



SELECT EDI 60 Part No. L300180 OPERATING MANUAL

Issue – A 10/03/17



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1 DOCUMENT HISTORY

Issue	Date of Change	Description of Change	Approved by
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2 PREFACE

This **Operating Manual** provides all of the information and instructions needed to install, operate and maintain your **SELECT edi 60** water purification unit.

Please read the instructions carefully and make sure that you fully understand the information given before operating the unit.

Details on how to install & commission your unit can be found in Section 12.

Details on how to operate your unit can be found in Section 6.

Details on how to maintain your unit can be found in Section 7.



Warning:

Before operating the unit always check to see that the water and electrical connections are secure and not likely to cause a trip hazard. If you have concerns about the unit or are unsure of its operation contact SUEZ Water Purification Systems limited or supplier for assistance.



3 CONTACT DETAILS

Should you require any additional information relating to the servicing, maintenance, spares and consumables, simply contact **SUEZ** using the details below:-



Water Purification Systems Ltd

Bandet Way Thame Oxfordshire OX9 3SJ United Kingdom

(Or your local distributor; (see <u>www.suezwater.co.uk</u> for details)

For all spares, consumable and general sales enquiries contact:

Customer Services Department:

Tel No. +44(0)1844 217141

For all service enquiries contact:

Service Department:

Tel No. +44(0)1844 211555

E-mail :

mail.waterpurificationsystems.uk@suez.com

Website:

www.suezwater.co.uk

Or follow us on:-





4 HEALTH AND SAFETY

4.1 Explanation of symbols and references



This symbol refers to any immediate dangers. Failure to follow the specified procedure could result in serious personal Injury. Extreme caution should be observed when conducting any activity where this symbol is shown. Work should be completed by a trained competent person.



Electrical shock. Do not touch electrical components. Before performing tasks on parts of the electrical system, disconnect the system from the power supply.



This symbol refers to a possible danger. Failure to follow the specified procedure could result in personal injury. Caution should be observed when conducting any activity where this symbol is shown. It is recommended work should be completed by a trained competent person.



This symbol refers to a possibly hazardous situation.

Failure to observe these references may result in minor injuries and/or damage to property.

Caution

I This symbol points out important information for working with the system in the proper manner. Failure to observe these references may result in malfunctions in the system or impact on the environment.

4.2 Additional safety requirements

Country-specific requirements standards and regulations must be observed.

4.3 Intended use.

The **Select edi 60** unit has been specifically designed for indoor use only to purify potable drinking water for use in laboratory applications or similar applications requiring highly purified deionised water. Refer to **Section 11.5** for details of feed water limitations and **Section 11.2** for treated water specification. For more details relating to the intended use of the equipment refer to the following notes.





Warning

The unit is not for use in explosive of oxygen rich atmospheres.

The unit is for indoor use only and must not be washed down.

The unit must not be allowed to freeze or be stored at temperatures below 5°C.

Always operate in a well ventilated area and ensure the cooling vents are not covered. DO NOT sit on the unit, place items on top of it, or use it as a step.

Always operate the unit on a firm and level surface.

DO NOT drink the purified water produced by the unit/system. It should only be used for the purposes intended to provide purified water for laboratory use.

If the unit develops a water leak follow the procedure in Section 4.4, DO NOT continue to operate the equipment.

Always isolate the mains electrical power supply before working on the unit.

If the unit's performance becomes impaired and any remedial work appears to be outside the scope of this manual, do not operate the unit and seek advice from SUEZ.

The unit must only be serviced and maintained by SUEZ Service personnel or SUEZ approved and trained technicians.

Failure to observe the instructions contained in this manual may compromise the safety, performance and reliability of the unit and may void any warranties.

Under no circumstances try to service or repair the system yourself if you have not been trained and approved to do so.

4.4 Operating staff

Only persons who have read and understood this Operating Manual should be permitted to operate the unit. When operating the units, it is important to observe all safety information.

Bringing the system to an immediate stop in the event of an emergency

- Press "STOP" on the display two times, (Fast stop).
- Turn off the electrical supply.
- Shut off the water supply.

After remedying the damage and checking that it is safe to use:-

- Open the water supply.
- Turn on the electrical supply.
- Restart the unit via the main display.

4.5 Safety information for maintenance tasks

The operator must take care to ensure that all maintenance, inspection and assembly tasks are performed by authorised and qualified personnel who have been sufficiently trained regarding the task at hand (via use of Operating Manual).



The system must be shut down and be protected from further use until all repair and maintenance tasks have been completed. It is essential to observe the shutdown procedure as described in this Operating Manual.

