Integrel
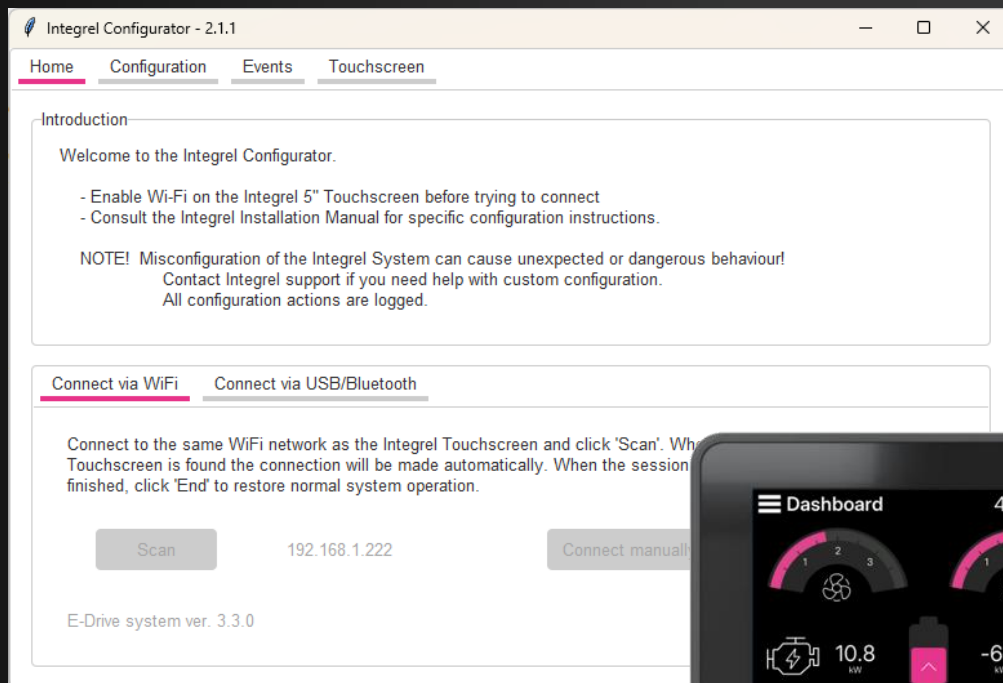
E-DRIVE

CONFIGURATOR
USER GUIDE

Version 1.0 | September 2025

Configurator Version 2.1.1

1   Contents

2 Introduction

The E-Drive Configurator is a software tool for configuring, updating, and debugging issues with the Integrel E-Drive system.

The Configurator provides the following major functionality.

- Connection to E-Drive systems via Wi-Fi

- Full configuration of E-Drive Systems

- Access to real-time E-Drive operational data

- Access to extensive system event logs

- Software and system updates

A Windows™ or MacOS™ compatible computer with Wi-Fi is required to use the E-Drive Configurator.

Download the latest version of the Integrel E-Drive configurator at:

https://tinyurl.com/E-Drive-Configurator
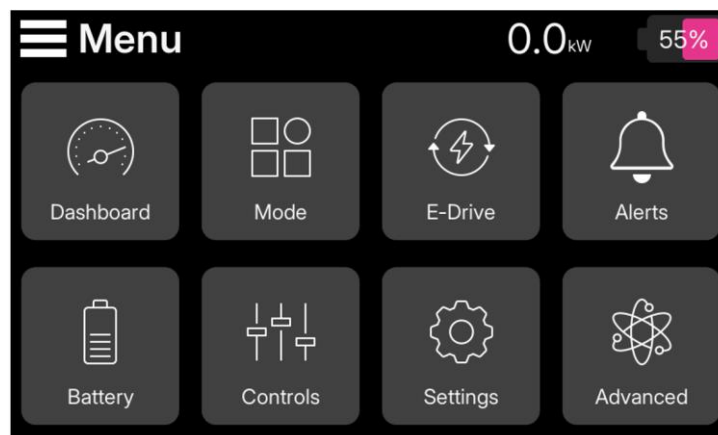

IMPORTANT NOTICE

Incorrect configuration of the E-Drive System may result in damage to the system or vessel and may void the E-Drive warranty.
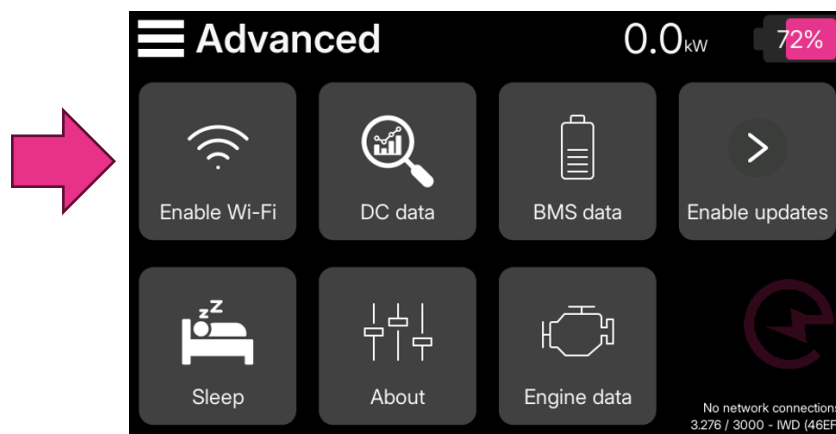
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3 Connecting to E-Drive

The Configurator connects to the E-Drive system using Wi-Fi via the 5" touchscreen.

3.1   Enabling the Touchscreen Wi-Fi

Select the **Advanced** icon.

Then, select the **Enable Wi-Fi** icon.

By default, the E-Drive Touchscreen starts a Wi-Fi network hotspot with the following settings.

Wi-Fi Network Name	Integrel-XXXX
Password	cornwall
Network Address	192.168.2.1

If the touchscreen has been configured to connect to a local network, connect your computer to the same local network as the Touchscreen then skip to *Section 3.3 - Connecting to E-Drive*.

