

- Easy Installation & Quick Setup
- 3 Year Warranty

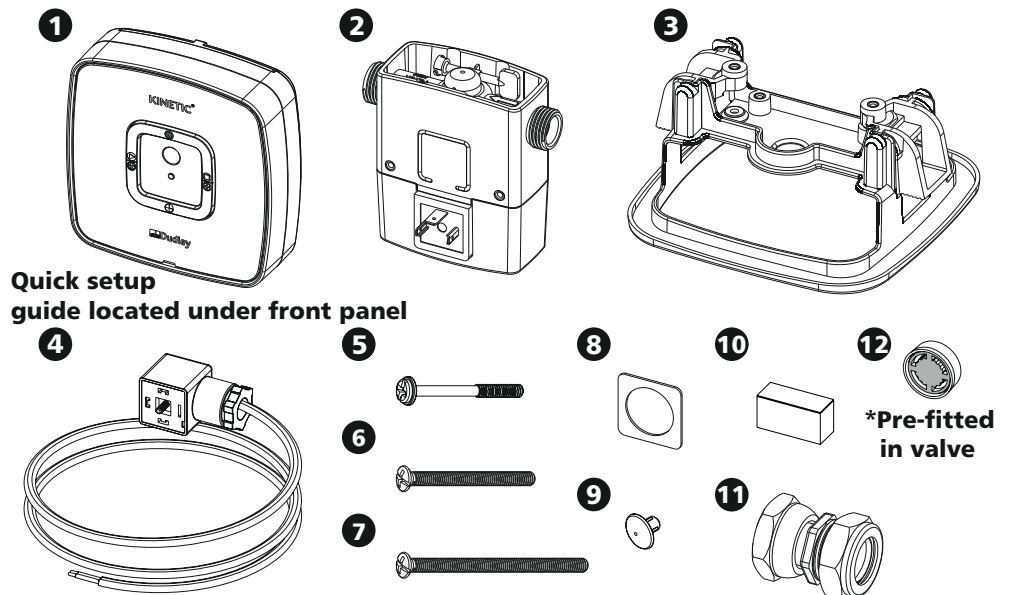
- Conforms to Water Regulations
- Battery or Mains Operated

- Pipe, Flush or Remote Mounted
- WRAS Approved

1 PACK CONTENTS

IMPORTANT: Check contents, make sure all the parts are accounted for before discarding any packaging material. If any parts are missing, **DO NOT** attempt to install the Kinetic until you obtain the missing parts. The flush mounting bezel cutting template is located at the back of this booklet.

1. Kinetic Controller
2. Kinetic Valve
3. Kinetic Flush Mounting Bezel
4. Solenoid Plug With 1M Cable
5. M3 x 30mm Solenoid Screw
6. M3.5 x 35mm Screw x2
7. M3.5 x 50mm Screw x2
8. Solenoid Plug Gasket
9. Blanking Plug x2
10. Self Adhesive Spacer Block x2
11. Tap to Compression Adaptor x2
12. Flow Restrictor 6L/min (pre-fitted)



2 INTRODUCTION

The Kinetic monitors the volume of washroom traffic, and in conjunction with a cistern and auto syphon adjusts the urinal flushing time to keep urinals fresh & clean.

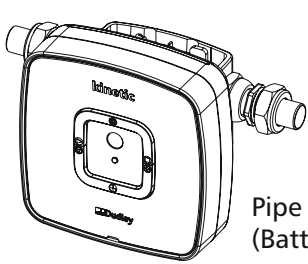
The Kinetic has 2 operating modes:

Hygiene Mode: On detecting movement in the washroom the Kinetic activates and will complete 1 fill and flush cycle after 60 minutes. Each further detection of movement decreases the time before activation by 4 minutes until the minimum activation time of 40 minutes is reached.

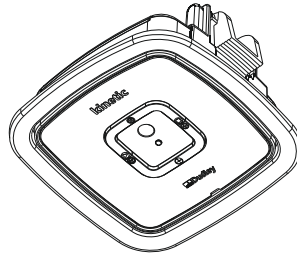
Economy Mode: For increased water saving the default flushing cycle on detecting movement is 80 minutes. Each further detection of movement decreases the time before activation by 4 minutes until the minimum activation time of 60 minutes is reached.

If no movement is detected the Kinetic will activate a flush every 12 hours in hygiene mode or 24 hours in economy mode.

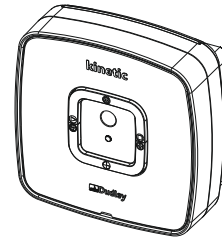
Kinetic Mounting Options



Pipe Mounted
(Battery ONLY)



Flush Mounted
(Battery & Mains
Powered)



Remote Mounted
(Battery & Mains
Powered)

Quick Installation & Setup Guide: For speed & ease the Kinetic has a quick guide leaflet in the box. There is also a quick setup guide located underneath the front panel of the controller. For full instructions, continue reading this booklet.

3 INSTALLATION REQUIREMENTS

IMPORTANT: A mains electrical installation must be done and checked by a qualified electrician. A mains powered Kinetic **MUST BE** installed in conjunction with a **3A fused spur**. During installation do not expose the electronics to fluids, dust, dirt or damp.

Preparation

The Kinetic can flush up to 5 urinals/trough on the provision that the cistern and auto-syphon conform to the water regulations. See the image below for details.

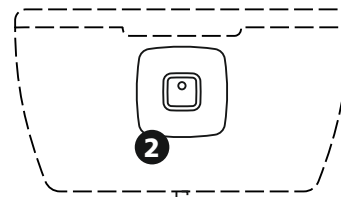
1 If the Kinetic is to be mains powered Install in accordance to the latest wiring regulations. Always mount the controller on a patress box (not supplied) or the provided bezel.

2 Where possible keep the controller mounted centrally to the urinal(s) or trough to minimise false triggering, especially on multiple Kinetic installations.

