



C-Nav[®]

C-NavX3 Firmware Update Installation Manual

CNAV-MAN-0066

Revision A

C-Nav[®] Positioning Solutions

oceanengineering.com/cnav

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REVISION HISTORY

Revision	Prepared by	Checked by	Approved by	Date Approved
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REVISION DETAILS

Revision	Change Details
A	Initial Release.

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1 INTRODUCTION

This is a short tutorial explaining the steps necessary to update the firmware in a C-NavX3 GNSS receiver using the Windows updater application software. Sections are organized in a manner that facilitates quick operator orientation.

2 DEFINITIONS

Abbreviation	Full Form
HSE	Health Safety and Environment.
PPE	Personal Protective Equipment.
LSR	Life Saving Rules.
JSEA	Job Safety and Environmental Analysis.

2.1 Document Conventions

Font Type	Used for
Arial	Plain Text
<i>Arial Italic</i>	Setting Names
'Arial Quoted '	Setting Values
Arial Bold	Button Names
<i>Arial Bold Italic</i>	Menu Items
Arial Blue	Cross Reference
Arial Blue Underline	Hyperlinks
<i>Arial Red Italic</i>	Typed Commands
Arial Bold Size 10	Captions
ARIAL BLACK ALL-CAPS	Port Connection Names

3 REFERENCES

Document Number	Document Title
NA	C-NavX3 GNSS Receiver User Guide. (Provides specifications and information about the C-NavX3 GNSS receiver).

3.1 Symbols

The following words and symbols found throughout this manual, highlights special messages to alert the operator of specific information concerning **personnel**, **equipment**, **process** or **environmental impact**.

Symbol	Description
	This symbol means Danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical and RF circuitry and be familiar with standard practices for preventing accidents.
	CAUTION: Failure to follow these directions can result in damage to equipment.
	CAUTION: Failure to follow these directions can result in environmental hazard.
IMPORTANT NOTES: Such note boxes display important information that should not be ignored.	
	This symbol means Reader Be Careful. It indicates a caution, care, and / or safety situation. The user might do something that could result in equipment damage or loss of data.

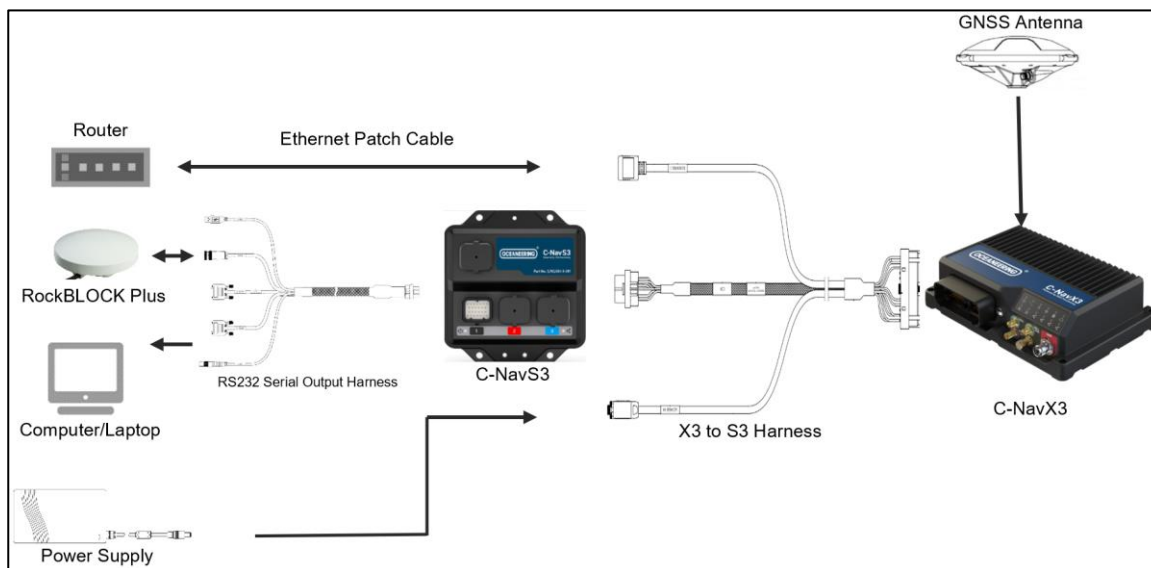
4 OVERVIEW

4.1 Introduction

The C-NavX3 GNSS receivers firmware update is performed over the receivers LAN connection. The update is sent to the receivers IP address before a restart is performed to finalize the update.

