

**G20 OEM Modem**  
**Flashing with PClloader**

<b>Date</b>	<b>Version</b>	<b>Comment</b>	<b>Done by</b>
2006-01-10	1.0	First release	Marek Niekrawietz

Following tools are needed to upgrade g20 with PClloader

1. PClloader
2. RS232 cabel
3. Motorola EVB or adapter board with RS232
4. Flex file & Firmware file
5. Combine file = 1FF file (Firmware & Flex)

To upgrade g20 with PClloader please follow the below instructions:

1. (\*)Install the PC Loader application on your PC
2. Connect the PC with the g20/ g20+EVB using RS232 cable.
3. Activate the PC Loader application program.
4. (\*)Set up the serial communication parameters.
5. Check PC-g20 EVB/Target board serial communication.
6. Select a SW version file/ configuration file/ or a combination of both to be downloaded.
7. Perform actual download.
8. Verify download log and status.

**Step 1 (\*) - Installing the PC Loader application on your PC.**

1. Confirm you have the "Pcl\_Install.exe" file. N2CS Help Desk, either by the Installation CD or by other electronic means, provides the needed file.
2. To install the "PC loader" double click on the file "Pcl\_Install.exe".
3. Follow the instructions displayed by the installation wizard.

**Step 2 - Connecting the PC with the g20 EVB/Target board**

1. Connect an RS232 cable from the PC to the g20 EVB or g20 RS232 (Configuration A or B).

**Note** – If the g20 unit communication baud rate is already set to one of following:  
19200, 38400,

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- 57600, 115200 bps or auto baud rate detect mode, you can skip the following step.
2. Before starting the programming procedure use the AT+IPR=9 AT command to set the g20 for auto baud rate detection.
  3. Confirm that under the operation filed the message “Serial Connection Established” appears.

#### Step 3 – Activate the PC Loader application

A full PC downloading procedure takes about 15 minutes when using the 115200 bps baud rate.

1. Run “Pcl.exe” file to start the PC Loader application and open the main window see Figure 2.

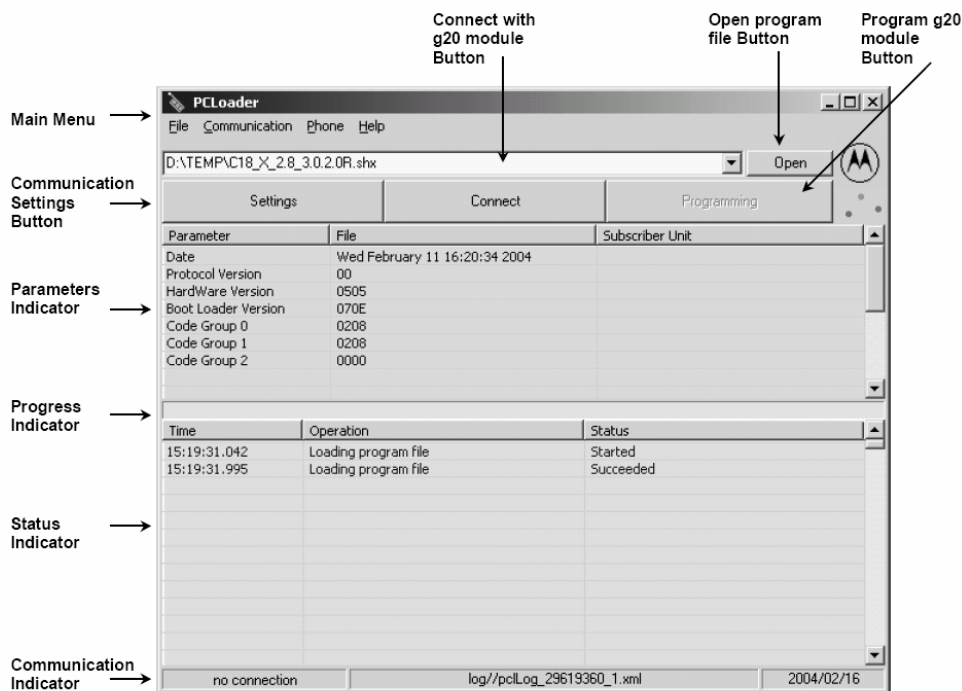


Figure 1 – PC Loader Main window

#### Step 4 - (\*) Setting serial communication parameters.

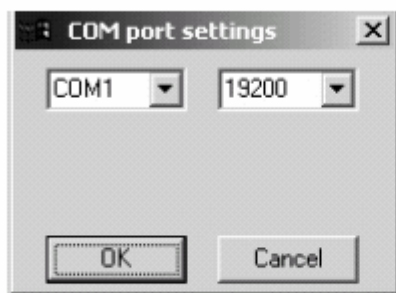
PC loader saves the file name (including the path) that was last downloaded, as well as the serial communication settings. This allows the application to start with the parameters from the last

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session, when available.

