How To

• Upgrading IOMOD from firmware version 1 to firmware version 2

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To upgrade the firmware from version 1 to version 2, the user should first connect the IOMOD via a mini USB as required for IOMODs with older firmware. More information on how to set up an IOMOD device for USB configuration can be found in each IOMOD's manual for firmware version 1.

After primary configuration, IOMOD should be configured over PuTTy or other serial terminal programs. The IOMOD configuration interface should look something like in the picture below (each IOMOD's and protocol firmware's interface may vary):

۵	COM3 - PuTTY	_	\times
	- IOMOD Configure Terminal (IEC-103) (V1.8.7)		^
[1]	Link Address (1)		
[2]	Baudrate & bits(9600, 8+1) E Parity		
[3]	Data addressing config		
[4]	RS485 Terminating Resistor (Disabled)		
[5]	Input State Inversion		
[0]	Set Default Settings		
181	Firmware Upgrade		
[9]	Diagnostics screen		
[0]	Exit		
			\sim

Fig. 1.1. IOMOD configuration interface with Firmware version 1

Using a keyboard, select a [8] Firmware Upgrade and then confirm:





After confirming an error message will appear:

PuTTY Fatal Error	\times
Error reading from serial device	
ОК	

Fig. 1.3 Error message

However, this error message is to be ignored, because the mass storage window will pop up either way:



Fig. 1.4. Mass storage window with IOMOD firmware

Delete the existing file and upload a bootloader (drag and drop), which can be found at the end of this page. After this step, disconnect IOMOD from the USB and connect it again. For the next steps, an IOMOD Utility will be needed. IOMOD Utility software can be downloaded from the IOMODs downloads page. After opening IOMOD Utility, select the USB interface and communication port.

😵 lomod utility - New project					
Project Device Settings Extras Help					
interface: USB v communication port: COM3 v Password S	Scan devices				



If the communication port is available and selectable, next click on Scan Devices. A new device will appear on the left side of the IOMOD Utility window Devices.

🕼 Iomod utility - New project					
Project Device Settings Extras Help					
interface: USB 🗸	communication port: COM3 ∨ Password Scan devices				
Devices	General info Communication settings Iomod settings Diagnostics				
8DI4RO_0801B011	Device name				
	Link address				
	Device type				
	Firmware version				
	Chip uid				
Apply changes					
Remove selected					

Fig. 1.6 IOMOD Utility window with new device available

As can be seen in Fig. 1.6. the device name is shown in red background. Double-click on the device name. The Bootloader data window will open automatically. There is a button on the bottom of the window "**update device**".

🕼 Bootloader dat		_		×	
Bootloader versi				1.0.10	
Bloc		Bloc	k 2		
Active		Active			
Version	0.0.0	Version			0.0.0
Info	Not starting	Info		Not	starting
Switch		Switch			
update device					

Fig. 1.7. Bootloader data window

After clicking on it a file explorer will open. Select a valid firmware with version 2 and click open. A new firmware will start uploading:



🕼 Firmware update	—		×		
Sending fi	rmware				
			~		
Firmware update	_		^		
Firmware updated successfully					

Fig. 1.8. Firmware upgrading process

As seen in the picture above, after a successful firmware upgrade a message indicating that will show up on the screen. If the firmware is not valid, the upgrade was unsuccessful or other problems occurred, repeat the steps from the beginning with IOMOD Utility. After a successful upgrade, disconnect and connect the IOMOD again and click on Scan devices again. A new table will show up on the screen:

	Cevice assignment	_		×
Do you want to overwrite the current project or assign scaned devices to it?				
		assign	overwrit	te

Fig. 1.9. Device/project assignment window on IOMOD Utility

The "assign" button will assign the link address and other changes that have been made before. It is usually used when working with a project or specific parameters, but for configuring the IOMOD for the first time "overwrite" should be selected. After this step, the device name on the left side of the Utility window should not have a red background and can be configurable. Further steps on how to configure IOMODs can be found in each IOMOD or IOMOD utility manual.

Bootloader --> Download