Before beginning tasks relating to electrical equipment/components of this system, a check must confirm that power has been disconnected from the corresponding section of the system. In addition, the system must be secured to prevent it from being turned on again unintentionally.

4.6 Disposing of system parts and operating materials

When they need to be discarded, consumables and spares must be disposed of according to local and National requirements. Refer to **Section 13.5** regarding disposal.

4.7 Unauthorised conversion and manufacturing replacement parts

Modification of the unit is only permitted with the approval of the manufacturer. The same applies to the uploading of new software for the control system. Original replacement parts and accessories authorised by the manufacturer enhance safety, the use of other non-approved parts will void the warranty and could affect the safety and or performance of the unit.

4.8 Warranty claims and liability

This product has been manufactured in accordance with our ISO 9001:2008 quality control process. If, however, you are unsatisfied with the unit, please contact SUEZ Ltd. Any warranties guaranteed by SUEZ with respect to the **Select edi 60** will be void if the equipment is not used in accordance with the written instructions provided within this Operating Manual.

Please visit our website (<u>www.suezwater.co.uk</u>) for a copy of our terms and conditions which contains further details on warranties.



5 ABOUT YOUR WATER PURIFIER

The SUEZ **Select edi 60** purifies potable water. The water is purified by a combination of processing including; activated carbon, double pass reverse osmosis, membrane degassing and electro-deionisation.

The Purified water produced by the unit complies with the latest standards for laboratory grade water. Refer to **Section 11.2 Treated Water Specification** for details.

5.1 The Select edi 60 range

The **Select edi 60** is only as one model producing a makeup flowrate of 10 litres/hour.

The above output is based on a typical 8 hour working day at 60psi (4 bar) inlet pressure, 25°C and maximum of 400 ppm total dissolved solids.

Note: At water temperatures below 25°C the output will decrease by as much as 3% per Degree C. Refer to **Section 11.1** for more details.

The **Select edi 60** is supplied with an integral 20 litre tank or if larger storage is required additional 50 and 100 litre tanks are available. Contact SUEZ sales department for details.

The unit type is detailed on its serial plate which can be found on the reverse side of the front cover.

The **Select edi 60** is provided with an installation kit for quick installation.

The unit is also supplied with one complete set of consumables. Refer to Section 9 for details

5.2 Key components of the Select edi 60

5.2.1 Touch screen display

Operation of the **Select edi 60** is controlled solely through the touch screen display. System schematics are displayed for easy understanding of the unit's process.

5.2.2 Storage tank

The integral storage tank holds 20 litres of purified water. To dispense water a bib tap has been provided at the front of the tank.



5.2.3 Removable front cover.

The front cover is easily removed and provides access to the consumable cartridge media pack.



Use the two grab slots to gently pull away the front cover to gain access to the purification packs

Bib Tap & integral 20 litre tank



6 OPERATING YOUR WATER PURIFIER

Your **Select edi 60** is operated via the touch screen display. Buttons are provided on the display to access start menus, set up functions and dispense water. The display also provides a mimic of the system when in operation.

6.1 Power on screen

To switch the unit on press the START button from the power on screen.



When connected to an electrical supply the unit goes through an initialisation process, followed after 10 seconds by the Power-On screen as shown above.

When the unit is started the RO Screen is displayed showing the condition of the permeate feed to the EDI module.

Pressing the NEXT button toggles between two further screens detailing the parameters around the EDI module and a general information screen showing the status of the valves and pumps within the flow path.

Pressing the MENU button at any time allows access to the set-up and control pages.

Pressing the red STOP button will initiate a shutdown routine lasting 15 seconds to allow the RO's to flush prior to stopping.



6.2 Menu structure



6.3 Clean routine menu

Refer to **Section 8** for details of disinfection procedure. Selecting the **Clean Routine** from the menu begins the disinfection process. Prompts are provided to guide you through the various stages of the disinfection process.

6.4 Settings menu



The settings menu enables system parameters to be entered and stored



6.4.1 Time and date







If you select "**Set Time**" the screen opposite will be displayed. The flashing cursor identifies which digit you can adjust.

By using the ▲/▼ buttons you can either increase or decrease the number value. Once the correct number has been selected, press "NEXT" to move to the next number. On pressing "NEXT" on the final number a confirmation screen will pop up, stating "Done" and after a few seconds the screen will revert back to the "Time Date Menu"

To select "Set Date" from the menu use the \blacktriangle/\lor buttons and press "ENTER". The date will be displayed and the cursor will flash on the first number.