3 Recommended water pressure 0.1 - 10.0 bar (1.45-145 PSI). For water pressure 8 bar (116 PSI) and above it is advisable to use a pressure reducing valve.

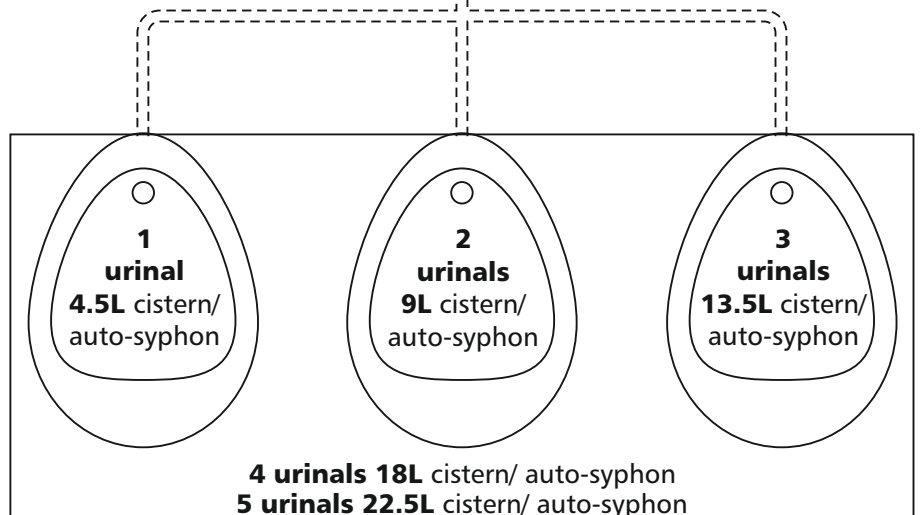
4 Always use the tap to compression adaptors supplied.

5 For water pressures above 1 bar (15 PSI) the provided flow restrictor must be fitted.



Note: Shown is a typical concealed cistern installation

Important: 1 Kinetic is required per cistern.



4 INSTALLING THE VALVE

IMPORTANT: DO NOT install any restriction such as a petcock or bibtap after the valve. **DO NOT** allow dirt, metal particles or PTFE tape to enter the Kinetic valve.

The Kinetic valve should be fitted relatively close to the flushing cistern, with an isolation valve being fitted before the Kinetic valve.

A: Tools Required. Power drill, 5/6/7mm drill bits, adjustable wrench, pozi/flat screwdrivers/bits, 23mm spanner, tape measure, pen/pencil.

B: Planning. Make sure there is adequate space to install the Kinetic controller and the Kinetic valve enabling ease of access for maintenance. The Kinetic valve should be installed near an isolation valve for maintenance.

C: Pipework Preparation. Always ensure that the surrounding pipework is made free to allow you to fully attach the pipework to the Kinetic valve then securely fix the pipework.

Installation:

1. Locate the nearest isolation valve or install one close to where the Kinetic valve will be fitted.
2. Turn off the water supply.
3. Ensure that the flow direction of the water is the same direction as the arrow located on the top of the Kinetic valve.
4. Change the direction if necessary by unscrewing the two screws and removing the valve cover.

5. Rotate the solenoid so that the pins face out from the wall/ceiling.

6. Re-attach the valve cover and tighten the 2 screws accordingly.

Optional - Place the blanking plugs over the exposed brass inserts if the controller is to be remote mounted from the valve.

7. Cut the pipe close to the cistern to a gap of 140mm. Ensuring that one side of the pipe is free to move.

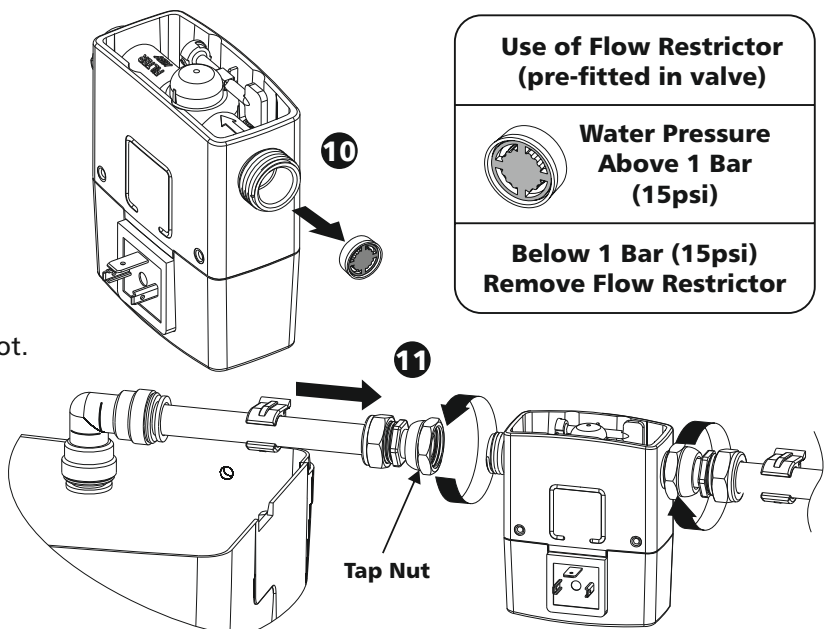
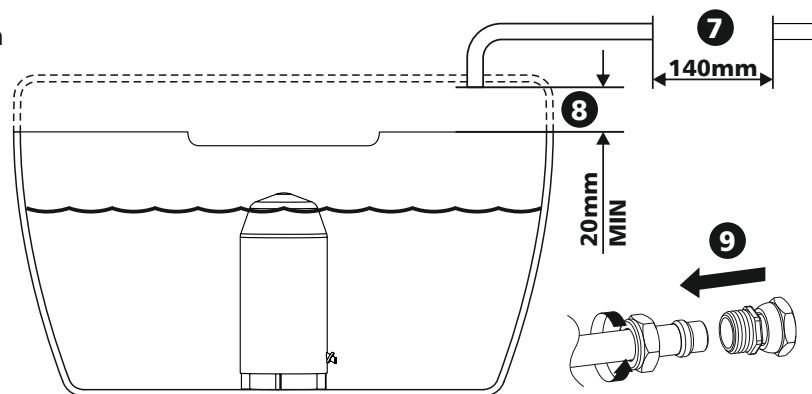
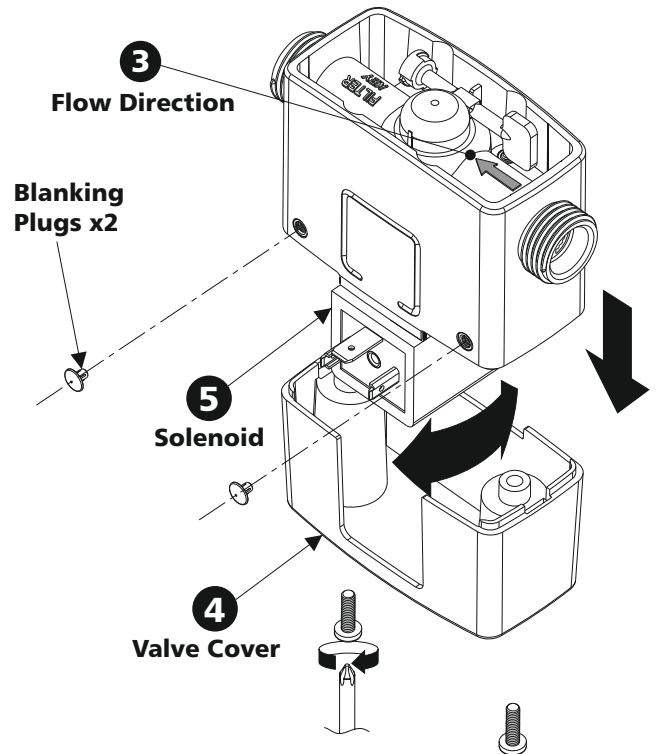
8. Leave a minimum of 20mm from the pipe to the top of the cistern.

