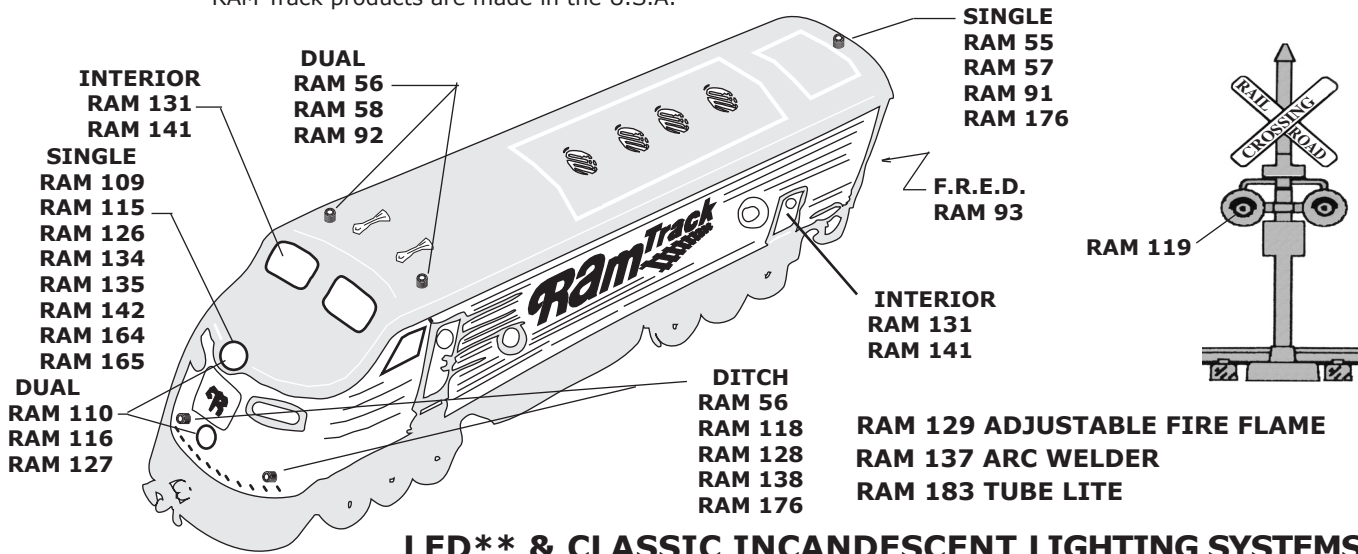




Electronic Devices

8-1-07

Most RAM Track products are adaptable to all popular scales, N through G. Some are more scale specific due to bulb or speaker size limitations. Our products have an established reputation for innovation and dollar value. All RAM Track products are made in the U.S.A.



LED** & CLASSIC INCANDESCENT LIGHTING SYSTEMS

RAM Track introduced white LEDs to the hobby industry in 1998. Since that time we have produced thousands of systems that have set the standard for high brightness, long life and low current drain. The standard track power sets will safely handle up to 12 volts DC, common for most models and power from on board DCC circuits. High voltage sets are produced for G scale, direct to rail DCC and other applications where up to 24 volts may be applied. The use of 3MM or 5MM LEDs and additional clear or colored lense caps provides ultimate adaptability to space and scale requirements of individual models. RAM 101 Lite Pipe fiber optics can be used with any of the LED systems.

RAM 55 SINGLE ADJUSTABLE "STROBE" LIGHT. This device simulates a strobe light for engine mount or End of Train use. The bulb, on a 12" lead, is HO scale and two clear lens caps provided, are appropriate for 0 and G scale. The 7/8" x 1 1/8" circuit board provides flash rate adjustment, an inline switch and is powered by a 9 volt ALKALINE battery so there is full brightness without waiting for power to come from the rail. Use a RAM 59 for rail power.

RAM 56 DUAL ADJUSTABLE "STROBE" LIGHT. This device has the same features as the RAM 55 but has 2 bulbs which can flash simultaneously or alternately as appropriate for the particular model. 4 lens caps are provided for 0 and G scale. Use a RAM 59 for rail power.

RAM 57 SINGLE ADJUSTABLE "REVOLVING" BEACON. This device simulates a revolving beacon for engine mount or an oscillating headlight. The circuit board is 1" x 1 3/8" and provides for adjusting the "revolving" rate. All other features are the same as the RAM 55. Use a RAM 59 for rail power.

