Product Manual

Thrii_SS
Solid Surface

Thrii_DIS_SS
Solid Surface Disabled

Thrii_ST
Stainless steel
# Contents

1. Disclaimer & Copyright notice ................................................................. 3

2. Conventions .................................................................................................. 4
   2.1 Warning ...................................................................................................... 4
   2.2 Caution ........................................................................................................ 4
   2.3 Important .................................................................................................... 4
   2.4 Numbered procedures ............................................................................... 4
   2.5 Bullet lists .................................................................................................. 4
   2.6 Menu items .................................................................................................. 4

3. Glossary ......................................................................................................... 5

4. Technical Specification .................................................................................. 6

5. Overview ....................................................................................................... 7

6. Installation and Commissioning .................................................................... 10
   6.1 Package Contents ...................................................................................... 10
   6.2 Site Preparation ........................................................................................ 10
   6.3 Installing the support frame, water and waste connections and electric .............. 11
   6.4 Mounting the fascia .................................................................................... 16
   6.5 Engine installation ..................................................................................... 18
   6.6 Electrical and Water Connections ............................................................ 20
   6.7 Commissioning for use ............................................................................. 21

7. Programme settings ....................................................................................... 23
   7.1 Operation .................................................................................................... 24
   7.2 Advanced adjustment ................................................................................. 25

8. Care, Routine maintenance, Service & Repair .............................................. 27
   8.1 Care /Cleaning ........................................................................................... 27
   8.2 Routine maintenance .................................................................................. 27
   8.3 Service and Repair .................................................................................... 27
   8.4 Spare parts ................................................................................................. 28
1. Disclaimer & Copyright notice

Every effort has been made to supply information within this manual which is correct. Wallgate Limited will not be liable for any damage or loss that arises if the person installing, operating or maintaining the unit has not read or not complied with the manual.

In any event, and without prejudice to any warranties in Wallgate Limited’s terms and conditions of sale, Wallgate Limited’s liability for all damages and losses (including negligence) shall not in any circumstances exceed the amount paid by the customer for the unit.

Wallgate reserves the right to alter, update or improve its product specification at any time without prior notice. This manual is specific to the product that it has been supplied with at the date of supply.

Without prejudice to any warranties in Wallgate Limited’s terms and conditions of sale, any warranty will be invalidated if the equipment is installed or serviced by unqualified personnel.

No part of this publication and the information contained may be reproduced, transmitted, stored in a retrieval system, used or disclosed wholly or partly without prior written permission from Wallgate Limited.

For full warranty details please see Wallgate Limited Terms and Conditions.

Please ensure this manual is passed to the end user. The manual forms an integral part of the product and should be kept for its working life. Additional copies of this and other supporting documents are available by contacting Wallgate Ltd or by visiting www.wallgate.com
2. Conventions

Certain conventions are used in this manual to make it easier to read and understand. They are shown in the sections below. It is recommended that you read and understand these warnings before you install and commission the Wallgate Thrii.

2.1 Warning

A boxed WARNING! is used to give information about hazards associated with electric current and high voltages that can cause damage, injury or death. Failure to heed these warnings can have serious consequences. Example box:

```
WARNING! The information contained within this ‘Warning’ box indicates hazards associated with electric current and high voltages
```

2.2 Caution

A boxed CAUTION! is used to give information about hazards that can cause damage or injury. Failure to heed these warnings can have serious consequences. Example box:

```
CAUTION! The information contained within this ‘Caution’ box indicates hazards that require safety advice for personnel or potential unit/property damage
```

2.3 Important

A boxed IMPORTANT: is used to draw your attention to important information on installation, set-up and operation. Example box:

```
IMPORTANT: The information contained within this ‘Important’ box gives further useful information.
```

2.4 Numbered procedures

Steps in procedures are numbered, starting from 1.

1. This is step 1.

2. This is step 2, etc.

2.5 Bullet lists

- A bullet list is used to give information that is not necessarily in sequential order.

2.6 Menu items

Menu items, submenu items and settings, where available, are given in bold.
3. **Glossary**

The glossary lists all words, abbreviations and technical terminology used in this manual, along with a short description of these terms.