9. Attach the tap to compression adaptors onto the pipework, using the compression fittings provided.

10. If water pressure is below **1bar (15psi)** remove the pre-fitted flow restrictor from the spigot.

11. Locate the Kinetic valve to the pipework and hand tighten the tap nuts to the valve. Ensure that the fibre washer is located in the tap adaptor.

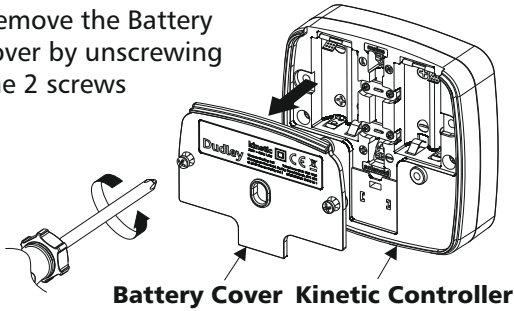
12. Use a spanner to tighten the adaptors to the valve, being careful not to over-tighten.



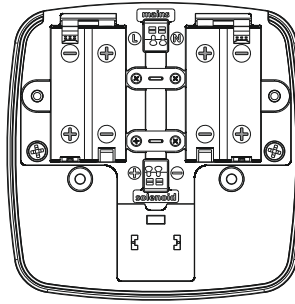
5 KINETIC CONTROLLER PIPE MOUNTED (BATTERIES ONLY)

IMPORTANT: DO NOT use mains power when the Kinetic controller is pipe mounted.

1. Remove the Battery cover by unscrewing the 2 screws



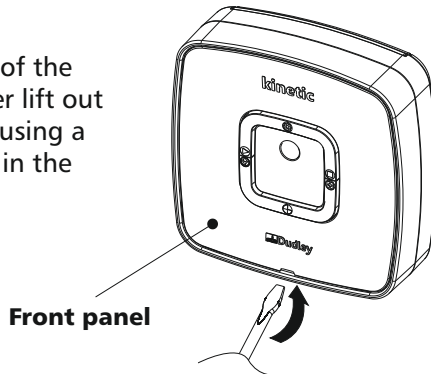
2. Insert 4x AA Batteries into the Kinetic controller, ensuring that the orientations are correct.



3. Re-attach the battery cover and screw together.

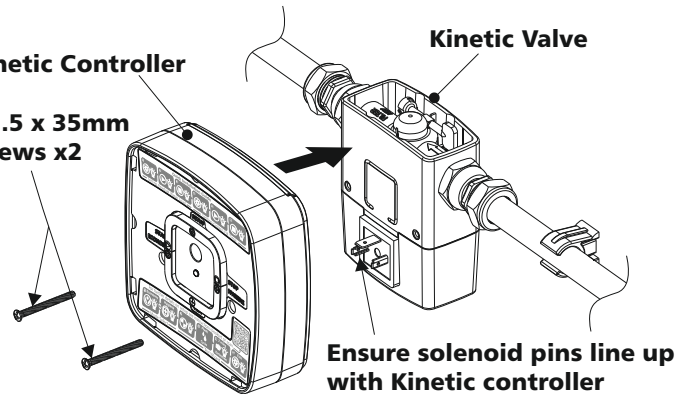
Important: The Kinetic controller will begin to flash red, as it needs to be setup.

