Updating PulsON Modules with New Embedded Code

PulsON® 400 Series

TIME DOMAIN®

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320-0316E October 2015



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Introduction

The following instructions will guide the user through the process of updating P400 series UWB modules with new embedded code through either the devices' Ethernet or USB ports. As of this date, the P400 series of platforms include the P400, P410, P412, and P440 units. In this document, these devices are collectively referred to as P4xx. The process is the same regardless of whether the user is updating P400 series embedded RCM, MRM, CAT, or RangeNet code.

All of the code required to update your unit will be found in the directory entitled "Embedded." This directory has four files, one of which is the file you are currently reading. The other three files are:

PulsON Radio Update Utility.exe: The program used to update the unit.

P4XX_"xxx".zip: A zip file containing the embedded code to be downloaded to your P400 series UWB module, where "xxx" is a placeholder for the version of code you will be downloading. **Interop.Shell32.dll:** A system file used to facilitate the process.

This document describes the process assuming that you are downloading P4XX_150715-final. So for this example, the P4XX_xxx.zip file name is actually P4XX_150715-final.zip. As of the date of this manual, this is the most current version of code.

Updating P4xx Platforms via Ethernet Connection

The following instructions will guide the user through the process to update their P4xx to embedded firmware version P4XX_150715-final.

First, connect the P4xx to the computer via Ethernet and then run the application entitled "PulsON Radio Update Utility" (see **Figure 1**). Select the tab marked "IP (Ethernet)." Note that older computers may require that the connection be made using an intermediate Ethernet hub.

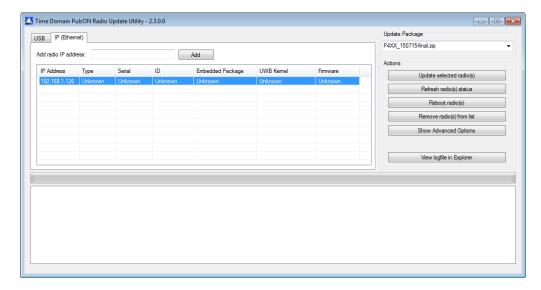


Fig. 1: Update Utility window showing screen at conclusion of step 3

Once the application has launched, follow these steps:

- 1. If not already present, then enter the radio IP address in the "Add Radio IP Address" field and click "Add."
- 2. On the right-hand side, select the Update Package by clicking on the drop-down menu. (There should be only one option for you to select P4XX_150715-final.zip.)
- 3. Click to highlight the radio IP address in the list on the left side. This will enable the actions to be selected.
- 4. Click "Update selected radio(s)." Once clicked, the utility will provide a list of messages and a progress bar as it updates the P4xx. Time to complete an update is approximately 1-2 minutes.
- 5. The process is complete when the message "Update finished" appears in the dialog box.

Occasionally the Update Utility will fail to complete correctly. In such a case it will produce an error message. When this happens, rerun the Update Utility. Rerunning the update utility has corrected every error experienced to date. If the update process still results in errors, then click on the "View logfile in Explorer" button. This will lead you to the Update Utility logfile. Copy this file to your desktop and email it with a short description of your problem to Time Domain's customer support team at support@timedomain.com.

This process will need to be repeated for each of your P4xx platforms.

Note that you may update more than one unit at a time. Simply connect multiple units through an Ethernet hub to the computer, entering each IP address and then selecting all of the units to be updated before you click "Update selected radios(s)."

Updating P4xx Platforms via USB Connection

The following instructions will guide the user through the process to update their P4xx devices to the latest embedded firmware version.

While connected to your P4xx via USB, run the application entitled "PulsON Radio Update Utility" (see **Figure 2**) and select the tab marked "USB."

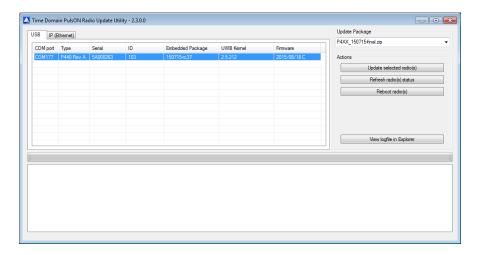


Fig. 2: Update Utility window showing screen at conclusion of step 2

Once the application has launched, the utility should recognize the P4xx via the COM port it is connected to. If the utility does not list the connected P4xx within a few seconds, we recommend cycling power on the P4xx and/or restarting the utility.

Next, follow these steps:

- 1. On the right-hand side, select the Update Package by clicking on the drop-down menu. (There should be only one option for you to select. In this example it is: P4XX_ 150715final.zip.)
- 2. Click to highlight the radio COM port in the list on the left side. This will enable the actions to be selected.
- 3. Click "Update selected radio(s)." The utility will provide a list of messages as it updates the P4xx. Time to complete an update is approximately 1-2 minutes.
- 4. The process is complete when the message "Update finished" appears in the dialog box.

Occasionally the Update Utility will fail to complete correctly. In such a case it will produce an error message. When this happens, rerun the Update Utility. Rerunning the update utility has corrected every error experienced to date. If the update process still results in errors, then click on the "View logfile in Explorer" button. This will lead you to the Update Utility logfile. Copy this file to your desktop and email it with a short description of your problem to Time Domain's customer support team at support@timedomain.com.

This process will need to be repeated for each of your P4xx platforms.

Note that you may update more than one unit at a time. Simply connect multiple units through an USB hub to the computer and select all of the units to be updated before you click "Update selected radios(s)."