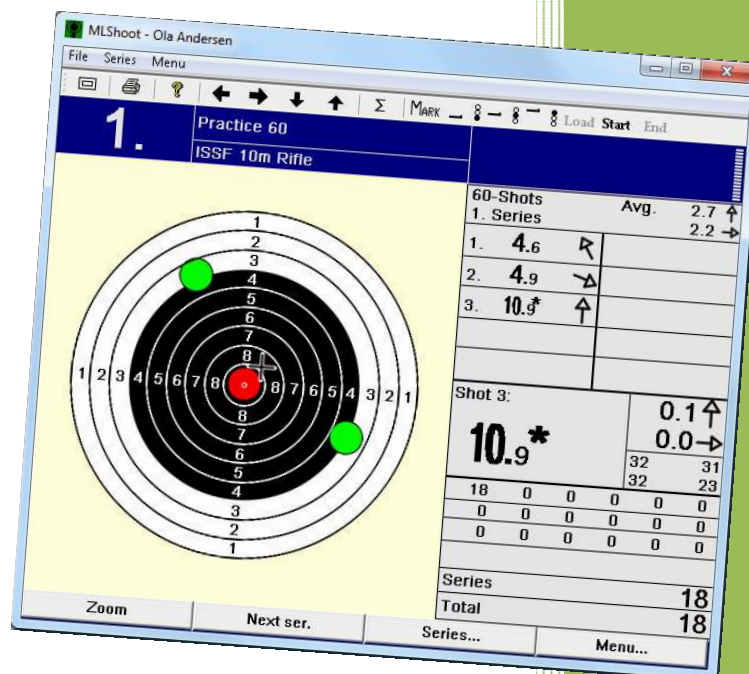


# 2011

## User Manual for ML2000 PC based personal target



Megalink AS  
V11.52



# User Manual for ML2000

## PC based personal target

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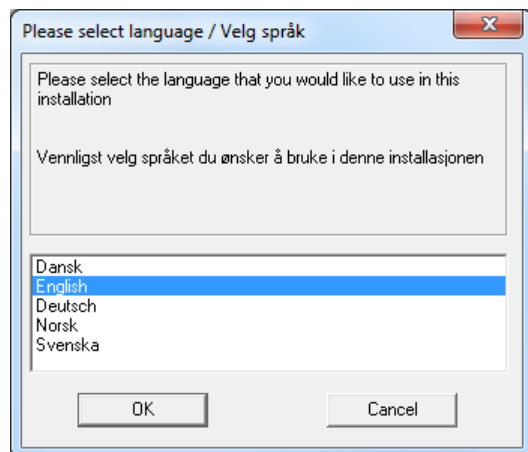
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**NB: Read the manual carefully when  
installing the USB drivers!**

## 1 MLShoot installation

Start MLShoot11xxSetup\_Win7 or MLShoot11xxSetup\_WinXp. (Located at the enclosed CD-ROM, memory stick or downloaded from [www.megalink.no](http://www.megalink.no))

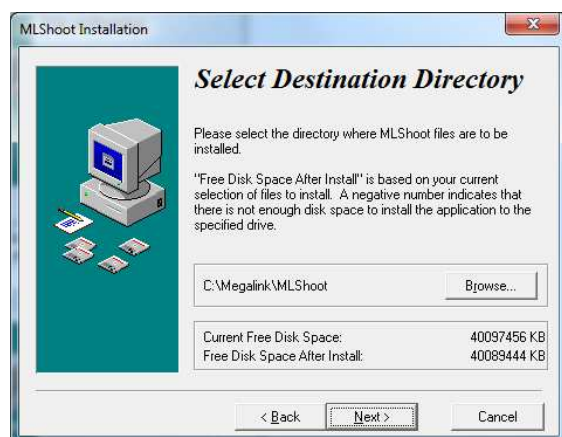
**Do NOT insert the USB adapter or the Hasp key before installing MLShoot**



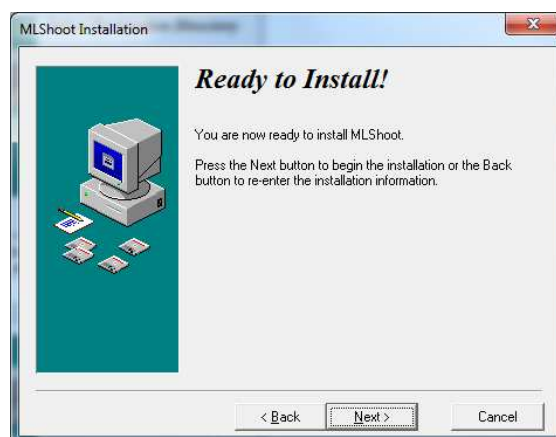
Select the language to use during the installation.



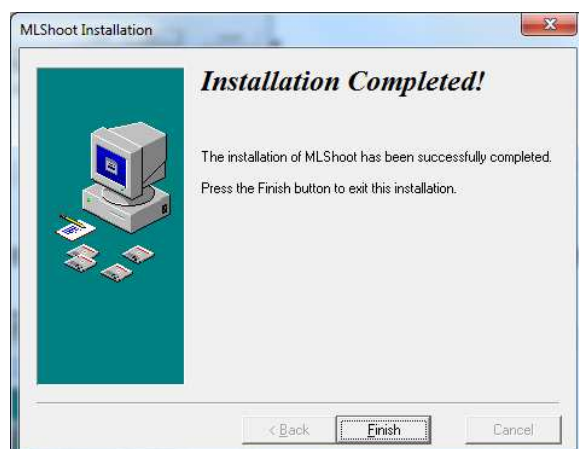
Press **Next**.



Select the directory where MLShoot files are to be installed.



Press **Next**. The installation may take several minutes.



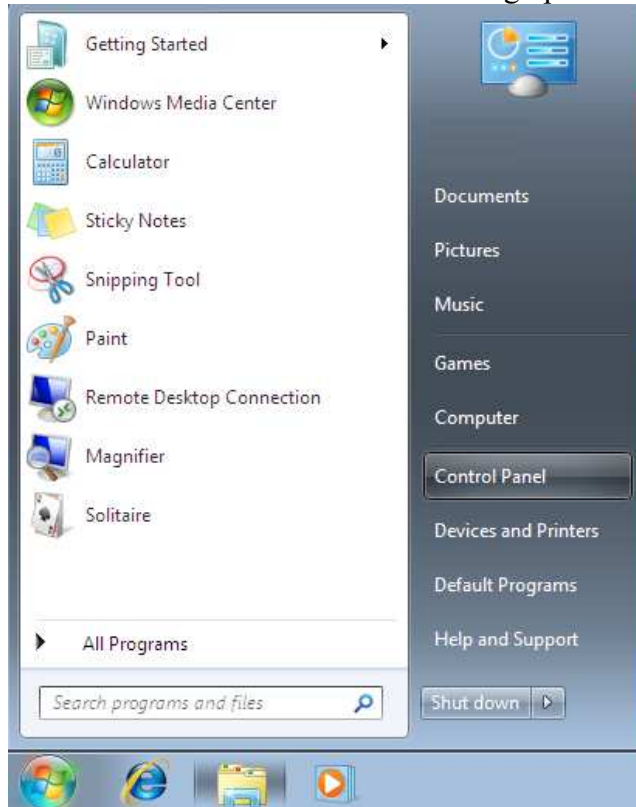
Press the **Finish** button to exit the installation. Proceed to the installation of the USB adapter.