4. On the front of the Kinetic controller lift out the front panel using a flat screwdriver in the small groove.



Kinetic Controller

M3.5 x 35mm screws x2



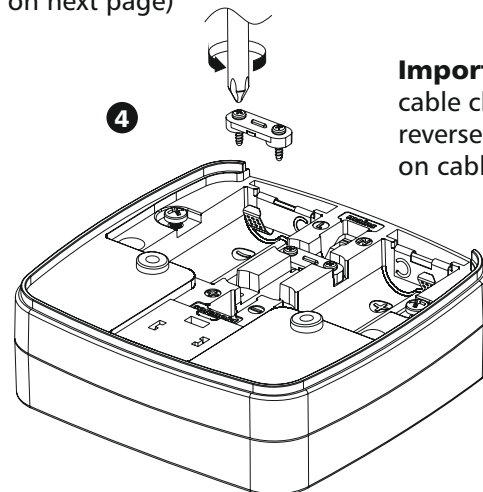
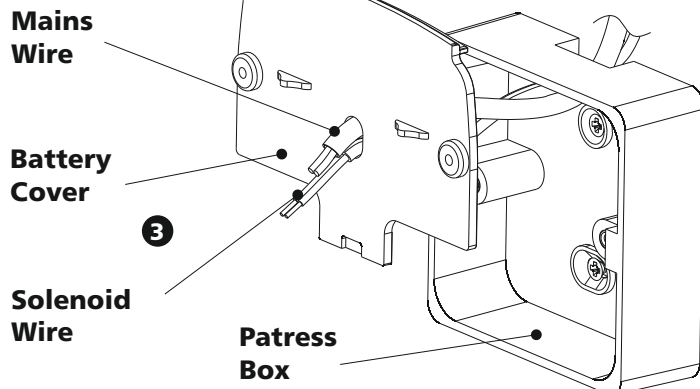
5. With the front panel removed locate the Kinetic controller onto the valve, then screw the controller to the valve using the provided M3.5 x 35mm screws.

6. Re-attach the front panel, then proceed to **section 8** for setting up the Kinetic.

6 REMOTE MOUNTED (BATTERY & MAINS POWERED)

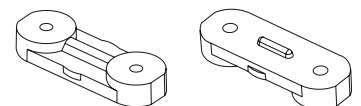
IMPORTANT: For remote installation of Kinetic controller **ALWAYS** mount on a standard **single gang patress box**. In order to comply with electrical regulations the Kinetic controller **MUST** be fitted by a qualified electrician, to a **3amp fused spur**.

1. For battery powered follow the steps in **section 5** then continue to **step 7** for connecting the solenoid wire.
2. For mains operated remove the battery cover by unscrewing the 2 screws.
3. Feed the mains cable through the patress box and the battery cover.
4. Remove the mains cable clamp by un-screwing.
5. Wire the live wire to 'L' and the neutral wire to 'N' (see **5** on next page)
6. Re-attach the cable clamp.



Important: The cable clamp can be reversed dependant on cable size.

7. Feed the solenoid cable through the patress box and the battery cover.
8. Remove the solenoid cable clamp by un-screwing.
9. Wire the brown wire to '+' and the blue wire to '-' (see **9** on next page)
10. Re-attach the cable clamp & screw the battery cover back to the controller.

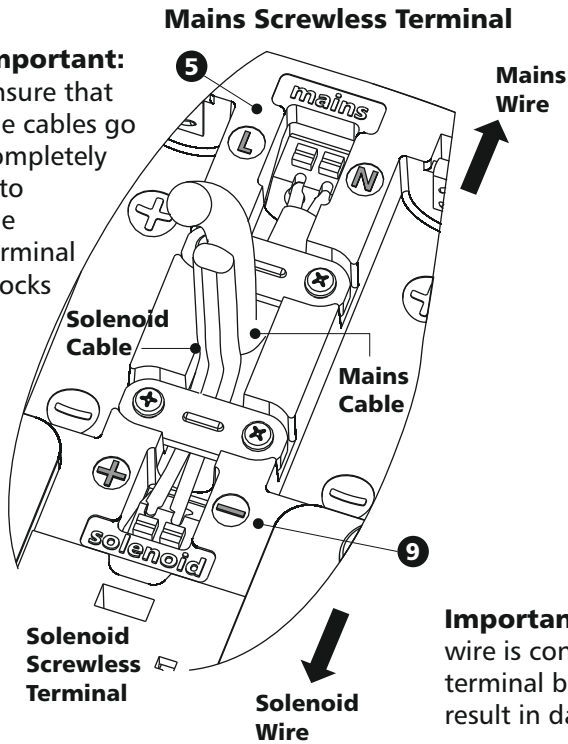


6 REMOTE MOUNTED continued

Wiring the Kinetic controller

Important:

Ensure that the cables go completely into the terminal blocks

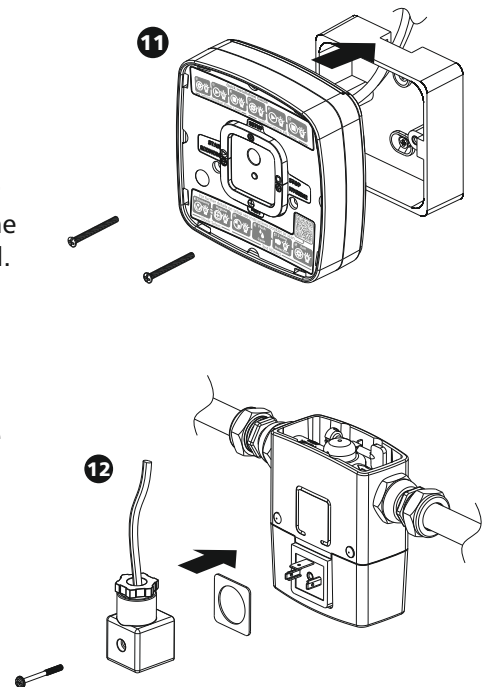


11. Screw the Kinetic controller onto the patress box, ensuring that none of the wires are trapped. Use either the 35mm screws or the 50mm screws provided.

12. Attach the solenoid plug to the Kinetic valve, and fix using the screw provided.

13. Proceed to **Section 8** for setting up the Kinetic.

Important: Ensure that the mains wire is connected to the correct terminal block. Failure to do so will result in damage to the Kinetic.

