

OWNER'S MANUAL



For the installation, operation and service of

PCFE40P12
PCFE54P12

Should you the installer or owner be unfamiliar with the correct installation or operation of this type of equipment you should contact the distributor/manufacture for the correct advice before proceeding with the installation or operation of this product.

EQUIPMENT INSTALLATION

General Warnings and Safety Information Electrical

There are no user-serviceable parts in the AC adapter, motor, or controller. In the event of a failure, these should be replaced.

- All electrical connections must be completed according to local codes.
- Use only the power AC adapter that is supplied.
- The power outlet must be grounded.
- To disconnect power, unplug the AC adapter from its power source.

Mechanical

- Do not use petroleum based lubricants such as vaseline, oils, or hydrocarbon based lubricants. Use only 100% silicone lubricants.
- All plastic connections should be hand tightened. Teflon* tape may be used on connections that do not use an O-ring seal. Do not use pliers or pipe wrenches.
- All plumbing must be completed according to local codes.
- Soldering near any plastic fittings should be done before connecting fittings to the valve. Excessive heat will cause interior damage to the valve.
- Observe drain line requirements.
- Do not use lead-based solder for sweat solder connections.
- Do not support the weight of the system on the control valve fittings, plumbing, or the bypass.
- It is not recommended to use sealants on the threads. Use Teflon* tape on all threaded connections.

*Teflon is a trademark of E.I. duPont de Nemours.

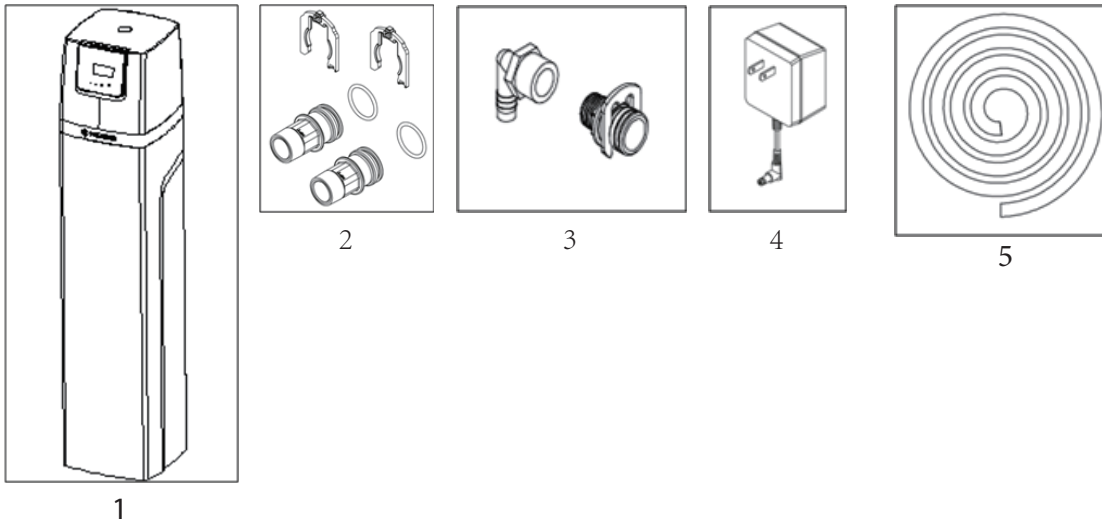
General

- Observe all warnings that appear in this manual.
- Keep the unit in the upright position. Do not turn on side, upside down, or drop. Turning the tank upside down will cause media to enter the valve.
- Working water pressure range is 0.14 to 0.35 MPa.
- Use only salt designed for water softening. Do not use ice melting, block, or rock salts.

INSTALLATION INSTRUCTIONS

Installation notes

- Installation and working space : Not less than 350x 350 mm, 170 cm high
- Technical index
 - a) The scope of application of water: municipal tap water
 - b) Temperature of water: 5°C □ 38°C
 - d) Voltage /Hz: AC 220V/50Hz
 - e) Power rating: 6 w