RAM 58 DUAL ADJUSTABLE "REVOLVING" BEACON. This device has the same features as the RAM 57 but has 2 bulbs which can "revolve" simultaneously and 4 lens caps for 0 and G scale. Use a RAM 59 for rail power.

RAM 86 DARKNESS SENSING STRUCTURE LIGHTS. An adjustable level, light sensing circuit turns on two high efficiency, replaceable lamps, each on 12 inches of wire. Requires 12 to 18 volts D.C. from your train power pack or an alternate source.

****RAM 91 SINGLE FLASHING WHITE.** This system provides a single strobe effect using a T1, 1/8" diameter (3MM) LED on 1 foot of high quality #30 flexible wire connected to a 1 7/8" x 5/8" x 1/2" circuit board. The system is complete and ready to install for low voltage rail power, nothing extra to buy.

****RAM 92 DUAL FLASHING WHITE.** All the features of the RAM 91 above but includes two, independently flashing, white LEDs for a dual strobe effect. The circuit board is 1 7/8" x 5/8" x 1/2".

****RAM 93 SINGLE FLASHING RED.** Ideal for "FRED" installations. All the features and specifications of the RAM 91 above but utilizing a red LED.

RAM 101 LIGHT PIPE. This kit enables you to bring light to parts of your model where it is not practical or scale appropriate to mount LEDs. The kit includes 36 inches of fiber optic cable which provides a "light" .040 in diameter and simple shrink tubes for connecting the cable to the RAM LEDs. The cable can be cut to lengths appropriate for any model.

****RAM 109 SINGLE HEADLIGHT-SUPER BRITE.** This system uses a T 1 3/4, 3/16" diameter (5MM) white LED on 1 foot of high quality #30 flexible wire connected to 5/16" X 5/8" X 1" Circuit board. The system is complete and ready to install for low voltage track power, nothing extra to buy.

****RAM 110 DUAL HEADLIGHT-SUPER BRITE.** All the same features of the RAM 109 but has two T 1 3/4, white LEDs.

****RAM 115 MINI SINGLE HEADLIGHT-SUPER BRITE.** All the same features of the RAM 109 but has one T1, 1/8" white LED.

****RAM 116 MINI DUAL HEADLIGHT-SUPER BRITE.** All the same features of the RAM 110 but has one T1, 1/8" white LEDs.

LIGHTING SYSTEMS CONTD. PG. 2

****RAM 118 DITCH LIGHTS-SUPER BRITE.** This mini module alternately flashes two T1, 1/8" (3MM) white LEDs, each on 1 foot of #30 wire. Included are two 3/16" clear lenses for larger scales. The flash rate is adjustable and the system is designed for low voltage rail power.

****RAM 119 CROSSING LIGHTS.** This inexpensive mini module alternately flashes two T1, 1/8" (3MM) red LEDs and operates on 5-24 volts DC. Includes 2, 3/16" red lenses for larger scales. A perfect match for the RAM 117 Dual Sensor Switch!

****RAM 126 SINGLE HEADLITE, SUPER BRITE, TO 24 VOLTS.** Designed for G scale, DCC, Lionel Command Control and any other uses where track power is at higher voltages. A single T1, 1/8" (3 MM) LED is used and a 3/16" and 1/4" clear lenses are also provided.

****RAM 127 DUAL HEADLITE, SUPER BRITE, TO 24 VOLTS.** The same as RAM 126 above but with two T1 LEDs and 4 lenses.

****RAM 128 DITCH LITES, SUPER BRITE, TO 24 VOLTS.** The same as RAM 118 above but capable of higher voltage and with two T1 LEDs and 4 lenses.

RAM 129 ADJUSTABLE FIRE FLAME For the first time a unit is designed to provide a wide variety of fire effects and intensities through the use of a circuit that allows you to adjust the flash rate and intermix of 4 bulbs. A formable flame shape enables you to choose the fire's size. Powered by 9 to 12 volts DC. Truly, dial a fire!

RAM 131 CONSTANT R/R INTERIOR LIGHTS For HO to G gauge trains, this 4 bulb system includes 2, AA Nicad cells with 1/2" x 2" circuitry for track or off track charging. Interior lights stay prototypically lit even when there is NO POWER from the track. Perfect for cabs, coaches and cabooses.

RAM 134 OSCILLATING HEADLIGHT/BEACON This single bulb system for HO to G scale simulates the effect of an oscillating light and has a 5/8" x 2 1/2" circuit board which operates from 5 to 24 volts of trackpower. Included are 3/16" and 1/4" clear lenses.

