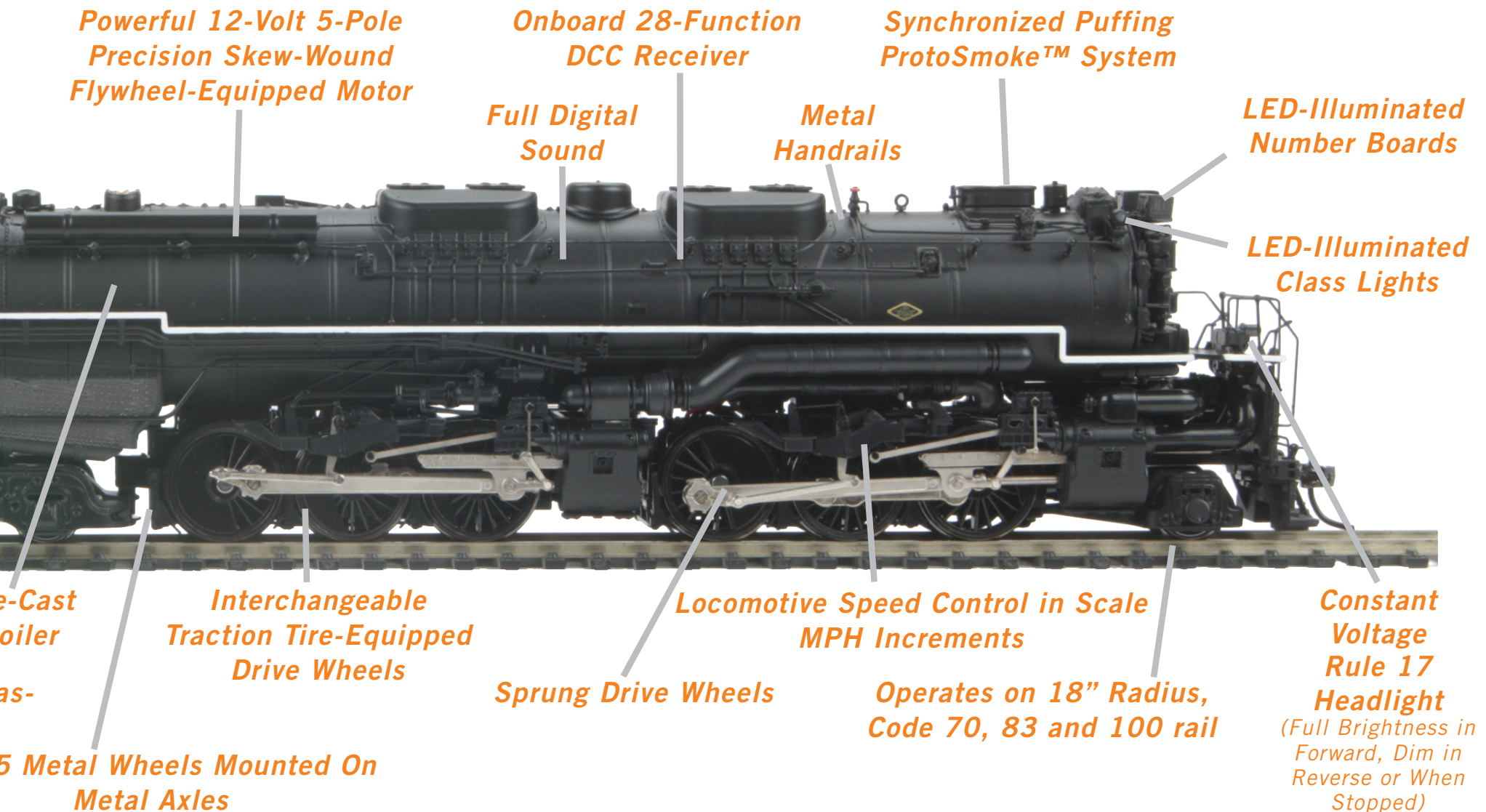
Chesapeake & Ohio - 2-6-6-6 Allegheny Steam Engine, Cab No. 1618
80-3252-1 Proto-Sound 3.0 \$649.95
80-3252-5 Proto-Sound 3E+ (3-Rail) \$679.95

Features Include:

- 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 and Decorative Bell
- Decorative Metal 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
- Proto-Sound 3.0 With The Digital Command System Featuring: Quillable Whistle With Freight Yard Proto-Effects
- Quillable Whistle w/Freight Yard Proto-Effects
- Measures: 18" x 1 5/8" x 2 1/4"
- Operates On 22" Radius Curves

Anatomy of a 2-6-6-6 Alleghen





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

Onboard 28-Function DCC Receiver

Synchronized Puffing ProtoSmoke™ System

Full Digital Sound

Metal Handrails

LED-Illuminated Number Boards

LED-Illuminated Class Lights

Die-Cast Boiler

Interchangeable Traction Tire-Equipped Drive Wheels

Locomotive Speed Control in Scale MPH Increments

Constant Voltage Rule 17 Headlight

(Full Brightness in Forward, Dim in Reverse or When Stopped)

5 Metal Wheels Mounted On Metal Axles

Sprung Drive Wheels

Operates on 18" Radius, Code 70, 83 and 100 rail

2-8-8-4 Yellowstone



Owned by United States Steel, the Duluth, Missabe & Iron Range Railway was built for one major purpose: to haul iron ore from the mines of Minnesota and Wisconsin to the Lake Superior ports of Duluth and Two Harbors, Minnesota. Its primary cargo was so heavy that normal hopper cars couldn't carry it; the DM&IR's signature rolling stock was the short "ore jenny" designed especially to haul iron ore.

As World War II loomed on the horizon, ore tonnage on the Missabe Road increased more than fourfold from 1938 to 1941, and the railway needed additional motive power. Ordered from Baldwin, the new engines were based on a Western Pacific 2-8-8-2 design. A four-wheel trailing truck was added to accommodate a larger firebox and a longer, all-weather cab for Minnesota's bitter winters. The so-called Yellowstone 2-8-8-4 wheel arrangement had originated earlier on the Northern Pacific, where Alco had promoted the first engine of that type by hosting a sit-down dinner for 12 people in its firebox.

Delivered in the spring of 1941, the DM&IR's first eight Yellowstones (Class M-3) were among the largest steamers ever built, in the same league as Union Pacific's Big Boys. By at least one measure — tractive effort — the Missabe Road engines were more powerful. They pleased their owners so well that, with the permission of the War Production Board, an additional ten Yellowstones (Class M-4) were ordered for delivery in 1943. Because the new engines were delivered during a seasonal downturn in ore traffic, part of the new order was temporarily leased to the Denver & Rio Grande Western. The following year, the D&RGW asked to borrow them again, stating in a telegram that they were among the finest engines the road had ever run. Hauling trains of over 100 loaded ore cars, the DM&IR's 2-8-8-4s soldiered on into the 1960s, with the last officially retired in 1963.

Outfitted with Proto-Sound 3.0, wireless tether and quillable whistle, the massive DM&IR Yellowstone debuts in the HO lineup in 2015, ready to haul the most challenging loads on your layout.

Did You Know? Yellowstones were equipped with either a cylindrical Elesco or a box-shaped Worthington feedwater heater ahead of the smokestack — a feature correctly replicated on our models. The later Class M-4 engines were heavier due to the use of carbon steel, as the lighter steel alloy used in the M-3 class was in short supply during World War II.

Features Include:

- Intricately Detailed, Die-Cast Boiler and Chassis
- Intricately Detailed, Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Handpainted Engineer and Fireman Figures
- Metal Handrails, Whistle and Bell
- RP25 Metal Wheels
- Sprung Drivers
- User-Installable RP-25 Drivers w/Traction Tires
- #158 Scale Kadee® Whisker Coupler
- Remote Controlled Proto-Coupler
- Prototypical Rule 17 Lighting
- LED-Illuminated Constant Voltage Headlight, Firebox Glow, Number Boards, Cab Interior, Class Lights, and Tender Back-Up Light
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Motor
- Synchronized Puffing ProtoSmoke™ System
- Speed Control In Scale MPH Increments
- Wireless Drawbar
- 1:87 Scale Dimensions
- Onboard 28-Function DCC/DCS Decoder With Advanced Consisting, Feature Mapping and Speed Mapping
- Proto-Sound® 3.0 With The Digital Command System Featuring Quillable Whistle With Passenger Station or Freight Yard Proto-Effects™
- Measures: 18 11/16" X 1 9/16" X 2 1/4"
- Operates On Code 70, 83 and 100 Track
- Operates On 22" Radius Curves



Duluth, Missabe & Iron Range - 2-8-8-4 M-3 Yellowstone Steam Engine, Cab No. 225
 80-3259-1 Proto-Sound® 3.0 \$599.95
 80-3259-5 Proto-Sound 3E+ \$599.95

Duluth, Missabe & Iron Range - 2-8-8-4 M-3 Yellowstone Steam Engine, Cab No. 227
 80-3260-1 Proto-Sound® 3.0 \$599.95
 80-3260-5 Proto-Sound 3E+ \$599.95



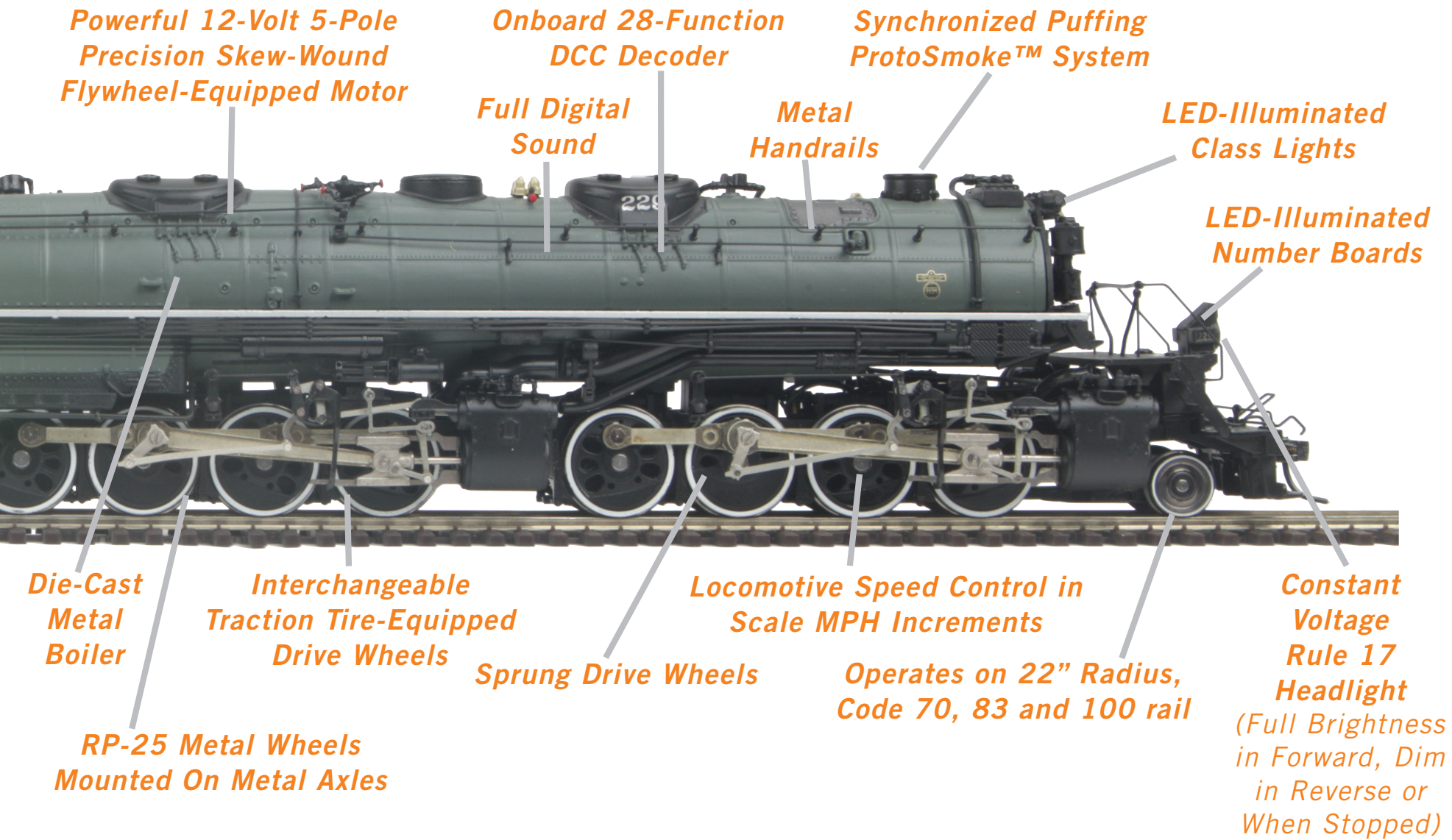
Duluth, Missabe & Iron Range - 2-8-8-4 M-4 Yellowstone Steam Engine, Cab No. 229
 80-3261-1 Proto-Sound® 3.0 \$599.95
 80-3261-5 Proto-Sound 3E+ \$599.95

Duluth, Missabe & Iron Range - 2-8-8-4 M-4 Yellowstone Steam Engine, Cab No. 232
 80-3262-1 Proto-Sound® 3.0 \$599.95
 80-3262-5 Proto-Sound 3E+ \$599.95



Anatomy of a 2-8-8-4 Yellowstone





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

Onboard 28-Function DCC Decoder

Synchronized Puffing ProtoSmoke™ System

Full Digital Sound

Metal Handrails

LED-Illuminated Class Lights

LED-Illuminated Number Boards

Die-Cast Metal Boiler

Interchangeable Traction Tire-Equipped Drive Wheels

Sprung Drive Wheels

Locomotive Speed Control in Scale MPH Increments

Operates on 22” Radius, Code 70, 83 and 100 rail

Constant Voltage Rule 17 Headlight

(Full Brightness in Forward, Dim in Reverse or When Stopped)

RP-25 Metal Wheels Mounted On Metal Axles

Pennsylvania H10 2-8-0 Consolidation



All Models Include Onboard DCC Receiver

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 though the end of steam, H10s could be found all over the Pennsy, the

Long Island Railroad, and the Pennsylvania Reading Seashore Lines in switching, work train, branch line, and occasionally main line service.

Our die-cast H-10 features the extraordinary level of detail you've come to expect in an M.T.H. HO steamer. Virtually all piping and boiler appliances are separate, added-on parts. Rods and valve gear have a prototypically darkened, grimy appearance, and the ProtoSound 3.0 sound and control system features an accurate Pennsy whistle. If you model any period from the Woodrow Wilson era to the Eisenhower years, there's an appropriate chore on your railroad for this rugged, muscular-looking steamer.



Pennsylvania - H10 2-8-0 Steam Engine,
Cab No. 7103
80-3240-1 DCC/DCS Proto-Sound 3.0 \$399.95
80-3240-5 DCC/DCS/Motorola 1/2 PS 3E+ (3-Rail) \$429.95

Pennsylvania - H10 2-8-0 Steam Engine,
Cab No. 7099
80-3241-1 DCC/DCS Proto-Sound 3.0 \$399.95
80-3241-5 DCC/DCS/Motorola 1/2 PS 3E+ (3-Rail) \$429.95

Pennsylvania - H10 2-8-0 Steam Engine,
Cab No. 7122
80-3242-1 DCC/DCS Proto-Sound 3.0 \$399.95
80-3242-5 DCC/DCS/Motorola 1/2 PS 3E+ (3-Rail) \$429.95



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

80-3244-1 DCC/DCS Proto-Sound 3.0 \$399.95
80-3244-5 DCC/DCS/Motorola 1/2 Proto-Sound 3E+ (3-Rail) \$429.95



Features Include:

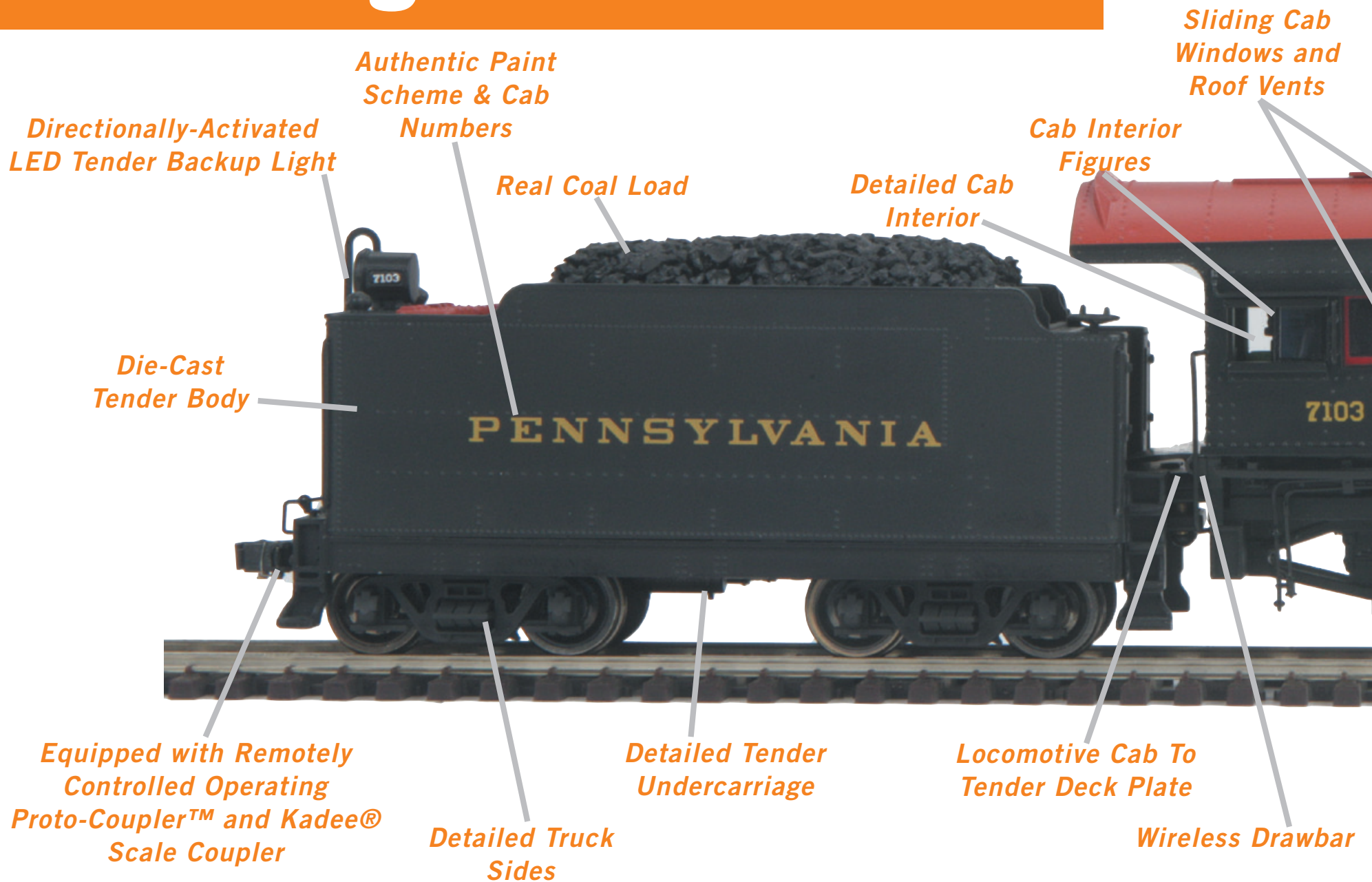
- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Engineer and Fireman Figures
- Metal Handrails and Bell
- Metal Whistle
- RP25 Metal Wheels
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- NEM 340 Metal Wheels*
- Sprung Drivers
- Operating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

