



MEWP SHIELD System (LIN V1.0)
OTA Update Manual

PLEASE READ 'BEFORE STARTING' Page 4 prior to executing this procedure.

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Version – V1.2

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Disclaimer

Crushing incidents may result in injury or death. Use of multiple systems reduces risk of incident and SHIELD should be used as an operator aid and backup system only. It is not a substitute for suitable experience, training, safe work practices and procedures or due care.

The information contained on this document is of a general nature only. It should not be relied upon to assess risk. Users and operators of the machinery to which the SHIELD is fitted, must separately assess, and verify risks before use. Product capability and operation is dependent on correct system selection, setup and installation, and maintenance by appropriately qualified and authorised personnel. Regular inspections of the SHIELD components and validation of system performance, forms a part of the required maintenance of the system.

Because of the nature of the sensors used in this system, it is essential that they are cleaned before use as part of the system's pre-start check procedure. If the sensors are unable to transmit the ultrasonic pulses due to physical obstruction of the sensor's faces (either intentional or accidental) the sensor will be unable to detect obstacles in its field of view.

For further information on whether the system is right for you please contact our sales staff. For details on the product capabilities see the relevant Product Manual.

Introduction

This document outlines the procedures required to update / change the firmware in the MEWP Shield Base Controller Units using the onboard Wi-fi based Over-The-Air (OTA) uploader. This procedure is only available for Base control units with firmware versions V0.4 and later.

Abbreviations and Acronyms

BASE – Shield Base Controller Unit

.BIN File – File required to update firmware. Supplied by Protective Pty Ltd

BLE – Bluetooth Low Energy

(M)EWP – (Mobile) Elevated Work Platform

SHIELD – The MEWP SHIELD System, including all provided components, wiring and hardware.

Before Starting!!

YOU MUST HAVE A BIN FILE PROVIDED BY PROTECTIVE ON YOUR LOCAL DEVICE BEFORE STARTING THIS PROCESS! PLEASE GO TO www.protective.net.au/manuals and download the file name that looks similar to this:

 shield_base_V0_4.bin

Save the file to an easily accessible location on your local device (typically a laptop).

Alternatively you can contact Protective and we can supply the file via email. Save

It is important to note that improper use of the OTA update mode can cause the base controller to cease proper functionality. Before uploading to a controller please ensure that:

- You and the uploading device (desktop, laptop, etc.) are within close proximity to the base controller in OTA mode. (Within 10 meters)
- Only 1 nearby base controller is in OTA mode at a time.
- Only upload approved firmware binary files (.bin) to the base controller.
- Do not power down the base controller or close the web browser during the update procedure.