## 2 Installing the USB adapter

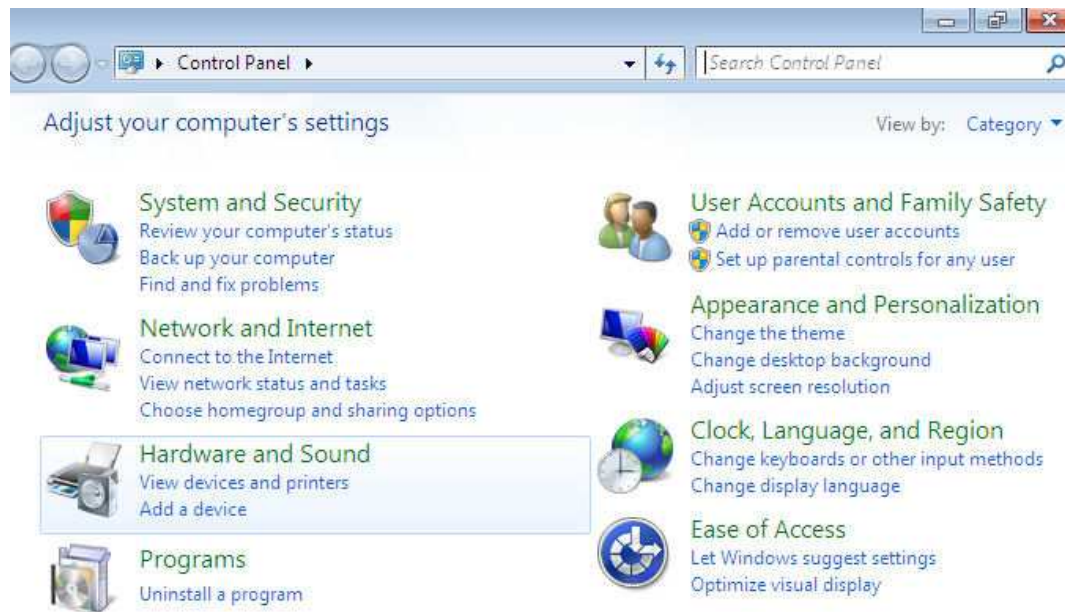
### 2.1 Windows 7

Before you begin, close all active applications running on your computer, including MLShoot. Connect the USB adapter to the computer using the enclosed USB cable. It's strongly recommended that the computer is **not connected to the Internet** during the install. The dialogs are expected to change depending on the Windows 7 version installed.

Press the Windows Start button to bring up the start menu and select “**Control Panel**”.



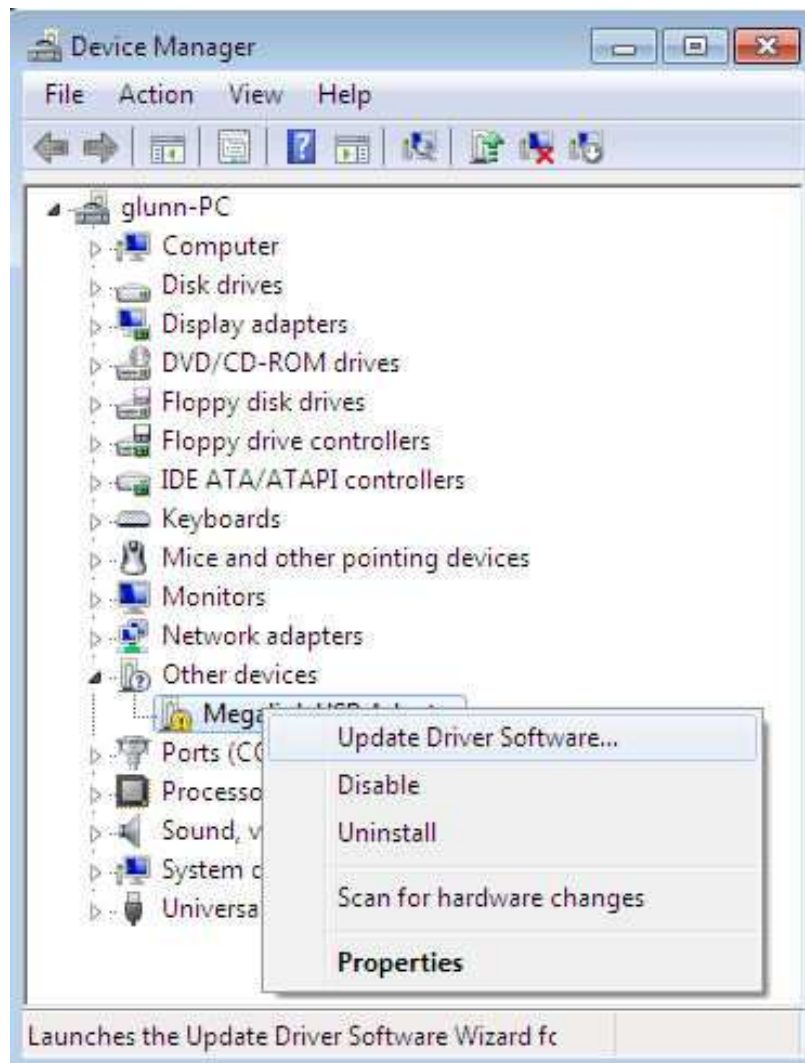
From the Control Panel window select **Hardware and Sound**.



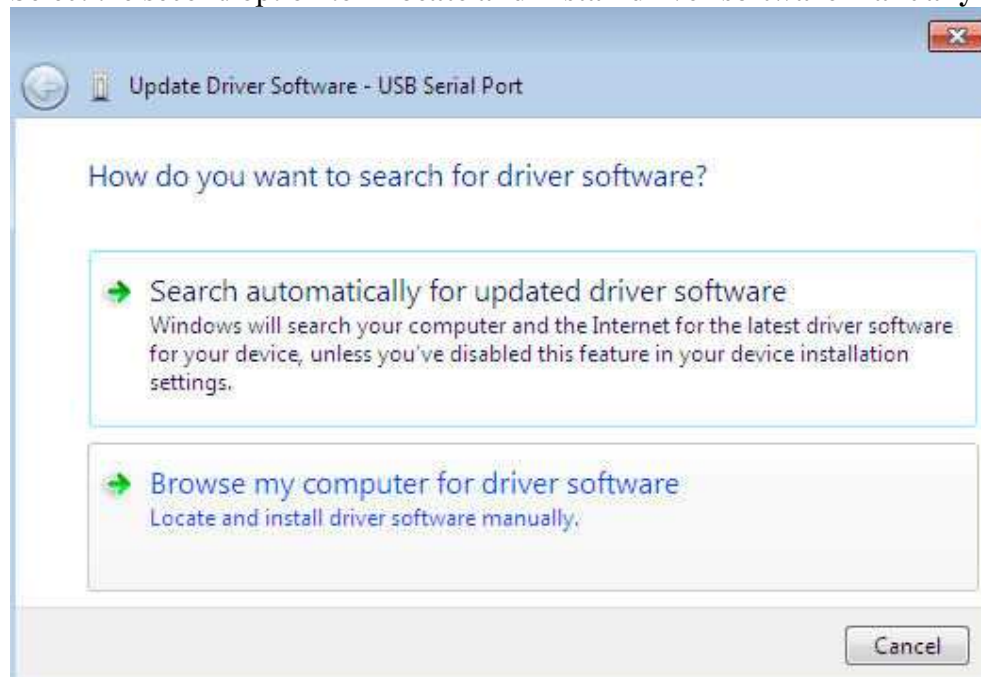
At the next screen select Device Manager:



In the Device Manager Window there will be a device called “**Megalink USB Adapter**” under Other Devices with a yellow warning symbol. Right click on the device and select “**Update Driver Software**”.



Select the second option to **“Locate and install driver software manually”**.





In the address box put the exact location where the drivers have been saved to. Typical “C:\Megalink\MLShoot”. Select “**Next**” to start the installation.

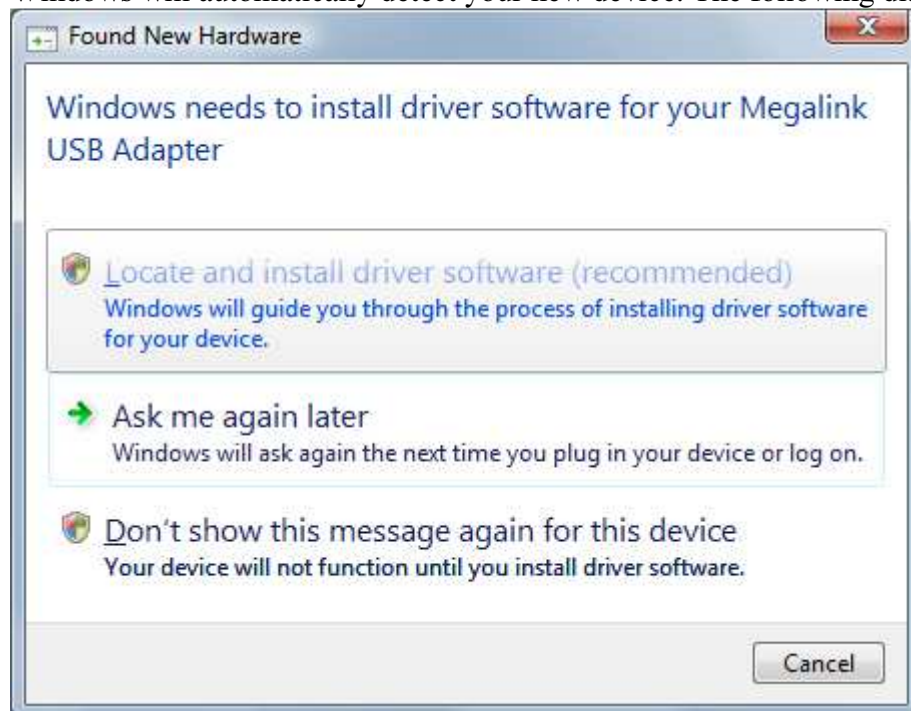


MLShoot can now be started.

## 2.2 Windows Vista

Before you begin, close all active applications running on your computer, including MLShoot. Connect the USB adapter to the computer using the enclosed USB cable. It's strongly recommended that the computer is **not connected to the Internet** during the install. The dialogs are expected to change depending on the Vista version installed.

Windows will automatically detect your new device. The following dialog will appear:

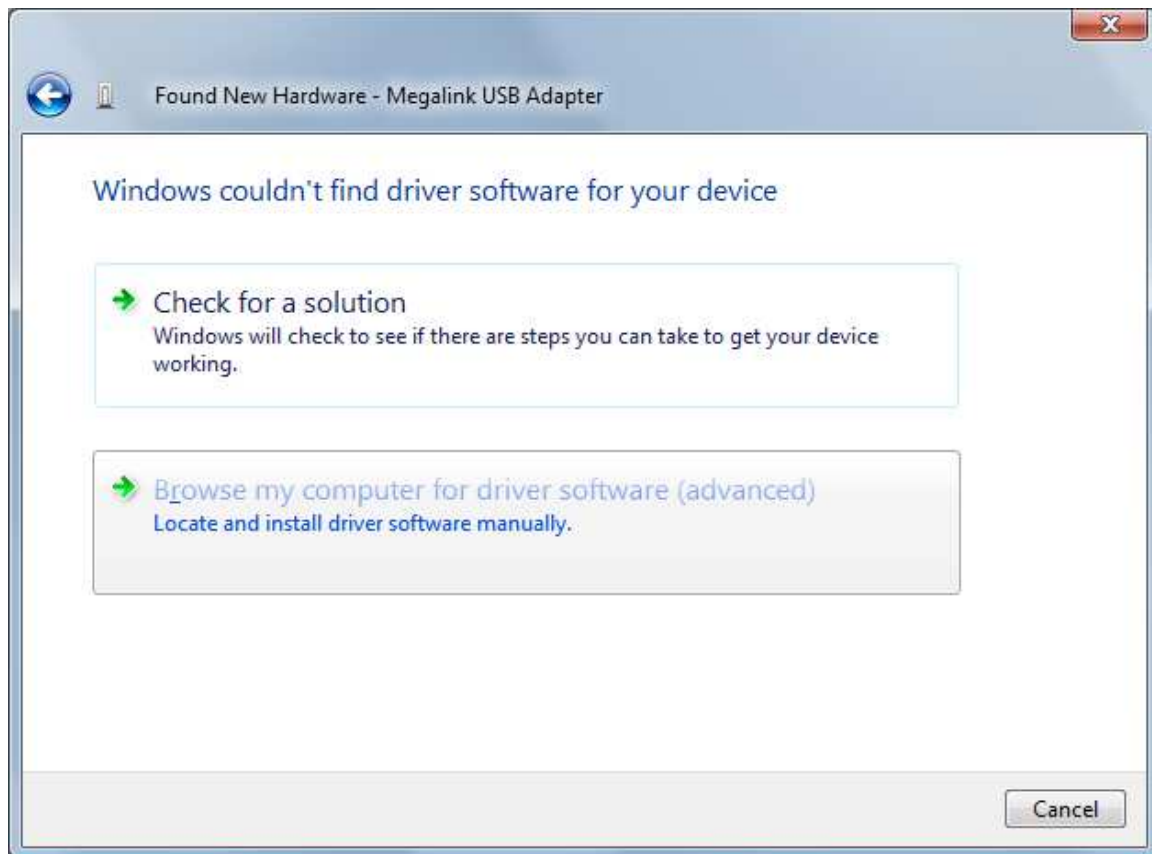


Select **Locate and install driver software**.