TYPICAL TOOLS AND FITTINGS REQUIRED

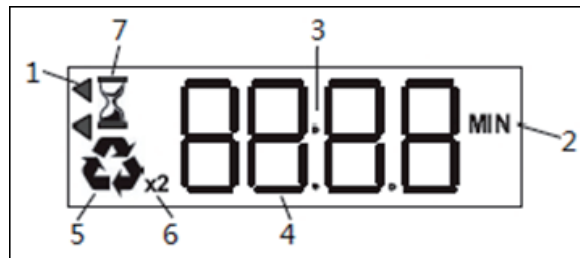
- Pipe Cutter
- Tubing Cutter
- File
- Pliers
- Tape Measure
- Soldering Tools
- Lead Free Solder
- Bucket
- Towel
- Plumber Tape
- Adjustable Wrench
- Tube 100% Silicone Grease

DIRECTIONS

Commissioning and setting
Control Valve panel



Description of Control Valve panel display

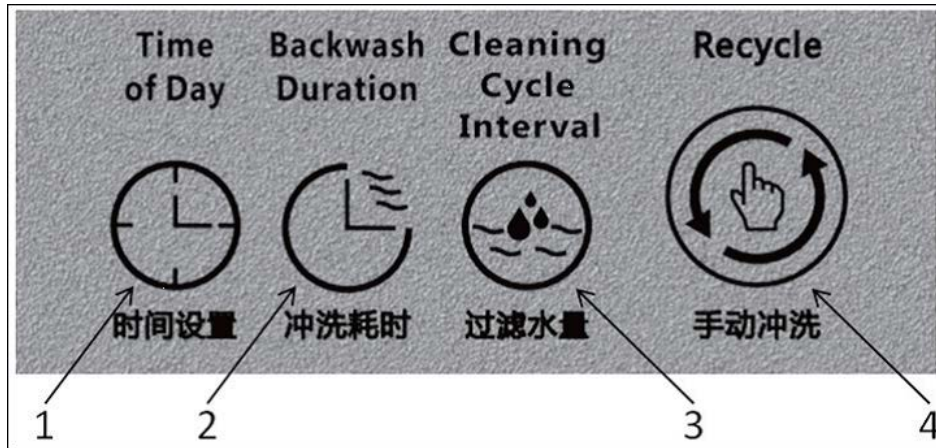


Display Icons

1. Indicates water flow when displayed. Arrows alternate faster as flow increases.
2. When "MIN" is displayed, the value in minute increments. "MIN" is displayed during recharge; the value displayed is the minutes of recharge remaining.
3. Colon (double dots) flashes as part of the time display. It Indicates normal operation.
4. Four digits used to display the time or program value. It also used for error codes.
5. The recycle sign is displayed (flashing) when a next recharge has been called for. Also displays (continuously) when in recharge.
6. When "x2" is displayed, a second recharge has been called for.
7. The hourglass is displayed when the motor is running.

NOTE: During normal operation (Service mode) the display will show the current time of the day with the colon (double dots) blinking. This will alternate with a display of the – quantity remaining to be treated before recharge.

DIRECTIONS



Display Icons

1 Time of Day: Press “Time of day” to display the current time value in hours. The time value is displayed as a number from 0 to 23, with 0 representing midnight and 23 representing 11:00 PM. While the value is being displayed, press the button to increase the value. Press and hold the button to rapidly advance the value. Release the button when the desired value is displayed. The value will be stored in the memory after five seconds.

Range: 0 - 23 hours

NOTE: The lapsed minutes will reset to zero when the hours are changed.

2 Backwash Duration: Press “Backwash Duration” to display and set the current backwash cycle steps. The value in minutes will be displayed for five seconds. While the value is being displayed, press the button to increase the value. Press and hold the button to rapidly advance the value. Release the button when the desired value is displayed. The value will be stored in the memory after five seconds.

Range: 2 - 50 minutes

NOTE: The Rapid Rinse cycle step adjusts automatically based on the Backwash Duration value. See table below.

Backwash Time	Rinse Time
2 - 5 minutes	1 minute
6 - 9 minutes	2 minutes
10 - 13 minutes	3 minutes
14 - 17 minutes	4 minutes
18 - 21 minutes	5 minutes
22 - 25 minutes	6 minutes
26 - 29 minutes	7 minutes
30 - 35 minutes	8 minutes
36 - 40 minutes	9 minutes
41 - 50 minutes	10 minutes

DIRECTIONS

3 Cleaning Cycle Interval: Press "Cleaning Cycle Interval" to display the current cleaning cycle interval setting. The value in cubic meters (metric units) to treat between cleaning cycles will be displayed for five seconds. While the value is being displayed, press the button to increase the value. Press and hold the button to rapidly advance the value. Press and hold the button to rapidly advance the value. Release the button when the desired value is displayed. The value will be stored in memory after five seconds.

