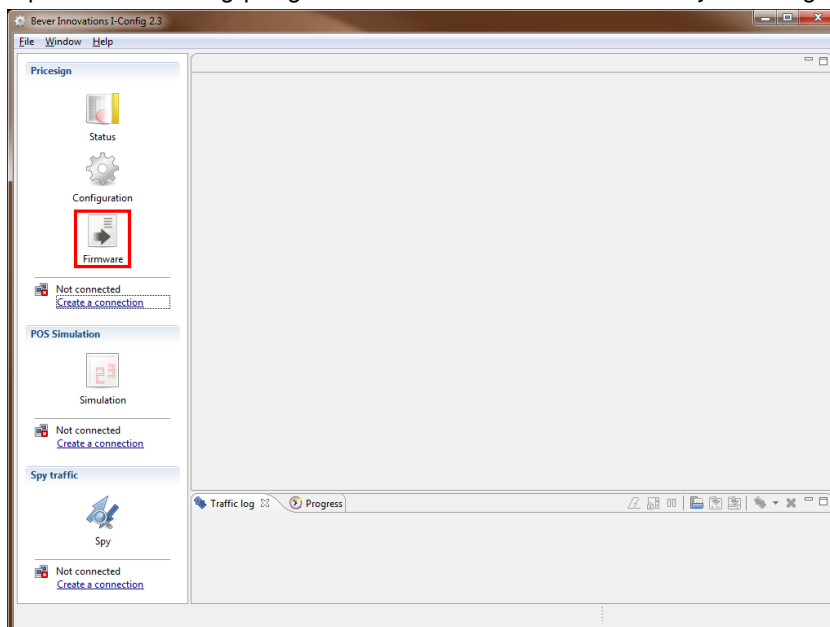# Upgrading Firmware and setup the Interface controller for Q8 protocol.

Needed Tools:
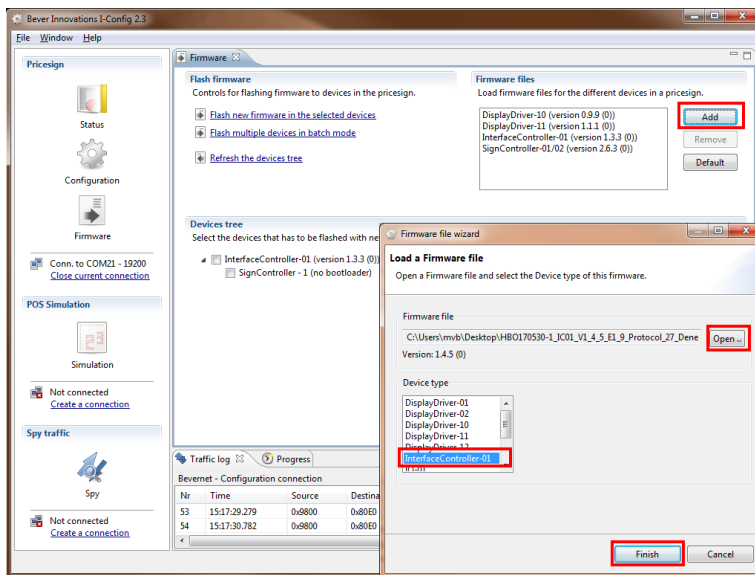
- Laptop
- HC02 config tool (2 pcs if possible)
- Spy testing cable RS485
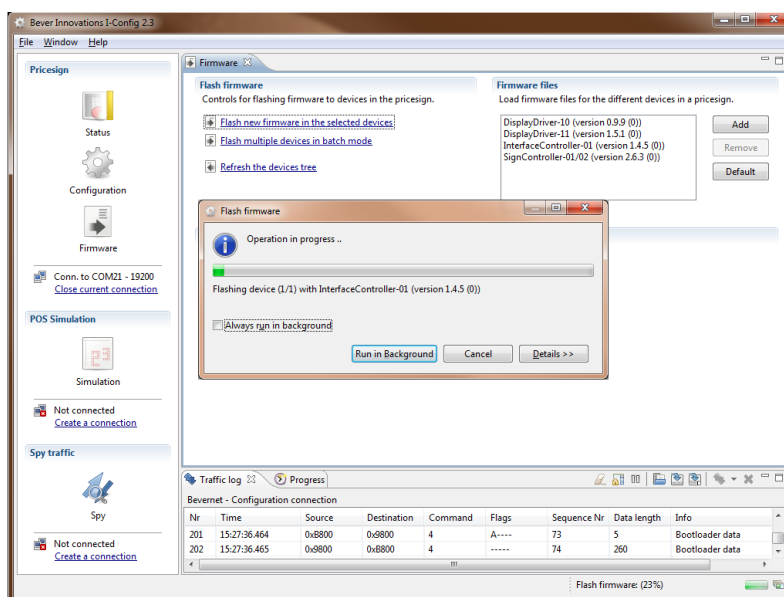- Files and programs downloaded from the Cloud

Step to follow:

1. Connect the configuration tool (hc02) to the interface controller and your laptop.
2. Open the I-Config program and create a connection by clicking on the Firmware icon.