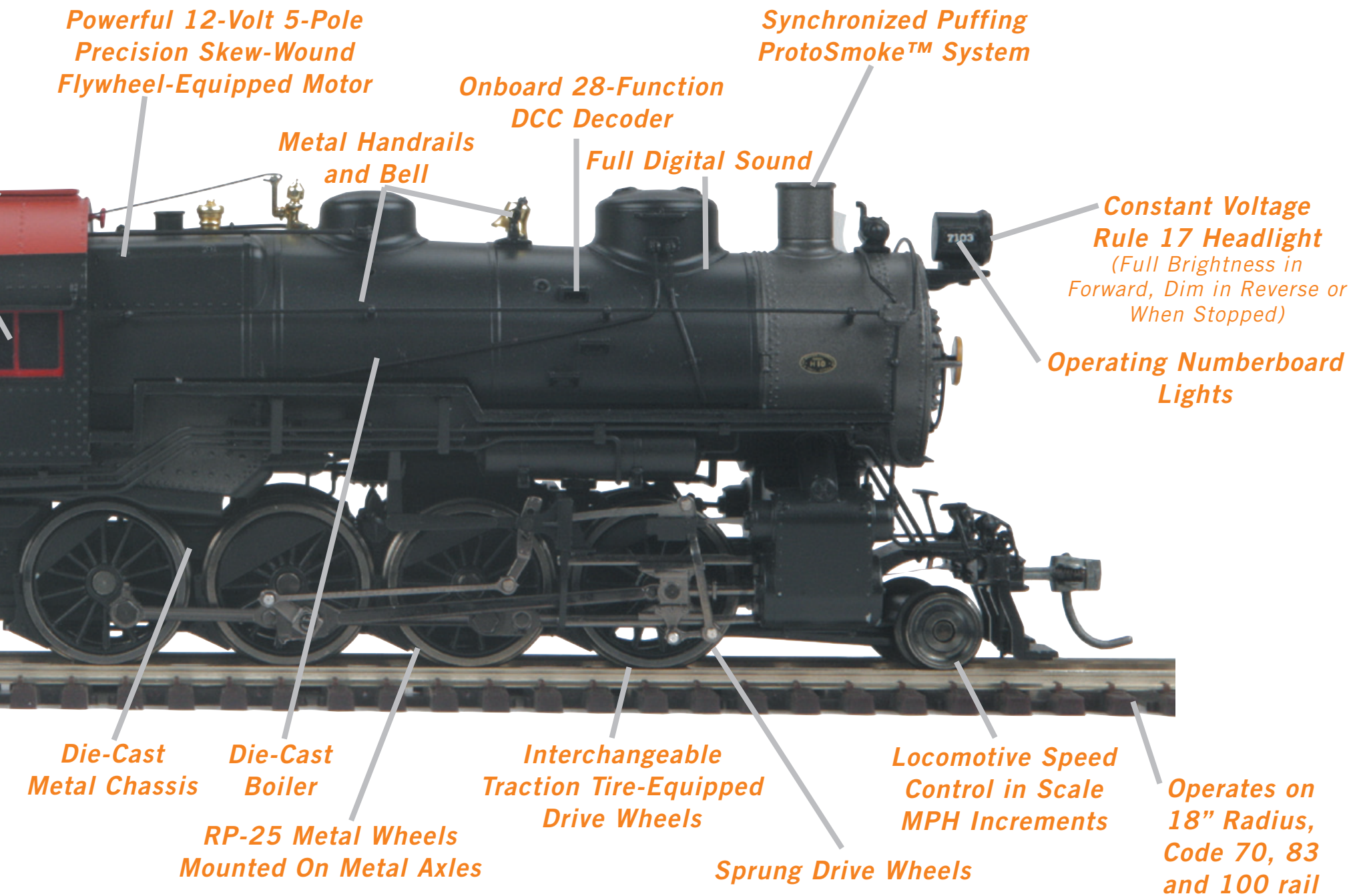
- (2) #158 Scale Kadee Whisker Couplers
- NEM 360/362 Coupler and Pocket Assembly*
- #18 U.S. Kadee® Coupler Compatible*
- Prototypical Rule 17 Lighting
- Constant Voltage Headlight
- Operating Marker Lights
- Operating Numberboard Lights
- Lighted Cab Interior
- Operating Tender Back-up Light
- Powerful 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 And 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

*Featured on Proto-Sound 3E+ Models

Anatomy of a H10 2-8-0





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

**Metal Handrails
and Bell**

**Onboard 28-Function
DCC Decoder**

Full Digital Sound

**Synchronized Puffing
ProtoSmoke™ System**

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

**Operating Numberboard
Lights**

**Die-Cast
Metal Chassis**

**Die-Cast
Boiler**

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

**Interchangeable
Traction Tire-Equipped
Drive Wheels**

Sprung Drive Wheels

**Locomotive Speed
Control in Scale
MPH Increments**

**Operates on
18" Radius,
Code 70, 83
and 100 rail**

Pennsylvania K4s 4-6-2 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 Pennsy's Juniata shops and Baldwin Locomotive Works.

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 offer both prewar and modern versions of the signature locomotive of the Standard Railroad of the World, 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, this K4s will be the pride of your layout or 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+ (3-Rail) \$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+ (3-Rail) \$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+ (3-Rail) \$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+ (3-Rail) \$529.95

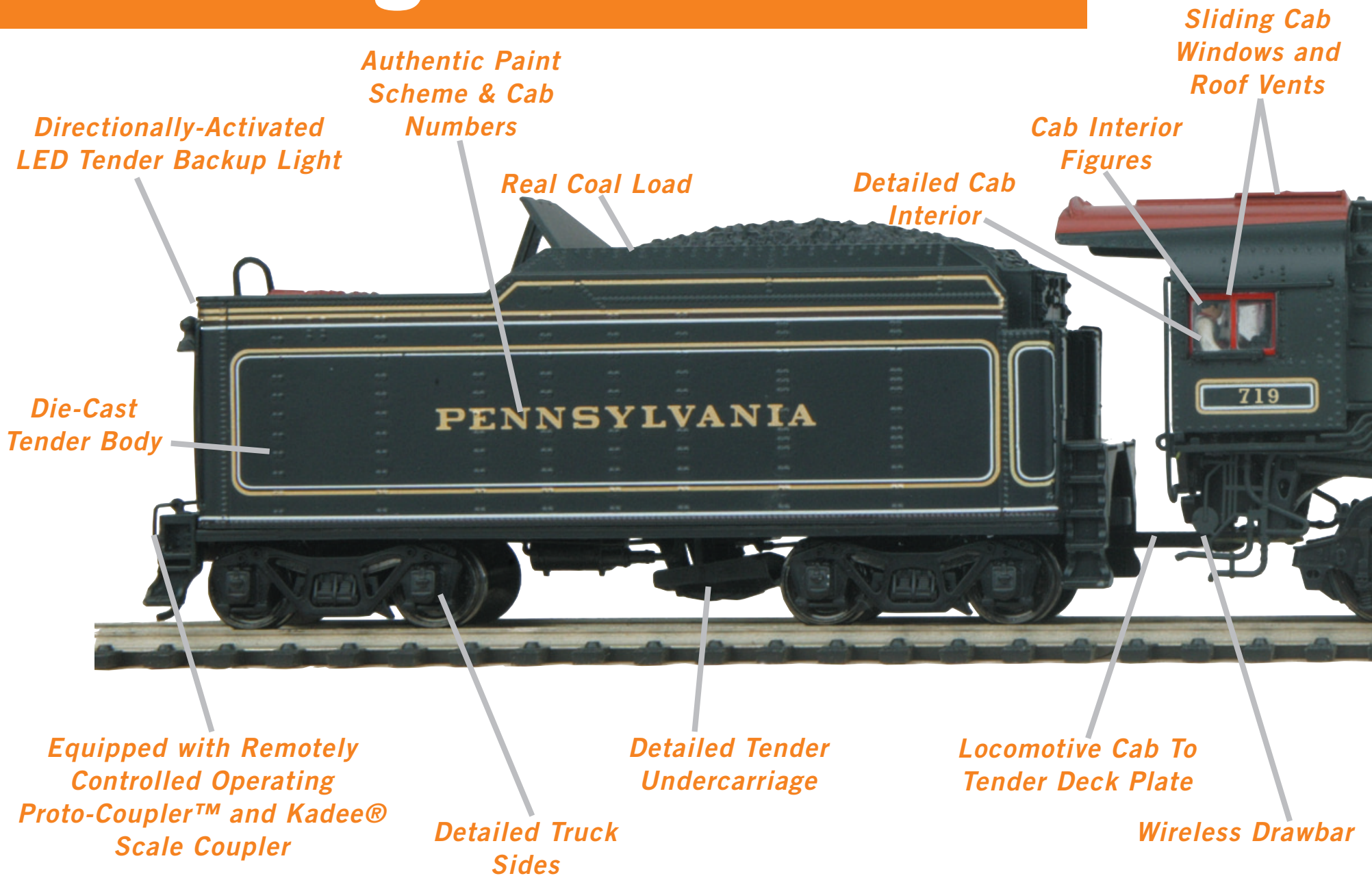
**All Models
 Include
 Onboard DCC
 Receiver**

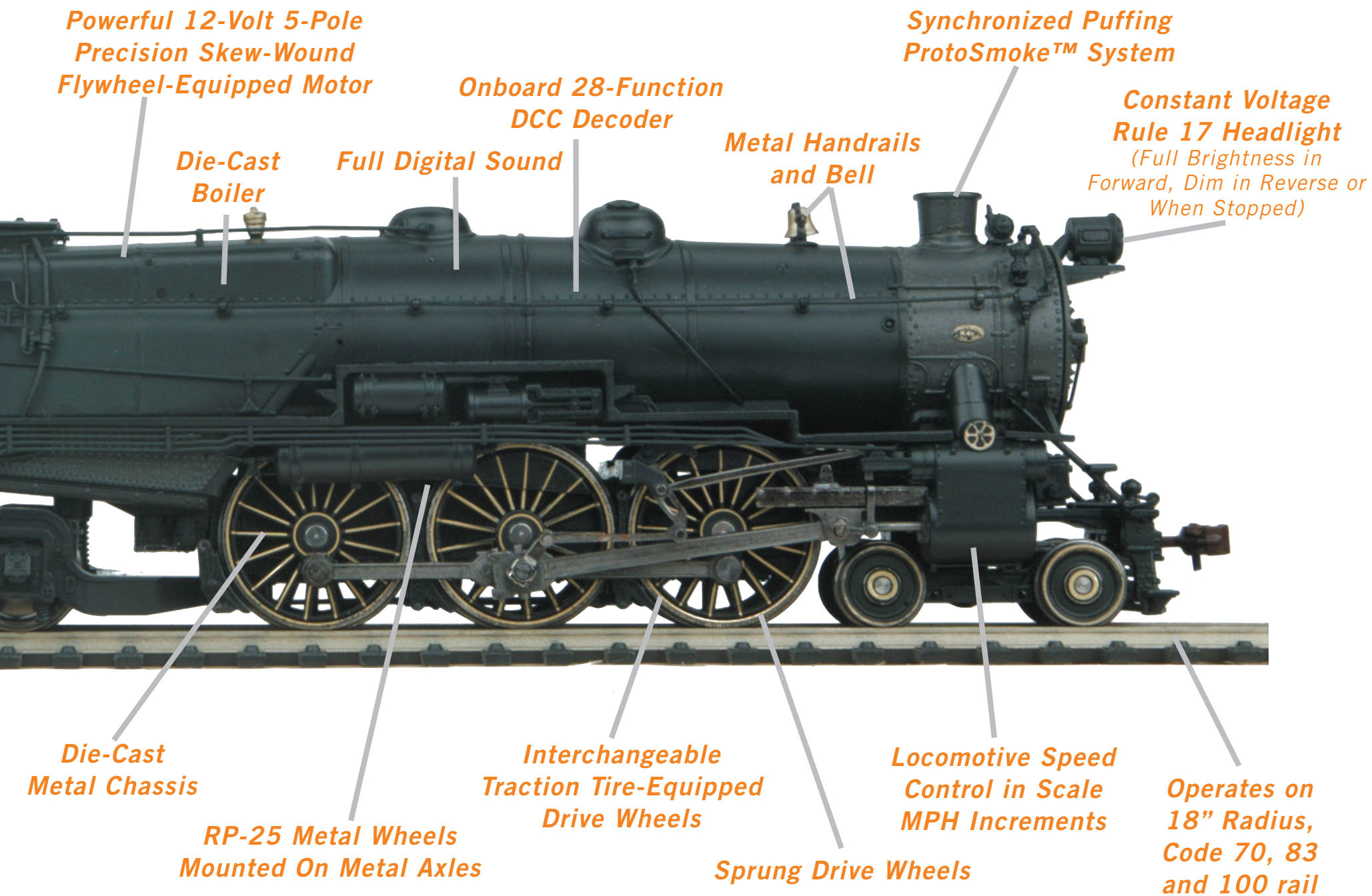


Features Include:

- 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
- Interchangeable RP25 Metal Drive Wheels w/o Traction Tires
- NEM 340 Metal Wheels*
- Sprung Drivers
- (2) #158 Scale Kadee Whisker Couplers
- Operating Kadee-Compatible Remote Controlled Proto-Coupler On Tender
- 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 Quillable Whistle And Passenger Station 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

Anatomy of a K4s 4-6-2





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

**Die-Cast
Boiler**

Full Digital Sound

**Onboard 28-Function
DCC Decoder**

**Metal Handrails
and Bell**

**Synchronized Puffing
ProtoSmoke™ System**

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

**Die-Cast
Metal Chassis**

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

**Interchangeable
Traction Tire-Equipped
Drive Wheels**

Sprung Drive Wheels

**Locomotive Speed
Control in Scale
MPH Increments**

**Operates on
18" Radius,
Code 70, 83
and 100 rail**

Bavarian Class 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 Rhinegold Express on part of its scenic route down the Rhine Valley, both before and after WWII. An S 3/6 could also be seen often on the point of the Orient Express.

Even after World War II, the aging engines continued to be great performers. A large number were modernized with new boilers and became the most economical steamers on the Deutsche Bundesbahn (DB), the new name for West Germany's railroad system. By the 1960s however, the S 3/6 class, which originally numbered 159 locomotives, had been retired, with a number of engines preserved in museums or in operating condition. M.T.H. is proud to introduce 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.



