2025

User Manual for ML2000 PC based personal target



Megalink AS V25.10



User Manual for ML2000

PC based personal target

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

1 MLShoot installation

Download MLShootSetupxxxx.EXE from www.megalink.no.

Do not insert the USB adapter before installation!

Start the installation file and follow the instructions:

1. Select language

Installer Language					
\bullet	Please select a language.				
	English	\sim			
	OK Cancel				

2. Press Next



Only select «HASP» Dongle Driver if you have a HASP lisence. *Hasp licenses is not delivered to customers after January 2025.* MLShoot Setup

ELECTRONIC SCORING SYSTEMS	oose Components hoose which features of MLShoot you want to install.					
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.						
Select components to install:	HLShoot HASP Dongle Driver					
	Description					
Space required: 38.0MB	Position your mouse over a component to see its description.					
Megalink AS						
	< Back Next > Cancel					

4. Select the directory. Its recommended to keed the default value. Press Install.

MLShoot Setup - ×

MEGAUNE CONNECTION Choose Install Location
Choose Install Location
Choose the folder in which to install MLShoot.

and select another folder. Click trista	ll to start the installation	on.
Destination Folder		
C: Megalink MLShoot		Browse
Space required: 38.0MB		
Space available: 72.2GB		

5. Press Finish to exit the installation. You can now insert the USB adapter and start the MLShoot application.



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2 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.

MLShoot	×
 English Norsk Dansk Svensk Deutsch 	ОК

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.

ſ	Interface					
	Choose USB adapter					
	Search for new					
	[Finished]					

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.

2.1 License

Select File / Licens

icense Name	John
License Code	xxxxxxxxx
	OK Cancel

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

3 MLShoot in use

3.1 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.

3.2 Shooting

3.2.1 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 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.

3.2.2 Fire on command

Select Series / Start or press the Start shortcut.

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

3.2.3 Start marking.

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

3.2.4 Show series details and statistics

Select **Series / Series details** or press the \sum shortcut.

3.2.5 Show shot details

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

3.2.6 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 **〈** shortcut.

3.2.7 Create a new shooting card

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

3.2.8 Select a previous shooting card

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

3.2.9 Printing a shooting card

Select Menu / Print or press the Print shortcut.

3.2.10 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.

3.3 Setup

3.3.1 System status

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

1		Practice 60		
	-	ISSF 10m Rit	ile	
			System statu	S
MLSho	oot			
Ver	sion		11.50 - 2011	.10.12
Target	t			
Ver	sion		SW=11.50 H	IW=35
Sen	SOL		4K187	
Ten	прега	ature	21.5	
Sho	t coi	unt	30	
Erro	ог со	unt	618	

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

- Current MLShoot software version.
- Curretn 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.

3.3.2 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.

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• Windows "Windows style" on the menu buttins A-D on/off. buttons

3.3.3 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).

3.3.4 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.

3.3.5 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.

3.3.6 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.

3.3.7 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.

<u>IMPORTANT</u>: 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.

3.4 Target software upgrade

Select File / Upgrade target.

ML2	1L2000 software loading				
La	ne Status	Send	Receive	Comment	
1	Ready			SW=11.50 HW=35 T=4K187 X=0 Y=0 S= 30	E= 618 T=21°C
-1.64			_ Interface		
	ense		Intenace		Unit
Lie	cense Name 🛛 🗍	lohn	Port	USB 🔽	C Display (DLD) From Jane 1
Lie	cense Code			LU 100770	C Display (DC) Training
	,		USB nr.	ML100776	
− So	ftware updating				Administration
Lar	nguage	v	Get version Send progra	m USB Update	Get log iet configuratio
Sof	tware CU-v11	150 -	Postart Stop		Delete log Get counters
	1				
					Exit
Ľ					

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.

4 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:





5 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.

6 Connection a target lift to pc based target



7 Schematic diagram

