



INSPIRE-100

How to Update Firmware

STEP-BY-STEP PROCEDURE

EQUIPMENT NEEDED

USB Cable



One end with micro-USB connector

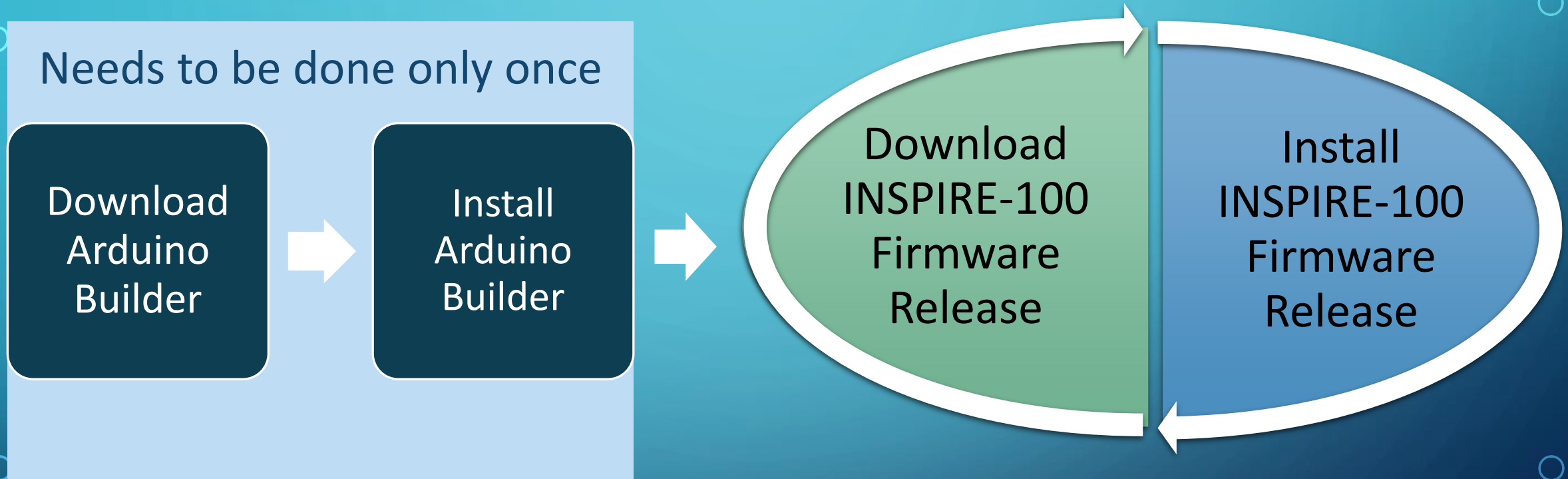
Windows Laptop



INSPIRE-100



FIRMWARE UPDATE OVERVIEW



Each Firmware release has 2 files – one for each controller in the INSPIRE-100 system

INSPIRE-100_master.ino.mega.hex

INSPIRE-100_slave.ino.nodemcu.bin

A decorative graphic on the left side of the image, consisting of a series of vertical and diagonal lines of varying lengths, some ending in small circles, resembling a circuit board or a stylized tree structure.

DOWNLOAD ARDUINO BUILDER

DOWNLOAD ARDUINO BUILDER

STEP 1

Open URL in your browser
<https://www.inspire-100.com>

Click on
"Update System Firmware"

INSPIRE-100 Web Applications

Add a Known System
Manage Known Systems

Select a Known System

BANGALORE ▾

Launch Dashboard
Launch Analyzer
Launch Recorder

Update System Firmware

Calculate FiO₂ Settings
View Documentation

Delete History

Right icons created by Freepik - Flaticon



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DOWNLOAD ARDUINO BUILDER

STEP 2




Click on
Arduino Builder
One-time Download


INSPIRE-100 Firmware Update

Step-by-step Instructions

Arduino Builder
One-time Download

Select and Download Release

Version	Release Date	Get
3.1.1	13-Dec-2023	
1.1.1	16-Oct-2023	
1.0.1	16-May-2023	

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DOWNLOAD ARDUINO BUILDER

STEP 3

The .exe is downloaded to your Downloads folder

Depending upon your settings, a new tab may open in your browser. Delete that tab after download is complete

Read and Dismiss the information popup



A decorative graphic on the left side of the slide, consisting of a network of light blue lines and small circles, resembling a circuit board or a stylized tree structure, set against a blue gradient background.