WARNING: Use only the latest version of software to perform the outlined procedure(s). The latest software and the firmware are available for download from the C-Nav [Customer Support](#) webpage.

4.2 Recommended Setup



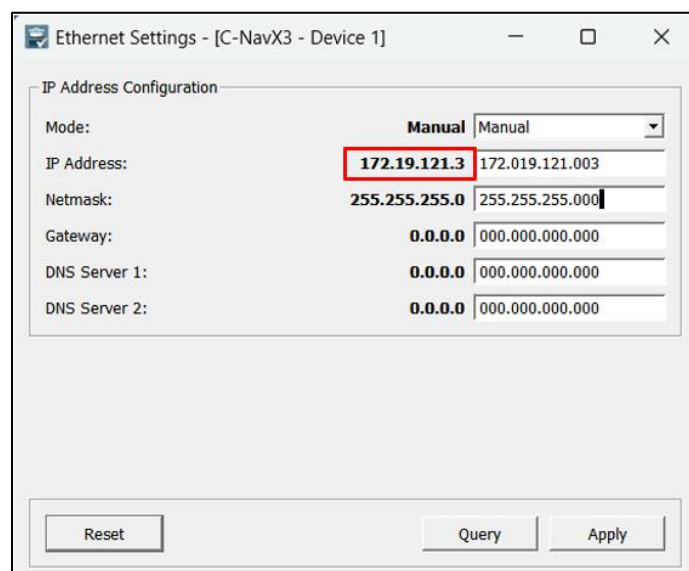
5 OBTAINING THE C-NavX3 IP ADDRESS

5.1 The C-NavX3 IP Address

- 1) Connect the receiver and the PC or laptop being used for the update to the same network switch with DHCP capabilities.
- 2) Using C-Setup / C-Monitor® QA / QC software / C-Scape connect to the C-NavX3 using one of the receiver's serial ports or alternatively USB port.
- 3) Once the C-Nav® control software establishes communication with the receiver, access the **Ethernet Settings** page from the **Device** menu.



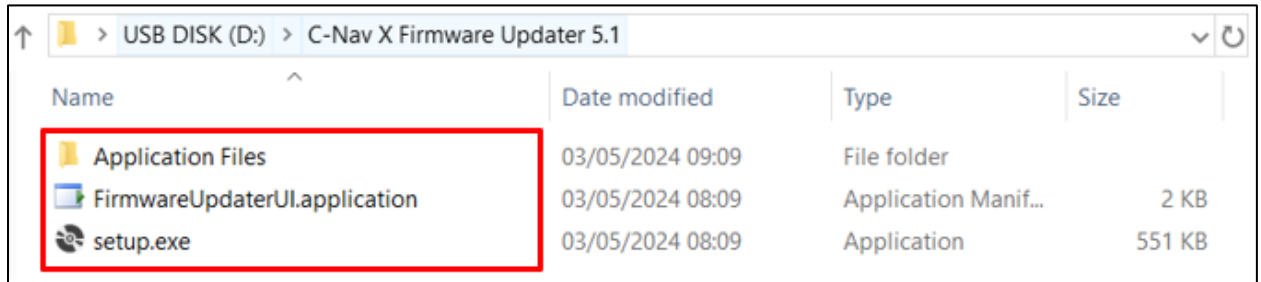
- 4) If there is no IP address, set the **mode** to 'DHCP', if it was 'Manual' before / after changing to 'DHCP' make sure to press **Apply**.
- 5) Use the **Query** button to update the items on the menu window, if an IP address isn't shown, give it some time and press **Query** again, else check the network hardware and cabling.
- 6) Take note of the **IP address** shown for the receiver, this will be the IP address entered on the C-NavX3 Firmware Updater Application.



