

# OPERATING INSTRUCTIONS

## Digital Mortar Mixer

**39-0045**

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<i>In the interests of improving and updating its equipment, ELE reserves the right to alter specifications to equipment at any time.</i> <b>ELE International 2019 ©</b>		

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## 1 Equipment

The equipment comprises:

- |   |       |
|---|-------|
| 1. Digital Mortar Mixer, 5 litre capacity, fitted with paddle | 1 No. |
| 2. Bowl   | 1 No. |
| 3. Sand Dispenser   | 1 No. |
| 4. Burette Assembly   | 1 No. |
| 5. Operating Instructions with General Assembly Drawing       | 1 No. |

## 2 Introduction

This machine is designed to mix mortars and cement pastes to the requirements of EN 196-1 and EN 196-3.

The mixing paddle has a planetary motion and is driven by a motor with a microprocessor based speed controller.

In the automatic options, the machine mixes the cement and mortar to pre-set mixing programs.

In the manual option, the machine can be used as a simple to operate, two-speed mixer.

Additionally, an automatic mixing program option where the user can define the time intervals for mixing has also been provided.

A nudge option is also provided to assist the user in getting the mixing beater into the correct position for checking the required gap between the mixing blade and the bowl.

An automatic sand dispenser is attached to the side of the mixer and feeds the sand into the mixing bowl through an automatic command from the program controller, depending on the program selected.

A burette assembly is also fitted to the side of the machine and allows the dispensing of pre-determined volumes of water for the requirements of EN 196 manually.

### 2.1 Safety

This equipment has been tested by ELE International and is safe to use providing that the proper safety precautions are observed:




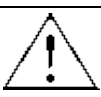

***DANGER – misuse of this equipment may result in serious injury to personnel.  
Only use the equipment for its intended purpose, as described in this manual.  
Do not attempt to operate the equipment with covers removed.  
Only connect to the correct electrical supply, as stated on the rating plate.  
Do not operate machine with wet hands.***

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 other personnel, or damage to the equipment.

**CAUTION – This equipment generates small levels of audible noise when in use. Ensure that it is installed in a location where operating noise will not cause disturbance to personnel in the area.**

***This equipment may automatically initialise electronic controls by rotation of the paddle for approximately 3-5 seconds when POWER switch is turned ON.***

## 2.2 Symbols

	Green or Black	<b>PROTECTIVE CONDUCTOR TERMINAL</b> Equipment safety earth point
	Green or Black	<b>Earth (ground) TERMINAL</b> Not for safety earth purposes but provides an earth reference point.
	Background Yellow; symbol and outline – Black	<b>Caution, risk of electric shock</b>
	Background Yellow; symbol and outline – Black	<b>Caution - refer to accompanying documents</b>
	Black	<b>Equipment conforms to the requirements of European CE Directives, as stated on the Declaration of Conformity</b>

## 2.3 Specification

Mortar Mixer Power Requirements	230 VAC, 50/60 Hz, 2 A		
Operating Environment	Temperature: 0 to 40°C (32 to 104°F) Humidity: 10 to 90%, non-condensing Operating Altitude: 2000m maximum		
Storage Environment	Temperature: -20 to 70°C (-4 to 158°F)		
Protection Class	I, IP20		
Pollution Degree/Installation Category	2: II		
<i>Speeds (rpm)</i>	<i>Paddle</i>	<i>Mixing Head Shaft</i>	
Low (Manual Speed 1)	140 ± 5	62 ± 5	
High (Manual Speed 2)	285 ± 10	125 ± 10	
<i>Overall dimensions</i>	<i>Length</i>	<i>width</i>	<i>height</i>
Basic machine	530 mm	350 mm	580 mm
Machine with sand dispenser	530 mm	390 mm	715 mm
Bowl capacity	(approx.) 5 litres		
Weight (mixer only)	54 kg		
Motor rating	180 watts		
Automatic Program 1	EN 196-1		
Automatic Program 2	EN 196 -3		
Nudge Speed (10 RPM)	For positioning of beater to check beater gap		
Program 3	User settable timing sequence		
Manual Program	Allows the user to operate the motor discretely and independently at low speed/high speed/nudge speed or allows the user to open/close the solenoid.		

