OPTICS RE

Setup Instructions

Purpose

This document provides instructions for installation and setup of OpticsRE. OpticsRE can be used on the MATE3 System Display and Controller or the AXS Port SunSpec Modbus Interface.

Requirements

Compatible Browsers

Chrome®   Safari®

Firefox®   Internet Explorer®

➢ Google Chrome®, Safari®, Firefox®, or Internet Explorer® web browser. Make certain to use the most updated version of any browser.

➢ Tablet, laptop, mobile phone, or other personal device with Internet access.

➢ OutBack communication device (MATE3 or AXS Port). User must be familiar with controls, product use, and menu navigation. Refer to device literature as needed.

~ Device must be configured for internet access. See Step 1 and product literature.

~ User must record the MAC address of the device. See Step 4.

~ To obtain the MATE3 MAC address: While on the main screen, press the PORT key. The MAC address will appear on the bottom of the screen. To obtain the AXS Port MAC address: The address can be found both on the device and on the label of the box. See step 4 for both devices.

~ If the MATE3 is in use, it must have firmware revision 002.009.xxx or higher installed **before** OpticsRE can be installed. If the MATE3 has an earlier revision, go to www.outbackpower.com or www.alpha-outback-energy.com to update it. After this, the OpticsRE programming can be installed. See Step 2.
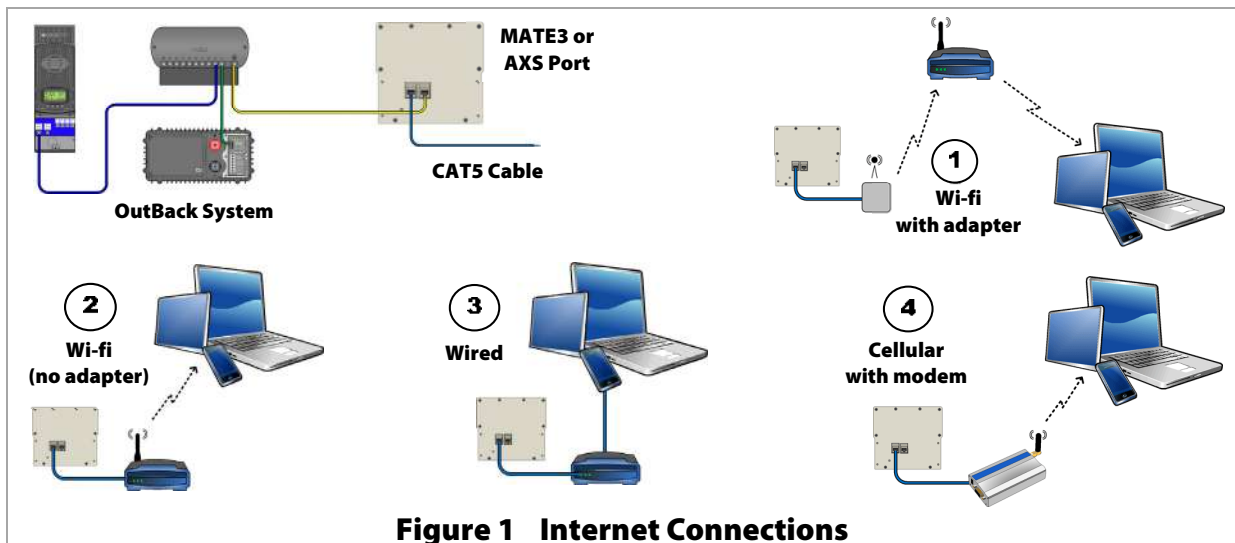
> ⚠️ **CAUTION: Hazard to Equipment:**
> During installation of OpticsRE programming, the MATE3 will be upgraded again to firmware revision 003.001.000. This is a one-way upgrade. Attempting to downgrade from this revision will permanently corrupt the MATE3.

Step 1 – Internet Access

The MATE3 or AXS Port can communicate with a tablet, laptop, or phone over the Internet. Set up the OutBack device for Internet access using any of the methods in Figure 1.

MATE3 or AXS Port

CAT5 Cable

OutBack System

1 Wi-fi with adapter

2 Wi-fi (no adapter)

3 Wired

4 Cellular with modem

Figure 1   Internet Connections

Step 2 – Firmware Upload

Order a preloaded SD card from OutBack, or download the firmware from the OutBack website.