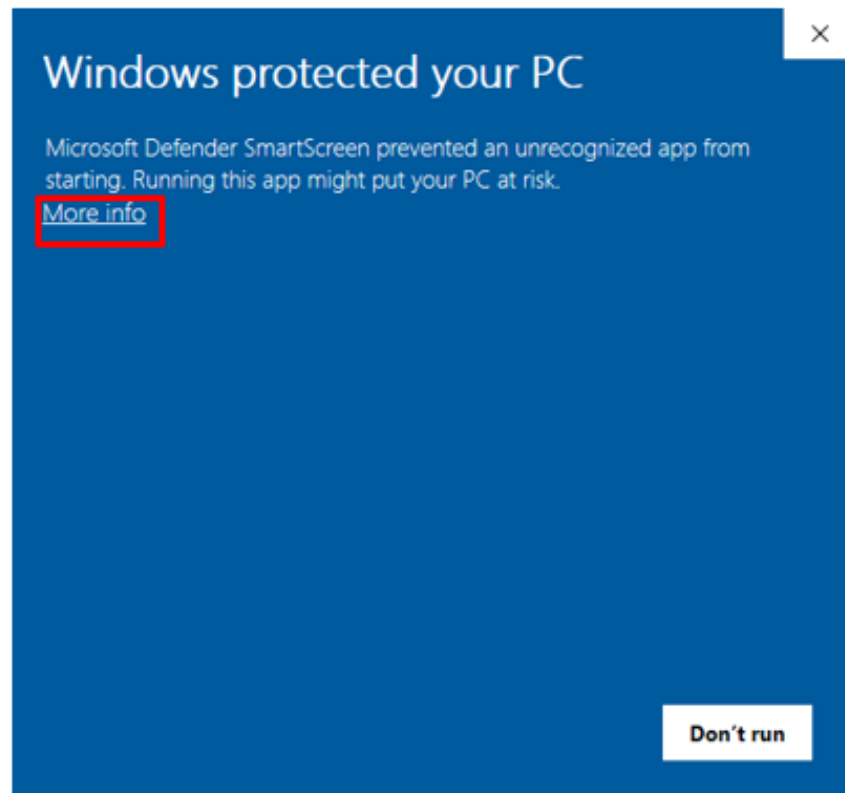
6 THE C-NavX3 FIRMWARE UPDATER

6.1 The C-NavX3 Firmware Updater

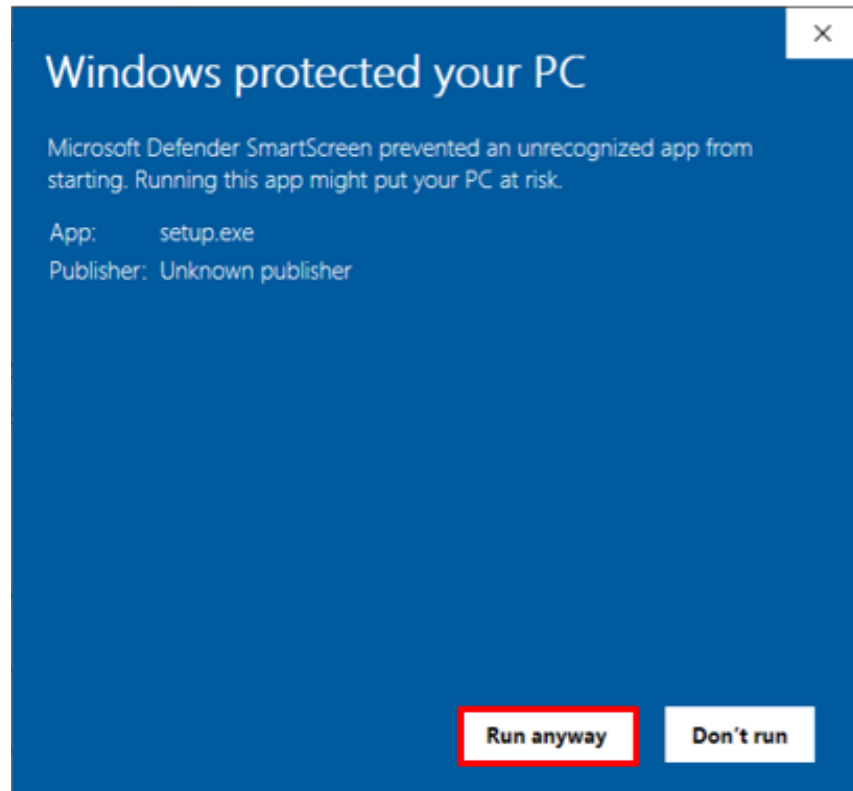
- 1) Navigate to the C-Nav [Customer Support](#) webpage to download the latest version of C-NavX3 Firmware.
- 2) Unzip the contents of the file to find firmware, release notes and updater application.
- 3) Unzip the contents of 'C-NavX3_v1.0.7.6.zip' to reveal the 'C-Nav X Firmware Updater.zip' file. Unzip the contents to reveal the 3 files for the C-Nav X.