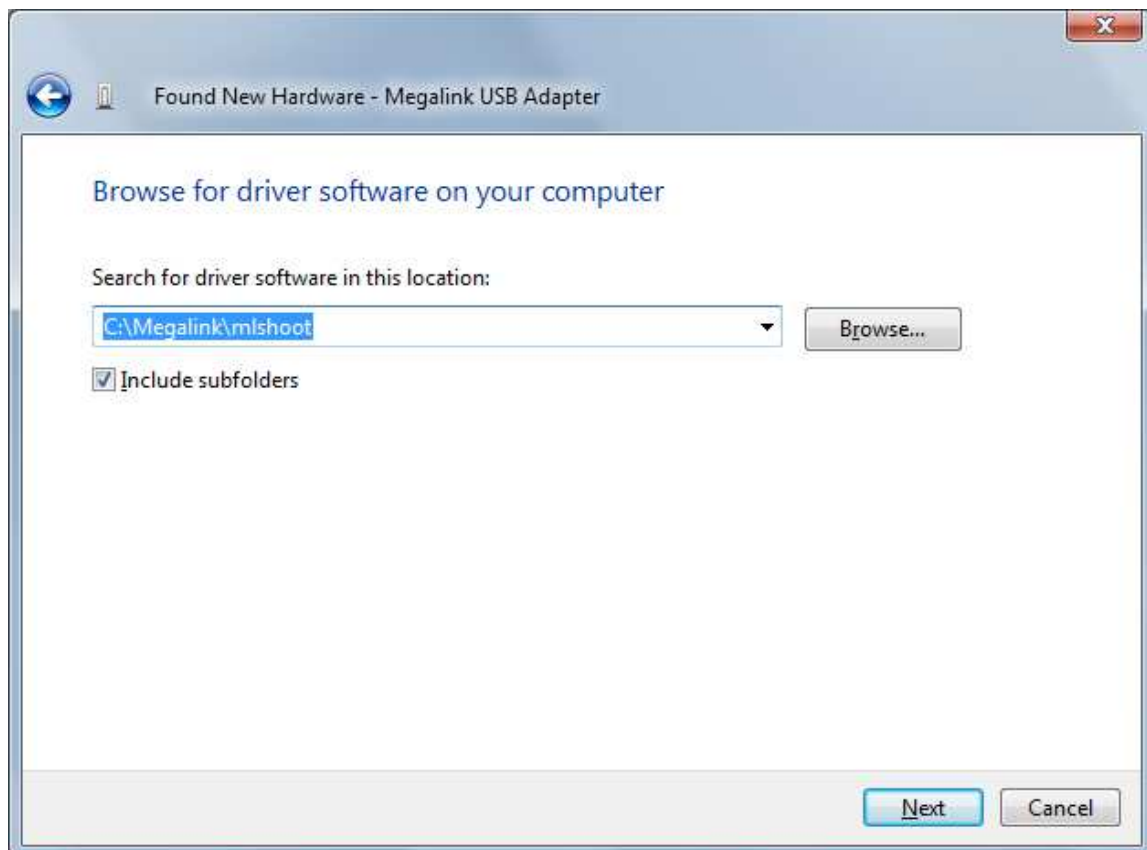


Select **I don't have the disc. Show me other options**.