INSTALL ARDUINO BUILDER

INSTALL ARDUINO BUILDER

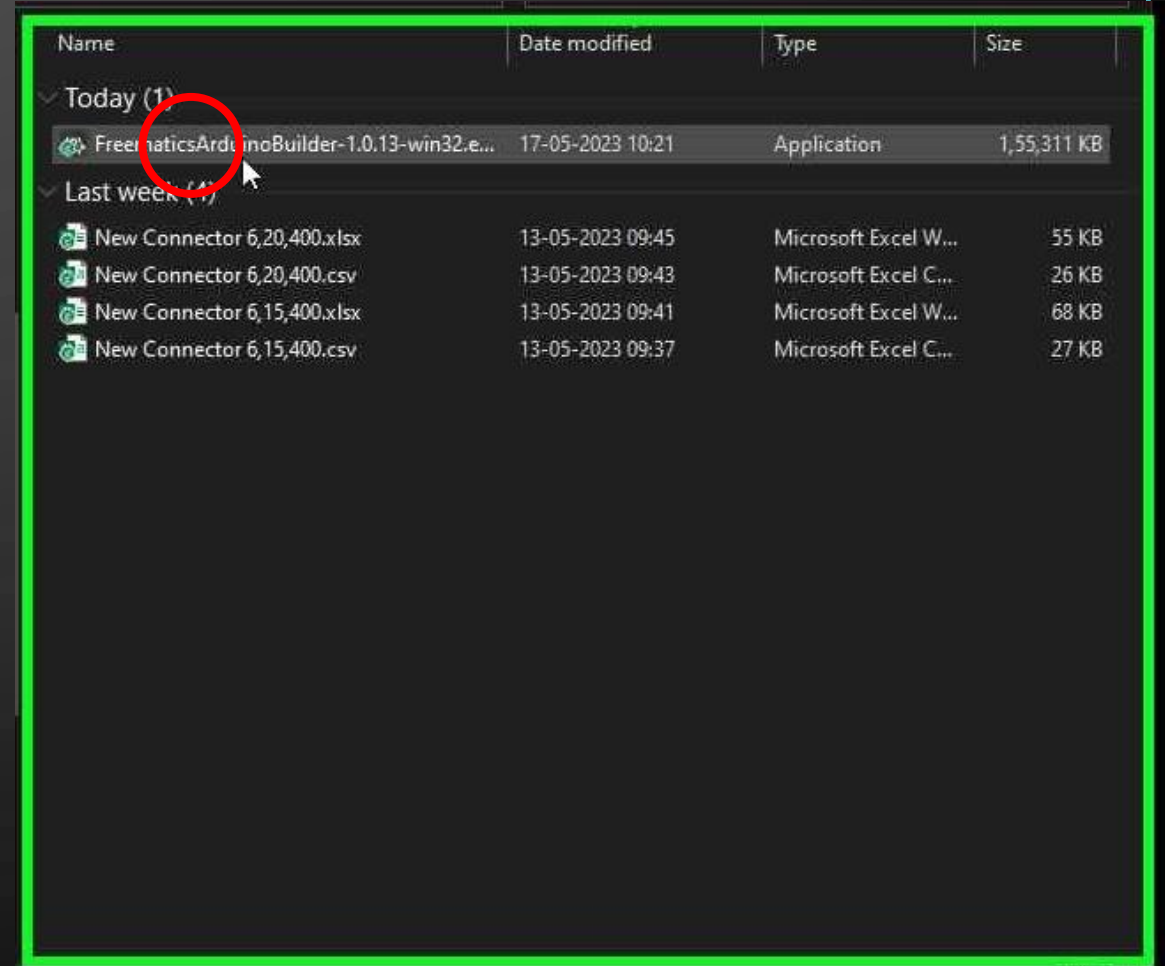
STEP 1

Find the downloaded .exe file (in your Downloads folder)

Double Click on the .exe file to execute it

You will need admin privileges on your laptop to execute this file

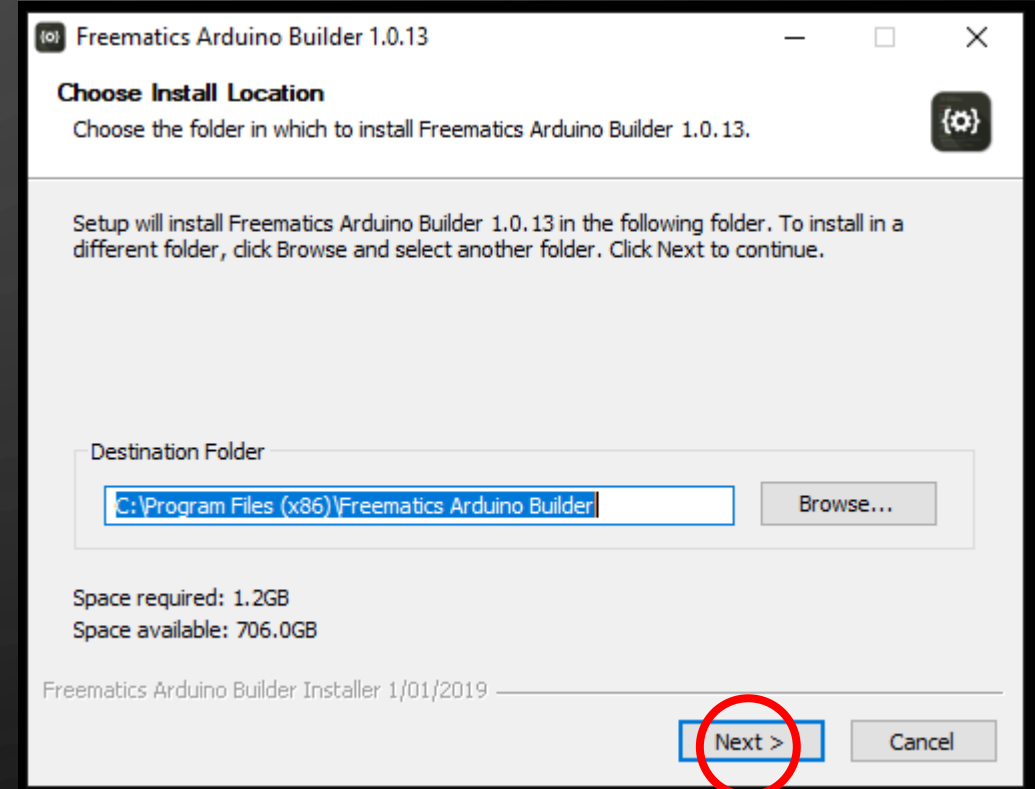
Your laptop's anti-virus software will sanitize the file automatically