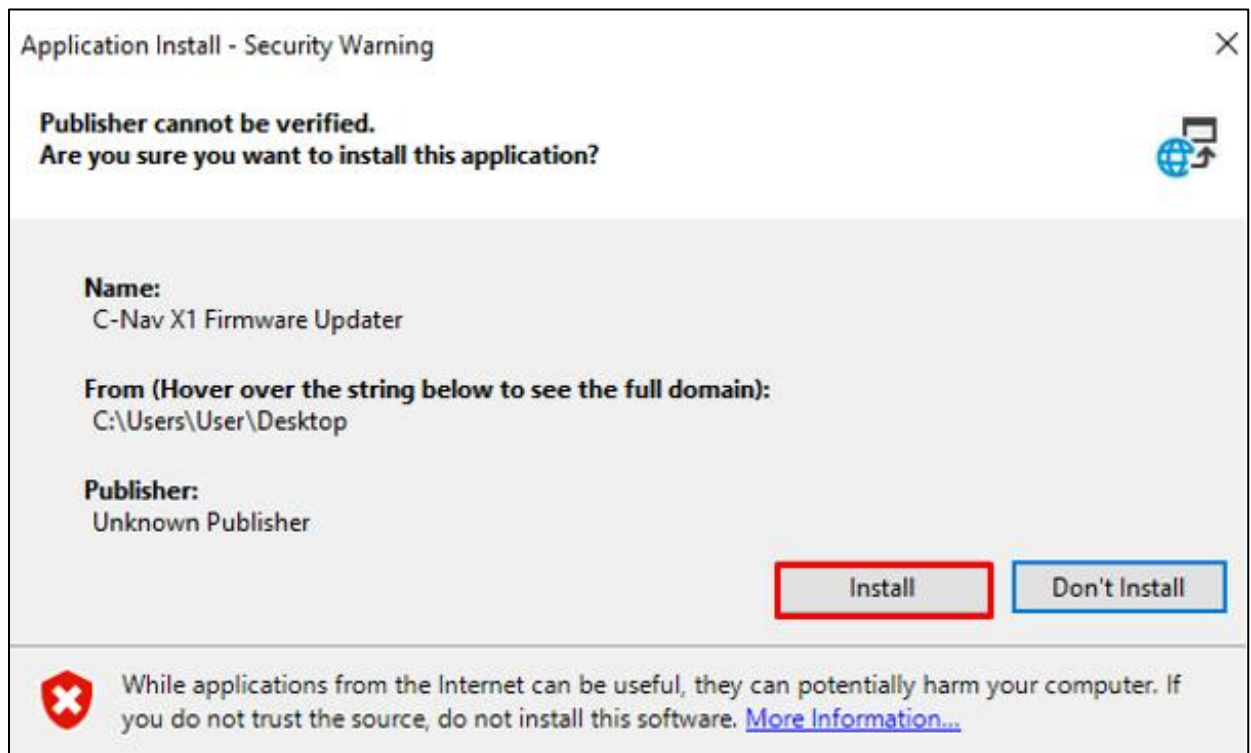
- 4) Run 'setup.exe'. If prompted with a security window, select **More info**.



