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User's Guide

# LaserLynx Lite





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LaserLynx Lite User's Guide

June 26, 2007

LaserLynx Lite for the Palm Operating System, Version 1.31

LaserLynx Lite for the WinCE Operating System, Version 1.0

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# Introduction

LaserLynx Lite™ is stand-alone software designed for use on a handheld device. Together with a laser, LaserLynx Lite records the measurement of throws and horizontal jumps in track and field competitions.

LaserLynx Lite runs on either a Palm™ handheld device or a Microsoft Windows CE (WinCE) Pocket PC handheld device.

LaserLynx Lite for the Palm handheld device supports the **LaserLynx Pro** model laser.

LaserLynx Lite for the Pocket PC handheld device supports the **LaserLynx Pro** model laser *and* the **LaserLynx Auto** model laser.

This user's guide contains instructions for setting up and operating both the LaserLynx Pro and the LaserLynx Auto, as well as setting up and operating LaserLynx Lite for the Palm handheld device and for the Pocket PC handheld device.

LaserLynx™ is a Plug-in for the FieldLynx handheld device. After following the instructions in this manual for setting up either the LaserLynx Pro or the LaserLynx Auto model laser, then refer to the **FieldLynx Operator's Manual** for instructions on how to operate the LaserLynx Plug-in with FieldLynx.

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## Contacting Lynx System Developers, Inc.

There are many ways to contact Lynx System Developers, Inc.

➤ ***Emergency after-hours technical support:***

- 1 If you need after-hours emergency technical support, make sure you have a call-back number available.
- 2 Dial: (978) 556-9780.
- 3 Follow the menu that instructs you to dial 1 for technical support.

- 4 If the tech support voice mail comes on, the menu instructs you to dial 3 and to then dial your call-back number. The emergency support technician will call you back at the earliest possible convenience.

➤ **Lynx on the Web:**

The *Lynx website* (<http://www.finishlynx.com/>) has a bounty of information about FinishLynx and the entire suite of Lynx products.

➤ **Lynx by telephone:**

Call us at (978) 556-9780. We are located in the United States of America in the Eastern Standard Time (EST) zone. Our office hours are 9:00 am to 5:00 pm, Monday through Friday.

➤ **Lynx through the mail:**

Write to us at:

Lynx System Developers, Inc.  
179 Ward Hill Avenue  
Haverhill, MA 01835  
U.S.A.

➤ **Lynx sales email:**

Write to Lynx sales at: [\*sales@finishlynx.com\*](mailto:sales@finishlynx.com)  
(mailto:sales@finishlynx.com).

➤ **Lynx technical support email:**

Write to Lynx technical support at: [\*support@finishlynx.com\*](mailto:support@finishlynx.com)  
(mailto:support@finishlynx.com).

## CHAPTER 1

# Installing LaserLynx Lite Software

You must first install the LaserLynx Lite software onto your Palm or Pocket PC handheld device.

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# Palm handheld device instructions

## Before you begin

Before completing the instructions in this chapter, you need the following items:

- computer running a Microsoft Windows operating system
- HotSync® cable or cradle
- Handheld device running the Palm Operating System (Palm OS) version 3.0 or higher
- LaserLynx Lite single file installer, and
- a LaserLynx Lite serial number.

### ➤ *How to obtain a LaserLynx Lite serial number*

To obtain a LaserLynx Lite serial number, you must know your Palm handheld device's flash ID.

- 1 Obtain your Palm handheld device's flash ID by following these steps:
  - a) Tap **Applications** on the Palm handheld device silkscreen.
  - b) Tap **Menu** on the silkscreen.
  - c) From the pick list, tap **Info...** The **Info** screen appears.
  - d) Tap the **Version** button at the bottom of the Info screen. The flash ID: # appears at the top of the Info screen.
- 2 *Contact Lynx System Developers, Inc.* (see "Contacting Lynx System Developers, Inc.")
- 3 Provide Lynx System Developers, Inc., with your handheld device's flash ID.
- 4 Lynx System Developers, Inc. in turn provides you with a LaserLynx Lite serial number.

## Install LaserLynx onto a computer

- 1 Run the LaserLynx Lite single file installer on your computer.
- 2 Follow the instructions on the screen to complete the installation. Check the box that says, "Yes, I want to view the README File," and then click **Finish** to launch the Readme file.
- 3 When the Readme file appears on your screen, follow its instructions to:
  - connect the HotSync® cable or cradle to your computer

- install the Palm Desktop® software onto your computer
- install the LaserLynx Lite application onto your handheld
- obtain a LaserLynx Lite serial number if you do not already have one, and
- assign the LaserLynx Lite serial number.

After you have installed the LaserLynx Lite application onto your handheld device, continue to the next chapter to *set up the laser* (see "Setting Up and Operating LaserLynx Lite").

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# Pocket PC handheld device instructions

## Before you begin

Before completing the instructions in this chapter, you need the following items:

- computer running a Microsoft Windows operating system
- ActiveSync® cable
- Handheld device running WinCE Pocket PC 2003 or later
- LaserLynx Lite single file installer, and
- a LaserLynx Lite serial number.

### ➤ **How to obtain a LaserLynx Lite serial number**


In order to obtain a LaserLynx Lite serial number, you must know your LaserLynx Lite activation license number.

- 1** Obtain the LaserLynx Lite activation license number by following these steps:
  - a) Run the LaserLynx Lite single file installer on your computer.
  - b) When the **Activation License** is displayed, copy that number down.
- 2** *Contact Lynx System Developers.* (see "Contacting Lynx System Developers, Inc.")
- 3** Provide Lynx System Developers with the LaserLynx Lite Activation License number.
- 4** Lynx System Developers will, in turn, provide you with a LaserLynx Lite serial number.