INSTALL ARDUINO BUILDER STEP 2

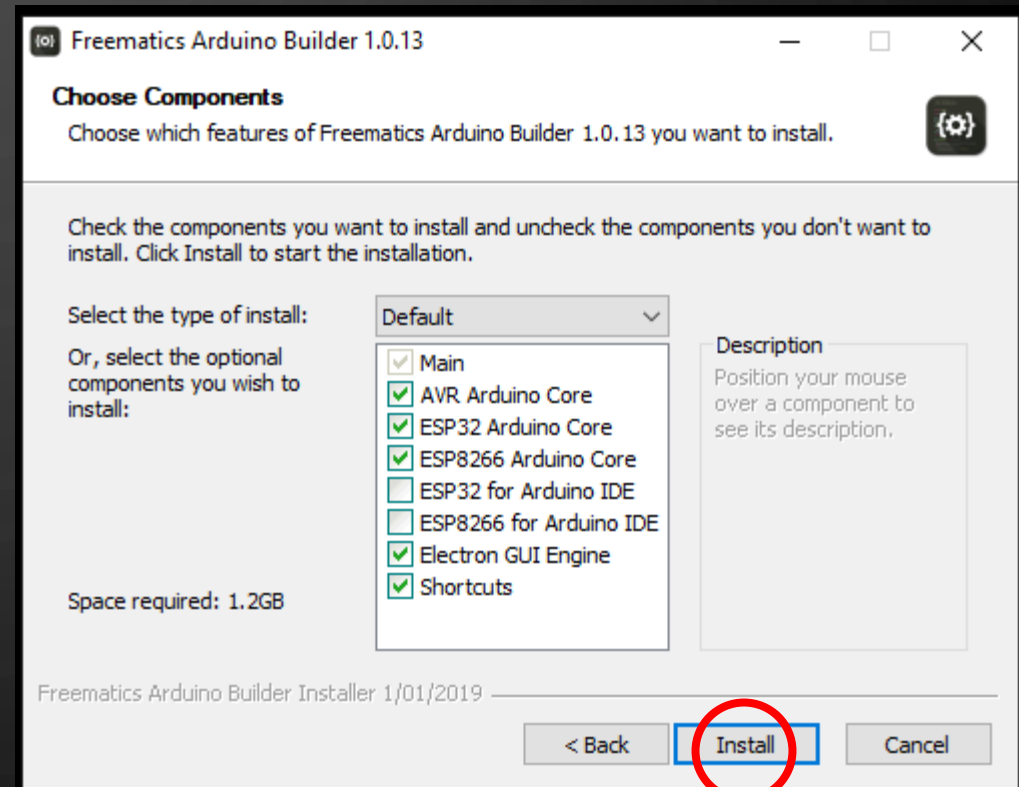
The Arduino Builder installer will
guide you step-by-step

Click on “Next”



INSTALL ARDUINO BUILDER STEP 3

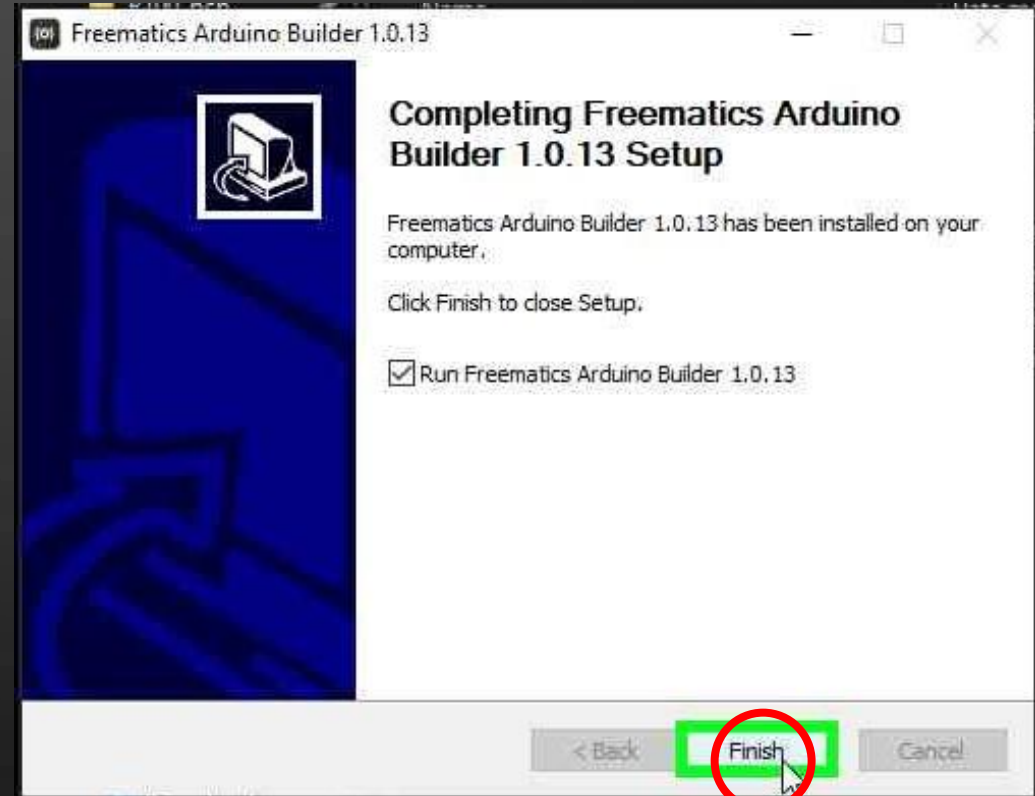
Click on “Install”



INSTALL ARDUINO BUILDER

STEP 4

Click on “Finish”



INSTALL ARDUINO BUILDER

STEP 5

Arduino Builder is installed!

You can now delete the .exe file in
your Downloads folder



A decorative graphic on the left side of the slide, consisting of a network of white lines and small circles on a blue gradient background, resembling a circuit board or data flow diagram.