****RAM 135 CONSTANT HEADLITE** The single 3MM Ultra Brite white LED of this system is powered by 3, mini "N" Nicad cells with a 1/2" x 2" circuit board for track or off track charging. The headlite stays prototypically lit even when there is NO POWER from the track. Included are 3/16" and 1/4" clear lenses.

****RAM 137 ARC WELDER** A 3 MM, white LED, gives a very realistic, computer controlled flash. Perfect for garage, factories and track repair. 9-18 V DC.

****RAM 138 CONSTANT DITCH LITES** All the features of the RAM 118 PLUS 4 mini "N" nicads with mini circuitry for track or off track charging. Ditch lites stay prototypically lit even when there is NO POWER from the track.

RAM 141 DCC INTERIOR LIGHTS Four, subtle bulbs on 6" and 12" wires provide realistic and adaptable lighting for coaches, cabooses and cabs. The mini circuit board connects to a pick up truck for DCC track power.

RAM 142 CONSTANT OSCILLATING HEADLIGHT/BEACON Same features as RAM 134 PLUS 2 AA nicads with circuitry for track or off track charging. The oscillating light stays prototypically lit even when there is NO POWER from the track.

****RAM 164 STEAM ERA HEADLITE** An ultrabrite 1/8" (3MM) LED gives the softer incandescent glow of a steam engine headlight. Electronically the same as the RAM 109 above, it is supplied with a 3/16" and 1/4" clear lenses to accommodate any size headlight housing.

****RAM 165 STEAM ERA HEADLITE TO 24 V** All the features of the RAM 164 above but able to operate up to 24 volts for G scale and DCC track power.

****RAM 176 SINGLE "STROBE" SUPER BRITE TO 24V** Same features as RAM 126 above.

****RAM 183 TUBE LITE.** The 8" plastic lite tube glows like a fluorescent tube and is lit by 2 white LEDs. The tube can be cut to length and color tinted. It can be track powered for on board use or from 6 to 24 volts DC for trackside applications.

SOUND DEVICES

RAM Track manufacturers analogue (51, 52, 53, 180) sound devices in order to provide accurate sounds and good dollar value. The analogue systems are supplied with scale appropriate, sized speakers.

OB RAM 51 STEAM ENGINE SOUND, HO. This on board device provides chuff and hiss sound that is electronically triggered by the turn of the axle for proper cadence with the engine's drive wheels. Once adjusted it will not go out of cadence when cars are added or removed from the train, the way that competitors' voltage driven systems react. The 13/16"x 3 1/4" amplifier board contains a switch. Power comes from a 9 volt ALKALINE battery so that there is full sound from the first turn of the wheel. System comes with a 1" speaker and additional speakers can be added. The entire system is small enough to fit in some tenders or in a car directly behind the engine. Use a RAM 59 for rail power after sufficient track voltage.

OB RAM 52 STEAM ENGINE SOUND, O. Electronically the same as the HO unit above but has a 2" speaker which creates greater volume and can fit easily into most O or G gauge tenders and cars.

OB RAM 53 STEAM ENGINE SOUND, G. Electronically the same as the HO unit described above but has a 3" speaker which creates greater volume and can fit easily into most G gauge tenders and cars. Especially effective for outdoor use.

OB RAM 180 RAIL CAR ENGINE SOUND, Bring your rail car alive with sound synchronized to speed, adjustable idle, and max RPM. The compact system is easy to install, has a 2" speaker with amplifier box and is powered by a 9 volt battery. See **RAM 181** for horn.

NEW COMPLETE DIGITAL ONBOARD AND AT SITE TRACKSIDE SOUNDS

Acoustically recorded, these digitally accurate sounds are produced by an amplified 1" x 2 1/2" circuit board and come with a 2" speaker (for Onboard HO substitute a 1" speaker). These complete systems also include a power switch, train actuated trigger switch and a speaker amplification box. EVERYTHING needed for automatic on board or trackside operation! Power by 9 to 18V DC from a battery or DC power supply. Track power can be provided from the RAM 59 and optional control by the RAM 76, 102, 111, 112, 113, 117 or DCC depending on your preference. Typical "OB" (on board) and "T" (trackside) sounds are listed below. All provide that final touch of realism and call attention to your scenery details as your train moves around your layout!

T RAM 63 FOG HORN. Adds realism to your harbor scene.

OB RAM 72 R/R STEAM WHISTLE. Melodious sounds of 1900's era steam engines.