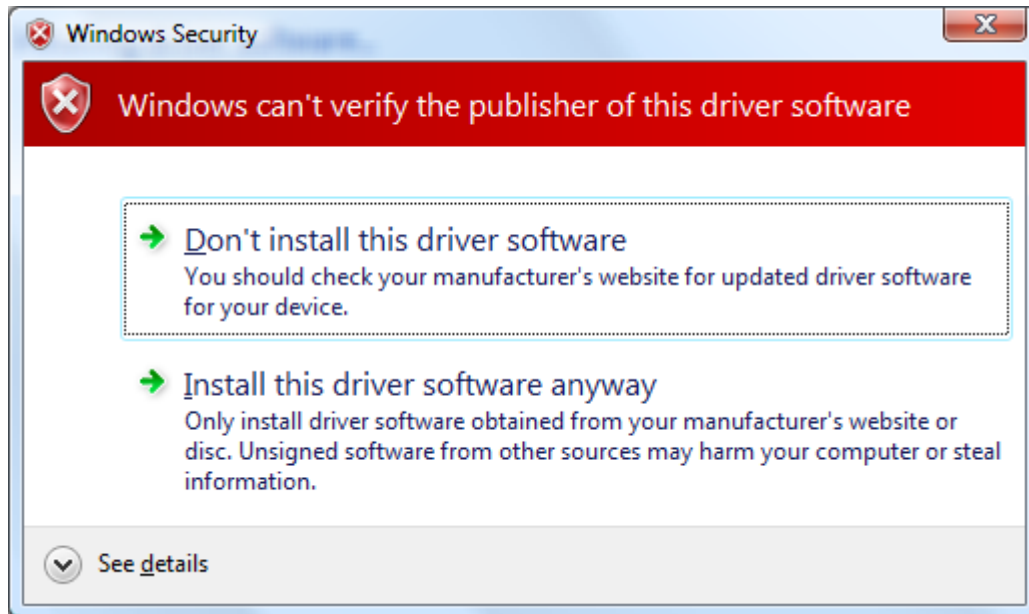




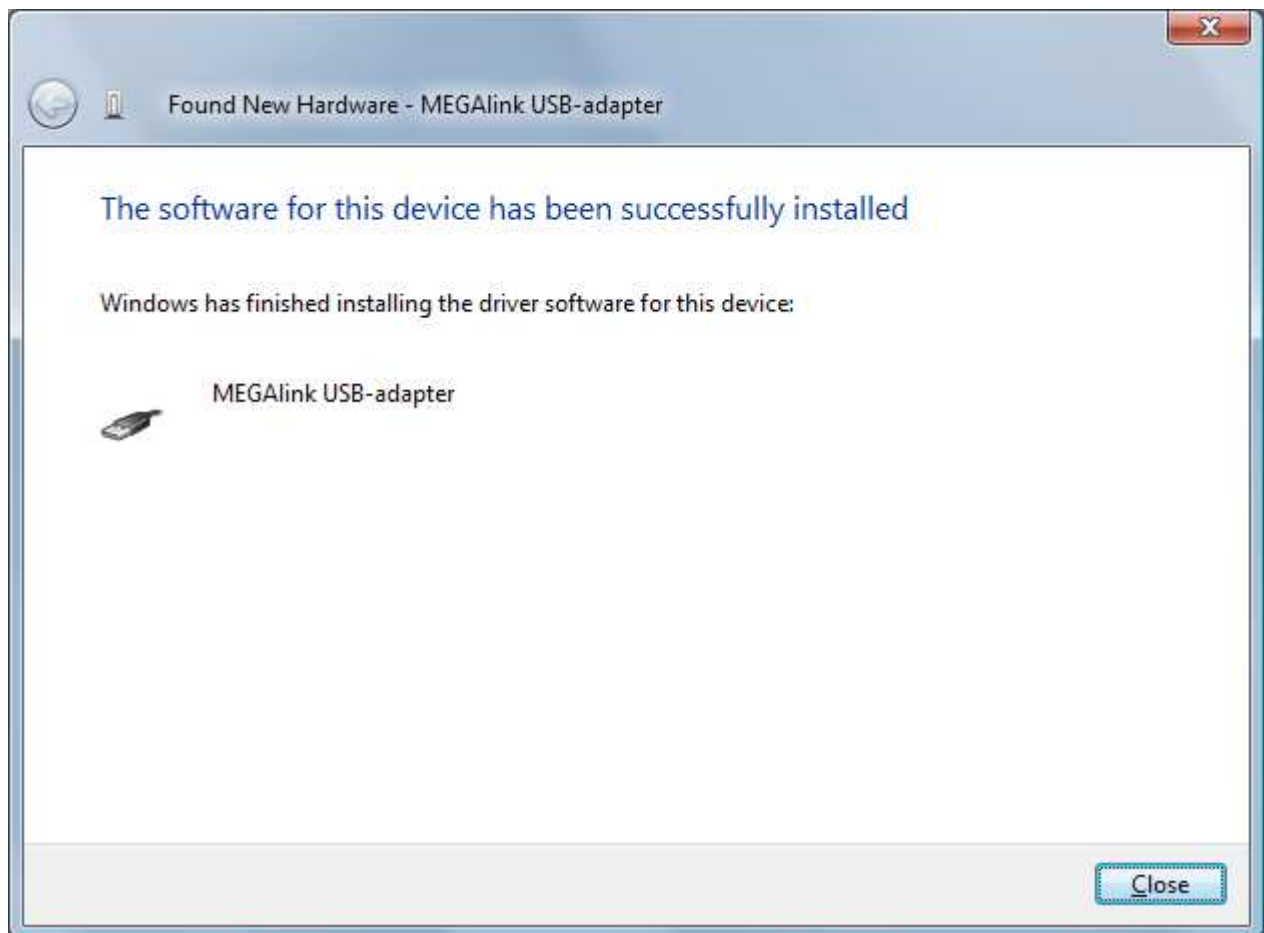
Select **Browse my computer for driver software (advanced)**.



Browse to the folder MLShoot is located. (Typical **C:\Megalink\MLShoot**)  
Then press **N**ext >.



Select **Install driver software anyway**.



Please wait while the required files are copied. The press **Close**.

You can now start MLRange.

## 2.3 Windows XP, 2000

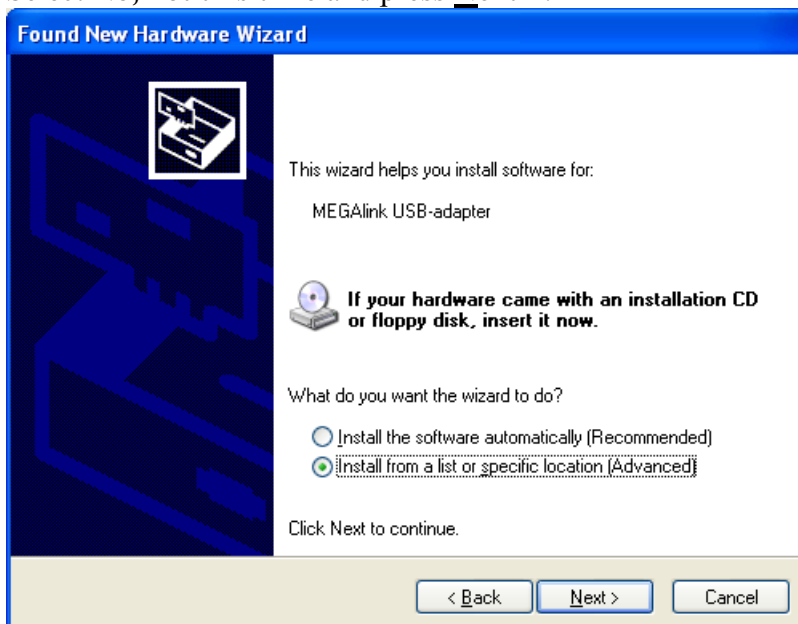
Before you begin, close all active applications running on your computer, including MLShoot. Connect the USB adapter to the computer using the enclosed USB cable.

Windows will automatically detect your new device. The following dialog will appear:

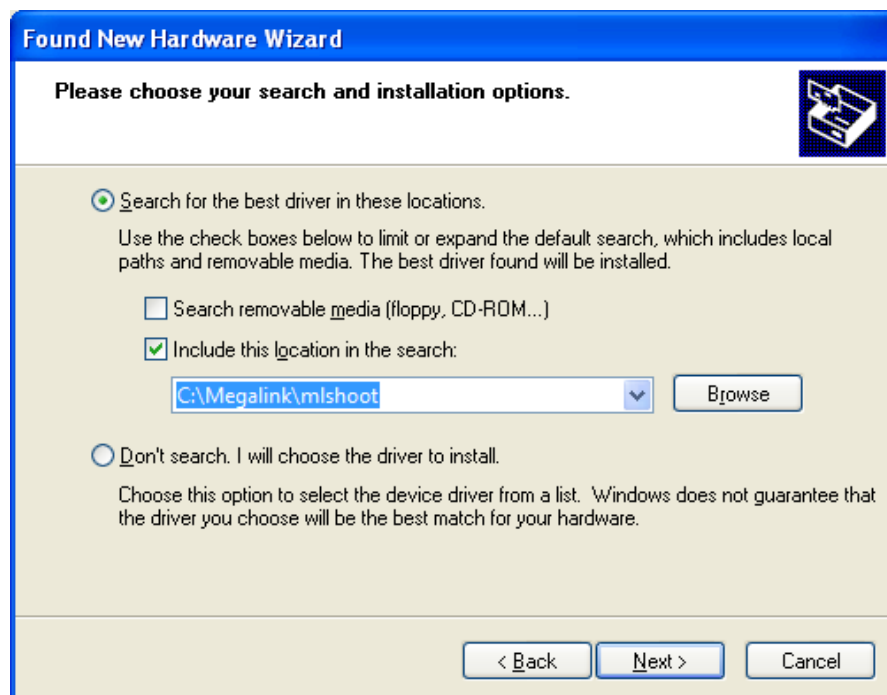
Warning: Windows should under no circumstances install the drivers automatically.