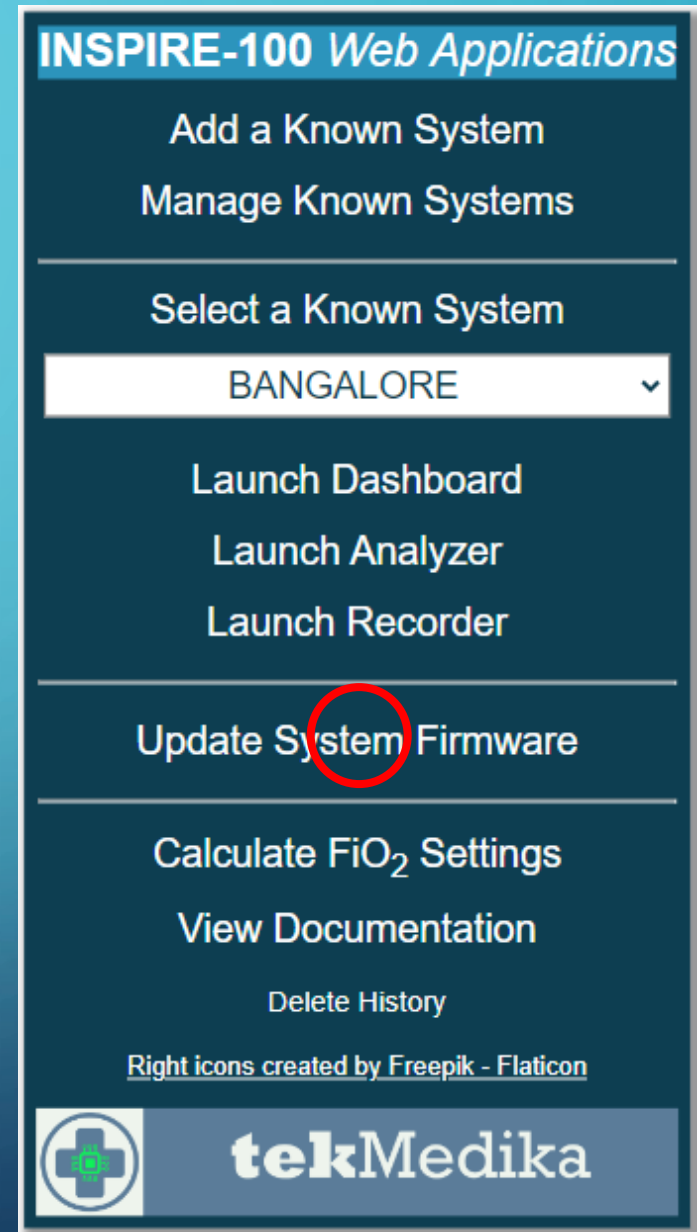
DOWNLOAD A FIRMWARE RELEASE

DOWNLOAD FIRMWARE RELEASE

STEP 1

Open URL in your browser
<https://www.inspire-100.com>

Click on
“Update System Firmware”



DOWNLOAD FIRMWARE RELEASE

STEP 2

Click on the download icon button next to the release you wish to download (1.0.1 in this example)

INSPIRE-100 Firmware Update

Step-by-step Instructions

Arduino Builder
One-time Download

Select and Download Release

Version	Release Date	Get
3.1.1	13-Dec-2023	
1.1.1	16-Oct-2023	
1.0.1	16-May-2023	

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DOWNLOAD FIRMWARE RELEASE

STEP 3

A .zip is downloaded to your
Downloads folder

Read and Dismiss the information
popup



DOWNLOAD FIRMWARE RELEASE

STEP 4

Double click on the downloaded .zip file to open it

Click on the “Extract All” button

A folder with the same name as the release tag will be created

It should show two files within it

INSPIRE-100_slave.ino.nodemcu.bin

INSPIRE-100_master.ino.mega.hex

Release is now downloaded and ready to be uploaded to the INSPIRE-100 system

An abstract graphic on the left side of the slide, consisting of a network of light blue lines and small circles, resembling a circuit board or a stylized tree structure, set against a dark blue gradient background.