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thrii®</td>
<td>Hand Wash Unit</td>
</tr>
<tr>
<td>Engine Unit</td>
<td>The Engine Unit refers to the complete soap, water, dryer module mounted on the back of the fascia.</td>
</tr>
<tr>
<td>IR Sensor</td>
<td>The infrared (IR) sensor transmits an invisible beam into the washbowl area, so that when interrupted by a person’s hand the beam is rebounded back to the receive sensor. This creates an electrical signal which rapidly activates the hand wash cycle.</td>
</tr>
<tr>
<td>BSP</td>
<td>The British Standard Pipe (BSP) thread is a family of standard screw thread types that has been adopted internationally for interconnecting and sealing pipe ends by mating an external (male) with an internal (female) thread.¹</td>
</tr>
<tr>
<td>Solid Surface</td>
<td>The term Solid Surface refers to the hard granite-effect or solid colour material that is moulded to form the Thrii fascia.</td>
</tr>
<tr>
<td>Power up</td>
<td>The external electricity supply is provided to the Thrii.</td>
</tr>
</tbody>
</table>

¹ Description sourced from Wikipedia at http://en.wikipedia.org/wiki/British_standard_pipe_thread

Thrii® is a registered trademark of Wallgate Limited
## 4. Technical Specification

<table>
<thead>
<tr>
<th>Weight</th>
<th>Item</th>
<th>Solid surface DISABLED</th>
<th>Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fascia</td>
<td>15.3 kg</td>
<td>9.5 kg</td>
</tr>
<tr>
<td></td>
<td>Engine</td>
<td>7.0 kg</td>
<td>7.0 kg</td>
</tr>
<tr>
<td></td>
<td>Support frame, etc.</td>
<td>4.5 kg</td>
<td>4.5 kg</td>
</tr>
<tr>
<td></td>
<td>Full soap container</td>
<td>2.6 kg</td>
<td>2.6 kg</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>29.4 kg</td>
<td>23.6 kg</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>29.4 kg</strong></td>
<td><strong>23.6 kg</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Width</th>
<th>Height</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>450mm</td>
<td>870mm</td>
<td>310mm</td>
</tr>
<tr>
<td></td>
<td>450mm</td>
<td>793mm</td>
<td>310mm</td>
</tr>
<tr>
<td></td>
<td>450mm</td>
<td>740.mm</td>
<td>310mm</td>
</tr>
</tbody>
</table>

(250mm behind the panel on all models)

<table>
<thead>
<tr>
<th>Water Supply</th>
<th>Minimum pressure</th>
<th>Dynamic</th>
<th>Maximum rating</th>
<th>Inlet connection size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 Bar / 100 kPa</td>
<td>10 Bar / 1000 kPa</td>
<td>15mm (Aus / NZ, 1/2” BSPP FM)</td>
</tr>
</tbody>
</table>

| Electrical Power requirement | 220–240V 50/60Hz, single phase, 2.6 to 3.1 kW (13 Amp fused double pole switched spur) |

| Enclosure IP Rating | IPX4 |

<table>
<thead>
<tr>
<th>Regulatory compliance</th>
<th>Complies with:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RoHS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solid Surface Approvals</th>
<th>BS476 Pt 6 Class 0 &amp; 7 Class 1 – fire propagation and surface spread of flame</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ISO EN 19712-3-2007 rated 5 for durability, stain resistance, cigarette burns, etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water heater</th>
<th>Water temperature range</th>
<th>30°C to 45°C Flow rate of 1.5LPM*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factory set @ 38°C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Based on 12°C supply temperature, 3Bar dynamic pressure & 240V supply.

| Water Resistivity | Water resistivity must not be less than 1300 Ωcm (refer EN603355-2) |

---

![RoHS](image1.png)  
![WRAS](image2.png)  
![AS 3498 Certificate No 23167](image3.png)
5. **Overview**

The Wallgate Thrii is an integrated hand wash dryer unit with automatic infra-red sensor operation. It is available in a solid surface or stainless steel (grade 304) material.

The unit should only be installed in a frost free environment, to avoid damage.

All models are identical, with the exception of the fascia material & fascia dimensions.

