NCT Power Cabinet

Problem Solving and Workarounds

Directory

NCT Power Cabinet

Problem Solving and Workarounds

Power Related Issues

Problem #1: The TIU red light is off.

Fix: Check power brick located in the bottom left or the middle left of the cabinet. The Brick has a circuit breaker.

Problem #2: The Legacy base or TMCC base will not turn on.

Fix: Check the power brick located in the bottom left or middle left of the cabinet. The brick has a circuit breaker.

Problem #3: Z4000's or the 18V Lionel Brick will not turn on

Fix: Make sure the Z4000 or 18V Brick is plugged in. Outlets and AC plugs are located in the lower left of the VA cabinet and the middle left of the MD cabinet.

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Harness Connection Issues

Problem #1: **The Green continuity light located in the front middle of the Power Cabinet is extinguished.**

Fix: Since the purpose of the light is to indicate when all the module harnesses are plugged in, check all the connections at each module including corners and the Power Cab
Suggestion: The orange wire in each module harness is directly connected to the male and female connectors, nothing else in the module. It is strictly for a continuity check. Each module can be checked prior to setting it up either by plugging the module into the power cab directly or by using an Ohm Meter between the male and female plugs. (Orange wire)

TIU Configuration Issues

Problem #1: **DCS control for any track especially the Middle and Inner loops doesn't work.**

Fix: **All TIU Channels must be FIXED. If any have been changed to Variable control issues manifest themselves. The process of changing Variable channels to Fixed is as follows:**

1. **Using the MTH handheld remote select:**
2. **Menu**
3. **System**
4. **DCS Setup**
5. **All four channels must be set to Fixed**
6. **Select the proper buttons for FIXED operation.**

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Problem Solving and Workarounds

DCS / Legacy Handheld Remote Issues

Problem #1: DCS inoperative via the MTH handheld remote

Note: Problems #1 and #2 assume the engine and remote are operational and checked out before the show or on the test track.

Fix:

1. Check for the red light inside the TIU, is it on? Don't forget the TIU power comes from the Aux Power and is controlled by the switch just below the test track, (Purple and Yellow)

2. Do not disconnect anything

3. Contact the Power Cabinet support staff

4. Initiate the following:

The best workaround is running conventional until TS can take place. Place conventional engines on the Middle and Inner Loops and control them with the Z4000's. If running Command engines in conventional mode turn of the MTH or Lionel (Legacy and TMCC} with the toggle switches located just under the programming track. Command engines will only come up in conventional mode if the command signal is turned off.

With this workaround, if the problem is only DCS, the Outer, Middle, and Inner Loops will still function in Legacy and TMCC command mode. Only turn off the MTH DCS.

Problem #2: Legacy/ TMCC inoperative via the Lionel handheld remote

This problem also assumes the engine and remote are operational either checked out before the show or on the test track.

Fix: Refer to Problem #1. Same workaround with the exception turn-off the Lionel Legacy and TMCC with the switch located just below the test track.

With this workaround, if the problem is only Legacy/TMCC, the Outer, Middle, and Inner Loops will still function in DCS command mode. Only turn off the Lionel Legacy /TMCC.

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WIFI Operational Issues

When using either the MTH or Lionel WIFI sign on to the Tracker network noted on the Router side. DO NOT sign on to the MTH or Lionel networks!

- For Reference Only:
- MTH default Network = MTH_DCS-6704
- Lionel default Network = LCS-31C2

Maryland WIFI Tracker Network Name: **MDTrackers5G**

Virginia WIFI Tracker Network Name: **TrackerWiFi-VA**

Passwords for either of these networks are plainly displayed on the side of each Router.

Problem #1: The Router will not power up.

Fix: Make sure the AC plug in connected. Outlet and plug are located in the lower left or lower middle left of the Cabinet.

a. **Do not disconnect any wiring!**
b. **Contact support**

Problem #2: Can't sign on to the Tracker Network

Fix: Check settings on your device and attach to the appropriate Tracker network (MD or VA). Enter the password noted on the side of the router and check the save password box.