## Install LaserLynx onto a computer

- 1** Make sure that you have installed the ActiveSync software onto your computer.
- 2** Make sure that the LaserLynx Lite single file installer has been installed on your computer.
- 3** Connect the ActiveSync cable to your handheld device and to your computer.



- 4 Double-click on , the **ActiveSync** icon, in the system tray. The **Microsoft ActiveSync** dialog appears.
- 5 Click **Explore**.



The Explore dialog appears.

- 6 Now, use Microsoft Windows Explorer to navigate to the directory on your computer where you installed the LaserLynx Lite single file installer. Locate the **LaserLynxLite.CAB** file in that directory.
- 7 Click on, then drag and drop, the **LaserLynxLite.CAB** file from the Microsoft Windows Explorer dialog into the Microsoft ActiveSync dialog.
- 8 Turn on your handheld device and tap **Start** in the top left corner of the screen.
- 9 Tap **File Explorer**.
- 10 Verify that the drop-down list at the top of the screen says **My Device**. If not, tap on that drop-down list and then tap **My Device**.
- 11 Tap the **LaserLynxLite.CAB** file to begin the installation.
- 12 Tap **Start**, and then tap **Programs**. Tap **LaserLynxLite**. When prompted, enter the LaserLynx Lite serial number. The next time you run LaserLynx Lite, the LaserLynx Lite application icon appears in the Start Menu.

After you have installed the LaserLynx Lite application onto your Pocket PC device, continue to the next chapter to *set up the laser* (see "Setting Up and Operating LaserLynx Lite").



## CHAPTER 2

# Setting Up the Laser

This chapter provides instructions for setting up and operating either the *LaserLynx Pro* (see "Setting up the LaserLynx Pro laser") or the *LaserLynx Auto* (see "Setting up the LaserLynx Auto laser").

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## Before you begin

Before you set up the laser, make sure you have all of the components that came with your laser.

If you are setting up LaserLynx at a throwing event, you need a measuring tape to measure the radius of the throwing circle.

Also, you need a second person, referred to in this user's guide as the *marker*, to hold the target pole when taking measurements.



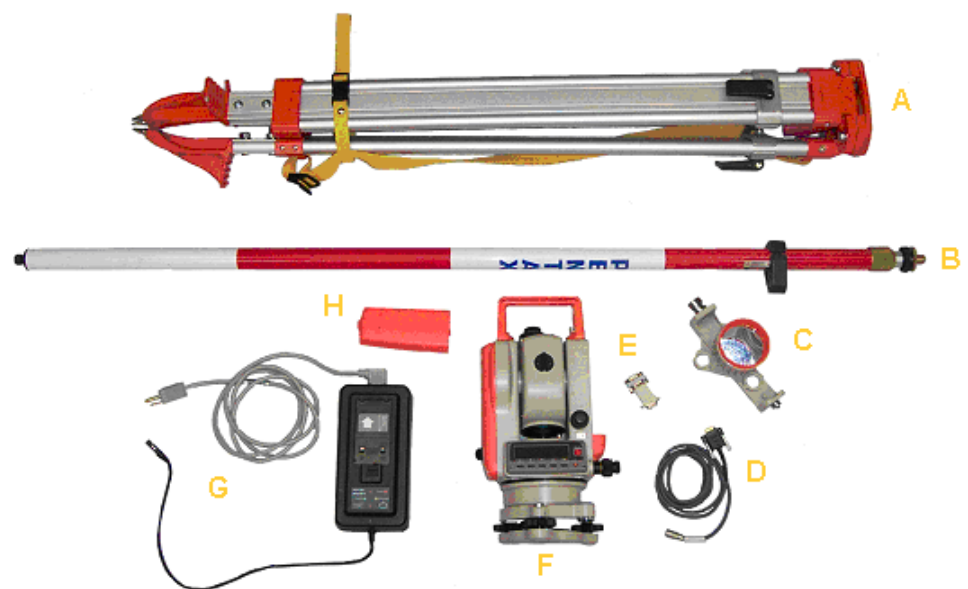
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# Setting up the LaserLynx Pro laser

## LaserLynx Pro components

Make sure that your LaserLynx Pro has the following components:

Not shown: handheld device clamp



- A. Tripod
- B. Target pole
- C. Prismatic reflector
- D. Serial cable
- E. Null modem/gender changer (**note:** no longer used)
- F. Sighting unit
- G. Battery charger
- H. Battery

## Step 1: Connect the battery to the sighting unit

**Warning!** If you change a battery during a competition, you must redo the control measurement or your measurements will not be accurate! You will learn how to set up the control measurement in the next chapter.

You may need to charge the battery before you first use the laser. Please refer to the manufacturer's manual that came with the LaserLynx Pro model laser for battery charging instructions. Then, follow these instructions to connect the battery to the sighting unit.

- 1 Notice the LaserLynx label on the sighting unit.
- 2 Facing the LaserLynx label, slide the orange battery pack along the left side of the sighting unit until the battery pack clicks into place.