3.2   Connecting to the Touchscreen Hotspot

Open the Wi-Fi connection manager on your computer and search for the Wi-Fi network named **Integrel-XXXX**.

Connect to the **Integrel-XXXX** Wi-Fi network using the network password detailed in the previous section.
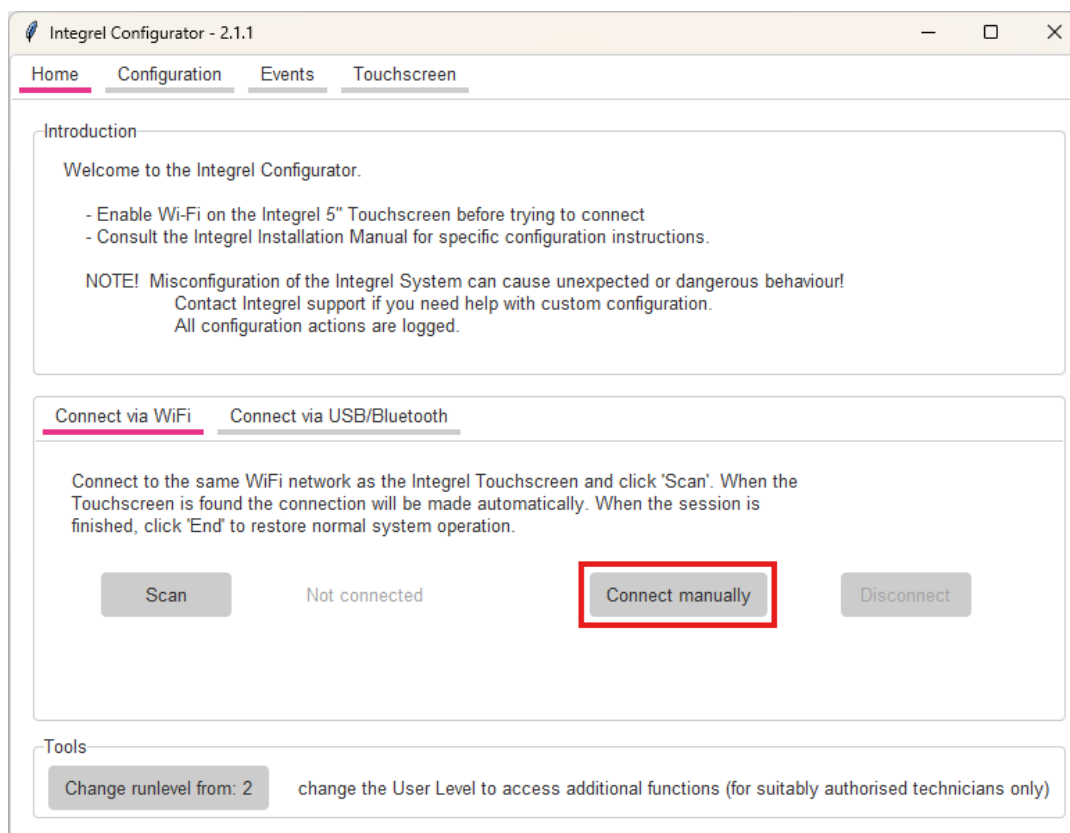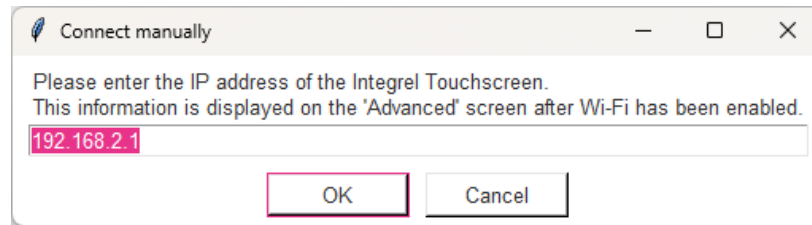
3.3   Connecting to E-Drive

Using the Configurator running on your computer, select the **Home** tab.

3.3.1   Wi-Fi Hotspot Connection

If your computer is connected to the Touchscreen Wi-Fi hotspot, select **Connect Manually**, then **OK** to accept the default network address of **192.168.2.1**.

3.3.2 Local Network Connection

If your computer is connected to the same local Wi-Fi network as the Touchscreen, select **Scan**, then **OK** after the Touchscreen is found on the local network. If the Configurator fails to find the touchscreen:

- Check the Touchscreen has not started a Wi-Fi hotspot instead.

- Check the Touchscreen network address (see the bottom-right corner of the Advanced page)