## 2.4 Electrical Safety

**Danger :** Before removing any covers or performing maintenance repair and service, isolate from electrical supply by removing mains plug. Where mains supply is required during these activities, only competent persons should perform the work.

Check that the local power supply is compatible with the requirements stated on the label and connect in accordance with IEE regulations or to local requirements. It is advised that this machine be connected via a residual current device (not supplied), and it should operate if earth leakage current exceeds 0.03 amps.

The power cable is coded as follows:

Brown wire	L	Live or Power
Blue wire	N	Neutral
Green/yellow wire	E	Earth or Ground

**Danger :** exercise extreme caution when using the machine with wet hands. Dry hands before operating machine.

### Portable Appliance Tests (PAT)

All ELE designed products are tested for electrical safety prior to sale. An electrical safety PAT label is fitted to the rear of the mixer.

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Should no label be found, please contact ELE Service Department quoting the serial number of the equipment.

Organisations have an obligation to ensure equipment is maintained and is safe for use. Regular PAT testing is one means of ensuring equipment continues to be electrically safe.

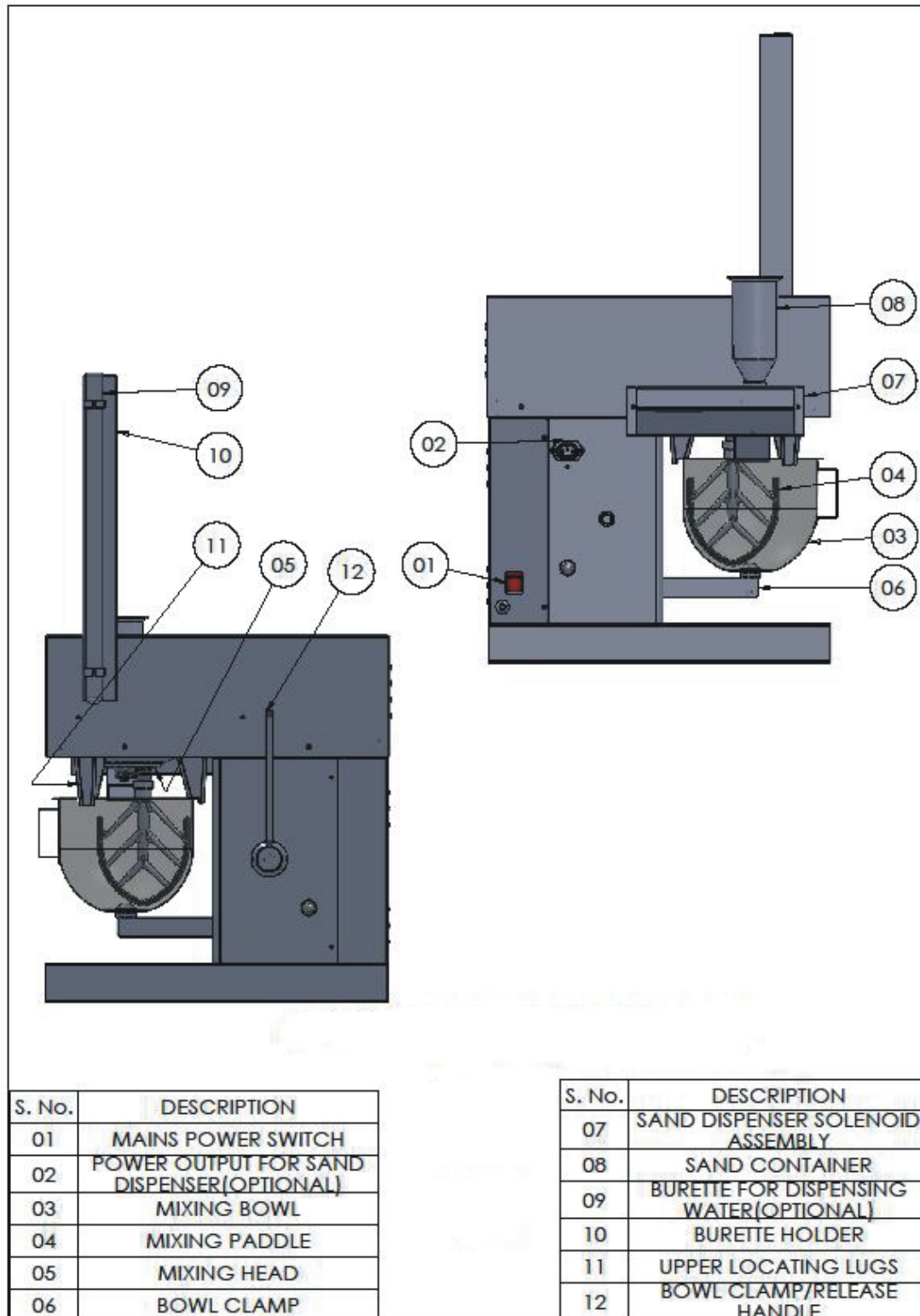
**Important: do not connect PAT leads to sensitive components such as PCBs, control switches and the like.**