SOUND SYSTEMS CONTD. PG. 3

- OB RAM 73 R/R DIESEL HORNS.** Provides the most common diesel horns.
- OB RAM 74 R/R ENGINE BELL.** Rhythmic bell sound common on later steam engines and all diesel engines.
- OB RAM 75 R/R DIESEL ENGINE.** Sounds of a diesel engine running at a range of speeds typical of operation underway.
- T RAM 77 STEAM CALLIOPE.** Upbeat tune typical of those heard on circus midways.
- OB RAM 80 OLD TIME STEAM WHISTLE.** Unique whistle sounds of 1800's steam engines typical of those used for logging.
- T RAM 88 CONDUCTOR "ALL ABOARD" ANNOUNCEMENT.** This device announces several future stops and the familiar boarding call. Can be made in your own voice - see details below.
- OB RAM 89 CATTLE SOUNDS.** This device provides the mooing of cattle in a pen or cattle car.
- T RAM 103 BIRDS.** This device provides a variety of bird sounds typical of parks or forests.
- T RAM 104 CITY TRAFFIC.** This device provides various horns and road sounds typical of city streets.
- T RAM 105 CONSTRUCTION SITE** The sounds of hammers and saws typical of buildings under construction.
- T RAM 106 DOCK SIDE.** This device provides the sounds of various boat horns and equipment typical of a busy harbor.
- T RAM 107 FACTORY MACHINERY.** Sounds of heavy machines, some rhythmic and others sporadic.
- T RAM 108 GARAGE.** Sounds of equipment and personnel typical of an automotive repair garage.
- T RAM 114 CROSSING BELL.** This device provides the sound heard at R/R crossings.
- T RAM 139 BELL, IRREGULAR** Inconsistent, clear, clang is typical of engine bells, schools and other smaller bell towers.
- T RAM 140 BELL, REGULAR** The deep, even tones are typical of clock towers, cathedrals and other larger bells.
- T RAM 143 TELEGRAPH** Staccato click of the telegrapher's message is perfect for your railroad station or signal tower.
- OB RAM 145 TRACK CLICK & SQUEAL** Perfect for adding the touch of realism coming from rolling stock as it negotiates switches, crossings and poor track.
- T RAM 146 HONKY TONK PIANO** This catchy tune is perfect for your town's entertainment center.
- T RAM 147 BLACKSMITH** No country or western scene can be complete with out a blacksmith and his clanging anvil.
- T RAM 148 SAWMILL** Bring your forest industry or furniture factory to life with the sound of a production saw.
- T RAM 149 SUMMER NIGHT** Birds, insects, and frogs all blend to add realism to your hot summer scene, pond or swamp.
- T RAM 150 THUNDER STORM** A darkened section of your layout, a flashing light and our thunder sounds are all you need for a spectacular effect.
- T RAM 151 HORSES** Prancing hoofs, neighing and whinnying are all that is needed to bring realism to your stable, barnyard or rolling stock.
- T RAM 152 PIGS** Snorting and squealing, these pigs and piglets make your barnyard or packing house extra realistic.
- T RAM 153 SHEEP** Lambs and sheep bleat as they roam your barnyard or meadow or packing house.
- OB RAM 154 TROLLEY BELL** Nothing matches the "tune" a motorman can play to entertain himself and his passengers.
- OB RAM 155 INTERURBAN HORN** The unique horn used on these electric trains can't be forgotten once you have heard it.
- T RAM 156 CRICKETS** The perfect background noise for a town scene or park. USE RAM 103 BIRDS for the full effect.
- OB RAM 157 HOBO JOE** Old Joe gets himself locked in a box car, again! Perfect for that touch of humor on any railroad.
- T RAM 162 HAUNTED SOUNDS** Perfect for graveyards and haunted houses.
- T RAM 163 BARNYARD ANIMALS** Combines various farm animals even the barnyard dog.
- OB RAM 181 A HOOGA HORN** The sound of an old car horn is perfect for rail cars.

AND MORE TO COME!!!

CUSTOM SOUND SERVICE

The sounds listed above are in stock at all times. We are well aware that there are many other sounds that an individual modeler may want. Our tapes, collected over the years, may contain the sound. You may supply the sound on your own standard audio cassette tape or you may choose to record your own voice for conductor calls or have our voice record your script. Any custom recording is the cost of the digital device, \$39.95, plus \$5.00 for the custom chip and \$6.00 for return U.P.S. CALL RAM for further details.

CONTROL & POWER SUPPLY DEVICES

RAM Track control and power devices provide various unique features when used in conjunction with other RAM Track products as well as with accessories from other manufacturers.

