

LocoFi™ locomotive configuration

App Update 2.30

Firmware Version: 0440

Released: December 24, 2021

SOUTHERN-2148

- 1: Lock loco for direct connection only
- 2: Auto reverse lights
- 3: Reverse lights direction
- 4: Reverse engine direction
- 5: Auto stop on connection loss
- 6: # of throttle notches
- 7: Scale / Units
- 8: Enable scale speeds / Consisting
- 10*: Start speed step
- 11: Start step delay
- 16*: Max speed step
- 17: Max display speed
- 18: Momentum/Inertia
- 19: Coast

1	Lock loco for direct connection only NEW : Enables lock on locomotive when operated via direct connection. Available only when operated via direct connection. [📄 Part 1 09:08 to 11:35]
2	Auto reverse lights: Enables automatic change of direction of lights based on change of direction of locomotive.
3	Reverse lights direction: Enables direction of lights opposite to that as wired. This is helpful if locations of front and rear lights are reversed by mistake, or when the shell has been put on in reverse direction by mistake, saving time and effort required to undo these mistakes and redo the assembly.
4	Reverse engine direction: Enables direction of motor opposite to that as wired. This is helpful if motor connections are soldered 'in reverse' by mistake, or when the shell has been put on in reverse direction by mistake, saving time and effort required to undo these mistakes and redo the connections or assembly.
5	Auto stop on connection loss NEW : Enables automatic stopping of locomotive when it loses connection with controller app. Locomotive resumes operation when connection to controller app is restored. [📄 Part 1 06:20 to 09:07]
6	# of throttle notches: Allows selecting number of throttle notches as desired using slider, from 8 to 1,023, in increments of 2x (8 -> 16 -> 32 -> 64 -> 128 -> 256 -> 512 -> 1,023). While 8 is default for typical American diesel locomotives (as well as LocoFi™ app), selecting higher number of speed steps helps with finer control of the throttle.
7	Scale / Units NEW : Allows definition of scale e.g. 48 for O scale. This is set to 87 by default for HO scale. Use toggle to select MPH or KMPH as desired on speedometer and 'scale speed' calculations. [📄 Part 1 12:50 to 13:38]
8	Enable scale speeds / Consisting NEW : Enables scale speeds for a) Consisting REQUIRED for Consisting. [📄 Part 2], and / or b) Creating up to 8 scale speed profiles [📄 Part 1 13:39 to 16:07]

Video resources:

Visit wifimodelrailroad.com/videos or visit our YouTube channel for:

- 📄 Part 1 LocoFi™ App Update 2.30 - Part 1
- 📄 Part 2 LocoFi™ App Update 2.30 - Part 2

9	Track voltage: Specify track voltage to name scale speed profile appropriately
10*	Start speed step (0 to 64): Use slider to mark 'Start speed step' i.e. speed at which locomotive barely begins to move. This effectively sets scale speed to 0 MPH / KMPH.
11	Start step delay: Use slider to select 'Start step delay' i.e. delay before which locomotive starts moving. This delay has a value from 0 (i.e. immediate start) to maximum possible value of 'Start speed step' as determined above. Actual delay will depend on: <ul style="list-style-type: none"> '9. Start speed step' setting above, and '13. Momentum/Inertia' setting below and can be used to achieve desired prototypical behavior during startup and acceleration.
12.a	Test track length: Specify test track length if taking time measurements yourself for calibrating speed. See 12.c below.
12.b	Speed table type: Select the number of speed table steps. More speed steps mean finer speed control definitions.
12.c*	Speed table step: If calibrating speed yourself, specify time measurement for the test track length (see 12.a above) to auto calculate scale speed. Or if using an external speed detection device, simply enter the measured scale speed. Do lock your speed in place when final.
13	Max scale speed: Use slider to mark 'Max scale speed'. If desired, this can be set to maximum speed of the prototype.
14	Save: Save profile and profile settings. All speeds must be locked to enable 'Save' button.
15	Multiple speed profiles. Select the appropriate profile for your track voltage.
16*	Max speed step: Specify a value between 64 and 255 to set maximum speed as observed on track.
17	Max display speed: Use slider to mark 'Max display speed' on speedometer, up to maximum 250, in increments of 5.
18	Momentum/Inertia: Use slider to achieve desired prototypical behavior during acceleration. Use in conjunction with '10. Start step delay' to define prototypical behavior of overcoming static friction.
19	Coast: Use slider to achieve desired prototypical behavior during deceleration.

Speed Table

SOUTHERN-2148

- 8.a: Track voltage
- 8.b: Start speed step
- 9: Track voltage
- 10*: Start speed step
- 11: Start step delay
- 12.a: Test track length
- 12.b: Speed table type
- 12.c*: Speed table step
- 13: Max scale speed
- 14: SAVE button

Enable scale speeds / Consisting

Scale speed profiles

- 12.0 V
- 16.5 V

ADD NEW PROFILE

UPDATE DELETE

15: SAVE button

* WARNING: While adjusting speed steps, the loco may take off suddenly. Please make sure that the loco is on an isolated track (a circular track is preferred) before performing speed calibration. Please make sure to set turnouts and remove any rolling stock in the way to avoid collision. It is ideal to have the test track setup on a flat surface.

