

# SaunaChrome™ White LED Control



## Installation and User Manual



# SaunaChrome™ White LED Control Kit Installation

Carefully unpack and inspect your kit to verify the correct components are included. Verify that the serial number on the back of your control matches the one located on the back page of this manual. The base White kit comes with a “single color” LED touch control and a flush-mount box for recessing the control into your wall., This kit will give you full-function control of your white LED lighting. Designed to be used exclusively with our 8 and 60w 12vdc power supplies, 10cm LED light strips, Recessed Ceiling Pucks and 1w Mini-spot light, all sold separately.

**READ INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING YOUR INSTALLATION!**

**WARNING: NOT FOR USE IN WOOD BURNING SAUNA!**

Components of Base White Kit:

- 9227-337 LED Touch Controller with input/output RJ45 connections
- 8093-065 Recess mounting box
- 2310-10 RJ45 In-line connectors (qty: 2)
- Instruction manual



Verify that the serial number in the warranty section on page 10 of this manual matches the serial number on the back of your touch control.

- Serial number is located on the back of the touch control as shown at right.



**Step 1.**

Your touch control should come pre-wired with 2 RJ45 cables for input/output power. If you are replacing an existing touch control, connect the 12vdc input cable to the terminal block on the back of the glass touch screen control panel.

- The brown wire will connect to the “V-“ position.
- The white with orange stripe wire will connect to the “V+“ position.

Note: The screw terminals may need to be turned counter-clockwise 6-8 turns prior to inserting the stripped wire.



Strip about 3/16” insulation from each wire before inserting into the terminal block.

**Step 2.**

Attach the 12v LED output cable as shown at right (if not already done at the factory)

- The brown wire will connect to the “L-“ position.
- The White with orange stripe wire will connect to the “L+“ position.



**Step 3.**

Install Flush mount enclosure to exterior of sauna wall. The touch control will mount to this box for a clean, custom installation.

If your project requires a surface-mounted control (ie; poured concrete or block wall), a plastic vapor-resistant box and a metal box for use with conduit are available from TyloHelo.



Vapor Resistant Surface Mount Box: 8093-065  
*Requires small bead of silicone caulk (not included) around edge to make vapor resistant.*



Metal box for use with conduit: 8093-064



Determine the location for your touch control and mark the location with a 3" x 3" "box".

- Make sure this area does not lie directly over framing members or electrical utilities of your sauna wall.
- Use a level to ensure the lines are drawn square.

Hint: Take into account door or window trim that may be added later in your sauna construction. You will want to leave plenty of room for these.



Remove the wall material from the marked area using a jig saw.

- **Verify that no framing members or electrical utilities are located behind this area BEFORE drilling/cutting!**
- Drill out the 4 corners first and simply connect the holes with your jig saw.

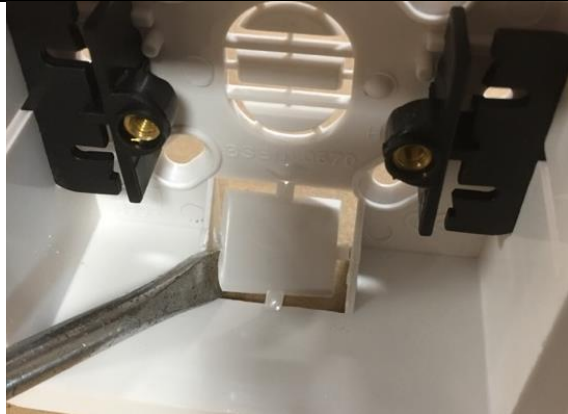


With wall material removed, pre-fit the flush mount enclosure to make sure it fits snug and level in the opening.



When satisfied with the fit of the enclosure in the sauna wall, push the two black tabs outward and pull each forward until they make contact with the back of the wall surface.

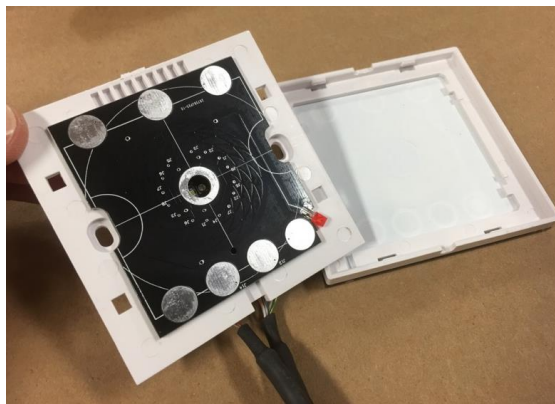




Using a screw driver or utility knife, carefully remove the upper and lower knock-out tabs so the control cables can be routed outside of the enclosure.



