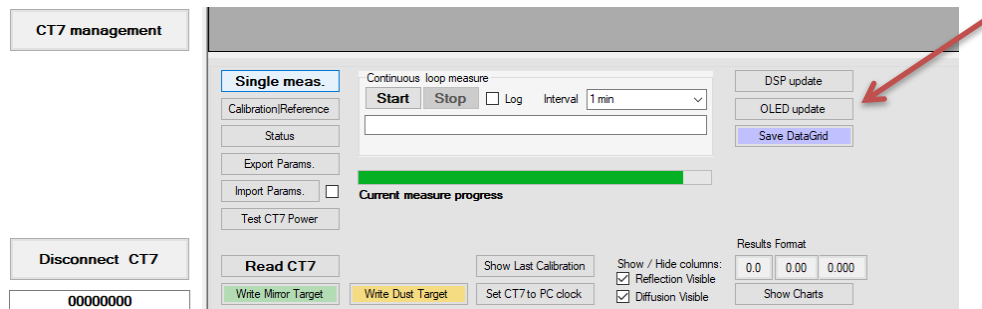


### 1.1.1 CT7 OLED display firmware update

CT7 main processing and control is managed by a DSP processor who receives orders either from PC (CT7Console), or from the CT7 OLED display in a stand-alone mode. The OLED display includes small processor busy with drawing menus and sending commands to DSP who does most of the work.

### 1.1.2 OLED update Procedure

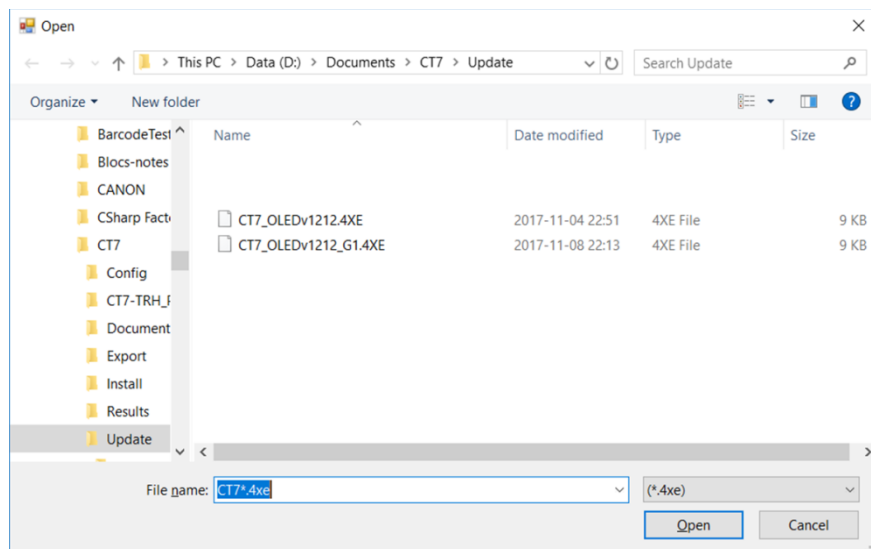


CT7 console has no built-in routine to upload OLED firmware, in place of this the Console generates and executes a batch file who calls OLED firmware loader (SCRIPT.EXE) with selected firmware file and actual COM port.

1. Make function button visible by changing CT7 Console operating mode to Advanced or Expert (*About* panel)
2. Connect CT7 to Console
3. At *CT7 Management* panel press UPDATE OLED button
4. You are prompted for selection of the firmware file from folder CT7\UPDATE\OLED. Select firmware file: CT7\_v1213.4xe ( or another .4xe file if newer version was downloaded)
5. A Windows command window will open, where you may follow the progress of the process.
6. CT7 will freeze, than display will become black during upload
7. After the update, the display will show CT7 welcome screen and freeze.
8. End the procedure by switching CT7 off (RESET button) and restarting it.
9. You may check the new version in the CT7 menu **FACTORY/VERSION**

