

# OPERATING INSTRUCTIONS

## ADR Touch Advanced Readout US Edition

### 37-4856/09

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<p><i>In the interests of improving and updating its equipment, ELE reserves the right to alter specifications to equipment at any time.</i></p> <p><b>ELE International 2020 ©</b></p>		

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## 1 Specifications

Specifications are subject to change without notice.

Specification	Details
Dimensions (W x D x H)	320 x 160 x 160 mm (12.6 x 6.3 x 6.3 in.)
Weight	2.8 kg (6.2 lb)
Enclosure	Paint epoxy coated 1.2 mm mild steel
Display	5.7-in. LCD QVGA touch screen
Protection class	I, IP45
Pollution degree/installation category	2; II
Power requirements	115/230 VAC $\pm$ 10%, 50/60Hz, single phase 250 mA at 115 VAC; 125 mA at 230 VAC Lithium cell battery, 10-year life with power off
Operating environment	Temperature: 0 to 40 °C (32 to 104 ° F) Humidity: 10 to 90%, non-condensing Altitude: 2000 m (6,560 ft)
Storage environment	Temperature: -40 to 70 °C (-40 to 158 °F) Humidity: 10 to 90%, non-condensing
Memory	microSD memory card (no user access); non-volatile memory (for calibration data and firmware)
Connections	RS232, miniUSB, DIN and BNC
Fuses	2 A, 250 VAC, anti-surge, time delay

## 2 General information

In no event will ELE International be liable for direct, indirect, special, incidental or consequential damages resulting from any defect or omission in this manual. ELE International reserves the right to make changes in this manual and the products it describes at any time, without notice or obligation.

## 2.1 Safety information

### NOTICE

The manufacturer is not responsible for any damages due to misapplication or misuse of this product including, without limitation, direct, incidental and consequential damages, and disclaims such damages to the full extent permitted under applicable law. The user is solely responsible to identify critical application risks and install appropriate mechanisms to protect processes during a possible equipment malfunction.

### AVIS

Le fabricant décline toute responsabilité quant aux dégâts liés à une application ou un usage inappropriés de ce produit, y compris, sans toutefois s'y limiter, des dommages directs ou indirects, ainsi que des dommages consécutifs, et rejette toute responsabilité quant à ces dommages dans la mesure où la loi applicable le permet. L'utilisateur est seul responsable de la vérification des risques d'application critiques et de la mise en place de mécanismes de protection des processus en cas de défaillance de l'équipement.

Please read this entire manual before unpacking, setting up or operating this equipment. Pay attention to all danger and caution statements. Failure to do so could result in serious injury to the operator or damage to the equipment. Make sure that the protection provided by this equipment is not impaired. Do not use or install this equipment in any manner other than that specified in this manual.

## 2.2 Hazard information

### 2.2.1 Use of hazard information

#### ⚠ DANGER

Indicates a potentially or imminently hazardous situation which, if not avoided, will result in death or serious injury.

#### ⚠ WARNING

Indicates a potentially or imminently hazardous situation which, if not avoided, could result in death or serious injury.

#### ⚠ CAUTION

Indicates a potentially hazardous situation that may result in minor or moderate injury.

### NOTICE



Indicates a situation which, if not avoided, may cause damage to the instrument. Information that requires special emphasis.

## 2.2.2 Interprétation des indications de risques

<b>⚠ DANGER</b>
Indique une situation de danger potentiel ou imminent qui, si elle n'est pas évitée, entraîne des blessures graves, voire mortelles.
<b>⚠ AVERTISSEMENT</b>
Indique une situation de danger potentiel ou imminent qui, si elle n'est pas évitée, peut entraîner des blessures graves, voire mortelles.
<b>⚠ ATTENTION</b>
Indique une situation de danger potentiel qui peut entraîner des blessures mineures ou légères.
<b>A VIS</b>
Indique une situation qui, si elle n'est pas évitée, peut occasionner l'endommagement du matériel. Informations nécessitant une attention particulière.



## 2.3 Precautionary labels

Read all labels and tags attached to the instrument. Personal injury or damage to the instrument could occur if not observed. A symbol on the instrument is referenced in the manual with a precautionary statement.

	This symbol, if noted on the instrument, references the instruction manual for operation and/or safety information.
	Electrical equipment marked with this symbol may not be disposed of in European public disposal systems after 12 August of 2005. In conformity with European local and national regulations (EU Directive 2002/96/EC), European electrical equipment users must now return old or end-of-life equipment to the Producer for disposal at no charge to the user. <b>Note:</b> For return for recycling, please contact the equipment producer or supplier for instructions on how to return end-of-life equipment, producer-supplied electrical accessories, and all auxiliary items for proper disposal.