Use the $\blacktriangle/\checkmark$ buttons to change the number to the correct value, then press "**NEXT**" to move to the next one. On pressing "**NEXT**" on the final number a confirmation screen will pop up and after a few seconds the screen will revert back to the "**Time Date Menu**"

Should the format of the date be wrong, by selecting the "Set Format" menu and by pressing "ENTER" the "Set Format" menu will be displayed. Touch the box that matches the correct format. A tick will appear to confirm your selection. Press "ENTER" a confirmation screen will pop up and after a few seconds the screen will revert back to the "Time Date Menu"

Note: Pressing the "**BACK**" button prior to pressing the "**ENTER**" button will cancel changes currently being made and return you to the "**Setting MENU**".



6.4.2 Alarms

The **Select edi 60** unit can be programmed to sound an alarm buzzer if certain performance limits are exceeded or if the unit has detected a serious fault.

Within the "**Alarms**" menu alarm set points can be set for the final purified water quality and for the temperature of the purified water. If exceeded the unit will sound a buzzer.

There is also an option to "Enable or Disable" the alarm buzzer. The unit will be supplied with the alarm buzzer "Enabled".



The device can be programmed to activate alarms in the event that defined parameters are exceeded. The alarms can be "enabled" to sound as an audible buzzer.

Audio alarm

This is enabled / disabled by first selecting the "Audio alarm" from the menu listing, and then by simply touching the relevant box next to either "Disabled" or "Enabled" you can change the alarm status. Then press "Enter" to save. Confirmation of your selection is given by a tick appearing in the selected box.



The audible alarm will also sound after any fatal alarm condition, refer to **Section 10.2** for list of alarms and warning messages. The alarm can be muted by pressing any part of the screen.

The alarm buzzer can be enabled / disabled by selecting from the audio alarm menu above.



Set quality alarm

A minimum water quality is required to protect the EDI Cell from fouling. An alarm can be set that will warn if the water quality exceeds the set value (5-10us nom). Enter the desired water quality alarm limit in the set quality alarm menu. During "Processing" should water quality fall below this level the navigation bar on the mimic screen will display "Poor Water Quality" alarm message. If the audible alarm is enabled a buzzer will sound. If the water quality improves to below the set point the alarm message will be removed from the screen and the buzzer will stop sounding



The range of the alarm set point is between 15 - 25uS. The unit will be set on delivery to 15uS. Setting a value lower than 15uS will disable this alarm.

To change the displayed value simply use the \blacktriangle , \triangledown , up/down buttons to either increase or decrease the value, pressing the "**NEXT**" button will move the cursor to the next digit. Then press "**NEXT**" to save the setting and return you to the "**Settings Menu**".



Set temperature alarm

If dispensed water must be supplied below a certain temperature an alarm can be set. Enter the maximum water temperature in the ""Set Perm Temp alarm" menu. During "Processing" should the water temperature rise above this, the navigation bar will display **"Temperature High"** alarm message. If the audible alarm is enabled a buzzer will sound.



The range of the alarm set point is between 20.0 – 35.0 $^{\rm o}C.$ The unit will be set on delivery to 35.0 $^{\rm o}C$

To change the displayed value simply use the \blacktriangle , \triangledown , up/down buttons to either increase or decrease the value, pressing the "**NEXT**" button will move the cursor to the next digit. Then press "**NEXT**" to save the setting and return you to the "**Settings Menu**".

To disable this function enter a value of 0.0 °C

6.4.3 Maintenance



The maintenance menu can be accessed via the settings menu.



The maintenance menu provides the capability to set defined dates for replacement of consumable items in the device. These dates, when expired, will trigger an alarm which will be displayed on the mimic screen

6.4.4 Systems menu



The systems menu provides information about your device and enables identification of the unit.

Product information

Product Informati	on	ВАСК
TYPE: SERIAL NUMBER: Unit ID: UNIT VERSION: POD VERSION: COMMISSION DATE: UNIT CHECKSUM: POD CHECKSUM: DATA MEMORY FULL: ADDRESS:	Select EDI 60 0000000 B.0.12/1069 B.0.12/1067 20/10/16 0xCA8B 0xA619 1% 02	

Displays data about your device.

This option will display details of the unit's configuration and current version of software being used

The data displayed cannot be edited via this screen.



6.4.5 Engineer menu



Access to the Engineer menu is limited to SUEZ Service personnel of approved/authorised technicians. The menu contains data relating to the factory settings of the unit. A PIN no. password is required to enter.

This option is password protected and for use by SUEZ Ltd service personnel only. Changes to settings within this menu should only be carried out by SUEZ Service personnel or those trained and approved by SUEZ.

"Serial No."

Displays a six digit number; the number can be changed within this menu.

"Unit Type"

Can be set to "Select edi 60" or "Select edi 60 + PP".