When hands are placed in the centre of the wash bowl, an infra-red sensor activates the hand washing and drying cycle, supplying soap (liquid or foam), warm water and dryer-air in amounts and intervals preset as required.

The unit can be installed in a variety of wall types, servicing can be carried out either from the front (fascia unlocks and whole Thrii swings out) or from within an access duct behind the machine.
Fig. 1 Fascia Front View

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fascia</td>
<td>6</td>
<td>IR Sensor</td>
</tr>
<tr>
<td>2</td>
<td>Fascia Lock (hidden)</td>
<td>7</td>
<td>Soap Outlet</td>
</tr>
<tr>
<td>3</td>
<td>Wash Bowl</td>
<td>8</td>
<td>Water Outlet</td>
</tr>
<tr>
<td>4</td>
<td>Dispensing Unit</td>
<td>9</td>
<td>Label (optional)</td>
</tr>
<tr>
<td>5</td>
<td>Dryer Outlet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Fig. 2 Fascia Rear View**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fascia</td>
<td>13</td>
<td>Hinge</td>
</tr>
<tr>
<td>2</td>
<td>Container Cap</td>
<td>14</td>
<td>Hinge side lock plate</td>
</tr>
<tr>
<td>3</td>
<td>Soap Hose</td>
<td>15</td>
<td>Water (inlet) adapter (Aus/NZ only)</td>
</tr>
<tr>
<td>4</td>
<td>Soap Container</td>
<td>16</td>
<td>Double Check Valve</td>
</tr>
<tr>
<td>5</td>
<td>Container Holder</td>
<td>17</td>
<td>Isolation Tap</td>
</tr>
<tr>
<td>6</td>
<td>Engine Cover</td>
<td>18</td>
<td>Water Connection (frame)</td>
</tr>
<tr>
<td>7</td>
<td>Locking Bar</td>
<td>19</td>
<td>Engine water supply hose</td>
</tr>
<tr>
<td>8</td>
<td>Mounting Frame</td>
<td>20</td>
<td>Engine Cover fixing</td>
</tr>
<tr>
<td>9</td>
<td>Clamp bracket</td>
<td>21</td>
<td>Control</td>
</tr>
<tr>
<td>10</td>
<td>Fascia Lock</td>
<td>22</td>
<td>LCD Control <em>(see fig. 18)</em></td>
</tr>
<tr>
<td>11</td>
<td>Drain</td>
<td>23</td>
<td>Mains Power socket</td>
</tr>
<tr>
<td>12</td>
<td>Waste Outlet</td>
<td>24</td>
<td>Soap Selection switch</td>
</tr>
</tbody>
</table>
6. **Installation and Commissioning**

The Wallgate Thrii handwash-drier unit is a three-part assembly consisting of a flush support frame and a hinged fascia and engine assembly. It is necessary to install the mounting frame and prepare the services (electrical, water and waste) prior to installing the fascia.

It is important that when selecting a mounting position consideration be given to the suitability of the wall construction, so that it is able to bear the weight of the assembled unit in both the open and closed positions, and able to withstand the clamping method as shown in Fig.6

6.1 **Package Contents**

Before you begin the installation, make sure that you have the following items:

- 1 Support frame
- 1 Installation instructions
- 1 Wall frame waste connector
- 1 Waste pipe 32 – 40mm adapter pipe (Aus/NZ only)
- 1 Fascia lock key
- 1 Mains electrical plug and lead (2 metre length)
- 1 User instruction label
- 1 Set of mounting brackets and fixings
- 1 Fascia
- 1 Engine
- 1 Container of liquid soap (2.5 litre)

6.2 **Site Preparation**

6.2.1 **Mounting guidelines**

Looking at the front of the unit the fascia hinges are on the right-hand side. For front access allow for the left-hand edge of fascia to swing out (120°) to allow full internal access. Water, mains power and waste water connections are located on the hinged side of the unit.
Make an opening in the wall surface according to the dimensions shown in drawing Fig.4 noting the appropriate mounting height as detailed on the drawing table A.

⚠️ The opening must be according to the dimensions given in fig.4. The aperture must be accurate in order for the door mechanism to work effectively.