3.3.3 Successful Connection

After the Configurator connects successfully to the E-Drive system, the **Scan** and **Connect Manually** buttons are greyed out.
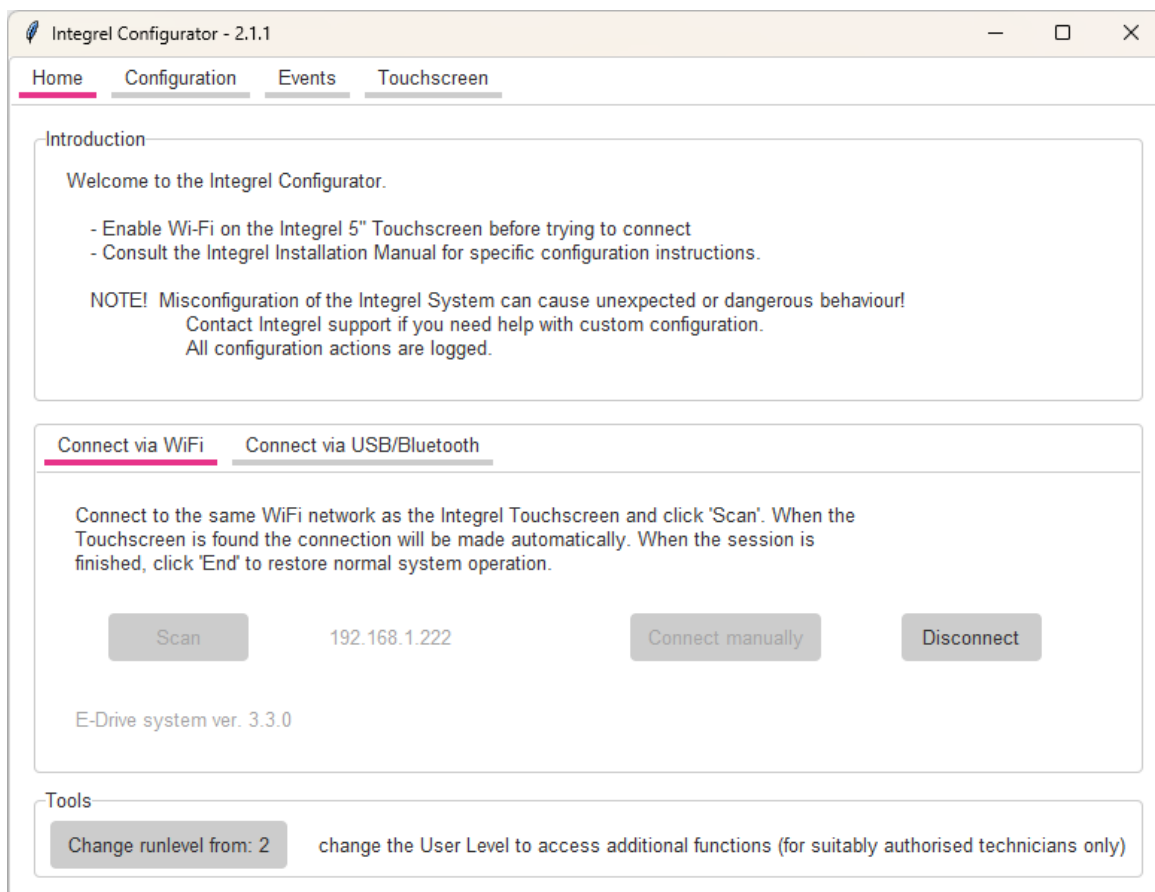
4 Configuration Tab

Configuration of the E-Drive system is available with the functions provided on the Configuration tab. The configuration tab provides access to reading/writing/loading/saving of E-Drive device configuration settings, display of live E-Drive operational data, and various other operations including factory reset and calibration.
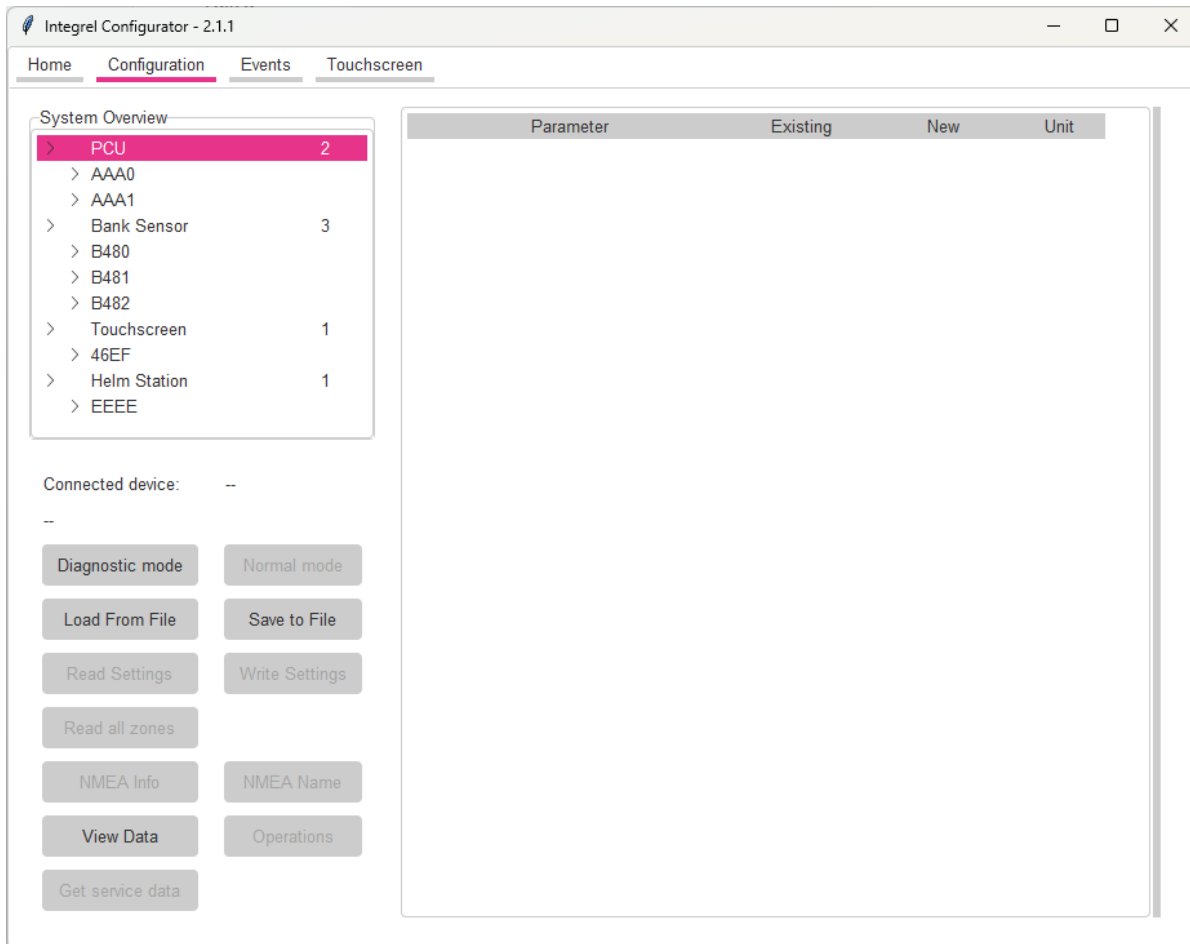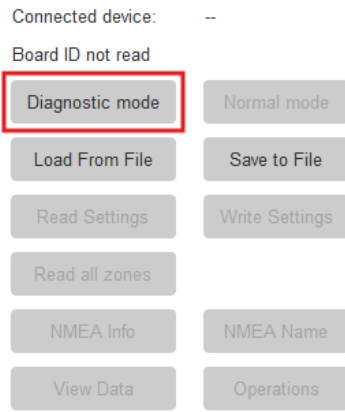

4.1   Diagnostic Mode

Under normal operating conditions, diagnostic and debug options are disabled.

