

# User manual for ML2000

## Configuration and upgrading

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### 3 Configuration and upgrading

This chapter describes how to configure the ML2000 system in order to achieve correct system behaviour. A description of the process for upgrading the software in the display unit (DU) and target controller unit (CU) is also included.

The procedures for installing, configuring and upgrading the PC software are described in a separate chapter.

#### 3.1 Configuration of display unit

Refer to the document “User manual for ML2000 – Display Unit” for a description of how to set up and configure the display unit.

The most important is that the system administrator configures the display units with correct lane numbers and marks the units with labels. Each segment should have one display unit set up as master.

#### 3.2 Configuration of target units

##### 3.2.1 Introduction

The controller units are almost identical for all target models. Since all controllers use the same software it is necessary to configure all units with vital sensor data and assigning lane numbers. This configuration is usually done in production before delivery or directly after installation by the user. Since this information is stored in rewriteable permanent memory it is not necessary to repeat the process. The only exceptions are:

- Target units are moved to other lane numbers (e.g. borrowing units from other ML2000 users)
- Defect units are replaced
- Some software releases might require reconfiguration (this is usually not necessary)

NB! We configure all target units before delivery. Even the lane number is usually assigned and the targets are numbered according to this. If this number can't be located, or the targets are set up differently, the lane numbers must be reassigned.

##### 3.2.2 Assigning lane number

The following procedure is used to prepare setting ID on the target units with use of a display unit:

1. Disconnect the data line between shooting stand and target connection cabinet. This can easily be done by unplugging the LINE IN connector.
2. Bring a display unit (preferably the master unit) to the target connection cabinet and connect it into the connector marked MONITOR.
3. Power on the monitor.
4. Select **Menu** → **System Settings...** → **Advanced** → **Set Target ID** (Password value = 3).

The master monitor can set target ID for all targets.

**IMPORTANT:** Make sure that ONLY ONE target is connected when you set the target's ID otherwise all targets will receive the same ID number. They must be connected and set one-at-a-time. Use the long cable from the cabinet to the target unit and verify that the other outlet on the target is left unconnected!

### 3.2.3 Configuration of targets by using display units

Each target can be configured from the display unit with the same lane number (ID). This can be done from the shooting stand.

- Select **Menu** → **System Settings...** → **Advanced** → **Target Config.** (Password value = 3).

The parameters can be changed as described in the document "User manual for ML2000 – Display Unit".

### 3.2.4 Configuring target lift

- Select **Menu** → **System Settings...** → **Lift adjust.**

See the document "User manual for ML2000 – Display Unit" for more information.

NB! Only the master monitor can be used to adjust the lifts.

### 3.2.5 Configuring LED lamp intensity

- Select **Menu** → **System Settings...** → **Lamp adjustment.**

See the document "User manual for ML2000 – Display Unit" for more information.

NB! This adjustment can be done more easily from the MLRange software.

### 3.3 Upgrading software – PC

#### 3.3.1 Fetch files on the internet

- Access <http://www.Megalink.no> and select English.
- Select Downloads and ML2000 Setup files in the menu.
- Download the newest ML2000 Setup (Ver.XX.XX) file. Save to disk or USB flash drive.

The setup file contains all the software needed on your range (MLRange, MLRes, MLView).

#### 3.3.2 Installation at the shooting range

- Run the MLSetupXXXX.exe file from your disk or USB flash drive.
- You will be prompted to select what application to install:



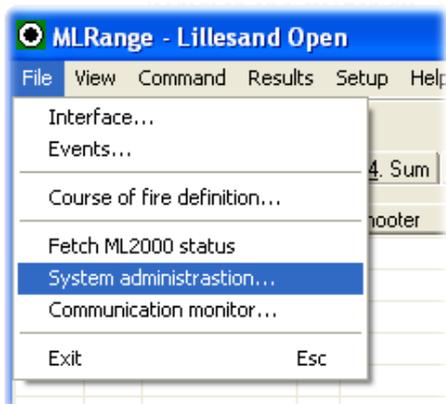
- It is strongly recommended that you install the software in the C:\Megalink folder as suggested.

### 3.4 Upgrading software – Hardware

The system administration dialog in MLRange is used to upgrade targets and monitors.