**DO NOT FLASH TEST ELECTRONIC EQUIPMENT.**

**If in doubt as to the most suitable connection point (which will usually be an earth stud or an external earth connection) contact ELE Service Department for assistance.**

### 3 Description

The Digital Mortar Mixer equipment is illustrated in the General Assembly Drawing below.



The numbers given in the following descriptions correspond to the General Assembly Drawing:

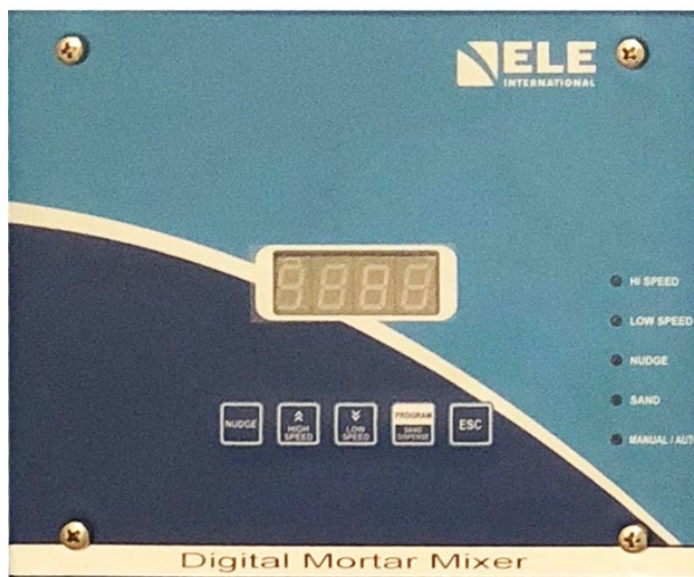
- (1) The mains power switch (1) is used to turn the mains power On and Off.
- (2) The output socket (2), supplies power to the sand dispenser during the time cycle when the sand is to be dispensed. The power to the sand dispenser attachment (7) is to be connected to this outlet socket.
- (3) The flange of the mixing bowl (3) has a notch which fits over a location spigot to ensure that the bowl is always fitted in the correct position and also prevents the rotation of the bowl. The location spigot also provides initial support to the bowl prior to clamping.