To access diagnostic information and to change E-Drive configuration, the E-Drive system is placed into Diagnostic mode. In diagnostic mode, the system runs with the following restrictions enforced to ensure safe operation:

- E-Drive operational mode changes are disabled e.g. changing from Generate to Drive.

- Configuration changes are forbidden when the system is generating or driving.

To put the system into Diagnostic Mode, select the **Diagnostic mode** button on the Configurator, then select **Yes** if the Touchscreen prompts to enable diagnostic mode.

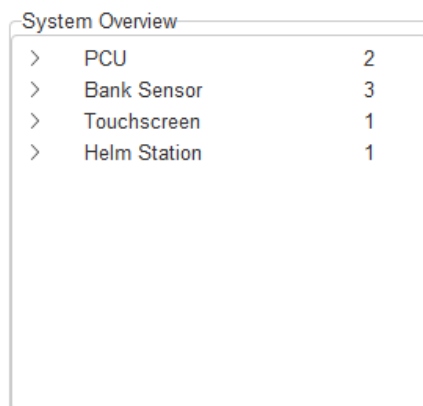Finally, select the Diagnostic Mode button on the Configurator again (if required).

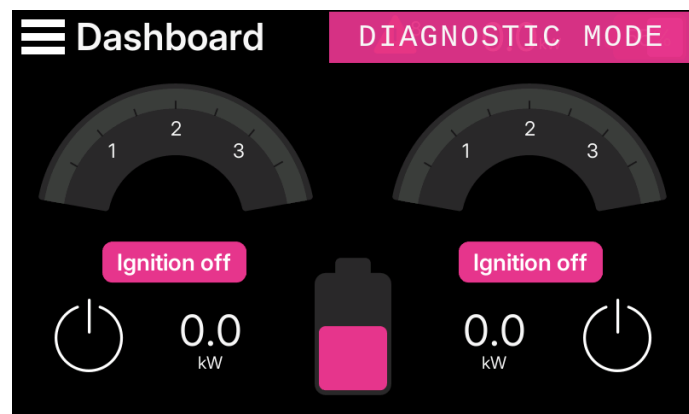*Select **Diagnostic Mode** on the Configurator.*
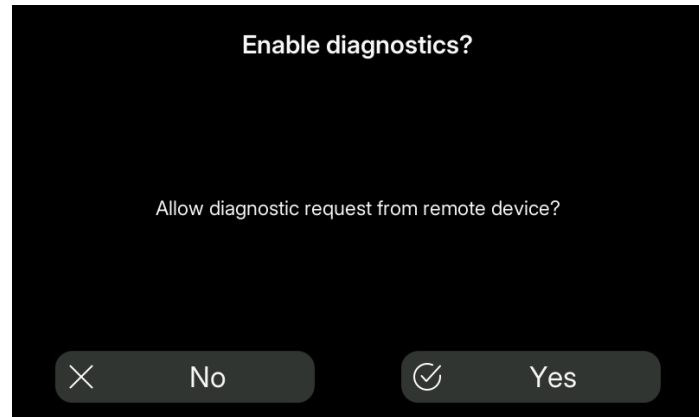
*Select **Yes** on the Touchscreen to enable Diagnostic Mode access.*

When the E-Drive system is in diagnostic mode, the **System Overview** panel shows a list of E-Drive devices detected on the network, and the Touchscreen displays a **DIAGNOSTIC MODE** banner in the top right of the screen.

E-Drive devices detected by the Configurator.

Touchscreen in Diagnostic Mode.

To exit Diagnostic Mode, either select the **Normal Mode** button on the Configurator, or touch the **DIAGNOSTIC MODE** banner on the Touchscreen and follow the prompts.

A power cycle may also be used to reset the system and return it to normal operation if required.
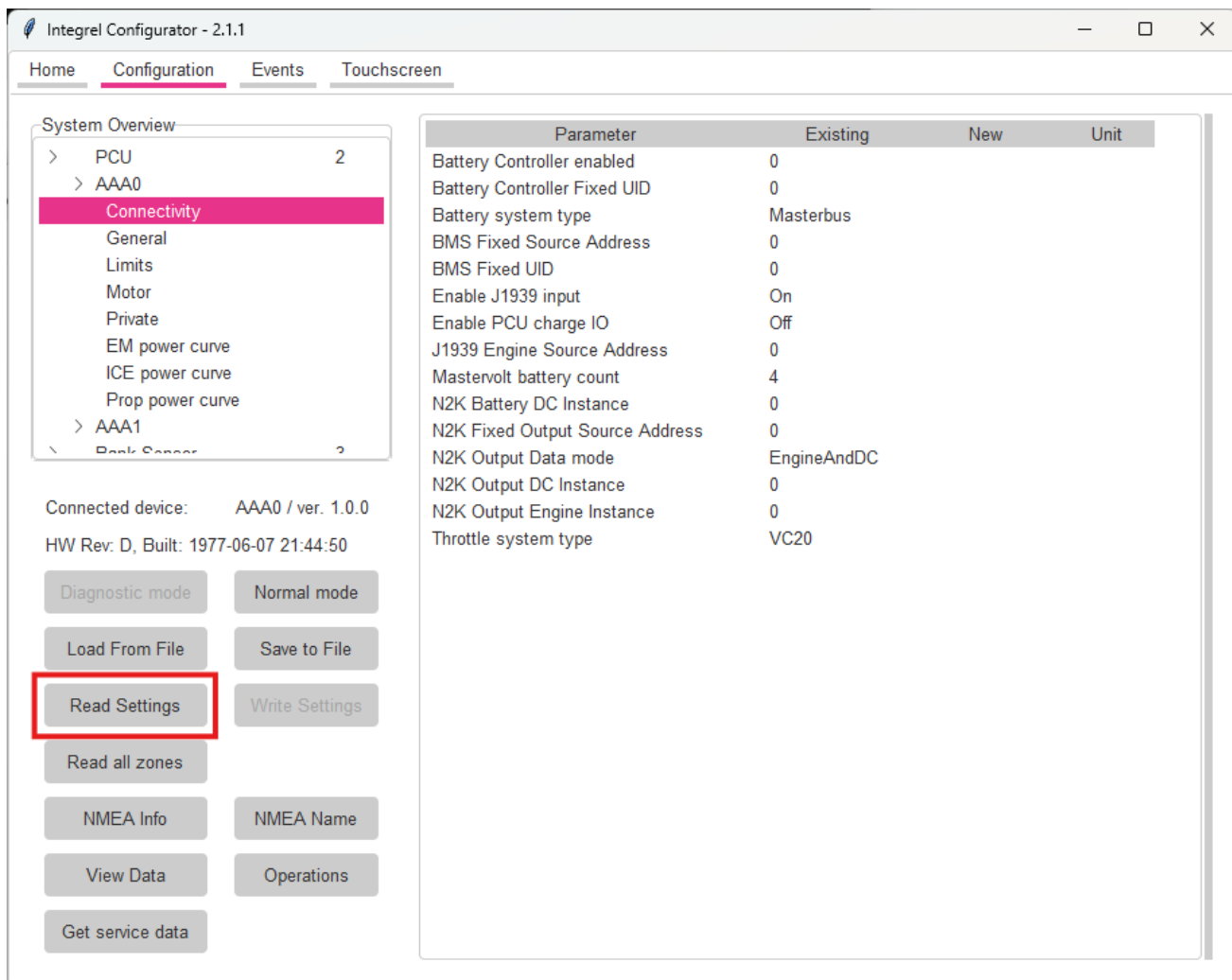
4.2   Settings