RAM 59 RAIL POWERED 9 VOLT SOURCE. Designed to power RAM 9 volt lighting and sound systems, this device will work with AC or DC powered trains up to 28 volts. With an output of 1 amp, it is both overload and short circuit protected. It must be connected to a power pick up truck for input from the rails. The size is 1" x 1 3/4" x 1 1/8" and a screw terminal strip is provided for simple installation.

CONTROL & POWER SUPPLY DEVICES PG. 4

RAM 85 STATION STOPPER. This device stops a train and delays it for an adjustable time up to 1 minute before the train continues on. The circuit accommodates attachment of RAM Track digital sounds such as RAM 88 "All Aboard" or custom announcements. See custom sound service details above.

RAM 87 12 VOLT DC POWER REGULATOR. Provides a filtered, regulated, short circuit and thermally protected DC source to 1 1/2 amps from your train power packs AC tap. It can be used to operate DC accessories on your railroad such as RAM Track Digital Sounds, Station Stopper and Structural Lights. Note that many "DC" train power packs NEED to be properly filtered to provide PURE DC.

RAM 102 INFRA RED SWITCH. This system uses infra red, eliminating magnets and minimum light requirements. It senses motion, such as a passing train, and switches devices up to 1/2 amp such as RAM digital sounds. For convenient, trackside installation, the IR sender and receiver are each on 1 foot cables attached to the circuit board and powered by 5 to 24 volts D.C.

RAM 111 LIGHT ACTIVATED SWITCH. A small photo cell senses a passing train and switches devices up to 1/2 amp such as RAM digital sounds. Light sensitivity is adjustable on the 1" x 1" circuit board powered by 5 to 24 volts DC.

RAM 112 REED SWITCH AND MAGNET (2 sets). A 1" reed switch is attached to 1' of wire to be triggered by a magnet.

RAM 113 TILT SWITCH. This 1/2" cube is mounted in rolling stock to randomly trigger devices such as RAM digital sounds.

RAM 117 DUAL SENSOR LIGHT ACTIVATED SWITCH. All the same features as the RAM 111 but has two small photo cells, perfect for activating a crossing signal or for similar needs. Two 1/2 amp outputs can operate RAM 119 Crossing Lights and the RAM 114 Crossing Bell or any similar devices.

RAM 158 SIGNAL DRIVER W/ TRAIN DETECTOR Able to control 2 bulbs or LEDs, a photocell detects the train and turns your green signal to red, adjustable up to 30 seconds after the train has passed. Powered by 9-18V, DC.

RAM 173 LATCHING SWITCH This on board switch, is activated by magnets to control the action of any on-board feature. Track powered, the 3/4" x 3" circuit has a DPDT relay capable of controlling up to 3 amps in a variety of switch configurations.

RAM 177 DITCH LITE CONTROLLER Specifically designed to give prototypical alternate flash or steady lite operation activated by track magnets. Instructions show simple hookup of the 3/4" x 2" circuit to RAM Track 118 or 128 Ditch Lites but can also be adapted to other units.

PLASTIC MODEL LIGHTS

High brightness LEDs are used in the following systems. This eliminates any possible heat distortion of your plastic model. The 3 volt battery box (two AA cells) can often be mounted in a model or be made part of its display base or diorama. Smaller 3 volt batteries can be substituted. The use of new "white" LEDs provides accurate head lights etc. T1 LEDs are approximately 1/8" (3MM) diameter; T1 3/4 LEDs are approximately 3/16" diameter (5MM). Smaller "lights" can be simply replicated with our RAM 101 Light Pipe kit. All systems are completely assembled with 1 foot of high quality, flexible #30 wire to each LED.

RAM 94 CAR HEAD LIGHTS & TAIL LIGHTS. This set provides the basic night running lights for any car or truck. It includes 2, T 1 3/4 white head lights, 2, T 1 red tail lights each with 1 foot of wire connected to a battery box.

RAM 95 4 FLASHING HAZARD LIGHTS. This set provides the amber flashing hazard light system standard on all vehicles. It includes 4, T 1 LEDs each with 1 foot of wire connected to a flasher board 5/16" x 5/8" x 7/8" and a battery box.

RAM 96 8 CLEARANCE LIGHTS. This set provides 8 amber, non flashing lights typical of truck running boards, body outlines and trailers. It includes 8, T 1 LEDs each with 1 foot of wire connected to a battery box.

RAM 97 2 HEAD LIGHTS/LANDING LIGHTS, LARGE. This set provides the bright, white lights for either application. It includes 2, T 1 3/4 LEDs each with 1 foot of wire connected to a battery box.