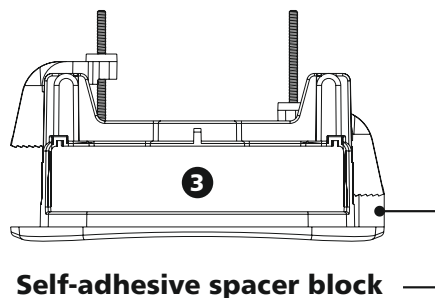
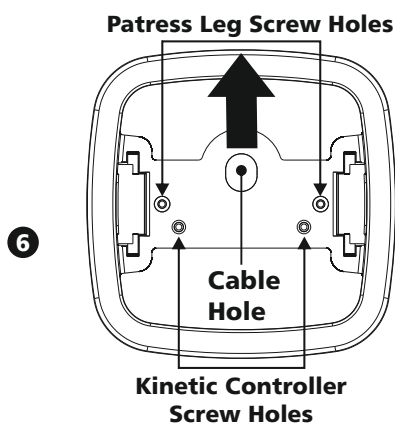


7 FLUSH MOUNTED (BATTERIES & MAINS POWERED)

IMPORTANT: The flush mounting bezel can be installed in ceilings and walls.

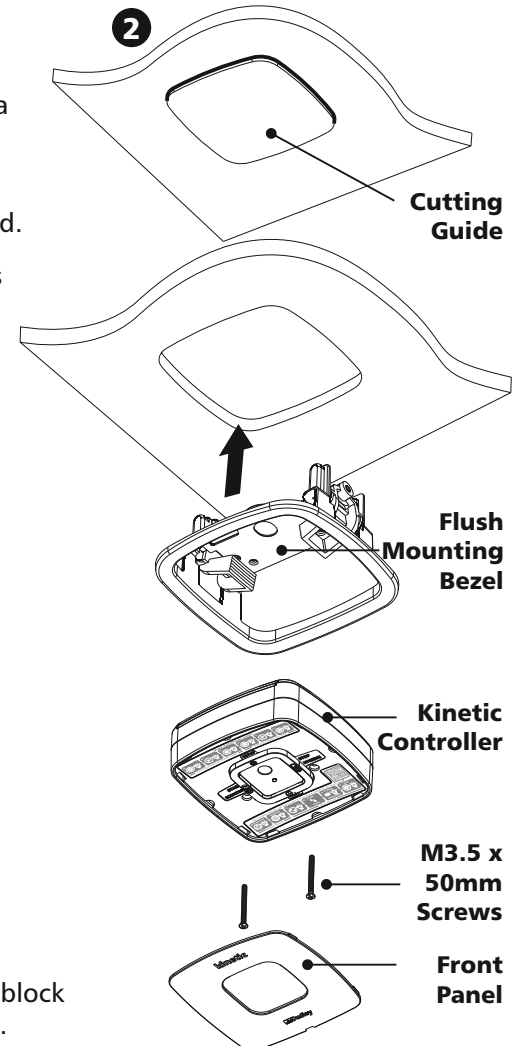
1. Locate where the Kinetic controller will go, and ensure there is enough space for the flush mounting bezel and wiring.
2. Use the cutting guide (back of booklet **section 15**) to mark out the area and then cut out the profile.
3. Follow the sequence of steps in **section 15** to fix the bezel to the wall/ceiling. If necessary for thin tiles, use the self adhesive spacer blocks provided.
4. For battery powered follow the steps in **section 5** then follow the steps in **section 6** for connecting the solenoid wire.
5. For mains operated follow the steps in **section 6** but ensure that the wires go through the flush mounting bezel cable hole as shown below.
6. Locate the Kinetic controller into bezel in the correct orientation and screw using the **M3.5 x 50mm** screws.
7. Proceed to **section 8** for setup.

Important: Ensure that the bezel orientation matches the arrow below.



Bezel clamp range: 0mm - 32mm

Important: Use self-adhesive spacer block for tile/panel thicknesses up to 13mm.



8 SETUP

IMPORTANT: The Kinetic **MUST** be set up in accordance to water regulations **G25.12** where urinals should use no more than 7.5L per bowl per hour (10L for a single bowl). Ensure that the water supply has been **turned back ON**.

Initial Power Up:

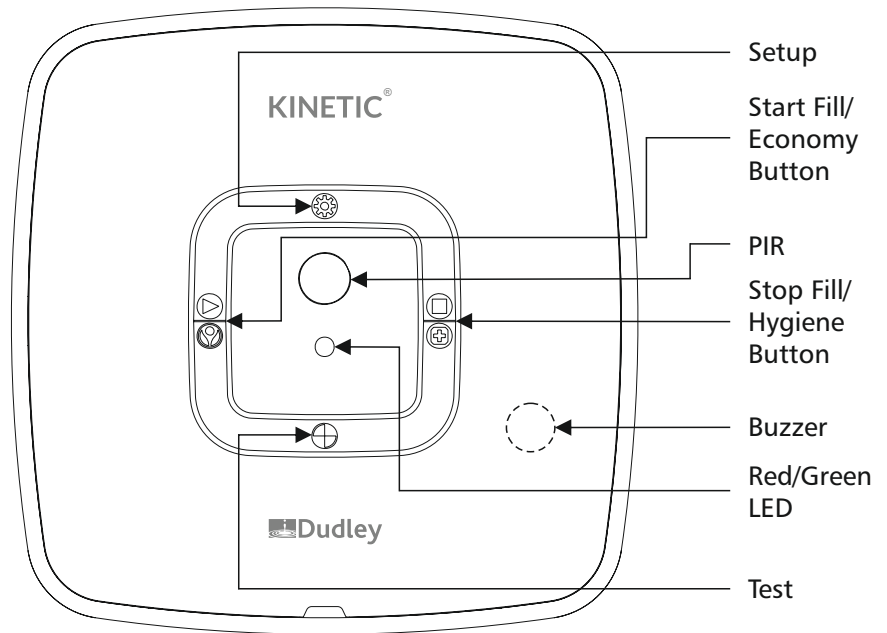
The red light on the controller will slowly flash to indicate the unit has not been setup. Please note, if the kinetic has not been set up within **30 mins**, see below for **keypad lockout**.