To access configuration settings for devices connected to the Integrel network, select the arrow next to the device category, then device in the **System Overview** panel. Configuration settings for devices are grouped into various zones. Zone access is restricted according to user authorisation level to avoid accidental misconfiguration by unauthorised users.

4.2.1   Read Settings

Select a zone to show zone configuration settings, then select the **Read Settings** button to populate the settings panel with existing device settings.

Depending on the number of devices present, there may be a short delay while the Configurator accesses device information over the network.

Configuration Settings for the PCU 'AAA0' Connectivity Zone.
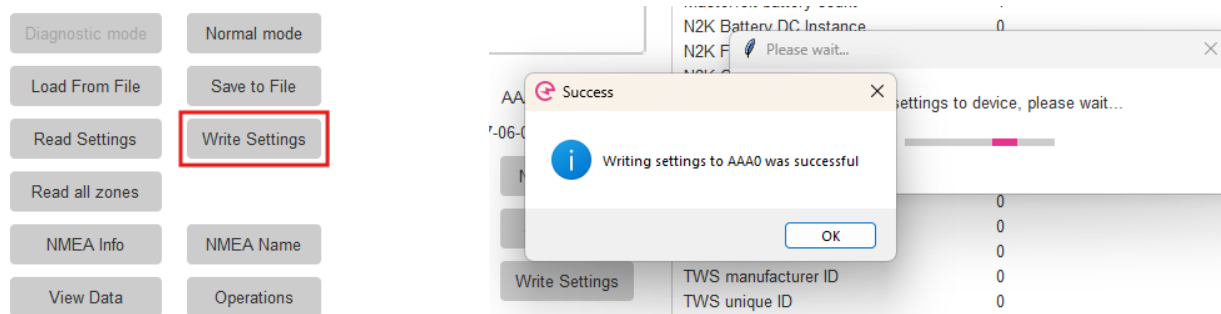
4.2.2 Write Settings

To change a configuration setting, double-click the desired setting; a dialogue box appears.

Enter a new value for the setting, or select a value using the dropdown, then select **OK**.
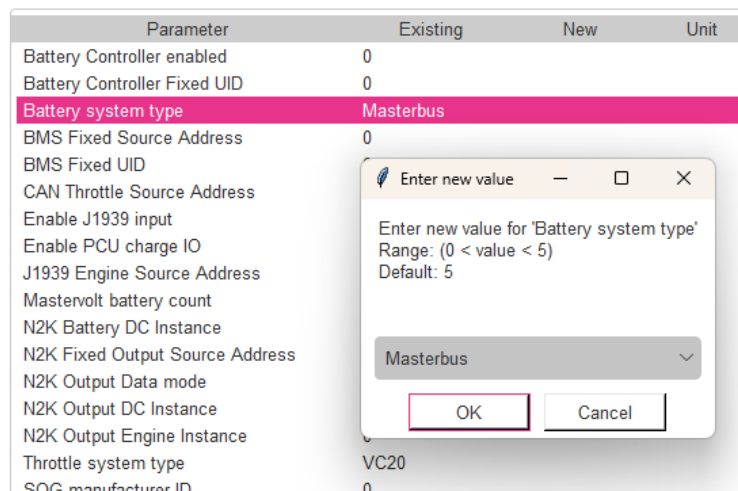
The new value appears in the **New** column.

To write the new value, select the **Write Settings** button and wait for the write to complete.

If the **Write Settings** button is unavailable (greyed out), check that:

- the engine ignition is **ON** (engine NOT running), and

- the E-Drive system is in **STANDBY** (on the Touchscreen dashboard).

4.2.3 Load Settings

To load settings from a file:

- Select the **Load from File** button; a file explorer appears.

- Use the file explorer to locate and select the desired E-Drive configuration file.

- Select **Open** to load the settings from the file.

- (Optionally) Verify that settings were successfully loaded by checking the **New** column of one or more device(s) is populated with settings loaded from the settings file.

- Select the **Write Settings** button to write the settings to device(s).

4.2.4 Save Settings

To save settings to a file:

- Use the **Read settings** / **Read all zones** button to read settings for devices to save.

- Select the **Save to File** button.

- Select the devices to save from the **Devices** panel; and other options (if relevant).