#### 3.4.1 Starting the System administration

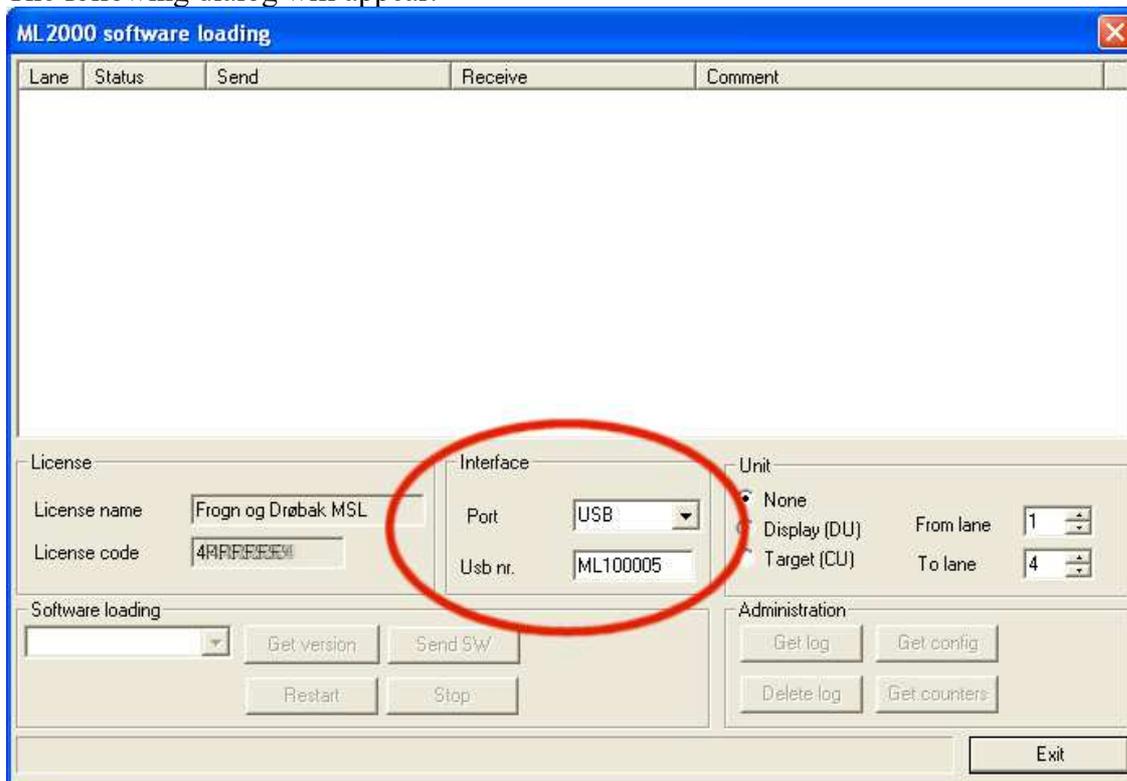
- Start MLRange with the PC/USB-adaptor connected. Select “System administration” in the “File” menu.



- Enter the password value “3”. This will prevent anyone to unintentionally enter the System administration.



- The following dialog will appear:



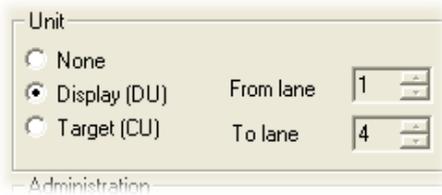
In the “Interface” section please select the correct communication port. If an USB adapter is used enter the serial number printed on top off the adapter.

### 3.4.2 Upgrade the display units color version (DU3)

Upgrading the color monitor is accomplished with any standard USB flash drive.

The software is located in two files enclosed in the MLRange installation. If these files are missing in the installation please download the MLSetup package with DU3 software from [www.megalink.no](http://www.megalink.no).

- Start System administration on the PC via MLRange.
- In the “Unit” section select the range of targets you want to work with. Then select the radio button labeled “Display (DU)”.

