Important Safeguards
(For your safety, please follow the instructions below.)

In this Instruction Manual, the following symbols are shown for safe and proper use of your automatic faucet and in order to alert you to the possibility of personal injury and damage to your property. The symbols and their meanings are as follows.

Warning

Do not use in humid area

Do not strike

Do not disassemble

Do not use the Automatic Faucet at temperatures what local codes allow.

Some models may have different components from the ones illustrated below.

Warning

Ignoring these symbols may cause personal injury and/or property damage.

Specification

<table>
<thead>
<tr>
<th>Item</th>
<th>EcoPower® type (1.06 gpm)</th>
<th>EcoPower® type (0.5 gpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td>TEL5GS10/60</td>
<td>TEL5LS10</td>
</tr>
<tr>
<td>Gooseneck</td>
<td>TEL5GG10/60</td>
<td>TEL5LG10</td>
</tr>
<tr>
<td>Helix™</td>
<td>TEL5GC10/60</td>
<td>-</td>
</tr>
<tr>
<td>Fordham™</td>
<td>TEL5GT10/60</td>
<td>-</td>
</tr>
<tr>
<td>Axiom™</td>
<td>TEL5GK10/60</td>
<td>-</td>
</tr>
<tr>
<td>Ryohan™</td>
<td>TEL5GM10/60 (0.8 gpm)</td>
<td>-</td>
</tr>
<tr>
<td>Duration of water discharge</td>
<td>10 Seconds (TEL5 □□10)</td>
<td>60 Seconds (TEL5 □□60)</td>
</tr>
<tr>
<td></td>
<td># CP = Polished Chrome</td>
<td></td>
</tr>
<tr>
<td>Power supply</td>
<td>Hydro Generated</td>
<td></td>
</tr>
<tr>
<td>Detection range from the sensor</td>
<td>5 - 1/8&quot; ~ 7 - 7/8&quot; (130 ~ 200 mm)</td>
<td>Sensor is self-adjusting</td>
</tr>
<tr>
<td>Water supply pressure</td>
<td>Minimum required water pressure: 14.5 PSI (100 kPa) (Flowing)</td>
<td>Maximum water pressure: 125 PSI (862 kPa) Check local building codes for maximum water pressure allowed</td>
</tr>
<tr>
<td>Water supply connection</td>
<td>1/2&quot; NPSM</td>
<td></td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>32 ~ 104° F (0 ~ 40° C)</td>
<td></td>
</tr>
<tr>
<td>Humidity</td>
<td>Max. 90% RH</td>
<td></td>
</tr>
<tr>
<td>Flow rate</td>
<td>1.06 gallon per minutes (4 L/min.) TEL5G□□□</td>
<td>0.8 gallon per minutes (3 L/min.) TEL5GM□□□</td>
</tr>
<tr>
<td></td>
<td>0.5 gallon per minutes (2 L/min.) TEL5L□□□</td>
<td></td>
</tr>
</tbody>
</table>
### Before Installing

1. **Check the pressure of cold and hot water supply**
   - Make sure the cold water supply pressure is higher or equal to the hot water supply pressure. When the water supply pressure is higher than 125PSI (862kPa), be sure to reduce the pressure within a range of 20 to 80 PSI by using a pressure reducing valve available in the market.
   - Optimum working pressure range is from 14.5PSI to 125PSI (100kPa to 862kPa). Make sure the water pressure is within this range.

2. **Check the temperature of hot-water supply**
   - Never use steam as a hot-water supply.
   - Make sure the temperature range of hot-water supply is within 140 to 185°F(60 to 85°C). This is not mandatory for the lower limit but is recommended. The Automatic Faucet does not discharge hot water exceeding 122°F(50°C).

3. **Piping**
   - Flush all water lines prior to installation.

4. **Others**
   - Pay special attention so that the sensor surface is not flawed or scratched.
   - Prepare stop valve and flexible hose or copper tube.
   - Do not place other devices using inverter or infrared sensor near the Automatic Faucet, this may cause malfunction.
   - There is no problem with the Automatic Faucet if the water remains inside.

### Set-up Drawing

Some models may have different components as illustrated below.

#### EcoPower® type

- **Front View**
- **Side View**

#### Standard

#### Gooseneck

#### Helix™

#### Fordham™

#### Axiom™

#### Ryohan™

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Make sure the cold water supply pressure is higher or equal to the hot water supply pressure. When the water supply pressure is higher than 125PSI (862kPa), be sure to reduce the pressure within a range of 20 to 80 PSI by using a pressure reducing valve available in the market.

Optimum working pressure range is from 14.5PSI to 125PSI (100kPa to 862kPa). Make sure the water pressure is within this range.

Never use steam as a hot-water supply.