**NOTE: As a safety feature, the mixer will not start unless the bowl is fixed in its correct working position.**

- (4) The mixing paddle (4) screws onto the output spindle of the mixing head.
- (5) The mixing head (5) utilises planetary gearing and transmits the drive from the motor to the mixing paddle. Spacers are added as necessary to give the required clearance between the mixing paddle and the bowl. A locking ring secures the spacers in position and provides a seating for the mixing paddle.
- (6) Bowl clamp : This incorporates a spring loaded mechanism that holds the bowl in the correct working position.
- (7) The sand dispenser assembly (7) is fitted to the left side of the main machine top enclosure. It contains the sand container (8), the solenoid assembly and the electrical assemblies that connect to the output socket (2). An optional automatic sand dispenser which feeds sand at the right time to the mixing bowl on receiving a command from the program can also be provided on request.
- (8) The sand container (8) is a polycarbonate container which holds the sand.
- (9) A polycarbonate burette (9) which holds approximately 500ml of water is provided for manually dispensing the water with the help of an attached faucet.
- (10) The burette holder holds the burette in place.
- (11) Upper locating lugs: These position the bowl centrally to the mixing head. It is important to ensure that the bowl is correctly located within the lugs before the locking handle is fully engaged.
- (12) The bowl clamp / release handle (12) is used to fix or release the bowl before the mixing cycle or after a mixing cycle is complete.



## Front Panel



### Front panel function keys:

Status  
Display



Displays the real time clock when the power is turned ON. This also shows the program timing status during the RUN.

Nudge  
Key



When pressed in manual mode, the paddle is run at about 10 rpm. This is a useful feature to ensure that the paddle is not rubbing the walls of the bowl.

UP arrow / High Speed



This is a dual function key. In the program edit mode, the up arrow function is active. In the manual mode, operating this button sets the motor's speed to the higher speed of 125 rpm +/- 10 rpm.

DOWN arrow / Low Speed



This is a dual function key. In the program edit mode, the down arrow function is active. In the manual mode, operating this button sets the motor speed to the lower speed of 62 rpm +/- 5 rpm.

PROGRAM/Sand  
Dispense



This is a dual function key. In the program RUN mode, this key allows you to choose the program you want to RUN ie. Program No.1 as per EN 196-1, Program No.2 as per EN 196-3 or Program No.3, a user editable program, or finally manual mode. For details of program listing, please see section Program Details. In the manual mode, when this switch is operated, it switches the state of the solenoid valve power.

ESC for escaping from  
Program edit mode



Pressing the ESC key takes you out of edit mode.

## 4 Operation

The following should be noted before reading more about the operation of the machine:

### 4.1 Mixing program termination

The mixing programs will be terminated for any of the following reasons:

- a) If the bowl is removed.
- b) If the operator is late replacing the bowl after cleaning when the mixing head is about to restart (automatic modes).
- c) Switching from any of the two automatic options while the mixer is running.

A pre-set mixing program will always start at the beginning of its mixing cycle, even if restarted after a forced interruption.

**Note:** During the pre-set mixing program there is a period when the mixing head is stationary. The bowl clamp can be lowered during this period without interrupting the mixing program, providing it is back in position before the mixing head is due to restart. The audible warning device and motor status indicator will beep and flash slowly during the stationary period and then beep and flash faster 10 seconds before the mixing head is due to restart.

### 4.2 Removing the mixing bowl

Whilst supporting the mixing bowl by its handle with the left hand, lower the bowl clamp by pulling the bowl clamp/release handle downwards.

Lower the front of the bowl until the flange clears the side location lugs, then withdraw the bowl away from the rear location lug (with the locating spigot).

According to how much material is in the bowl, it may help to support the bowl with the right hand before extracting it from the location lugs.

### 4.3 Attaching the mixing bowl

Always ensure that the handle of the mixing bowl is at the front of the machine.

Whilst holding the bowl handle in the left hand and, if necessary, supporting the underside of the bowl with the right hand, insert the bowl into the location lug at the rear, ensuring that the locating spigot is engaged in the notch in the bowl flange.

Lift the front of the bowl until the flange is inserted within the two front location lugs and then clamp it into position by pushing the bowl clamp/release handle upwards until the bowl is locked into position.

#### 4.4 Removing and attaching the mixing paddle




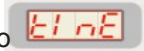
With the POWER switch turned to O (OFF), lower the bowl clamp and remove. Unscrew the mixing paddle from its shaft by turning it in an anticlockwise direction. The procedure for attaching the paddle is the reverse of the above procedure.

#### 4.5 Mixing Process: Automatic mixing mode:





Turn the machine ON with the POWER switch at the rear of the side panel. The display will show the current time, indicating that the power to the system has been applied and the machine is ready for running the programs.



