Intelli-Circ™

THERMAL EFFICIENCY OPTIMIZER

CONTROLLER / ACTIVATION
Applies to ATC3000/ TL4000/ TL5000 / TLC Systems

RJ11 MOMENTARY CONTACT SINGLE-CYCLE ACTIVATION

PUMP POWER*

CONTROLLER POWER IN

EXTEND w/PHONE CABLE >= 28 AWG
dry non-powered circuit

WATER CONTACTING STAINLESS STEEL TEMPERATURE PROBE
with 1/2" NPT male thread

WALL MOUNT READY
or Leave Attached to Pump

BACK

For additional information visit
www.RedyTemp.com Or call 760-586-6030.

* Applies to TL4000D/5000D & TLC's

TEMPERATURE DIAL
ADJUSTABLE TEMPERATURE CONTROL

Temperature Dial provides the ability to control the hot water circulation loops hot water temperature set point at which pumping occurs / stops.

Adjustable 40°F to 118°F
Incremental to 0.5°F degree

" for every 10°F reduction in temperature, you can save from 3%–5% on your water heating costs"

Water heating is the second largest energy expense in your home. It typically accounts for about 18% of your utility bill.
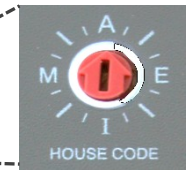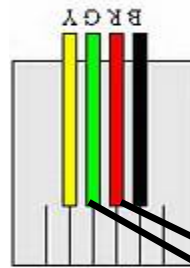
REFERENCE: *http://energy.gov/energysaver/articles/tips-water-heating*
http://energy.gov/energysaver/articles/15-ways-save-your-water-heating-bill

WIRELESS PUSH-BUTTON
OPEN/CLOSED LOOP SYSTEM INTEGRATION

Controllers
RJ11 Phone Jack

House Code "A"

Select
Relay Only

Select
Momentary

STEP 1: Cut off (1) connector from a standard phone cord, strip two middle wires and connect to screw posts on "C". Plug other end of phone cord into RJ11 phone jack on *Intelli-Circ* control box.

STEP 2: Select "Momentary" and "Relay Only" on module "C". Plug "C" into "wall outlet" near *Intelli-Circ* controller (not into timer socket on control box).

STEP 3: Plug "B" into wall outlet within 50' of wireless push-button "E".

For exclusive on-demand circulation operations place *Intelli-Circ* timer to "OFF" by pressing ON/OFF button.

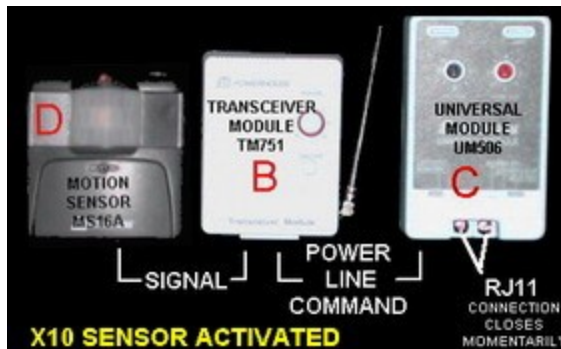For both wireless and hard wired activation utilize a phone splitter   at the RJ11 jack .

NOTE: This system use homes existing power wires to send commands (B to C) UM506. No issues with range or line of sight.

NOTE: *The Intelli-Circ controller senses resistance changes at the RJ11 connection to trigger activation. No power exist in wires.*
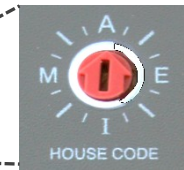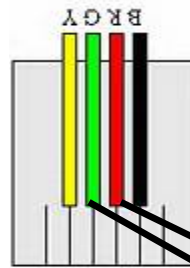
NOTE: Items available for purchase at http://www.redytemp.com/paybuycheck.htm

WIRELESS MOTION SENSOR
OPEN/CLOSED LOOP SYSTEM INTEGRATION

Controllers
RJ11 Phone Jack

House Code "A"

Select
Relay Only

Select
Momentary

STEP 1: Cut off (1) connector from a standard phone cord, strip two middle wires and connect to screw posts on "C". Plug other end of phone cord into RJ11 phone jack on *Intelli-Circ* control box.

STEP 2: Select "Momentary" and "Relay Only" on module "C". Plug "C" into a "wall outlet" near *Intelli-Circ* controller (<u>not</u> into *Intelli-Circ* timer socket on control box).

