R-ION Utilities User Guide

ontrol

Summary

- R-ION Utilities is an upper version of Sox-to-Serial Utilities and developed by Ontrol. This utilities bring new feature different from to Sox-To-Serial Utilities.

- This utilities includes the following enhancements:
    - Download new application
    - Download new Firmware
    - Automatically Com PORT detection

- This features benefits are:
    - Easy Commissioning
    - Save Engineering Time
    - Quick and Easy Maintenance
    - Less Knowledge Require

Summary

R-ION Utilities User Guide

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2	Running R-ION Utilities
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R-ION Utilities User Guide

STEP
1

Installing R-ION Utilities

Installing R-ION Utilities

- R-ION Utilities can be download on www.ontrol.com website.

  You can find this software on page of R-ION product (https://www.ontrol.com/rion)

- After Downloading, unzip the file and keep folder on your hard disk.
  Prefer location **{niagara-install-folder}/sedona/ontrol/**.

⚠️ **CAUTION**

- The path should not contain any spaces or non-english characters
(illegal path example : C:\Users\John Doe\Documents\Desktop\R-ION_Firmware)

- Requires Java 32-bit or 64-bit to be installed on your machine.

> This PC > Windows (C:) > Niagara > Niagara-3.8.401 > sedona > ontrol

Name	Date modified	Type	Size
fontBank	25.03.2019 08:21	File folder	
imageBank	10.04.2019 14:00	File folder	
RionUtilities	15.04.2019 10:02	File folder	
ontrol.properties	9.04.2019 10:37	PROPERTIES File	1 KB

Move

Name	Date modified
RionUtilities_v0.0.3	15.04.2019 09:54
RionUtilities_v0.0.3.zip	15.04.2019 09:32

Unzip

- Open
- Open in new window
- Extract All...
- Pin to Start
- Move to OneDrive
- Edit with Notepad++
- Scan with Windows Defender...
- Share

R-ION Utilities User Guide

STEP 2

Running R-ION Utilities

Running R-ION Utilities

- Double click to RionUtilities file and right click to ♨ **rionutilities.exe**
- Select **Run as administrator** only for first running

NOTE: If you work with Windows 10;
opens "Windows protected your PC" warning window, first click "More info" text, after click Run anyway button**.**
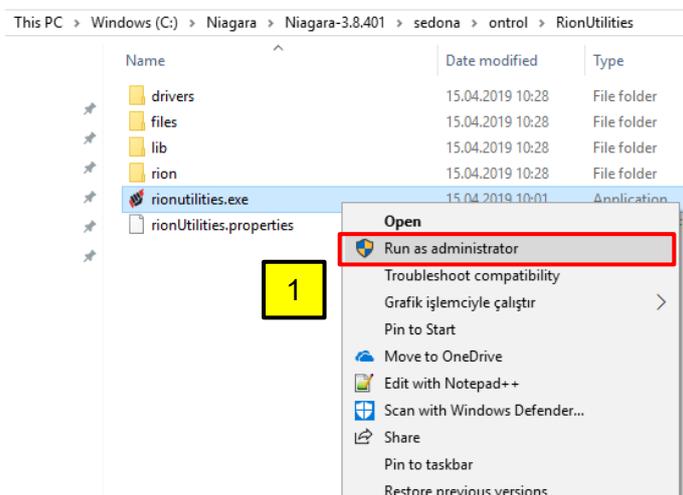
R-ION Utilities User Guide

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STEP 3

R-ION Utilities

Sox-to-Serial

Tools of R-ION Utilities:

Sox-to-Serial

- Small program to connect R-ION to Niagara AX via USB

- **Start Tunnel**; start to connection

- **Stop Tunnel**; stop to connection

- **COM Port**; R-ION-USB connection port to computer. USB COM Port number is automatically detected. Manuel COM selection is possible.

