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).

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 ¹/₄ 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.