LocoFi™ App Update 2.30

What's **NEW**

Image icons to indicate action: App design and menus have been updated for a cleaner interface with more helpful options and intuitive icons to indicate those options.

Emergency Stop: Activation pressure sensitivity configuration is now possible. This is a **LocoFi™ Exclusive** safety feature, ensuring Emergency Stops are indeed 'Emergency' and not 'Accidental' [📺 Part 1 03:44 to 06:20]

Loco / multi-loco consist icon with color to indicate **firmware update status** [📺 Part 1 01:20 to 01:46] Now you can even **revert / downgrade firmware**, if needed [📺 Part 1 16:08 to 17:30]

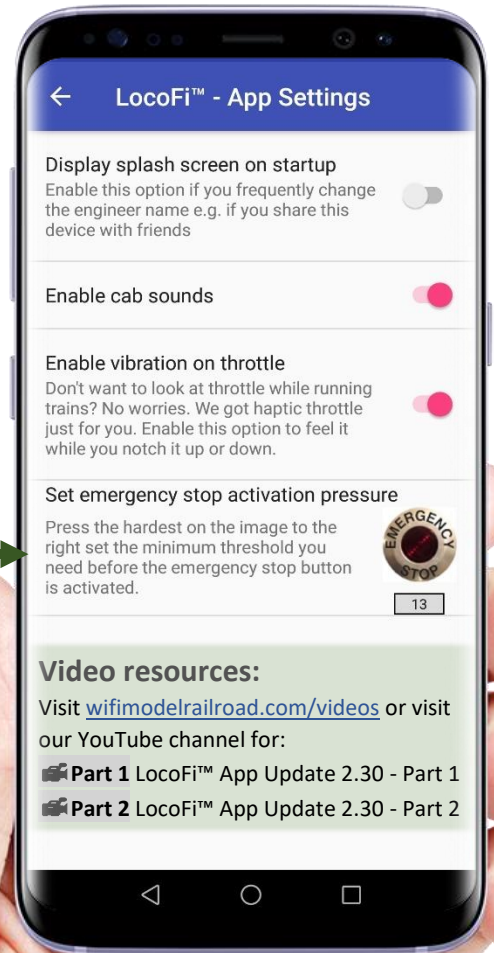
Lock loco for direct connection only: **LocoFi™ Exclusive** safety feature to secure locomotive from being 'stolen' when operated via direct connection. [📺 Part 1 09:08 to 11:35]

Auto stop on connection loss: Another **LocoFi™ Exclusive** safety feature, an essential on any wirelessly controlled locomotive. Especially useful for dead rail scenarios. [📺 Part 1 06:20 to 09:07]

Scales / Units: Now ALL scale modelers can customize to their specific scale e.g. OO, S, On30 in addition to the more popular ones like HO, O, G, etc. [📺 Part 1 12:50 to 13:38]

Create and Save Speed Profiles: This is BIG!!! Run your loco or consist (see below) on multiple layouts across voltages, at home or club, with no hassle - another **LocoFi™ Exclusive** [📺 Part 1 13:39 to 16:07]

CONSISTING: Most awaited update. Discover the ease of configuring and running a consist with prototypical operation in the most seamless execution of this feature ever [📺 Part 2]



1 Loco / Consist **Names** being managed by Current Engineer. Long press to see helpers on a consist.

2 Indicator for **Current Loco / Consist** being controlled in Pink

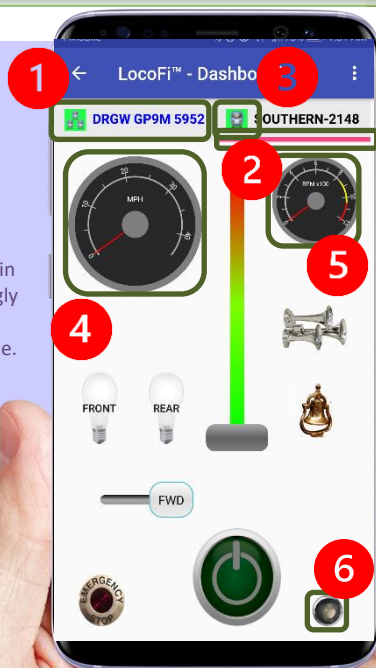
3 **Firmware Available** indicator in Yellow (Red for app update strongly recommended). Tap **Upgrade Firmware** to proceed with upgrade. Green indicates 'all is good'.

4 **Speedometer** gauge. Unit can be changed to MPH or KMPH from Loco Configuration Screen.

5 **RPM** gauge

6 **Start Up / Shutdown** Indicator. Dashboard controls unavailable when flashing.

INDICATORS



1 Go back to Main Screen

2 Startup / Shutdown control.

3 Speed Throttle: Configurable to provide haptic feedback and user-defined number of notches.

4 Emergency Stop: User-configurable for pressure sensitivity.

5 Loco Direction control

6 Loco Lights control

7 Loco Bell control

8 Loco Horn control

9 Tap on Menu icon to

- Configure: Loco / Consist configuration settings
- About: Diagnostic and other information about Loco / Consist
- Factory Reset: To reset to factory settings

CONTROLS