- **UDP Port**; SOX port number. Default sox port is 1876. The device may have been set to use a different port, but this would be rare

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R-ION Utilities User Guide

STEP

3
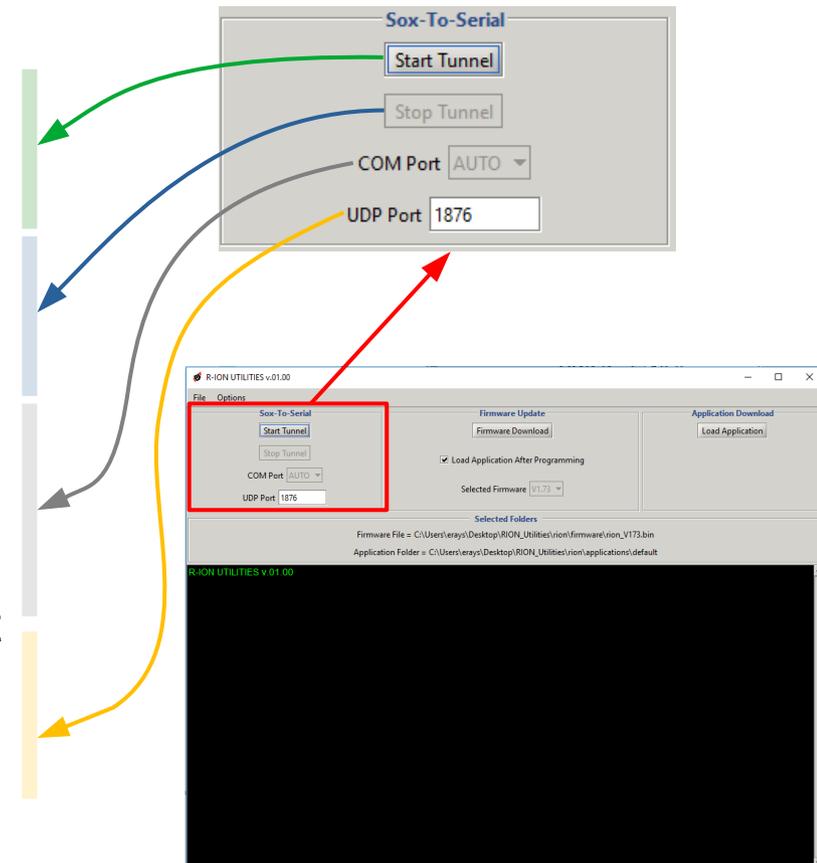
R-ION
Utilities

Sox-to-
Serial

Tools of R-ION Utilities:

Sox-to-Serial

- Starting sox to serial runs in the background to tunneling Sox IP message to USB Port
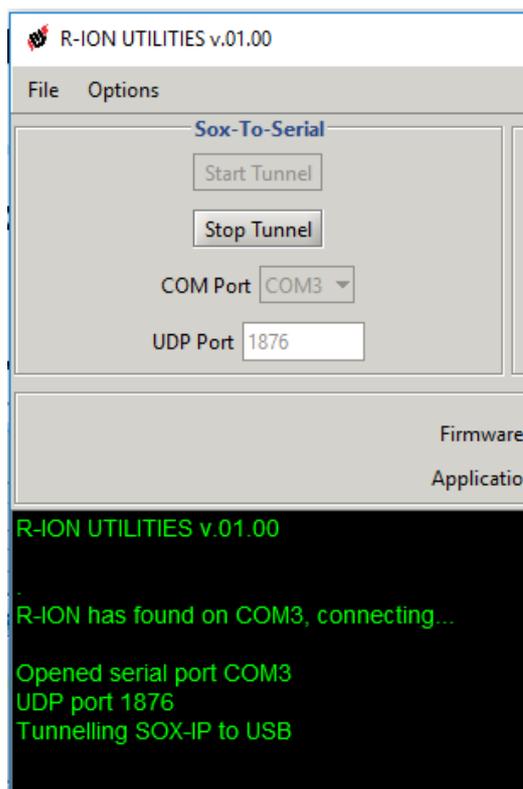
NOTE: For use R-ION Utilities must connect to R-ION with Standard Micro USB cable. If you get any error message on R-ION Utilities console window, check to cable connection between R-ION to PC