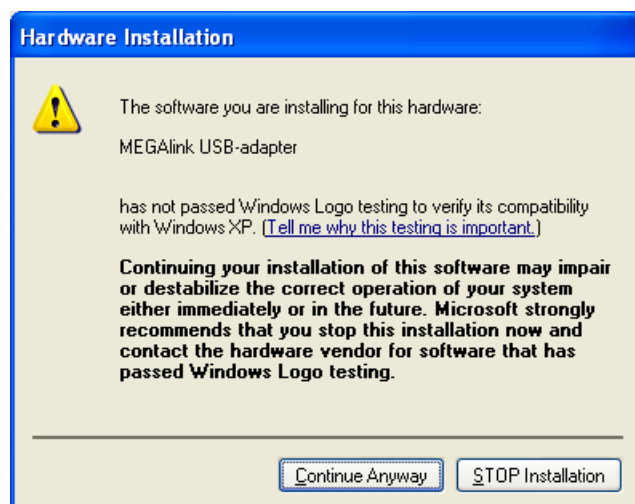
Select **No, not this time** and press **Next >**.



Select **Install from a list or specific location (Advanced)** and press **Next >**.



Select **Search for the best driver in these locations.** and enable ONLY **Include this location in the search:**. Browse to the folder MLShoot is located. Then press **Next >**.



Select **Continue Anyway.**

Please wait while the required files are copied.



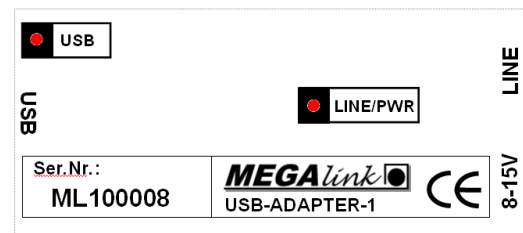
The driver installation is completed. Press **Finish**.

You can now start MLShoot.

## 2.4 USB status LEDs

Two LEDs are mounted on the adapter.

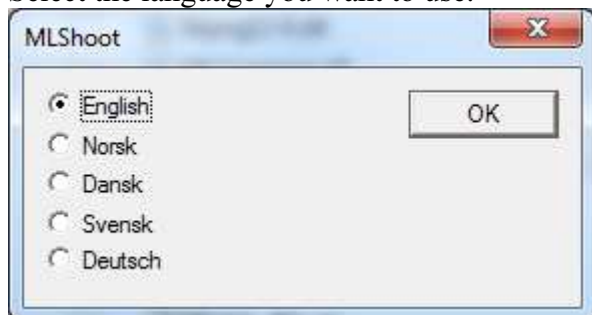
- **USB:** The LED is blinking every 5 second and for each message as long as the communication is working correctly. The connection can be tested by sending a command from MLRange.
- **LINE/PWR:** The LED lights when the adapter is powered. The LED is blinking when it communicates with ML2000.



### 3 Startin MLShoot for the first time

Start MLshoot. Use the shortcut on your desktop or start C:\Megalink\MLShoot\MLShoot.exe.

Select the language you want to use.



Select the language in the list and press OK. This can be changed later.

Next step is to select which USB adapter that is used between MLShoot and the target.



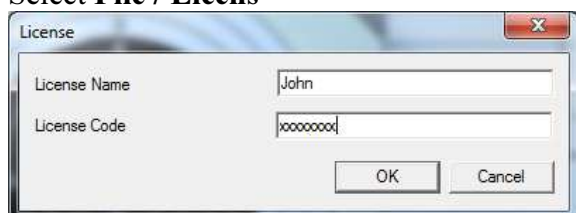
The serialnumber is written on the USB adapter. If none is appearing in the list the following must be checked:

- Is the USB adapter connected? Check the cable.
- Is the USB adapter driver properly installed?

Before any shots can be received the correct license name and code must be registered.

#### 3.1 License

Select **File / Licens**

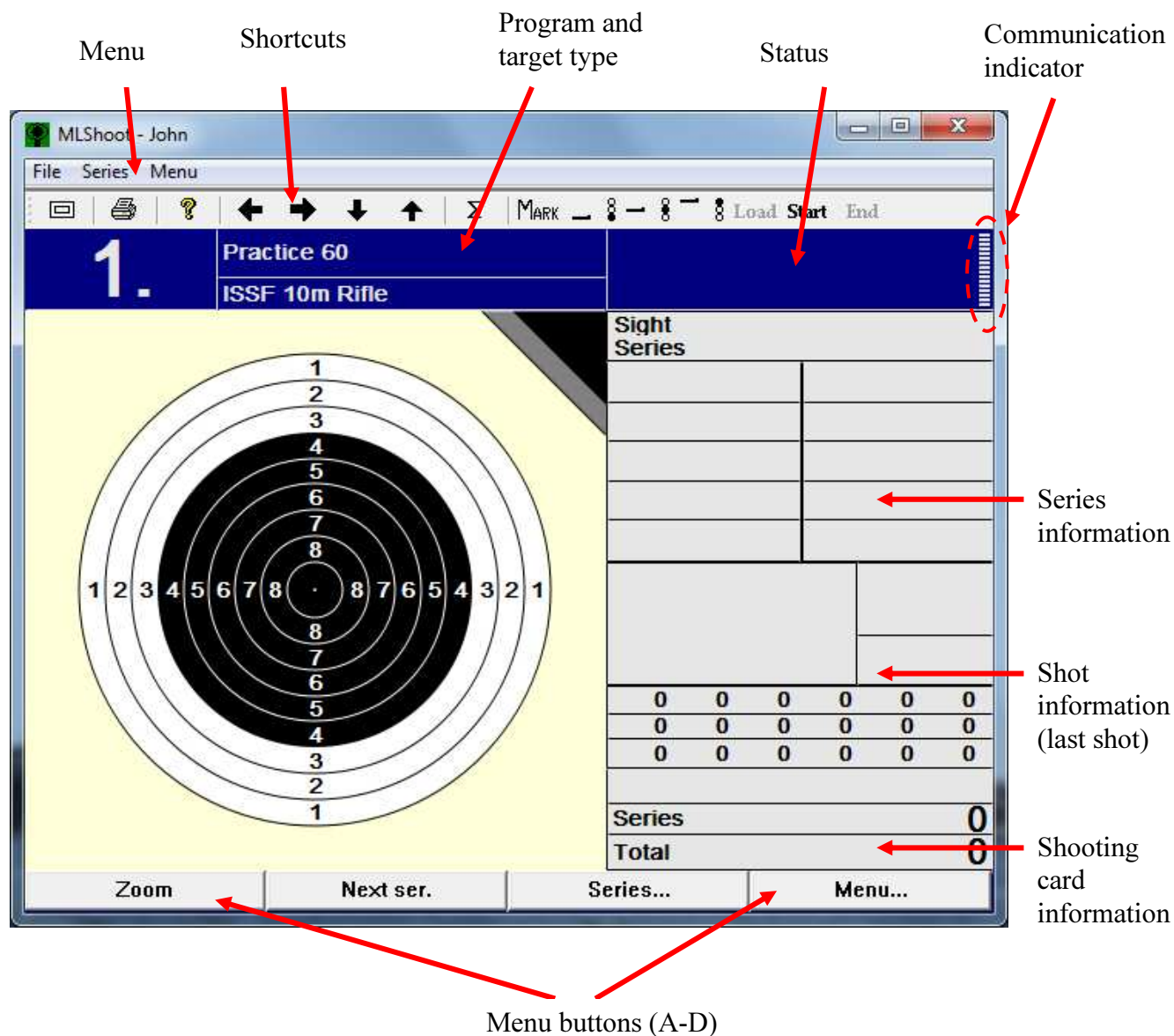


Be sure that the correct license name and license code is typed. MLShoot is now ready for use.