### 2.3.1 Etiquettes de mise en garde

Lisez toutes les étiquettes et tous les repères apposés sur l'instrument. Des personnes peuvent se blesser et le matériel peut être endommagé si ces instructions ne sont pas respectées. Les symboles apposés sur l'appareil sont complétés par un paragraphe Danger ou Attention dans le manuel.

	Si l'appareil comporte ce symbole, reportez-vous au manuel d'utilisation pour consulter les informations de fonctionnement et de sécurité.
	En Europe, depuis le 12 août 2005, les appareils électriques comportant ce symbole ne doivent pas être jetés avec les autres déchets. Conformément à la réglementation nationale et européenne (Directive 2002/96/CE), les appareils électriques doivent désormais être, à la fin de leur service, renvoyés par les utilisateurs au fabricant, qui se chargera de les éliminer à ses frais. <b>Remarque :</b> Pour le retour à des fins de recyclage, veuillez contacter le fabricant ou le fournisseur d'équipement pour obtenir les instructions sur la façon de renvoyer l'équipement usagé, les accessoires électriques fournis par le fabricant, et tous les articles auxiliaires pour une mise au rebut appropriée.

## 2.4 Certification

### **Canadian Radio Interference-Causing Equipment Regulation, IECS-003, Class A:**

Supporting test records reside with ELE International.

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

### **FCC Part 15, Class "A" Limits:**

Supporting test records reside with ELE International. The device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- a. The equipment may not cause harmful interference.
- b. The equipment must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

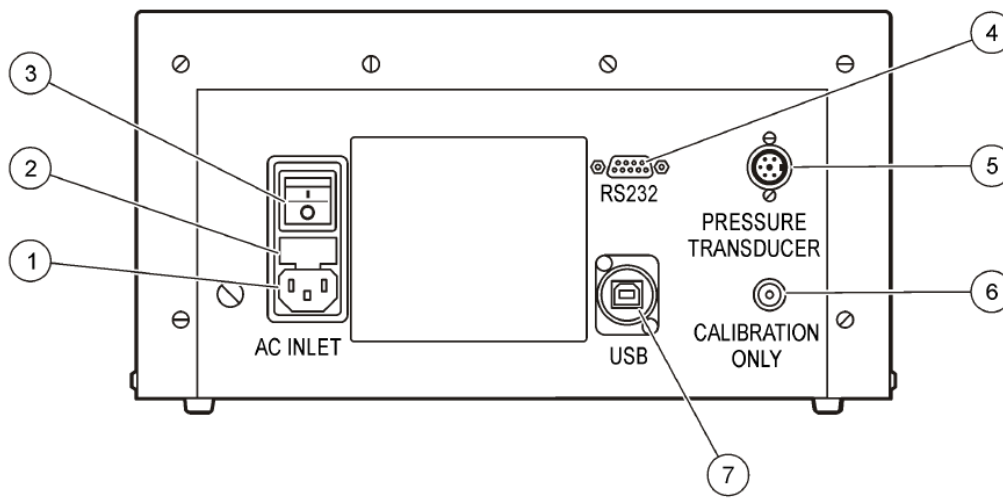
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their expense. The following techniques can be used to reduce interference problems:

- a. Disconnect the equipment from its power source to verify that it is or is not the source of the interference.
- b. If the equipment is connected to the same outlet as the device experiencing interference, connect the equipment to a different outlet.
- c. Move the equipment away from the device receiving the interference.
- d. Reposition the receiving antenna for the device receiving the interference.
- e. Try combinations of the above.

## 2.5 Product overview



This controller is used with compression testers to identify the compressive strength or flexural strength of concrete, mortar mixes and masonry products in accordance with ASTM standards. Use the LCD touch screen display to enter sample information and to monitor the pace rate. Test results are shown on the display at the end of each test and are saved to internal memory. Figure 1 shows the power switch, fuse drawer and controller connections.

**Figure 1 Instrument overview (back view)**



1 Power connector	5 DIN connector (pressure transducer cable only)
2 Fuse drawer	6 BNC connector (Service use only)
3 Power switch	7 miniUSB connector for a computer
4 RS232 connector for a printer	

### 3 Installation

<b>⚠ WARNING</b>	
	Multiple hazards. Only qualified personnel must conduct the tasks described in this section of the document.
<b>⚠ AVERTISSEMENT</b>	
	Dangers multiples. Seul le personnel qualifié doit effectuer les tâches détaillées dans cette section du document.