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



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



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



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

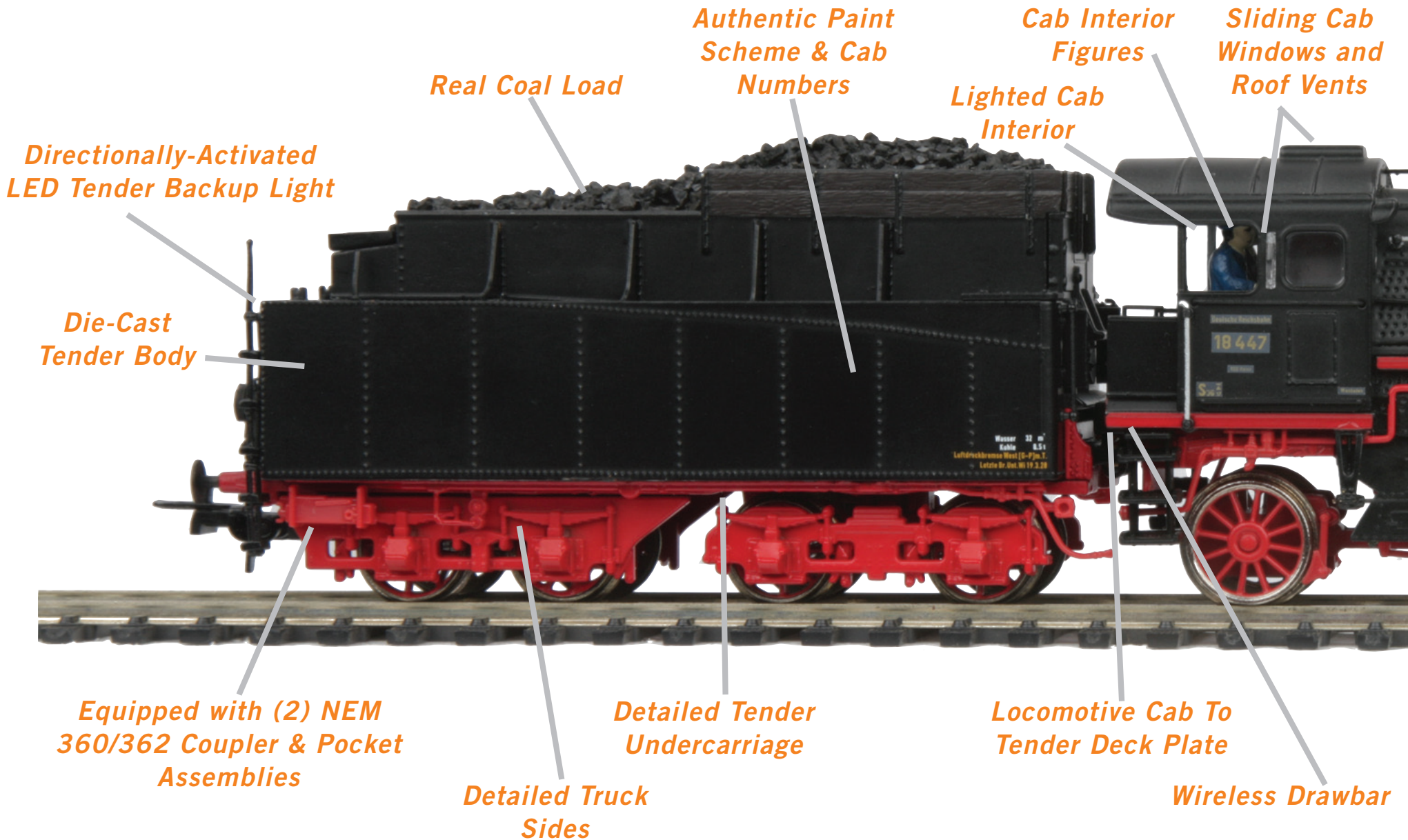


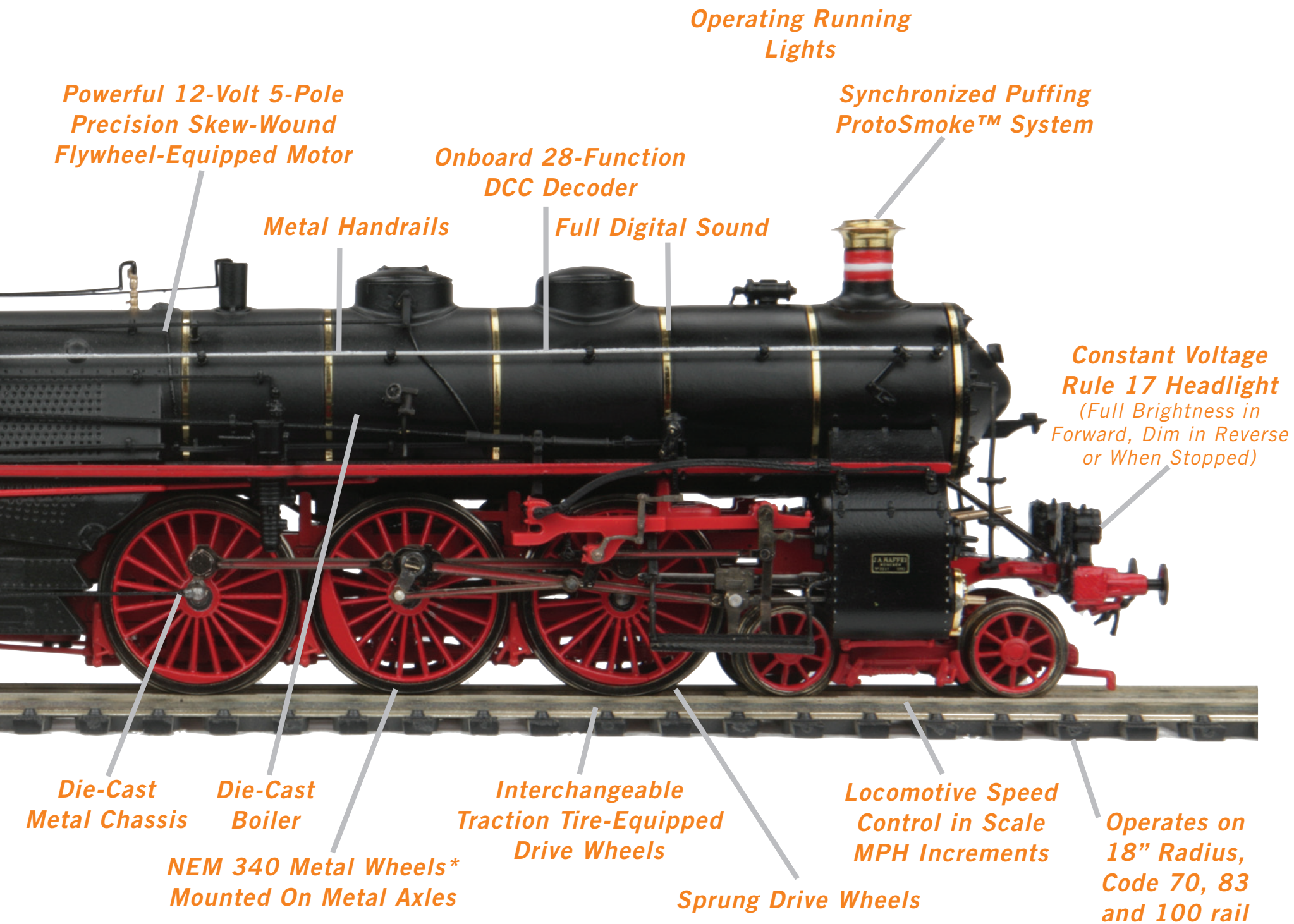
Features Include:

- Die-Cast Boiler and Chassis
- Die-Cast Tender Body
- Authentic Paint Scheme
- Real Tender Coal Load
- Metal Handrails and Whistle
- Sprung Buffers
- NEM 340 Metal Wheels*
- #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

Anatomy of a S 3/6 Express





Operating Running Lights

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

Synchronized Puffing ProtoSmoke™ System

Onboard 28-Function DCC Decoder

Metal Handrails

Full Digital Sound

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

Die-Cast Metal Chassis

Die-Cast Boiler

NEM 340 Metal Wheels* Mounted On Metal Axles

Interchangeable Traction Tire-Equipped Drive Wheels

Sprung Drive Wheels

Locomotive Speed Control in Scale MPH Increments

Operates on 18" Radius, Code 70, 83 and 100 rail

*Available on Proto-Sound 3E+ Models

EMD GP38-2 Diesels

READY **2** RAIL

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

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

The result was an engine so hard working and dependable that it became as common on American railroads as the F-unit was in the 1950s and '60s. *Trains* magazine recognized this in 1982 by designating B&O GP38 #3802 (a pre-Dash-2 model) as the All American Diesel; the engine now resides at the Baltimore & Ohio Railroad Museum, repainted in its 1982 Chessie System colors. While today many GP38-2s have moved on to second careers on short line and regional railroads, others have soldiered on for more than three decades with their original owners. As of late 2013, for example, Union Pacific and Norfolk Southern still rostered more than 500 GP38-2s apiece.

This accurately modeled GP38-2 joins our economically priced Ready2Rail lineup in 13 prototypical paint schemes. While Ready2Rail locomotives have fewer added-on details than standard M.T.H. motive power, Proto-Sound 3.0 versions feature the same versatile electronics and prototypical sounds found in every Proto-Sound 3.0 engine. In command mode, you can operate this second-generation stalwart with any other DCC- or M.T.H. DCS-equipped models. With the DCS system, you can create a lashup with just a few key-strokes, combining one or more GP38-2s with other Proto-Sound 3.0 first-, second-, or third-generation diesels — and run them all from a single throttle just like the prototype.





Features Include:

- Intricately Detailed, Durable ABS Body
- Metal Chassis
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- (2) Remote-Controlled Proto-Couplers™*
- (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: 8" x 1 3/8" x 2.5"
- Operates On 18" Radius Curves

* Proto-Sound 3.0 Models Only



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

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



CSX - GP38-2 Diesel, Cab No. 2722
 85-2019-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2019-0 DCC-Ready \$129.95
 CSX - GP38-2 Diesel, Cab No. 2736
 85-2020-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2020-0 DCC-Ready \$129.95

CSX - GP38-2 Diesel, Cab No. 2729
 85-2021-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2021-0 DCC-Ready \$129.95



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

Indiana Railroad - GP38-2 Diesel, Cab No. 3806
 85-2022-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2022-0 DCC-Ready \$129.95
 Indiana Railroad - GP38-2 Diesel, Cab No. 3802
 85-2023-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2023-0 DCC-Ready \$129.95
 Indiana Railroad - GP38-2 Diesel, Cab No. 3803
 85-2024-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2024-0 DCC-Ready \$129.95



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



New York & Atlantic - GP38-2 Diesel, Cab No. 270
 85-2028-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2028-0 DCC-Ready \$129.95
 New York & Atlantic - GP38-2 Diesel, Cab No. 271
 85-2029-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2029-0 DCC-Ready \$129.95

Norfolk Southern - GP38-2 Diesel, Cab No. 5304
 85-2030-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2030-0 DCC-Ready \$129.95
 Norfolk Southern - GP38-2 Diesel, Cab No. 5296
 85-2031-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2031-0 DCC-Ready \$129.95
 Norfolk Southern - GP38-2 Diesel, Cab No. 5291
 85-2032-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2032-0 DCC-Ready \$129.95



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



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

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



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



Long Island - GP38-2 Diesel, Cab No. 254
 85-2048-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2048-0 DCC-Ready \$129.95
 Long Island - GP38-2 Diesel, Cab No. 255
 85-2049-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2049-0 DCC-Ready \$129.95

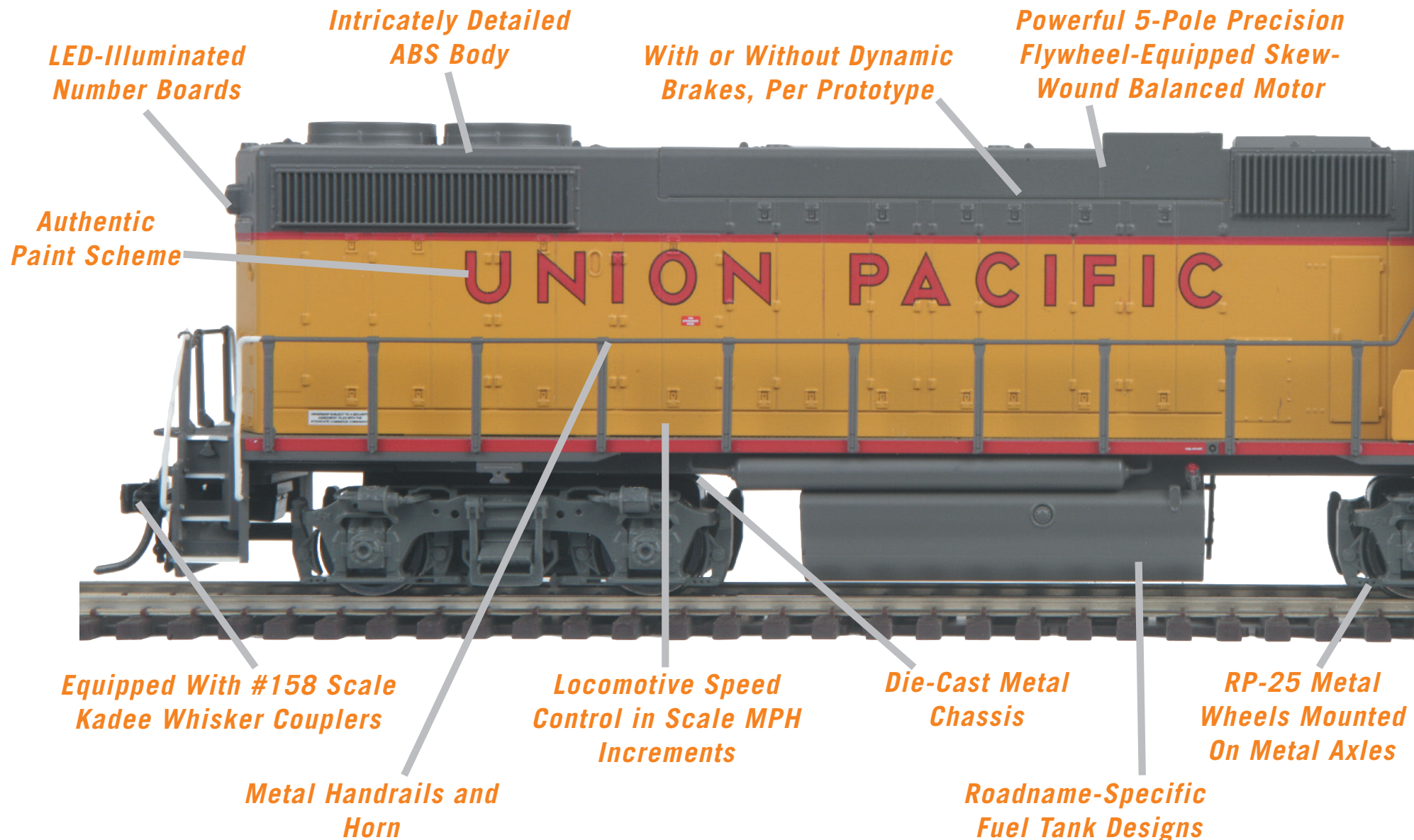
Long Island - GP38-2 Diesel, Cab No. 256
 85-2050-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2050-0 DCC-Ready \$129.95



Southern Pacific - GP38-2 Diesel, Cab No. 4850
 85-2051-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2051-0 DCC-Ready \$129.95
 Southern Pacific - GP38-2 Diesel, Cab No. 8044
 85-2052-1 DCC/DCS Proto-Sound 3.0 \$199.95
 85-2052-0 DCC-Ready \$129.95

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

Anatomy of a GP38-2



*28-Function DCC/DCS Decoder with
Advanced Consisting, Feature
Mapping and Speed Mapping*

*Constant-Voltage LED
Rule 17
Headlights*

*Crew
Figures*

*Operates on 18" Radius
Code 70, 83 or 100 Track*

*1:87 Scale
Proportions*



General Electric Dash 9-44CW



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

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

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

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

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

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

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



BNSF (Swoosh) - Dash 9 Diesel Engine, Cab No. 796*

80-2286-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2286-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2286-0	DCC Ready	\$199.95

BNSF (Swoosh) - Dash 9 Diesel Engine, Cab No. 4484

80-2345-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2345-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2345-0	DCC Ready	\$199.95

* Before its merger into BNSF in 1995, the Santa Fe specified a unique notch on the side of its Dash 9 cab roofs for clearance reasons, particularly at its York Canyon, New Mexico coal loadout. Known as a gull wing cab roof, this feature was carried over into subsequent BNSF Dash 9 orders, and is accurately rendered on our Santa Fe, transition period, and BNSF models.



BNSF (Warbonnet) - Dash 9 Diesel Engine, Cab No. 4704*

80-2287-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2287-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2287-0	DCC Ready	\$199.95

BNSF (Warbonnet) - Dash 9 Diesel Engine, Cab No. 4719*

80-2288-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2288-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2288-0	DCC Ready	\$199.95

BNSF (Warbonnet) - Dash 9 Diesel Engine, Cab No. 4707*

80-2289-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2289-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2289-0	DCC Ready	\$199.95



Features Include:

- Intricately Detailed ABS Body
- Die-Cast Metal Chassis
- Metal Handrails and Horn
- Metal Body Side Grilles
- Detachable Snow Plow
- (2) Engineer Cab Figures
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- (2) Operating Kadee-Compatible Remote

- Controlled Proto-Couplers***
- (2) #158 Scale Kadee Whisker Couplers
- 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*
- Onboard 28-Function DCC Receiver*
- 8-Pin DCC Decoder Plug**
- Operates On Code 70, 83 and 100 Track
- 1:87 Scale Proportions
- Proto-Sound 3.0 With The Digital Command System Featuring Freight Yard Proto-Effects*
- Unit Measures: 10 9/16" x 1 7/16" x 2 3/16"
- Operates On 18" Radius Curves

* Proto-Sound 3 and 3E+ Models Only

** DCC-Ready Model Only

*** Proto-Sound 3.0 Models Only



Canadian National - Dash 9 Diesel Engine, Cab No. 2604
 80-2290-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2290-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2290-0 DCC Ready \$199.95

Canadian National - Dash 9 Diesel Engine, Cab No. 2610
 80-2291-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2291-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2291-0 DCC Ready \$199.95

Canadian National - Dash 9 Diesel Engine, Cab No. 2617
 80-2292-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2292-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2292-0 DCC Ready \$199.95



**Features prototypical notched "gull wing" cab roof unique to Santa Fe and BNSF Dash 9s (See previous page for more detail.)*

Santa Fe - Dash 9 Diesel Engine, Cab No. 620*
 80-2302-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2302-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2302-0 DCC Ready \$199.95

Santa Fe - Dash 9 Diesel Engine, Cab No. 624*
 80-2303-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2303-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2303-0 DCC Ready \$199.95

Santa Fe - Dash 9 Diesel Engine, Cab No. 629*
 80-2304-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2304-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2304-0 DCC Ready \$199.95



Chicago & North Western - Dash 9 Diesel Engine, Cab No. 8669	Chicago & North Western - Dash 9 Diesel Engine, Cab No. 8672	Chicago & North Western - Dash 9 Diesel Engine, Cab No. 8676
80-2294-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2295-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2296-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2294-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95	80-2295-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95	80-2296-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
80-2294-0 DCC Ready \$199.95	80-2295-0 DCC Ready \$199.95	80-2296-0 DCC Ready \$199.95



Chicago & North Western (OPLS logo) - Dash 9 Diesel Engine, Cab No. 8727

80-2293-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2293-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
80-2293-0 DCC Ready \$199.95



Southern Pacific - Dash 9 Diesel Engine, Cab No. 8101	Southern Pacific - Dash 9 Diesel Engine, Cab No. 8116	Southern Pacific - Dash 9 Diesel Engine, Cab No. 8121
80-2305-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2306-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2307-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2305-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95	80-2306-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95	80-2307-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
80-2305-0 DCC Ready \$199.95	80-2306-0 DCC Ready \$199.95	80-2307-0 DCC Ready \$199.95



Union Pacific (Red Stripe) - Dash 9 Diesel Engine, Cab No. 9800	Union Pacific (Red Stripe) - Dash 9 Diesel Engine, Cab No. 9812	Union Pacific (Red Stripe) - Dash 9 Diesel Engine, Cab No. 9820
80-2309-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2310-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2311-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2309-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95	80-2310-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95	80-2311-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
80-2309-0 DCC Ready \$199.95	80-2310-0 DCC Ready \$199.95	80-2311-0 DCC Ready \$199.95



Union Pacific (CNW Flag logo) - Dash 9 Diesel Engine, Cab No. 9807
80-2308-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2308-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
80-2308-0 DCC Ready \$199.95

(Models an ex-Chicago & North Western unit acquired in the UP takeover.)



