

# **NaWi**<sup>©</sup> - Hand controller

User guide

Draft for discussion and testing only!



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## Safety precautions

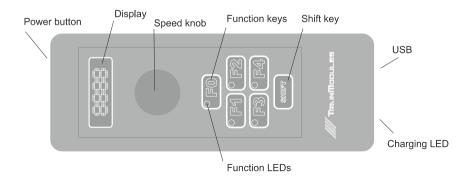
You must always observe the technical specifications indicated in the specifications when using the device. Please always take care of the environment when putting the device into operation and protect the device from moisture and direct sunshine.

You may need a soldering iron during installation or putting the device into operation. Please be careful when executing these operations.

## Technical parameters:

Dimensions: 137x47 mm Idle mode current consumption: 20 mA Internal rechargeable battery: 1700 mA Li-Ion Operating frequency: ISM - 2,4GHz DSSS (certified) Number of selectable channels: 70 Number of DCC functions: F0-F8 Wireless standard: NaWi© interface Battery charging: from miniUSB-B (PC host port or wall adaptor)

## User interface review



**Power button:** Switch on/off a controller. For power off, please hold at least 2 seconds.

Display: A 4 digit numeric display. Displays:

- L000-L126: Loco speed
- Sett.: Settings menu
- L.Adr: Loco address (1-9999)
- Sfmt: Speed format (14 / 28 / 128 NMRA DCC speed formats)
- N.Adr: NaWi internal address. Must be unique within one wireless hub.
- r.ch: Radio channel (1-70)
- F.def: Reset all settings to factory default.

**Speed knob:** For changing the actual loco's speed, and its direction. To emergency break, push the speed knob once.

Function keys: Turn on/off a selected function.

Function LEDs: Indicating the actual state of function.

**Shift key:** Change the function key addresses from F1-4 to F5-8. While the shift key is pressed, the LEDs on the function keys will indicate the states of F5-8 functions.

Example: For activating the F5 function, hold the Shift key and press the F1 key simultaneously. To checking the state of F5, press the Shift key only. If the function is active, the LED on the keyboard will indicate this.

**USB:** Charging connector. The controller is need the standard USB 5V for charging.

Attention! The charging current is 200mA. Always use at least 500mA maximal current USB port, for proper operation. The controller won't need a data connection on the USB port.

**Charging LED:** While the internal rechargeable battery is charging the LED will indicate this. If the battery is fully charged, the LED will turn off.

While is on the charger: If it not necessary, please never use the controller while is on charger, for faster and safer charging.

## Setting the radio channel

- 1. Press the "Shift" and "Speed knob" simultaneously, for the settings menu.
- 2. With rotating the speed knob, select the "r.ch" option.
- 3. Press the "Speed knob", for entering the selected option.
- 4. With rotating the speed knob, select the desired radio channel.
- 5. Press the Speed knob, to save your settings.
- Press Power button to exit from settings. The controller will now reboot. ( - - - - on display)

### Synchronizing with NaWi wireless hub

- 1. Check the wireless hub address. Make sure, the controller and the hub is on same channel.
- 2. Press the push button of selected slot on the wireless Hub.
- 3. The pushed channel will now blinking. That means: Waiting for controller.
- 4. Hold the "Shift" key and press the Power button simultaneously on the wireless controller.
- 5. The controller now in Locomotive mode (Lxxx on display)
- 6. Synchronizing is completed. The controller is registered on the Hub.

#### Changing the locomotive address

- 1. Enter the settings menu. Press the Shift and Speed knob in same time.
- 2. With rotating the "Speed knob", select "L.Adr" option.
- 3. Press the "Speed knob" for entering the selected option.
- 4. Use a speed knob, or the F1-F4 keys to modify the locomotive address. F1 is the thousands, F2 is the hundreds, etc.
- 5. Press the "Speed knob" for exit and save.
- 6. Press "Power button", to exit from settings.
- 7. The controller is ready to use with entered locomotive address.

Notes:

TrainModules ®: BioDigit Ltd. NaWi®: BioDigit Ltd. NMRA DCC: National Model Railroad Association