INSTALL FIRMWARE RELEASE

INSTALL FIRMWARE RELEASE

STEP 1

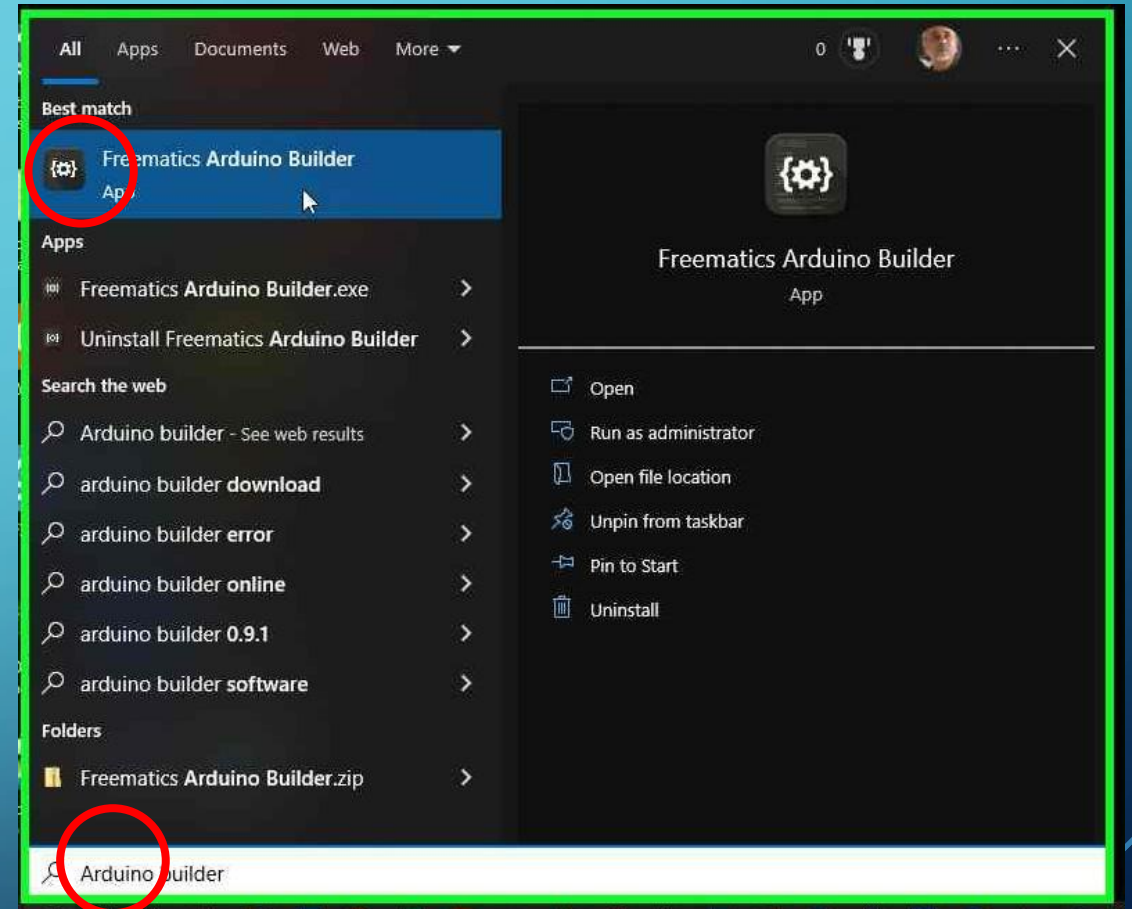
Search for “Arduino Builder”
on the laptop



INSTALL FIRMWARE RELEASE

STEP 2

Click on
“Freematics Arduino Builder”
in the search window



INSTALL FIRMWARE RELEASE

STEP 3

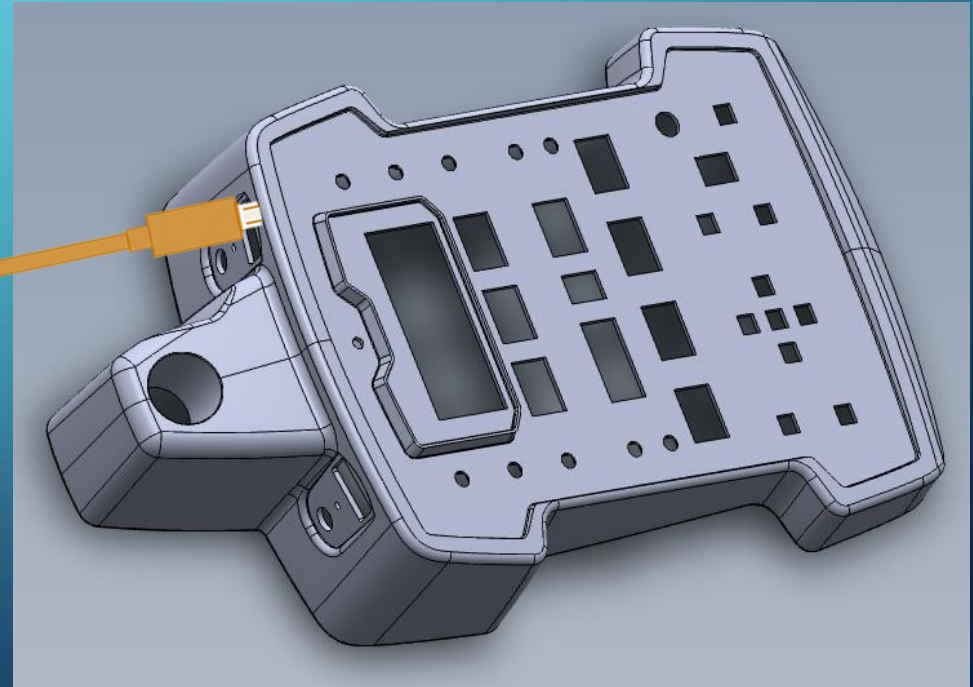
Arduino Builder app
window will open



INSTALL FIRMWARE RELEASE

STEP 4

Connect laptop's USB port to the micro-USB port labelled "Controller" on the back of the control panel of the INSPIRE system



