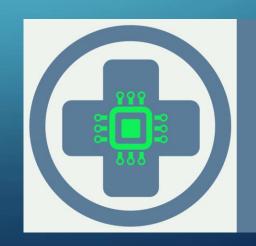
INSPIRE-100

How to Update Firmware STEP-BY-STEP PROCEDURE



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EQUIPMENT NEEDED

USB Cable

Windows Laptop

INSPIRE-100



One end with micro-USB connector





FIRMWARE UPDATE OVERVIEW

Needs to be done only once

Download Arduino Builder

Install Arduino Builder



Download INSPIRE-100 Firmware Release Install
INSPIRE-100
Firmware
Release

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

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



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



Install Freematics Arduino Builder

Execute downloaded file on your Windows laptop.

This installation needs to be done only once. It can be used to upload any Firmware release to any target Respimatic100 system.

Follow link for Step-by-step Instructions.



INSTALL ARDUINO BUILDER

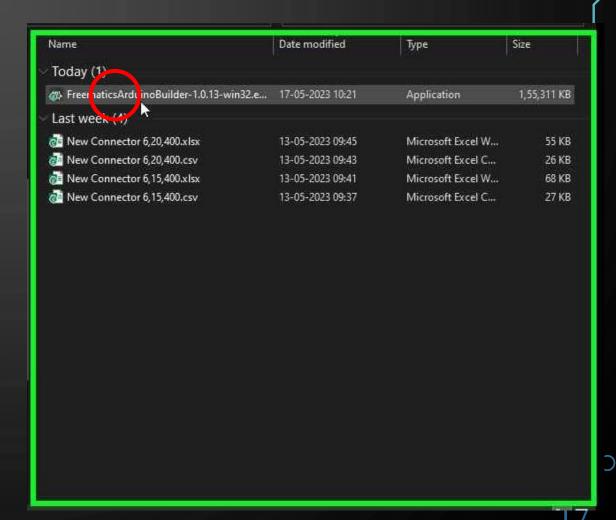
INSTALL ARDUINO BUILDER STEP 1

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

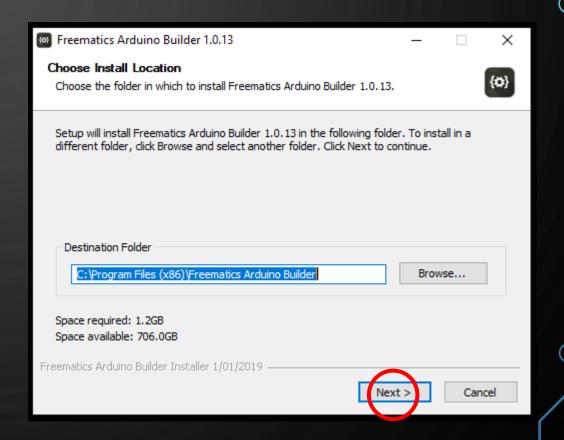
Your laptop's anti-virus software will sanitize the file automatically



INSTALL ARDUINO BUILDER <u>STEP 2</u>

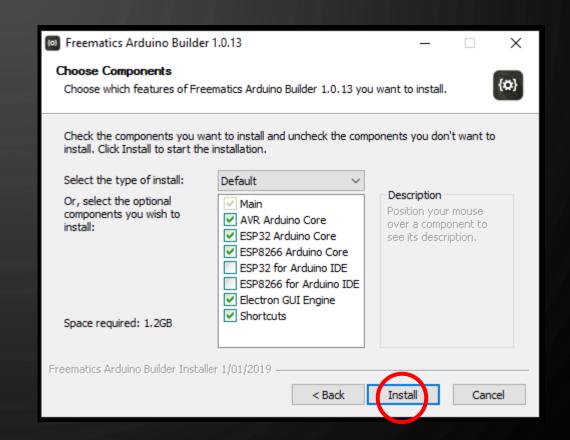
The Arduino Builder installer will guide you step-by-step

Click on "Next"