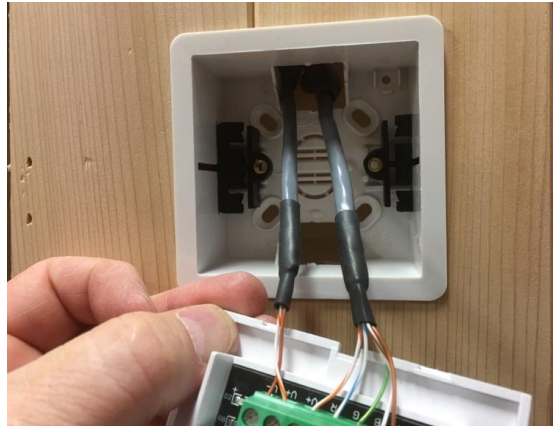
Remove the glass touch panel from the touch control by carefully inserting a small flat-blade screw driver into the slot as shown above and use a twisting/prying action to separate the glass from the control.



**Step 4:**

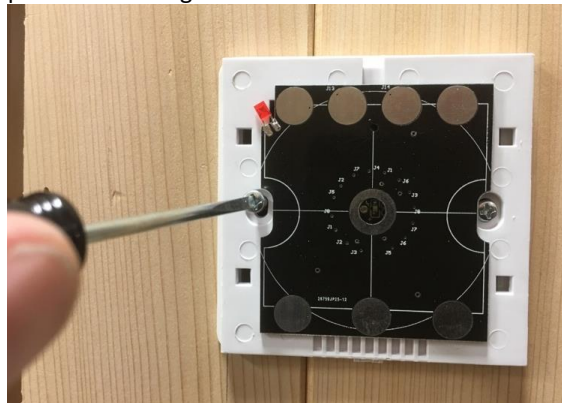
Mount the touch control to the enclosure.

It is important to have access to the back side of your touch control in order to easily connect your power and distribution cables to the control. Leaving the wall open inside the sauna will allow for easy wiring. If leaving the wall open is not an option, you will want to pre-install the CAT5 power and distribution cables at the time of framing and connect them to the control panel by inserting them through the back side of the enclosure before securing the enclosure to the exterior sauna wall.



Insert the two CAT5 cable ends into the upper or lower opening in your enclosure. (upper will allow more cable to be in the wall)

Hint: Pre-install one RJ45 inline coupler to each cable end prior to installing in enclosure.



Secure the panel to your enclosure using the two M3.5 x 30mm screws that were included with your kit.

- Do not over-tighten the screws! Snug them until the panel is firmly held in place.
- Be sure to orientate the panel with the red LED located at the upper left corner, as shown above.

**CHECK ORIENTATION OF CONTROL BEFORE SECURING TO YOUR ENCLOSURE!!!**



Snap the glass panel onto the control by aligning the notches on the bottom of the panel first then pivoting the glass panel horizontal. Use light pressure to “snap” the glass cover in place.

- Be sure to orientate the glass panel with the small clear “window” aligned with the red LED on the control panel. The power icon should also be correctly orientated with the vertical line in the 12:00 position.



Correctly orientated panel shown above.



### Step 5:

#### Making the electrical connections

The 12vdc input cable on your control should be connected to either our APV-8-12 or APV-60-12 low voltage transformer, included with your specific light kit.



8-port splitter kit included with optional light kits.

Your optional LED light kit includes one 8-port splitter with RJ45 connections. You can connect up to 8 LED light fixtures to your system using this splitter.

**DO NOT CONNECT A HOME AUTOMATION OR HOME NETWORK SYSTEM TO THIS SPLITTER!!**

**DO NOT EXCEED THE RATED WATTAGE OF THE TRANSFORMER YOU ARE USING!!**

If the CAT5 cables provided in your kit are not long enough, you may source any CAT5 cable with RJ45 ends (Ethernet) as a substitute.

This splitter can be located in any convenient location such as on top of your sauna or in an adjacent utility room. Never locate the splitter inside sauna cabin UNLESS you are enclosing it inside a water-tight junction box!

- Connect the 12vdc “IN” cable from the touch control to the 12vdc transformer using an RJ45 in-line connector. (if additional length is needed, use any standard CAT5 Ethernet cable) The brown and blue wires from the transformer will need to be connected to a constant 120vac/15amp power source.

Note: Your 12vdc transformer may differ from that shown in photos.



- Connect the 12vdc “OUT” cable from the touch control to the male plug on the 8-port splitter via the RJ45 in-line connectors. Once this is done, any of the 8 open ports on the splitter are “live” and can be connected to the LED light bulbs, strips or mini-spot using the shorter (1 & 2 meter cables) provided in your kit. Any extra cable can be simply rolled up and secured with a twist-tie.
- If only installing one light fixture, you can connect directly to the fixture with your CAT5 cable and will not need the 8-port splitter.



**Step 8.**

Using your touch control

The glass touch control is a “capacitive” device and will only respond to human touch. Do not use any metal or other foreign objects to try operating the control. Reference diagram at right for specific control functions.

**Technical Specifications**

- 4ch output, 4A/ch or 16A/4ch
- Input voltage: DC5v or DC 12-24v
- Max Power: 80W @ 5v or 192W @ 12v
- Static Power Consumption: <1W

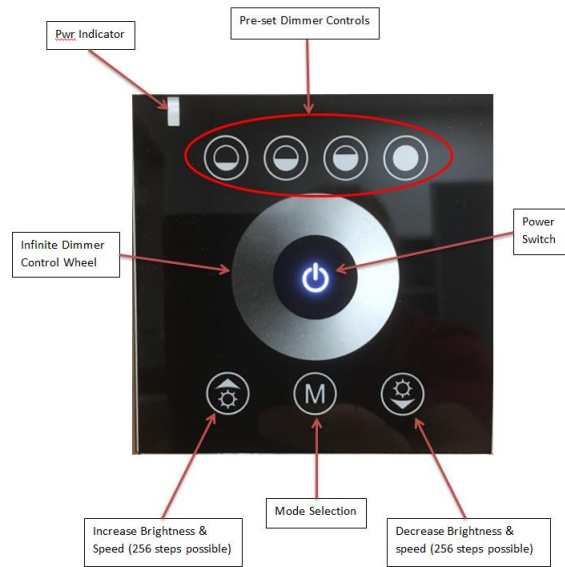
Warranty

TyloHelo Inc. will warrant any component of the SaunaChrome™ light system for a period of 1 year from date of purchase when used as instructed in a sauna environment. Any other use may void the warranty.

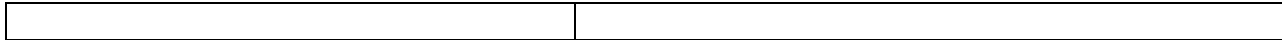
Place product serial number in this space

Date of Purchase \_\_\_\_\_

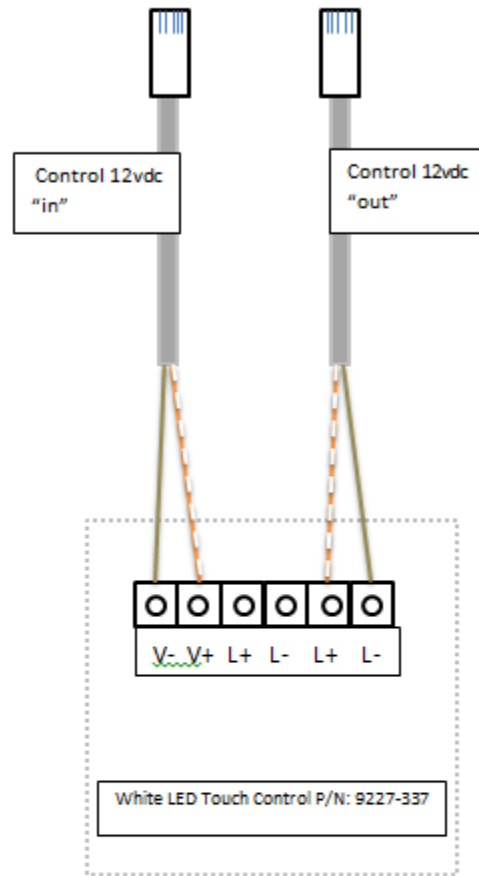
Contact TyloHelo Technical Support for warranty or installation assistance 1-800-363-0251



NO.	Mode	NO.	Mode
1	Fade	3	25% Brightness
2	Jump	4	50% Brightness
/		5	75% Brightness
/		6	100% Brightness
	Speed Adjustable		Brightness Adjustable



### SaunaChrome White LED Touch Control Wiring Diagram



RJ45 Pin	Wire Color	Function
1	White/Orange	+12Vdc
2	Orange	N/A
3	White/Green	N/A
4	Blue	N/A
5	White/Blue	N/A
6	Green	N/A
7	White/Brown	N/A
8	Brown	-12vdc