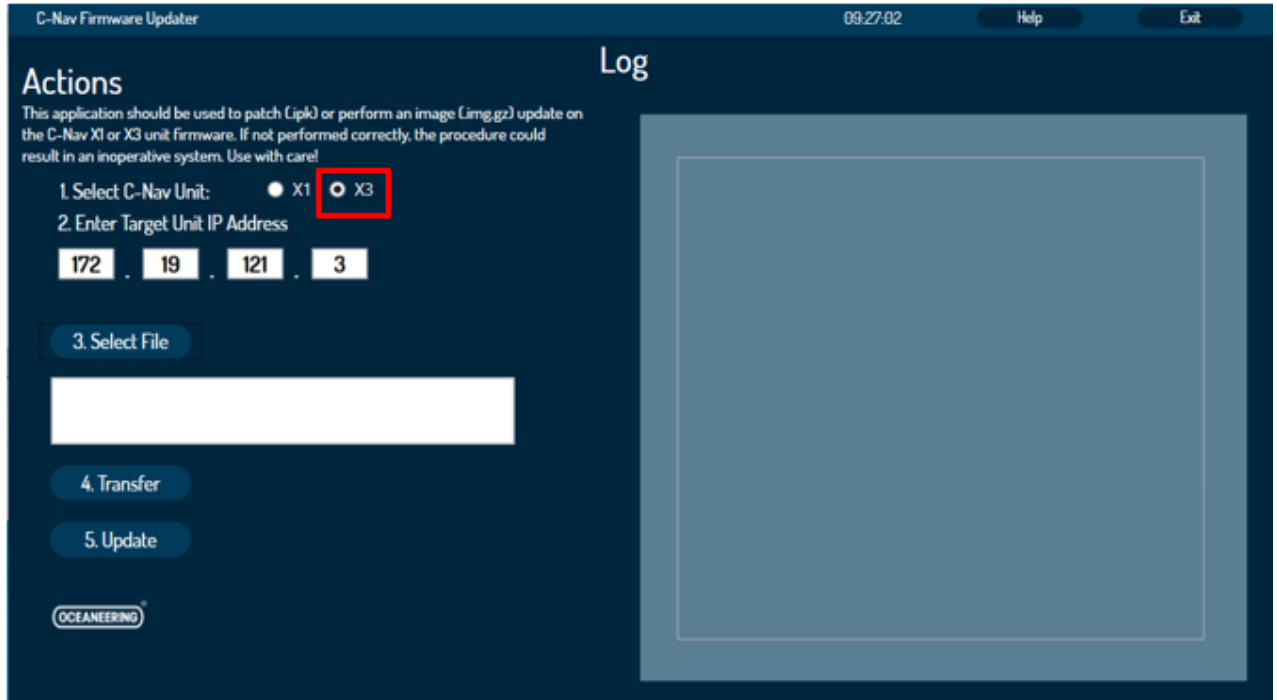
- 5) Followed by **Run anyway**.



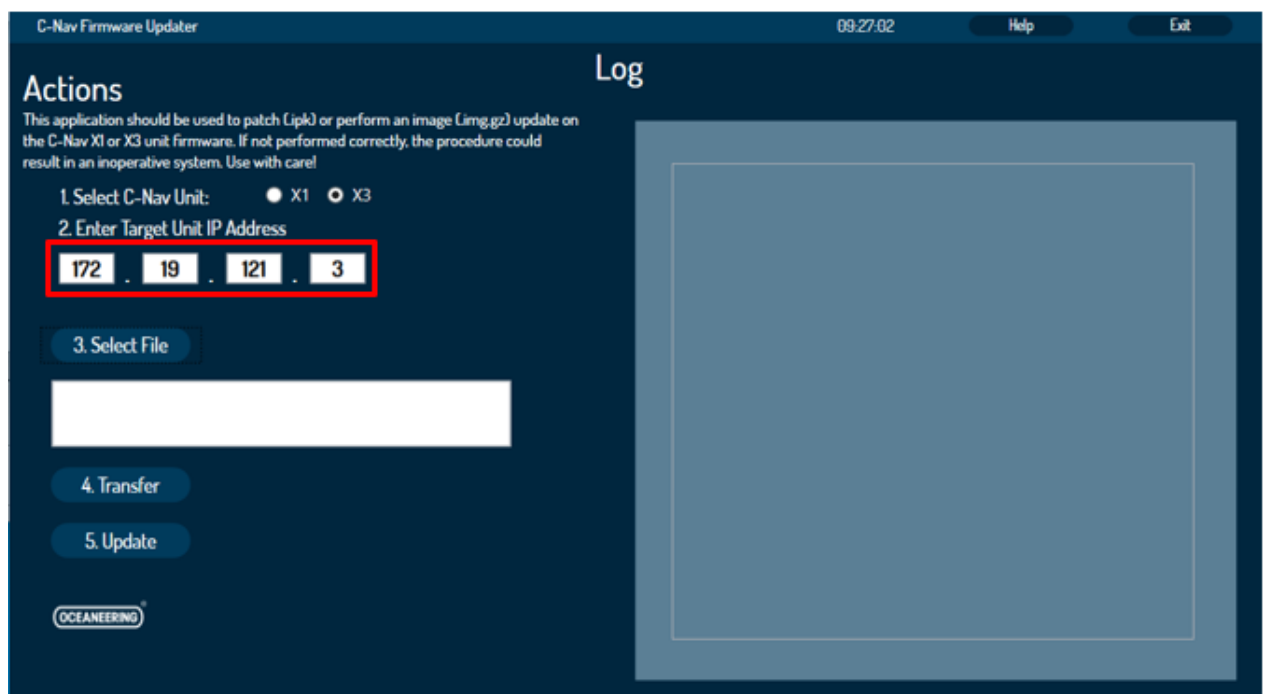
- 6) On the final prompt select **Install**.