#### 4.6 Setting the real-time clock

Press the  key.  will appear on the display. Press . The display will change to .

Press  to "Enter". The current time  will appear in the editable mode.





Press  for changing the hour field. When the desired value is achieved, press  for toggling the editable field to the minute field. Use  to set the desired minute value. When complete / when the desired value is achieved, press  to come out of the RTC setting mode.







#### 4.7 Running the machine in the Automatic Mode for mixing mortar or cement paste:

Select one of the three automatic program options available:

- a) Mortar Mixing to EN 196 -1
- b) Cement paste mixing to EN 196-3
- c) User settable mixing program



Press the  button. The display will change to . Press  again to get into the program modes. The display will change to .

Use  to execute  or press  once to select  or twice to select  and press  to execute the selected program.

**Note 1:**







When the mixing head is at rest while the mixing program is underway, the motor status light will flash intermittently at approximately a two second cycle and the audible warning device will emit a pulsed sound. Ten seconds before the mixing head is due to re-start, the motor status indicator and the audible warning device will increase to a faster rate up to the re-start of the mixing program.


#### 4.8 User Defined Program Cycle - Program No.3 ( Pr-3 )

Program 1 (Pr-1) and Program 2 (Pr-2) are pre-defined (not editable) mixing cycles, as required by EN 196-1 and EN 196-3 respectively.

However, if the user wishes to program a mixing cycle to his own time sequence, he can do so by editing and saving the time sequences in Program 3 (Pr-3) and executing Program 3 when required.

In order to edit Program 3, follow the steps described below:


- 1) Press  once. *Prun* will appear on the display.
  - 2) Press  twice. *PG-3* will appear on the display.
  - 3) Press  once. *L5tn* will appear on the display.
  - 4) Press  again. The display will show *8888* or the current time *L5tn* event in seconds.
  - 5) Use  or  keys to set the desired time interval for *L5tn*
- L5tn* refers to the duration of the low speed setting for the paddle from the start.



6) Press  to return the display to Step No.3 *L5tn*

7) Every time, you Press  the display will change to


*5dL, H5tn, P-tn*



8) When the display shows *5dL*

9) Press  again. The display will show *0000* or the current time event *5dL* in seconds.

10) Use  or  keys to set the desired time interval for *5dL*





11) Similarly, you can edit the time interval for *H5tn* and *P-tn*

12) Finally, pressing  takes you to the Program Run mode *Prun*


13) Use  or  now to set the desired Program Pr-1, Pr-2 or Pr-3 and execute the timing sequence

#### 4.9 Manual Mode Mixing

When the manual mode is selected, the LED indicator against Automatic / Manual will light up indicating that the program is set to operate in Manual mode. In this mode,

when you press, , the paddle speed is set to about 10 rpm. When you press, , the paddle will rotate at high-speed ( 125 +/- 10 rpm ). When you press , the paddle will rotate at a low speed ( 62 +/- 5 rpm ). When you press, , the sand dispenser solenoid will open as long as you keep the button pressed. When you release the button, the sand dispenser solenoid will be de-activated.

#### 4.10 The “Nudge” Option

In this mode, the mixing head will rotate at about 10 rpm whenever the  button is pressed and will stop revolving when the switch is pressed again. This mode is used when checking the clearance between the mixing paddle and the bowl by inching the paddle into the correct position for measurement.

#### 4.11 Adjusting the Mixing Paddle Clearance

The clearance between the mixing paddle and the bowl may need adjusting after a period of extensive use.

**DANGER: Great care must be taken during this process. It is recommended that only a qualified person who is totally familiar with the process should be tasked with this procedure.**

It is essential that the mixing paddle shaft is prevented from rotating when unscrewing or re-tightening the locking ring or undue stress will be imposed on the drive mechanism. Both the mixing paddle shaft and the locking ring have machined flats to accommodate a 22 mm spanner for this purpose.

Using the slot openings in the guard to see the paddle position, use the nudge option described in section 4.9 of these instructions to move the mixing paddle to a position where the blade edge of the paddle is in its nearest position to the side of the bowl.