RAM 98 2 HEAD LIGHTS/LANDING LIGHTS, SMALL. This set provides the bright, white lights for either application but for smaller scale use. It includes 2, T 1 LEDs each with 1 foot of wire connected to a battery box.

RAM 99 NAVIGATION LIGHTS. This set provides the red, green and white lights necessary for any airplane or ship model. It includes 3, T 1 LEDs each with 1 foot of wire connected to a battery box.

RAM 100 FLASHING NAVIGATION LIGHTS. This set provides the red, green and white flashing effect needed to make some models more realistic. It includes 3, T 1 LEDs each with 1 foot of wire connected to a 5/16" x 1/8" x 7/8" flashing board and a battery box.

RAM 101 LIGHT PIPE. This kit enables you to bring light to parts of your model where it is not practical or scale appropriate to mount LEDs. The kit includes 36 inches of fiber optic cable which provides a "light" .040 in diameter and simple shrink tubes for connecting the cable to the RAM LEDs. The cable can be cut to lengths appropriate for any model.



- LIGHTING SYSTEMS
- SOUND SYSTEMS
- CONTROL SWITCHES
- POWER DEVICES
- PLASTIC & DIE CAST

229 E. ROLLINS RD., ROUND LAKE BEACH, IL 60073 USA

(847) 740-8726 FAX: (847) 740-8727

WWW.RAMRCandRAMTrack.com

8-1-07

LIGHTING SYSTEMS

	Stock#	List Price
Single Adj. "strobe" light, 9V DC battery or track power	RAM 55	19.95
Dual Adj. "strobe" light, Simul. or Alt. 9V DC battery or track power	RAM 56	24.95
Single Adj. "revolving" Beacon, 9V DC battery or track power	RAM 57	19.95
Dual Adj. "revolving" Beacon, 9V DC battery or track power	RAM 58	24.95
Darkness Sensing Structure Lights Adj. sensor, 2 bulbs, 12 to 18V DC	RAM 86	19.95
Single Flashing White 1 white, 3MM LED w/ low voltage track power circuit	RAM 91	14.95
Dual Flashing White 2 white, 3MM LEDs w/ low voltage track power circuit	RAM 92	19.95
Single Flashing Red 1 red, 3MM LED w/ low voltage track power circuit	RAM 93	9.95
Light Pipe 3' fiber optic cable for LEDs w/conn	RAM 101	9.95
Single Headlight-Super Bright 1 white 5MM LED w/ low voltage, track power circuit	RAM 109	12.95
Dual Headlight-Super Bright 2 white 5MM LEDs w/ low voltage, track power circuit	RAM 110	15.95
Mini Single Headlight-Super Bright 1, white 3MM LED w/ low voltage, track power circuit	RAM 115	12.95
Mini Dual Headlight-Super Bright 2, white 3MM LEDs w/ low voltage, track power circuit	RAM 116	15.95
Ditch Lights-Super Brite 2, white 3MM LEDs adj. rate w/ low voltage, track power circuit	RAM 118	24.95
Crossing Lights 2, red 3MM LEDs, power from 5-24V DC	RAM 119	9.95
Single Headlite, Super Brite, to 24 Volts 1 white 3MM LED	RAM 126	19.95
Dual Headlite, Super Brite, to 24 Volts 2 white 3MM LEDs	RAM 127	24.95
Ditch Lites, Super Brite, to 24 Volts 2 white 3MM LEDs, adj. rate	RAM 128	29.95
Adjustable Fire Flame 4 lights, 9-12V	RAM 129	24.95
Constant R/R Interior Lights HO to G, 4 lights w/ nicad batt. and charge circuit	RAM 131	24.95
Oscillating Beacon/Headlight HO to G, trackpower 4 to 24 volts	RAM 134	19.95
Constant Headlite 1 white 3MM LED w/ nicad batt. and charge circuit	RAM 135	24.95
Arc Welder 1 white 3MM LED, 9 to 18 V DC.....	RAM 137	29.95
Constant Ditch Lites 2 white, 3MM LEDs w/ nicad batteries & charge circuit	RAM 138	34.95
DCC Interior Lights 4 lights for DCC track power	RAM 141	14.95
Constant Oscillating Headlight/Beacon w/ nicad batteries & charge circuit	RAM 142	29.95
Steam Era Headlite 1 soft white 3MM LED w/ low voltage track power circuit	RAM 164	11.95
Steam Era Headlite to 24 V 1 soft white 3MM LED	RAM 165	14.95
Single "Strobe" Super Brite to 24V 1 white 3MM LED	RAM 176	14.95
Tube Lite 2 3MM LEDs, 6 to 24 V DC.....	RAM 183	14.95

SOUND SYSTEMS **New Family of Sounds, digitally accurate recordings.