## Step 2: Set up the tripod

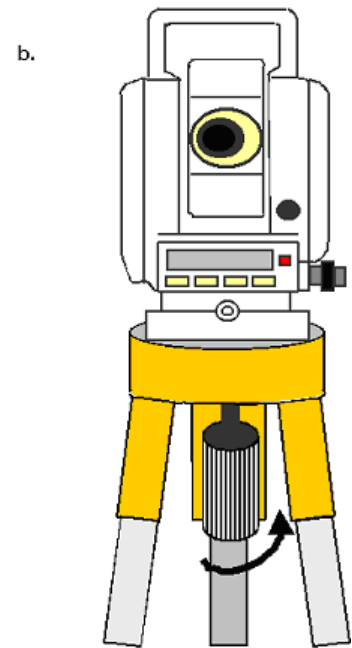
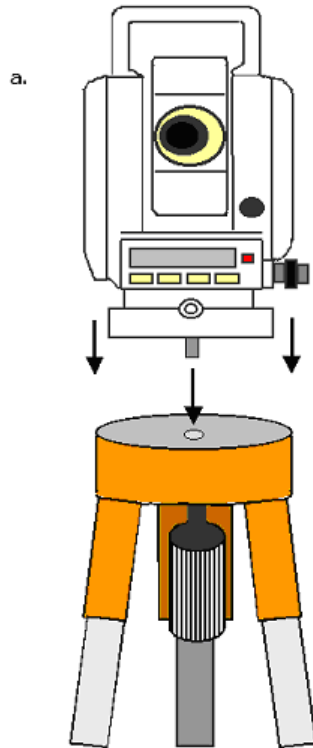
After you have attached the battery to the laser's sighting unit, then you can set up the tripod.

- 1 Set up the tripod about 10 meters away from the throwing circle or jump pit. You should have a clear line of sight to anywhere a fair throw or jumper might land.
- 2 Open the legs of the tripod equal width apart.
- 3 Flip the levers on the tripod legs and extend them so that the top of the tripod is at about chest height.
- 4 Step back and look at the tripod. Then, adjust the legs so that the tripod tabletop appears as level as possible. You will make finer adjustments to level the tripod later.
- 5 If you are outside, push the legs of the tripod into the ground by stepping on the foot rests at the base of the tripod.

## Step 3: Connect the sighting unit

- 1 Place the sighting unit on the tripod tabletop with the laser aperture facing the throwing circle or the take-off board. The laser aperture is located on the opposite side of the laser from the eyepiece.
- 2 Remove the lens cap from the laser aperture.
- 3 Slide the sighting unit around on the tripod tabletop until the threaded hole lines up with the securing screw and the handle beneath the tripod tabletop.

- 4 Turn the handle to secure the sighting unit to the tripod tabletop.



## Step 4: Level the tripod

Now that the sighting unit is attached to the tripod, you must make fine adjustments to level the tripod.

➤ ***Sighting unit diagram***



- A. Site
- B. Eyepiece
- C. Fine adjustment knob - tilt
- D. Tilt release knob
- E. Fine adjustment knob - rotation
- F. Rotation release knob
- G. Zero-set button
- H. Precision level adjusters

➤ **Instructions**

- 1 Notice the round level on the sighting unit, near the bottom of the base.
- 2 Turn the precision level adjusters (labeled "h" in the sighting unit diagram) until the bubble is centered in the middle of the level.
- 3 Locate the additional cylindrical levels on the sighting unit. Continue to move the precision level adjusters until the bubble in all of the cylindrical levels is also centered.

When all of the bubbles on the sighting unit levels are centered, the tripod is level.

## Step 5 (Optional): Set the unit of measurement

Your laser must measure in the same units as that of the LaserLynx Lite application running on the handheld device. By default, your laser is set to measure in metric. If you want to change this to English, follow the steps in this section.

- 1 Make sure the LCD on the laser is turned **off**.
- 2 Hold down the ➤ (right arrow) key while simultaneously turning on the LCD. The **Init. Set B** screen appears briefly, and then another screen is displayed.
- 3 Press the ▲ (up arrow) key until you get to the **Dist. Unit** screen.
- 4 Press the ➤ (right arrow) key to highlight **m**.
- 5 Press the **OK** key to save the setting.

## Step 6: Measure the throwing circle

(Skip this step if you are using LaserLynx Lite exclusively to measure a horizontal jumping event).

- 1 Use a tape measure to determine the radius of the throwing circle. Record the measurement somewhere, as you will enter this value later into the LaserLynx Lite handheld application.
- 2 Use a tape measure to find the exact center of the throwing circle. Do this by measuring the widest width across the circle and dividing the number by 2.
- 3 Make a mark in the exact center of the circle. Then, continue to the next step.

## Step 7: Connect the handheld device to the laser

If your laser came with a handheld device clamp, tighten it to one of the legs of the tripod.

- 1 Connect the serial cable to the sighting unit. Remove the black rubber stopper from the port below the laser aperture and connect the cable to the port.
- 2 Attach the HotSync cable or cradle to the serial cable.
- 3 Connect the Palm handheld device to the HotSync cable or cradle.

## Step 8: Set up the target pole

- 1 Screw the prismatic reflector into the target pole, turning until secure.
  - 2 Flip the target pole so that the prismatic reflector is touching the ground.
- ***If you are measuring a throwing event:***
- a Ask someone acting as a marker to set the target pole in the center of the throwing circle.
  - b Have the marker face the prismatic reflector toward the laser aperture on the sighting unit while holding the target pole as upright and as still as possible.
- ***If you are measuring a horizontal jumping event:***
- a Ask someone acting as a marker to set the target pole on the near corner of the take-off board. This is the corner that is closest to the laser.

- b Have the marker face the prismatic reflector toward the laser aperture on the sighting unit while holding the target pole as upright and as still as possible.

## Step 9: Use the site to find the prismatic reflector

- 1 Turn the rotation release knob counter-clockwise so that the sighting unit moves freely on its base.
- 2 Look through the site on top of the sighting unit and rotate the sighting unit until you can see the target pole while looking through the site. Once the target pole is in view, turn the rotation release knob clockwise to lock it.
- 3 Turn on the laser by pressing the red button on the LCD.
- 4 If the laser aperture is locked in place, turn the tilt-release knob counter-clockwise to unlock it.
- 5 With the laser turned on, move the laser aperture all of the way up and all of the way down so that it moves above and below the horizon. You are finding the vertical scope when you do this. You will hear a short beep when the laser aperture finds the vertical scope.