The unit will be fitted to the support frame supplied. The frame is fixed to the sides of the wall opening using the frame fixing brackets provided. The front edge of the frame must be flush with the finished face of the wall. On IPS panel walls such as trespa or corian the aperture in the panel should be lined on the rear face with 50mm timber studding.

⚠️ Complete all surface finishes such as screed, plaster or tiling before attaching the fascia to the support frame.

⚠️ All electrical work must be carried out by a qualified electrician and should be installed in accordance with the current Nationally Approved Regulation

The installer must:

Provide an electrical supply of 220–240V 50/60Hz with a switched fused spur. The fused spur must be a 13Amp, double pole connection point that is local to the unit (the contact separation of the fused spur switch should be at least 3mm). Earth bonding for this type of unit must comply with the nationally approved regulations.

⚠️ The switched fused spur MUST be accessible from either the front of the Thrii or from the rear without having to open the fascia

- Provide a mains cold water supply mounted behind the wall below the ‘hinge’ side of the aperture. Terminate the cold water supply with a suitable isolating tap. For optimum operation a dynamic water flow pressure of between 1 & 3 bar is required.

⚠️ Request advice from Wallgate before you connect the unit to a gravity-fed water supply.

- Provide a waste pipe with suitable deep seal waste trap for connection of 32mm (1¼”) (or 40mm 1½” - AUS / NZ only) behind the wall below the ‘hinge’ side of the aperture.

6.3 Installing the support frame, water and waste connections and electric

1. Remove the support frame from the packing box.

2. Orientate the frame with hinge plates on the right-hand side and waste outlet parts at bottom and facing away from you. The frame front edge should now be facing towards you.
3. Place the frame into the front of the aperture, ensuring it is flush fitting with the finished face of the wall, at the correct height and perfectly level in the horizontal and vertical planes. The hinge-side of the frame should be hard up against the aperture.

**Other mounting heights:**
For Disabled model *Thrii_DIS_SS*:
- UK = 590mm
- France = 700mm
- Australia = 680mm
- New Zealand = 675mm

Fig. 4 Typical site preparation for Wallgate Thrii unit. (Dimensions in millimetres)
Note hinge positions on the right-hand side when looking from the front.
Refer to table below

Fig.5 Fascia Dimensions (in millimetres)

<table>
<thead>
<tr>
<th>Model</th>
<th>Fascia height dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thrii_SS</td>
<td>870mm</td>
</tr>
<tr>
<td>Thrii_DIS</td>
<td>793mm</td>
</tr>
<tr>
<td>Thrii_ST</td>
<td>740mm</td>
</tr>
</tbody>
</table>
The switched fused spur MUST be accessible from either the front of the Thrii or from the rear without having to open the fascia.

**Fig. 6** Typical site installation of Wallgate Thrii unit showing clamping bracket (*view on rear*)
4. Insert the 4No. M10x150mm threaded rods through the corner angles on the support frame and into the brackets as shown in Fig. 6

5. Tighten all 4 brackets until the wall frame is held securely in place in the wall opening. It is important that the frame side members are not distorted when tightening to the wall, as this may prevent the hinge and catch mechanisms from working properly.

6. Once the frame is securely attached to the wall, if necessary make good any excessive gaps between the frame and the wall that may not be covered by the fascia.

7. Install the waste connector to the frame as shown in Fig. 7 (below) along with the pipe adapter (Aus/NZ only) which then is terminated to the deep seal waste trap as detailed in section 6.2 site preparation. Note that the pipe adapter can be used for either a 32mm or 40mm pipe connection.

![Fig. 7 Waste fitting assembly (view on rear)](image)

8. Provide a cold water supply pipe to connect to the inlet connector on the support frame see Fig. 2 & 6. Note that the water inlet connector is 15mm (or ½” BSPP FM for AUS/NZ).

   The hand wash unit is supplied with a double check valve fitted to the water inlet connection which must be in place to comply with water regulations.

   If pipe sealing compound is used, avoid applying excessive amounts as particles of sealant can block water filters and impede valve operation.