STEP 3: Plug "B" into wall outlet within 50' of motion sensor "D".

NOTE: This system use homes existing power wires to send commands (B to C) UM506. No issues with range or line of sight.
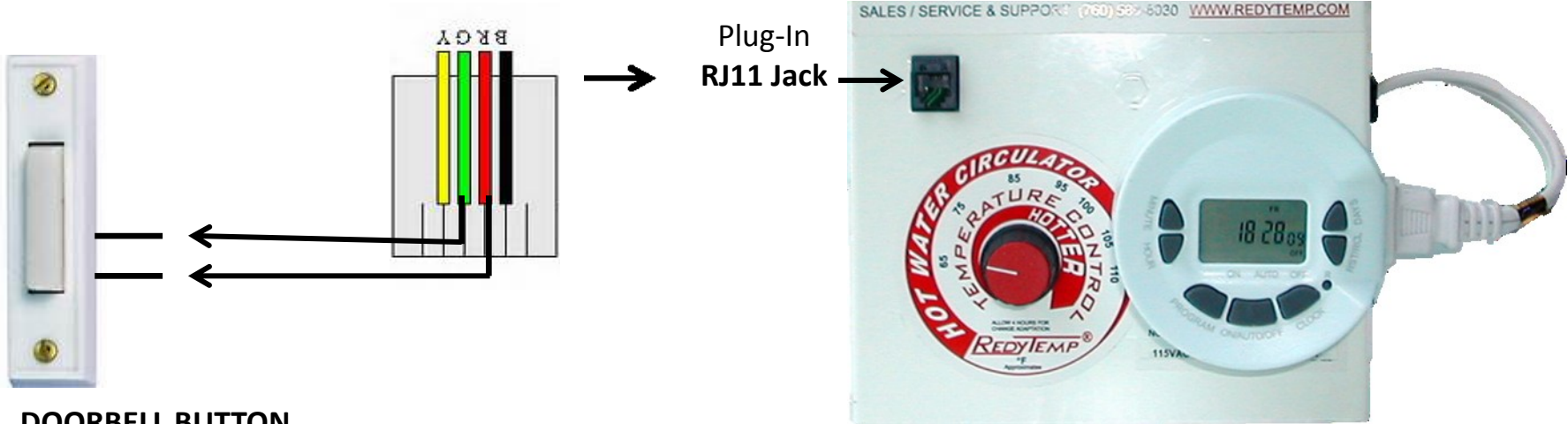
For exclusive on-demand circulation operations place *Intelli-Circ* timer to "OFF" by pressing ON/OFF button.

NOTE: *The **Intelli-Circ** controller senses resistance changes at the RJ11 connection to trigger activation. No power exist in wires.*

NOTE: Items available for purchase at http://www.redytemp.com/paybuycheck.htm

PUSH-BUTTON
OPEN/CLOSED LOOP SYSTEM INTEGRATION

Plug-In
RJ11 Jack

DOORBELL BUTTON
Or other momentary contact switch

STEP 1: Cut off (1) connector from a standard phone cord, strip two middle wires and connect to screw posts inside doorbell button. Plug other end of phone cord into RJ11 phone jack on *Intelli-Circ.*

In this configuration when the button is pressed the *Intelli-Circ* controller activates the pump for a single- cycle. Upon hot water arriving at the sink the system stops.