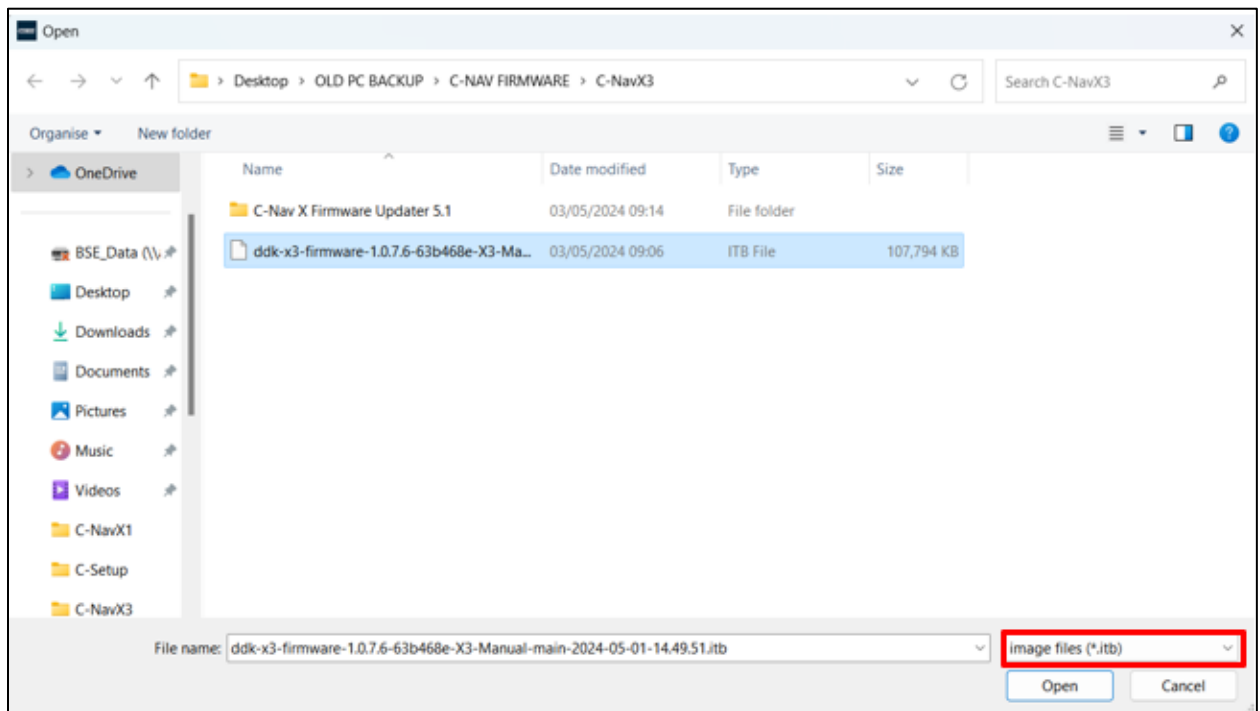
- 7) The C-NavX3 Firmware Updater window will open, there is a **Help** button in the top right which provides an in-application option for instructions.
- 8) Toggle the C-Nav Unit radio button to **X3**.