   Before completing the water supply connection to the unit, flush the mains water supply pipes to remove any debris and trapped air. Failure to do so may result in damage and failure of the unit.

9. Connect the supplied electrical cable to the 13 amp spur connection unit.
6.4 Mounting the fascia

⚠️ Ensure that the fascia is fully supported until both hinges are fully engaged. Failure to do so may damage the hinges

⚠️ For ease of installation it is recommended to have at least two people carry out this operation

1. Remove the fascia from the packing box.

2. With the right-hand side of the fascia vertically aligned with the support frame and offered up in the ‘open’ position (approximately 120°), extend the fascia hinges to the open position, align and locate hinge ends into the hinge side lock plates on the support frame and engage the two parts to secure the two halves together. See Fig. 8

3. Engage the ‘Hinge release lock’ spigot, fitted to each hinge to prevent accidental hinge latch release see Fig.9

4. It is necessary to check the fascia alignment with the frame before proceeding further, as the hinges may need adjustment. Carefully close the fascia ensuring the door opens and closes freely. In the closed position, visually check the gap between the fascia and the wall along the hinged edge, and adjust the hinges as appropriate to ensure an even fit using the adjustment screw on the hinges see Fig. 10a. Do not over-tighten as this may result in the fascia damaging the wall finish. Horizontal adjustment of the fascia door can be configured, (see Fig. 10b) however note this is factory set.
Fig. 10 Hinge adjustment. 10a showing depth adjustment. 10b showing side adjustment
Note hinge release spigot in place

5. Once the fit has been checked, close the fascia fully to check the locking bar operation. The
locking bar is spring-loaded and may require a firm push to engage correctly. To re-open insert
the key provided into the fascia lock release at the base of the fascia, ¼ turn anti-clockwise and
push the key up to disengage the lock and allow the fascia to open freely see Fig. 2.

6. For installations where front access is not required in addition to the hinge release lock, engage
the 2 hinge side locks, rotating into the slot provided in the frame as shown in
Fig. 11a, and when the lock bar has been fully engaged, relocate the top screw fixing into the
locking position below, as shown in Fig. 11b

Fig. 11 Securing the unit for rear-access only, 11a showing hinge side locks, 11b showing fixing
repositioning
6.5 Engine installation

1. Remove the engine cover, retaining the engine cover fixing.

2. Remove the securing pin out through the side from the base of the engine *Fig. 12*

![Fig. 12 Securing pin removal](image)

3. Present the engine to the engine mounting plate on the back of the fascia locating the dispensing nozzle into the aperture provided. Align the engine on the plate and click into place *Fig. 13*

![Fig. 13 Fitting the engine](image)

4. Replace the securing pin through both mounting plates and engine ensuring it passes fully through this assembly *Fig. 14*
Fig. 14 Fitting the securing pin

5. Replace the engine cover, ensuring the flexible hose and soap hose attached does not foul upon reassembly, and secure the cover into place with the fixing provided Fig. 15

Fig. 15 Replacing the engine cover
6.6 **Electrical and Water Connections**

From the rear side of the wall:

6.6.1 **Electrical connection from the wall mounted fused spur switch to the Thrii:**

All electrical work must be carried out by a qualified electrician and should be installed in accordance with the current Nationally Approved Regulations.

Complete the electrical connection by fitting the plug into the socket on the rear of the engine. Ensure the cable is a suitable length so that the door can fully open without catching or fouling.

6.6.2 **Mains water connection from support frame to the engine:**

Using the flexible water hose provided take the loose end of the hose, which is attached to the engine, and attach it to the water inlet connection mounted on the upper bracket part of the support frame See Fig. 16. With all services connected to the Thrii, open and close the fascia assembly to ensure that the wiring and piping feeds move without snagging or kinking. Ensure the waste spigot from the wash bowl smoothly engages with waste outlet on the frame bracket.
6.7 Commissioning for use

To commission the Wallgate Thrii:

1. Ensure the engine cover is securely fitted and the electrical plug is fully pushed in.

2. Fully open the mains water supply isolating tap. Check the system for external leaks, if ok, open the tap on the support frame.