**Note:** After a few minutes of idle time, the laser may turn itself off. If this happens, press the red LCD button to turn on the laser again, and rotate the laser aperture through the horizon again to find its vertical slope. Any time that you turn on the laser, you must find its vertical slope.

- 6 Look through the site on top of the sighting unit once more and move the laser aperture until you can see the prismatic reflector on the bottom of the target pole. When you can see the prismatic reflector through the site, turn the tilt release knob clockwise to lock it. Then, continue to the next step.

## Step 10: Focus on the prismatic reflector

- 1 Now that you have the prismatic reflector in view using the site, look through the eyepiece on the sighting unit.
- 2 Turn the large, fine adjustment knobs beneath the smaller rotation and tilt release knobs until the prism is centered when looking through the lens.
- 3 Notice that the eyepiece has two adjustment rings. Turn the smaller adjustment ring until you see crosshairs when looking through the lens.

- 4 Turn the larger adjustment ring on the eyepiece to focus the prism until the image is crisp. The crosshairs on the lens should center on the middle of the prism. If not, make sure that the marker is holding the target pole as upright as possible and turn the fine adjustment knobs until the crosshairs on the lens center on the middle of the prism. Once you are focused on a crisp image of the prismatic reflector, continue to the next chapter to set up and use the LaserLynx Lite application.

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# Setting up the LaserLynx Auto laser

## Introduction

The LaserLynx Auto laser is equipped with Automatic Target Recognition (ATR).

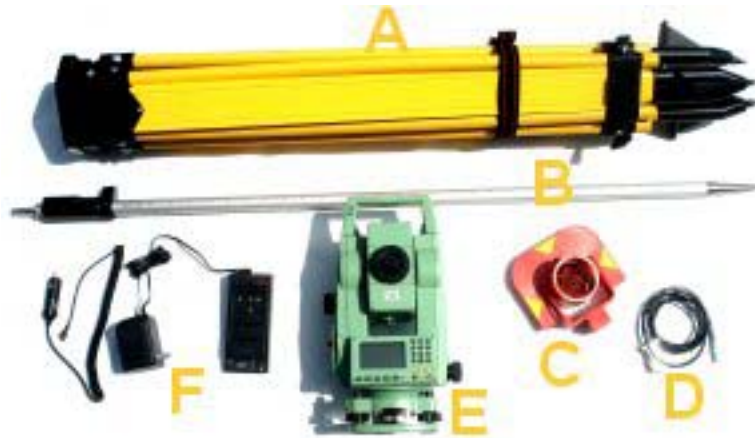
Using LaserLynx Auto in ATR mode allows you to make automatic prism measurements, which eliminates the tedious step of manual sighting to find the prismatic reflector.

LaserLynx Auto has motors which allow the laser to sight the prismatic reflector automatically.

## LaserLynx Auto components

Make sure that your LaserLynx Auto resembles the components shown here.

Not shown: handheld device clamp



- A. Tripod
- B. Target pole
- C. Prismatic reflector
- D. Serial cable
- E. Sighting unit
- F. Battery charger

## Step 1: Connect the battery to the sighting unit

**Warning!** If you change a battery during a competition, you must redo the control measurement or your measurements will not be accurate! You learn how to set the control measurement in the next chapter.

You may need to charge the battery before you first use the laser. Please refer to the manufacturer's manual that came with the LaserLynx Auto model laser for battery charging instructions. Then, follow these instructions to connect the battery to the sighting unit.

- 1 Notice the LaserLynx label on the sighting unit.
- 2 Facing the LaserLynx label, remove the battery holder from the left side of the sighting unit.
- 3 Insert the battery into the battery holder.
- 4 Remove the battery and replace.
- 5 Insert the battery holder into instrument.

## Step 2: Set up the tripod

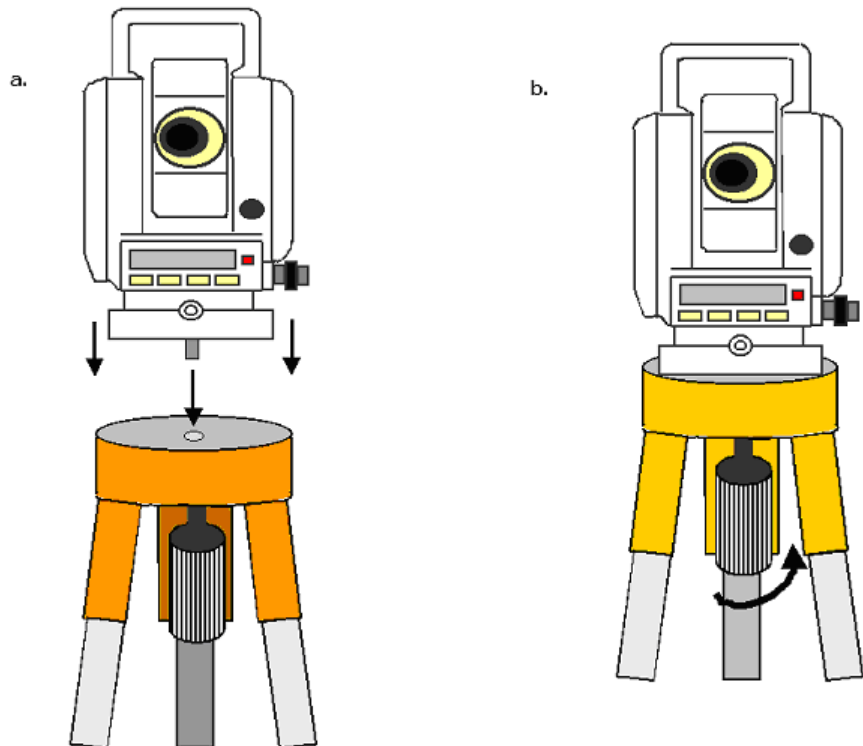
After you have attached the battery to the laser's sighting unit, then you can set up the tripod.

