

## Kato 20-851-1

# Kato M2 UNITRACK Basic Oval and Siding Model Train Set Instruction Manual

Brand: Kato | Model: 20-851-1

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## 1. INTRODUCTION

The Kato UNITRACK Master (M) and Variation (V) sets are designed for model train enthusiasts, from beginners to those creating complex layouts. This M2 Basic Oval and Siding set provides a foundational track system that can be expanded with additional Variation sets or individual UNITRACK pieces. Each set offers a complete layout landmark, such as a staging yard, a passing siding, or a flyover viaduct bridge, allowing for diverse and engaging model train environments.

## 2. PRODUCT OVERVIEW

The Kato M2 UNITRACK Basic Oval and Siding set offers a comprehensive package for N scale model railroading. Key features include:

- Constructs a 3' x 6' oval of UNITRACK with 12 3/8" radius curves.
- Includes a rerailing track section for easy train placement.
- Features a passing siding utilizing #6 turnouts for dynamic train movement.
- Comes with a Kato Power Pack for speed and direction control.
- Designed for easy expansion with any of Kato USA's "Starter Series" train sets or individual locomotive and car releases.
- Packaged in an easy-to-transport box with a carrying handle.
- Utilizes the reliable and easy-to-use UNITRACK snap track system for quick setup of both temporary and permanent layouts.



Figure 1: The Kato M2 UNITRACK Basic Oval and Siding Set packaging, showing the track layout and included components.

### 3. SETUP INSTRUCTIONS

Follow these steps to assemble your Kato M2 UNITRACK Basic Oval and Siding set. For a visual guide, refer to the embedded video below.

#### 3.1. Unboxing and Component Identification

Carefully open the box and identify all components. The set includes various track pieces (straight, curved, rerailer, feeder track), two switch controllers, a power pack, and a track cleaning swab.

Your browser does not support the video tag.

*Video 1: A quick unboxing and setup guide for the Kato M2 Track Set. This video demonstrates the contents of the box and initial assembly steps.*

#### 3.2. Connecting Track Pieces

1. Place the track pieces on a flat, stable surface.
2. To connect two track sections, align the UniJoiners (metal connectors) and push the pieces firmly together until they snap. Ensure a secure fit to maintain electrical connection.
3. To disconnect track sections, hold both sections firmly and bend them horizontally towards you, as if breaking the track. This will separate the UniJoiners without damage. **Do not bend vertically**, as this can break the UniJoiners.
4. Assemble the oval and siding layout as depicted in the included diagram (refer to the M2 Basic Oval Track and Passing Track Set diagram in the manual).

*Visual Reference:* The video demonstrates connecting and disconnecting track sections from 02:00 to 02:15.

#### 3.3. Power and Control Connections

1. Locate the feeder track, which has a small cable attached. This cable connects to the power pack.
2. Connect the feeder track cable to the designated port on the Kato Power Pack Standard SX. Ensure the logo on the cable connector faces up when inserting.
3. Connect the power adapter to the power pack and then plug it into a wall outlet.
4. Attach the two switch controllers to the side of the power pack. These controllers manage the #6 turnouts in your siding. Connect the wires from the turnouts to the switch controllers.

*Visual Reference:* The video demonstrates connecting the feeder track and power pack from 04:40 to 04:50.

### 3.4. Placing the Train on the Track

Use the included rerailer tool to easily place your train cars onto the track. Position the rerailer over a straight section of track, place the train wheels into the rerailer's guides, and gently push the train forward until all wheels are correctly seated on the rails.

*Visual Reference:* The video demonstrates using the rerailer tool from 02:55 to 03:05 and placing a train on the track from 04:10 to 04:30.

## 4. OPERATING INSTRUCTIONS

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Once your track is assembled and the train is placed, you can begin operation using the Kato Power Pack Standard SX.

1. **Power Pack Control:** The power pack features a lever for direction (FWD/OFF/REV) and a knob for speed control. Set the direction to FWD or REV, then slowly turn the speed knob to increase the train's speed.
2. **Switch Control:** Use the levers on the attached switch controllers to change the direction of the turnouts, allowing your train to move between the main oval and the siding. The switches operate instantaneously with a distinct click.
3. **Train Lights:** Some train models feature directional lighting. When moving forward, headlights will illuminate. When reversing, taillights (often red) will illuminate.

*Visual Reference:* The video demonstrates operating the train and switches from 05:17 to 06:33.

## 5. MAINTENANCE

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Regular maintenance ensures smooth operation and longevity of your UNITRACK system.

- **Track Cleaning:** Use the provided large cotton swab or a similar soft, lint-free cloth to gently wipe along the rails. This removes dust and debris that can interfere with electrical contact and train performance.
- **Storage:** When not in use, store track pieces and trains in their original packaging or a clean, dry environment to prevent dust accumulation and damage. The original box is designed to store components securely.

*Visual Reference:* The video shows the track cleaning swab at 01:35 and mentions its use for cleaning rails.

## 6. TROUBLESHOOTING

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If you encounter issues with your train set, consider the following common solutions:

- **Train Derailment:**
  - Ensure all track sections are securely connected with UniJoiners. Loose connections can cause uneven surfaces.
  - Verify that the train wheels are properly seated on the rails using the rerailer tool.
  - Avoid sudden changes in speed or direction, especially at high speeds, as this can cause derailment. The video demonstrates a derailment when reversing too quickly (07:28).
- **No Power to Train:**
  - Check all electrical connections: power adapter to power pack, feeder track cable to power pack, and power pack to wall outlet.
  - Ensure the power pack's direction lever is not in the "OFF" position.
  - Clean the track rails and train wheels to ensure good electrical contact.

• **Switch Malfunction:**

- Confirm that the switch controller wires are correctly connected to both the controller and the turnout.
- Ensure the switch controllers are receiving power from the power pack.

**7. SPECIFICATIONS**

Feature	Detail
Product Dimensions	71 x 36 x 3 inches
Item Weight	3.2 pounds
ASIN	B000OXI0XM
Item Model Number	20-851-1
Manufacturer Recommended Age	14 months and up
Manufacturer	Kato Trains
Date First Available	May 20, 2007

**8. WARRANTY AND SUPPORT**

For specific warranty information and customer support, please refer to the documentation included with your product or visit the official Kato USA website. Keep your purchase receipt as proof of purchase for any warranty claims.