INSTALL FIRMWARE RELEASE

STEP 5

Select “Arduino Mega 2560/ADK”
from the dropdown menu in the
“Target” field

Check “Verify” box



INSTALL FIRMWARE RELEASE

STEP 6

Click “Load Sketch/Binary”
button on the Arduino Builder

Select INSPIRE-
100_master.ino.mega.hex from
the extracted release folder

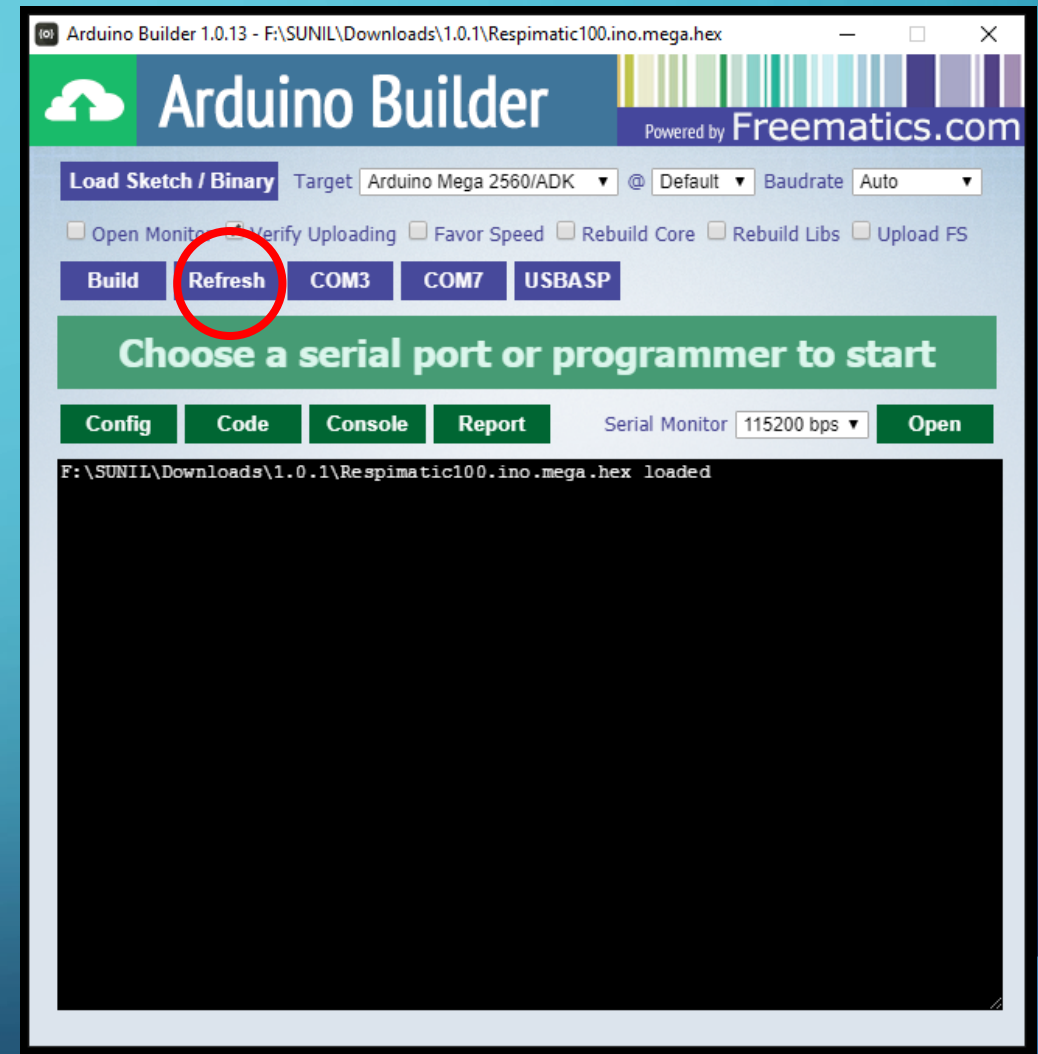


INSTALL FIRMWARE RELEASE

STEP 7

Check “Refresh” button on the
Arduino Builder

It refreshes the list of COM ports
that the INSPIRE system could be
connected to



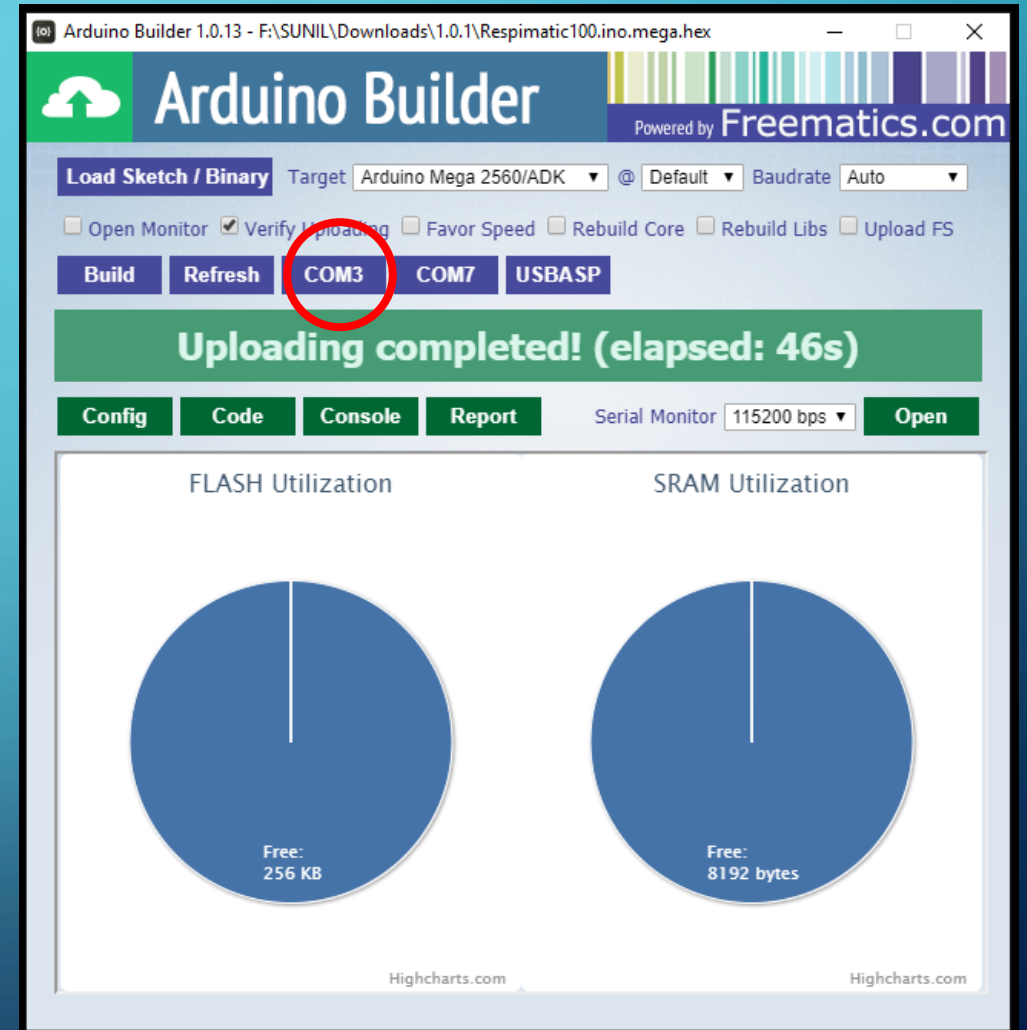
INSTALL FIRMWARE RELEASE

STEP 8

Click the correct COM port i.e. the laptop port that the INSPIRE system is connected to (in this example it is COM3)