- 1 Set up the tripod about 10 meters away from the throwing circle or jump pit. You should have a clear line of sight to anywhere a fair throw or jumper might land.
- 2 Open the legs of the tripod equal width apart.
- 3 Flip the levers on the tripod legs and extend them so that the top of the tripod is at about chest height.

- 4 Step back and look at the tripod. Then, adjust the legs so that the tripod tabletop appears as level as possible. You will make finer adjustments to level the tripod later.
- 5 If you are outside, push the legs of the tripod into the ground by stepping on the foot rests at the base of the tripod.

### Step 3: Connect the sighting unit

- 1 Place the sighting unit on the tripod tabletop with the laser aperture facing the throwing circle or the take-off board. The laser aperture is located on the opposite side of the laser from the eyepiece.
- 2 Remove the lens cap from the laser aperture.
- 3 Slide the sighting unit around on the tripod tabletop until the threaded hole lines up with the securing screw and the handle beneath the tripod tabletop.
- 4 Turn the handle to secure the sighting unit to the tripod tabletop.



## Step 4: Level the tripod

Now that the sighting unit is attached to the tripod, you must make fine adjustments to level the tripod.

➤ **Sighting unit diagram:**



- A. Optical site
- B. Eyepiece
- C. Fine adjustment knob - tilt
- D. Fine adjustment knob - rotation
- E. Keypad
- F. Precision level adjusters

➤ **Instructions:**

- 1 Notice the round level on the sighting unit, near the bottom of the base. Turn the precision level adjusters (see label “F” in the figure above) until the bubble is centered in the middle of the level.

Note that when the laser is on, a digital level appears on the laser display.

- 2 Locate the additional cylindrical levels on the sighting unit. Continue to move the precision level adjusters until the bubble in all of the cylindrical levels is also centered. When all of the bubbles on the sighting unit levels are centered, the tripod is level.

## Step 5 (Optional): Set the unit of measurement

Your laser must measure in the same units as that of the LaserLynx application running on the handheld device. By default, your laser is set to measure in metric. If you want to change this to English, follow the steps in this section.

- 1 Make sure the laser is turned **on**.
- 2 Press the **Shift** key and then press the **Prog (Menu)** key.
- 3 Press the yellow down (**Pg Dn**) key until the text "3 All Settings" is highlighted.
- 4 Press the red **Enter** key. The "ALL SETTINGS MENU" is now displayed.
- 5 Press the yellow down (**Pg Dn**) key until "3 Measurement Units" is highlighted.
- 6 Press the red **Enter** key. The "MEASUREMENT UNITS" menu is now displayed.
- 7 Press the yellow down (**Pg Dn**) key until the field next to "Distance" is highlighted.
- 8 Use the left and right yellow arrows to change this setting to either "meter" for metric or "ft-in1/8" for English. (LaserLynx Lite reports an error message if the laser is set to any other setting.)
- 9 Press the red **Enter** key. "SET" is now highlighted.
- 10 Press the red **Enter** key again.
- 11 Use the yellow arrow keys to navigate down to "EXIT."
- 12 Press the red **Enter** key.

## Step 6: Measure the throwing circle

(Skip this step if you are using LaserLynx Lite exclusively to measure a horizontal jumping event).

- 1 Use a tape measure to determine the radius of the throwing circle. Record the measurement somewhere, as you will enter this value later into the LaserLynx Lite handheld application.

- 2 Use a tape measure to find the exact center of the throwing circle. Do this by measuring the widest width across the circle and dividing the number by 2.
- 3 Make a mark in the exact center of the circle. Then, continue to the next step.

## Step 7: Connect the handheld device to the laser

If your laser came with a handheld device clamp, tighten it to one of the legs of the tripod.

- 1 Connect the ActiveSync cable to the sighting unit, the port for which is near the base of the sighting unit, between the precision level adjusters.



- 2 Connect the PocketPC handheld device to the ActiveSync cable.

## Step 8: Set up the target pole

- 1 Screw the prismatic reflector into the target pole, turning until secure.
- 2 Flip the target pole so that the prismatic reflector is touching the ground.

- ***If you are measuring a throwing event:***
  - a Ask someone acting as a marker to set the target pole in the center of the throwing circle.
  - b Have the marker face the prismatic reflector toward the laser aperture on the sighting unit while holding the target pole as upright and as still as possible.
- ***If you are measuring a horizontal jumping event:***
  - a Ask someone acting as a marker to set the target pole on the near corner of the take-off board. This is the corner that is closest to the laser.
  - b Have the marker face the prismatic reflector toward the laser aperture on the sighting unit while holding the target pole as upright and as still as possible.

## Step 9: Use the site to find the prismatic reflector

- 1 Look through the optical site on top of the sighting unit and rotate the sighting unit until you can see the target pole while looking through the site.
- 2 Turn the laser **on** by pressing the red power button on the sighting unit.

**Note:** After a few minutes of idle time, the laser may turn itself off. If this happens, press the red power button again to turn the laser back on. Also, make sure that the laser is still level. The laser cannot take a measurement unless it is level.

- 3 Look through the site on top of the sighting unit once more and move the laser aperture until you can see the prismatic reflector on the bottom of the target pole. When you can see the prismatic reflector through the site, turn the tilt release knob clockwise to lock it.
- 4 Take the measurement. The ATR feature allows the laser to automatically locate the center of the prismatic reflector and take the distance measurement.

Now that you have some of the prismatic reflector in view, continue to the next chapter to learn how to set up and operate the LaserLynx Lite handheld application.



## CHAPTER 3

# Setting Up and Operating LaserLynx Lite

LaserLynx Lite is a stand-alone application for a handheld device running a *Palm Operating System* (see "Operating LaserLynx Lite on a Palm device") or a *Pocket PC* (see "Operating LaserLynx Lite on a Pocket PC device") device running Microsoft Windows CE. The instructions in this chapter explain how to set up and run LaserLynx Lite.