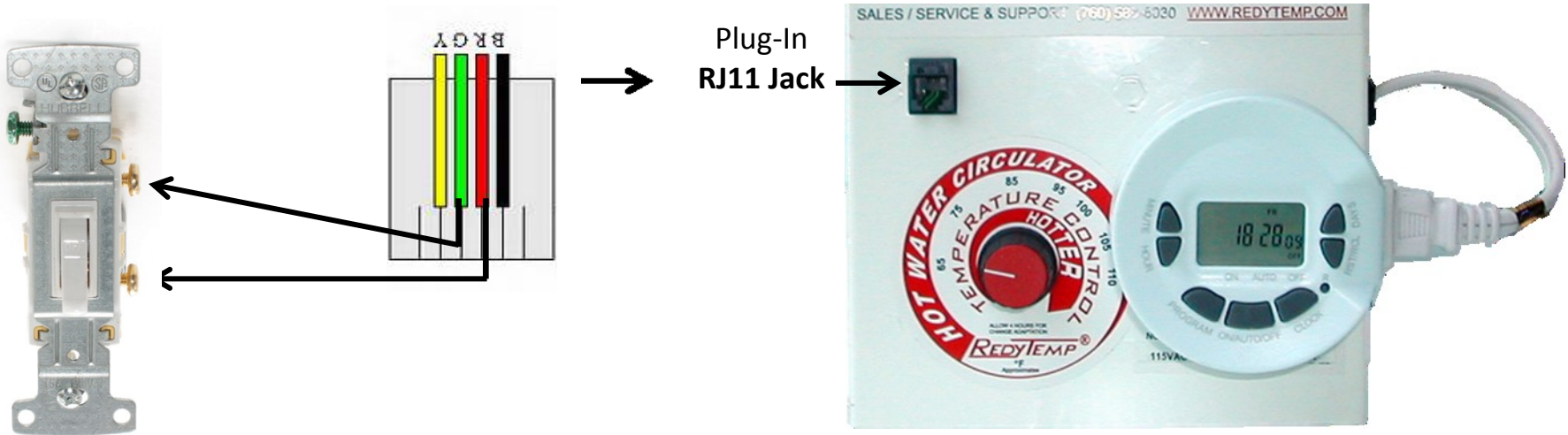For exclusive on-demand operation place *Intelli-Circ* timer to "OFF" by pressing ON/OFF button.

NOTE: *The Intelli-Circ controller senses resistance changes at the RJ11 connection to trigger activation. No power exist in wires.*

NOTE: Item available at most home improvement stores

WALL SWITCH (DRY CIRCUIT)
INTEGRATION

Plug-In
RJ11 Jack

SALES / SERVICE & SUPPORT (760) 585-8020 WWW.REDYTEMP.COM

STEP 1: Cut off (1) connector from a standard phone cord, strip two middle wires and connect to standard WALL SWITCH screw post wire terminals. Plug other end of phone cord into RJ11 jack on *Intelli-Circ*.

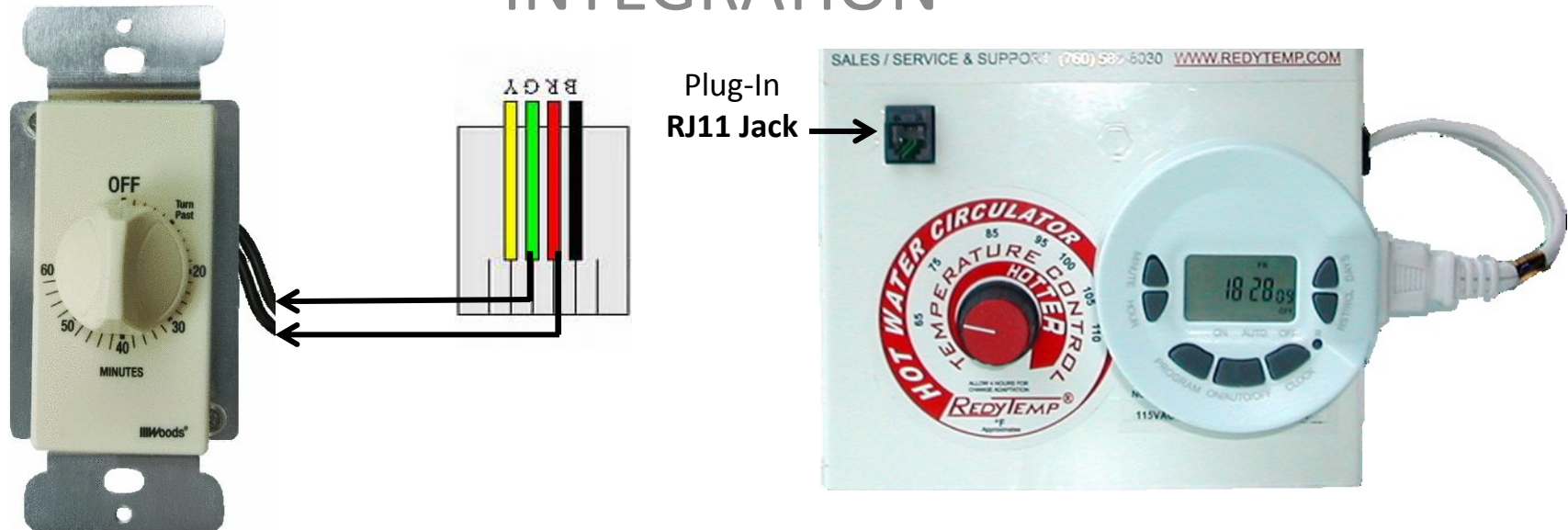### THE WALL SWITCH MUST BE A DEDICATED "NON-POWERED / DRY CIRCUIT"

In this configuration anytime the switch is in the ON position the *Intelli-Circ* controller will cycle the pump ON and OFF as needed to maintain hot water at the sink/loop until switch is turned OFF.