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STEP 4

R-ION Utilities

Application download

Tools of R-ION Utilities:

Application Files Download

- This process deletes current application and files in the R-ION

- **Load Application**; loads to application folder in the selected folder.
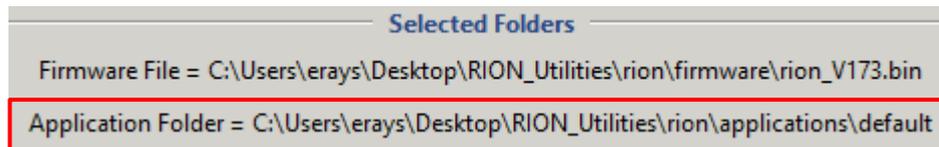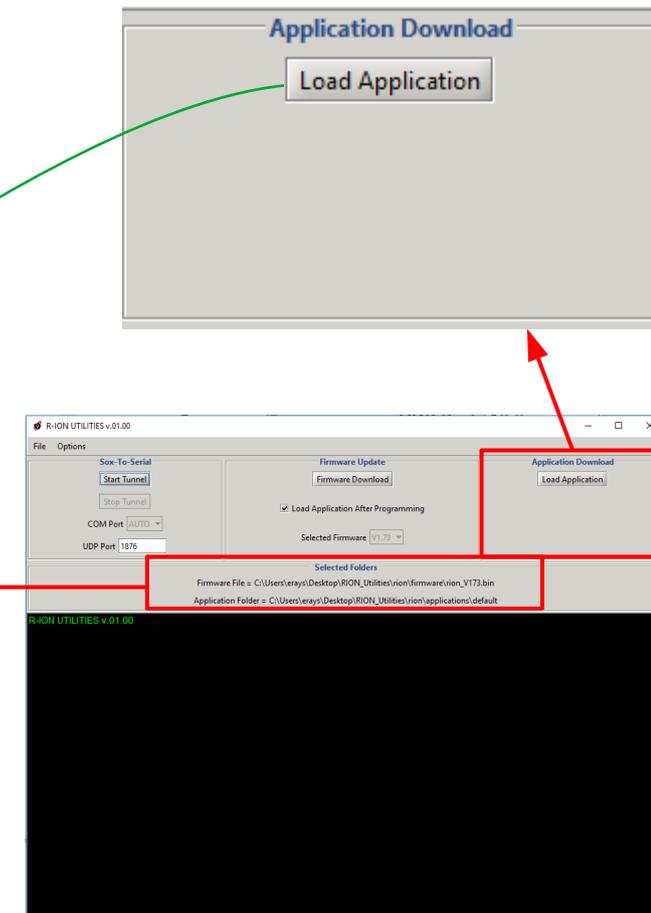
Application Download

Load Application

Selected Folders

Firmware File = C:\Users\erays\Desktop\RION_Utilities\rion\firmware\rion_V173.bin

Application Folder = C:\Users\erays\Desktop\RION_Utilities\rion\applications\default

Default application folder

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STEP 4

R-ION Utilities

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Application download

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Tools of R-ION Utilities:

Application Files Download

Download Success

Background color of console pane goes to green from black and write "...APP FILE DOWNLOAD IS SUCCESSFUL..." .
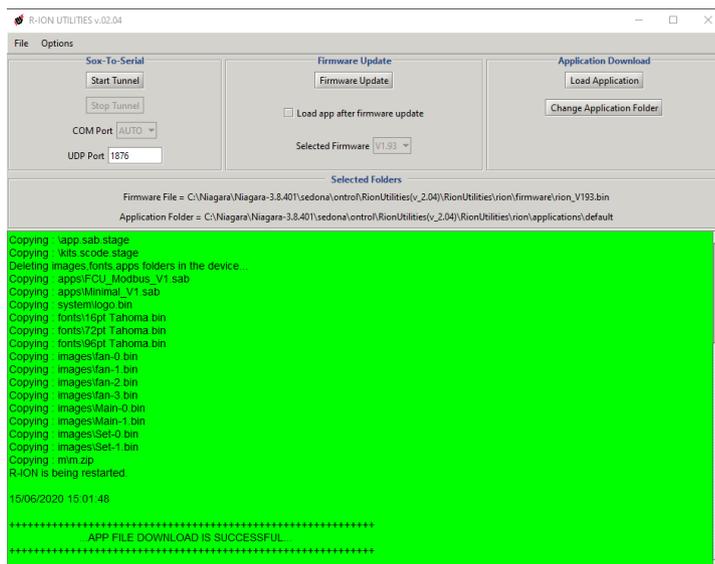
Download Failed