If you are using the **LaserLynx Plug-in** with a FieldLynx unit, please refer to the FieldLynx Operator's Manual for operation instructions.

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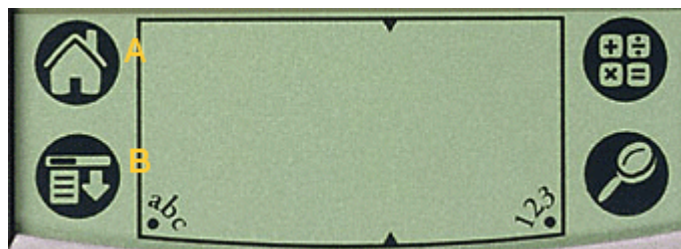
## Operating LaserLynx Lite on a Palm device

The instructions in this section explain how to operate LaserLynx Lite on a Palm handheld device with the LaserLynx Pro laser.

### Step 1: Set up LaserLynx Lite

- 1 Turn on the handheld device and tap the **Applications** button on the silkscreen.

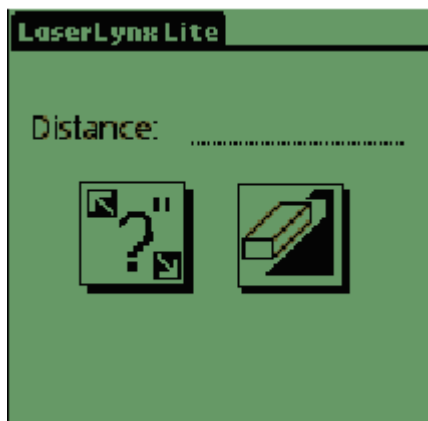
Palm handheld device screen



A = Applications button

B = Menu button

- 1 Tap the LaserLynx Lite icon. The LaserLynx Lite main screen appears.



- 2 Tap the **Menu** button on the silkscreen.
- 3 Tap **Preferences** from the pick list.

- 4 Tap **Metric** or **English** to select the method of measurement that you want to use.

**Note:** The LCD on the laser must match the measurement method that you use in LaserLynx Lite. For example, if you set the laser to measure in English, then LaserLynx Lite must also be set to measure in English. Refer to Step 5 in the set up instructions for the *LaserLynx Pro* (see "Step 5 (Optional): Set the unit of measurement").

### If you are measuring a throw

- 1 Tap the **Throwing Circle Radius** text box.
- 2 Tap the arrows to enter the radius measurement that you *recorded earlier* (see "Step 6: Measure the throwing circle").
- 3 Tap **OK**.
- 4 If it is not already checked, tap the **Horizontal Throw** checkbox and then continue to the next step.

### If you are measuring a horizontal jump:

Tap the **Horizontal Jump** checkbox and then continue to the next step.


## Step 2: Set the control measurement

- 1 Tap the **Laser** tab at the top of the screen.
- 2 From the pick list, tap **LaserLynx Pro**.
- 3 Connect the handheld device to the HotSync cable or cradle.
- 4 Tap **Set Control(s)**.

### For measuring a throw:

- 1 Have your assistant who is doing the marking hold the prismatic reflector in the middle of the throwing circle.
- 2 Focus the laser on the prismatic reflector.




- 3 Tap  to get the control measurement.
- 4 Wait until the **Dist to Circle Center** is calculated.
- 5 Tap **Done** twice to return to the LaserLynx Lite main screen. Continue to the next step to record a measurement.


### For measuring a horizontal jump:

- 1 Make sure that your assistant who is doing the marking is holding the prismatic reflector on the near corner of the take-off board. This is the corner that is closest to the laser.
- 2 Focus the laser on the prismatic reflector.
- 3 Tap **Near**.



- 4 Tap  and wait until the **Dist to Board** is calculated.
- 5 Have your assistant move the prismatic reflector to the far corner of the take-off board.
- 6 Tap **Far**.
- 7 Focus the laser on the prismatic reflector.

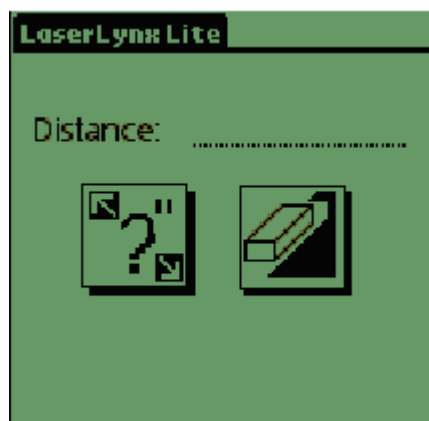


- 8 Tap  and wait until the **Dist to Board** measurement for the far corner of the take-off board is calculated.
- 9 Tap **Done** twice and then continue to the next step to record a measurement.

## Step 3: Record a measurement


Now that you have found the control measurement for the throwing circle or the take-off board, you are ready to measure a competitor's throw or jump.

- 1 Make sure that the Palm handheld device is turned on and that it displays the LaserLynx Lite main screen




- 2 After the competitor throws or jumps, have your marker take the target pole to the mark and angle the prismatic reflector toward the laser aperture. Once the marker has found the mark, make sure that the target pole is held as upright and as still as possible.
- 3 Focus the laser on the prism.



- 4 Tap .
- 5 Wait for the distance measurement to appear. This is the distance of the competitor's throw or jump.
- 6 To take the measurement of a throw or a jump for the next competitor, *clear the measurement* (see "Clearing a measurement"), and then repeat the steps in this section.

### Clearing a measurement



To clear a measurement, tap .

**Warning!** There is no way to undo clearing a measurement! When you delete a measurement, it is *deleted permanently* from memory!