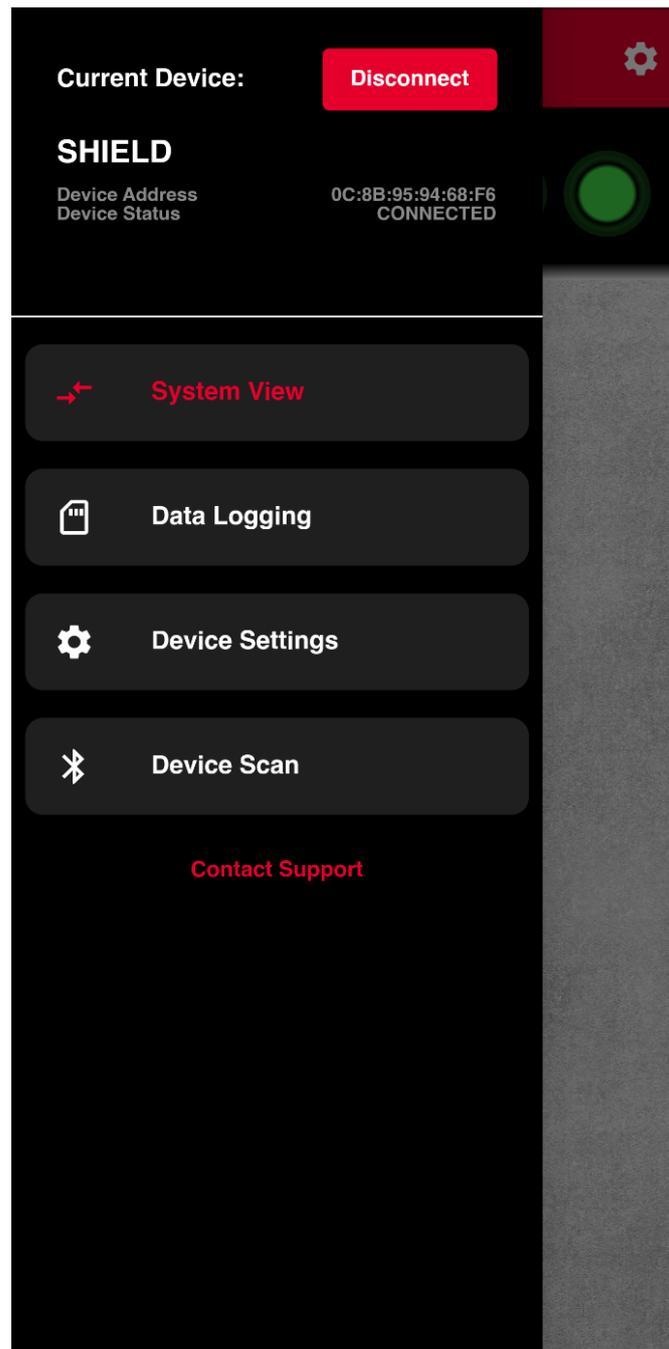
Procedure

Step 1: Power on the Base and connect via App

Before starting, ensure you have downloaded an approved firmware binary file to your local device. Do not proceed with Step 1 unless you have done this.

The update procedure is most reliable when no other networks are available for connection. Please disconnect any Ethernet cables from the computer and where possible temporarily turn off auto-connecting to other Wi-Fi networks in the area.

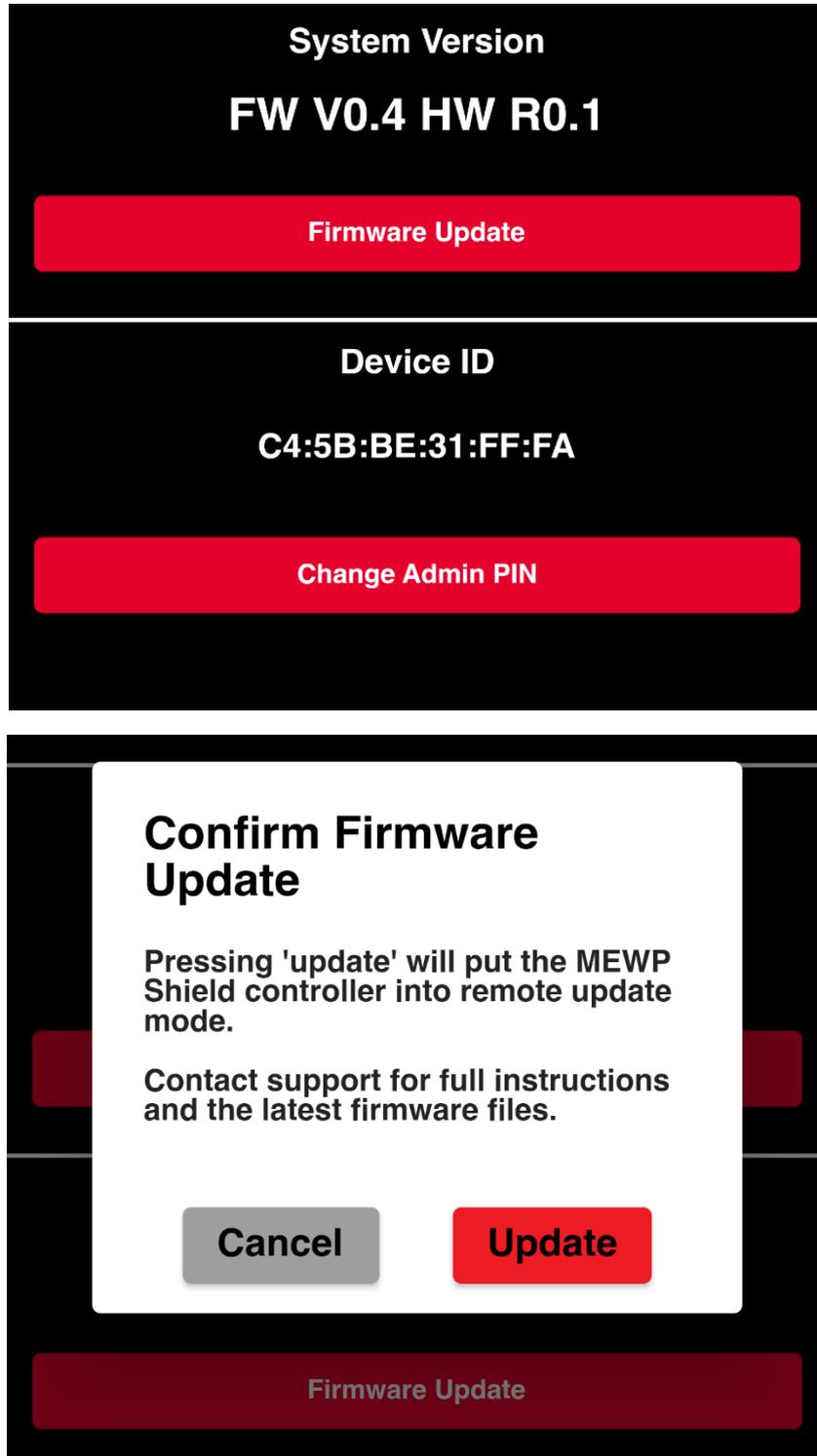
Make sure that the system boots correctly and that the Base controller is accessible via the App.