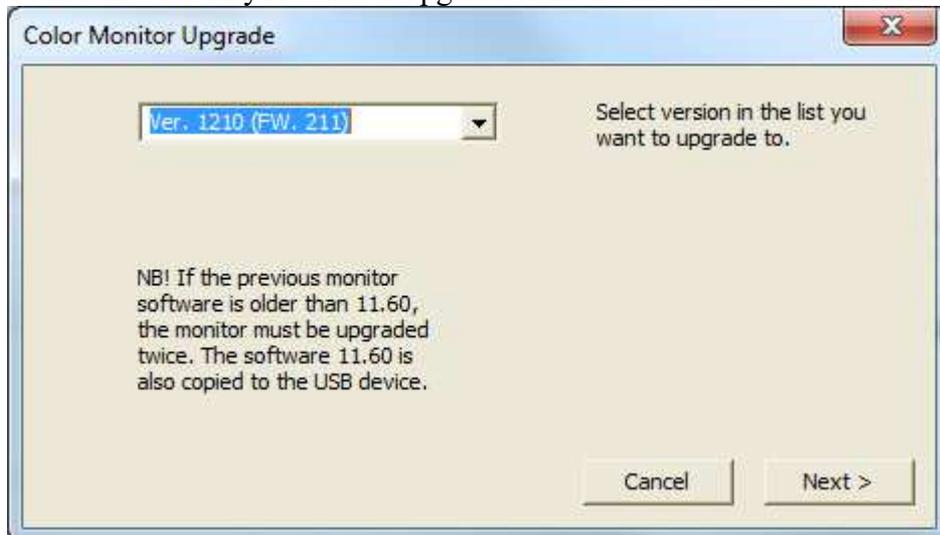


- Press the button "Color Monitor Update". The monitors will enter USB upgrade mode.



If the monitors are not connected to a PC this mode can be selected manually. On the monitor select: **Menu** → **System Setup** → **Advanced** → **USB Upgrade**. Remember that to access the advanced system settings you need a password and that the default password is the number **3**.

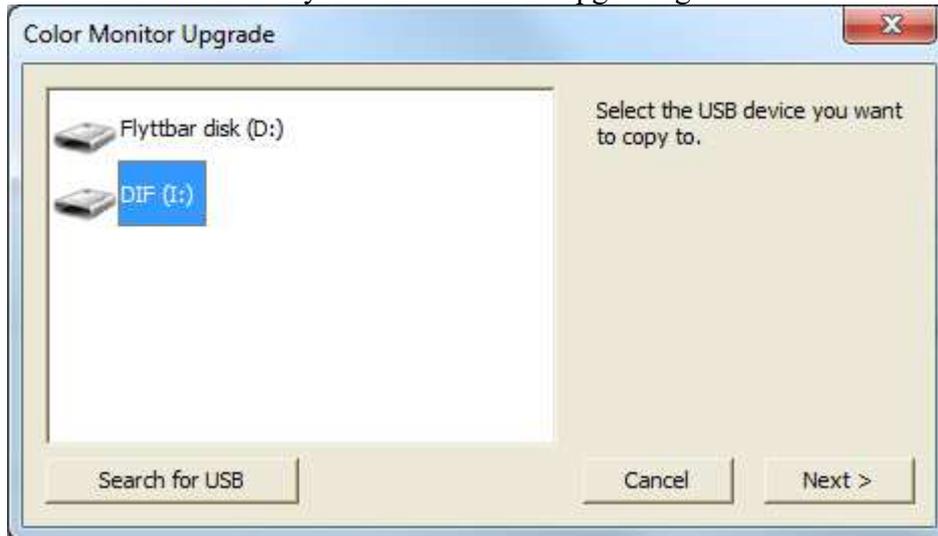
- Select the version you want to upgrade to in the list. The newest version is already selected.



*The number marked FW is the version number of the operation system. If the operation system file is missing, please check that the required version already is present on the monitor. (**Meny** → **System Setup** → **System Status**).*

- Press the **Next >** button.

- Select the USB device you want to use for upgrading.

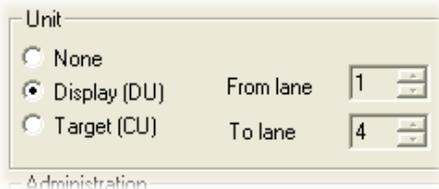


*If the USB device is not present, press **Search for USB**.*

- Press the **Next >** button.
- Wait for the copy to finish. The USB flash drive is then ready for use on the monitor. Place the drive in one of the available USB sockets on the back side of the monitor. The monitor will restart after upgrade is finished.