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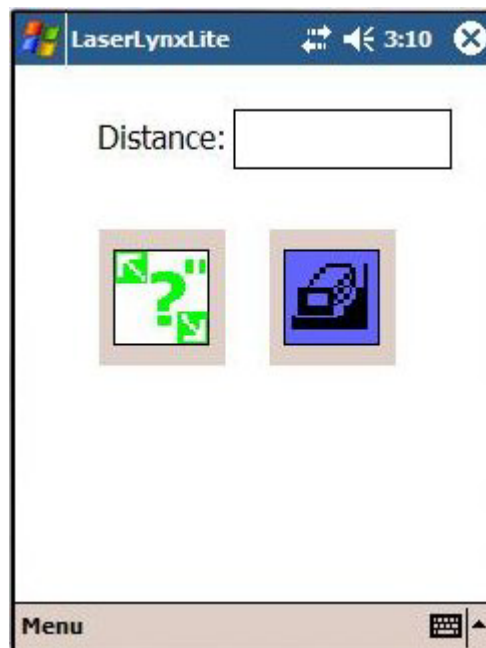
## Operating LaserLynx Lite on a Pocket PC device

The instructions in this section explain how to operate LaserLynx Lite on a Pocket PC handheld device with the LaserLynx Pro or LaserLynx Auto laser.

### Step 1: Set up LaserLynx Lite

- 1 Turn on the handheld device and tap the **Start** menu.
- 2 From the drop-down list, tap **LaserLynx Lite**. The LaserLynx Lite main screen appears.

**Note:** The first time that you run LaserLynx Lite on the Pocket PC, the LaserLynx Lite shortcut may not appear with the other applications. If not, tap **Start**, then tap **File Explorer**, navigate to **My Device**, and then tap **Program Files | LaserLynx Lite**. The LaserLynx Lite shortcut appears on the applications screen.



- 3 Tap **Menu** from the lower left corner of the Pocket PC screen.
- 4 Tap **Options** and then tap **Preferences...**

- 5 By default, LaserLynx Lite is set to measure in Metric. If you want to change this to English, tap **Measure** at the bottom of the screen. Then, tap the **English** radio button.

**Note:** The LCD on the laser must match the measurement method that you use in LaserLynx Lite. For example, if you set the laser to measure in English, then LaserLynx Lite must also be set to measure in English. Refer to Step 5 in the set up instructions for either the *LaserLynx Pro* (see "Step 5 (Optional): Set the unit of measurement") or the *LaserLynx Auto* (see "Step 5 (Optional): Set the unit of measurement").

### **If you are measuring a throw:**

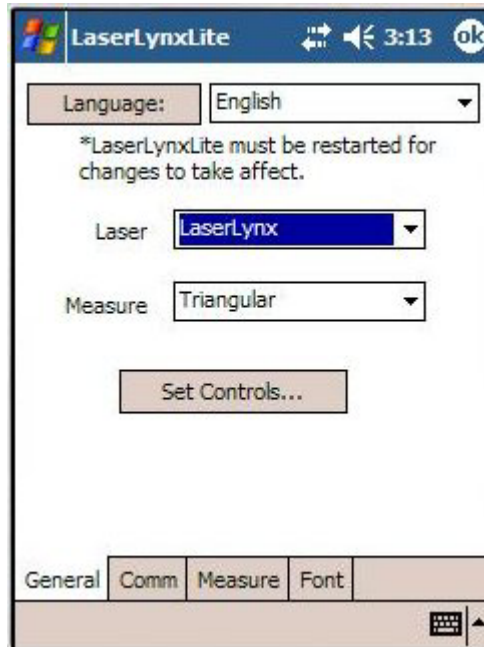
- 1 Tap **Not Set** under the **Circle Radius:** text.
- 2 Tap the arrow to enter the radius measurement that you *recorded earlier* (see "Step 6: Measure the throwing circle").
- 3 Tap **Ok** when done.
- 4 If not already selected, tap the **Horizontal Throw** radio button and then continue to the next step to set the control measurement.

### **If you are measuring a horizontal jump:**

Tap to select the **Horizontal Jump** radio button and then continue to the next step to set the control measurement.

## Step 2: Set the control measurement

- 1 Tap **General** to return to the LaserLynx Lite preferences screen.



- 2 From the **Laser** pick list, tap either **LaserLynx Pro** or **LaserLynx Auto**, depending on the type of laser that you are using.
- 3 With the handheld device connected to the ActiveSync cable, tap **Set Controls....**

### For measuring a throw:

- 1 Make sure that your assistant who is doing the marking is holding the prismatic reflector in the middle of the throwing circle.
- 2 Make sure that the laser is focused on the prismatic reflector.
- 3 From the LaserLynx Lite Preferences screen, tap **Measure**.
- 4 Tap to select the **Horizontal Throws** radio button.
- 5 Tap **Ok**.
- 6 Tap **Menu | Options | Preferences** to access the LaserLynx Lite Preferences screen again.
- 7 Tap **Set Controls....**
- 8 Tap **Set**.
- 9 Wait until the **Laser to Circle Center** and **Angle** values are calculated.
- 10 Tap **Ok** twice to return to the LaserLynx Lite main screen.

### For measuring a horizontal jump:


- 1 Make sure that your assistant who is doing the marking is holding the prismatic reflector on the near corner of the take-off board. The near corner of the take-off board is closest to the laser.
- 2 Make sure that the laser is focused on the prismatic reflector.
- 3 From the LaserLynx Lite Preferences screen, tap **Set Controls...**. The **Set LaserLynx Control(s)** screen appears.
- 4 Tap the **Near** button.
- 5 Tap **Set**. Wait until the **Laser to Board** distance is calculated.
- 6 Tap **Far** and then repeat step 5.
- 7 Tap **Ok** twice to return to the LaserLynx Lite main screen.