To download firmware:

1. Remove the SD card from the MATE3 or AXS Port. (See **A**.)
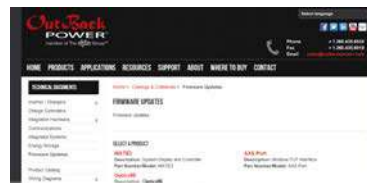
2. Reformat and erase all existing files on the SD card.

> ⚠️ **CAUTION: Hazard to Equipment:**
> Make certain all card contents are removed. If previous firmware or files remain on the card during installation, the OutBack device could be permanently corrupted.

3. From www.outbackpower.com (**B**) or www.alpha-outback-energy.com, download OpticsRE revision 003.000.000 (or higher) to the SD card.
   NOTE: Make certain to extract (unzip) the files to the card. If the files are downloaded in compressed form, they will be unusable.

A

B

To upload to the MATE3:

Confirm MATE3 revision is 002.009.000 or higher. If it is lower, update the MATE3 before proceeding. Then proceed from Step 1 to install OpticsRE.

1. Insert the SD card into the MATE3. In **Main Menu** under **Firmware Update**, select **MATE3** (**C**). Press **<Update>** (**D**). The screen will show updates for several minutes with the BATTERY STATUS yellow LED flashing rapidly (**E**). Revision is complete when the home screen reappears.

C

D
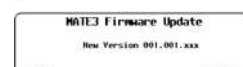
> ⚠️ **CAUTION: Hazard to Equipment:**
> Do not disconnect the MATE3 or otherwise stop the upload before completion. Any interruption could permanently corrupt the MATE3.

2. Press the PORT key to verify status. No response means the upload is still in progress. The upload was successful if this key changes the display. If the full screen in **F** is not visible, disconnect and reconnect the MATE3 to prompt the new firmware operation. The screen should display **OPTICSRE**. If the DHCP function has not been enabled, the status in **F** will read **Connecting**.

E

F

3. To enable DHCP: In **System** under **Settings Menu**, select **Ethernet Addresses** (**G**). Set **DHCP** to **Enabled.** Press PORT to update the status from **F**. The message will change to **Connected**.

4. In **System** under **Settings Menu**, select **System Information** (**H**). Set **Gen Type** to match the generator installed in the system (**AC**, **DC**, or **None**.) This allows OpticsRE to track generator activity.
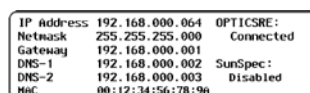
G
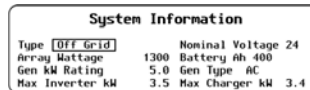
H

To upload to the AXS Port:

1. Insert the SD card into the SD card slot on the AXS Port (**I**).

2. Disconnect any OutBack device cable from the AXS Port.

3. Using a narrow tool, press and hold the AXS Port reset switch. Reconnect the OutBack device cable. The amber SD Card LED will blink while the firmware is being updated. When this indicator stops blinking, release the switch.

Uploading is complete.

SD Card Slot

Reset Switch

I

Figure 2   Firmware Upload

Step 3 – Creating an Account

Create an account to be able to log in. From www.opticsre.com, click **Create an Account.**

To open the account screen, click here.

➢ Fill out all fields.

➢ After reviewing the terms of service, check **I agree to the Terms of Service** and click the CREATE button to proceed.

➢ OpticsRE will email instructions on activating the account and confirming the password. Follow all steps.

➢ The account is ready. To set up profiles, add site locations, and register devices, follow the additional instructions.