Note: By checking the save password box anytime your device

sees the network it will automatically sign on.

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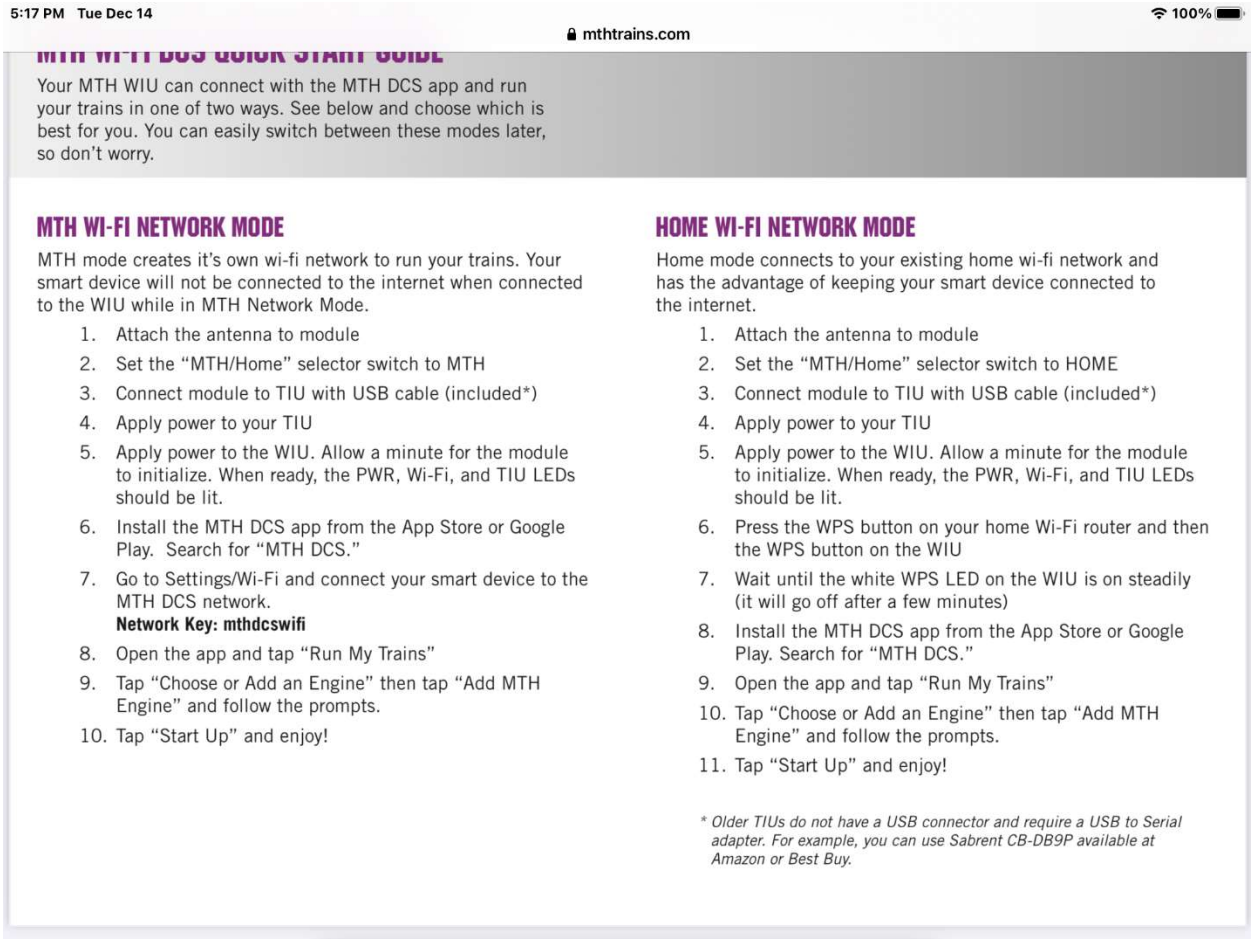
Problem Solving and Workarounds