### 3.4.3 Upgrade the display units black and white version (DU2)

- When upgrading the display units, connect the PC/USB-adaptor to the outlet marked PC-ADAPTER in the shooting stand cabinet.
- NB! Avoid power failure during the upgrading process. In unlucky circumstances you might need to send the equipment to service after such events.
- Start System administration on the PC. Stop all other programs on the PC and don't work with the PC during the upgrading process.
- In the "Unit" section select the range of targets you want to work with. Then select the radio button labeled "Display (DU)".



- All the lines with lane numbers should be in steady Ready state. If this is not the case, do not start the upgrading until the problem is fixed.

ML2000 software loading				
Lane	Status	Send	Receive	Comment
1	Ready			5.50 31.12.2005
2	Ready			5.50 31.12.2005
3	Ready			5.50 31.12.2005
4	Ready			5.50 31.12.2005

- In "Software loading" select the version you want to upgrade to. Highest number is newest.



Then press the button "Send SW". Check that system administration asks for upgrading to the version you expect. After this confirmation system administration start the upgrading process. Wait for this process to finish (approximately 3-6 minutes).

- When the upgrading is finished the displays will self-restart. You will then see this picture:

ML2000 software loading				
Lane	Status	Send	Receive	Comment
1	Ready	Upgrade finished		6.31 09.06.2006
2	Ready	Upgrade finished		6.31 09.06.2006
3	Ready	Upgrade finished		6.31 09.06.2006
4	Ready	Upgrade finished		6.31 09.06.2006

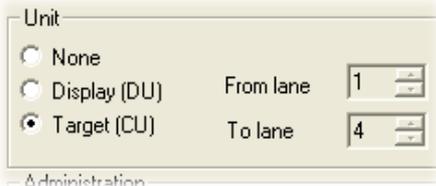
Its important that it says "Upgrade finished" in all the lines. If this does not happen within 1 minute after the last block has been sent or the system halts for over a minute, you can try to push the "Send SW" button again. Do **not turn off the power or push the "Restart" button** in this situation.

- Verify that all units have the right version.

If you have a problem with the version number or upgrading, call the Megalink support phone.

### 3.4.4 Upgrade the target controller unit (CU)

- When upgrading the target controller units, connect the PC/USB-adaptor to the outlet marked BYPASS REPEATER OR UPGRADE TARGET in the shooting stand cabinet. Disconnect all the display units.
- NB! Avoid power failure during the upgrading process. In unlucky circumstances you might need to send the equipment to service after such events.
- Start System administration on the PC. Stop all other programs on the PC and don't work with the PC during the upgrading process.
- In the "Unit" section select the range of targets you want to work with. Then select the radio button labeled "Target (CU)".



- All the lines with lane numbers should be in steady Ready state. If this is not the case, do not start the upgrading until the problem is fixed.

ML 2000 software loading				
Lane	Status	Send	Receive	Comment
1	Ready			5.50 31.12.2005
2	Ready			5.50 31.12.2005
3	Ready			5.50 31.12.2005
4	Ready			5.50 31.12.2005

- In "Software loading" select the version you want to upgrade to. Highest number is newest.



Then press the button "Send Program". Check that system administration asks for upgrading to the version you expect. After this confirmation system administration start the upgrading process. Wait for this process to finish (approximately 3-5 minutes).

- When the upgrading is finished the controller units will self-restart. You will then see this picture:

ML2000 software loading				
Lane	Status	Send	Receive	Comment
1	Ready	Upgrade finished		6.34 09.06.2006
2	Ready	Upgrade finished		6.34 09.06.2006
3	Ready	Upgrade finished		6.34 09.06.2006
4	Ready	Upgrade finished		6.34 09.06.2006

It's important that it says "Upgrade finished" in all the lines. If this does not happen within 1 minute after the last block has been sent or the system halts for over a minute, you can try to push the "Send SW" button again. Do not turn off the power or push the "Restart" button in this situation.

- Verify that all units have the right version.

If you have a problem with the version number or upgrading, call the Megalink support phone.