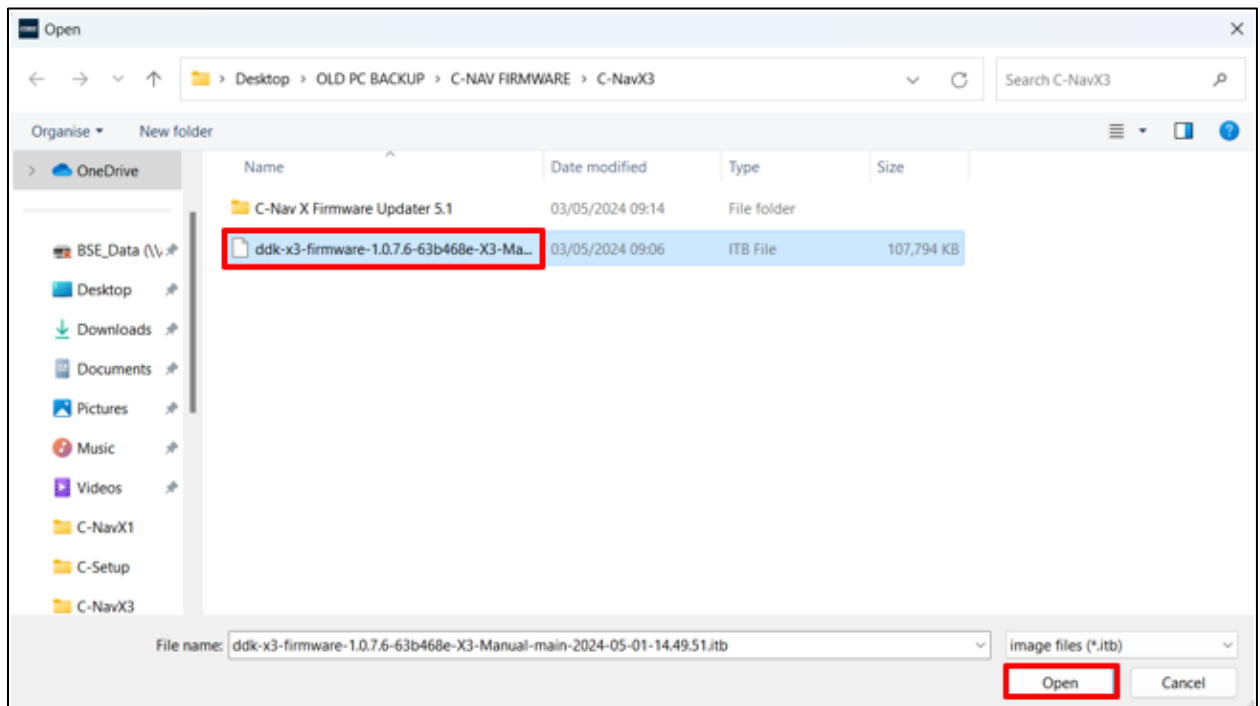
- 9) Populate the *Target Unit IP Address* box, with the IP address noted from [Section 5 – Obtaining the C-NavX3 IP Address](#) (Page 6).



- 10) Press **Select File** to browse to the location of the C-NavX3 firmware. The C-NavX3 firmware file extension will end with *.itb.



- 11) The file can either be double clicked or selected and **Open** pressed.



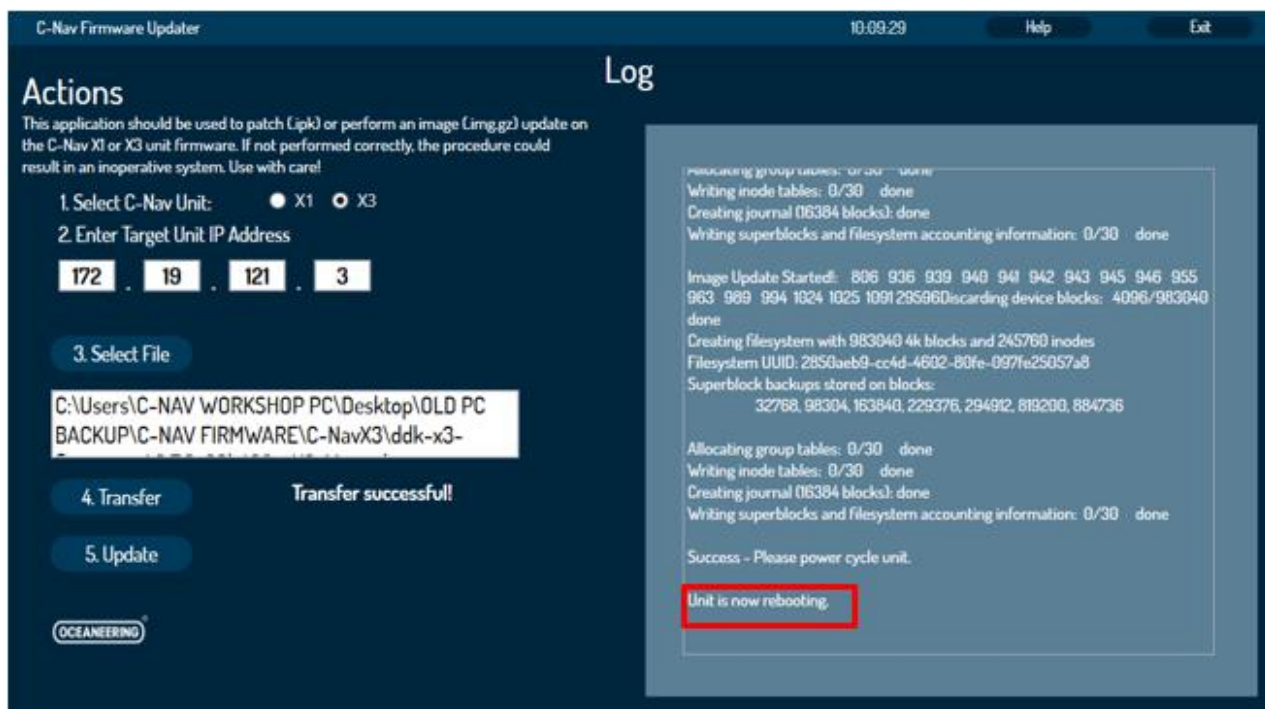
- 12) With the *Target Unit IP address* populated and the **Select File** completed use the **Transfer** button to send the update to C-NavX3 unit. The progress will update in the Log portion of the application.