### 1.1.3 OLED Display update explained

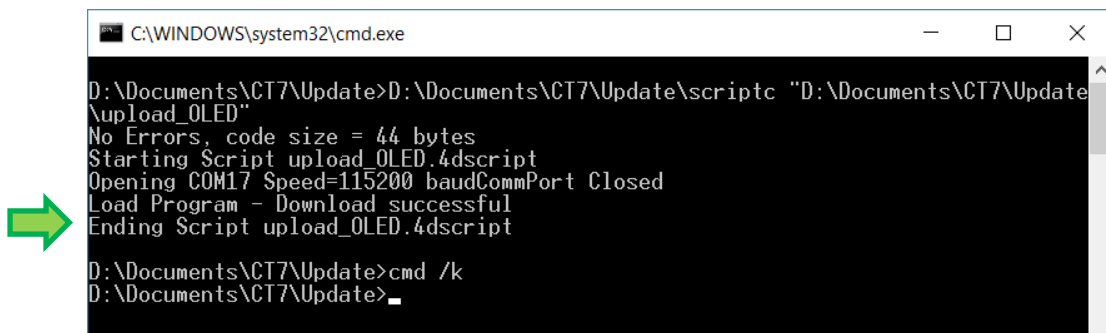
1. Place received or downloaded upgrade in the folder CT7\UPDATE\OLED
2. Folder CT7\UPDATE\OLED shall contain SCRIPT.EXE file (actual uploader)
3. (before c 2.1.07) Make CT7 Management panel-UPLOAD OLED function button visible by changing CT7 Console operating mode to Advanced or Expert (on the *About* panel)
4. Connect CT7 to Console
5. At *CT7 Management* panel press UPDATE OLED button
6. You are prompted for selection of the firmware file from folder CT7\UPDATE\OLED. Select firmware file: CT7\_v1601.4xe ( or another .4xe file if newer version was downloaded)



7. A Windows command window will open, where you may follow the progress of the process.

If the process goes without problems the CMD window will look like this (note green lines) :

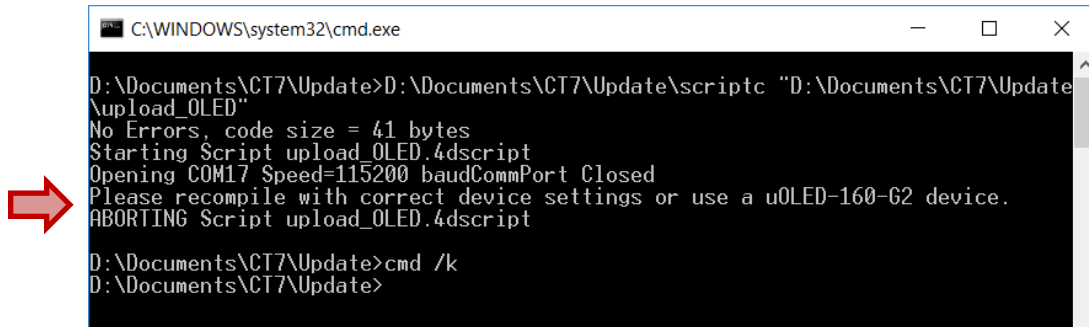
```
D:\Documents\CT7\Update>D:\Documents\CT7\Update\scriptc "D:\Documents\CT7\Update\upload_OLED"
No Errors, code size = 44 bytes
Starting Script upload_OLED.4dscrip
Opening COM17 Speed=115200 baudCommPort Closed
Load Program - Download successful
Ending Script upload_OLED.4dscrip
D:\Documents\CT7\Update>cmd /k
D:\Documents\CT7\Update>
```



In case of problems, you will find "ABORTING Script" message

```
D:\Documents\CT7\Update>D:\Documents\CT7\Update\scriptc "D:\Documents\CT7\Update\upload_OLED"
No Errors, code size = 41 bytes
Starting Script upload_OLED.4dscrip
Opening COM17 Speed=115200 baudCommPort Closed
Please recompile with correct device settings or use a uOLED-160-G2 device.
ABORTING Script upload_OLED.4dscrip
```

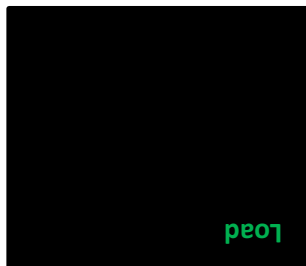
```
D:\Documents\CT7\Update>cmd /k
D:\Documents\CT7\Update>
```



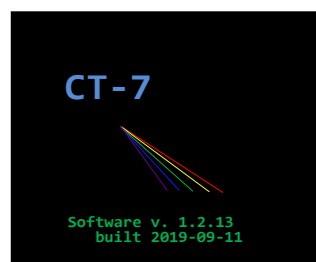
```
C:\WINDOWS\system32\cmd.exe
D:\Documents\CT7\Update>D:\Documents\CT7\Update\scriptc "D:\Documents\CT7\Update\upload_OLED"
No Errors, code size = 41 bytes
Starting Script upload_OLED.4dscrip
Opening COM17 Speed=115200 baudCommPort Closed
Please recompile with correct device settings or use a uOLED-160-G2 device.
ABORTING Script upload_OLED.4dscrip
D:\Documents\CT7\Update>cmd /k
D:\Documents\CT7\Update>
```

The source of such problem is that there are two generations of OLED display installed in CT7, called : G0 and G1. If you encounter such error, just try another firmware file .4xe provided.

8. CT7 will freeze, than display will become black during upload



9. After the update, the display will show CT7 welcome screen and freeze.



10. End the procedure by switching CT7 off (RESET button) and restarting it.

#### 1.1.4 OLED Firmware upload verification:

Select FACTORY / Version option from menu:



Verify OLED software version:

