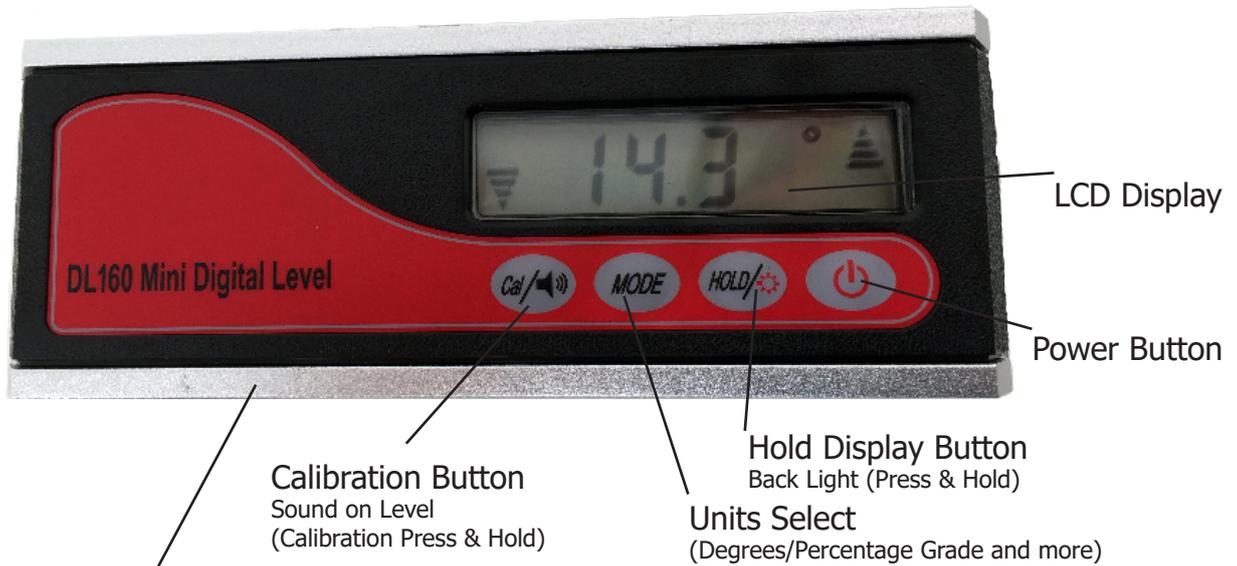




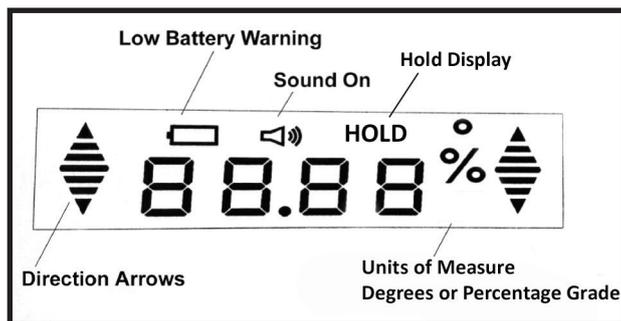
# DL160 Digital Level

## Instruction Manual

The DL160 is a Digital Level and inclinometer for measuring levels and angles. It has a large clear back light LCD panel which can display measurements in degrees or percentage and more. The zero sound feature allows audible indication as the unit gets closer to being level ( $0^{\circ}$ ), the Hold features allows the user to lock the angle displayed. The DL160 also features a strong magnetised base allowing you to mount the instrument on metal work you wish to level.



Magnetic Base



Battery Compartment  
3x "AAA" Batteries



**Operation** (unit may need calibration when first used see easy instructions on other side)

Power up the DL160 with the On/Off button, the LCD display will show the angle of a surface when placed on it,  $0.0^{\circ}$  and all four arrows will indicate level. When not level the arrows will indicate which direction the unit needs moving to reach level.

The "Hold" button allows you to freeze the LCD display when pressed. This is useful when holding the level on a surface in such a position that you cannot see the display, simply press the hold button the measurement will be frozen until you press the hold button again.

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A short press of the "Cal" button turns on or off the sound feature of the DL160. When turned on the DL160 will emit a number of beeps the beeps will get faster and faster as the level gets progressively closer to being either level (0.0°) or to Vertical (90.0°), once exactly on these points a solid tone beep is sounded. A long press of the same button (2 seconds) will put the level into Calibration Mode (see details later).

The "Mode" button changes the units of measure displayed by the DL160, the default unit is degrees and each press of the button will toggle the DL160 between degrees and percentage grade, in/ft and mm/m.

The "Hold" button will freeze the LCD display when pressed, this is handy when wanting to check the angle of a surface that is out of view when the level is placed on it. Place the level on the surface press the hold button once which freezes the display so that you can remove the level so that you can read the display. A long press (3 seconds) will turn on and off the backlight.

Low Battery is indicated by a flashing battery symbol appearing on the LCD display.

The DL160 will auto power off if no movement has been detected within 20 minutes to save batteries.

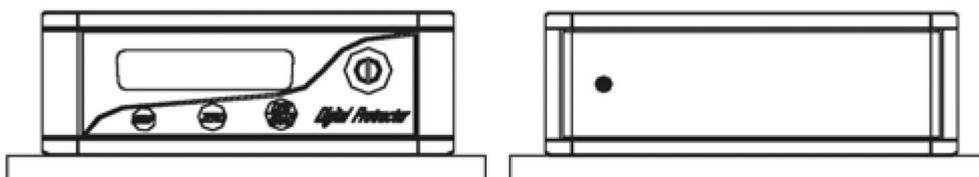
The base of the DL160 is magnetised which is useful for levelling and aligning metal beams, shelving and other structures.



## Calibration Instructions

Calibration may be required after sustained vibrations, large temperature variations or any knocks or drops. To check the calibration simply place the level on any handy flat surface and read off the angle/slope displayed then rotate the DL160 180° so that the reverse side of it is facing you, again note the angle/slope the difference between the two should be no more than 0.2° which is tolerance. If the variation falls beyond this then the DL600 will need calibrating using the following method.

### 180 degree test

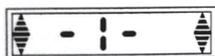


#### To calibrate.

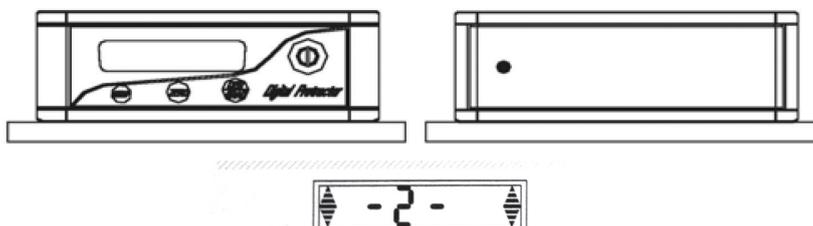
1. Place the DL160 on smooth horizontal surface (does not have to be level) and press hold "Cal" button "-0-" will be displayed.



2. Wait 10 seconds and press "Cal" button again and "-1-" will be displayed.



3. Next turn the level 180° on the same levelling surface (see diagram below) and wait another 10 seconds press "Cal" again "-2-" will display for a moment and the display will then return to showing the angle in degrees. Re-check and if necessary repeat calibration procedure.



#### Specifications

Angle Range 4x90°  
 Accuracy Digital: +/-0.1° (0°-10°)  
 +/-0.2° (other)  
 Power: 3x "AAA" Batteries  
 Operation: Approx 600hrs  
 Temperature: -10°C - +45°C  
 Weight: 0.3kg with Batteries