## Step 3: Record a measurement

Now that you have found the control measurement for the throwing circle or the take-off board, you are ready to measure a competitor's throw or jump.

- 1 Make sure that the handheld device is turned on and that you are at the LaserLynx Lite main screen.
- 2 After the competitor throws or jumps, have the marker take the target pole to the mark and angle the prismatic reflector toward the laser aperture. Once the marker has found the mark, make sure the target pole is held upright and as still as possible.



- 3 After the laser has focused on the prism, tap the  icon on the LaserLynx Lite main screen and wait for the distance measurement to appear. This is the distance of the competitor's throw or jump.

### Clearing a measurement



To clear a measurement, tap , the eraser icon.

**Warning!** There is no way to undo clearing a measurement! When you delete a measurement, it is *deleted permanently* from memory!

## Changing languages

LaserLynx Lite for the Pocket PC is operable in languages in addition to English.

➤ ***To change the LaserLynx Lite language setting:***

- 1** From the LaserLynx Lite main screen, tap **Menu | Options | Preferences....** The **LaserLynx Lite Preferences** screen appears.
- 2** Tap to make a new selection from the **Language:** drop-down list at the top of the screen.
- 3** Tap **Ok**.
- 4** Exit LaserLynx Lite by tapping **Menu | File | Exit**.
- 5** Restart LaserLynx Lite. LaserLynx Lite displays in the new language that you selected.



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## CHAPTER 4

# LaserLynx Lite Best Practices

This chapter contains suggested best practices to follow when operating LaserLynx Lite during a competition.

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## Safeguard the tripod

Avoid setting up the tripod so that one of the tripod legs is between your legs when you look through the eyepiece. This helps you avoid tripping on a tripod leg and moving the tripod.

Also, make sure that the eyepiece is at a level where you must lean forward slightly to look through it. This keeps your feet further away from the legs of the tripod and minimizes the potential of moving it.

---

## Lock the rotation release (LaserLynx Pro only)

If the sighting unit is left idle for more than five minutes, it turns off. Be careful not to rotate the laser base after the laser has turned itself off, or else you will have to redo the control measurement. To avoid this, make sure that you lock the rotation release by turning the knob when not in use.

---

## Find the vertical slope (LaserLynx Pro only)

Whenever you turn the laser on, make sure that you rotate it through the horizon using the tilt release knob to find the vertical scope again. Remember that every time you turn the laser back on after it has turned itself off, you must find the vertical slope again.

---

## Verify your first few measurements

The first time that you use the laser to take measurements during a competition, verify your measurements with a steel measuring tape. If the laser does not match the tape measurements:

- Make sure that the tripod is level by checking all three level indicators.
- Redo the control measurement.

---

## Take a zero-set measurement (LaserLynx Pro only)

If you are using the LaserLynx Pro, we recommend that before you take the control measurement, you take a *zero-set* measurement for reference. Throughout the competition, you can reference the zero-set measurement to make sure that the tripod has not been moved or bumped. This is especially helpful during indoor competitions, when the tripod is more likely to be moved or bumped.

- 1 ***Set up the tripod*** (see "Step 2: Set up the tripod").
- 2 Turn on the laser.
- 3 Find a fixed point somewhere on the horizon. Select something that will not move during the competition. For example, use the corner of a wooden sign at the end of the stadium.
- 4 Focus the laser on the fixed point.

- 5 Press the zero-set button on the laser LCD twice so that it reads **0**. On the LaserLynx Pro, the zero-set button resembles a down arrow, like this: ▼.
- 6 Frequently throughout the competition, aim the laser back at the fixed point on the horizon. When you do so, the LCD on the laser should read 0. If it reads anything other than 0, it means that the tripod was bumped or moved, and you must redo the control measurement.

---

## Use the Mark Components screen

You can use the **Mark Components** screen in the LaserLynx Lite application to view all of the measurements that the distance calculation is made from. Viewing this screen gives you an idea of how LaserLynx Lite calculated the distance measurement.

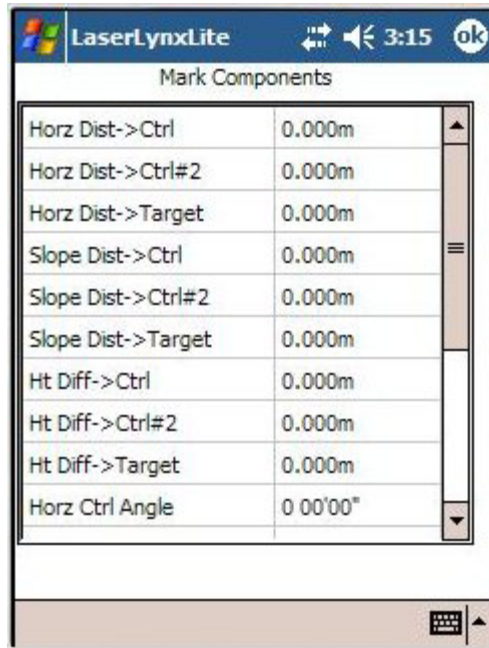
➤ **To view the Mark Components screen on the LaserLynx Lite for the Palm handheld device:**

- 1 Start at the **LaserLynx Lite** main screen.
- 2 Tap the **Menu** button.
- 3 Tap **Components** from the pick list. The **Mark Components** screen appears. Tap the arrow in the bottom right corner of the screen to scroll through the list of values.



➤ **To view the Mark Components screen on the LaserLynx Lite for the Pocket PC handheld device:**

- 1 Start at the **LaserLynx Lite** main screen.
- 2 Tap **Menu | Options | Components...** The **Mark Components** screen appears.



- 3 Tap the right slider to scroll through the list of values.

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