MTH WIFI Router Configuration



Set switch to MTH

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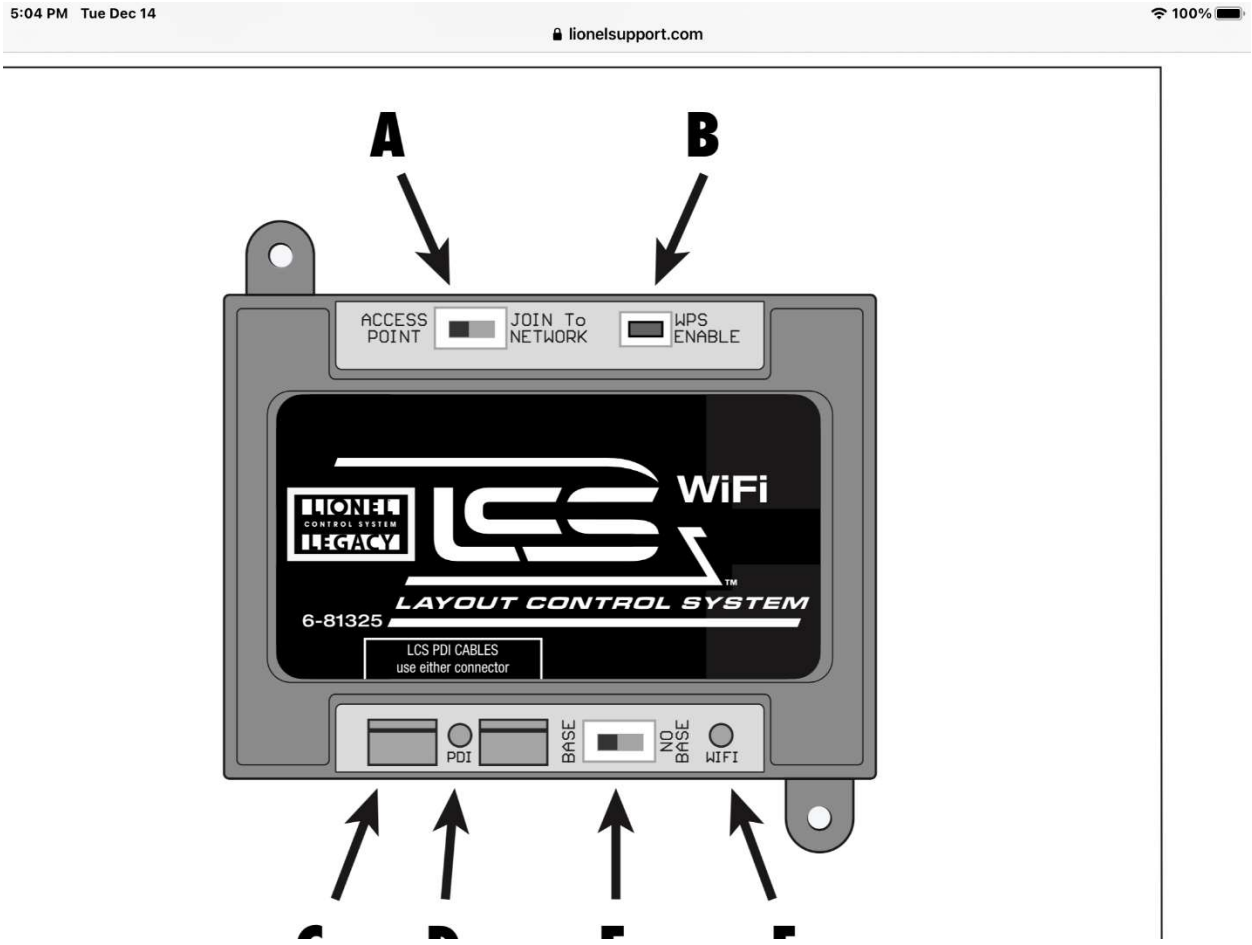
Lionel WIFI Router Configuration



BASE / NO BASE

When operating with a Legacy Base or Base1L the switch should be set to "BASE." When not connected to a Lionel base the switch must be placed in the "NO BASE" position. In a no-base setup, the LCS WiFi must occupy the first connection in the chain of LCS products.