To select the COM port settings perform the following steps:

1. Press “Settings” button on the Main window see Figure 1 – PC Loader Main window:
2. Select the PC COM port that connects the g20 (COM1 in Figure 2 - COM port settings



**Figure 2 - COM port settings**

3. If required, access the Port Settings window to configure the PC port and communication baud rate.
4. The COM port and baud rate shown on the “Settings” window are the same as were used in previous programming session. If no previous session exists, the following default parameters will be shown and used:

- Port:** COM1
- Baud rate:** 19200

**Note:** Other communication parameters are set in following state and cannot be changed:

- Data bits: 8
- Start bits: 1
- Stop bits: 1
- Parity: None
- Flow control: None

### **Step 5 - Checking PC-g20 EVB/Target board serial communication.**

1. Click the “Connect” button to establish the connection with the g20 unit.
2. The PC Loader will attempt to establish communication with the g20 unit.

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3. Confirm the result of establishing connection – the results appear on the status List field –

see Figure 3 - Main window - Result and status.

**G20/C18 – PC loader application documentation**

g20 PC Loader.doc

#### **Step 6 - Selecting a file to download.**

1. Press the “OPEN” button.
2. Browse to choose the file you want to download, use the filter (type of file) for easy selection if needed.

The three types of files that can be downloaded are:

- Module Firmware update
- Module Configuration update
- Combined Firmware update

All three types end with an .shx.

Note: In order to have the option to update the g20 (applies to g20 only) with a configuration

file or with a combined firmware file, g20 should first be updated with SW 0C.04.44R SW

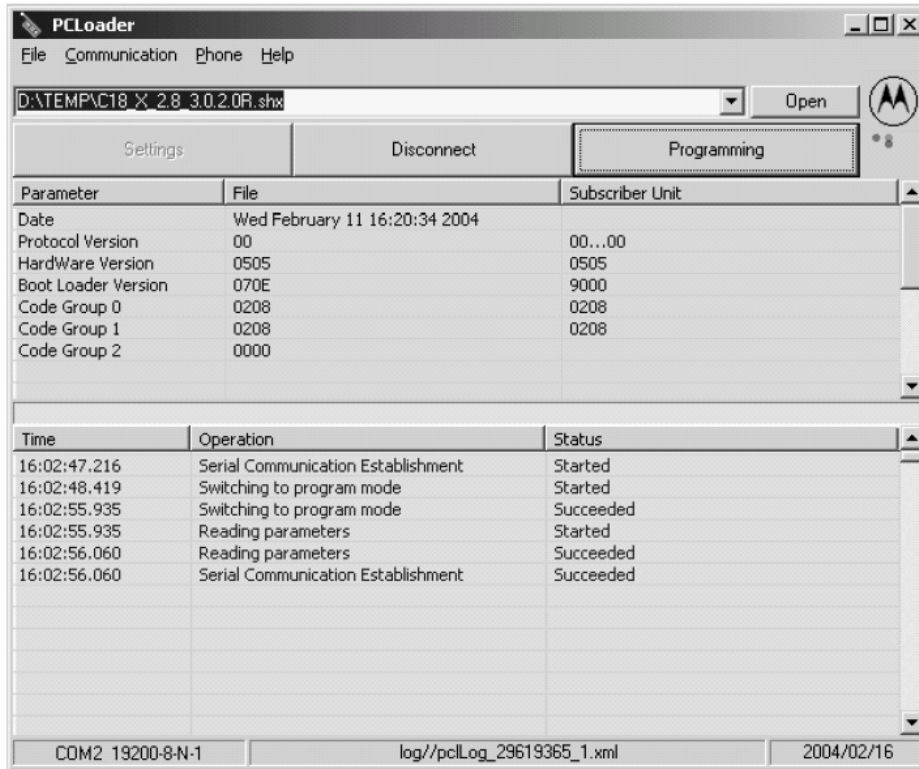
Combined example is G208\_G\_0C.04.58R\_LP0001\_GCEG202001NA017\_1FF.shx.

3. Press the “OPEN” button to select the chosen file.
4. A pop up window will appear so you can confirm you chose the wanted type of file to download.
5. Verify that the file prompt in the file window is the selected one.

#### **Step 7 - Perform actual download.**

1. Press the “Programming” button on the Figure 1 – PC Loader Main window.
2. Wait for the process finish. During the programming process, the operation statuses and results appear on the status List field – see Figure 3 - Main window - Result and status.

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**Figure 3 - Main window - Result and status**

#### Step 8 - Verify download log and status

The PC Loader stores the operational status and results of every execute operation in a Log file.

The log file is placed in the same directory in which the data logger program installed. The following parameters are stored:

- Operation name.
- Start operation time.
- End Operation time.
- Operation result.

When programming is finished – Baud rate is set to 115200 bps.

The example of the LOG file is represented on Figure 4 - Example of a PC loader log file.

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2004/02/16	16:02:47.216	Serial Communication Establishment	STARTED
	16:02:48.419	Switching to program mode	STARTED
	16:02:55.935	Switching to program mode	SUCCEEDED
	16:02:55.935	Reading parameters	STARTED
	16:02:56.060	Reading parameters	SUCCEEDED
	16:02:56.060	Serial Communication Establishment	SUCCEEDED

**Figure 4 - Example of a PC loader log file**

Note 1 All reference to g20 applies to c18 unless otherwise noted

Note 2 Pclloader is supplied in a zipped file. Unzip the file in a directory and then click on

setup.exe to install the pclloader application on your PC.