"Maintenance"

Is used to quantify the number of EDI operations and water volume produced since commissioning.

Set Up menu.

This sub menu is split into 4 further lower level menus Line cell constants Flow calibration Transit Mode Touchscreen calibration



"Line Cell Constants"

There are three line cells within the unit, each cell constant can be set independently and are displayed. The accepted input range will be 0.05 - 1.99. If a value outside of this range is entered, the value will be ignored, and the previous value retained.

"Transit Mode"

When the unit is first delivered it will be set in "Transit mode", When the unit is first powered up the user will be prompted to set the time & date and reset the consumable dates. After the time & date options have been entered the Transit mode option will automatically go to "Disabled"

"Touchscreen Calibration"

The calibration of the touch screen will be able to be carried out within this menu option. A number of identified calibration points will be highlighted on the touch screen. Pressing the highlighted points/markers will cause the resulting values to be stored and used in place of the default values. Default values will be entered/used for Touch screen calibration whenever

Commission Date

This feature when selected will display the date on which the unit was commissioned. The date is automatically entered following the setting of the time and date after Transit Mode. If the unit is re-commissioned at any point in the future the date can be changed within this menu.

The default date is set as 01/01/09

Software Update

This menu option will provide a means of uploading/replacing software on the unit's control and display boards. Files will be able to be uploaded direct from a USB memory device, which can be plugged into the display board/pod. Three sub menus will be displayed on selecting this feature.

"Update Display" "Update Controller" "Update GUI"

When any one of these options is selected, an "Are You Sure" message will be displayed. If "Yes" is selected the unit will upload the appropriate files from the USB memory device. The unit's software will



detect if a USB memory device is connected. If no device is detected, a message "Memory Stick Not Detected" shall appear for a few seconds on the screen. The stages of data transfer and programming sequence will be displayed. The programme upload, and transfer for the Control board will likely take several minutes. A "%" indicator bar will be displayed providing an indication of rate of transfer.

"Restore Defaults"

When this option is selected, all the adjustable/selectable options will revert back to their default settings. Refer to **Section 6.5** for a complete listing of factory default settings.

Set unit ID



A discrete device identifier can be stored here should multiple units be used in one location.

Auto restart



If "Enabled" the unit will automatically return to operation following an interruption in the power supply.



Set log frequency



The device has an inbuilt data logger that record status of the unit and any alarm events and performance data. Data is written to the memory. The frequency of sending data to the memory can be set via this menu option.

Data Logger

Data Logger	BACK
Upload Files Clear Logger	\mathbf{O}
	ENTER

Data can be downloaded and saved on a memory stick device and transferred to a PC computer. Refer to Section for details of suitable memory devices.

"Upload files"

Follow the displayed commands to download data from the unit memory.

Insert data stick into the USB port on the underside of the pod. This may take some time depending upon the amount of stored data.



Data is stored to the data stick as a .CSV file which may be viewed using Microsoft Excel.

"Clear data logger"

After downloading data it is recommended to clear the data logger memory as it has a limited capacity which when exceeded historical data will be over written

Selecting and accepting clear data logger clears the data file log.

6.5 Factory Default settings

SETTINGS MENU	Default settings
Date and Time	
Set Time	-
Set Date	-
Set Format	DD/MM/YY
Alarms	
Audio Alarm Enable	Enable
Permeate Quality Alarm	15 uS
Permeate Temperature Alarm	35°C
Rinse Temperature	30°C
Maintenance	
Pre-treat (PT) Pack date	-

6.5.1 Setting menu defaults

6.5.2 System menu defaults

SYSTEM MENU	Default settings
Product Information	-
Engineer menu	-
Set Unit ID	00
Auto Restart	Disabled
Log Frequency	30 Minutes
Data Transfer	-
Upload Files	-
Clear Logger	-



6.5.3 Engineer menu defaults

ENGINEER MENU	Default settings
Serial Number	000000
Unit Type	-
Select edi 60	✓
Select edi 60 + PP	-
Maintenance	
EDI Run Hours	-
EDI On / Offs	-
Total Volume	-
Setup	
Line Cell Constants	-
Outlet Line Cell	0.12
Product Line Cell	0.13
RO Line Cell	0.55
Flow Calibration	16000
Transit Mode	Disabled
Touchscreen Calibration	-
Commission Date	-
Software Update	-
Update Display	-
Update Controller	-
Update GUI	-
Restore Defaults	



7 MAINTENANCE

7.1 Replacing the media pack

Scan QR code for video clip on how to replace the media pack



- Switch the unit off by pressing the STOP button.
- Leave the unit to stand for 30 seconds to relieve any internal pressure.
- Pull away the front door cover to expose the media packs.
- Press down the lever on top of the cartridge to be replaced and pull it away from its retainer block.
- Discard the media pack and remove the new pack from its packaging ensuring that the two plugs are removed from the inlet/outlet ports.
- Slide the media pack into the retaining block, push it home until it clicks into position and retaining mechanism clicks up and locks. Check by trying to pull the cartridge, it should not slide back out.
- Press "START" and follow the instructions on screen for setting new pack replacement date.
- After resetting pack date the unit can be started from the power on screen.