Selecting "NO BASE" will allow the LCS WiFi to operate in non TMCC/Legacy environments, such as Conventional or DCC configurations. In conventional setups, the LCS system will operate the Power Systems, such as the ZW-L or Legacy Power master, allowing conventional control of the locomotives. Additionally, turnouts and accessories may be operated with the appropriate LCS modules (SER2, ASC2, BPS2, etc).

PDI LED

The PDI LED will indicate the LCS communication status. If the LED remains on continuously, it indicates a problem with the PDI cabling or the command base.

WIFI LED

The WiFi LED will indicate the WiFi communication status. The LED will blink when no clients have connected to the LCS WiFi module. When one or more clients have connected to the LCS WiFi, then the LED will turn solid ON, and flicker OFF with WiFi activity.

Changing the WiFi Channel

JOIN to NETWORK Mode

If your Wireless Router supports "WPS" (WiFi Protected Setup), then you may add LCS WiFi to your home network. Now your iPad (or other device) can seamlessly access the internet and run your layout. However, if your home network is busy, you may experience latency (slower response to your commands) when using the JOIN to NETWORK mode of operation.

To select "JOIN To NETWORK" mode:

1. If LCS WiFi is connected to a Lionel Command Base, set the "BASE/NO-BASE" switch to "BASE." If not, set this switch to "NO-BASE."
2. Next, slide the "ACCESS POINT / JOIN To NETWORK" switch to "JOIN To NETWORK".
3. Press and hold the "WPS" push button on the LCS WiFi interface for 2 seconds, then press the "WPS" button on your wireless router. The devices will negotiate a secure connection.
4. Be sure your device is connected to your existing network.
5. Launch the LCS-aware application to control your layout.

If you are using LCS App, you will be prompted to search for the LCS WiFi, after which the connection will allow the LCS app to control your locomotives and layout. Locating the LCS WiFi may take as long as 5 minutes the first time, or anytime your home network configuration changes. Once LCS App connects, the green LED on the LCS WiFi will be solidly illuminated.

Md Power Cabinet

NCT WIFI

Available Network Information

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1. **Using WIFI to operate either MTH or Lionel trains requires signing on to a network. Under *settings* in your phone or tablet look for these network names displayed whenever the Power Cabinet is turned on,**

   - **MDTrackers-5G This is the preferred network using the Router. Both the MTH and Lionel Apps accessible through this connection.**

   - **MTH_DCS-6EEC This is the MTH WIFI network and is available as an alternative bypassing the Router in case of problems. Only the MTH App is accessible. (Reconfiguration is not necessary**

   - **LCS-31C2 This is the Lionel WIFI network and is available as an alternative bypassing the Router in case of problems. Only the Lionel App is accessible. (Reconfiguration is not necessary)**

   - **MTH_DCS-2410 This is for the *Programming Track* with the MTH WIFI unit connected directly to the Programing TIU. By Signing on to this network a MTH engine can be configured with your phone or tablet. No tethering is required!**

VA Power Cabinet

NCT WIFI

Available Network Information

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2. **Using WIFI to operate either MTH or Lionel trains requires signing on to a network. Under *settings* in your phone or tablet look for these network names displayed whenever the Power Cabinet is turned on,**

   - **TrackersWIFI-VA This is the preferred network using the Router. Both the MTH and Lionel Apps accessible through this connection.**

   - **Notice: The VA Power Cabinet does not have a separate MTH WIFI network. The reason being the configuration of the MTH WIFI unit. It was configured to connect only to the router and when this is accomplished it is irreversible.**

   - **LCS-31C2 This is the Lionel WIFI network and is available as an alternative bypassing the Router in case of problems. Only the Lionel App is accessible. (Reconfiguration is not necessary)**

   - **MTH_DCS-66E0 This is for the *Programming Track* with the MTH WIFI unit connected directly to the Programing TIU. By Signing on to this network a MTH engine can be configured with your phone or tablet. No tethering is required!**