3. Close the fascia, ensuring it closes fully against the wall. Adjust the hinges if required and push the fascia to the closed position ensuring the locking bar engages fully.

4. Switch ON the fused spur, this will power-up the Wallgate Thrii ready for use.

5. Upon initial power-up the Wallgate Thrii automatically runs through a 15 second water calibration cycle. This is repeated everytime the mains power supply is interrupted. This will also activate the clock on the LCD.

6. Reopen the fascia using the key provided.

7. To install the soap container, place the soap container into its stowage position, to the right of the engine unit Fig.17a, ensuring the cap is outer most.

Important! A range of compatible liquid soaps & specifications are available from Wallgate.

Fig.16 Engine water supply hose connection to water connector on wall frame

---

<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
<th>c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitting the container</td>
<td>Cap removal</td>
<td>Installing the push-fit cap/tube</td>
</tr>
</tbody>
</table>
8. Unscrew the cap from the soap container Fig. 17b and replace with the push-fit cap pre-connected to the soap tube Fig. 17c pushing fully into place ensuring no leaks.

9. Press the soap prime switch, (located at the rear of the engine unit in the window aperture to the left of the mains connector (see Fig.3), until soap is consistently dispensed into the bowl.

If only rear access is required lock the fascia into the closed position using the front screw fixing and secure using the fixings provided (see Fig. 11).

10. When ready for use, a green light will emit from the dispensing unit into the wash bowl. Once hands are placed under the dispensing unit this light will turn to blue and will activate the wash cycle. The light then changes to red when the hand dryer is operating. Check the wash & dry cycle operates correctly as per the list of checks below and repeat the cycle at least five times.

✓ Soap dispenses

✓ Water dispenses & water is warm (Note that water dispenses whilst hand sensor detects the presence of hands in the bowl, the water will stop when the sensor fails to detect any hands after a period of 2 seconds.

✓ Hand dryer operates (Note that the dryer operates whilst the hand sensor detects the presence of hands in the bowl, the dryer will stop when the sensor fails to detect any hands after a period of 2 seconds.

11. If required by the customer, fit the user instruction label to the dispensing unit as per Fig.1

12. Upon completion ensure that a copy of the instruction manual (or leaflet), the instruction label (if not fitted) and the fascia lock key are passed to the customer.
7. Programme settings

The Wallgate Thrii operational programme is supplied factory set but can be adjusted to suit the end user requirements.

Any service or repair work must be done by a qualified engineer. During the warranty period, the service or repair must only be done by a Wallgate engineer or appointed service agent. Refer to the Wallgate terms and conditions for warranty information.

Fig. 18 LCD Control detail

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>LCD</td>
<td>8</td>
<td>MED Fan speed LED indicator</td>
</tr>
<tr>
<td>2</td>
<td>Menu Select button</td>
<td>9</td>
<td>LOW Fan speed LED indicator</td>
</tr>
<tr>
<td>3</td>
<td>UP Button</td>
<td>10</td>
<td>SOAP Select button</td>
</tr>
<tr>
<td>4</td>
<td>DOWN Button</td>
<td>11</td>
<td>LIQUID LED indicator</td>
</tr>
<tr>
<td>5</td>
<td>ENTER Button</td>
<td>12</td>
<td>FOAM LED indicator</td>
</tr>
<tr>
<td>6</td>
<td>FAN SPEED Button</td>
<td>13</td>
<td>Ribbon cable connector</td>
</tr>
<tr>
<td>7</td>
<td>HIGH Fan speed LED indicator</td>
<td>14</td>
<td>Soap prime switch</td>
</tr>
</tbody>
</table>
7.1 Operation

The hand wash & dry cycle is activated when your hands are placed centrally into the wash bowl below the dispensing nozzles. An infra-red hand sensor initiates the cycle when it detects hands in the bowl area. When the cycle starts, a sequence of soap, warm water & hand dryer air are dispensed. Note that the water dispensing & hand dryer functions include a feature to auto cancel a cycle that is in operation should the user remove their hands from the wash bowl before either cycle has completed its preset time. The cycle cancels after the users hands have been removed from the wash bowl (Water 4 sec & Hand drier 2 sec). This feature can be adjusted to increase or decrease the 2 second default time or the feature can be disabled, refer to section 7.2 for information.