Make sure the temperature range of hot-water supply is within 140 to 185°F(60 to 85°C). This is not mandatory for the lower limit but is recommended. The Automatic Faucet does not discharge hot water exceeding 122°F(50°C).

Flush all water lines prior to installation.

Pay special attention so that the sensor surface is not flawed or scratched.

Prepare stop valve and flexible hose or copper tube.

Do not place other devices using inverter or infrared sensor near the Automatic Faucet, this may cause malfunction.

There is no problem with the Automatic Faucet if the water remains inside.
5 Installation

*Some models may have different components as illustrated below.

### Control box
- EcoPower® type
- Water inlet bracket ($\times$2)
- Self tapping screw ($\times$8) (φ4.5 mm×38)

### Water inlet bracket
- Installation manual
- Allen wrench Size: 1/16" (2mm)
- Screw (φ3 mm×10)

### Others
- Others
- Spout, Flexible tube and Open-close tool

### Optional Accessories (Not included)

#### Plate (Not for TEL□GM□)
- 4" Plate (TN71V100S)
- 8" Plate (71244T8CC)

<table>
<thead>
<tr>
<th>Plate</th>
<th>Packing</th>
<th>Packing</th>
<th>Tie bolt</th>
<th>Washer</th>
<th>Wing nut</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot; Plate</td>
<td>Packing</td>
<td>Packing</td>
<td>Tie bolt</td>
<td>Washer</td>
<td>Wing nut</td>
</tr>
<tr>
<td>8&quot; Plate</td>
<td>Packing</td>
<td>Packing</td>
<td>Tie bolt</td>
<td>Washer</td>
<td>Wing nut</td>
</tr>
</tbody>
</table>

**Required Tools**
Adjustable wrench, phillips and flat head screwdrivers

### Flexible Tube
- Flexible tube is installed through spout connecting hose.

### Others
- Open-close tool

### Drain
- Drain
- Drain Pipe

### Spout
- Standard
- Gooseneck
- Helix™
- Fordham™
- Axiom™
- Ryohan™

*Spout, Flexible tube and Open-close tool are included.*
**Installation Procedure**

**STEP 1**

**Water supply pipe**

Before installing the faucet, be sure to thoroughly flush away any foreign matter such as dirt and sand trapped in the water supply pipe.

**STEP 2**

**Remove the controller cover**

- Loosen the two screws on the front cover.
- Remove the controller cover to the direction as shown in the figure.

**STEP 3-A**

**Mount the two water inlet brackets on the wall**

- Mount the water inlet brackets on the wall and temporarily tighten the screws. The distance between the water inlet brackets shall be 3-3/4" (95mm). The controller and the two brackets should be temporarily connected first in order to affix.

*Note:* It is required to keep a distance of 3-3/4" between the two water inlet brackets. This distance is fixed because the controller attaches to these brackets.

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**1 Water supply pipe**

**2 Remove the controller cover**

**3 Mount the two water inlet brackets on the wall**

**4 Connect the controller to the water inlet brackets**

**5 Cut the spout connecting hose if necessary**

**6 Connect the spout connecting hose to the controller**

**7 Attach the connector to the controller**

**8 Fasten the spout with tool**

**9 Attach the controller cover**

**10 Install the Drain**

**Controller cover**

**Screws**

**Pull**

**3-3/4" (95mm)**

**HOT IN**

**COLD IN**

**Self tapping screw**

**Wall anchors (not included)**

**Water inlet bracket**

To be continued on the back
**STEP 3-B**  
**Mount the two water inlet brackets on the wall**

- Make sure that the controller can be attached to the water inlet brackets.
- Tighten the water inlet brackets with the eight self tapping screws.
  
  **Caution**  
  Be sure to mount each water inlet bracket in the correct direction. Otherwise, the strainer on the water inlet bracket will be inaccessible for cleaning.

**Note:** Remove all protective covers.

- Connect the hot/cold water supply lines to the water inlet brackets.

- If the spout connecting hose is too long, cut it to proper length. Do not cut the hose more than 4 inches. Be sure to cut the hose carefully with a cutter, so the surface is square.

**STEP 4**  
**Connect the controller to the water inlet brackets**

**Note:** Remove all protective covers.

- Connect the controller to the water inlet brackets, and then affix them with the nuts as shown in the figure.
- Packing is located on the water inlet bracket.

**STEP 5**  
**Cut the spout connecting hose if necessary**

1. Cut the spout connecting hose to the appropriate length.
   
   **Caution**  
   Do not cut the hose more than 4 inches. Be sure to cut the hose carefully with a cutter, so the surface is square.

2. Insert the spout connecting hose into the flexible tube.

**Note:** Make sure hot goes on the left side.
**STEP 6**  
**Connect the spout connecting hose to the controller**

- Insert the spout connecting hose into the controller.
- Fasten the hose with the hose clamp.