7.2 Cleaning the inlet screen filter

It is recommended that this filter is cleaned at least once per year. The inlet screen filter is located in the rear of the unit and can be cleaned as follows:

- Switch off the water supply at source
- To relieve any residual water pressure, momentarily switch the unit on then off.
- Remove the right hand side panel of the unit.
 - To do so first remove the front cover by pulling it gently from the unit using the hand holds provided.
 - Pull the pod assembly gently forward to disengage the top cover retaining pin.
 - Remove the top cover by lifting up the front and sliding gently backwards.
 - Remove the four retaining screws holding the side panel in place and slide gently backwards.
 - Remove the rear panel retaining screws and move the panel aside.



- To obtain access to the filter screen unscrew the black knurled top anticlockwise. The screen will then be exposed. Pull the screen away from the housing and clean away any debris.
- Once cleaned, replace the screen and black top.
- Replace the rear, side, top and front cover using the reverse procedure and switch on the water supply. Start the unit from the power on screen

7.3 Replace main PCB battery

(Ref to Section 9 for re-order part no. of replacement battery)

Note: Replacement of the battery should only be carried out by trained and/or SUEZ approved technicians.

1. Ensure unit is in "**Power On**" mode.

2. Turn the unit off by using the rear isolation rocker switch, ensure switch is in the "**O**" position and then isolate the unit from the electrical mains supply by removing the power cord from the wall socket or from the connection on the rear of the unit.

3. Turn off the incoming water supply to the unit.

4. The battery is located within the main PCB which is accessed via removal of the top cover.

5. Pull the Pod forward to disengage from the top cover. The top cover can then be lifted away from the unit. Once removed the battery can be clearly seen on the main PCB, prise the battery out of its holder. (Refer to *"location Lithium battery on main PCB diagram"*)

7. Refit the new battery ensuring the, (+) positive side is facing upwards, the battery should be pressed gently until the four clamps in the retainer "snap" over the battery fully. Refer to **Section 11.4.5** to check details of battery before fitting.

8. Dispose of the old battery according to guidelines in Section 13.5.

9. Refit the top cover and push the Pod back ensuring it engages with the cover.

10. Reinstate the mains power supply and check the operation of unit.

11. You may be requested to reset the Time & Date, refer to **Section 6.4.1**



Warning:

Incorrect fitting of the battery could cause irreversible damage to the main PCB. Ensure the **(+) positive** side of the battery is facing upwards. Always use the recommended battery, Part No. R083349. The battery has a five year in-service life, but we recommend that it is replaced every three years. However, if the unit has been switched off and disconnected from the mains supply for more than 1 year we would recommend that the battery is replaced.



Location of lithium battery on main PCB

8 DISINFECTION PROCEDURE

Sanitisation of the unit should be carried out at least once every 6 months.

- Switch the unit off by pressing the **STOP** button.
- The unit will now have reverted to the **POWER ON** screen.
- Turn off the water supply to the unit.
- Leave the unit to stand for 60 seconds to relieve the pack water pressure.
- Pull away the front door cover to reveal the media cartridge packs.
- Remove the left hand Pre-Treatment pack and discard.
 - To sanitise the unit insert a cleaning pack adaptor (Suez part number L998549) into the left hand media pack location.
- Turn on the water supply and press the menu button.
- Select 'Clean Routine' from the menu and follow the 'on screen' instructions.
- When the clean routine has completed, isolate the water supply and allow the unit to stand for 60 seconds to depressurise.
- Remove the cleaning / descale pack and dispose of according to local regulations.
- Fit a new 'Pre-Treatment pack and follow the 'on screen' instructions.