Figure 3   Creating an Account

Step 4 – Creating a Profile

Create a profile to monitor a specific site or system. Once signed into the OpticsRE account, click **SETUP A NEW PROFILE** as shown in Figure 4.
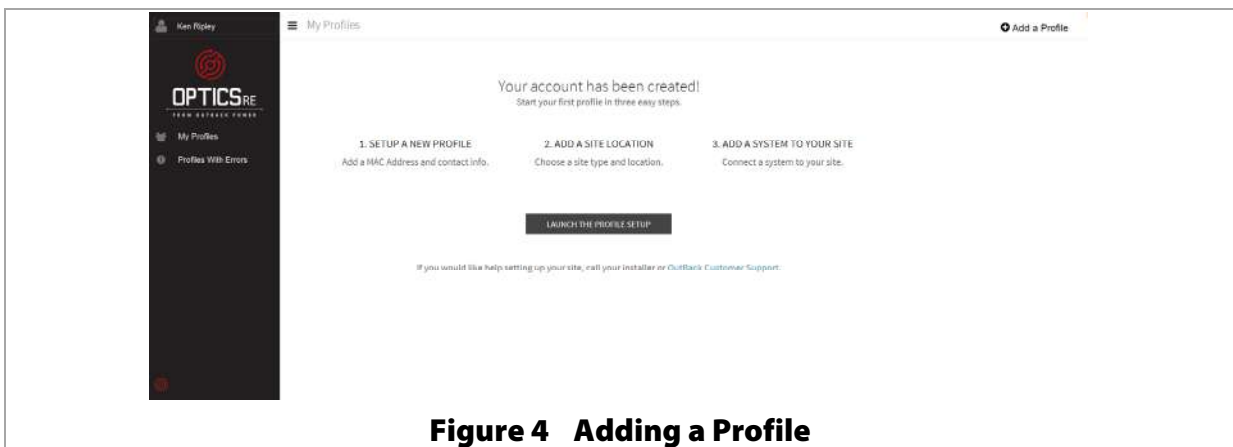
Figure 4   Adding a Profile

MAC Address

Creating a profile requires entering the OutBack device MAC address. To obtain the MATE3 address, it must be operating. While on the home screen, press the PORT key. The address will appear along with other data. (See Figure 5.) For the AXS Port, the address can be found on the label of the box or printed on the AXS Port itself. See Figure 5.

MATE3

```
IP Address 192.168.000.064  OPTICSRE:
Netmask    255.255.255.000     Connected
Gateway    192.168.000.001
DNS-1      192.168.000.002
DNS-2      192.168.000.003
MAC        00:12:34:56:78:9A
```

MAC address

AXS PORT

MAC address

Make sure to record the MAC address so it can be entered into OpticsRE.
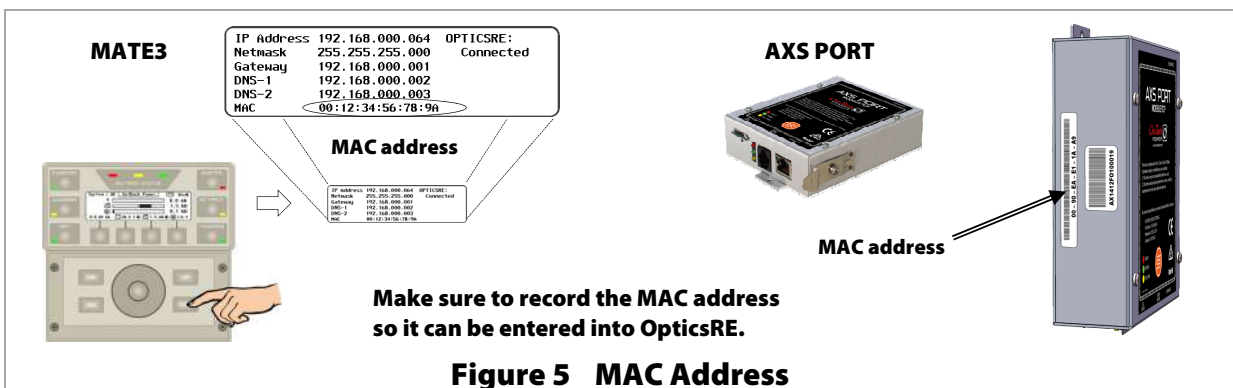
Figure 5   MAC Address

Enter the MAC address and proceed through the subsequent menus to set up a profile.

Figure 6   Entering the MAC Address

Figure 7   Creating a Profile

Following the entry of a profile, there will be additional screens for adding site locations and adding systems to those sites for monitoring. Once entered, monitoring of these items will proceed automatically.

For more information please visit **www.alpha-outback-energy.com**