- Enter a **File comment** to describe the settings.

- Select **Export**; a file explorer appears.

- Use the file explorer to enter a name for the settings file to be saved.

- Select **Save** to save the file to disk.

Note that only device settings read by the Configurator will be exported.
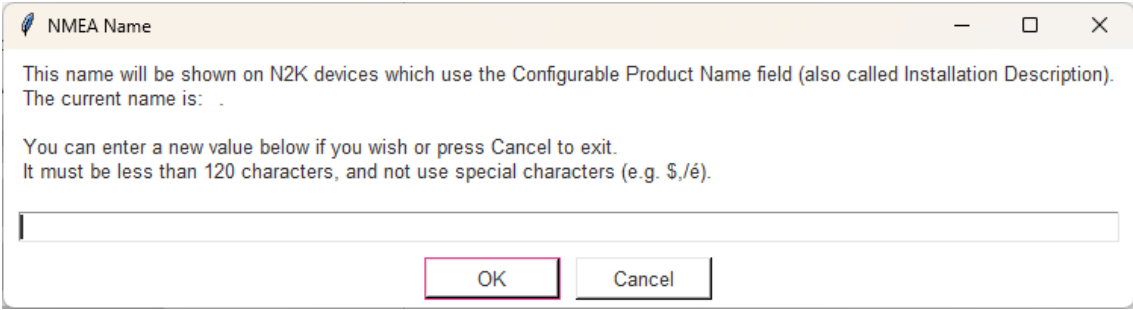
4.3   NMEA Operations

4.3.1   NMEA Info

Select the **NMEA Info** button to export NMEA device information detected on the NMEA network.

4.3.2   NMEA Name

Select the **NMEA Name** button to assign a name to the E-Drive system advertised on the NMEA network.

4.4 View Live Data

To view live operational data for a particular E-Drive device, select the device from the **System Overview** panel, then select the **View Data** button.

More than one live data window may be viewed simultaneously.

4.5   Device Operations

Under some circumstances, PCU or Battery Bank Sensor devices may require factory reset or calibration. These functions are accessed by selecting the relevant device in the **System Overview** panel, then selecting the **Operations** button.

<div style="border: 2px solid red;">

WARNING

Consult a support technician before using any of these operations!

</div>

A **Device operations** window provides access to the desired functionality as shown.
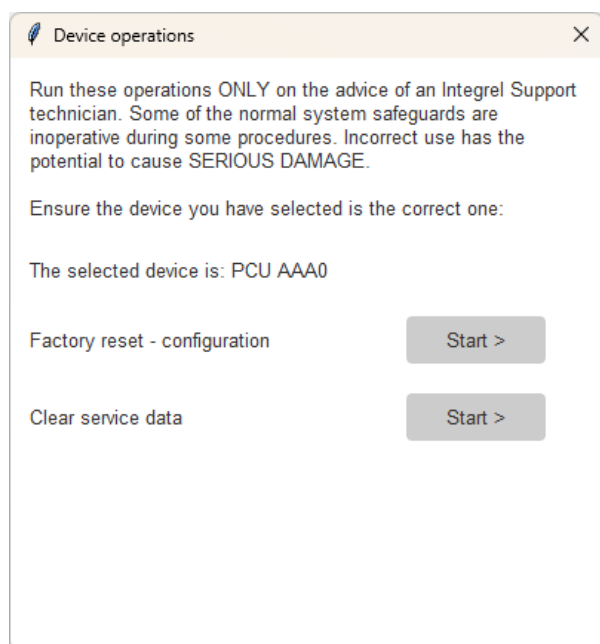
PCU Device Operations
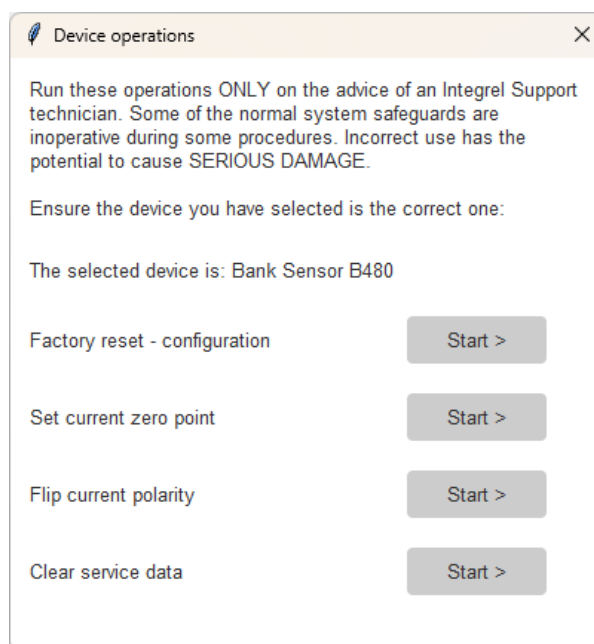
Battery Bank Sensor Device Operations

4.6   Service Data

During normal operation, the E-Drive system logs service data including running hours for drive and generation, operation at thermal limits, and more.

Select the **Get service data** button to download service data to a file.

5 Events Tab

Use the Events tab to download historical event logs and view previously saved Event Logs.

The dropdown provides an option to select between **System Events** and **Touchscreen Events**.

System events are related to the operation of the E-Drive system. Event logs are useful to help debug operational issues with all devices connected to the E-Drive system.

Touchscreen events are related only to the operation of the Touchscreen. Touchscreen logs are useful to help debug operational issues with the Touchscreen ONLY.

To save events to a file:

- Select the event type to save using the dropdown.

- Enter the **Number of entries** (events) to download from the system; using more than 1000 entries may result in long download times.

- Hit **Refresh** to download events.

- Select **Export to File**, then enter a name and location in the file system dialog box.