Background color of console pane goes to red from black and write "APP FILE DOWNLOAD IS FAILED!!!" .

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STEP

4

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Utilities
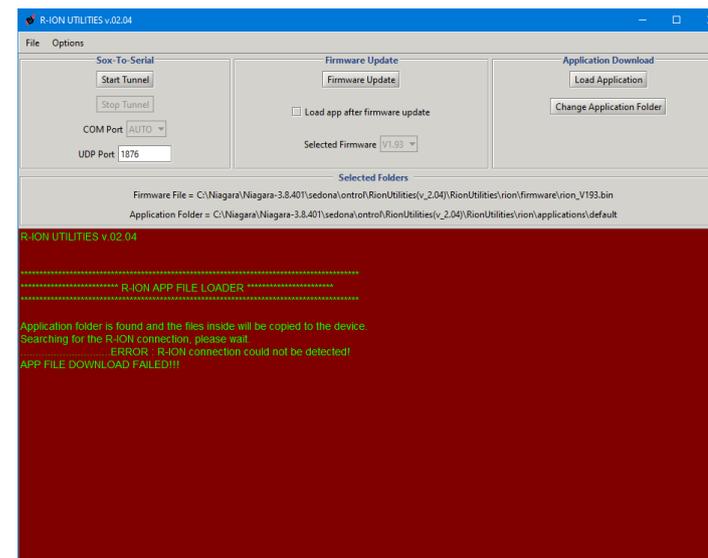
Application
download

Tools of R-ION Utilities:

How to choose different application folder?

- Click to Option menu and uncheck to **Load Default Application**
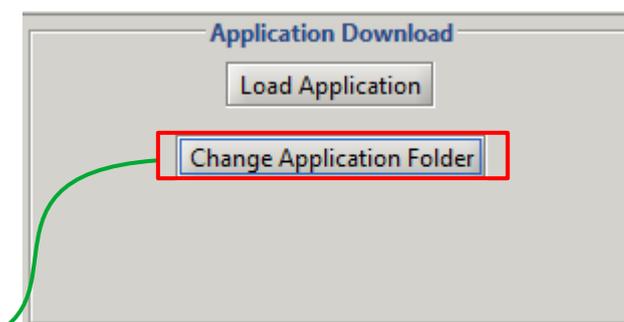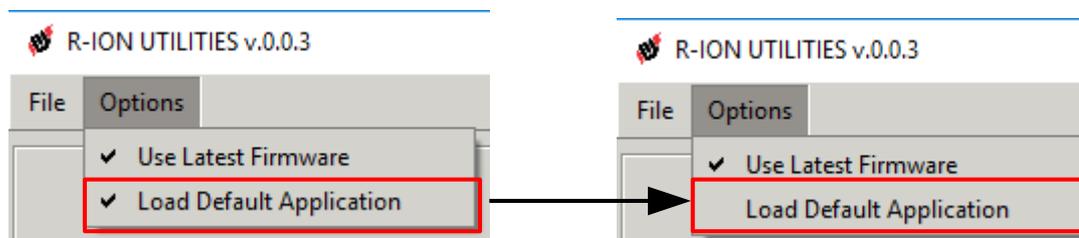
- **Change Application Folder** button

  appears in Application Download tab

- Click **Change Application Folder** and

  choose folder.

> ⚠️ **CAUTION**
> - Don't change any files under application folder.