## 4 MLShoot in use

### 4.1 Overview



MLShoot is working and looks the same as the Megalink shooting range monitors. The menu buttons equals the buttons A – D on the monitor. The buttons can be used via the mouse, the keyboard or remote control.

### 4.2 Shooting

#### 4.2.1 Select the course of fire or target type

Select **Menu / Course of fire**.

In this menu you can change the following options:

- Course of fire      Shooting program to be used

- Target Target type to be used.
- Caliber Caliber type.
- Motor frequency How many shots before the band is advanced. (Only for targets with automated band advance)
- Motor length How far to advance the band. (Only for targets with automated band advance)
- Actual distance Displays the actual range to the target.
- Simulated distance Displays the simulated range to target. Hit points and values are calculated using this simulated distance.
- Prepare time Time in seconds between the selection of **Series / Start** until firing can commence.
- Mark delay Number of seconds between the displaying of each shot.
- Marking auto Yes / No. Selects whether the display should follow the course of fire or whether the shots are to be displayed continuously.

#### **4.2.2 Fire on command**

Select **Series / Start** or press the **Start** shortcut.

The time is now shown in the status field. Prepare time can be changed in **Course of fire** menu.

#### **4.2.3 Start marking.**

Select **Series / Mark X-X** or press the **Mark** shortcut.

#### **4.2.4 Show series details and statistics**

Select **Series / Series details** or press the  $\Sigma$  shortcut.

#### **4.2.5 Show shot details**

Select **Series / Shot details** or press the  $\Sigma$  shortcut and select the menu button **Shots**.

#### **4.2.6 Change series**

For the next series select **Series / Next series** or press the  $\rightarrow$  shortcut.

For the previous series select **Series / Prev. series** or press the  $\leftarrow$  shortcut.

#### **4.2.7 Create a new shooting card**

Select **Menu / New card**. Creating a name in addition to time/date and number is optional.

#### **4.2.8 Select a previous shooting card**

Select **Menu / Change card**. Old shooting card can be deleted.

#### **4.2.9 Printing a shooting card**

Select **Menu / Print** or press the **Print** shortcut.

#### 4.2.10 Running the target lift

Select **Menu / System Setup / Lift** or one of the target lift shortcuts.

The target lift can be adjusted in the menu selection **Menu / System Setup / Lift / Lift adjust**.

### 4.3 Setup

#### 4.3.1 System status

Velg **Meny / System Oppsett / Systemstatus** eller trykk på ? snarveien.

1.	Practice 60	
	ISSF 10m Rifle	
System status		
MLShoot		
Version	11.50 - 2011.10.12	
Target		
Version	SW=11.50 HW=35	
Sensor	4K187	
Temperature	21.5	
Shot count	30	
Error count	618	

In the system status screen the following information about MLShoot and the connected target are listed:

- Current MLShoot software version.
- Current target software version
- Sensor – Target sensor type.
- Temperature – Current target temperature.
- Shot count – Total shots registered on the target.
- Error count- sum of detected system anomalies.

#### 4.3.2 Display settings

Select **Menu / Display settings**.

- Language                      Change the language.
- Screen style                  Change the color scheme.
- Sound                          Sound on/off when pressing the menu buttons.

- Windows buttons “Windows style” on the menu buttons A-D on/off.

### 4.3.3 Communication settings

Select **Menu / System Settings / Comm. Config.**

- Master Yes / No. Specify a monitor as the communication master. MLShoot is always master.
- Lane Specify which lane is connected to the monitor.
- First lane Specify which lane is the first lane in a serial segment. (Must be the same as Lane in MLShoot).
- Last Lane Specify which lane is the last lane in a serial segment. (Must be the same as Lane in MLShoot).

### 4.3.4 Target lift adjustent

**Menu / System Setup / Lift / Lift adjust.**

This menu is used for adjusting and storing target lift positions. From a single monitor all target lift positions can be freely adjusted.

Select **Previous** or **Next** to select a target. Select **Adjust** to move the target up or down. Select **Store** to store the target position. Actual potions are prone, kneel, stand and park.

### 4.3.5 Filter configuration

Select **Menu / System Setup / Advanced / Filter Config.**

The filter is used to specify which organization, weapon and shooting distance that the monitor will be used for. For example, if organization is set to ISSF then all courses of fire and target types not related to this organization will be removed from all operating menus.

### 4.3.6 Target configuration

Select **Menu / System Setup / Advanced / Target Config**

This menu is used to change the parameters for the target connected to the monitor. The first screen shows the related parameters.

- Sensor Specify the sensor type that the target is configured to use.
- Offset X Specify **horizontal** offset in millimeters (mm).
- Offset Y Specify **vertical** offset in millimeters (mm).
- Turned sensor Mirrored target. Can be used if the target is positioned the opposite way (back side).
- Frame sensor Specify if the frame sensor is to be used. (applicable only for targets that support frame sensors)

- External motor Specify if the target has a connection to an external motor for band advance. (applicable only for targets that support connection to an external motor)

To change these parameters, select **Config....** When you are finished making your changes and have selected **Finished**, you then need to select **Send Data** to transfer your changes to the target.

#### 4.3.7 Set Target ID

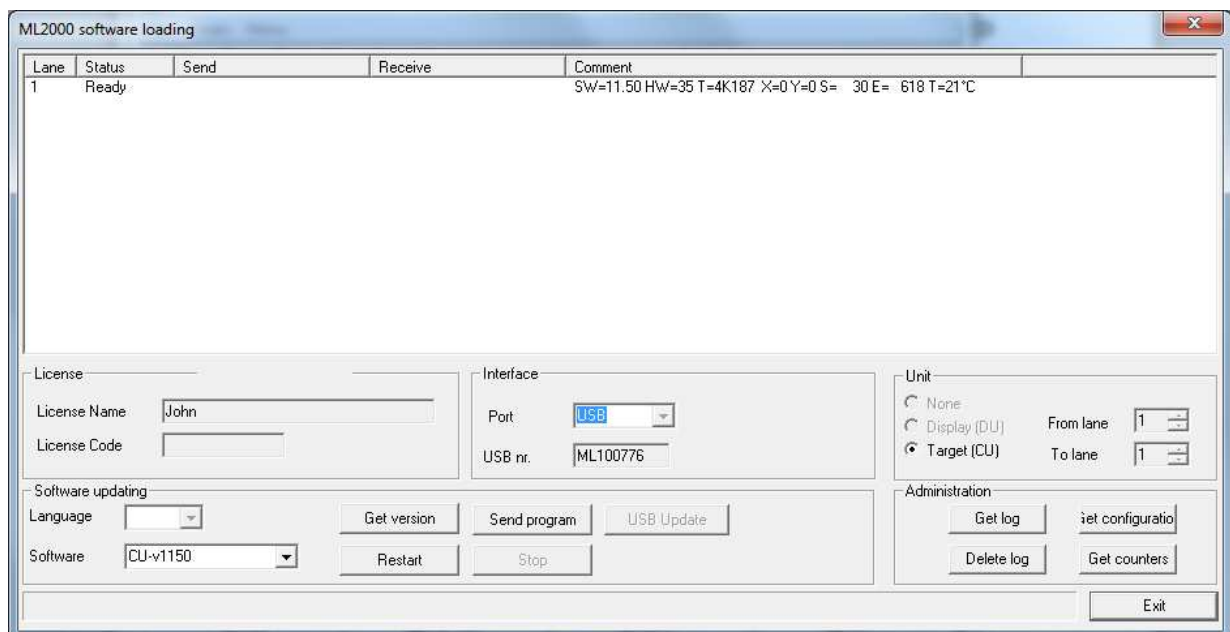
Select **Menu / System Setup / Advanced / Set Target ID**