Range: 0.4 - 9.5 cubic meters

Default: 1.0 cubic meters

4 Recycle:

- Press and release "Recycle" to program a delayed cleaning cycle. The system will regenerate at the next scheduled cleaning cycle. Repeat procedure to disable the scheduled cleaning cycle. The display indicator dot blinks when a delayed cleaning cycle is scheduled.

- Press and hold for three seconds to initiate an immediate cleaning cycle. The control cycles to the backwash cycle step. The control will proceed through a complete cleaning cycle. A cascading symbol (- -) will be displayed until the cycle is complete.

NOTE: If a button is not pushed for five seconds, the controller returns to normal operation mode.

Pushing the recharge button immediately returns the controller to normal operation.

Quick Cycling

Press and hold for three seconds "Recycle" to initiate an immediate cleaning cycle. The control will cycle to the backwash cycle step.

1. Press and release "Recycle" to display "C1" (backwash).

2. Simultaneously press then release "Recycle" and "Time of day" to move the control to the next cycle step, "C2" (rinse).

NOTE: The time may be displayed for 5 seconds.

3. Repeat steps 2 and 3 to cycle through each position.

Quick Cycle to Service Position

Simultaneously press "Recycle" and "Time of day" and hold for three seconds during any cleaning cycle step. The control will skip the remaining cycle steps and return to the service position. The time of day will be displayed when the control reaches the service position.

5 Calendar Override: To set time duration between cleaning cycles to ensure proper functioning of the filter in the event of a flow sensor malfunction, press and hold "Recycle" and "Cleaning Cycle Interval" for three seconds. The value in days between cleaning cycles will be displayed for five seconds. While the value is being displayed, press the button to increase the value. Press and hold the button to rapidly advance the value. Release the button when the desired value is displayed. The value will be stored in memory after five seconds.

Range: 8 hours (0.3 days) - 30 days; 0 to disable

Default: 0 (disabled)

DIRECTIONS

RECHARGE

- The water supply valve should be off or be in by-pass
- At initial power-up, the camshaft may need to rotate to the HOME (in service) position.
- Camshaft may take 1 to 2 minutes to return to HOME position.
- Err 3 will be displayed until the camshaft returns to HOME position (Initial Power-Up Display).
- If more than 2 minutes lapse, verify that the motor is turning the camshaft. If not, check the "Troubleshooting" section.



Initial Power-Up Display

When the camshaft has reached the HOME (service) position the display will show "--:--". If the time of day alternating with remaining capacity is displayed, then the controller has used its short term memory to load settings. Short term memory will hold settings for approximately eight hours.

Initial Startup settings

The description above guides the system parameters.

- Time of day: current time
- 'Backwash Duration' and 'Cleaning Cycle Interval' be set according below table.

PCFE40P12		
TSS(NTU)	Cleaning Cycle Interval(t)	Backwash Duration(min)
<1	5	8
1.0-2.0	5	12
>2	5	20

PCFE54P12		
TSS(NTU)	Cleaning Cycle Interval(t)	Backwash Duration(min)
<1	9	8
1.0-2.0	9	12
>2	9	20

Notes: if - TSS value, suggest setting 20 min for backwash duration.

NOTES

A series of 40 horizontal dotted lines provided for taking notes.

NOTES

A series of horizontal dotted lines for taking notes.

NOTES

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

IMPORTANT

Please attach your sales invoice/docket here as proof of purchase should warranty service be required.
Please do not return warranty form to Pentair Australia - Retain for your records.

Purchased from :

Purchase date : Serial No : Model No :



Head Office
Pentair AU/NZ: 1-21 Monash Drive,
Dandenong South, VIC 3175

Australia
National Customer Service: Phone: 1300 137 344
Fax: 1800 006 688
National dealer Locator: Phone: 1800 664 266

Email: au.sales@pentair.com
Web: www.pentair.com.au

Head Office
Christchurch: Unit 2 16 George Bellew Road,
Dakota Park, Christchurch

Auckland: Unit 2 17 Highbrook Drive,
East Tamaki, Auckland

Phone: 0800 654 112
03 349 1350

Email: orders@43south.co.nz
Web: www.43south.co.nz