Norfolk Southern - Dash 9 Diesel Engine, Cab No. 9197	Norfolk Southern - Dash 9 Diesel Engine, Cab No. 9156	Norfolk Southern - Dash 9 Diesel Engine, Cab No. 9183
80-2299-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2300-1 DCC/DCS Proto-Sound 3.0 \$299.95	80-2301-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2299-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95	80-2300-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95	80-2301-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
80-2299-0 DCC Ready \$199.95	80-2300-0 DCC Ready \$199.95	80-2301-0 DCC Ready \$199.95



Norfolk Southern (Black Horse logo) - Dash 9 Diesel Engine, Cab No. 9171
80-2298-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2298-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
80-2298-0 DCC Ready \$199.95



Norfolk Southern (Black OPLS logo) - Dash 9 Diesel Engine, Cab No. 9250
80-2297-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2297-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
80-2297-0 DCC Ready \$199.95

Did You Know?

Norfolk Southern Dash 9s have software that downrates their motors to 4000 hp to reduce engine wear and fuel consumption. If needed, the extra 400 horses can be accessed with the flip of a key switch.

Anatomy of a Dash 9-44CW

*Intricately
Detailed, Durable
ABS Body*

*Authentic
Paint Scheme*

Metal Handrails



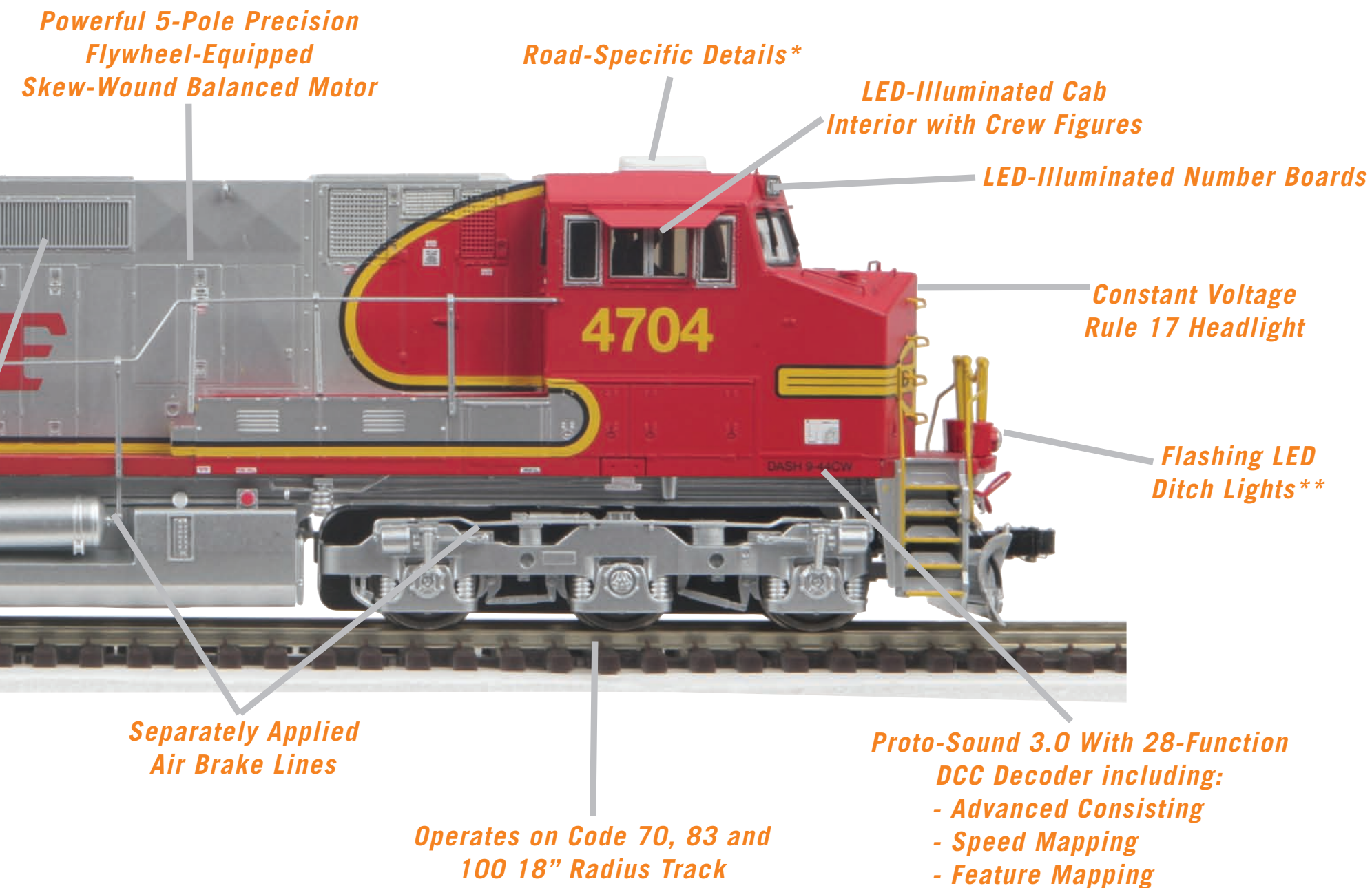
*Supplied with #158 Kadee
Whisker Couplers and
Remote Controlled Proto-Couplers***

Die-Cast Metal Chassis

*See-Through
Metal Grilles*

*RP-25 Metal Wheels
Mounted On Metal Axles*

*Locomotive Speed Control
in Scale MPH Increments***



** See individual item numbers online for specifics*

*** Proto-Sound 3.0 models only*

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.

HO railroaders will find this model offers 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 model also offers a broader range of operating 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.



Chessie - GP35 Diesel, Cab No. 3545

80-2230-1 DCC/DCS Proto-Sound 3.0 \$279.95

80-2230-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95

80-2230-0 DCC Ready \$179.95

Chessie - GP35 Diesel, Cab No. 3546

80-2231-1 DCC/DCS Proto-Sound 3.0 \$279.95

80-2231-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95

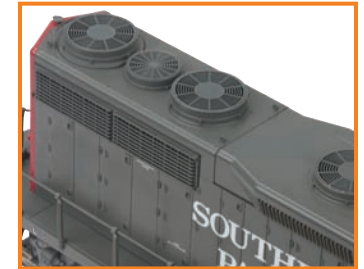
80-2231-0 DCC Ready \$179.95

Chessie - GP35 Diesel, Cab No. 3551

80-2232-1 DCC/DCS Proto-Sound 3.0 \$279.95

80-2232-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95

80-2232-0 DCC Ready \$179.95



All Proto-Sound Models Include Onboard DCC Receiver

Features Include:

- 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
- 8-Pin DCC Decoder Plug on DCC Ready Models
- 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

*Featured on Proto-Sound 3E+ Models

Proto-Sound 3E+

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

This 3-rail version of Proto-Sound 3.0 can be operated in six different modes: AC or DC powered Analog/Conventional, DCC Command Mode with any DCC Controller, DCS Digital Command System mode, Märklin DCC Command Mode, and Motorola 1 and 2 Command Modes.



Pennsylvania GP35 Diesel, Cab No. 2258		Pennsylvania GP35 Diesel, Cab No. 2268		Pennsylvania GP35 Diesel, Cab No. 2273	
80-2160-1	DCC/DCS Proto-Sound 3.0	\$279.95	80-2161-1	DCC/DCS Proto-Sound 3.0	\$279.95
80-2160-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$299.95	80-2161-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$299.95
				80-2162-1	DCC/DCS Proto-Sound 3.0
					\$279.95



Union Pacific GP35 Diesel, Cab No. 750		Union Pacific GP35 Diesel, Cab No. 756		Union Pacific GP35 Diesel, Cab No. 759	
80-2172-1	DCC/DCS Proto-Sound 3.0	\$279.95	80-2173-1	DCC/DCS Proto-Sound 3.0	\$279.95
80-2172-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$299.95	80-2173-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$299.95
			80-2173-0	DCC Ready	\$179.95
				80-2174-5	DCC/DCS Proto-Sound 3E+ (3-Rail)
				80-2174-0	DCC Ready
					\$179.95

All Proto-Sound Models Include Onboard DCC Receiver



Southern Pacific GP35 Diesel, Cab No. 6580		
80-2175-1	DCC/DCS Proto-Sound 3.0	\$279.95
80-2175-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$299.95

Norfolk & Western GP35 Diesel, Cab No. 1304		
80-2166-1	DCC/DCS Proto-Sound 3.0	\$279.95
Norfolk & Western GP35 Diesel, Cab No. 1305		
80-2167-1	DCC/DCS Proto-Sound 3.0	\$279.95



New York Central GP35 Diesel, Cab No. 6133			New York Central GP35 Diesel, Cab No. 6131		
80-2164-1	DCC/DCS Proto-Sound 3.0	\$279.95	80-2163-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$299.95
80-2164-0	DCC Ready	\$179.95			

Erie Lackawanna GP35 Diesel, Cab No. 2551
 80-2169-1 DCC/DCS Proto-Sound 3.0 \$279.95
 Erie Lackawanna GP35 Diesel, Cab No. 2552
 80-2170-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95



Baltimore & Ohio GP35 Diesel, Cab No. 3541
 80-2158-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95



Conrail - GP35 Diesel, Cab No. 2256
 80-2239-1 DCC/DCS Proto-Sound 3.0 \$279.95
 80-2239-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95
 80-2239-0 DCC Ready \$179.95

Conrail - GP35 Diesel, Cab No. 2257
 80-2240-1 DCC/DCS Proto-Sound 3.0 \$279.95
 80-2240-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95
 80-2240-0 DCC Ready \$179.95

Conrail - GP35 Diesel, Cab No. 2266
 80-2241-1 DCC/DCS Proto-Sound 3.0 \$279.95
 80-2241-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95
 80-2241-0 DCC Ready \$179.95



Penn Central - GP35 Diesel, Cab No. 2372
 80-2233-1 DCC/DCS Proto-Sound 3.0 \$279.95
 80-2233-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95
 80-2233-0 DCC Ready \$179.955

Penn Central - GP35 Diesel, Cab No. 2382
 80-2234-1 DCC/DCS Proto-Sound 3.0 \$279.95
 80-2234-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95
 80-2234-0 DCC Ready \$179.95

Penn Central - GP35 Diesel, Cab No. 2387
 80-2235-1 DCC/DCS Proto-Sound 3.0 \$279.95
 80-2235-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95
 80-2235-0 DCC Ready \$179.95

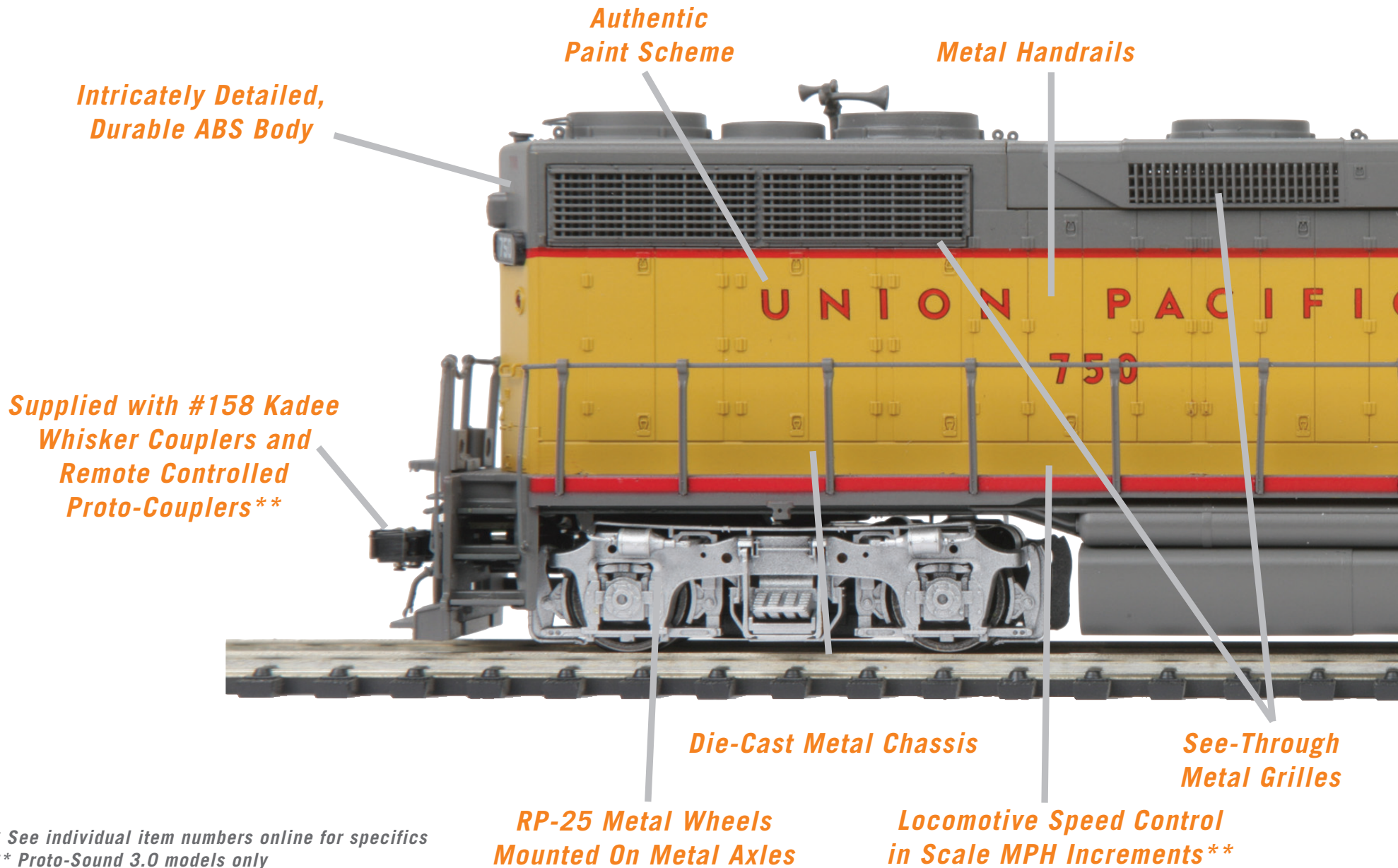


Chesapeake & Ohio - GP35 Diesel, Cab No. 3520
 80-2236-1 DCC/DCS Proto-Sound 3.0 \$279.95
 80-2236-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$299.95
 80-2236-0 DCC Ready \$179.95

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

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

Anatomy of a GP35



*Authentic
Paint Scheme*

Metal Handrails

*Intricately Detailed,
Durable ABS Body*

*Supplied with #158 Kadee
Whisker Couplers and
Remote Controlled
Proto-Couplers***