- Finally, select **Save** to save the events to a log file.
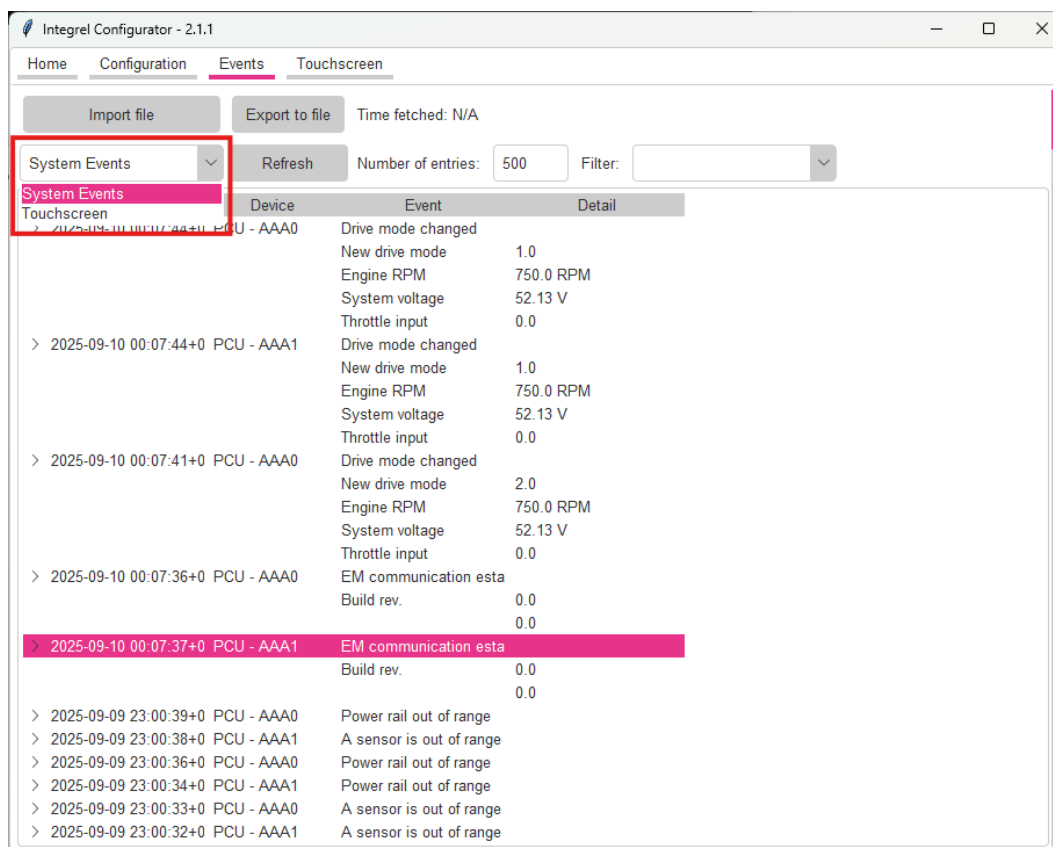
6 Touchscreen Tab

In addition to listing system version details, the Touchscreen tab provides the following functionality:

- Software Updates for the E-Drive System

- Configure the touchscreen to connect to a local Wi-Fi network

- Download all touchscreen and system log data in a single package

- Manually synchronise the system clock to the current time

6.1 Updating Software

To update E-Drive software, select **Apply update package**.
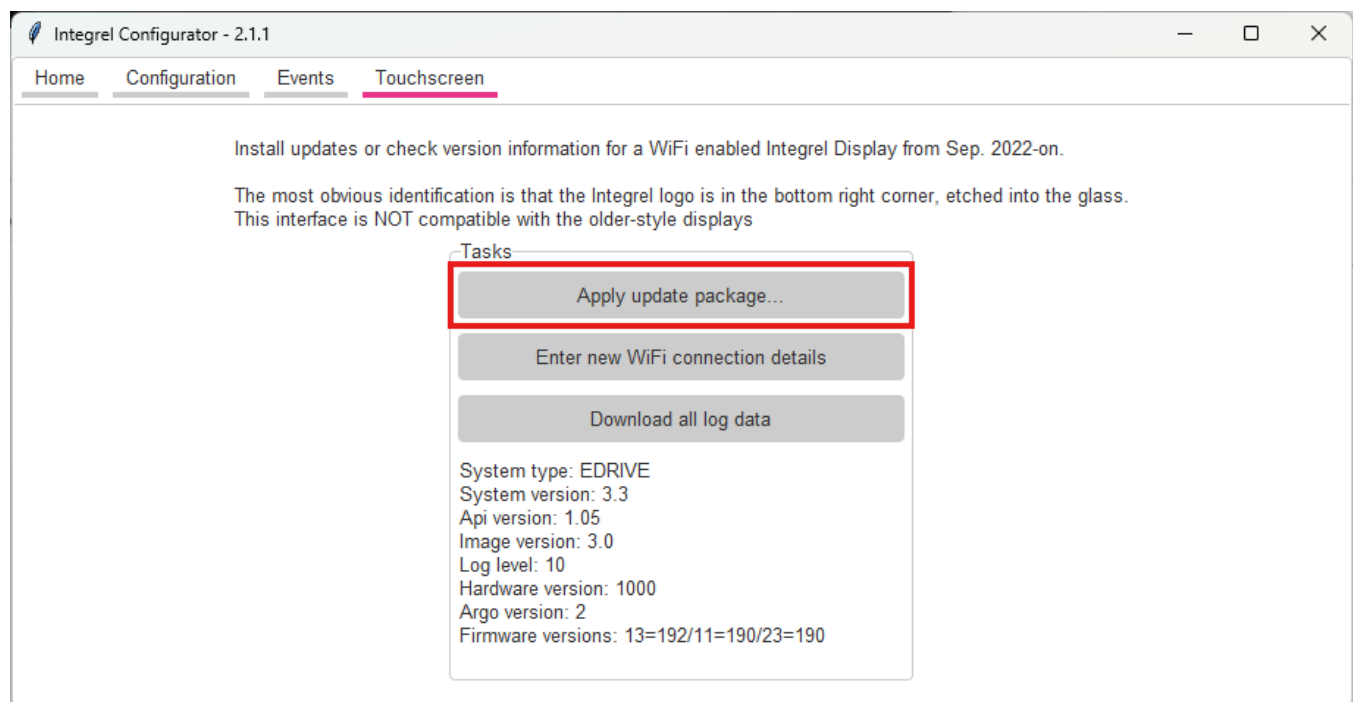
Using the file system dialog box, locate the E-Drive software package file, then select **Open**. The Configurator uploads the package to the Touchscreen.