The unit will revert to the 'Power On' screen and be ready for operation

9 CONSUMABLES & ACCESSORIES

CONSUMABLE	PART No.	DESCRIPTION
MEMBRANE PACK	M996057	Select edi 60 RO membrane pack
CONSUMABLE PACK	M996006	2 x PT 8 cartridges
DEGASSING CONTACTOR	R090331	Select edi 60 membrane degasser
ELECTRO-DEIONISATION CELL	R090330	Select edi 60 cell
	L300901	wall mount kit
	PM00901	Installation kit
INSTALLATION & WALL MOUNTS	L991110	Feed water pressure regulator
	L998405	External Tank Wall mount Kit
	L991276	10" filter housing
EXTERNAL FILTRATION	R011044	10" 5µm filter element
	L998549	Disinfection pack
OTHERS	R041180	Operator's Manual (extra copies)
OTHERS	R083349	Main PCB Battery
	R083352	Tank interface cable

10TROUBLE SHOOTING

The touch screen communicates faults with the system via both the mimic screen and text lines.

A fault finding guide with corrective actions is shown below.

10.1 General fault conditions

Symptom/s	Possible causes	Actions
Unit does not power up	 Fuse blown in mains lead Fuse blown in IEC module Electrical fault with the unit. 	 Check 5 amp fuse in mains lead Check fuses in IEC module (refer to Sec. 11.4.2) Contact supplier
Make up rate into integral tank declining	 Feed water temp low. Media pack needs replacing (RO) membrane fouled 	 Check feed conditions. (Refer to Sec.11.1 and 11.5.1-11.5.2) Check all replacement dates and replace where necessary. Contact supplier with details. Check condition of pre-filter

10.2 Alarm/Warning messages

DISPLAY	POSSIBLE CAUSE	OPERATOR ACTION
TEMPERATURE SENSOR ERROR	Temperature probe lead possibly disconnected or faulty.	Contact your local distributor or SUEZ Service Department.
LINE CELL ERROR	Line cell lead possibly disconnected or faulty.	Contact your local distributor or SUEZ Service Department.
	RO Boost Pump faulty or loss of	Check boost pump operation.
	feed water supply.	Check feed water supply pressure.
LOW PRESSURE	Low pressure switch fault.	Replace pre-filter.
	PT media pack blocked.	Contact supplier if fault persists.
		Check feed water pressure must be <30psi.
	increase in reed water pressure.	
HIGH PRESSURE	RO membrane may require cleaning	from new pack.
		Contact supplier if problem persists.

LHS PACK NOT FITTED	PT media pack not fitted or not fully engaged.	Check pack is fully engaged and retainer pin locked. (ref sec 7.1)
RHS PACK NOT FITTED	Flushing pack not fitted or not fully engaged.	Check Pack is fully engaged and retainer pin located. (Ref Sec 7.1)
FIT BOTH PACKS	PT media pack or Flushing pack not fitted or both not fully engaged.	Check pack/s are fully engaged and retainer pins located. (Ref Sec 7.1)
TIME/DATE NOT SET	On Start Up, time and date may not be set. Main PCB battery needs replacing.	Select Set Time and Date function from settings menu and set. Replace lithium PCB battery (Ref Sec. 7.4)
POOR WATER QUALITY	RO membranes fouled	Check membrane performance, clean if required. Contact supplier if new pack does not improve water quality.
TANK LOW LEVEL	Water in process tank below low level. Usage exceeding make up rate.	Check feed water supply and (RO) performance. Check tank level (visual). Check take off rate from any attached equipment, eg. Washers.
COMMS ERROR	Link between keypad and main PCB faulty	Contact your local distributor or SUEZ service department.
TEMPERATURE HIGH	Temperature of purified water above set limit.	Check temp setting. (Refer to Sec 6.4.2) Drain off water from system and leave to refill. Check feed water temp. (Ref Sec 11.5)

NOTE: If remedial actions do not resolve the problem, turn off the water supply, isolate the unit from the electrical supply and contact either your authorised supplier or call SUEZ Service Department. DO NOT ATTEMPT TO DISMANTLE THE UNIT AND CARRY OUT ANY REPAIRS, UNLESS TRAINED AND APPROVED TO DO SO, WITHOUT FIRST CONTACTING SUEZ LIMITED OR YOUR AUTHORISED SUPPLIER.

TECHNICAL SPECIFICATION

10.3 Product outputs

	Make-up rate (I/hr)
@ 10°C &	6
@ 25°C & 60psi	10

10.4 Treated water specification

- Inorganics $> 1 M\Omega.cm$
- pH Neutral
- Bacteria > 99% rejection
- Organics (TOC) <50ppb

10.5 Water storage

Pure water storage capacity: 20 litres

10.6 Electrical specifications / connections

10.6.1 Mains supply

Electrical	KW	Current	External Fuse
Supply	Rating	Draw (Amps)	Rating
Single phase 100-230v <u>+</u> 10%,50/60 Hz and Earth	0.25	1.0	5 Amps (conforming to BS1362)

10.6.2 Fuse rating / type

IEC module fuse type: - (20x5mm), T5AH250V, conforming to IEC 127 Number per unit = 2



The mains supply is double pole/live & neutral fused.