### 4 User Interface and Navigation

#### 4.1 Display description

All test functions of the controller are started from the LCD touch screen. To use the touch screen, tap the screen with a finger, pencil eraser or stylus. Do not use sharp objects to select options.

Refer to Table 1 for descriptions of the Home screen icons. Refer to Table 2 for descriptions of the other icons. Refer to Table 3 for descriptions of the keyboard icons.

Table 1 Home Screen Icons






Icon	Description	Icon	Description
	Shows the Test Setup screen.		Shows the Configuration menu.
	Selects the sample type and sample size.		Shows the Calibration screen. Password protected. (Service use only)
	Shows the saved test results.		



Table 2 Other Icons



















Icon	Description	Icon	Description
	Changes the selected value.		Sends the current test results to the attached printer.
	Backspace		Shows the pace graph.
	Confirm, enter or select		Makes a USB connection between the internal memory and the attached computer.
	Adds the sample as a favorite.		Lets the sample weight be entered.
	Removes the sample as a favorite.		Sets the load to zero.
	Increases the value.		Stops changes to the screen during a test so the values shown can be recorded. <i>Note: The controller gives an audible warning to identify that the load shown on the screen is not the current load.</i>
	Decreases the value.		Lets the screen change during a test to show the current load.





Table 3 Keyboard Icons

Icon	Description	Icon	Description
	Backspace		Changes the keyboard to lower case letters.
	Changes the keyboard to numbers and symbols.		Changes the keyboard to upper case letters.

## 4.2 Navigation

Refer to Table 4 for descriptions of the navigation icons.

Table 4 Navigation icons

Icon	Description	Icon	Description
	Goes to the Home screen.		Scrolls down
	Scrolls up		Goes to the previous screen.

## 5 Start-up

### 5.1 Connect the power cord:

- a. Connect the supplied power cord to the power connector.
- b. Connect the power cord to a mains electrical outlet with protective earth ground.





### 5.2 Connect a printer (optional):

To send test results to a printer, connect a printer to the RS232 connector.


### 5.3 Turn on the controller:

Set the power switch for the controller to on.







### 5.4 Select the language, date and time:

1. Push .
2. Push **General Settings**.
3. Push **Set Date and Time**.
4. Select the 12 or 24 hour checkbox to select the clock format.
5. If a 12-hour clock is selected, select the AM or PM checkbox.
6. Push  or  to set the date and time.
7. Push .
8. Push **Set Language**.
9. Select the language.

*Note: The English language has the option of UK or US which set the date format to DD/MM/YYYY (UK) or MM/DD/YYYY (US).*

10. Push .

## 5.5 Adjust the display


1. Push .
2. Push **User-defined Settings**.
3. Push **Adjust Display**.
4. To hear a beep each time a button on the touch screen is pushed, select the Key Click checkbox.
5. Push  or  to adjust the brightness.
6. Push  or  to adjust the contrast.
7. Push .

## 6 Maintenance

<b>⚠ DANGER</b>	
	Multiple hazards. Only qualified personnel must conduct the tasks described in this section of the document.

<b>NOTICE</b>	
Do not disassemble the instrument for maintenance. If the internal components must be cleaned or repaired, contact the manufacturer.	

<b>AVIS</b>	
<b>Ne pas démonter l'instrument pour le réparer. Si un composant interne a besoin d'être nettoyé ou changé, merci de contacter le fabricant</b>	

<b>⚠ DANGER</b>	
	Dangers multiples. Seul le personnel qualifié doit effectuer les tâches détaillées dans cette section du document.

### 6.1 Clean the instrument

Clean the exterior of the instrument with a moist cloth and a mild soap solution.

### 6.2 Replace the controller fuse

<b>⚠ DANGER</b>	
	Fire hazard. Use the same type and current rating to replace fuses.

<b>⚠ DANGER</b>	
	Risque d'incendie. Remplacez les fusibles par des fusibles de même type et de même calibre.

Fuse failure is typically caused by an instrument problem. If the fuse continues to fail, contact ELE International's Customer Service Department.

A spare fuse is supplied in the fuse drawer. Refer to Section 1 Specifications for fuse requirements.

- a. Set the power switch for the controller to off.
- b. Remove the power cord for the controller from the electrical outlet.
- c. Use a flat-blade screwdriver to open the fuse drawer.
- d. Remove the fuse drawer and replace the fuse.
- e. Install the fuse drawer.

## 7 Troubleshooting

### 7.1 Common problems

Problem	Possible cause	Solution
The controller does not turn on.	Power is not supplied to the controller.	Connect the power cord to the power connector and to an electrical outlet.
	The controller has a blown fuse.	Replace the controller fuse.