Arduino Builder will now install the selected file on the INSPIRE system

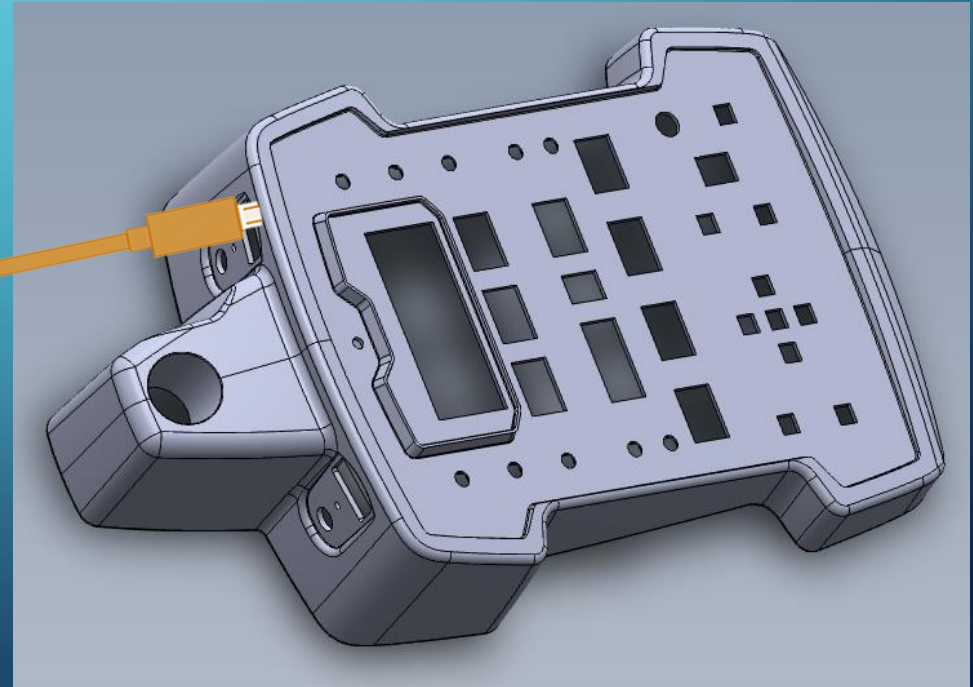
Now we need to follow a similar procedure for the other file in the release.



INSTALL FIRMWARE RELEASE

STEP 9

Connect laptop's USB port to the micro-USB port labelled "Wi-Fi" on the back of the control panel of the INSPIRE system