**Danger:** Isolate the mixer from the mains electricity before any work commences. Now remove the guard assembly by first removing the sand dispenser, if fitted, and then loosen the two lower front panel screws and the front top cover screw on the right hand side. The guard can now be lowered and the micro switch unplugged from the socket. Assembly is a reversal of the procedure. Now measure the gap between the beater edge and the bowl side. If the gap is outside required standards then unscrew the locking ring (4). Add or remove the spacer (3) as required. Refit and re-tighten the locking ring (4). Refit the mixing paddle and guard assembly making sure that the guard is correctly located and the screws are secure.

## **5 Maintenance**

Clean the mixing paddle and bowl as soon as possible after mixing to prevent a build-up of hardened mix material on these components. No other maintenance should be required.

For machines with a sand dispenser fitted, it is possible that a build-up of light sand dust may occur within the case of the sand dispenser unit. The quantity will be dependent upon usage. It is recommended that the dispenser be periodically inspected and, if necessary, stripped and any dust removed.

Please contact ELE International for details of available spare parts and servicing requirements.



## Mixing Programs

### Program 1: for mixing mortars to EN 196-1 (PG-1)

When selected and when the PROGRAM button is pressed:-

- a) The mixer starts at low speed.
- b) After 30 seconds from the start, a command is sent to the output socket for the sand dispenser to open and allow sand into the bowl.
- c) After 60 seconds from the start, the mixer changes to high speed.
- d) After 90 seconds from the start, the mixer stops. A slow pulsed tone can be heard during this period. This time is used to clean down the sides of the bowl.
- e) After 170 seconds from the start, the pulsed tone increases in frequency to warn the operator 10 seconds before the motor starts and the program continues.
- f) After 180 seconds from the start, the mixer starts at high speed.
- g) After 240 seconds from the start, the mixer stops.

End of program.

### Program 2: for mixing cement pastes to EN 196-3 (PG-2)

When selected and when the PROGRAM button is pressed:-

- a) The mixer starts at low speed.
- b) After 90 seconds from the start, the mixer stops. A slow pulsed tone can be heard during this period.
- c) During the next 20 seconds the bowl must be removed and the cement paste scraped from the inside walls. (Note: After being stopped for 20 seconds, the pulsed tone speeds up for 10 seconds to warn the operator to refit the bowl.)
- d) After 120 seconds from the start, the mixer will start at low speed and continue at this speed.
- e) After 210 seconds from the start, the mixer stops.

End of program.

**Program 3:** for user defined mixing program for cement and mortar (PG-3)

When selected and when the PROGRAM button is pressed:-

- a) The mixer starts at low speed and continues to operate at low speed for a time selected by the user ( L S t n ).
- b) After X seconds from the start, [defined by the user ( i S d L ) ], a command is sent to the output socket for the sand dispenser to open and allow sand into the bowl.
- c) At the end of the low speed time period defined by the user, the mixer changes to high speed for a period defined by the user ( H S t n ).
- d) After Y seconds from the start, as defined in ( P - t n ), the mixer stops. A slow pulsed tone can be heard during this period. This period is utilised in cleaning the sides of the bowl.
- e) During the last 10 seconds of the pause, the pulsed tone increases in frequency to warn the operator that 10 seconds remain to the motor starting and the program continuing.
- f) As soon as the remaining period in high speed as selected is completed, the mixer will stop automatically and return to the beginning of the program, ready for the next cycle of mixing.

End of program.

## EC DECLARATION OF CONFORMITY



The Original Declaration of Conformity is suitable to Decision No 768/2008/EC of the European Parliament and the Council of 9<sup>th</sup> July 2008 on a common framework for the marketing of products and contains the elements specified in the relevant modules set out in Annex II of that Decision for the applicable Directives.  
This declaration relates exclusively to the equipment in the state in which it was placed on the market, and excludes components which are added and/or operations carried out subsequently by the final user.