NOTE: *The Intelli-Circ controller senses resistance changes at the RJ11 connection to trigger activation. No power exist in wires.*

NOTE: Item available at most home improvement stores

SPRING WOUND MECHANICAL TIMER
INTEGRATION

Plug-In
RJ11 Jack

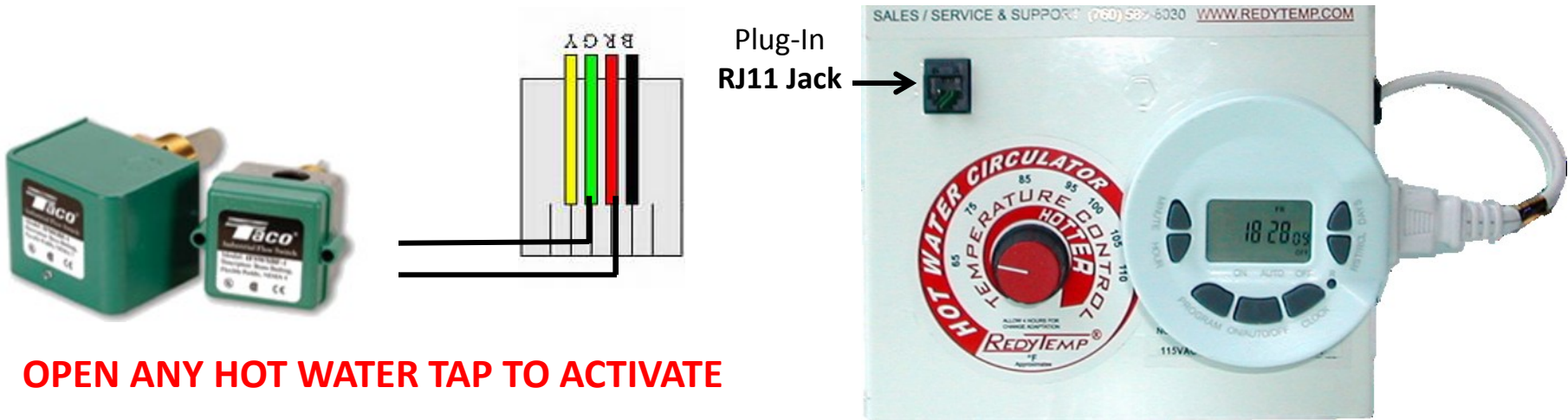SALES / SERVICE & SUPPORT (760) 585-6020 WWW.REDYTEMP.COM

STEP 1: Cut off (1) connector from a standard phone cord, strip two middle wires and connect to SPRING WOUND MECHANICAL TIMER wire leads. Plug other end of phone cord into RJ11 phone jack on *Intelli-Circ* control box.

In this configuration when the TIMER is rotated to a ON position the *Intelli-Circ* controller will cycle the pump as needed to maintain ready hot water within the loop until time expires. This configuration is often used to maintain ready hot water during dishwasher operations. Thus, solving a common problem of dishwashers not cleaning properly if HOT water is not available during dishwasher operations.

NOTE: Item available at most home improvement stores

FLOW SWITCH
INTEGRATION (Closed-loop systems)

Plug-In
RJ11 Jack →

OPEN ANY HOT WATER TAP TO ACTIVATE

STEP 1: Install a N.O. FLOW SWITCH suitable for domestic hot water on water heater hot water supply pipe.

STEP 2: Cut off (1) connector from a standard phone cord, strip two middle wires and connect to the flow switch. Plug other end of phone cord into RJ11 jack on *Intelli-Circ* control box.

STEP 3: Install *Intelli-Circ's* stainless steel water contacting temperature probe on the hot water circulation pipe just after the last hot water load on the circulation loop.

Opening any hot water tap for a fraction of a second would cause the *Intelli-Circ* controller to activate the hot water circulation pump for a single-cycle until hot water is detected by the stainless steel temperature probe.
This eliminates the need for multiple activation push-button installs.

NOTE: Anytime hot water is present in the loop, the system will not activate a pump cycle.