Select **Select ID** to set the ID for the target. The target can then get the same ID number that you have set for the monitor.

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 connected and set one-at-a-time.

### 4.4 Target software upgrade

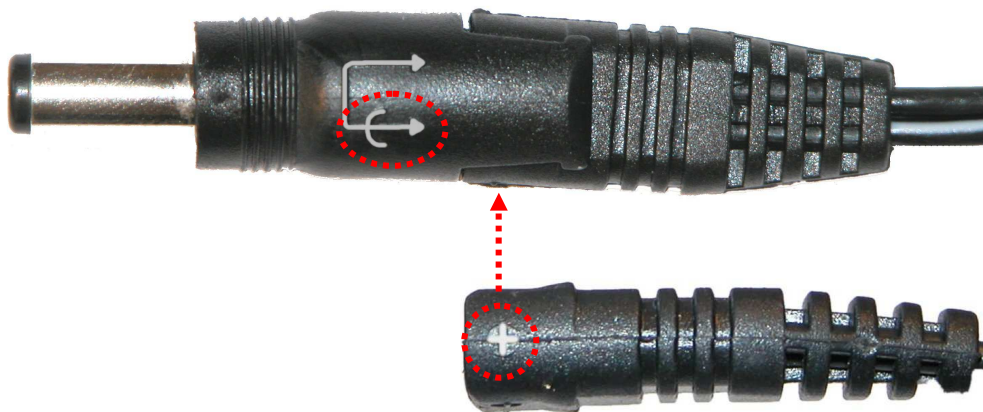
Select **File / Upgrade target**.



Make sure the connected target is listed as **Ready**. Select the new software version in the drop down menu and press **Send program** to start the upgrade.

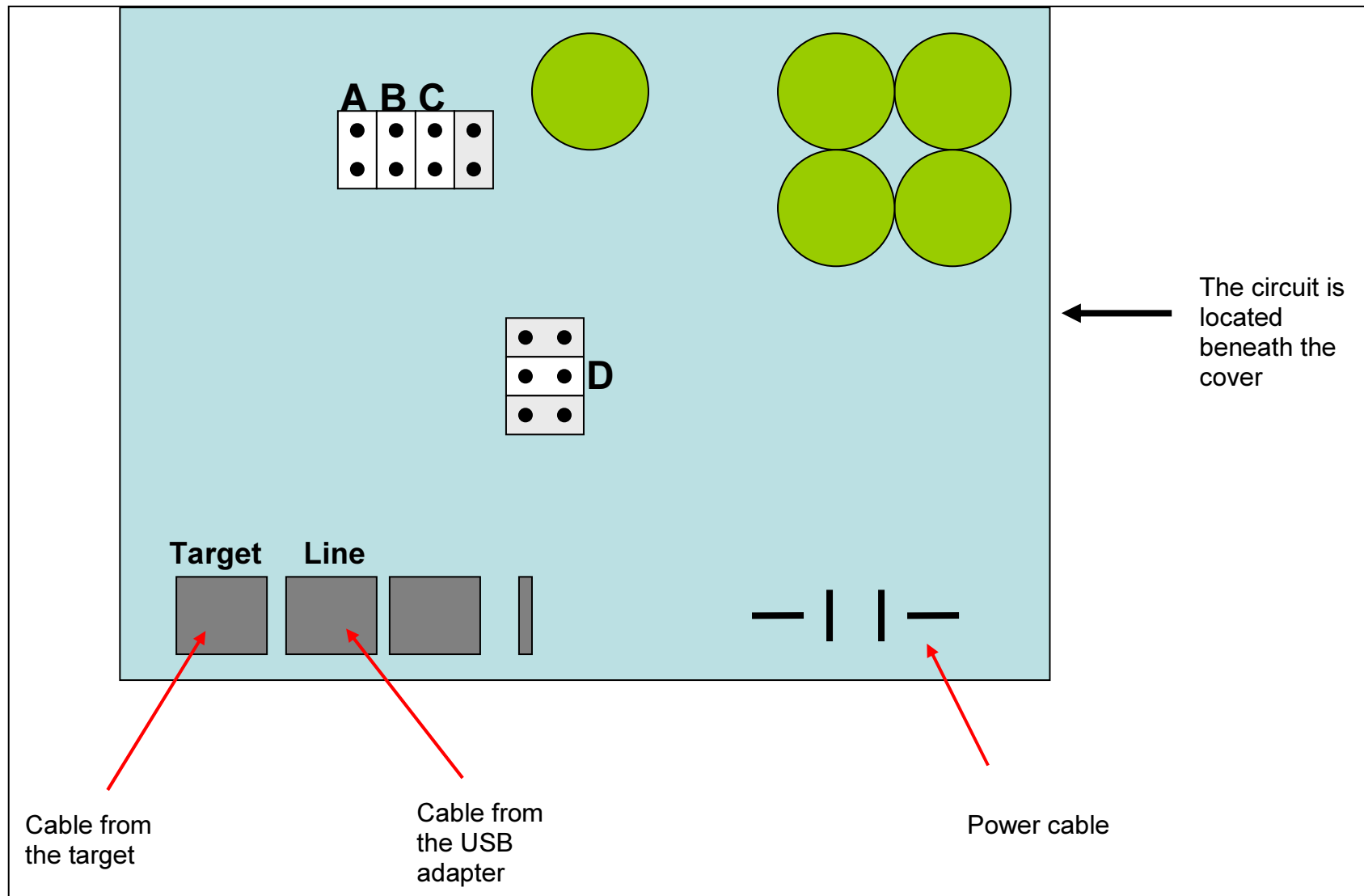
## 5 Power supply

The power supplies are delivered with an adapter for polarity switching. The Megalink USB adapter requires positive current in the center. See figure:





## 6 Connection a target lift to pc based target



## 7 Schematic diagram