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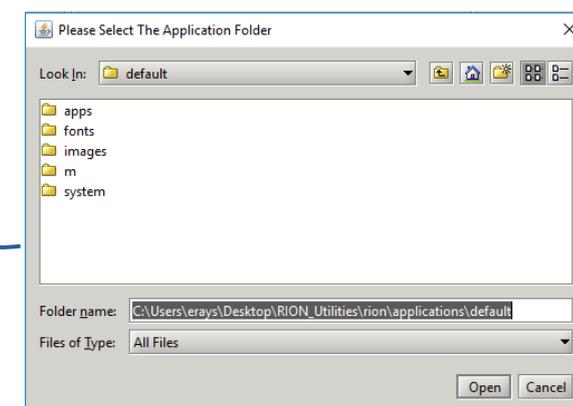
STEP
5

R-ION
Utilities

Firmware
files
Download

Tools of R-ION Utilities:

Firmware Update

- Able to download update firmware to the R-ION. Before start to Firmware download process, must be;

    -installed SAM-BA
    -R-ION have to be firmware programming mode (see page 14)
    -installed R-ION Serial Port Driver (see page 4)

- **Install SAM-BA**; Install to SAM-BA

- After Install SAM-BA close and re-run as administrator the R-ION Utilities

- **Install Serial Port Driver;** Generally driver installs automatically. If It doesn't, you must install driver manually.

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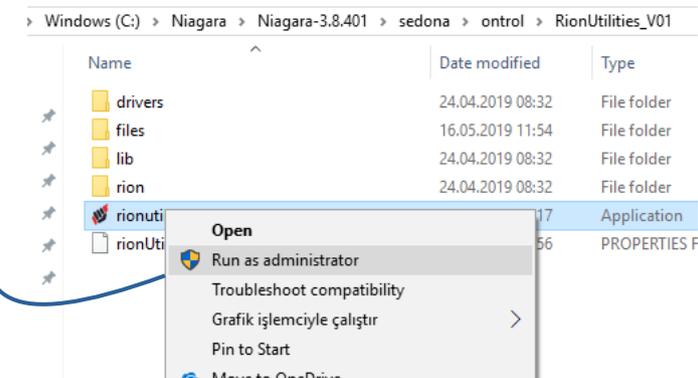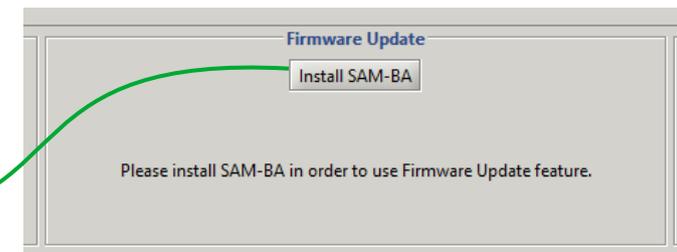
STEP 5

R-ION Utilities

Firmware files Download

Tools of R-ION Utilities:

Firmware Update

- **Firmware Download**; loads to firmware file in the selected folder.

- **Load Application After Programming**; enables to load application after firmware download.