### Applied Council Directive(s)

2006/42/EC Machinery Directive  
2014/30/EU Electromagnetic Compatibility (EMC)  
2011/65/EU RoHS2 Directive and Commission Delegated Directive (EU)2015/863

have been demonstrated

We, the Manufacturer :

**ELE International**, Chartmoor Road, Chartwell Business Park, Leighton Buzzard  
Bedfordshire LU7 4WG, UK

declare under our sole responsibility that the following equipment

**Product:** Mortar Mixer Digital 5 ltr  
**Catalogue Numbers:** 39-0045/01, 39-0045/06

**Description:** Mortar Mixing Machine, 5 ltr, for cement sample testing

The object of the declaration described above, is in conformity with the relevant Union Harmonisation Decision and the provisions of the following standard(s) or other normative document(s) when installed in conformance with the installation instructions contained in the product documentation

### EMC

**Emissions:** EN61326-1:2013 Group 1 Class A  
**Immunity:** EN61326-1:2013 Industrial Environment

### Clauses pertinent to the Machinery Directive of

IEC 60204-1:2016 Safety of machinery. Electrical equipment of machines. General requirements

**RoHS2:** EN50581:2012 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

Date of issue :

11/12/2017

Signed:



Name:

Tony Power

Position:

Managing Director

BS EN ISO9001:2008 approved  
Certificate number 860461

## DIRECTIVE ON WASTE ELECTRICAL & ELECTRONIC EQUIPMENT (WEEE)



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.

**Note:** For return for recycling, please contact the equipment producer or supplier for instructions on how to return end-of-life equipment for proper disposal.

**Important document. Retain with product records.**

### GERMAN

Elektrogeräte, die mit diesem Symbol gekennzeichnet sind, dürfen in Europa nach dem 12. August 2005 nicht mehr über die öffentliche Abfallentsorgung entsorgt werden. In Übereinstimmung mit lokalen und nationalen europäischen Bestimmungen (EU-Richtlinie 2002/96/EC), müssen Benutzer von Elektrogeräten in Europa ab diesem Zeitpunkt alte bzw. zu verschrottende Geräte zur Entsorgung kostenfrei an den Hersteller zurückgeben.

**Hinweis:** Bitte wenden Sie sich an den Hersteller bzw. an den Händler, von dem Sie das Gerät bezogen haben, um Informationen zur Rückgabe des Altgeräts zur ordnungsgemäßen Entsorgung zu erhalten.

**Wichtige Informationen. Bitte zusammen mit den Produktinformationen aufbewahren.**

### FRENCH

A partir du 12 août 2005, il est interdit de mettre au rebut le matériel électrique marqué de ce symbole par les voies habituelles de déchetterie publique. Conformément à la réglementation européenne (directive UE 2002/96/EC), les utilisateurs de matériel électrique en Europe doivent désormais retourner le matériel usé ou périmé au fabricant pour élimination, sans frais pour l'utilisateur.

**Remarque :** Veuillez vous adresser au fabricant ou au fournisseur du matériel pour les instructions de retour du matériel usé ou périmé aux fins d'élimination conforme.

**Ce document est important. Conservez-le dans le dossier du produit.**

### ITALIAN

Le apparecchiature elettriche con apposto questo simbolo non possono essere smaltite nelle discariche pubbliche europee successivamente al 12 agosto 2005. In conformità alle normative europee locali e nazionali (Direttiva UE 2002/96/EC), gli utilizzatori europei di apparecchiature elettriche devono restituire al produttore le apparecchiature vecchie o a fine vita per lo smaltimento senza alcun costo a carico dell'utilizzatore.

**Nota:** Per conoscere le modalità di restituzione delle apparecchiature a fine vita da riciclare, contattare il produttore o il fornitore dell'apparecchiatura per un corretto smaltimento.

**Documento importante. Conservare con la documentazione del prodotto.**

### DANISH

Elektriske apparater, der er mærket med dette symbol, må ikke bortskaffes i europæiske offentlige affaldssystemer efter den 12. august 2005. I henhold til europæiske lokale og nationale regler (EU-direktiv 2002/96/EF) skal europæiske brugere af elektriske apparater nu returnere gamle eller udtjente apparater til producenten med henblik på bortskaffelse uden omkostninger for brugeren.