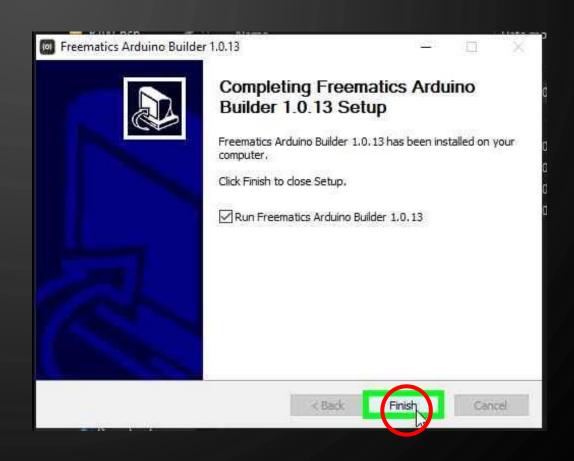
INSTALL ARDUINO BUILDER <u>STEP 3</u>

Click on "Install"



INSTALL ARDUINO BUILDER STEP 4

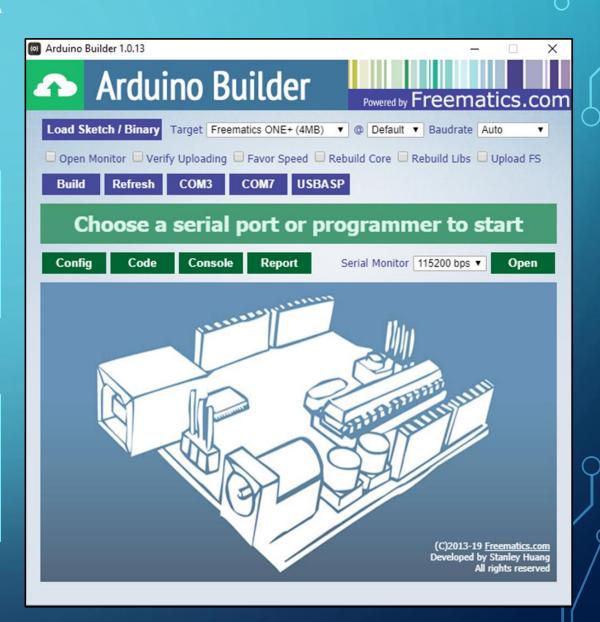
Click on "Finish"



INSTALL ARDUINO BUILDER STEP 5

Arduino Builder is installed!

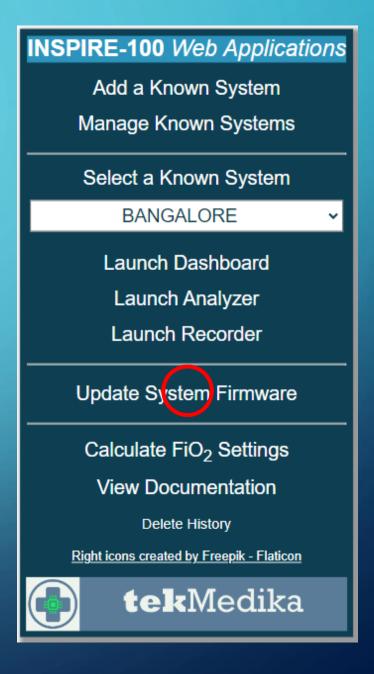
You can now delete the .exe file in your Downloads folder



DOWNLOAD A FIRMWARE RELEASE

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

Click on "Update System Firmware"



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



A .zip is downloaded to your Downloads folder

Read and Dismiss the information popup



Install Release 1.0.1

Unzip downloaded zip file '1.0.1.zip'

Use installed Freematics Arduino Builder to upload both files found in the unzipped folder to the target Inspire-100 system

Inspire-100_slave.ino.nodemcu.bin
 &
 Inspire-100_master.ino.mega.hex

Follow link for Step-by-step Instructions.



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

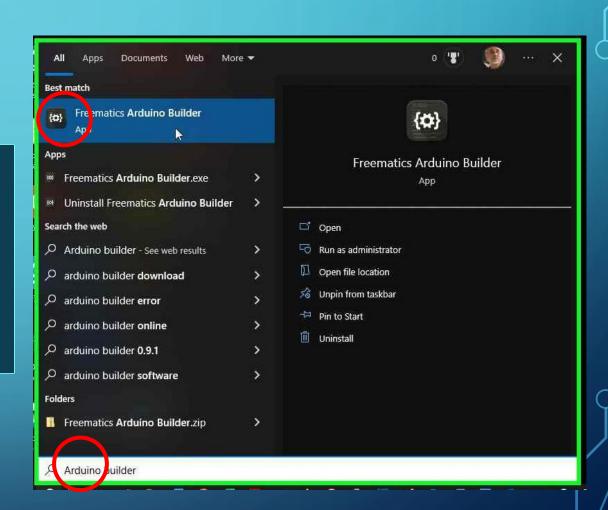
Release is now downloaded and ready to be uploaded to the INSPIRE-100 system