Die-Cast Metal Chassis

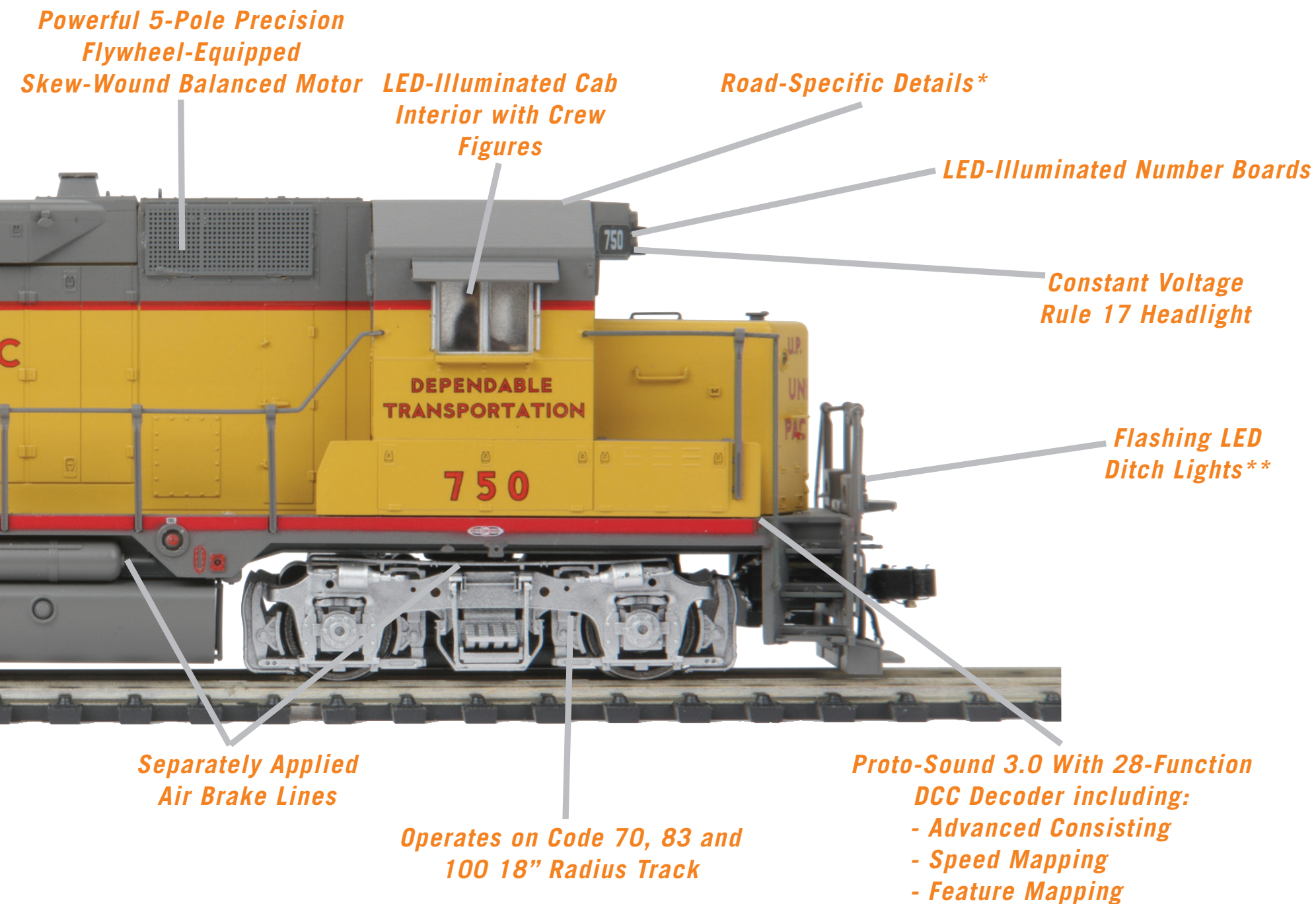
*See-Through
Metal Grilles*

*RP-25 Metal Wheels
Mounted On Metal Axles*

*Locomotive Speed Control
in Scale MPH Increments***

** See individual item numbers online for specifics*

*** Proto-Sound 3.0 models only*



General Electric ES44AC



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

With a wave of consolidation behind it, North American railroading is once again a good business to be in. Freight traffic is booming. Locomotive orders are coming in at a solid pace from the Big Six roads that dominate rail transportation on the continent: Union Pacific, BNSF, CSX, Norfolk Southern, Canadian National, and Canadian Pacific. And the two remaining diesel builders are locked in a battle to become *the* locomotive supplier for the 21st century. Caterpillar®-owned EMD, no longer a division of General Motors, is represented by the AC-traction-motored SD70ACe and its DC-traction sibling, the SD70M-2. General Electric's standard bearers are the EVOs, the Evolution Series ES44AC and ES44DC.

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

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

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

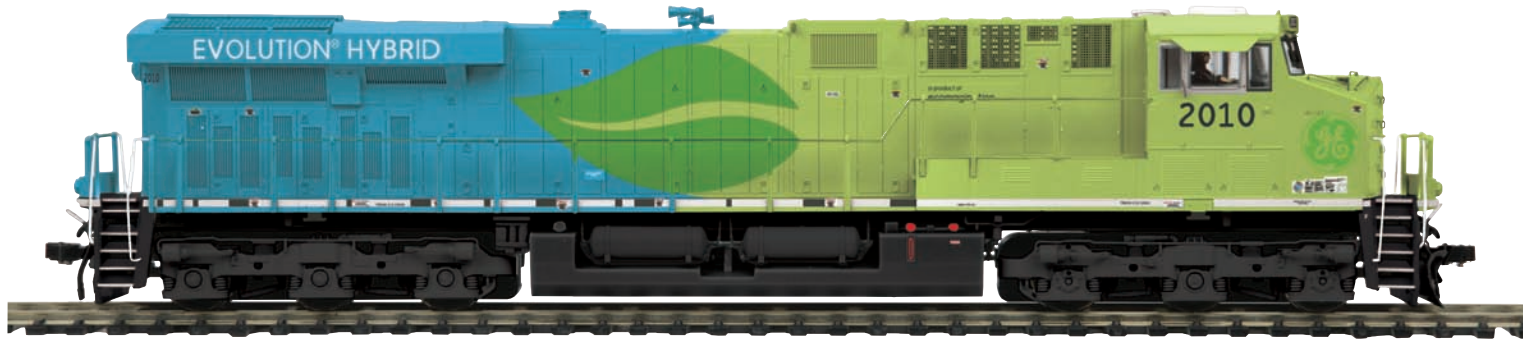
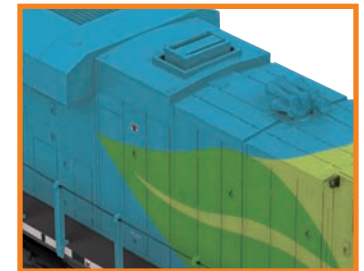
windshield wipers, body and truck air brake piping, and a host of other separately applied details. Activate the couplers from anywhere on the layout using any DCC controller or the DCS Digital Command System. For the ultimate in power and sound, operate these diesels in multiple-unit lashups under DCC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



BNSF - ES44AC Diesel Engine, Cab No. 7028
 80-2327-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2327-5 DCC/DCS Proto-Sound 3E+ (3-Rail)
 \$319.95
 80-2327-0 DCC Ready \$199.95

BNSF - ES44AC Diesel Engine, Cab No. 7033
 80-2328-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2328-5 DCC/DCS Proto-Sound 3E+ (3-Rail)
 \$319.95
 80-2328-0 DCC Ready \$199.95

BNSF - ES44AC Diesel Engine, Cab No. 7036
 80-2329-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2329-5 DCC/DCS Proto-Sound 3E+ (3-Rail)
 \$319.95
 80-2329-0 DCC Ready \$199.95



Evolution Hybrid - ES44AC Diesel Engine, Cab No. 2010
 80-2344-1 DCC/DCS Proto-Sound 3.0 \$319.95
 80-2344-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$339.95

Hybrid has flashing charging lights

Features Include:

- Intricately Detailed ABS Body
- Die-Cast Metal Chassis
- Metal Handrails and Horn
- Metal Body Side Grilles
- Detachable Snow Plow
- (2) Engineer Cab Figures
- Authentic Paint Scheme
- RP-25 Metal Wheels and Metal Axles
- (2) Operating Kadee-Compatible Remote Controlled Proto-Couplers****
- (2) #158 Scale Kadee Whisker Couplers
- Prototypical Rule 17 Lighting*
- Directionally Controlled Constant Voltage LED Headlights
- Lighted Cab Interior
- Illuminated Number Boards
- Operating Ditch Lights
- Flashing Underbody Charging Lights***
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor
- Locomotive Speed Control In Scale MPH Increments*
- Onboard 28-Function DCC Receiver*
- NMRA Compliant 8-Pin DCC Decoder Plug**
- Operates On Code 70, 83 and 100 Track
- 1:87 Scale Proportions
- Proto-Sound 3.0 With The Digital Command System Featuring Freight Yard Proto-Effects
- Unit Measures: 10 9/16" x 1 7/16" x 2 3/16"
- Operates On 18" Radius Curves

* Proto-Sound 3 and 3E+ Models Only ** DCC-Ready Model Only *** Evolution Hybrid Model Only **** Proto-Sound 3.0 Models Only



Ferrosur - ES44AC Diesel Engine, Cab No. 4706		
80-2330-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2330-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2330-0	DCC Ready	\$199.95
Ferrosur - ES44AC Diesel Engine, Cab No. 4714		
80-2331-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2331-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2331-0	DCC Ready	\$199.95
Ferrosur - ES44AC Diesel Engine, Cab No. 4722		
80-2332-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2332-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2332-0	DCC Ready	\$199.95

CSX - ES44AC Diesel Engine, Cab No. 3005		
80-2312-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2312-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2312-0	DCC Ready	\$199.95
CSX - ES44AC Diesel Engine, Cab No. 3018		
80-2313-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2313-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2313-0	DCC Ready	\$199.95
CSX - ES44AC Diesel Engine, Cab No. 3024		
80-2314-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2314-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2314-0	DCC Ready	\$199.95



Canadian Pacific - ES44AC Diesel Engine, Cab No. 9362		
80-2324-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2324-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2324-0	DCC Ready	\$199.95

Canadian Pacific - ES44AC Diesel Engine, Cab No. 9366		
80-2325-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2325-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2325-0	DCC Ready	\$199.95

Canadian Pacific - ES44AC Diesel Engine, Cab No. 9372		
80-2326-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2326-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2326-0	DCC Ready	\$199.95



Union Pacific - ES44AC Diesel Engine, Cab No. 7926

80-2318-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2318-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2318-0	DCC Ready	\$199.95

Union Pacific - ES44AC Diesel Engine, Cab No. 7933

80-2319-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2319-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2319-0	DCC Ready	\$199.95

Union Pacific - ES44AC Diesel Engine, Cab No. 7941

80-2320-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2320-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2320-0	DCC Ready	\$199.95

Rock Island (Iowa Interstate) - ES44AC Diesel Engine, Cab No. 513

80-2333-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2333-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2333-0	DCC Ready	\$199.95



Kansas City Southern - ES44AC Diesel Engine, Cab No.4767

80-2315-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2315-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2315-0	DCC Ready	\$199.95

Kansas City Southern - ES44AC Diesel Engine, Cab No.4770

80-2316-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2316-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2316-0	DCC Ready	\$199.95

Kansas City Southern - ES44AC Diesel Engine, Cab No.4783

80-2317-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2317-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2317-0	DCC Ready	\$199.95



Norfolk Southern - ES44AC Diesel Engine, Cab No. 8110
 80-2321-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2321-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2321-0 DCC Ready \$199.95

Norfolk Southern - ES44AC Diesel Engine, Cab No. 8116
 80-2322-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2322-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2322-0 DCC Ready \$199.95

Norfolk Southern - ES44AC Diesel Engine, Cab No. 8122
 80-2323-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2323-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2323-0 DCC Ready \$199.95



To celebrate its 30th anniversary in 2012, the Norfolk Southern Railway painted 44AC diesels by Norfolk Southern employees at its Chattanooga, TN and Altoona, PA shops. Half of the prototype schemes were honored by the models on these pages. The remaining heritage schemes were painted on Progress Rail Services' shops in Muncie, IN.

Central of Georgia - ES44AC Diesel Engine, Cab No. 8101
 80-2337-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2337-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2337-0 DCC Ready \$199.95

NORFOLK SOUTHERN

HERITAGE SERIES



Monongahela - ES44AC Diesel Engine, Cab No. 8025
 80-2340-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2340-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2340-0 DCC Ready \$199.95

Conrail - ES44AC Diesel Engine, Cab No. 8098
 80-2336-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2336-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2336-0 DCC Ready \$199.95



120 freight diesels in paint
 applied to General Electric ES-
 a, PA shops, and are replicated
 EMD SD70ACe locomotives at



Lehigh Valley - ES44AC Diesel Engine, Cab No. 8104
 80-2339-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2339-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2339-0 DCC Ready \$199.95



NORFOLK SOUTHERN

HERITAGE SERIES



Interstate - ES44AC Diesel Engine, Cab No. 8105
 80-2338-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2338-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2338-0 DCC Ready \$199.95

Southern - ES44AC Diesel Engine, Cab No. 8099
 80-2335-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2335-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2335-0 DCC Ready \$199.95



Pennsylvania - ES44AC Diesel Engine, Cab No. 8102
 80-2334-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2334-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2334-0 DCC Ready \$199.95





Norfolk Southern - ES44AC Diesel Engine, Cab No. 8114

80-2342-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2342-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2342-0	DCC Ready	\$199.95



Nickel Plate Road - ES44AC Diesel Engine, Cab No. 8100

80-2341-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2341-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2341-0	DCC Ready	\$199.95

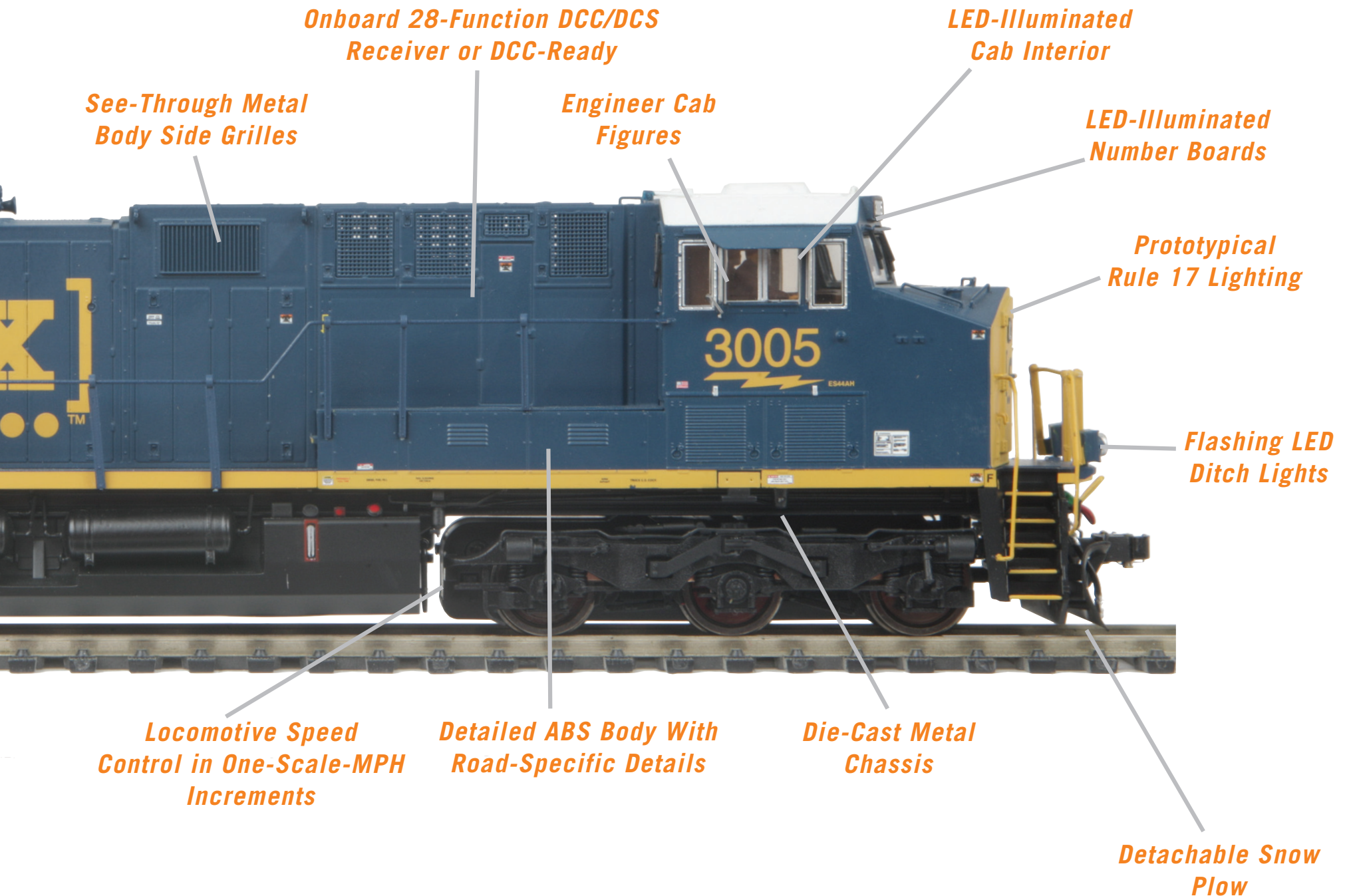
Norfolk & Western - ES44AC Diesel Engine, Cab No. 8103

80-2343-1	DCC/DCS Proto-Sound 3.0	\$299.95
80-2343-5	DCC/DCS Proto-Sound 3E+ (3-Rail)	\$319.95
80-2343-0	DCC Ready	\$199.95



Anatomy of an ES44AC





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

LED-Illuminated Cab Interior

See-Through Metal Body Side Grilles

Engineer Cab Figures

LED-Illuminated Number Boards

Prototypical Rule 17 Lighting

Flashing LED Ditch Lights

Locomotive Speed Control in One-Scale-MPH Increments

Detailed ABS Body With Road-Specific Details

Die-Cast Metal Chassis

Detachable Snow Plow

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 in classic first-generation diesel paint schemes. These streamlined diesels will bring beauty and power to any HO layout. Each Alco FA-1 A-B diesel set includes one powered A unit and powered B unit. The A unit has full directional lighting and both the A and B units feature two operating Kadee-compatible remote controlled couplers.