**Bemærk:** I forbindelse med returnering til genbrug skal du kontakte producenten eller leverandøren af apparatet for at få instruktioner om, hvordan udtjente apparater bortskaffes korrekt.

**Vigtigt dokument. Opbevares sammen med produktdokumenterne.**

#### SWEDISH

Elektronikutrustning som är märkt med denna symbol kanske inte kan lämnas in på europeiska offentliga sopstationer efter 2005-08-12. Enligt europeiska lokala och nationella föreskrifter (EU-direktiv 2002/96/EC) måste användare av elektronikutrustning i Europa nu återlämna gammal eller uttrangerad utrustning till tillverkaren för kassering utan kostnad för användaren.

**Obs!** Om du ska återlämna utrustning för återvinning ska du kontakta tillverkaren av utrustningen eller återförsäljaren för att få anvisningar om hur du återlämnar kasserad utrustning för att den ska bortskaffas på rätt sätt.

**Viktigt dokument. Spara tillsammans med dina produktbeskrivningar.**

#### SPANISH

A partir del 12 de agosto de 2005, los equipos eléctricos que lleven este símbolo no deberán ser desechados en los puntos limpios europeos. De conformidad con las normativas europeas locales y nacionales (Directiva de la UE 2002/96/EC), a partir de esa fecha, los usuarios europeos de equipos eléctricos deberán devolver los equipos usados u obsoletos al fabricante de los mismos para su reciclado, sin coste alguno para el usuario.

**Nota:** *Sírvase ponerse en contacto con el fabricante o proveedor de los equipos para solicitar instrucciones sobre cómo devolver los equipos obsoletos para su correcto reciclado.*

**Documento importante. Guardar junto con los registros de los equipos.**

#### DUTCH

Elektrische apparatuur die is voorzien van dit symbool mag na 12 augustus 2005 niet meer worden afgevoerd naar Europese openbare afvalsystemen. Conform Europese lokale en nationale wetgeving (EU-richtlijn 2002/96/EC) dienen gebruikers van elektrische apparaten voortaan hun oude of afgedankte apparatuur kosteloos voor recycling of vernietiging naar de producent terug te brengen.

**Nota:** *Als u apparatuur voor recycling terugbrengt, moet u contact opnemen met de producent of leverancier voor instructies voor het terugbrengen van de afgedankte apparatuur voor een juiste verwerking.*

**Belangrijk document. Bewaar het bij de productpapieren.**

#### POLISH

Sprzęt elektryczny oznaczony takim symbolem nie może być likwidowany w europejskich systemach utylizacji po dniu 12 sierpnia 2005. Zgodnie z europejskimi, lokalnymi i państwowymi przepisami prawa (Dyrektywa Unii Europejskiej 2002/96/EC), użytkownicy sprzętu elektrycznego w Europie muszą obecnie przekazywać Producentowi stary sprzęt lub sprzęt po okresie użytkowania do bezpłatnej utylizacji.

**Uwaga:** *Aby przekazać sprzęt do recyklingu, należy zwrócić się do producenta lub dostawcy sprzętu w celu uzyskania instrukcji dotyczących procedur przekazywania do utylizacji sprzętu po okresie użytkowania.*

**Ważny dokument. Zachować z dokumentacją produktu.**

#### PORTUGUESE

Qualquer equipamento eléctrico que ostente este símbolo não poderá ser eliminado através dos sistemas públicos europeus de tratamento de resíduos sólidos a partir de 12 de Agosto de 2005. De acordo com as normas locais e europeias (Directiva Europeia 2002/96/EC), os utilizadores europeus de equipamentos eléctricos deverão agora devolver os seus equipamentos velhos ou em fim de vida ao produtor para o respectivo tratamento sem quaisquer custos para o utilizador.

**Nota:** *No que toca à devolução para reciclagem, por favor, contacte o produtor ou fornecedor do equipamento para instruções de devolução de equipamento em fim de vida para a sua correcta eliminação.*

**Documento importante. Mantenha junto dos registos do produto.**