3. An overview of the connected device will be showed in the bottom window. All available default Firmware versions can be found in the Right top corner.
4. Click on **"Add"** and a new window pops-up.
5. Click on **"Open"** go to the location on where you have saved the new firmware file that you downloaded earlier from the cloud.
6. Once Firmware file is selected, you need to select the correct device type "interfaceController-01"and click on Finish.

7. The test firmware version 1.4.5 will be added in the firmware release window replacing the default version 1.3.3.

8. Tick the box in front of the interface controller at Device tree and click on "Flash new firmware in the selected device. The I-Config program knows which file to use.

9. The Upgrade starts and progress is showed in an extra window.

10. Once the Firmware upgrade is finished you can click on the Configuration icon on the left side to open the configuration window so configuration of the interface controller can be adjusted. Please setup as below screenshots.

Bever Innovations I-Config 2.3

File   Window   Help

Pricesign

Status

Configuration

Firmware

Conn. to COM21 - 19200
Close current connection

POS Simulation

Simulation

Not connected
Create a connection

Spy traffic

Spy

Not connected
Create a connection

Firmware   Configuration ✕

Configure Device

InterfaceController-01 ▼   🔄 Refresh list

◀ Read configuration from device

⚙ Write configuration to device

Connected device: InterfaceController-01 (1.4.5 (0))

Configuration version: 1.9 (InterfaceController-01)

Configuration file

📂 Open configuration file

💾 Save configuration to file

File name: no file opened

Description:

Configuration

Contents of the configuration in the connected device.
Displayed version: 1.9 (InterfaceController-01)

Settings Options Prices LCD Display Extension SMS Settings

Protocol in settings		Protocol out settings	
Protocol	ℹ Protocol 27 ▼	Protocol	Bevernet (active) ▼
Baudrate	9600 ▼	Baudrate	default ▼
Channel	RS485 ▼	Channel	default ▼
Protocol Dot Position			
Protocol Price length			
Protocol Address			

Traffic log ✕

Bevernet - Configuration connection

Nr	Time	Source	Destination	Command	Flags	Sequence Nr	Data length	Info
1984	15:34:10.173	0x9800	0xB800	0	----F	75	0	
1985	15:34:10.184	0xB800	0x9800	0	A---F	75	0	
1986	15:34:10.209	0x9800	0xB800	0	A----	76	0	

Bever Innovations I-Config 2.3

File   Window   Help

Pricesign

Status

Configuration

Firmware

Conn. to COM21 - 19200
Close current connection

POS Simulation

Simulation

Not connected
Create a connection

Spy traffic

Spy

Not connected
Create a connection

Firmware   Configuration ✕

Configure Device

InterfaceController-01 ▼   🔄 Refresh list

◀ Read configuration from device

⚙ Write configuration to device

Connected device: InterfaceController-01 (1.4.5 (0))

Configuration version: 1.9 (InterfaceController-01)

Configuration file

📂 Open configuration file

💾 Save configuration to file

File name: no file opened

Description:

Configuration

Contents of the configuration in the connected device.
Displayed version: 1.9 (InterfaceController-01)

Settings Options Prices LCD Display Extension SMS Settings

Options
☑ Show prices at startup

Multiple Signcontrollers
☑ Enable Signcontroller 1
☐ Enable Signcontroller 2
☐ Enable Signcontroller 3
☐ Enable Signcontroller 4

Configure external device at startup
☑ Configure RF module
☐ Configure LON module (once)

RF module settings

Preset   Standard 1 (DT:0003 HF ▼)