Steam Engine Sound HO - 1" speaker speed sensing, track or battery power	RAM 51	49.95
Steam Engine Sound O - 2" speaker speed sensing, track or battery power	RAM 52	49.95
Steam Engine Sound G - 3" speaker speed sensing, track or battery power	RAM 53	49.95
Foghorn 2" speaker, 9 - 18 V	RAM 63	39.95
R/R Steam Whistle 2" speaker, 9 - 18V	RAM 72	39.95
R/R Diesel Horns 2" speaker, 9 - 18V	RAM 73	39.95
R/R Engine Bell 2" speaker, 9 - 18V	RAM 74	39.95
R/R Diesel Engine 2" speaker, 9 - 18V	RAM 75	39.95
Steam Calliope 2" speaker, 9 - 18V	RAM 77	39.95
Old Time Steam Whistle 2" speaker, 9 - 18V	RAM 80	39.95
Conductor "All Aboard" Announcement 2" speaker, 9-18 V	RAM 88	39.95
Cattle Sounds 2" speaker, 9-18V	RAM 89	39.95
Birds 2"speaker, 9-18V	RAM 103	39.95
City Traffic 2"speaker, 9-18V	RAM 104	39.95
Construction Site 2" speaker, 9-18V	RAM 105	39.95
Dock Side 2"speaker, 9-18V	RAM 106	39.95
Factory Machinery 2"speaker, 9-18V	RAM 107	39.95
Garage Sounds 2"speaker, 9-18V	RAM 108	39.95
Crossing Bell 2"speaker, 9-18V	RAM 114	39.95
Bell, Irregular 2" speaker, 9 - 18 V	RAM 139	39.95
Bell, Regular 2" speaker, 9 - 18 V	RAM 140	39.95
Telegraph 2" speaker, 9 - 18 V	RAM 143	39.95
Track Click & Squeal 2" speaker, 9 - 18 V	RAM 145	39.95
Honky Tonk Piano 2" speaker, 9 - 18 V	RAM 146	39.95
Blacksmith 2" speaker, 9 - 18 V	RAM 147	39.95
Sawmill 2" speaker, 9 - 18 V	RAM 148	39.95
Summer Night 2" speaker, 9 - 18 V	RAM 149	39.95
Thunder Storm 2" speaker, 9 - 18 V	RAM 150	39.95
Horses 2" speaker, 9 - 18 V	RAM 151	39.95
Pigs 2" speaker, 9 - 18 V	RAM 152	39.95
Sheep 2" speaker, 9 - 18 V	RAM 153	39.95
Trolley Bell 2" speaker, 9 - 18 V	RAM 154	39.95
Interurban Horn 2" speaker, 9 - 18 V	RAM 155	39.95

Cont'd next page

SOUND SYSTEMS **New Family of Sounds, digitally accurate recordings.

Crickets 2" speaker, 9 - 18 V	**	RAM 156	39.95
Hobo Joe 2" speaker, 9 - 18 V	**	RAM 157	39.95
Haunted Sounds 2" speaker, 9 - 18 V	**	RAM 162	39.95
Barnyard Animals 2" speaker, 9 - 18 V	**	RAM 163	39.95
Rail Car Engine Sound 2" speaker, 9 - 18 V	**	RAM 180	39.95
A Hooga Horn 2" speaker, 9 - 18 V	**	RAM 181	39.95

CONTROL AND POWER DEVICES

Rail Powered 9V Power Source provides power for above devices	RAM 59	14.95
Station Stopper Train delay up to 1 minute, can trigger digital sound	RAM 85	34.95
12 Volt DC Power Regulator from power pack AC, up to 1- 1 1/2 amps	RAM 87	24.95
Infra Red Switch 1/2 amp, 5-24 V DC	RAM 102	19.95
Light Activated Switch 1/2 amp, 5-24 V DC	RAM 111	14.95
Reed Switch and Magnet (2 sets).....	RAM 112	9.95
Tilt Switch responds to random on board motion	RAM 113	9.95
Dual Sensor Light Activated Switch 2, 1/2 amp outputs, 5-24 volts DC ideal for crossing detector	RAM 117	24.95
Signal Driver w/ Train Detector for 2 bulb or LED signals, requires 9-18V, DC.....	RAM 158	24.95
Latching Switch On-Board, Track Powered	RAM 173	19.95
Ditch Lite Controller Magnet Operated	RAM 177	19.95

