# GE Sensing

# GE Protimeter Aquant<sup>®</sup> User Instructions

## Introduction

The *GE Protimeter Aquant BLD5760* moisture detector is used to assess and monitor the relative moisture level of non-conductive and porous materials: such as plaster, masonry, concrete and fiberglass (GRP). It is an ideal instrument for making rapid surveys of solid walls and floors and to pinpoint areas of concern in tiled shower cubicles, GRP boat hulls, motor homes and caravans etc.

The Aquant BLD5760 has a digital display that is synchronized with a color coded LED scale. The digital display shows the relative moisture level of the material under investigation on a scale of 0-1000 and the LED scale indicates moisture condition of the material.

The color-coded zones signify the moisture condition of the material under investigation. The **green**, **yellow**, and **red** color-coded zones indicate the following:

- Material in the green zone is in a safe air-dry condition.
- In the **yellow** zone moisture levels are higher than normal but not critical; further investigation is recommended.
- The **red** zone represents excessive moisture levels. If sustained, red zone moisture levels will lead to decay in organic materials.

## 1 Operation

The Aquant BLD5760 moisture detector has a radio frequency transceiver located in the bulge on it's underside to give relative readings within the material against which it is held up to a nominal depth of 3/4 in. (19 mm). The depth of measurement is subject to the characteristics of the material under test.

To use the Aquant, do the following:

1. Hold the Aquant away from surfaces as shown and switch  ${\sf ON}$  by pressing

 $( \bigcup$  momentarily. The instrument may now be used to take measurements or zeroed as appropriate.

- Zero the instrument (with respect to the environment in which it is about to be used) by pressing and holding ▶ for 3 seconds, until the word "nuL" appears in the display.
- Release ►; "nuL" will flash for a few seconds and then disappear from the screen. The Aquant is now zeroed.



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- 4. Place the instrument against the surface of the wall, floor or element at the chosen point of measurement as shown. Ensure that your forefinger and thumb do not extend beyond the top of the black plastic grip band and wrap all fingers around the side of the instrument.
- **Note:** The Aquant should be held at a nominal 25° to the surface so that both top edge of the instrument and the sensor bulge are in contact with the surface.
- **5.** Read the relative moisture level value from the display and note that moisture condition of the material from the color coded LED scale.

### 2 Zero Feature

The zeroing feature enables the user to compensate for the effects of changes in temperature on the calibration. It is necessary to zero the Aquant if the following appear on the display when the instrument is held in air away from surfaces:

- numbers, or
- three lines "---" and symbols "°C°F REL)))" are flashing

The recommended best practice is to always zero the Aquant with respect to the environment in which it is about to be used, even if the display shows "**0**". Read the Operation section above for details.

## 3 Hold Feature

The relative value shown on the display may be held for 3 seconds by pressing  $\bigcirc$  while the Aquant is being held against a surface. This feature is useful when using the instrument in areas where the display cannot be clearly seen.

### 4 Auto Switch-Off Override Feature

Press and hold  $\binom{1}{1}$  for 3 seconds to switch the instrument **OFF**.

### 5 User Set-Up Options

The Aquant is initially set-up to switch **OFF** automatically after 1 minute and to emit an audible beep for readings beyond the yellow zone. The user may change these default settings by entering the Set-up mode.

Setup the User Options as follows:

With the instrument switched OFF, press and hold the lower button ▶ and switch ON using the upper button (). The display will show the firmware version number (e.g. "4.06") until both buttons are released.



- 2. Scroll across the display and record the following information:
  - a. part number ("bLd5760")
  - **b.** firmware date in the form yy-mm-dd (e.g. **"04-05-20"**)
  - c. calibration code (e.g. **E1-1**).

Note: Once the scrolling is complete, display shows "0 = 0" meaning that option 0 is set to 0. The (1) and ▶ buttons may now be used to change the instrument options and settings, respectively, as detailed in Table 1 below.

() When Option No. Is:	And Setting Number Is:	Aquant Set-Up Is:			
0	0	Instruments settings are not changed from previous settings			
	1	Instrument default settings loaded - switches <b>OFF</b> automatically after 1 minute, beeper is activated, factory-set zeroing			
1	0	Beeper is switched <b>OFF</b>			
	1	Beeper beeps when switching from one mode to the other			
	2	Beeper beeps with increasing frequency from nominal value of 170			
2	0	Auto switch OFF is not active. Instrument can only be			
		switched <b>OFF</b> by pressing $(h)$ and holding it for over 3 sec.			
	1	Auto switch <b>OFF</b> is active. Instrument switches <b>OFF</b> after 1 minutes			
	2	Auto switch <b>OFF</b> is active. Instrument switches <b>OFF</b> after 2 minutes			
	3	Auto switch <b>OFF</b> is active. Instrument switches <b>OFF</b> after 3 minutes			

TABLE	1.	User	Set-U	o O	otions
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**Note:** The instrument options can only be changed in numerical order (0, 1, and 2 respectively). Save setting changes and exit the Set-up mode by pressing () again, as in Step 4 of the following example:

#### Example:

To switch the audible beeper **OFF** and set the auto switch **OFF** time to 3 minutes, complete the following steps:

- **1.** Press and hold  $\blacktriangleright$  followed by () to enter Set-up mode.
- When display shows 0 = 0, press () once to select beeper options (1), then press ▶ until the display shows 1 = 0.

- Press () once again to select auto switch off options (2), then press ▶ until the display shows 2 = 3.
- 4. Press  $\binom{1}{1}$  to save settings, exit Set-up mode and return to operational modes.

#### 6 Error Messages

When zeroing if the error message **E32** appears on the instrument display, signifying that the instrument reading is beyond the zeroing range of 130.

#### 7 Care and Maintenance

When the Aquant is not being used, then do the following:

- Store the Aquant in the carry case (provided with the kit) in a stable and dry environment.
- Remove the battery, if the Aquant will not be used for extended period of time.
- Replace the battery when the low battery symbol appears on the display.

The information contained in this leaflet is given in good faith. As the method of use of the instrument (and its accessories) and the interpretation of the readings are beyond the control of the manufacturers, they cannot accept responsibility for any loss, consequential or otherwise, resulting from its use.

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