Setup:

Press the setup button on the keypad, the red light will become steady. Press the start fill button, the light will flash green. The valve will open and begin filling the cistern.

The cistern fills and the auto-syphon flushes:

Wait roughly **5 seconds** and then press the stop fill button to allow for pressure variation, the valve will then shut off. This is indicated by a steady green light.



Important: Run through the setup again to ensure the residual water in the cistern has been accounted for, then proceed to **section 9** for mode select.

Kinetic keypad lockout:

The kinetic has a lockout feature to prevent misuse. The Kinetic keypad will automatically lockout after **30mins** from the last button pressed. To unlock the Kinetic press & hold the **setup & test buttons** for **3 seconds** until the buzzer sounds and the green light will flash. Alternatively to lock, press & hold the **setup & test buttons** together for **3 seconds**. The buzzer will sound and the red light will flash to indicated lockout. In lockout **only the 'force flush'** feature can be activated by pressing the **test button**.

9 MODE SELECT

IMPORTANT: Mode select can only be changed when the Kinetic has been unlocked. To unlock the Kinetic press and hold the setup and test buttons until the green light flashes and the buzzer sounds.

Economy Mode (default setting)



Press the **Economy button** when a greater level of water saving is required. The **green light** will glow and then fade.

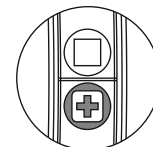


Maximum flush every 60 mins

Flushing periods will be from 80 to 60 minutes, depending on the washroom traffic. On detecting movement the Kinetic activates and will complete 1 flush cycle after 80 minutes. Each further detection of movement decreases the time before activation by 4 minutes until the minimum activation time of 60 minutes has been reached.

If no movement is detected the Kinetic will flush every **24 hours**.

Hygiene Mode



Press the **Hygiene button** when a greater level of hygiene is required. The **red light** will glow and then fade.



Maximum flush every 40 mins

Flushing periods will be from 60 to 40 minutes, depending on the washroom traffic. On detecting movement the Kinetic activates and will complete 1 flush cycle after 60 minutes. Each further detection of movement decreases the time before activation by 4 minutes until the minimum activation time of 40 minutes has been reached.

If no movement is detected the Kinetic will flush every **12 hours**.

OR

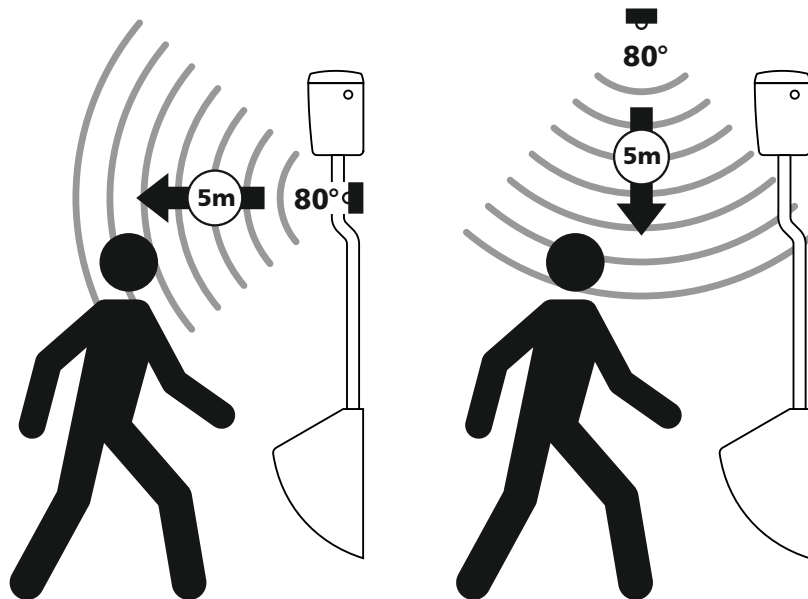
10 TEST FEATURE

The Kinetic has a test feature mode which ensures that the unit has been setup correctly. To access the test feature, first ensure that the keypad is not locked out then press the **test button** on the Kinetic controller. The **green light** will glow for **3 seconds**, followed by a flush cycle where the valve opens fills up the cistern and the auto-syphon flushes. Once the Cistern has flushed the walk test will begin. **Important:** If the flush cycle does not complete and the valve closes before the cistern has flushed, run the setup process again detailed in **section 8**.

Walk test:

The walk test will start immediately after the flush cycle has been completed.

Upon detection of a person the **red light flashes** and the **buzzer sounds** per detection of movement. The walk test will remain on for **2 minutes** or until the test button is pressed again. The **red light** will remain on for **3 seconds** and then revert back to usual operational mode.



Force flush feature:

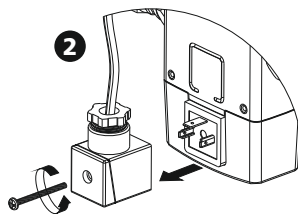
The Kinetic has a force flush feature which can be activated only when the Kinetic has been locked. The force flush can be triggered by pressing the **test button** once. The cistern will perform a flush cycle only, there will be **NO** walk test that follows. Should you need to unlock the Kinetic to access the test feature or setup for any reason **press & hold** the **setup & test buttons** for **3 seconds** until the green light flashes and the buzzer sounds.