Features Include:

- 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	SOO Line - Alco FA-1 A Unit, Cab No. 2222A	Soo Line - Alco FB-1 B Unit, Cab No. 2222B
80-2200-1 DCC/DCS Proto-Sound 3.0 \$489.95	80-2201-1 DCC/DCS Proto-Sound 3.0 \$269.95	80-2202-1 DCC/DCS Proto-Sound 3.0 \$269.95
80-2200-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$529.95	80-2201-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$289.95	80-2202-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$289.95
	80-2201-0 DCC Ready \$169.95	



Erie - Alco FA-1 A/B Set, A Unit No. 725A, B Unit No. 725B	Erie - Alco FA-1 A Unit, Cab No. 729A	Erie - Alco FB-1 B Unit, Cab No. 729B
80-2212-1 DCC/DCS Proto-Sound 3.0 \$489.95	80-2213-1 DCC/DCS Proto-Sound 3.0 \$269.95	80-2214-1 DCC/DCS Proto-Sound 3.0 \$269.95
80-2212-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$529.95	80-2213-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$289.95	80-2214-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$289.95
80-2212-0 DCC Ready \$309.95	80-2213-0 DCC Ready \$169.95	80-2214-0 DCC Ready \$169.95



New York Central - Alco FA-1 A/B Set, A Unit No. 1030, B Unit No. 2320	New York Central - Alco FA-1 A Unit, Cab No. 1010	New York Central - Alco FB-1 B Unit, Cab No. 2300
80-2209-1 DCC/DCS Proto-Sound 3.0 \$489.95	80-2210-1 DCC/DCS Proto-Sound 3.0 \$269.95	80-2211-1 DCC/DCS Proto-Sound 3.0 \$269.95
80-2209-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$529.95	80-2210-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$289.95	80-2211-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$289.95
80-2209-0 DCC Ready \$309.95	80-2210-0 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+ (3-Rail)	\$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+ (3-Rail)	\$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+ (3-Rail)	\$289.95



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

All Proto-Sound Models Include Onboard DCC Receiver

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+ (3-Rail)	\$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
80-2207-0	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+ (3-Rail)	\$289.95





Proto-Sound 3E+

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

This 3-rail version of Proto-Sound 3.0 can be operated in six different modes: AC or DC powered Analog/Conventional, DCC Command Mode with any DCC Controller, DCS Digital Command System mode, Märklin DCC Command Mode, and Motorola 1 and 2 Command Modes.



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

Pennsylvania - Alco FA-1 A Unit
 80-2278-1 DCC/DCS Proto-Sound 3.0 \$269.95

Pennsylvania - Alco FB-1 B Unit
 80-2094-0 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 turbocharger 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.

Features Include:

- 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 in A-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



Pennsylvania - Alco PA A/B Set, A Unit No. 5756, B Unit No. 5756B	Pennsylvania - Alco PA A Unit, Cab No. 5755	Pennsylvania - Alco PA B Unit, Cab No. 5752B
80-2215-1 DCC/DCS Proto-Sound 3.0 \$529.95	80-2216-1 DCC/DCS Proto-Sound 3.0 \$289.95	80-2217-1 DCC/DCS Proto-Sound 3.0 \$289.95
80-2215-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$569.95	80-2216-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$309.95	80-2217-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$309.95
80-2215-0 DCC Ready \$349.95	80-2216-0 DCC Ready \$189.95	80-2217-0 DCC Ready \$189.95



Missouri Pacific - Alco PA A Unit, Cab No. 8008	Missouri Pacific - Alco PA A-A Set, Cab Number 8001, 8008
80-2225-1 DCC/DCS Proto-Sound 3.0 \$289.95	80-2283-1 DCC/DCS Proto-Sound 3.0 \$529.95
	80-2283-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$569.95
	80-2283-0 DCC Ready \$349.95



Union Pacific - Alco PA A/B Set, A Unit No. 600, B Unit No. 600B	Union Pacific - Alco PA A Unit, Cab No. 602	Union Pacific - Alco PA B Unit, Cab No. 602B
80-2218-1 DCC/DCS Proto-Sound 3.0 \$529.95	80-2219-1 DCC/DCS Proto-Sound 3.0 \$289.95	80-2220-1 DCC/DCS Proto-Sound 3.0 \$289.95
80-2218-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$569.95	80-2219-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$309.95	80-2220-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$309.95
80-2218-0 DCC Ready \$349.95	80-2219-0 DCC Ready \$189.95	



Lehigh Valley - Alco PA A Unit, Cab No. 610	Lehigh Valley - Alco PA A-A Set, Cab Number 607, 608
80-2222-1 DCC/DCS Proto-Sound 3.0 \$289.95	80-2284-1 DCC/DCS Proto-Sound 3.0 \$529.95
80-2222-0 DCC Ready \$189.95	80-2284-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$569.95
	80-2284-0 DCC Ready \$349.95



Nickel Plate Road - Alco PA A Unit, Cab No. 187	Nickel Plate Road - Alco PA A-A Set, Cab Number 180, 181
80-2228-1 DCC/DCS Proto-Sound 3.0 \$289.95	80-2285-1 DCC/DCS Proto-Sound 3.0 \$529.95
80-2228-0 DCC Ready \$189.95	80-2285-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$569.95
	80-2285-0 DCC Ready \$349.95





New Haven - Alco PA A Unit, Cab Number 0785
 80-2084-0 DCC Ready \$189.95



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

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



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
 80-2273-0 DCC Ready \$189.95

Featuring Stainless Steel Finish



Delaware & Hudson - Alco PA A-A Set, Cab Number 16 & 18
80-2089-0 DCC Ready \$349.95

Delaware & Hudson - Alco PA A Unit, Cab Number 19
80-2090-0 DCC Ready \$189.95

Featuring Stainless Steel Finish



Erie - Alco PA A Unit, Cab Number 856
80-2087-0 DCC Ready \$189.95

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



Southern Pacific - Alco PA A/B Set, A Unit No. 6008,
B Unit No. 5914
80-2274-1 DCC/DCS Proto-Sound 3.0 \$529.95

Southern Pacific - Alco PA A Unit, Cab No. 6013
80-2275-1 DCC/DCS Proto-Sound 3.0 \$289.95

Southern Pacific - Alco PA B Unit, Cab No. 5912
80-2276-1 DCC/DCS Proto-Sound 3.0 \$289.95

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. Diesel sets with Proto-Sound 3.0 offer authentic EMD

567 prime mover sounds, first generation diesel horn and bell, crew station sounds, break sounds, and cab chatter. Our F3 features the 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), wind-shield wipers, and trucks with separately-applied spring hangers, brake cylinders, and air pipes.

Features Include:

- 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

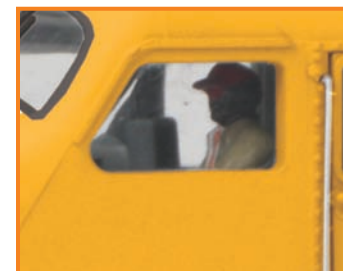
** Where Prototypical



Denver & Rio Grande - F3 A/B Set, A Unit No. 5524, B Unit No. 5523	Denver & Rio Grande - F3 A Unit, Cab No. 5531	Denver & Rio Grande - F3 B Unit, Cab No. 5532
80-2197-1 DCC/DCS Proto-Sound 3.0 \$489.95	80-2198-1 DCC/DCS Proto-Sound 3.0 \$269.95	80-2199-1 DCC/DCS Proto-Sound 3.0 \$269.95
80-2197-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$529.95	80-2198-5 DCC Proto-Sound 3E+ (3-Rail) \$289.95	80-2199-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$289.95
80-2197-0 DCC Ready \$309.95	80-2198-0 DCC Ready \$169.95	80-2199-0 DCC Ready \$169.95



Southern Pacific - F3 A/B Set, A Unit No. 6103, B Unit No. 8003	Southern Pacific - F3 A Unit, Cab No. 6139	Southern Pacific - F3 B Unit, Cab No. 8039
80-2191-1 DCC/DCS Proto-Sound 3.0 \$489.95	80-2192-1 DCC/DCS Proto-Sound 3.0 \$269.95	80-2193-1 DCC/DCS Proto-Sound 3.0 \$269.95
80-2191-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$529.95	80-2192-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$289.95	80-2193-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$289.95
80-2191-0 DCC Ready \$309.95	80-2192-0 DCC Ready \$169.95	80-2193-0 DCC Ready \$169.95



Union Pacific - F3 A/B Set, A Unit No. 1404A, B Unit No. 1442B	Union Pacific - F3 A Unit, Cab No. 1441A	Union Pacific - F3 B Unit, Cab No. 1471B
80-2188-1 DCC/DCS Proto-Sound 3.0 \$489.95	80-2189-1 DCC/DCS Proto-Sound 3.0 \$269.95	80-2190-1 DCC/DCS Proto-Sound 3.0 \$269.95
80-2188-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$529.95	80-2189-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$289.95	80-2190-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$289.95
80-2188-0 DCC Ready \$309.95	80-2189-0 DCC Ready \$169.95	80-2190-0 DCC Ready \$169.95



**Features
Plated
Stainless
Steel Finish**



Santa Fe - F3 A/B Set, A Unit No. 18, B Unit No. 18A	Santa Fe - F3 A Unit, Cab No. 18C	Santa Fe - F3 B Unit, Cab No. 18B
80-2185-1 DCC/DCS Proto-Sound 3.0 \$489.95	80-2186-1 DCC/DCS Proto-Sound 3.0 \$269.95	80-2187-1 DCC/DCS Proto-Sound 3.0 \$269.95
80-2185-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$529.95	80-2186-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$289.95	80-2187-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$289.95
80-2185-0 DCC Ready \$309.95	80-2186-0 DCC Ready \$169.95	80-2187-0 DCC Ready \$169.95



Pennsylvania - F3 A/B Set, A Unit No. 9501, B Unit No. 9501B	Pennsylvania - F3 A Unit, Cab No. 9505	Pennsylvania - F3 B Unit, Cab No. 9505B
80-2194-1 DCC/DCS Proto-Sound 3.0 \$489.95	80-2195-1 DCC/DCS Proto-Sound 3.0 \$269.95	80-2196-1 DCC/DCS Proto-Sound 3.0 \$269.95
80-2194-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$529.95	80-2195-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$289.95	80-2196-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$289.95
80-2194-0 DCC Ready \$309.95	80-2195-0 DCC Ready \$169.95	80-2196-0 DCC Ready \$169.95



EMD F3



READY **2** 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. 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 Include:

- 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

** Featured on Proto-Sound 3.0 Models Only*



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
85-2013-3	Non-Powered (No. 1622)	\$69.95



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
85-2014-3	Non-Powered (No. 16)	\$69.95



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
85-2015-3	Non-Powered (No. 1405)	\$69.95



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 in this catalog come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies. They are equipped with a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This 3-rail version of Proto-Sound 3.0 can be operated in six different modes: AC or DC powered Analog/Conventional, DCC Command Mode with any DCC Controller, DCS Digital Command System mode, Märklin DCC Command Mode, and Motorola 1 and 2 Command Modes.

Features Include:

- Intricately Detailed ABS Body
- Metal Chassis
- Metal Handrails and 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 or Freight Yard 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



Western Maryland - F7 A/B Set, Cab Numbers 60 & 59B
 80-2111-0 DCC Ready \$309.95

Western Maryland - F7 A Unit, Cab Number 54
 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



Erie Lackawanna - F7 B Unit, Cab Number 6332
 80-2125-0 DCC Ready \$169.95



Erie Lackawanna - F7 A Unit, Cab Number 6351
 80-2124-0 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+ (3-Rail) \$289.95
 80-2116-0 DCC Ready \$169.95



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+ (3-Rail) \$289.95
 80-2115-0 DCC Ready \$169.95

Features Plated Stainless Steel Finish

EMD 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.

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 cabooses. And there is, of course, a cupholder for the engineer.

The SD70ACe also offers, in EMD's words, "outstanding improvements in maintainability." All electrical wires are on the right side of the locomotive and all piping is on the left, with most pipes and wires routed under the frame so they can be serviced

by a 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 in this catalog come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies. They are equipped with a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This 3-rail version of Proto-Sound 3.0 can be operated in six different modes: AC or DC powered Analog/Conventional, DCC Command Mode with any DCC Controller, DCS Digital Command System mode, Märklin DCC Command Mode, and Motorola 1 and 2 Command Modes.

All Proto-Sound Models Include Onboard DCC Receiver



Union Pacific - SD70ACe Diesel Engine (Comfort Cab),
Cab No. 8627
80-2250-1 DCC/DCS Proto-Sound 3.0 \$299.95

Union Pacific - SD70ACe Diesel Engine (Comfort Cab),
Cab No. 8634
80-2251-1 DCC/DCS Proto-Sound 3.0 \$299.95
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
80-2252-0 DCC Ready \$199.95



CSX - SD70ACe Diesel Engine, No. 4842
80-2256-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2256-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$319.95

CSX - SD70ACe Diesel Engine, No. 4845
80-2257-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2257-0 DCC Ready \$199.95

CSX - SD70ACe Diesel Engine, No. 4847
80-2258-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2258-5 DCC/DCS Proto-Sound 3E+ (3-Rail)\$319.95



BNSF - SD70ACe Diesel Engine (Comfort Cab), No. 9185
80-2253-1 DCC/DCS Proto-Sound 3.0 \$299.95
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
80-2254-0 DCC Ready \$199.95

BNSF - SD70ACe Diesel Engine (Comfort Cab), No. 9199
80-2255-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2255-0 DCC Ready \$199.95



Features Include:

- Intricately Detailed ABS Body
- Die-Cast Metal Chassis
- Metal Handrails and Horn
- Moveable Roof Fans
- Metal Body Side Grilles
- Detachable Snow Plow
- (2) Engineer Cab Figures
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- 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

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+ (3-Rail) \$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+ (3-Rail) \$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+ (3-Rail) \$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
Union Pacific Heritage Series Diesel



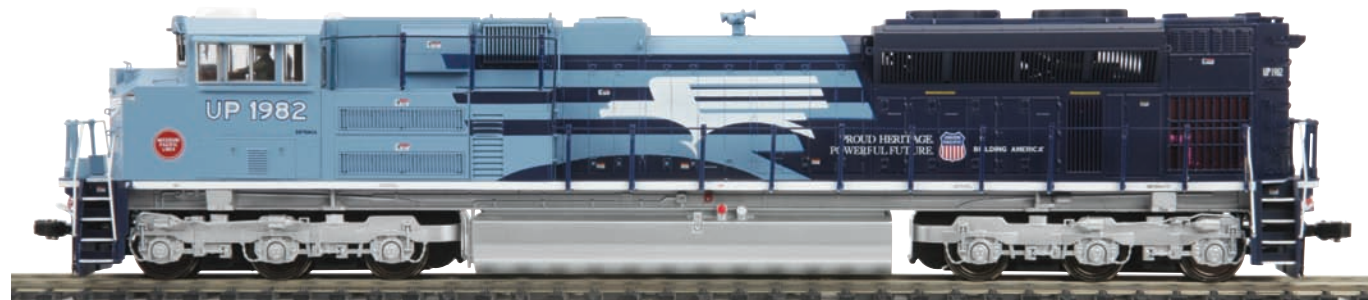
All Proto-Sound Models Include Onboard DCC Receiver

Denver & Rio Grande Western - SD70ACe Diesel Engine, Cab No. 1989
 80-2281-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2281-0 DCC Ready \$199.95
Union Pacific Heritage Series Diesel

George H.W. Bush - SD70ACe Diesel Engine, Cab No. 4141
 80-2282-1 DCC/DCS Proto-Sound 3.0 \$299.95
 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
 Union Pacific Heritage Series Diesel



Missouri Pacific - SD70ACe Diesel Engine, Cab No. 1982
 80-2263-1 DCC/DCS Proto-Sound 3.0 \$299.95
 Union Pacific Heritage Series Diesel

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+ (3-Rail) \$319.95
 80-2280-0 DCC Ready \$199.95
 Union Pacific Heritage Series Diesel



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+ (3-Rail)
 80-2267-5 Cab No. 2668 \$319.95

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 antenna.

Like our regular HO SD70ACe models, 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 in this catalog come outfitted with NEM 340 Wheels and NEM 360/362 Coupler & Pocket Assemblies. They are equipped with a 3rd rail slide shoe for use with Märklin HO stud rail and can operate on AC power.

This 3-rail version of Proto-Sound 3.0 can be operated in six different modes: AC or DC powered Analog/Conventional, DCC Command Mode with any DCC Controller, DCS Digital Command System mode, Märklin DCC Command Mode, and Motorola 1 and 2 Command Modes.