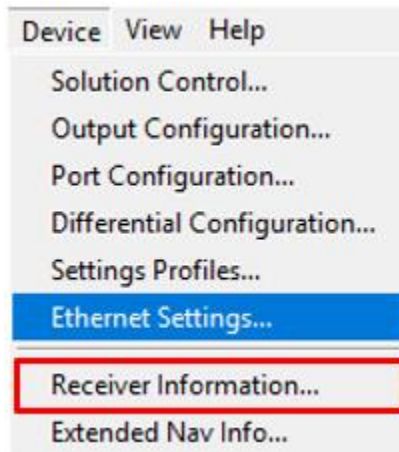
- 13) Following a successful transfer, press **Update**.



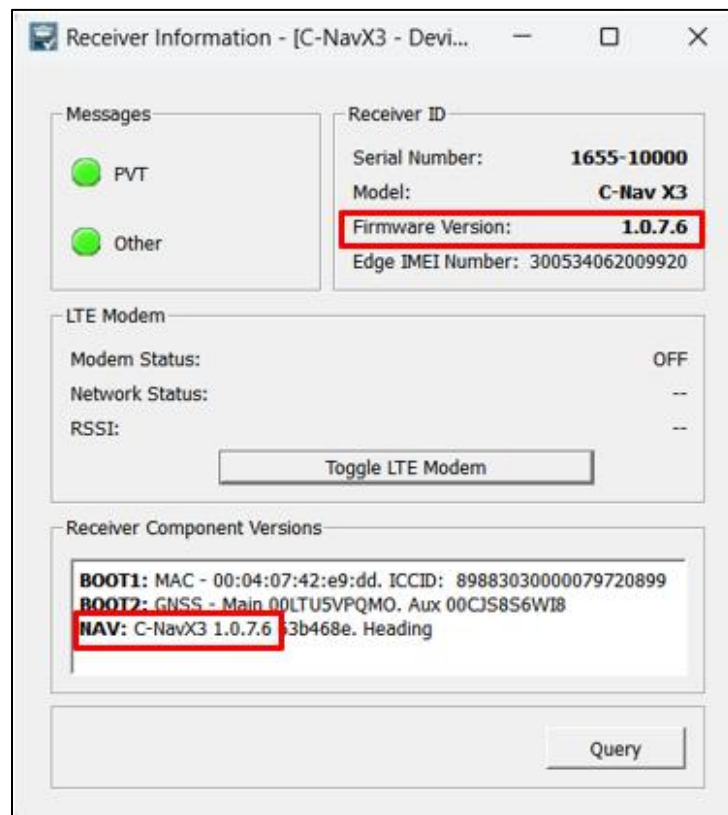
- 14) After successful update, the C-NavX3 will reboot automatically. Once, the update is complete, the LED's will be illuminated.



- 15) Using C-Setup / C-Monitor® QA / QC software / C-Scape connect to the C-NavX3 to confirm that the new firmware version has been loaded.
- 16) Once the C-Nav® control software establishes communication with the receiver, access the **Receiver Information** page from the **Device** menu.



- 17) Confirm that the reported firmware version corresponds to the version number of the selected firmware update.



WARNING: You will not be able to connect to the C-NavX3 until the GNSS status LED is green.