# DTH101

## www.thermomart.com

Users should download eWeLink App on their Smartphone. The app is available on both Android play store "eWeLink" and iOS app store "eWeLink-smart home control".

After downloading the app, an account should be registered with your email (not phone#). A verification code will be emailed to you and by entering this code registration will be completed and you can login to your account.

#### **Pairing the Device**

Firstly, make sure you are close enough to Wi-Fi router and if you have VPN, remove it temporary. Also if your Wi-Fi is 5G, change it to 2.4G temporary. The app only **pairs with 2.4G Wi-Fi** but you can change it back to 5G when pairing is successfully completed. If you couldn't change your Wi-Fi to 2.4G, please check item 5 in "problems and solutions" section of this manual and you can also check our video on YouTube by searching "DTH101 2.4G".

Plug DTH101 receiver, wait for 10 seconds to 3 minutes until blue LED blinks slowly and then open eWeLink App. Press and hold the button on DTH101 receiver box for 4-7 sec. When the LED light blinks (3 times) & pauses (once) repeatedly, click on the "+" icon on your App and then you can release the pairing button. Then select the 1st pairing method "Quick pairing". Type your home Wi-Fi ID & password and click next. It takes 1-3 minutes for DTH101 receiver to be paired with your phone and added to your account. You can name the device on the app to complete the process. When the blue LED is ON and solid, the device is Online. If it still doesn't pair or shows "Offline", **turn your "Router", "DTH101" and "Cellphone" OFF and ON** and try pairing again (check items 1 & 2 in "problems & solutions" section of this manual). Also check the video on YouTube by searching "pairing DTH101". To make sure the app works correctly, you should hear a clicking sound when you turn the switch ON/OFF by your smartphone or manually by pressing the pairing button. After pairing, the pairing button on the DTH101 receiver can also operate as manual switch for turning the Gas Pool or Spa Heater (Gas Heater) ON/OFF.

#### Features and functions:

**ON/OFF Remote:** Turn ON/OFF your Gas Heater from anywhere in the world or at home by your iOS or Android Smartphone.

**Professional timer:** Use scheduled/countdown/loop on the app to turn your Gas Heater ON/OFF at specified times. You can define 8 events on the app. Pre-set timers can even work if the internet is not connected to DTH101 anymore.

**Temperature Control:** In **Auto mode** you can monitor and control the real time temperature, or turn the Gas Heater ON or OFF at a specified temperature range. In **Manual mode** you can turn the Gas Heater ON or OFF manually by your Smartphone and this function can also be combined with timer.

**Share Control:** You can remotely control your Gas Heater with multiple Smartphones. Each device has a main user, who can share the device with other people. By downloading the app on another Smartphone you can easily add another remote to your household. The main user can also remotely add, modify, delete or enable each additional user and their authorizations.

**Security mechanism:** No one can add a registered DTH101 to their Smartphone without main user's authorization and only the main user has complete access to all features of DTH101 and can share it . If you wish to transfer a registered DTH101 to other users, it should be first deleted from the main user's App.

**Update:** This app sends you notifications when a newer firmware or version is available. Please update your App as soon as receiving the notification for using the latest features.

**Voice Control:** Go to icon on the first page of your app. By clicking on "More" it shows all the voice control systems that are supported by eWeLink, such as Alexa, Google Home, Google Nest, IFTTT and... by clicking on each voice control system, it shows how to add your device to that system. For example, download "Google Assistant" app from your phone's app store. Open the app, click on the circle at the top

right of the page. Click on + Add and choose "eWeLink Smart Home" from the list. Insert your registration account information. The voice command should be "Ok Google, turn {device name} ON" or OFF.

## Setting

By clicking on  $\bigcirc$  sign at the top right corner of the app page, you will go to "setting" and there you can edit the **Name**, check and update the **Firmware** version, and turn the **Notification for operation** ON (this option sends notification to your phone when you or shared person turn the Gas Heater ON/OFF). Also you can set the **Power-on state** status at ON, OFF or KEEP. We recommend setting "Power-on state" at "OFF" status for safety matters in case of power outage or when electricity cuts off. Enable **Inching** mode if you need to turn the Gas Heater ON/OFF at a precise time by seconds from 0.5s to 3600s (works like a countdown timer). You can change temperature unit to Celsius or Fahrenheit on **Temp. Units**. You can check which shared user and when has turned the Gas Heater ON/OFF from **History record**.

### **Problems and solutions**

1. DTH101 has been paired and added to the app successfully but stays "Offline"?

The reason can be that **DTH101 is placed too far from the router**, which causes weak Wi-Fi signal. You can extend the length of the two connecting wires of the receiver and place it closer to your router and add wire extension to sensor too. If it doesn't work, **turn your router**, **Smartphone and DTH101 OFF and ON** and the problem should be solved. If it is still offline, just delete and add the device one more time.