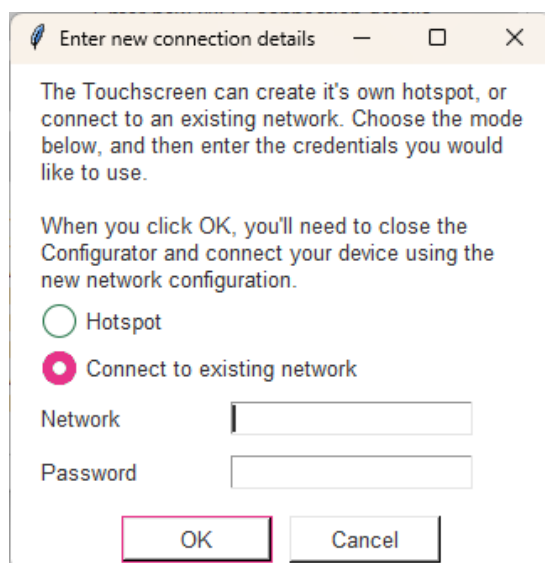Watch the touchscreen for additional prompts to update the system.

6.2   Configuring Connection to a Local Wi-Fi Network

To change the touchscreen Wi-Fi settings, select **Enter new Wi-Fi connection details**.

The touchscreen starts a Wi-Fi hotspot by default. To configure the touchscreen to connect to a local Wi-Fi network, select **Connect to existing network**, then enter the **Network name** and **Password**. Finally, select **OK** to save the settings.

After configuring the Wi-Fi network, the touchscreen must be power cycled.

If the touchscreen is unable to connect a local Wi-Fi network when Wi-Fi is enabled, it reverts to starting a Wi-Fi hotspot called **Integrel-XXXX** as described in Section 3.2, Connecting to the Touchscreen Hotspot.

6.3 Download Log Data

To download all touchscreen and system logs, select **Download all log data**. Using the file system dialog box, enter a filename and location to save logs, then select **OK**.
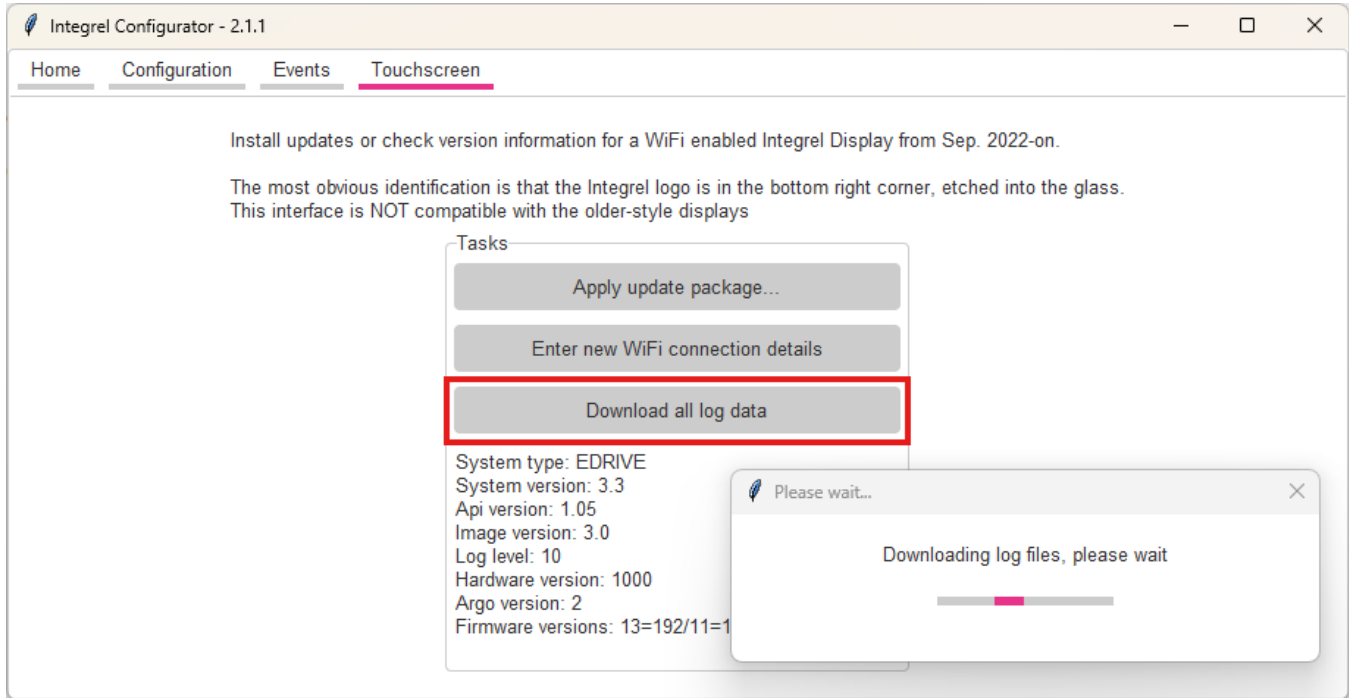
7 Support

Integrel provides premium customer service and support. If you need help with your Integrel E-Drive system, we are ready and available to help.

Consult the Integrel website for an extensive list of [frequently asked questions](#).

General support is available by opening a support ticket or sending an email. The entire support team are notified when a ticket is created ensuring a swift response.

Web: integrelsolutions.com/support/

Email: support@integrelsolutions.com

For urgent help, please call the support number shown below. Phone support is generally limited to business hours in the United Kingdom.

Technical Support: +44 7830 479 089

Integrel

solutions

Integrel Solutions

Unit 1, Marine Renewable Energy Park

Hayle, Cornwall

TR27 4DD

United Kingdom

Phone: +44 (0) 1736 755466

integrelsolutions.com