Quick Start Guide

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ScaleSync V1

ScaleSync

Basic Features

Scale speed detection accurate to +/- 2 scale mph

Selection between HO and N Scale

Bright LCD display for good visibility in all environments

10 second delay between readings

Fits over N scale NMRA double track

Fits HO double stack intermodal cars

Durable 3D printed construction

Powered from 9v battery

How to Operate

1. Place ScaleSync over section of straight track
2. Turn on device using power switch
3. Select scale using the front toggle switch (N or HO)
4. Run a train through the ScaleSync tunnel
5. View scale speed results (visible for 10 seconds before resetting)
6. Turn off device using power switch

Suggested 3-Part Easy Calibration

(Example using Digitrax System)

1. Set the start voltage (CV2) to when your locomotive first makes movement
2. Run the locomotive at full speed (speed step 99), and modify the max voltage (CV5) until it reads 99 mph through ScaleSync.
3. Run the locomotive at half speed (speed step 50), and modify the mid voltage (CV6) until it reads 50 mph through ScaleSync.
4. You now have an accurate speed matching reference to consist all of your locomotives.

Note: This method is calibrated so that the speed step you are running at is also the active scale mph of your train, making this perfect for operating sessions and realism.

User Notes and Tips

- If using locomotives with dark color schemes, add a piece of rolling stock before the locomotive to get an accurate reading (it is difficult for the IR sensors to deflect signals off of dark surfaces).
- For calibrating speed steps, place the sensor along a flat, straight piece of track away from curves or grades; this ensures that the locomotive is at a constant speed.
- Try to run above 5 N Scale MPH or 3 HO Scale MPH; anything below this speed may get inaccurate readings.
- For more accurate calibration, use the full decoder speed table instead of CV2, 5, & 6 (requires some math or software such as JMRI. See backside for more information).

Warnings

- Do not expose to wet and humid conditions.
- Always store in a cool, dry, environment
- Never leave the device on for extended durations.
- Disconnect battery if being stored for a long period of time.
- Always disconnect power before handling internal electronics.
- Do not operate with any other power source than listed in this manual.
- Modifying or changing any part of the product voids all warranties.
- If the detection LED is used continuously for a long time, the brightness will gradually decrease, which will eventually lead to poor detection. Please turn off the power when the speedometer is not in use.