STATIC MODEL LITES - Plastic & Die Cast

Plastic Model Car Head Lights and Tail Lights 2 white, 2 red LEDs. 3V	RAM 94	19.95
Plastic Model Flashing Hazard Lights 4 amber LEDs, 3V.....	RAM 95	9.95
Plastic Model 8 Clearance Lights 8 amber LEDs, 3 V	RAM 96	9.95
Plastic Model Head Lights / Landing Lights Large 2, 5MM white LEDs, 3V	RAM 97	14.95
Plastic Model Head Lights / Landing Lights Small 2, 3MM white LEDs, 3V	RAM 98	14.95
Plastic Model Navigation Lights red, green, white LEDs, 3V	RAM 99	14.95
Plastic Model Flashing Navigation Lights red, green, white LEDs, 3V	RAM 100	19.95
Light Pipe 3' fiber optic cable for LEDs, w/conn	RAM 101	9.95

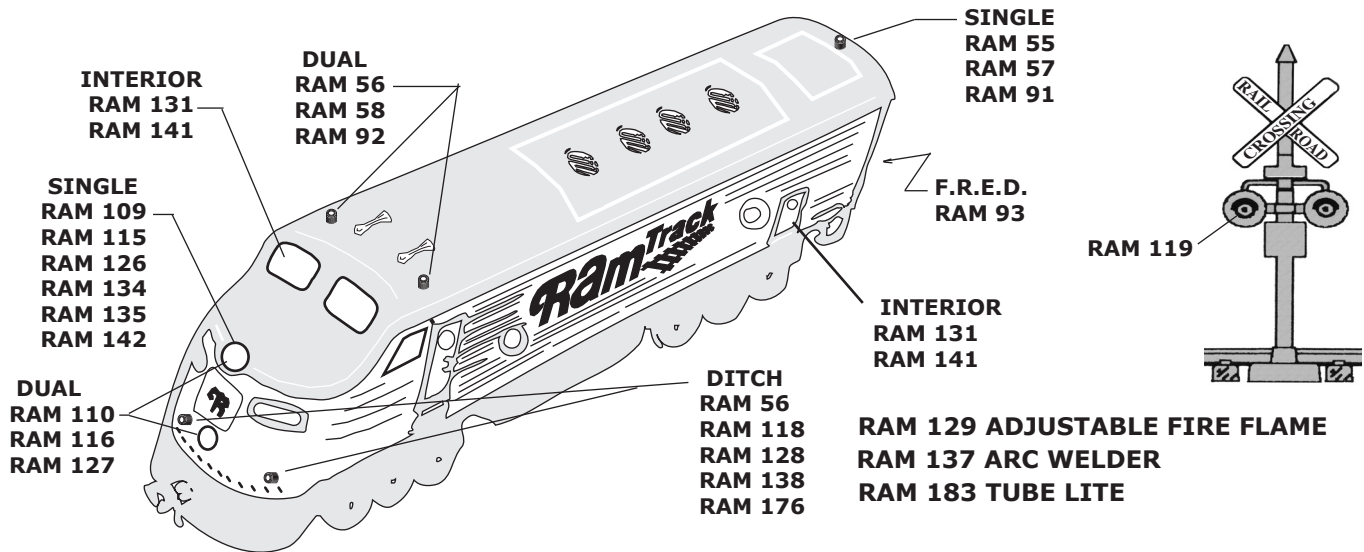
SHIPPING INFORMATION

INDIVIDUAL ORDER: Include full address needed for U.P.S. shipment. Send cash, check, money order in U.S. funds or full credit card info (Master or Visa) for the cost of items plus \$6.00 U.S. (\$7.00 all foreign orders) for immediate shipment. Sorry, no C.O.D.

DEALER AND DISTRIBUTOR ORDERS: Full standard discount applies to all items. Send a company purchase order and a business check to cover the net cost of the items plus \$6.00 for shipping. We will pay shipping costs on all domestic orders totaling 20 or more items.

Prices and specifications are subject to change without notice. All RAM products are assembled in the U.S.A.

RAM is known for producing unique, top quality, American made products that offer the best dollar value on the model market.



ALSO 90 RADIO CONTROL ACCESSORIES

- * LIGHTS
- * CONTROL DEVICES
- * SOUND DEVICES
- * FAILSAFES

For a full brochure, send a stamped, #10 envelope or call 847-740-8726. • WWW.RamRCandRamTrack.com