Step 2: Navigate to device settings and enable OTA mode

From the side menu, select “Device Settings”. This will require Admin level access (6-digit PIN code). If you have lost your PIN Code, please contact the MEWP Shield Support Team.

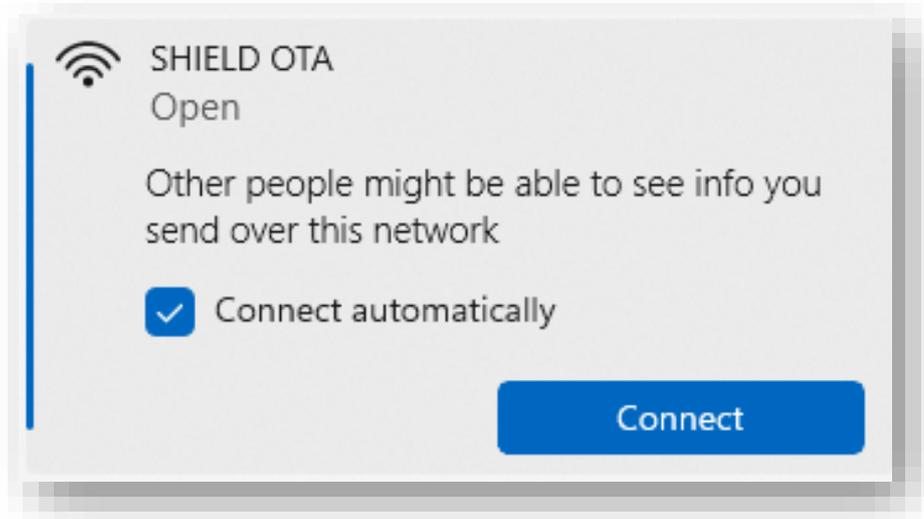
Press the “Firmware Update” button and then press “Update” on the confirmation pop-up window. This will disconnect the Base from the app and reboot the controller in OTA mode.