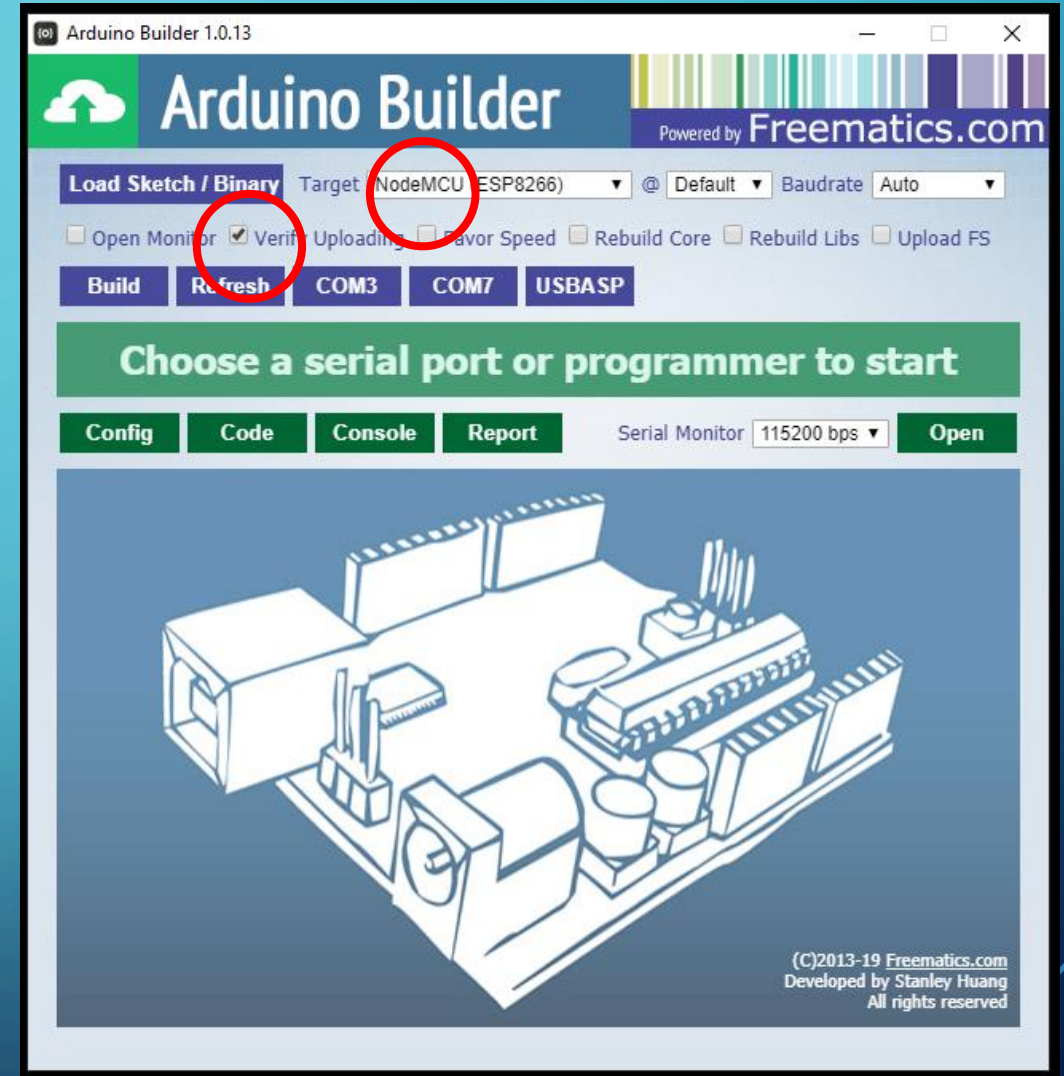


INSTALL FIRMWARE RELEASE

STEP 10

Select “NodeMCU (ESP8266)”
from the dropdown menu in the
“Target” field

Check “Verify” box



INSTALL FIRMWARE RELEASE

STEP 11

Click “Load Sketch/Binary” button on the
Arduino Builder

Select

INSPIRE-100_slave.ino.nodemcu.bin
from the extracted folder of the release

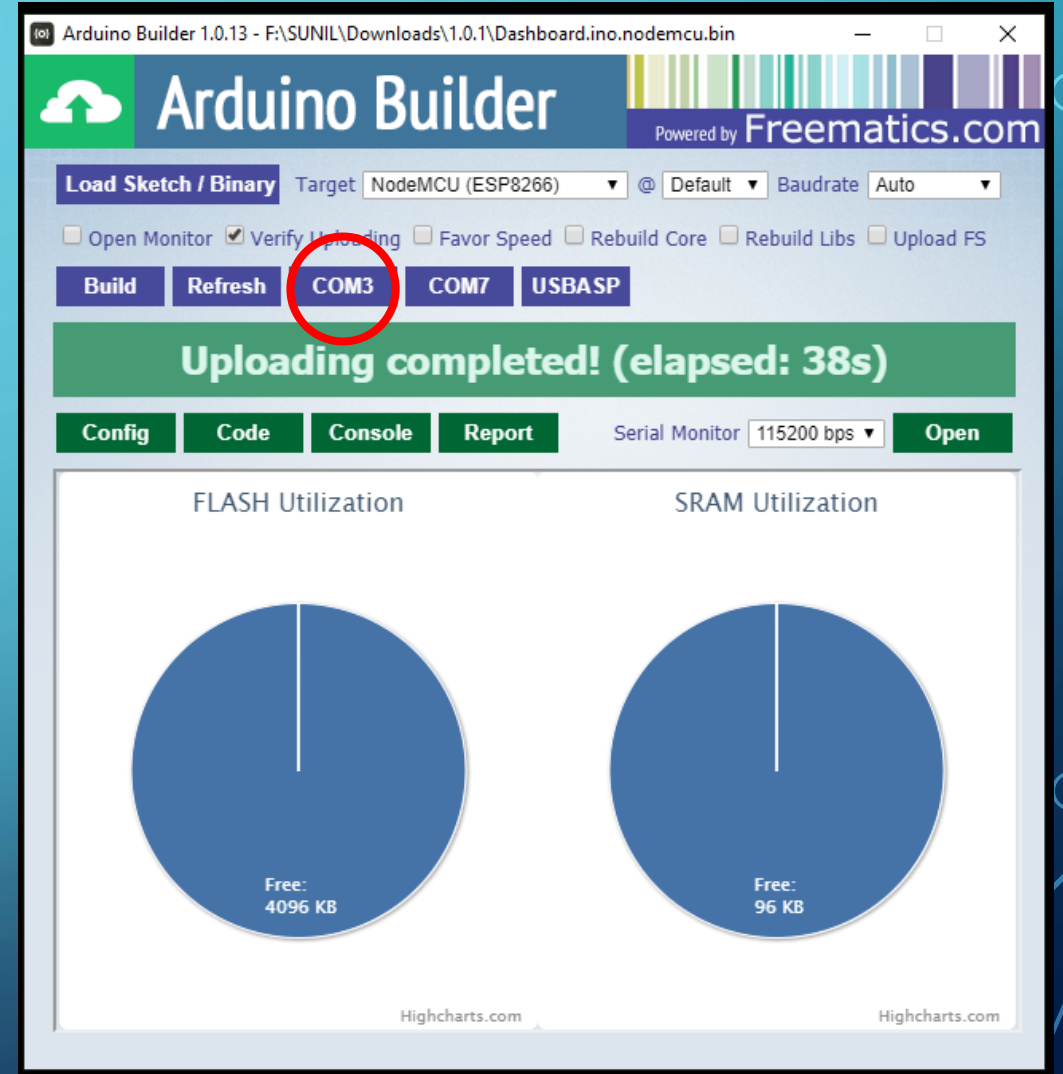


INSTALL FIRMWARE RELEASE

STEP 12

Click the correct COM port i.e. the laptop port that the INSPIRE system is connected to (in this example it is COM3)

Arduino Builder will now install the selected file on the INSPIRE-100 system



The background is a blue gradient with faint concentric circles. In the corners, there are white line art elements resembling circuit boards or neural network connections, with lines and small circles.

DONE