1. Download the "novus.zip" file in here
2. Unzip the file in the following folder:

   C:\Program Files (x86)\Arduino\hardware

3. Open Arduino's IDE
4. Choose in **Tools > Board > NOVUS Boards** the option NOVUS DigiRail NXprog
5. Choose the port where it is connected
6. Ready to use.
7. Libraries (include them in **Sketch > include library**)

   - #include <NovusIO.h>

Use to configurate Analog inputs/outputs.

- `Novus.analogInput_Mode(int pin, int type, int temp, float safeState);`
- `Novus.analogOutput_Mode(int pin, int type, float powerON, float safeState);`

Use to configurate Digital inputs.

- `Novus.digitalInput_Mode(int pin, int func, int type, int debounce);`

Use to configurate Digital outputs.

- `Novus.digitalOutput_enInstant(int pin, int powerON, int safeState);`
- `Novus.digitalOutput_enPulse(int pin, int pulseTime, int pulsePeriod, int nPulse);`

Use to manipulate Analog inputs/outputs.

- `float result= Novus.analogRead(int Channel);`
- `Novus.analogWrite(int Channel, float Value);`

Use to manipulate Digital inputs/outputs.

- `int result= Novus.digitalRead(int Channel);`
- `int result= Novus.digitalReadCounter(int Channel);`
- `int result= Novus.digitalReadTimer(int Channel);`
- `int result= Novus.digitalWrite(int Channel, int Value);`

- #include <NovusRS485.h>

Use to enable/disable RS485.

- `int status= Novus_RS485.enable(Mode, Address, Baudrate, Parity, Stopbits);`
- `Novus_RS485.disable();`

Use to communicate with RS485.

- `int status= Novus_RS485.communicate(uint16_t* sendValue, uint16_t sendBytes, uint16_t* receiveValue, uint16_t receiveBytes);`
- `Novus_RS485.flush(uint16_t* receiveValue, uint16_t receiveBytes);`

Use RS485 as a Sniffer.

- `int status = Novus_RS485.sniffer_bytes(uint16_t size, uint16_t Timeout, uint16_t* receiveValue);`

- #include <NovusETHERNET.h>

Use to enable ETHERNET.

- `Novus_ETHERNET.enable(uint16_t DHCP);`

- `Novus_ETHERNET.enable(int DHCP, IPAddress ip, IPAddress mask, IPAddress gateway, IPAddress DNS);`

    - #include <NovusDevice.h>

Use to read how the module is configured.

- `ReadDevice.Configs(uint8_t channel, uint8_t type, uint8_t mode);`
- `ReadDevice.RS485Config();`
- `ReadDevice.ETHERNETConfig();`

8. Above was declared each function present in this module, use them to create your code.

9. After configuring your module, use the following function to apply the configuration.

- `Novus.applyConfig();`

IMPORTANT: step 9 MUST be done after all configurations have been done.

10. NOVUS provides several examples you can open in **File > Examples > "Library"**.

11. More information see the user guide.