10.6.3 Alarm port connection details

Application: BMS Volt free alarm output.

Connector type: Din 3-pin Plug (max rating 34Vdc / 24ac, 1 amp). Maximum lead length= 10 metres. Contact SUEZ for supply of alarm lead.

10.6.4 USB Mass storage device

Specification: FAT 16 formatted USB memory stick

10.6.5 Main PCB Battery Specification

Voltage:	3V
Type:	Lithium, CR2032

10.7 Feed water specification

10.7.1 Feed water quality

The unit has been designed to only operate on a potable water supply conforming to current **EC Directive** "**Relating to the quality of water intended for human consumption**", but with the following additions.

Pre Filtration	Filtered to 5 Micron*
Free Chlorine	< 1 ppm as Cl ₂
Total Dissolved Solids (Max)	1000 ppm
Temperature	1-35°C (33.8 – 95° F)
TOC	Up to 2000ppb (Typical)

* Provided by external filter assembly supplied as part of the installation kit.

10.7.2 Feed water pressures

Feed water Pressure (Max)	(90 psi)*
Feed water Pressure (Min)	(20 psi)
Optimum Pressure	(60 psi)**

* If your feed water pressure is greater than a pressure regulator will be required. Refer to **Section 9** for details.

** Output performances based on 60 psi, 10Deg C potable water.

10.8 Water services connections

All water feed connections are found on the rear of the unit. Using the installation kit provided attach the water feed, Low pressure drain, high pressure drain and overflow tubing as shown below.

Unit Viewed from the rear. Electrical & hydraulic connections



High pressure drain

10.9 Weights and dimensions

Unit	Weight kg	Height (mm)	Width (mm)	Depth (mm)
Select edi 60	35 (shipping) 55 (working)*	750	440	560

*Weight with full tank of 20 litres

10.10 Environmental

Room storage and operating temperature range	5 to 40°C (41-104°F)
Relative Humidity	30 to 80%
Max Altitude	2000m
Transport and Storage temperature (limited by RO membranes)	-5 to 85° C (with frost protection liquid – 40 to 85° C)
RFI/EMI Radiation	Care must be taken not to have sources of RFI/EMI, which are liable to cause electromagnetic disturbance to the unit. If the unit is affected by such disturbances, the sources should be suppressed or relocated.

10.11 Cartridge outputs

Cartridge	Exchange Capacity
Pretreat PT 8	10,000 litres*

*Based on continuous operation for 1500 hours.

11INSTALLATION

For details on installing the unit scan the QR code below to gain access to video clip or alternatively follow the procedure below.



The unit can either be wall or bench mounted. Refer to **Section 12.4.2** for details on how to install the wall mounting kit.

11.1 Unpacking

Remove all packaging materials and ensure the following items have been provided:

- Select edi 60 unit
- Installation kit
- Select wall mount kit (optional)
- 1 off PT media pack
- 1 off Flushing pack
- User manual

11.2 Installation Kit

The installation kit comprises of the following items:-

- 1 off security clips
- 1 off 12mm stem elbow
- 3 off 8mm stem elbow
- 3 m ¹/₂" blue braided hose
- 7 m 8mm natural, nylon tubing
- 3 m 12mm natural, nylon tubing



11.3 Cartridge media pack



Your **Select edi 60** is supplied with a Pretreat PT8 cartridge pack and a blank 'Flushing pack'

Note: The PT8 pack must be fitted in the left hand position in the front of the unit and the Flushing pack should be fitted in the right hand position.

Refer to **Section 9**, Consumables, for part nos. of all consummable items.

11.4 Unit positioning

The Select edi 60 can be either bench or wall mounted.

11.4.1 Bench mounted

Locate the unit on a suitable work surface, ensuring access to tank dispense bib tap and sufficient clearance to rear of the machine for all water and electrical connections.

All water feed connections are found on the rear of the unit. Using the installation kit provided attach the water feed, drain and overflow tubing as shown below.

11.4.2 Wall mounted

Installation steps

Find a suitable mounting position. The wall bracket **MUST** be fitted to a load bearing wall of masonry or concrete material capable of supporting the weight of the bracket, unit, tank and full load of stored water. For this reason the unit SHOULD NEVER BE MOUNTED TO A STUD OR PARTITION WALL. (Refer to Section 11.7 for details of unit working weights).

Mark the centre fixing position on the wall allowing for the height of the unit below the ceiling level (650mm min).



Drill the centre fixing hole to the correct size for the masonry fastener to be used and install the first fastener.