LON module settings

Device address   0x0801 (default) ▼

Protocol version   1.16 (default) ▼

Traffic log ✕

Bevernet - Configuration connection

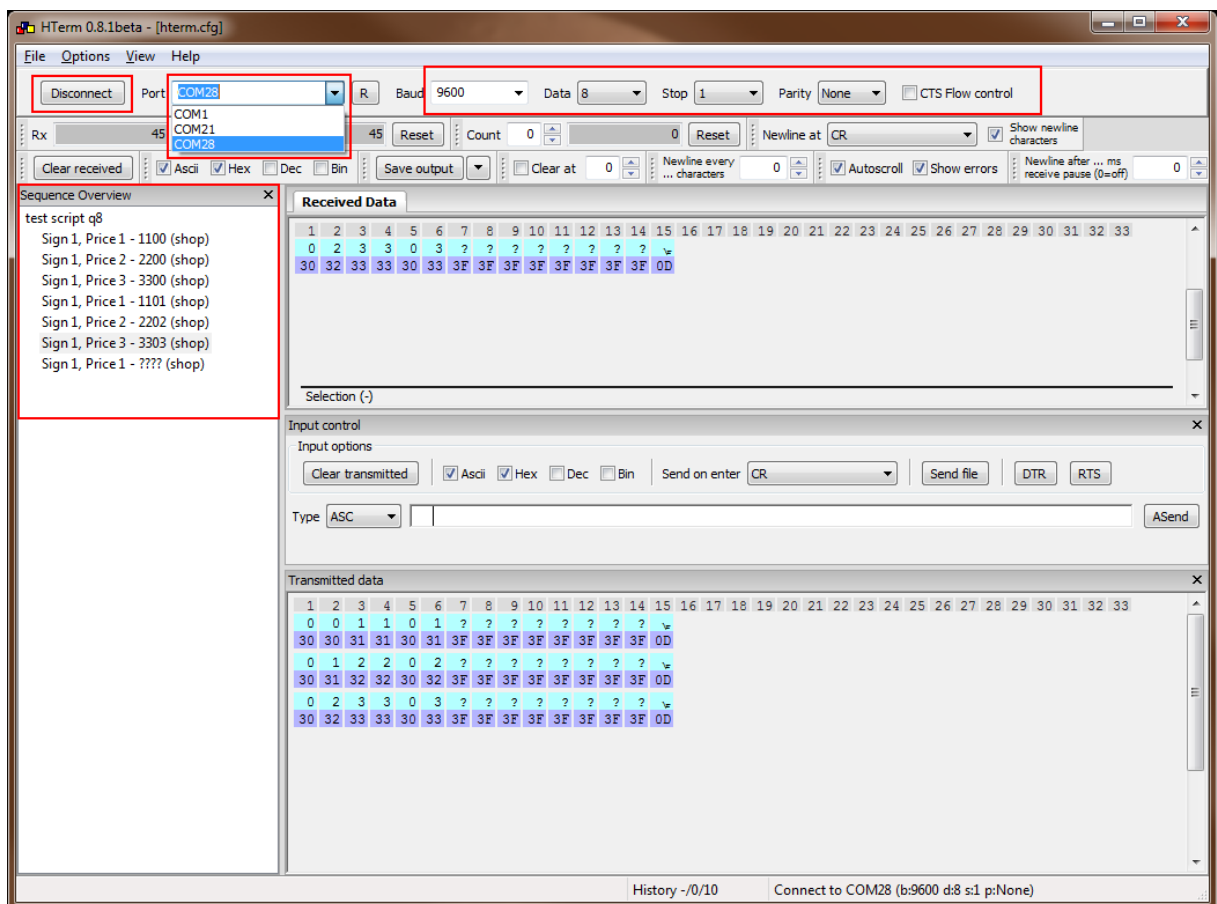| Nr	Time	Source	Destination	Command	Flags	Sequence Nr	Data length	Info
1984	15:34:10.173	0x9800	0xB800	0	----F	75	0	
1985	15:34:10.184	0xB800	0x9800	0	A---F	75	0	
1986	15:34:10.209	0x9800	0xB800	0	A----	76	0	

11. Once the adjustments have been made click on "Write configuration to device". All
settings will be written in the interface controller and the unit is ready to use.

Testing protocol

For testing the Protocol on the Interface Controller we will use the program Hterm which you
can download from the cloud location. If possible, connect the second HC02 tool to your
laptop. If not possible, close connection in the I-Config program so the Configuration tool is
available for use in Hterm.

1. Connect the Spy cable to the HC02 Tool
2. Connect the blue wire to pin 1 of the protocol connector (9pin) at the Interface
controller and create a wire bridge to pin 3.
3. Connect the blue-white wire to pin 2 of the connector, create a wire bridge to pin 4.

The program (Hterm.exe) can be started and should look like the image below (if version
from cloud is taken)

Theoretically the settings should be correct already, but please recheck and make sure the
Baud, data, stop and parity are exactly the same as above.

Select the correct comport number that corresponds with the HC02 configuration that you use for this and click on connect.

On the left side of the program there is a section called "sequence overview". Here I have made a script with preset price options. If you double click on the text line, A a data package will be send to the interface controller corresponding with the protocol. What is send can be seen below at the section "Transmitted Data".

Example:

Double click on "Sign 1, price 1 - 1100 (Shop)
If all is correct then Display 1 (Port 1 side 1 or 2), should come up with "1100"
Double click on "Sign 1, price 1 -???? (Shop)
This should result in Blanks on the first display. Only decimal remains ON.
The data package is build up as follow
In ASCI written

`001000????????<cr>`

`012222????????<cr>`

`023030????????<cr>`

`03????????????<cr>`

Result

`Sign 1, Price 1: 1000`

`Sign 1, Price 2: 2222`

`Sign 1, Price 3: 3030`

`Sign 1, Price 4:` ███ (blanks)

This means that behind Type "ACS" in section **input control** you can also send something else Manually.

For Example:

Fill in: `025656????????` and press Enter (don't click the button "Asend"). Hterm will add <CR> to it. Result:

`Sign 1, Price 3: 5656`.