7.1.1 Soap Operation

There are 2 settings for soap delivery, LIQUID (default) or FOAM. The controls to set the required soap option are located on engine unit. To change the settings the unit must be powered up.

There are 2 controls that need to be altered:

1. At the window to the left of the mains connector there is a small push button labelled ‘Soap’. Press and hold this button to select the desired setting this will be confirmed by an illuminated LED see Fig.18

2. Adjust the soap selection switch to position 1, see below;

![Image of soap selection switch and button]

Ensure that both button setting and soap selection knob position select the same operation. Failure to do so may result in an incorrect operation.

Low soap level indicator:

A function on the unit can be enabled, to indicate that the soap container level is low. When this function is set to ON (Default setting is OFF) & the soap is at a low level the bowl light will pulse.
Once per second. To turn ON this function refer to section 7.2 for “Advanced Adjustments” and select menu item F146 which is the setting for number of soap operations before the warning light is activated. Setting this to 20 will activate the warning light after 2000 operations. The setting may require adjustment if the number of operations per full soap container is found to be fewer or greater than the setting.

To reset the warning light there are two options.

1. Press buttons 2 & 3 on the display together & hold for 5 seconds.

2. The reset can be done when the soap prime push button is activated but this option has to be enabled by setting menu item F148 to 1. Refer to section 7.2 for “Advanced Adjustments”.

7.1.2 Dryer Operation

There are 3 dryer speed settings. The control to adjust the speed is located at the rear of the unit. To change the speed the unit must be powered up (The fan does not need to be operating). On the LCD Control there is a small push button labelled ‘Fan Speed’ see Fig.18. Press and hold this button to select the desired setting, this is confirmed by an illuminated LED and a five second fan cycle. (It should be noted that lowering the fan speed will take longer to dry the hands) see Fig.19

7.2 Advanced adjustment

The unit is supplied with factory settings as shown in Fig. 19 below. Further adjustments can be made to the configuration of the water, soap and air operations & to the cycle sequence.

Incorrect alterations to the default handwash settings may result in malfunctions or possible unit damage. If in any doubt contact “Wallgate after sales service” for advice & information.

<table>
<thead>
<tr>
<th>Description</th>
<th>Factory Settings</th>
<th>Setting range</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soap dosage liquid</td>
<td>0.4 sec</td>
<td>0.1 - 10</td>
<td>F 8</td>
</tr>
<tr>
<td>Soap dosage foam</td>
<td>0.3 sec</td>
<td>0.1</td>
<td>F 7</td>
</tr>
<tr>
<td>Delay Time</td>
<td>1 sec</td>
<td>1 - 10</td>
<td>F 10</td>
</tr>
<tr>
<td>Water Time</td>
<td>10 sec</td>
<td>1 - 100</td>
<td>F 04</td>
</tr>
<tr>
<td>Dryer Time</td>
<td>45 sec</td>
<td>1 - 100</td>
<td>F 06</td>
</tr>
<tr>
<td>End of cycle delay Time</td>
<td>3 sec</td>
<td>1 - 10</td>
<td>F 11</td>
</tr>
<tr>
<td>Water cycle auto cancel¹</td>
<td>4 sec</td>
<td>0 - 10</td>
<td>F149</td>
</tr>
<tr>
<td>Hand drier auto cancel¹</td>
<td>2 sec</td>
<td>0 - 10</td>
<td>F71</td>
</tr>
</tbody>
</table>

¹. Set to zero to disable the auto cancel function.
Fig. 19 F-Functions table for Water, Dryer and Soap times (*shown in order of operation*) & auto cancel function.

1 To change the settings you will need to enter the programming mode, press and hold ‘MENU’, ‘SELECT’ and ‘ENTER’ buttons simultaneously for 5 seconds see Fig. 18. After this period the display will read ‘F 01’.

2 With ‘F’ menu item displayed (as shown in the Fig.19), momentarily pressing the ‘UP’ and ‘DOWN’ buttons will move up and down the menu selection.

3 When the desired menu item is selected, press the ‘ENTER’ button to confirm. The display will show the current value, flashing, for that menu item.