11 MAINTENANCE

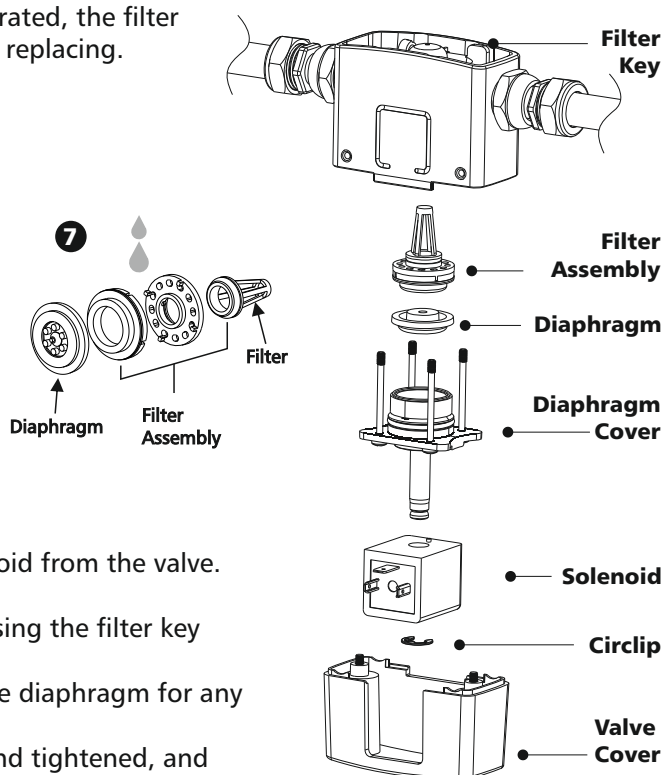
IMPORTANT: DO NOT use any chemicals to clean the valve, **ONLY** use clean water to wash out the valve and the filter.

If the Kinetic valve fails to shut off or does not open when operated, the filter may be blocked by dirt and debris or the diaphragm may need replacing. Follow the steps below to clean the filter.

1. Isolate the mains water supply.
2. If the Kinetic controller is pipe mounted remove the controller as shown in **section 5**. If the Kinetic is remote from the valve remove the solenoid plug by un-screwing the retaining screw.



3. Remove the valve cover by un-screwing the 2 screws.
4. Push the circlip off the solenoid and then remove the solenoid from the valve.
5. Remove the 4 screws of the diaphragm cover.
6. Take out the diaphragm. Then remove the filter assembly using the filter key provided.
7. Clean the diaphragm and filter under clean water. Check the diaphragm for any tears, replace the diaphragm if necessary.
8. Reverse the steps to re-assemble ensuring all screws are hand tightened, and then turn on the mains water supply again.



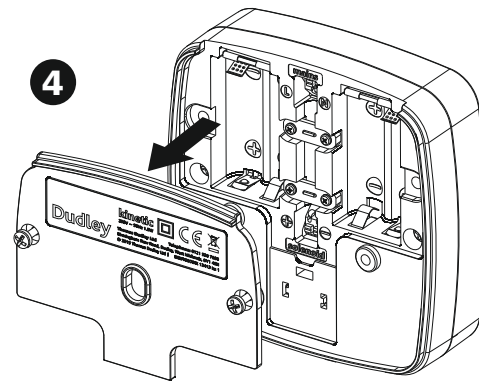
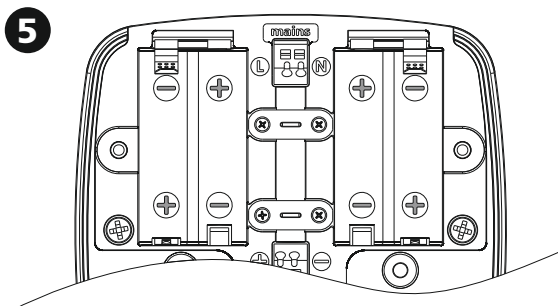
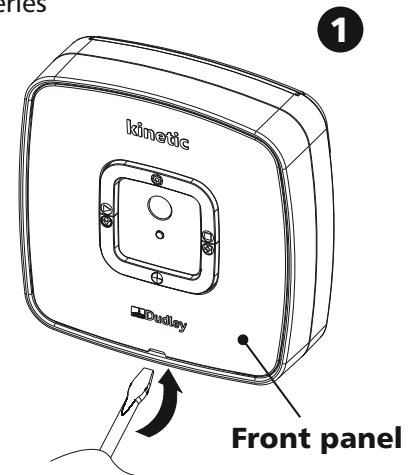
12 BATTERY REPLACEMENT

IMPORTANT: For mains powered with battery back up the low battery buzzer will also sound when the batteries are low. This can be cancelled by pressing any of the buttons. If the Kinetic is battery operated only, the warning buzzer will not be turned off until the batteries are replaced.

When the batteries are low the buzzer will beep at 4 minute intervals until the batteries have been changed. To change the batteries follow the steps below:

Important: Turn **OFF** the mains if the controller has mains power.

1. Remove the front panel with a flat screwdriver.
2. Remove the 2 screws fixing the controller to the valve/patress box/flush mounting bezel.
3. Detach the Kinetic controller from the Valve/patress box/flush mounting bezel
4. Unscrew the 2 screws of the battery cover and remove.
5. Replace batteries with 4 x AA and ensure that the batteries are placed in the correct orientation.
6. Reverse steps to re-assemble the Kinetic controller and re-attach. If applicable turn the mains back **ON**.
7. Once Batteries have been replaced the Kinetic controller will continue operating from its previous setting.
8. If unsure of previous setup run through the setup process again in **section 8**.



13 TROUBLE SHOOTING

- LED is flashing:** Ensure that the Kinetic has been through the initial setup procedure. See **section 8** for details on running the setup process.
- Keypad is locked out:** Press and hold the setup & test buttons for 3 seconds, the green light will flash and the buzzer will sound to indicate the Kinetic is unlocked.
- Sensor does not detect:** Ensure that the sensor is directed at the correct detection ranges as stated in the walk test detailed in **section 10**.
- Valve does not open or close:** If remote check that the solenoid cables are the right orientation. Ensure batteries are not low. Check the filter for dirt and debris and the diaphragm for any tears detailed in **section 11**.
- Valve is leaking:** Check that the adaptors have been installed correctly. Check the filter for dirt and debris and also the diaphragm for any tears detailed in **section 11**.
- Cistern fills too quickly:** Check the water pressure from the inlet water supply, ensure the flow restrictor has been pre-fitted as shown in **section 4**. Alternatively adjust the setup times for filling in **section 7**.
- Cistern fills too slowly:** Check the water pressure from the inlet water supply, if the water pressure is low remove the pre-fitted flow restrictor. Also check the filter for any blockages, detailed in **section 11**.
- Kinetic controller is beeping:** Once setup if the buzzer sounds at regular intervals then the batteries are running low, see **section 12** on replacing the batteries. If the unit is running off mains with battery back up, then the batteries require changing or press any button to cancel warning.
- Kinetic is flush cycling too often:** Check to see if the correct mode has been selected. Hygiene mode will result in quicker flushing cycles than economy mode. For mode selection see **section 9** for details.
- Flushing required immediately:** Press the test button on the Kinetic controller to activate the force flush. The Kinetic will then perform an immediate flush cycle.