HERITAGE SERIES



All Proto-Sound Models Include Onboard DCC Receiver

Virginian - SD70ACe Diesel Engine (Comfort Cab), Cab No. 1069
 80-2246-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2246-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2246-0 DCC Ready \$199.95



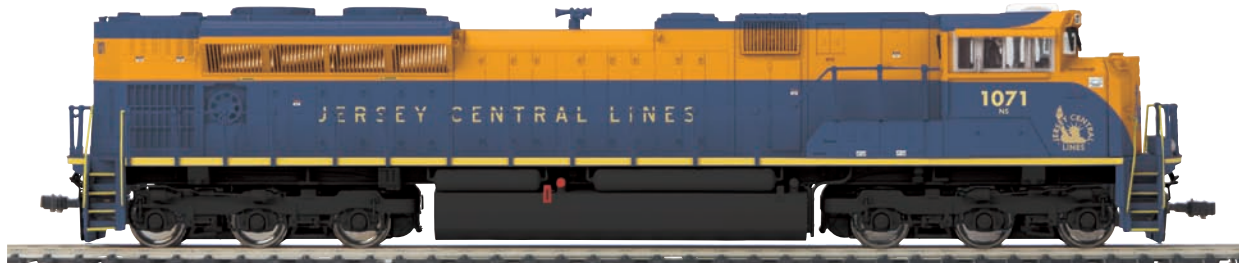
Illinois Terminal - SD70ACe Diesel Engine (Comfort Cab), Cab No. 1072
 80-2249-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2249-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95

Features Include:

- Intricately Detailed ABS Body
- Die-Cast Metal Chassis
- Metal Handrails and Horn
- Moveable Roof Fans
- Metal Body Side Grilles
- Detachable Snow Plow
- (2) Engineer Cab Figures
- Authentic Paint Scheme
- Metal Wheels and Axles
- RP25 Metal Wheels
- 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+ (3-Rail) \$319.95



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+ (3-Rail) \$319.95
80-2245-0 DCC Ready \$199.95



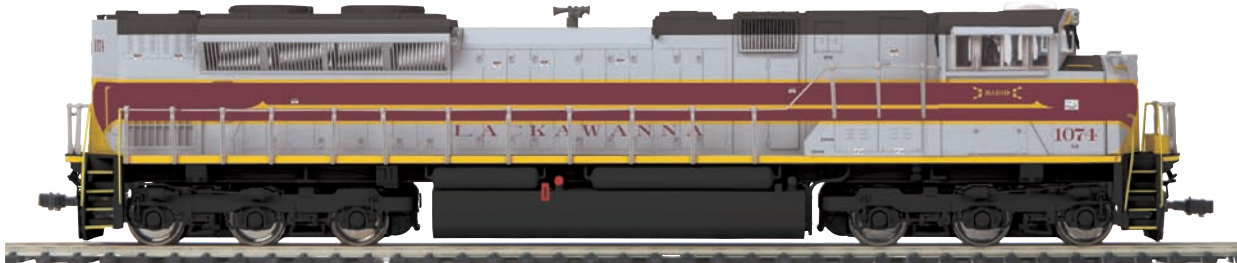
Savannah & Atlanta - SD70ACe Diesel Engine (Comfort Cab), Cab No. 1065
80-2242-1 DCC/DCS Proto-Sound 3.0 \$299.95
80-2242-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
80-2242-0 DCC Ready \$199.95

**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+ (3-Rail) \$319.95
80-2244-0 DCC Ready \$199.95

SERIES SD70ACe



Lackawanna - SD70ACe Diesel Engine (Comfort Cab), Cab No. 1074
 80-2269-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2269-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$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+ (3-Rail) \$319.95
 80-2243-0 DCC Ready \$199.95

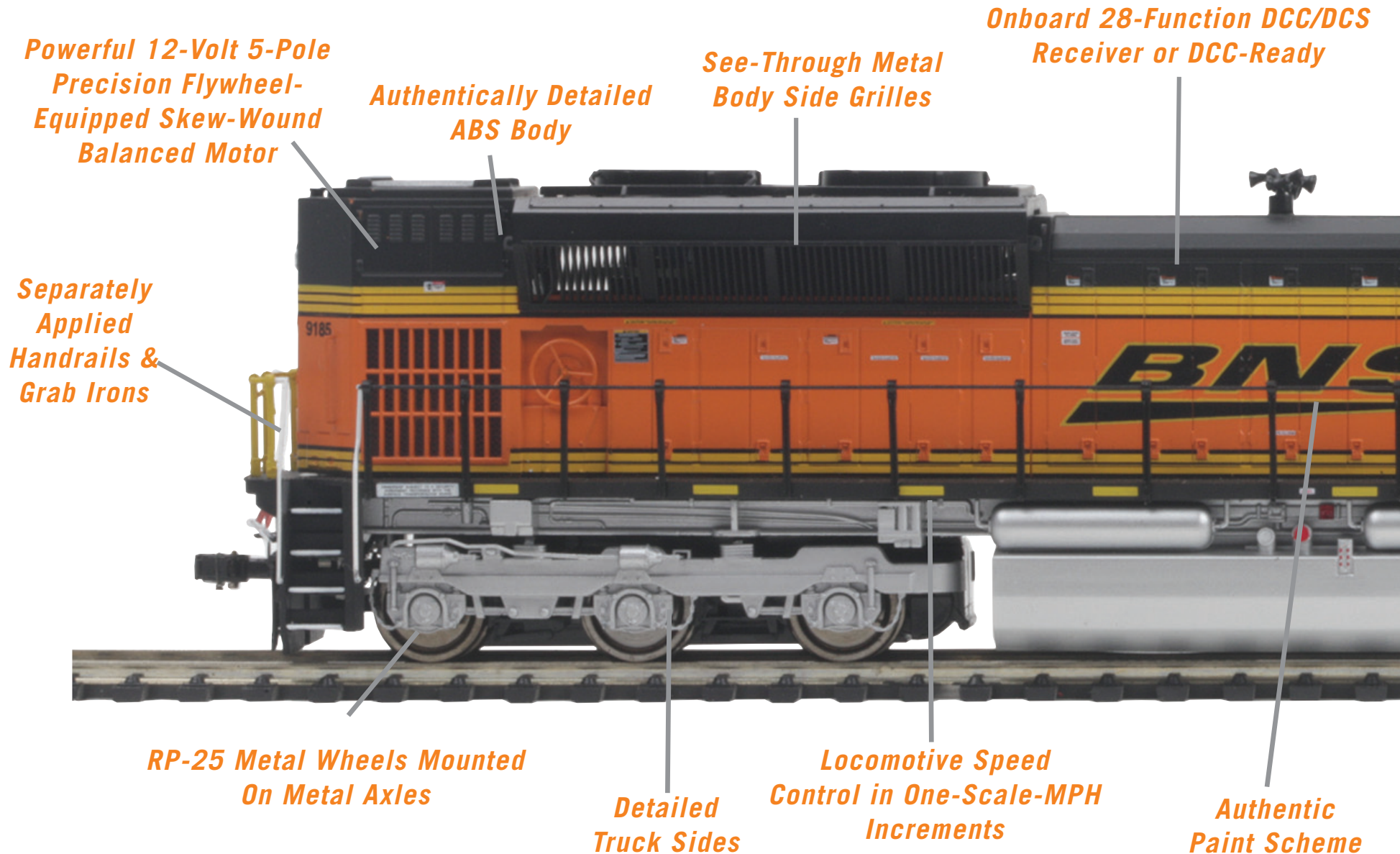


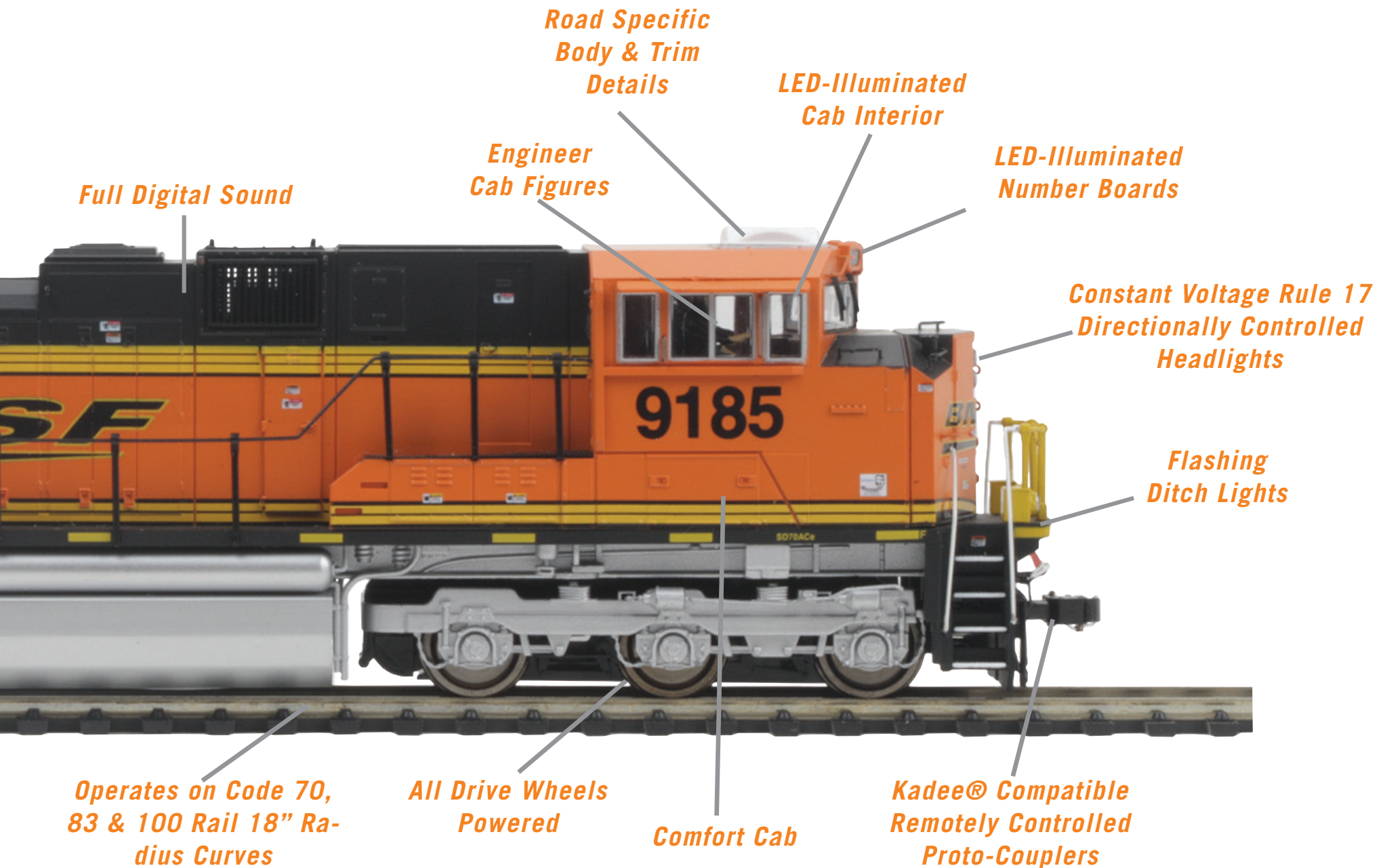
Penn Central - SD70ACe Diesel Engine (Comfort Cab), Cab No.
 80-2268-1 DCC/DCS Proto-Sound 3.0 \$299.95
 80-2268-5 DCC/DCS Proto-Sound 3E+ (3-Rail) \$319.95
 80-2268-0 DCC Ready \$199.95



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+ (3-Rail) \$319.95

Anatomy of a SD70ACe





Milwaukee Road Bi-Polar



Directionally Controlled Operating Pantographs!

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**



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

Die-Cast Metal Body



Features Include:

- 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-Installable Kadee Compatible Magnetic Couplers
- Metal Handrails, Horn and Bell
- Locomotive Speed Control In Scale MPH Increments
- Interchangeable Traction Tire-Equipped Drive Wheels
- On-Board DCC Receiver
- Proto-Sound 3.0 With The Digital Command System Featuring Passenger Station Proto-Effects™
- Unit Measures (Pantograph Up): 11 5/16" x 1 3/8" x 3 9/16"
- Operates On 18" Radius Curves
- Operates On Code 70, 83, & 100 Rail Curves

NYC R-17 Subway



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

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

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

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

Preservation and Movie Roles

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



Metropolitan Transportation Authority (Blue & Silver) - R-17 4-Car Subway Set
Car Nos. 6518, 6648, 6562, 6513

80-2346-1 Southbound Proto-Sound 3.0 \$379.95
80-2346-0 Southbound DCC-Ready \$279.95

Metropolitan Transportation Authority (Blue & Silver) - R-17 4-Car Subway Set
Car Nos. 6512, 6579, 6531, 6692

80-2347-1 Northbound Proto-Sound 3.0 \$379.95
80-2347-0 Northbound DCC-Ready \$279.95



Metropolitan Transportation Authority (Blue & Silver) - R-17 2-Car Subway Add-On Set, Car Nos. 6508, 6617

80-2346-3 Southbound Non-Powered \$119.95



Metropolitan Transportation Authority (Maroon) - R-17 4-Car Subway Set
Car Nos. 6688, 6621, 6550, 6510

80-2348-1 Southbound Proto-Sound 3.0 \$379.95
80-2348-0 Southbound DCC-Ready \$279.95

Metropolitan Transportation Authority (Maroon) - R-17 4-Car Subway Set
Car Nos. 6691, 6637, 6581, 6666

80-2349-1 Northbound Proto-Sound 3.0 \$379.95
80-2349-0 Northbound DCC-Ready \$279.95



Metropolitan Transportation Authority (Maroon) - R-17 2-Car Subway Add-On Set, Car Nos. 6699, 6500

80-2348-3 Southbound Non-Powered \$119.95

Features Include:

Set Includes:

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

Powered Car Features:

- Intricately Detailed, Durable ABS Body
- Metal Chassis
- Detailed Car Undercarriage
- Authentic Paint Scheme

- Metal Wheels and Axles
- RP25 Metal Wheels
- (2) Remote Controlled Proto-Couplers™
- (2) #158 Scale Kadee® Whisker Couplers
- Directionally Controlled Constant Voltage LED Headlights
- Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor
- Onboard DCC Receiver

- Locomotive Speed Control In Scale MPH Increments
- Operates On Code 70, 83 and 100 Track
- 1:87 Scale Proportions
- Equipped With Proto-Sound® 3.0 Featuring Station Stop Proto-Effects™

Non-Powered Car Features:

- Intricately Detailed, Durable ABS Body

- Metal Wheels and Axles
- RP25 Metal Wheels
- Detailed 4-Wheel Trucks
- Overhead Constant Voltage LED Interior Lighting
- (2) #158 Scale Kadee Whisker Couplers
- Authentic Paint Scheme
- Detailed Car Interior
- Metal Chassis
- Detailed Car Undercarriage

Anatomy of an R-17 Subway

*Directionally Controlled
Constant Voltage
LED Headlight*

*Authentic
Paint Scheme*

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

*Intricately Detailed
ABS Body*



*Equipped With Kadee
Compatible Operating
Proto-Couplers and
#158 Scale Kadee
Whisker Couplers*

*RP-25 Metal Wheels
Mounted On
Metal Axles*

*Detailed
Undercarriage*

Metal Chassis

*Locomotive Speed
Control in Scale MPH
Increments*

*Operates on
Code 70, 83 and
100 Track*

Overhead Constant Voltage LED Interior Lighting

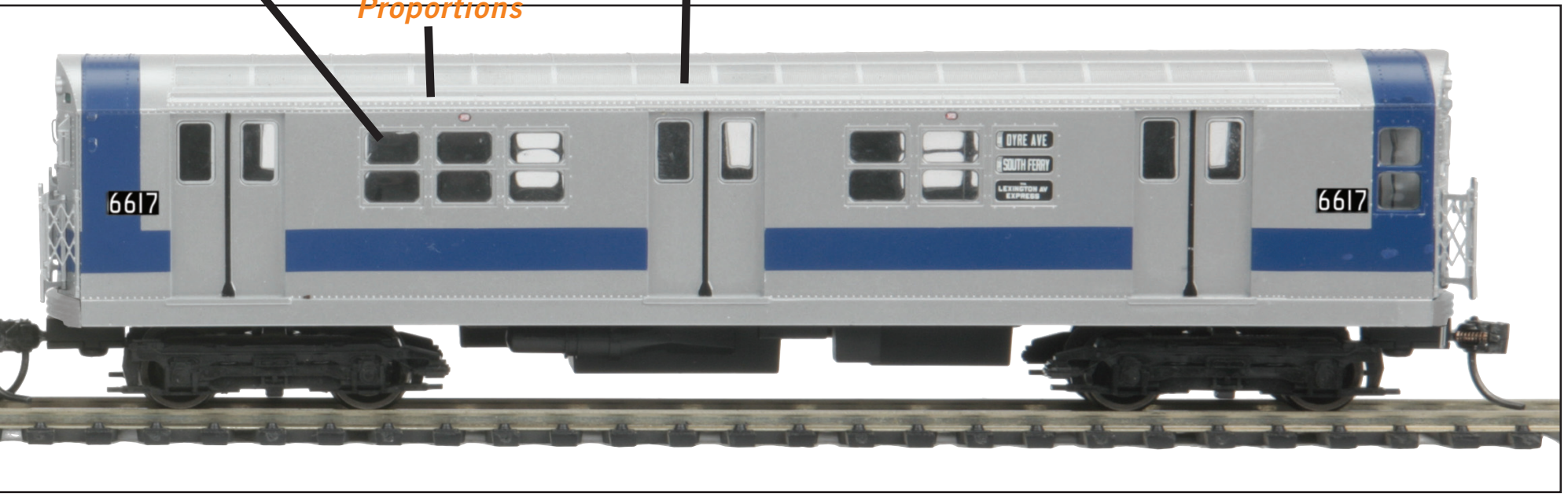
Powerful 5-Pole Precision Flywheel-Equipped Skew-Wound Balanced Motor

1:87 Scale Proportions

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

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

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



Rolling Stock

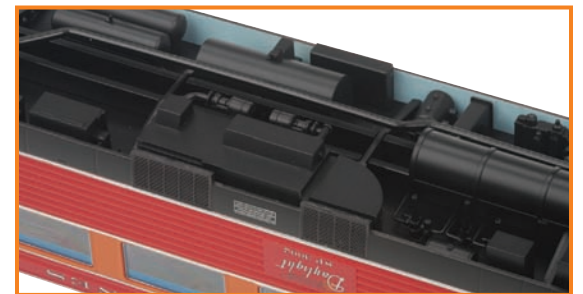
M.T.H. Electric Trains has a long history of developing expansive offerings throughout our product line categories, and HO rolling stock — both freight and passenger — is certainly no exception.