4 To adjust the flashing value, press the up or down button as required.

5 To save the required value, press the ‘ENTER’ button. This action saves the value and switches the display back to the selected menu item.

6 For further adjustments repeat steps 1 to 5, or to exit the programming mode momentarily press the Menu Select button. A 20 second period of inactivity will automatically exit the programming mode and revert to displaying the time.

Instructions can be downloaded from the Wallgate web site or contact Wallgate Ltd to:

- Restore the unit to factory default settings.
- Instructions to change the cycle sequence of soap – water – hand dryer.
8.  Care, Routine maintenance, Service & Repair

The Thrii Hand wash dryer unit is well designed and manufactured from high quality materials. If you install, operate and maintain them according to the instructions given in this manual, the unit will give reliable and efficient service. If you need any further information or advice, please contact Wallgate Customer Services.

8.1  Care /Cleaning

- A range of compatible liquid soaps & specifications are available from Wallgate.
- For cleaning see the Wallgate cleaning guide, this can be found on the Wallgate website.
- Cleaning kits are available from Wallgate Ltd.

8.2  Routine maintenance

The following routine regular maintenance in between service intervals will help to prevent premature parts failure:

- Flush the soap pump system with warm water to remove congealed soap within the pump, tube & soap nozzle.
- Clean the external surfaces of the soap nozzle to remove congealed soap.
- De-scale the water spray nozzle.
- Clean the lens on the infra-red hand sensor.
- Clean the waste outlets on the basin bowl and flush out / clean the waste sump.
- Clean & de-scale the wash bowl.
- Check the unit functions of soap, water and dryer dispensing are operating correctly. Any malfunction must be reported so that service repair work can be arranged to avoid further potential damage to the unit.

**Switch OFF the electrical power to the unit in the event of a serious fault or if the unit fails to operate.**

8.3  Service and Repair

**Service warning indicator:** The LCD display shown on fig 18 will show “Ser” when a recommended service is required or alternatively it is recommended that the unit is serviced every 56000 cycles or a minimum of once per annum.

**Service warning indicator reset:** Press & hold buttons 2 & 4 together for 4 seconds.
Any service or repair work must be done by a qualified engineer. During the warranty period, the service or repair must only be done by a Wallgate engineer or appointed service agent. Refer to the Wallgate terms and conditions for warranty information.

**Risk of electric shock, serious injury or death. Only qualified personnel should remove the cover of the engine unit when powered up**

8.4 **Spare parts**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPU110</td>
<td>Soap Pump Assembly</td>
<td>FM4614</td>
<td>Motor Carbon Brush</td>
</tr>
<tr>
<td>SNA100</td>
<td>Soap Nozzle Assembly</td>
<td>TCU101_2</td>
<td>Electronic Control Board</td>
</tr>
<tr>
<td>STS110</td>
<td>Soap Tube Assembly</td>
<td>PSA101</td>
<td>Infra-Red Hand Sensor</td>
</tr>
<tr>
<td>WHU025</td>
<td>Water Heater Unit</td>
<td>EDC101</td>
<td>Electronic Display Circuit</td>
</tr>
<tr>
<td>WS3832</td>
<td>Water Solenoid Valve</td>
<td>EF6538</td>
<td>EMC Filter</td>
</tr>
<tr>
<td>WF3963</td>
<td>Water Nozzle</td>
<td>RW9625</td>
<td>Waste Seal</td>
</tr>
<tr>
<td>FU0500</td>
<td>Fan Blower Unit</td>
<td>DL7534</td>
<td>Door Catch Key</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FF4000</td>
<td>Fan inlet filter mesh</td>
</tr>
</tbody>
</table>

Fig. 20 Spare Parts List

Wallgate Ltd offer comprehensive after-sales and service support. For more information contact Wallgate Ltd or visit www.wallgate.com

---

**Wallgate Ltd.**
Crow Lane, Wilton,
Salisbury, Wiltshire,
SP2 0HB, England

tel: +44 (0) 1722 744594
fax: +44 (0) 1722 742096
e-mail: service@wallgate.com
web: www.wallgate.com