14 INSTALLATION CHECKLIST

IMPORTANT: Please fill in checklist and retain with end user.

Checklist Item	Tick as appropriate <input checked="" type="checkbox"/>		
How is the Kinetic mounted	Pipe <input type="checkbox"/>	Remote <input type="checkbox"/>	Flush <input type="checkbox"/>
Has the Kinetic valve been installed with a minimum 20mm gap between pipe outlet and the top of the cistern	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Has the flow restrictor been fitted	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Is the Kinetic mains/ battery powered or both (Pipe mounted Kinetic battery powered ONLY)	Mains <input type="checkbox"/>	Battery <input type="checkbox"/>	Both <input type="checkbox"/>
If the Kinetic is remote from valve has the controller been fitted on a patress box (not supplied) or the flush mounting bezel	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
The Kinetic has been fitted in accordance with water regulations	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
The Kinetic has been fitted in accordance with electrical regulations	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Has the test/walk test feature been run	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

Date of Installtion:

Installed by:

Contact:

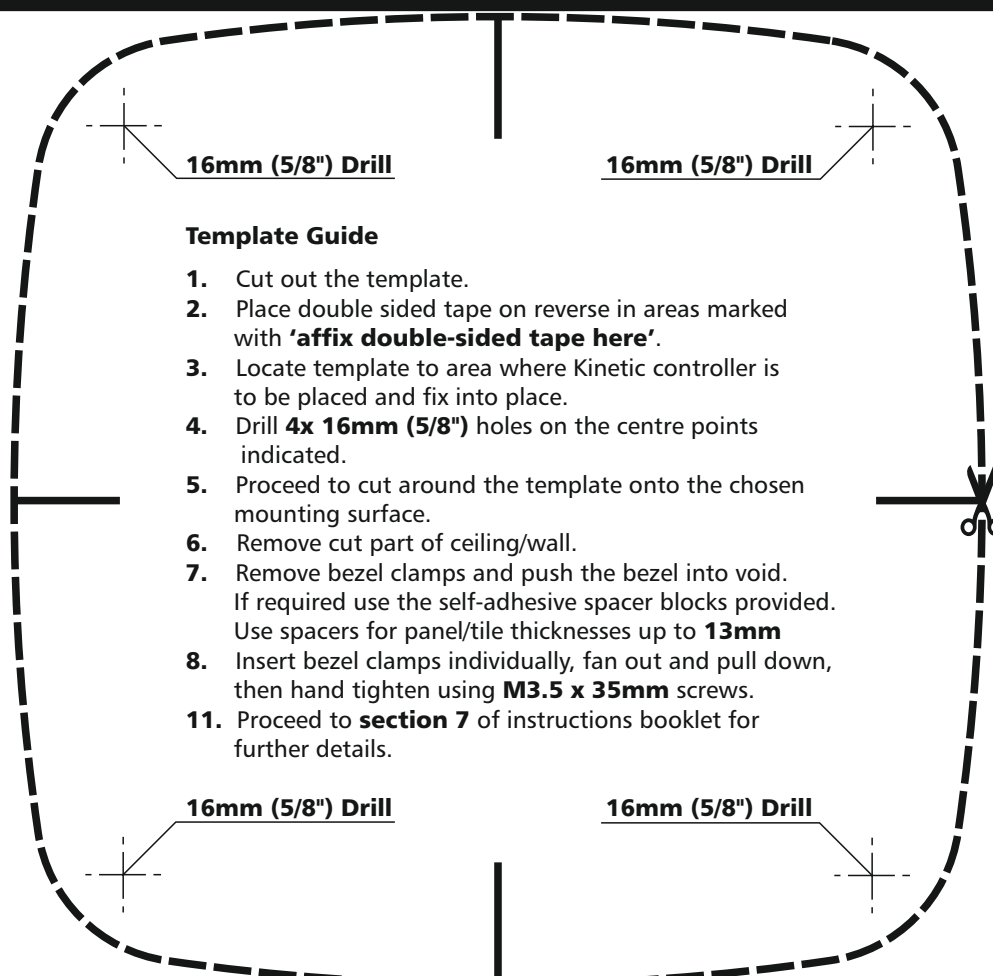
Company:

...../...../.....

The Kinetic comes with a **3 year** warranty. To qualify, register the product within 14 days of purchase and ensure that the checklist above has been completed.

Register at: www.dudleybathroomproducts.co.uk

15 FLUSH MOUNTING BEZEL CUTTING TEMPLATE



Template Guide

1. Cut out the template.
2. Place double sided tape on reverse in areas marked with '**affix double-sided tape here**'.
3. Locate template to area where Kinetic controller is to be placed and fix into place.
4. Drill **4x 16mm (5/8")** holes on the centre points indicated.
5. Proceed to cut around the template onto the chosen mounting surface.
6. Remove cut part of ceiling/wall.
7. Remove bezel clamps and push the bezel into void. If required use the self-adhesive spacer blocks provided. Use spacers for panel/tile thicknesses up to **13mm**
8. Insert bezel clamps individually, fan out and pull down, then hand tighten using **M3.5 x 35mm** screws.
11. Proceed to **section 7** of instructions booklet for further details.

Thomas Dudley Ltd.

Manufacturing in the UK since 1920



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