# **LNWI**

#### **LocoNet Wifi Interface**

#### **Features:**

- Wi-Fi interface to a Digitrax LocoNet for up to four compatible mobile Wi-Fi devices and Apps.
- Compatible with most Android and Apple devices running supported throttle apps
- Easy Setup and Configuration. A single LNWI works 'out of the box', with no additional configuration required.
- Up to 8 LNWI can be supported per LocoNet
- Multiple LNWI units automatically resolve SSID with no additional configuration
- Optional Wi-Fi WPA2 security for layout operations in public.
- Option switches to fully customize all device settings
- LocoNet Compatible
- Meets FCC Class B requirements

#### **Parts List**

1 LNWI LocoNet Wifi Interface

1 2' LocoNet cable

1 PS14 Power Supply

1 Instruction Sheet

# LNWI Quick Setup

- 1. Visit <u>www.digitrax.com/throttleapps/</u> on your compatible Mobile Wi-Fi device for a list of supported apps.
- 2. Follow your device manufacturer's and app vendor's instructions for installing the appropriate throttle app.
- 3. Place the LNWI in a convenient location and connect it to your LocoNet system using a known good LocoNet cable.
- 4. Plug in the PS14 and connect the barrel plug connector to the LNWI. The ID light will light green being mostly lit winking off as a "heartbeat" indicator.
- 5. On your Mobile Device following your device's instructions select and join the Wi-Fi network with the SSID "Dtx1-LnServer\_XXXX-7". The XXXX for each LNWI is the unique LNWI serial number. This is the factory default SSID format for all LNWI devices.
- Open your throttle app on your device. Follow your apps instructions for selecting the appropriate server. Most apps will automatically detect the LNWI. If you must manually enter the server, by default the LNWI's IP address is 192.168.7.1, Port 12090
- 7. Follow your apps instructions to select and run a locomotive.

# Special Considerations to Note for Using the LNWI

When using a LNWI Wi-Fi connection, any other internal mobile device or app functions requiring WAN or Internet access may be temporarily inoperative. This may limit other mobile device and app functionality. Many devices automatically select which Wi-Fi network to join, you may need to take this feature into consideration with using the LNWI. Refer to your mobile device instructions for more information on this feature. If you move out of range or your mobile device connects to another Network, your throttle app will not be able to communicate with the LNWI until you reconnect to the correct LNWI network.

Digitrax does not produce or support Mobile Devices or Throttle apps, please contact your mobile device manufacturer or Throttle app vendor for specific support. The LNWI has been tested with a range of devices and available applications, however not all configurations are guaranteed to function as expected. Additionally, the LNWI may not support some subsets of an app's capabilities, and some apps may not be configurable to access all LocoNet capabilities.

Each LNWI will support 4 mobile devices. Once 4 devices have connected to an LNWI additional connections will fail. To add additional mobile device capability up to 8 LNWI units may be connected to a LocoNet.

# **Connecting Multiple LNWI units to LocoNet:**

LocoNet can support up to 8 connected LNWI units. Adding additional LNWI units will allow for more mobile devices to be connected, up to a total of 32 mobile devices can be connected. Each LNWI added supports 4 mobile devices, each added LNWI will have its own unique SSID. To connect additional LNWI's simply follow the quick setup instructions for each additional unit.

# **Connecting Wi-Fi devices in Multi LNWI setups**

Each LNWI connected to LocoNet can support up to 4 Wi-Fi devices. Each LNWI will have a different SSID configured by the units unique device serial number. The SSIDs by default begin with "Dtx1-LnServer\_XXXX-7" where XXXX is the units unique LNWI serial number. Each LNWI can support 4 connections. Once 4 devices are connected to one LNWI any additional connections will fail and another SSID must be selected.

# **Turning on Basic WPA2 Security**

Enabling WPA2 security will allow you to prevent unauthorized users from connecting to your LocoNet by requiring a simple Passcode that is entered when you connect to an LNWI SSID.

To Enable Basic WPA2 Security:

- Power up your LNWI and connect it to an active LocoNet
- 2. Connect a Digitrax throttle to one of the LNWI's LocoNet connectors
- 3. Press the OPS button on the LNWI. The Green ID and Red OPS indicators should start alternating blinking ON.
- 4. Go to SWITCH mode on your Digitrax throttle.
- 5. Set Sw 17=c and Sw 18=c
- 6. Once all switches are configured press the OPS button again, the ID light

- should go back to its normal "heartbeat" operation.
- 7. Power the unit off and back on by disconnecting and reconnected the barrel plug power connection.
- 8. The LNWI should now show with a secured SSID. The passcode is "digitrax1234"
- 9. Repeat this procedure for any additional LNWI units.

# **Resetting LNWI to Factory Default**

- 1. Power up your LNWI and connect it to an active LocoNet
- 2. Connect a Digitrax throttle to one of the LNWI's LocoNet connectors
- 3. Press the OPS button on the LNWI. The Green ID and Red OPS indicators should start alternating blinking ON.
- 4. Go to SWITCH mode on your Digitrax throttle.
- 5. Set Sw 40 = c
- 6. Press the OPS button again, the ID light should go back to its normal "heartbeat" operation.
- 7. Power the unit off and back on by disconnecting and reconnected the barrel plug power connection.

# **Advanced LNWI configuration and settings**

The LNWI has additional configuration and customization options that will not be necessary for most users. LNWI SSID channel, subnet, and Net Name can all be configured. WPA2 security passcode can also be customized. Additional option switch configurations are also available. To access advanced customization options and technical specifications visit the Digitrax Tech Support Deport or directly at <a href="https://www.digitrax.com/advancedLNWI">www.digitrax.com/advancedLNWI</a>

# **Regulatory Information**

Radio or TV Interference (this information is MANDATED by the FCC)

This equipment incorporates FCC ID # 2AC7Z-ESPWROOM02 module. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note that any modifications to the equipment not expressly approved by Digitrax voids the user's authority to operate under and be in compliance with CFR 47 rules, as administered by the Federal Communication Commission. Digitrax believes any conscientiously installed equipment following guidelines in this manual would be unlikely to experience RFI problems.

For Canadian Users:

Canada ISED RSS: Contains Canadian ID module: 21098-ESPWROOM02

"This digital apparatus does not exceed the Class B limits for Radio noise emission from digital apparatus set out in the Radio Interference Regulation or the Canadian Department of Communications."

Le present appariel numerique n emet pas de bruits radio-electriques depassant les limites applicables aux appareils numeriques de la classe B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

2AC7Z-ESPWROOM02 Exposure Guidance: "In order to comply with FCC / ISED RF Exposure requirements, this device must be installed to provide at least 20 cm separation from the human body at all times." "Afin de se conformer aux exigences au moins 20 mm de séparation du corps humain en tout temps."

CE/ C-Tick/ R-NZ /RCM etc: The LNWI conforms to; CE and Australia/New Zealand requirements of EN 300 328 V2.2.

### Warranty & Repair

Digitrax gives a one year Warranty against material and manufacturing defects on the LNWI.

Visit www.digitrax.com for instructions for returning items for repair.

**Please return warranty items directly to Digitrax** - DO NOT return items to place of purchase.

Digitrax, Inc. reserves the right to make changes in design and specifications, and/or to make additions or improvements in its products without imposing any obligations upon itself to install these changes, additions or improvements on products previously manufactured. The newest features are documented on the product pages of the website.

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