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R-ION Utilities User Guide
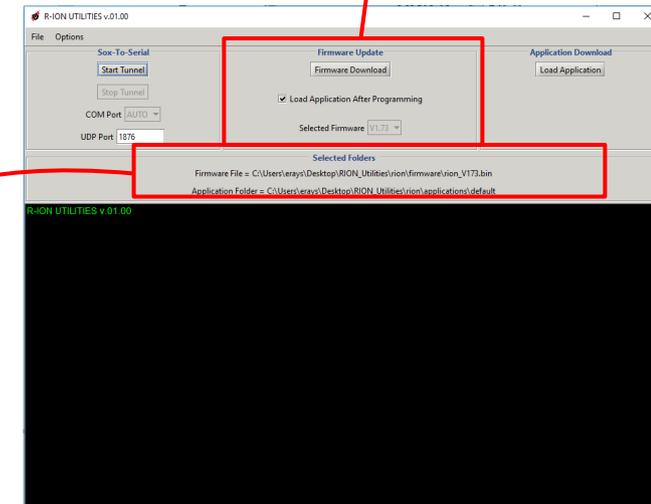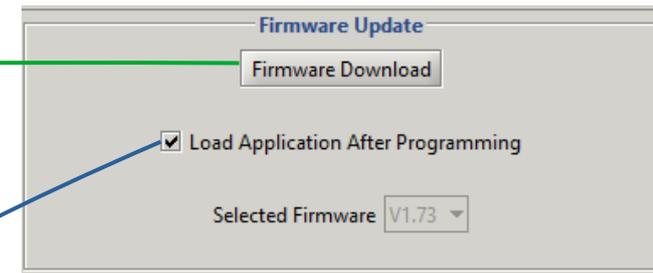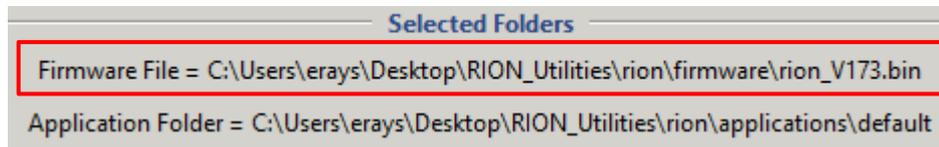
STEP 5

R-ION Utilities

Firmware files Download

Tools of R-ION Utilities:

Firmware Update

Download Success	Download Failed
Background color of console pane goes to green from black and write "FIRMWARE UPDATE IS SUCCESSFUL..." .	Background color of console pane goes to red from black and write "FIRMWARE UPDATE IS FAILED!!!" .
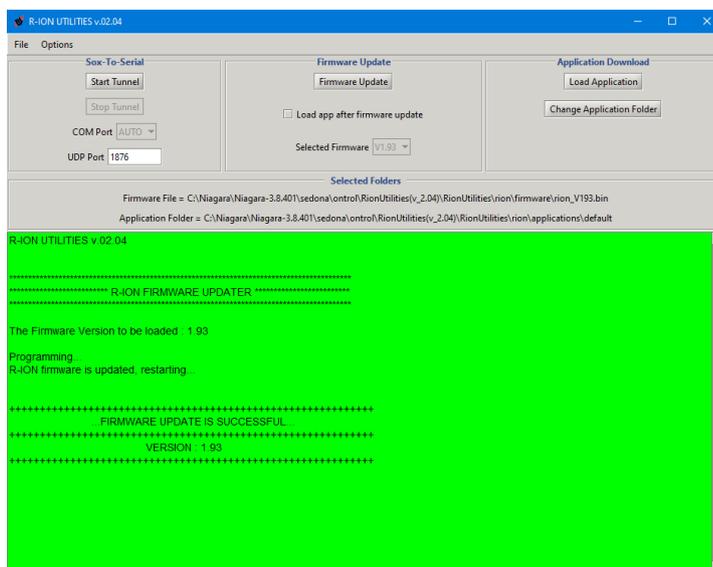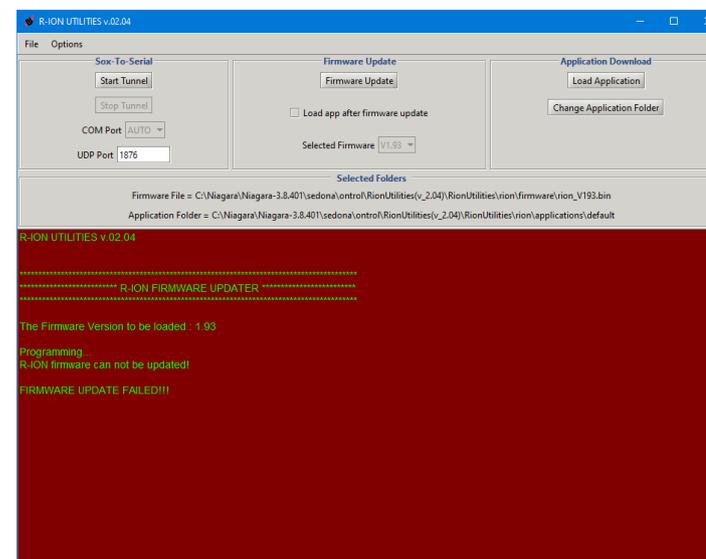
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STEP 5

R-ION Utilities

Firmware files Download

Tools of R-ION Utilities:

How to choose different firmware files?