Search for "Arduino Builder" on the laptop



Click on

"Freematics Arduino Builder"
in the search window

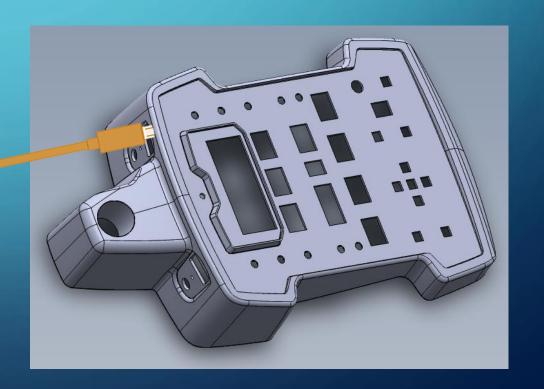


Arduino Builder app window will open



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





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

Check "Verify" box



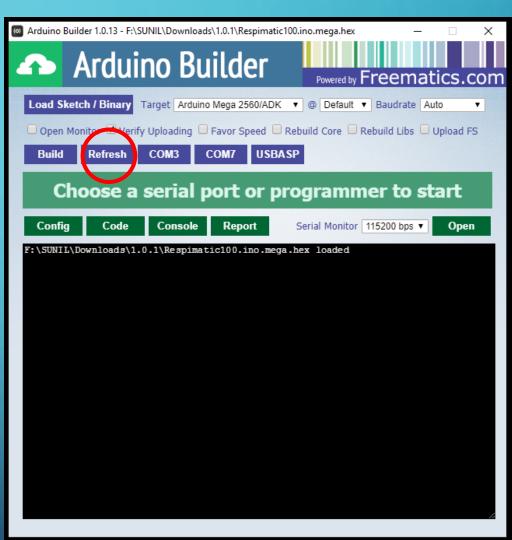
Click "Load Sketch/Binary" button on the Arduino Builder

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



Check "Refresh" button on the Arduino Builder

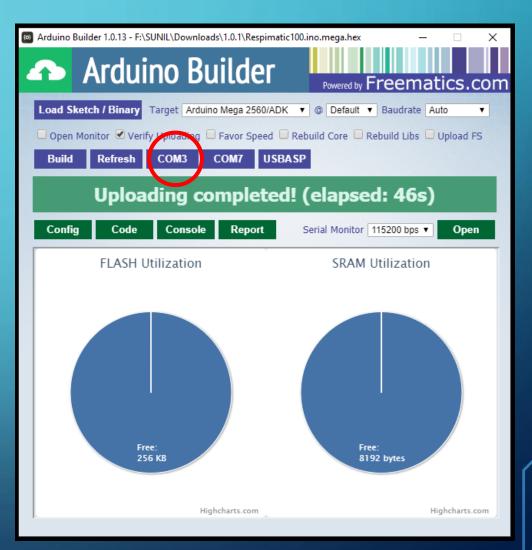
It refreshes the list of COM ports that the INSPIRE system could be connected to



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

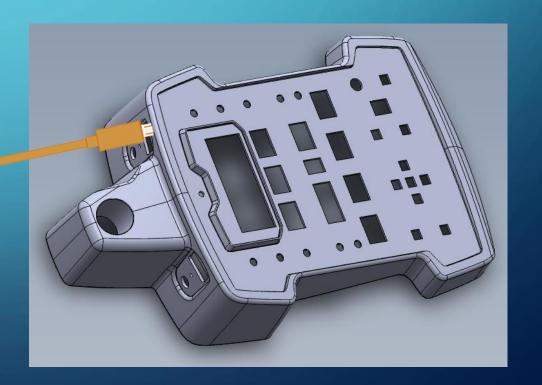
Arduino Builder will now install the selected file on the INSPIRE system

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



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





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

Check "Verify" box



Click "Load Sketch/Binary" button on the Arduino Builder

Select

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



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