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 is offered in multiple car numbers so that modelers can recreate real-life consists. Many of the same paint schemes are also offered in six car sets in up to 12 car numbers making it easy and affordable to build really long trains.

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

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





Ready 2 Rail™ rolling stock from M.T.H. Electric Trains provides the superior quality and detailing you've come to expect from M.T.H. HO rolling stock, coupled with a competitive price point for the entry-level HO hobbyist. These cars offer the same construction and body detailing as their more expensive M.T.H. HO counterparts but are designed for the budget-minded model railroader. 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 1950s. 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 Rolling Stock

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 backlighting 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!



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



Sharks - Operating Action Car
81-99007 \$54.95



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

Features Include:

- Intricately Detailed Durable ABS Body
- Metal Wheels and Axles
- Fully Sprung Die-Cast 4-Wheel Metal Trucks
- Kadee® Compatible Couplers
- Colorful, Attractive Paint Schemes
- Decorative Brake Wheels
- Moving Backlit Scenes
- Unit Measures: 6 1/8" x 1 1/8" x 1 15/16"
- Operates On 18" Radius Curves

R40-2 Woodside Reefer



Jelke Good Luck Margarine - R40-2 Woodside Reefer
 80-94037 No. 10805 \$34.99
 80-94038 No. 10808 \$34.99



Sullivan's Packing - R40-2 Woodside Reefer
 80-94050 No. 8158 \$34.99



Roberts & Oake Meats - R40-2 Woodside Reefer
 80-94053 No. 1007 \$34.99



Hillsboro Pale Beer - R40-2 Woodside Reefer
 80-94040 No. 3532 \$34.99

Features Include:

- Intricately Detailed Durable ABS Body
- Metal Wheels and Axles
- Decorative Brake Wheels
- Separate Metal Handrails
- 1:87 Scale Dimensions
- Kadee® Couplers
- Detailed Undercarriage
- Detailed 4-Wheel Trucks
- Unit Measures: 6 1/4" x 1 1/2" x 2 1/8"
- Operates On 18" Radius Curves

USRA 55-Ton Steel Twin Hopper

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



Chesapeake & Ohio - USRA 55-Ton Steel Twin Hopper
80-97046 No. 300510 \$34.95
80-97047 No. 300511 \$34.95
80-97048 No. 300500 \$34.95



Pennsylvania - USRA 55-Ton Steel Twin Hopper
80-97055 No. 220380 \$34.95
80-97056 No. 220383 \$34.95
80-97057 No. 220378 \$34.95



Western Maryland - USRA 55-Ton Steel Twin Hopper
80-97049 No. 15528 \$34.95
80-97050 No. 15530 \$34.95
80-97051 No. 15542 \$34.95



Pittsburgh & Lake Erie - USRA 55-Ton Steel Twin Hopper
80-97052 No. 37845 \$34.95
80-97053 No. 37848 \$34.95
80-97054 No. 37852 \$34.95



Union Pacific - USRA 55-Ton Steel Twin Hopper
 80-97082 No. 88808 \$34.95
 80-97083 No. 88812 \$34.95
 80-97084 No. 88860 \$34.95



Baltimore & Ohio - USRA 55-Ton Steel Twin Hopper
 80-97061 No. 324109 \$34.95
 80-97062 No. 324122 \$34.95
 80-97063 No. 324135 \$34.95



Virginian - USRA 55-Ton Steel Twin Hopper
 80-97067 No. 23630 \$34.95
 80-97068 No. 23633 \$34.95
 80-97069 No. 23644 \$34.95

Features Include:

- Intricately Detailed Durable ABS Body
- Metal Wheels and Axles
- Decorative Brake Wheels
- Separate Metal Handrails
- 1:87 Scale Dimensions
- Kadee® Couplers
- Detailed Undercarriage
- Detailed 4-Wheel Trucks
- Unit Measures: 4 3/4" x 1 3/8" x 1 1/2"
- Operates On 18" Radius Curves



Canadian National - USRA 55-Ton Steel Twin Hopper
 80-97064 No. 116508 \$34.95
 80-97065 No. 11652 \$34.95
 80-97066 No. 116539 \$34.95



Norfolk & Western - USRA 55-Ton Steel Twin Hopper Car
 80-97019 No. 22072 \$34.95
 80-97020 No. 22095 \$34.95

70-Ton Center Discharge Ore Car



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

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



Canadian Pacific - 70-Ton Center Discharge Ore Car

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



Milwaukee Road - 70-Ton Center Discharge Ore Car

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



Soo Line - 70-Ton Center Discharge Ore Car

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



Union Pacific - 70-Ton Center Discharge Ore Car

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



Great Northern - 70-Ton Center Discharge Ore Car

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



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

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



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

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

Features Include:

- Intricately Detailed Durable ABS Body
- Metal Wheels and Axles
- Decorative Brake Wheels
- Separate Metal Handrails
- 1:87 Scale Dimensions
- Kadee® Couplers
- Detailed Undercarriage
- Detailed 4-Wheel Trucks
- Unit Measures:
- Operates On 18" Radius Curves

4-Car 70-Ton Center Discharge Ore Car Set



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

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



Duluth Missabe & Iron Range - 4-Car 70-Ton Center Discharge Ore Car Set

80-90087	No. 27430, 27464, 27425, 27457	\$129.95
80-90088	No. 27052, 27074, 27061, 27087	\$129.95
80-90089	No. 27428, 27433, 27442, 27450	\$129.95



Duluth Missabe & Iron Range - 4-Car 70-Ton Center Discharge Ore Car Set

80-90090	No. 28520, 28542, 28519, 28517	\$129.95
80-90091	No. 28846, 28886, 28867, 28855	\$129.95
80-90092	No. 28513, 28524, 28536, 28550	\$129.95

4-Car Mini-Quad 70-Ton Center Discharge Ore Car Set



Duluth Missabe & Iron Range - 4-Car Mini-Quad 70-Ton Center Discharge Ore Car Set
 80-90095 No. 52836, 52063, 52678, 52530 \$129.95
 80-90096 No. 52631, 52708, 52877, 52555 \$129.95



Duluth Missabe & Iron Range - 4-Car Mini-Quad 70-Ton Center Discharge Ore Car Set
 80-90097 No. 53283, 53127, 53140, 53074 \$129.95
 80-90098 No. 53165, 53434, 53329, 53395 \$129.95



Duluth Missabe & Iron Range - 4-Car Mini-Quad 70-Ton Center Discharge Ore Car Set
 80-90093 No. 52423, 52022, 51157, 5190 \$129.95
 80-90094 No. 51018, 51170, 51250, 51492 \$129.95

Passenger Cars



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

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



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



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



Union Pacific - 5-Car Heavyweight Passenger Set
80-40004 \$469.95

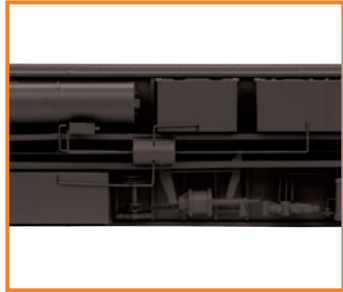


Union Pacific - 2-Car Heavyweight Sleeper/Sleeper Passenger Set
80-40006 \$189.95



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





Pullman - 5-Car Heavyweight Passenger Set
80-40007 \$469.95



Pullman - 2-Car Heavyweight Baggage/Sleeper Passenger Set
80-40008 \$189.95



Pullman - 2-Car Heavyweight Sleeper/Sleeper Passenger Set
80-40009 \$189.95



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



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

Features Include:

- Durable, Intricately Detailed ABS Bodies
- Metal Wheels and Axles
- Constant Voltage Overhead LED Interior Lighting
- Detailed 6-Wheel Trucks
- Authentic Paint Scheme
- Separate Metal Handrails
- Detailed Car Interiors
- Kadee Couplers
- Detailed Car Undercarriage
- 5-Car Sets Feature: (1) Baggage Car, (3) Sleeper Cars, (1) Observation Car *(Except Pullman Set, Which Features (4) Sleepers and (1) Observation Car)*
- 2-Car Sets Features: (1) Baggage Car, (1) Sleeper Car or (2) Sleepers
- Each Car Measures: 11 3/4" x 1 3/8" x 2"
- Operates On 22" Radius Curves



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

Passenger Cars



Missouri Pacific - 5-Car Passenger Set (Smooth-Sided)
80-60052 \$469.95



Missouri Pacific - 2-Car Parlor Passenger Set (Smooth-Sided)
80-60053 \$189.95



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



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



Santa Fe - 5-Car Passenger Set (Ribbed-Sided)
80-60056 \$469.95

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



Nickel Plate Road - 2-Car Parlor Passenger Set (Ribbed-Sided)
80-60051 \$189.95



Santa Fe - 2-Car Parlor Passenger Set (Ribbed-Sided)
80-60057 \$189.95



Nickel Plate Road - 5-Car Passenger Set (Ribbed-Sided)
80-60050 \$469.95



Union Pacific - 5-Car Passenger Set (Smooth-Sided)
80-60054 \$469.95



Union Pacific - 2-Car Parlor Passenger Set (Smooth-Sided)
80-60055 \$189.95



Pennsylvania - 2-Car Parlor Passenger Set (Smooth-Sided)
80-60049 \$189.95



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



Erie - 5-Car Passenger Set
81-60007 \$399.95



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



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



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

Passenger Cars - New York Central



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

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



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



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

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



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

See them in action at
mthHOtrains.com



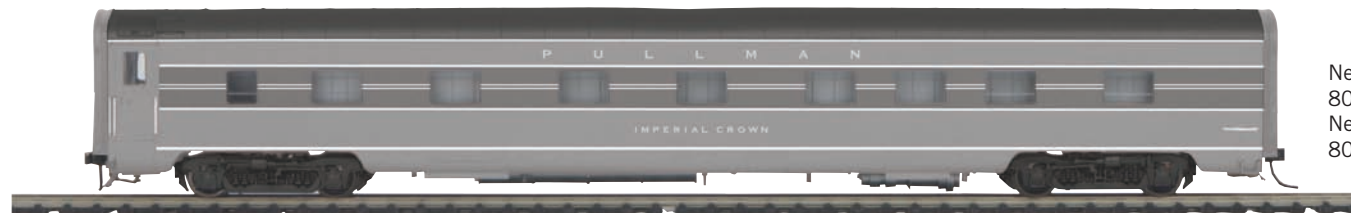
New York Central (1940) - 2-Car Sleeper Passenger Set
80-60019 \$189.95

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



Soft, Flexible End-of-Car Diaphragms

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



Passenger Cars - Southern Pacific



Southern Pacific - 5-Car De-skirted Passenger Set
 80-60035 \$469.95
 80-69035 (HO 3-Rail) \$499.95

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



Features Include:

- Durable, Intricately Detailed ABS 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 Couplers
- Detailed Car Undercarriage
- 5-Car Sets Feature: (1) Combine, (1) Coach, (1) Tavern Car, (1) Parlor Car, (1) Observation Car
- Each Car Measures: 11 1/2" x 1 7/16" x 1 7/8"
- Operates On 22" Radius Curves

Prototypically Designed To Match Real-Life Prototypes



Southern Pacific - Chair/Chair Deskirted 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





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
 80-60030-5 (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

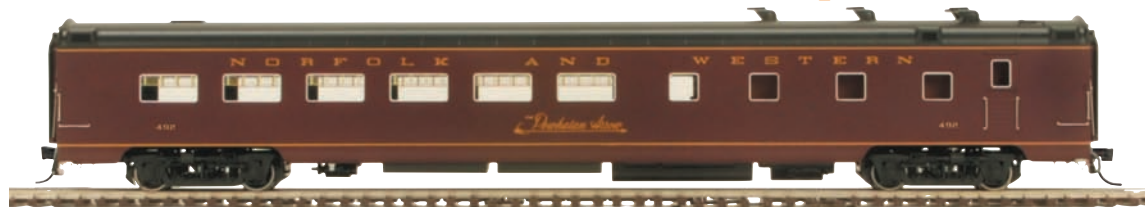


Passenger Cars - Norfolk & Western



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

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



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



Prototypically Designed To Match Real-Life Prototypes



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

 **See them in action at mthHOtrains.com**

Diesel Era Passenger Train

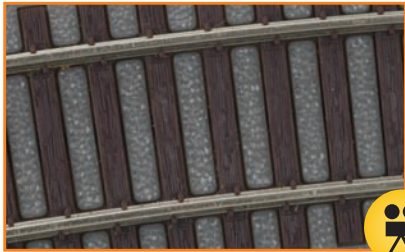


Norfolk & Western (Blue) - 5-Car Passenger Set
80-60039 \$469.95

Track & Accessories

REALTRAX[®]

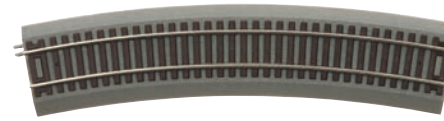
BY M.T.H. ELECTRIC TRAINS



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.



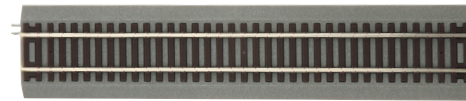
Compatible with Atlas[®] HO Track using 81-1011 Adapters



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



HO RealTrax 9" Straight Code 83 Track Railer 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 22" 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 Terminal Pack (2 Ct)
81-1003 \$7.29



HO RealTrax Track Railer Joiner Pack (48 Ct)
81-1015 \$7.99



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 Railer (3 Pack) (Not Shown)
80-1003 \$8.50



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



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

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

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.

SMOKE - Turns Smoke Unit on & off
HDLT - Turns Headlights on & off
ENGINE SOUND - Silences Engine Sounds
DOPPLER - Activates Proto-Doppler™
PFA - Activates Passenger/Freight Sounds

CONV - Activates Conventional Mode
DCS - Activates Command Mode
MOM - Adjusts Engine Momentum
ADD - Adds PS 3 engines

EDIT
Edits engine addresses

DEL
Deletes engines

RESET
Resets PS 3 engines

PASS THRU
Sends DCC signals to track from DCC system**

E STOP - Cuts power to all tracks

BELL - Rings Bell

ENG - Engine Menu (To Select and Control Engines)

SEL - Selects or activates a setting

LCD DISPLAY

SFS - Plays Forward Signal Sound
SRS - Plays Reverse Signal Sound
VOL+ - Globally increases all sounds
START UP - Activates sound, smoke & lights
VOL- - Globally decreases all sounds
SHUT DOWN - Deactivates all sound, smoke & lights

SCS - Plays coupler stack sound
LIGHTS - Turns loco lights on & off
ALL - Selects all engines
STA MODE - Selects Station Mode
STA SEL - Activates Station Stop sounds
STW - Plays Train Wreck sound

AUX 1-3
Auxiliary buttons

CPLR-F/CPLR-R*
Fires front & rear couplers

BOOST/BRAKE
Temporarily raises or lowers speed

LABOR/REV UP OR DRIFT/REV DN
Makes an engine sound like it's working harder (labored steam chuff or higher revving diesel) or easier (drifting chuff or lower revving diesel)

W/H - Whistle/Horn
DIR - Changes locomotive direction

THUMBWHEEL
Sets throttle speed & voltage setting



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.

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

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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)

HO Coupler 7,694,834 Bi-Directional Communication 8262034

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Products bearing Chicago and North Western, Denver & Rio Grande, Denver & Rio Grande Western, MKT/Katy, Missouri Pacific, Southern Pacific, Union Pacific, Western Pacific are made under trademark license from Union Pacific Railroad Company.

DCS REMOTE COMMANDER:
Get into DCS on a budget

DCS Remote Commander Set
50-1033 \$59.95

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

MTH Railroaders Club

Join The M.T.H. Railroaders Club



85-74136 MTHRRC
40' PS-1 Box 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.

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.

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.

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 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.



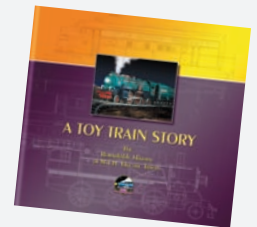
Previous Year Club Cars

MTHRRC members can still obtain earlier produced MTHRRC cars by visiting the MTHRRC pages on the web-site. 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)!

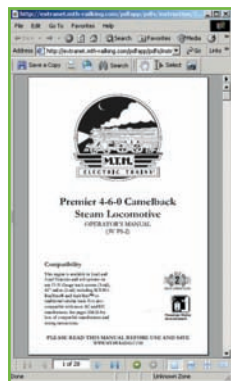


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WWW.MTHTRAINS.COM

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.



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 2.0 downloads.

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

WHAT'S THE LATEST INFO ON ...?

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

DID YOU EVER MAKE?

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

WHAT'S NEW?

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

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.

WHEN IS IT COMING?

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

ARE YOU GOING TO MAKE?

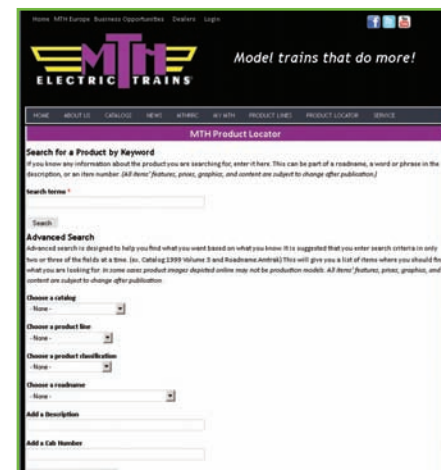
View the last several M.T.H. Catalogs online. Or click on Video to see M.T.H. products in action.

HOW CAN I FIX...?

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

WHAT REPAIR PART DO I NEED?

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



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

Just go to mthtrains.com and click on Newsletter Signup.

www.mthHOtrains.com



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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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- Delivery Schedule
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- Special Offers

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To find your nearest DCS Demo Center or request your complimentary DVD visit

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