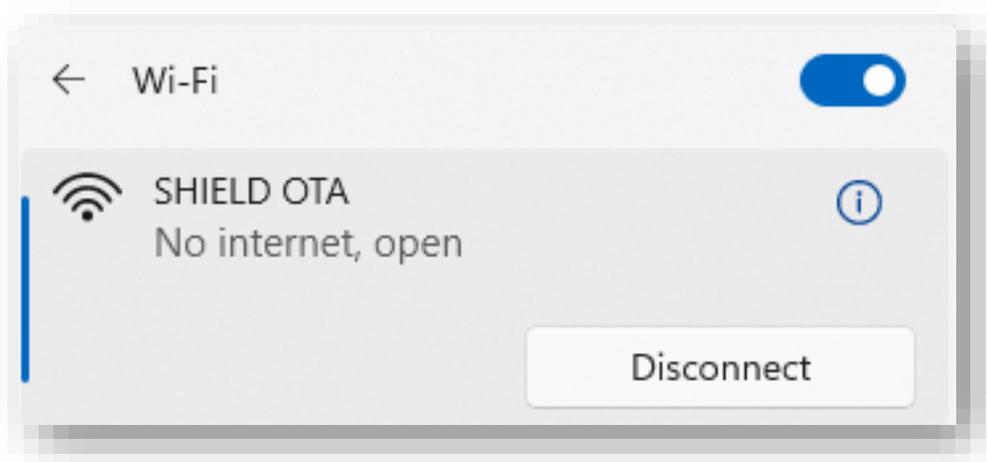
Once OTA is enabled, the system will remain in OTA mode for 5 minutes before automatically rebooting into the normal operating mode.

Step 3: Connect to the OTA Wi-fi Network

Once the unit is in OTA mode, a Wi-fi network should become available.



Note: The update procedure is most reliable when no other networks are available for connection. Please disconnect any Ethernet cables from the computer and temporarily turn off auto-connecting to other Wi-Fi networks in the area.

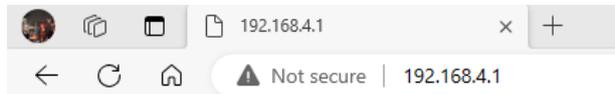


The above image is what you should see once connected to the Shield OTA network. Once you are connected to the network, proceed to Step 4.

Step 4: Access the OTA web-based uploader

Open your preferred web browser on your local device and enter the following IP address in the address bar and press enter:

192.168.4.1



You should then be navigated to the upload page:

A screenshot of a web page titled 'MEWP Shield Update Tool'. At the top left is the logo for 'PROTECTIVE ENGINEERED SAFETY', which consists of a red Wi-Fi symbol above the word 'PROTECTIVE' in large bold letters, with 'ENGINEERED SAFETY' in smaller letters below it. The main heading is 'MEWP Shield Update Tool' in a large, bold, black serif font. Below the heading are two numbered instructions: '1. Select a firmware file ending in .bin (contact support for latest files)' and '2. Press "upload" and wait for the progress to start.' A red warning message follows: 'Do not refresh or leave this page while the upload is in progress.' Below this is the label 'Firmware file:' followed by a file selection button that says 'Choose file' and 'No file chosen'. At the bottom are two blue buttons: 'Upload' and 'Cancel'.

Step 5: Select firmware image from file system

Press the “Choose File” button to select the firmware file. This will open a file selector window. Navigate to the location you saved the .BIN file (see BEFORE STARTING page 4) supplied by the MEWP Shield support team.

Name	Type	Size
 shield_base_V0_1.bin	BIN File	686 KB
 shield_base_V0_3.bin	BIN File	686 KB
 shield_base_V0_4.bin	BIN File	995 KB

Once selected, the name of the file should appear next to the “Choose File” button.

Firmware file:

shield_base_V0_4.bin

Step 6: Upload the firmware

Press the "Upload" button to begin uploading the firmware file. The progress counter on the uploader screen will start to increment.



PROTECTIVE

MEWP Shield Update Tool

1. Select a firmware file ending in .bin (contact support for latest files)
2. Press "upload" and wait for the progress to start.

Do not refresh or leave this page while the upload is in progress.

Firmware file:

Choose file shield_base_V0_4.bin

Upload **Cancel**

Progress: 10%

Once the upload is complete, the progress value should display 100% and the system should reboot in the new normal operation mode.

Firmware update complete, rebooting now!

This completes the procedure. See below for support details.

Technical Support

(+61) 8 6244 4353 (Available 0900-1700 Mon-Fri AWST)

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