Offer the main bracket body to the wall and fix tightly to the wall (after levelling the bracket) and mark the remainder of the fixing positions.

Remove the bracket from the wall (or rotate out of the way), drill and fit the remaining four wall fixing positions.

Offer the main bracket body to the wall again, level / align correctly and tighten the bracket into position using the correct torque for the fixings being used.





If the unit is supplied with an internal tank, fix the tank support bracket to the bracket base plate using 3 off washers and nylock nuts supplied.

Remove the feet from the underside of the unit and discard the feet and fixing screws.



Slide the base plate onto the main wall bracket ensuring it is fully back.



Lift the unit onto the base plate and fit the two shorter Anulok retaining screws through the front of the slide plate into the unit feet inserts.

Fit the longer Anulok retaining screws through the base plate rear fixing positions (slots) and into the water unit rear feet fixing inserts. Tighten the front and rear retaining screws to fix the unit firmly to the plate and bracket.

Bracket operation

Empty the storage tank of water to make the unit lighter to move.

Loosen the four slide plate fixing screws (DO NOT REMOVE). Pull the unit and slide plate forwards.

The unit and slide plate will only move forwards to the limits of the slots in the slide plate and will prevent the unit from falling forwards.

The returns in the slide plate trap the unit to the main bracket and stop the unit from moving sideways.

11.5 Drain connection

Attach a suitable length of 8mm tubing to both **drain** connections so that the free end may be inserted into an appropriate drain. The tubing must not be kinked or the flow restricted in any way.

If the drain is to be run over 5 metres and/or rises above the level of the unit then contact our Service Department for advice.

Attach a suitable length of 12mm hose to the **overflow** connection on the unit and run to a suitable drain point. If the drain is to be run over 5 metres of the unit then contact our Services Dept. for advice.

The overflow tubing should never be allowed to rise higher than the unit.

12APPENDIX

12.1 MSDS

Material Safety Data Sheets for the following accessories are available upon request or can be downloaded from the SUEZ web site, see Section 3 for details.

• PT 8 Media Pack



12.2 Pushfit water connections

To make a connection, the tube is simply pushed in by hand; an integral collet locking system then holds the tube firmly in place without deforming it or restricting flow.



12.3 Process

Refer to flow diagram on following page.

All external hydraulic and electrical connections are positioned at the rear of the unit to protect them from accidental damage.

On entering the Select Analyst an internal feed water strainer removes any large debris remaining in the feed water supply.

When operated, an inlet solenoid opens and allows water to pass through the pre-treatment cartridge to remove chlorine from the water and then on to the reverse osmosis boost pump.

The boost pump increases the feed water pressure to a level to enable the reverse osmosis (RO) membranes to operate efficiently.

The Pre-filtered water enters the first reverse osmosis module. Purified water passes through the membrane and is termed 'permeate' (85-95% of salts removed). The water containing the rejected salts passes across the membrane and out of the RO module to drain and is termed 'concentrate'.

The concentrate is pumped at high velocity across the RO membrane to lessen the risk of fouling or scaling.

The concentrate flow rate is controlled by a fixed orifice restrictor located in the drain line. The permeate is further purified by the second reverse osmosis membrane with the 'concentrate' returning to the pump inlet for recirculation.

The second stage 'permeate' then flows through the degasser where excess CO_2 is removed prior to polishing with the Electro deioniser (EDI).

An optional NCP media cartridge containing high grade mixed ionexchange resin performs a final polishing if fitted.

The deionised water then feeds directly into the integral 20 litre storage tank. Water can be dispensed from this tank via the front mounted bib tap.

When the tank is full, the unit feeds a small amount of water back through the EDI to 'turn over' the stored water to keep it fresh and to 'refresh' the EDI Cell.

If the unit performs 3 'refresh' cycles within 20 minutes, the unit will go into standby mode to conserve power. Drawing water from the tank to the mid position will awake the unit and place it back into 'Processing' mode.



L300180 Iss:A

12.4 CE declaration

A copy of Declaration of Conformity can be obtained from SUEZ upon request or from our website at <u>www.suezwater.co.uk</u>

12.5 WEEE declaration



Users in the United Kingdom who wish to discard electrical and electronic equipment that was supplied by SUEZ should contact:-



 Tel: No:
 0844 873 1034

 E-mail:
 info@complydirect.com

 Fax No:
 0844 873 1035

SUEZ Registration No. WEE/EGO267RW

Users in other European Countries should contact their producer, who will be the organisation in their country that supplied the product.

For users outside of the European Union, if you wish to discard this product then please contact your local authorities or dealer and ask for the correct method of disposal.