### 3.4.5 Upgrade target lift (TL)

- The newest generation target lift can be software upgraded.
- When upgrading the target lift, connect the PC/USB-adapter to the outlet marked **BYPASS REPEATER OR UPGRADE TARGET** in the shooting stand cabinet. Disconnect all the display units.
- NB! Avoid power failure during the upgrading process. In unlucky circumstances you might need to send the equipment to service after such events.
- Start System administration on the PC. Stop all other programs on the PC and don't work with the PC during the upgrading process.
- In the "Unit" section select the range of targets you want to work with. Then select the radio button labeled "Equipment (BF,FH,TL)".



Unit

None  
 Display (DU)  
 Target (CU)  
 Equipment (BF,FH,TL)

From lane: 1

To lane: 10

- All the lines with lane numbers should be in steady Ready state. If this is not the case, do not start the upgrading until the problem is fixed.

ML2000 software loading				
Lane	Status	Send	Receive	Comment
1	Ready			SW=19.24.01 HW=1 V=26.7 Last run: Vavg= 0.0 Iavg= 0.0 Imax= 0.0

- In "Software loading" select the version you want to upgrade to. Highest number is newest.

Software updating

Language: EN

Software: TL-v1925

Buttons: Get version, Send program, Restart, Stop

Then press the button "Send Program". Check that system administration asks for upgrading to the version you expect. After this confirmation system administration start the upgrading process. Wait for this process to finish (approximately 2-3 minutes).

- When the upgrading is finished the target lift will self-restart. You will then see this picture:

ML2000 software loading				
Lane	Status	Send	Receive	Comment
1	Ready	Upgrade finished		SW=19.25 HW=1 V=23.9 Last run: Vavg= 0.0 Iavg= 0.0 Imax= 0.0

It's important that it says "Upgrade finished" in all the lines. If this does not happen within 1 minute after the last block has been sent or the system halts for over a minute, you can try to push the "Send Program" button again. Do not turn off the power or push the "Restart" button in this situation.

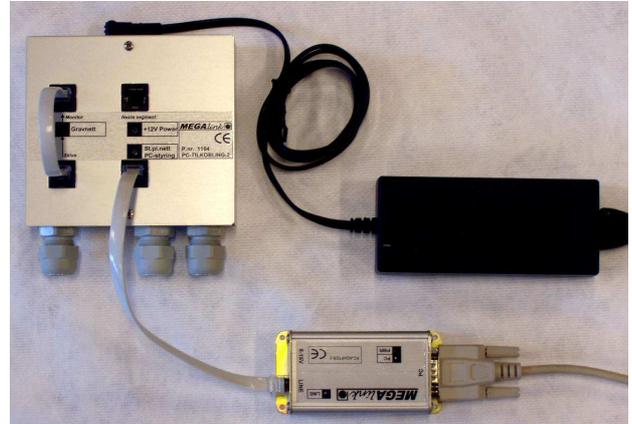
- Verify that all target lifts have the right version.

If you have a problem with the version number or upgrading, call the Megalink support phone.

### 3.4.6 Upgrading with old equipment

#### 3.4.6.1 Display units

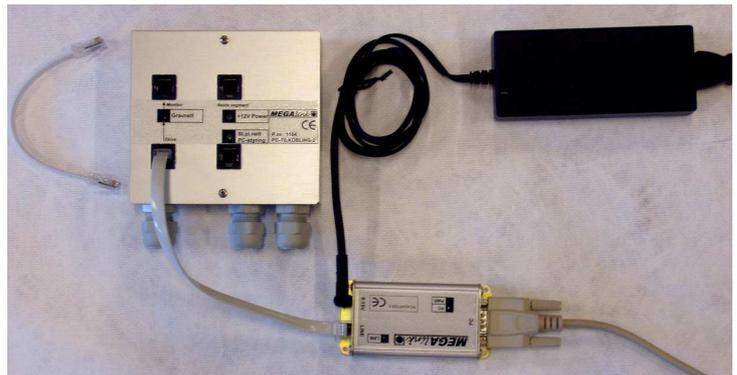
When upgrading the display units, the PC-adapter should be connected to the ordinary outlet in the PC-connector box (lower right outlet marked: “St.pl.nett”).



Upgrading the display units

#### 3.4.6.2 Target controller units

Connect the PC-adapter to the target network. This is the lower left outlet on the PC-connection box. Remember that you need external power for the PC-adapter in this position. Disconnect all the display units.



Upgrading the target controller units