- Click to Option menu and uncheck to **Use Latest Firmware**
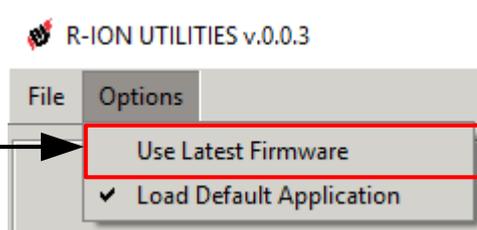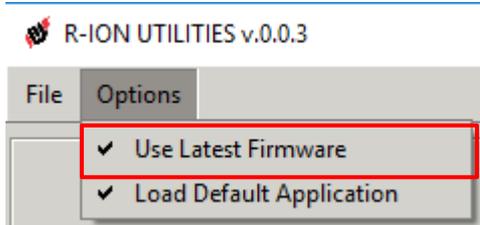
- **Change of Directory** button appears in Firmware Update tab

- Click **Change of Directory** button and show different firmware file path

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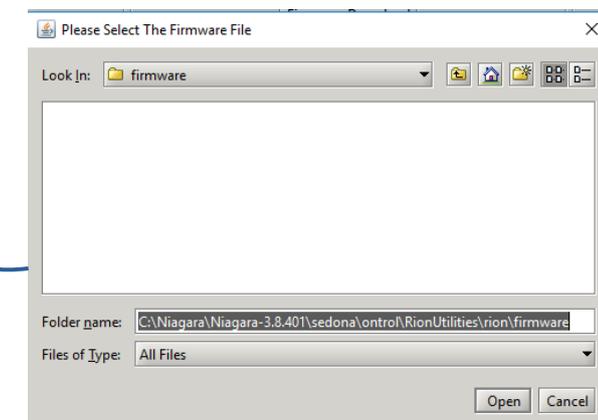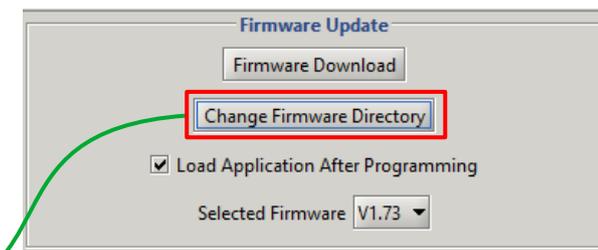
STEP
5

R-ION
Utilities

Firmware
files
Download

Tools of R-ION Utilities:

Switching to firmware programming mode

- Make sure power is off :
  - disconnect / turn-off power connection
  - *and* disconnect the USB cable

- Disengage R-ION display part (front) from the metal frame.

- Keep the small button (PROG) on the backside pressed for the next step

- Connect the USB cable to PC for a few seconds.
  Disconnect again.

- Release the button.

- The R-ION is now "initialized"
  Memory has been erased and it will be waiting for a new firmware update.

  Connect the USB cable to your PC.
R-ION may appear "Bossa Program" or "ATMEL" in the Device Manager.
If this is the first time, Windows will recognize RION as a new device, and try to search for and install a driver.
Interrupt this automatic installation by clicking No when prompted.
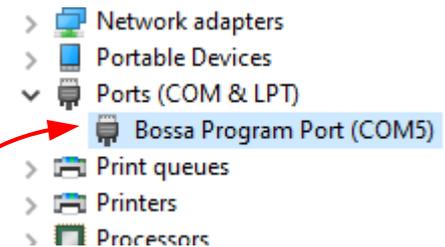
> ⚠️ **CAUTION**
> - **This will erase the existing application and all image/font files on the device.**
> - **If turn on power of R-ION after erase memory, display doesnt have any view.**