#### 2. I cannot pair my Smartphone with DTH101?

- Place DTH101 and your Smartphone close to your router and make sure that your **Wi-Fi is set at 2.4G** (you can set it back to 5G after pairing). Also make sure your router is MAC-open.
- If you have VPN on your Smartphone, remove it temporary.
- Delete the eWeLink app on your Smartphone.
- **Turn OFF your "router", "Cellphone" and "DTH101"** all together and turn them back ON after 10 Seconds. Before pairing DTH101, wait for 10 seconds to 3 minutes until blue LED blinks slowly.
- Download the app one more time (only from the App store or Google play, but not iCloud) and register an account.
- Try to pair your device once more and make sure you will enter a correct Wi-Fi password and user name. When you enter the password you need to make sure that there is no blank space after the password, also consider all upper case and lower case characters. Also check the video on YouTube by searching "pairing DTH101".

**3.** The blue LED remains OFF, even when DTH101 is powered ON? There is a loose connection or the adapter is broken. Change the adapter with a new 5V one.

**4.** The device is paired but the app doesn't show the temperature?

The sensor is not connected firmly. Please twist and push the sensor inside to make sure it is firmly in place.

#### **5.** I cannot change the Wi-Fi from 5G to 2.4G?

This unit won't be paired if the Wi-Fi is at 5G. So, if you don't see 2.4G in your Wi-Fi list, type your router web address (the numbers like 192.169.0.1) on Google and login to your router admin page (router web address, Username and password is printed at the back of your router. Password can be your Wi-Fi password). Click on "Wireless" (the one that takes you to the wireless setting, not wireless status). Click on the "5G" tab and turn the "Wireless enabled" option OFF temporary and save the changes. After successfully pairing your device with your Smartphone you can change 2.4G to 5G again. You can also check our video on YouTube by searching "DTH101 2.4G". If you cannot change this setting, contact your Internet provider for more assistance.

**6.** When the electricity cuts off or the device is unplugged, the Gas Heater will turn on when power is back or I plug it again?

The "Power-on State" is set at ON. Go to the setting Ound change "Power-on state" to OFF.

#### WARNING

Opening DTH101 box will void the return policy and any modification to its components may pose a fire hazard. Improper installation can cause damage to electronic module, Gas valve and DTH101. The device should be installed by a QUALIFIED PROFESSIONAL according the gas heater manufacturer's manual.

#### Wiring and installation

**Locate the adapter and DTH101 receiver in a water proof box or indoor place. You can extend the 2 wires of DTH101 up to 100 meters** and the length of the sensor by buying our 5 meter wire extension too. The wiring is the exact same as usual 2 wire heaters remote controls. The following instruction is only for assistance and please follow **the manufacturer's manual** in the section of Remote Control by qualified technician.

#### 1-Heaters with remote function

All new gas heaters are equipped with external remote control on PCB controller. The 2 wires of DTH101 do not have any voltage and act like a switch (no voltage/no polarity) to turn the heater ON or OFF, so it will not damage the digital circuit board of heater.

This device has 2-wires for switching and can only control one of the heating modes (either pool or spa). For example, wiring DTH101 to Raypak Gas heater:

1. Push the mode button "POOL" or "SPA" and set the temperature to the highest setting possible on the heater control panel. The actual set point will be controlled by DTH101.

2. Turn the heater off.

3. Open the gas heater control panel. On the heater PCB remote connector, connect the BLUE wire to one of the 2 wires of DTH101 and connect the other one to either the ORANGE/BLACK wire for "SPA" operation or the BLACK/ORANGE wire for "POOL" operation. Please consider that the wire colors can be changed by different manufacturers, so please check the gas heater manual.

4. Secure the unused wires and turn the heater "ON" and activate remote function (to activate the remote function, please check your heater manual).

# ORN/BLK - To Spa (COMM) BLU - 24VAC Raypak PCB Remote Connector

BLK/ORN - To Pool (COMM)

#### 2-Heaters without remote function

The very old gas heaters don't have remote control function and work with mechanical thermostat. So, by using the 2 wires of DTH101 bypass or replace the current mechanical thermostat (or switch) in the circuit with DTH101.

### Sensor installation

The plastic sensor holder on the sensor is <sup>1</sup>/<sub>4</sub> NPT and usually is compatible with the screw of heater drain plug (please use Teflon tape to completely seal the inlet pipe of heater) or you can drill and taper a suitable flat place on one of the **inlet pipe** connectors to install the sensor.

Also you can remove the sensor holder and attach the sensor on the inlet pipe and completely cover and insulate it from outside weather to have an accurate temperature reading (you would need foam insulation pad, Aluminum foil and Duct tape for insulation). Place a thick pad of aluminum foil firmly over the sensor and wrap an insulation pad around the whole area and secure it tightly with duct tape.