

# ACCULINE<sup>®</sup>

LASER LEVELS

## PRO<sup>®</sup>

### Universal Laser Detector Model No. 40-6790

## Instruction Manual

*The 40-6790 Universal Laser Detector is a versatile and durable dual use laser detector for the construction site. The 40-6790 Universal Laser Detector can be used as a machine mounted detector and a level rod mounted detector, designed for all brands of rotary lasers. Its 5" receiving photo cell and 240 degree reception area makes it perfect for use with a standard level rod or for use with backhoes, excavators, dozers, skid steers, and box blades. This unit comes complete with detector and rod bracket. Additionally, the 40-6790 includes built-in magnetic mounts for use with machines.*



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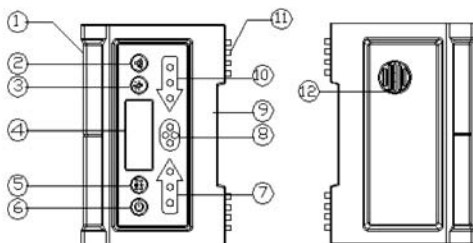
### 1. Kit Contents

<b><u>Description Model No. 40-6580</u></b>	<b><u>Qty.</u></b>
Universal Laser Detector	1
“AA” Alkaline Batteries	4
Instruction Manual with Warranty Card	1
Hardshell Carrying Case	1

## 2. Technical Specifications

Detecting Range:	Up to 700' (200m)
Detecting Accuracy:	Fine: $\pm 5\text{mm}$ Coarse: $\pm 12.5\text{mm}$
Receiving Window:	5" (12 cm)
Receiving Angle:	240°
Power Supply:	4 "AA" Alkaline Batteries
Battery Life:	35 hrs. continuous use with LCD lighting off
Sound Indicator:	slow short beep, rapid short beep and continuous sound
LCD Indicator:	Up arrow, Down arrow, On grade
LED Indicator:	Up, Down, On grade
Includes:	Level Rod Bracket
Dimensions:	6.69" x 4.52" x 1.65" (170 x 115 x 42mm)
Weight:	1.5 lb. (0.680kg)
Working temperature:	-20°C to 50°C (-4°F to +122°F)
Other functions:	If laser signal is lost, the display will show last signal recorded for 5 seconds

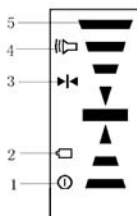
### 3. Location of Parts/Components



- |                                   |                        |
|-----------------------------------|------------------------|
| 1. Receiving Window               | 7. Up LED display      |
| 2. Sound Key                      | 8. Middle LED display  |
| 3. Backlight Key                  | 9. Battery Compartment |
| 4. LCD Display Window             | 10. Down LED display   |
| 5. Coarse/Fine Detecting Accuracy | 11. Magnets            |
| 6. Power Key                      | 12. Horn               |

#### Display Window Symbols

1. Power Symbol
2. Low Battery Symbol
3. Coarse/Fine Symbol
4. Sound Symbol
5. Laser Signal Position Indicator





Power Key: Turn on/off the instrument



Sound Key: Turn on/off the sound



Coarse/Fine Detecting Key



Backlight Key

## 4. Operating Instructions

### Battery Installation

1. Rotate battery compartment screw counterclockwise to open.
2. Put 4 "AA" Alkaline Batteries in (note polarity) and clockwise rotate battery compartment screw to close.
3. When the battery voltage is low the unit will display a low battery symbol and buzz for 2-4 seconds. The backlight function is disabled when the low battery symbol is on.

#### Note:

- Remove the batteries when the unit is being stored for a long time.
- When the low battery indicator is displayed, change the batteries soon.

## Operating Instructions

**IMPORTANT:** Hold the unit stable while detecting.

**Press the Power Key:** The LCD will display all the symbols then enter into detection mode. (See figure 3) The LCD display will show the ON symbol and the Coarse/Fine symbol. (See figure 4)

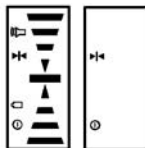


Figure 3 Figure 4

### Detecting a horizontal laser signal

Put the unit vertically, with the receiving window facing the laser to receive the laser signal. If the LCD shows a down arrow, the down LED is flashing, and there is short beeps, it means the laser signal is down. (See figure 5) If the LCD shows an up arrow, the up LED is flashing and there is rapid beeps, it means the laser signal is up. (See figure 6) If the LCD shows the on grade symbol, the middle green LED is flashing and there is a continuous sound, it means the detector is on the same grade/plane as the laser beam. (See figure 7-1 coarse detecting and figure 7-2 fine detecting)

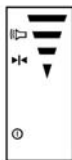


Figure 5



Figure 6

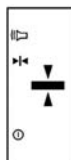
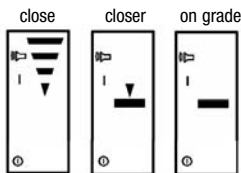


Figure 7-1



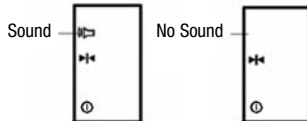
Figure 7-2

**Note:** In the fine detecting mode, when the laser signal is near the on grade position, the displaying arrow will decrease in size.



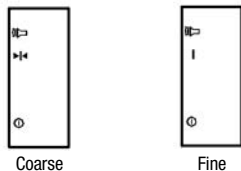
### Sound functions

When the detector is ON, pressing the sound key will alternate between sound-on and sound-off, it will also change the sound sign on the LCD screen.



### Coarse/Fine detecting

With the detector on, pressing the coarse/fine detecting key will alternate the unit between coarse and fine mode. The detector has a different symbol and accuracy specifications.



### Backlight function

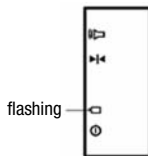
When the detector is on, pressing the backlight key will turn on and off the LCD backlight.

### Power saving function

Press and hold the backlight key for more than 3 seconds. The middle green LED indicator will flash three times and the power saving function is turned on. If the detector does not receive a laser signal for 30 minutes, and there are no other keypad operations during these 30 minutes, the unit will automatically turn off to prolong the battery life. Press and hold the backlight key again and the middle green LED indicator will flash once and the power saving function is turned off.

### Low battery indicator

If the LCD blinks the battery symbol, it means the batteries are low and should be changed soon. If the battery power is very low, the detector will shut off automatically.



### Memory function

If the last signal the detector received from the laser beam was up or down, the detector will remember which direction it received the signal from. The LED and LCD display arrow will flash 5 times in the direction of the last signal received from the laser beam.



## Use of Level Rod Bracket

### Note:

- Arrow symbol on bracket should be facing the front of the detector.
- Use level rod bracket when connecting the detector to a level rod.
- Snap off bracket for attaching to machinery.



## Detector Maintenance

- Keep the unit, particularly the reception window, clean. If it does get dirty, use a cloth to wipe it clean.