**Caution**
- Check that the spout connection hose is firmly in place.
- Do not bend the spout connection hose.
- The hose clamp should be attached at the specified position.
- The spout connection hose must be fastened with the hose clamp.

**STEP 7**  
**Attach the connector to the controller.**

- Attach the back-up battery connector (white) to the controller.
- Allow the circuit board to stabilize for 2 minutes, then attach the sensor connector (Green)

**Caution**
- EcoPower® type needs about two minutes for its controller to be ready for operation after attaching the back-up connector to the controller.
- Make sure there are no obstructions between the sensor and the basin. The controller starts setting right after the sensor connector is attached. (This sensor setting operation is completed in approx 20 seconds.)
- Make sure that no electric cord comes in contact with the hot water supply pipe.

**STEP 8**  
**Fasten the spout**

- Affix the spout by tightening the hexagonal nut.

**Spout position**

- At the center
- On the right side

**Caution**
- Be sure to mount the faucet body with its spout tip directed toward the basin center.
- Confirm there are no obstructions within the detection range.
- If light continues to flash, the spout direction will need to be readjusted for proper operation.

**Caution**
- The light will only blink for 10 minutes. If all adjustments are not made during this 10 minutes, unplug sensor connector for 10 seconds to reset the unit.
**STEP 9**

**Attach the controller cover**

After checking the connectors are securely attached, cover the controller.

**STEP 10**

**Install the Drain (Ryohan™ Only)**

Install the main drain body, Gasket, washer, and Lock Nut in that order.

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**Remove the drain cup unit**

1. Pull the drain cup unit firmly to the drain part then release it.
2. Turn the drain cup unit clockwise (About 45 degrees)
3. Pull the drain cup unit upwards and out

*If the drain cup unit does not come out, put it back, and while turning it clockwise once again, slowly pull it out.*

**Install the Drain cup**

1. Insert the drain cup into the main drain body
2. Turn the drain cup counter-clockwise making the cross-bar align with the notches in the angles.
3. Pull firmly on the drain cup unit, being careful not to remove it, then release it.
4. Push the drain cup unit in.

*If the drain cup is accidentally removed, begin the process over from the beginning.*
1. Checking after installation

After your Automatic Faucet is installed, check it according to the following procedures.

1. Check for water leakage
   Open the stop valve and check for water leakage.

2. Operation
   <Check the sensor operation>
   - When hands are placed under the faucet, water starts flowing.
   - When hands are removed, water stops in one or two seconds.
   - For safety and conservation reasons, after detecting objects continuously for about 10 seconds or 60 seconds, water automatically stops.

If the Automatic Faucet does not operate properly, contact TOTO® or your plumbing contractor.

2. Temperature adjustment

The water temperature has been factory set to 100°F (38°C, Max: 42° ± 3°C). Depending on the supply water pressure and other local conditions, the water temperature may not be kept as specified. In such a case, adjust the temperature by turning the temperature control handle.

Note: If water temperature goes opposite direction, make sure hot & cold connection is right side or not.

3. Cleaning of the strainer

Closed the stop valve by hand.
Use the open-close tool to remove the strainer cover.

After installation, be sure to clean the strainer periodically. When the strainer is clogged, the flow rate will decrease and the Automatic Faucet may not operate properly.

4. Adjustment of flow rate

The flow controller regulates flow rate to 1.06gpm (4L/min.) for TEL□GM, 0.8gpm (3L/min.) for TEL□GM, 0.5gpm (2L/min.) for TEL□GL, there is no need to adjust the flow rate. Use the Automatic Faucet with the stop valve fully opened. However, if you need to regulate the flow rate because the wash basin is small or that the water supply pressure is too strong, adjust the flow rate by turning the stop valve clockwise.

The EcoPower® type must be used with the stop valve fully opened. Insufficient flow rate, mentioned below, may cause power shortage resulting in consumption of the built-in back-up battery.

- If you need to regulate the flow rate, make sure that the initial flow rate is more than 0.8gpm (3L/min.) for TEL□GM, 0.75gpm (2.7L/min.) for TEL□GM, 0.48gpm (1.8L/min.) for TEL□GL.

- (For TEL□GM) The water appears white with flow rate of more than 0.8gpm (3L/min.)

- (For TEL□GL) If the water pressure is low and the water flow rate is below 0.76gpm (2.7L/min.) the back up battery will run down quickly. To test water flow rate, run water for 13 seconds cycles into 20 ounce bottle or container. Faucet should flow at least 20 ounces in 13 second cycles.

- (For TEL□GM) If the water pressure is low and the water flow rate is below 0.48gpm (1.8L/min.) the back up battery will run down quickly. To test water flow rate, run water for 10 seconds cycles into 20 ounce bottle or container. Faucet should flow at least 20 ounces in 13 second cycles.