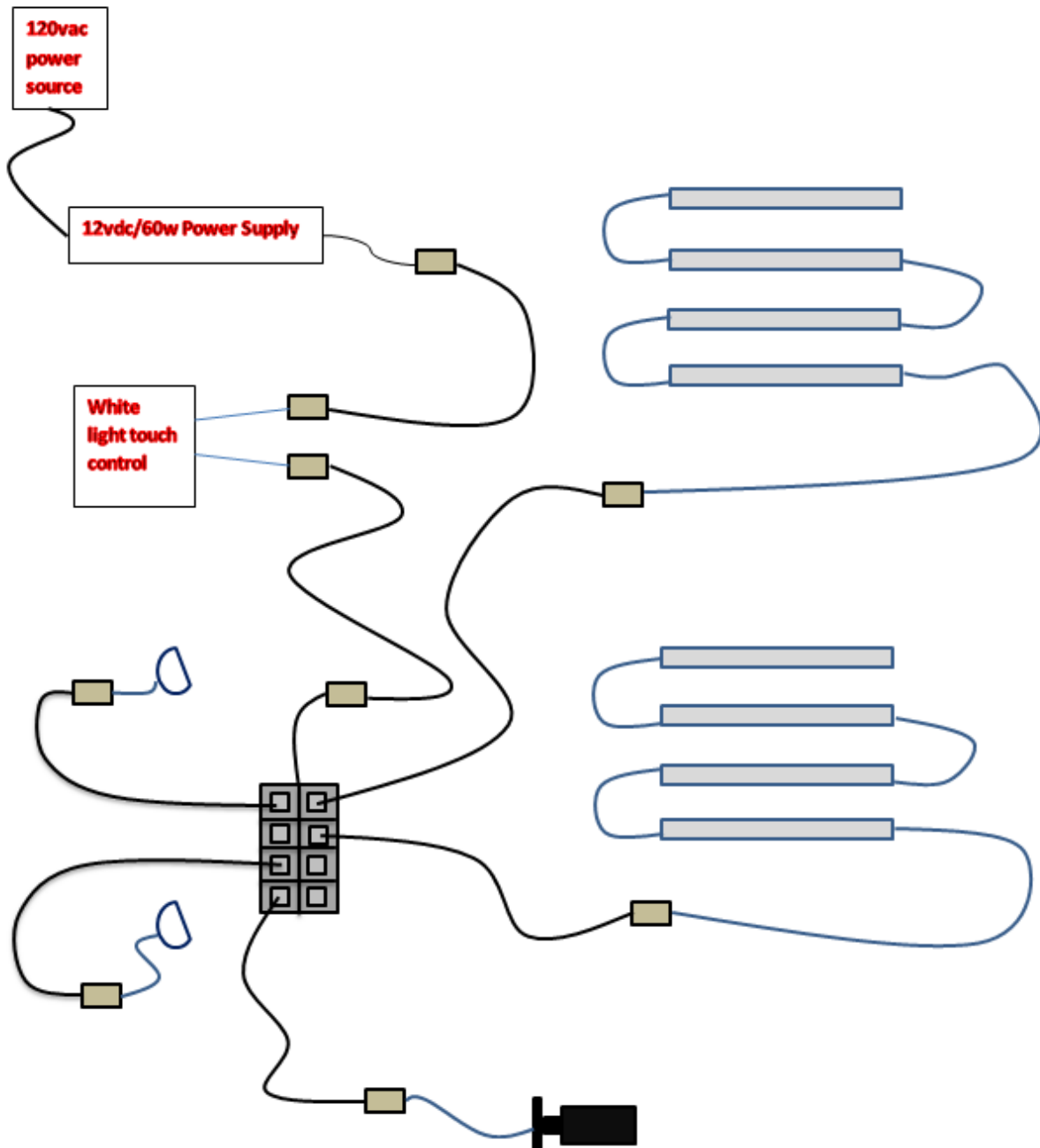
**Control 12vdc "IN"**

RJ45 Pin	Wire Color	Function
1	White/Orange	+12vdc
2	Orange	N/A
3	White/Green	N/A
4	Blue	N/A
5	White/Blue	N/A
6	Green	N/A
7	White/Brown	N/A
8	Brown	White LED

**Control 12vdc "OUT"**

## Quick Installation Diagram

*Any combination of LED strips, Pucks or Mini-Spots will work as long as you don't exceed the wattage rating of the 12vdc transformer.*



### How to calculate combined watts of your lighting system

Find the wattage rating for the fixture(s) that you are using from the chart below. Multiply this by the number of same fixtures you have for total watts consumed. Never exceed the maximum watts rating of your transformer!!

Fixture Type	Rated Watts each
10cm LED strip	1 watt
MR16 LED Bulb	.5 watt
Mini-Spot, adjustable gimbal	1 watt

#### Example

To calculate the watts consumed in the example shown on page 12:

8 strip lights = 8 watts + 2 MR16 bulbs = 1 watt + 1 Mini-spot = 1 watt

Total Watts = 10w

The available transformers from TyloHelo are either the APV-8-12 (8 watt) or APV-60-12 (60 watt) so in this example we will need to use the APV-60-12. Our Technical Support and Sales Staff will help you select the correct transformer for your project needs.