SaunaChrome RGBW LED Light Kit

Installation and User Manual

SaunaChrome Color LED Light Kit Installation

Carefully unpack and inspect your kit to verify the correct components are included before proceeding. The base color light kit comes with 3 RGBW (Red, Green, Blue & White) LED bulbs with stainless steel trim rings, Touch Control, Power Supply, cables, connectors and an 8-port splitter. This kit is suitable for rooms up to 5 x7 in size. If your room requires more coverage, additional color light kits are available from your dealer or TyloHelo Inc.

READ INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING YOUR INSTALLATION!

WARNING: NOT FOR USE IN WOOD BURNING SAUNA!

Components of Base Color Kit:

	Qty 1: RGBW Touch Control Panel		Qty 1: ¼" x 3" Heat shrink tubing
	Qty 1: Flush Mount Enclosure for Control Panel		Qty 1: 8-port Splitter, RJ45
	Qty 3: S.S. Trim ring w/ gasket & Clear Lens		Qty 7: RJ45 inline connector (FM/FM)
	Qty 3: RGBW LED light bulb with 10cm harness		Qty 2: Wire nut, orange
	Qty 1: Transformer, 8w/12vdc		Qty 2: M3.5 x 30mm Phillips screw
	Qty 2: 15cm CAT5 w/ male RJ45 plug (on Control)		Qty 2: 2.2mm x 6.5mm Phillips screw
	Qty 3: 1m CAT5 w/ male RJ45 plug (M/M)		Qty 1: Instruction manual, pn: 4215-124
	Qty 1: 5m CAT5 w/ male RJ45 plug (M/M)		

Verify that the serial number in the warranty section on page 12 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.

If not already done from the factory, 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
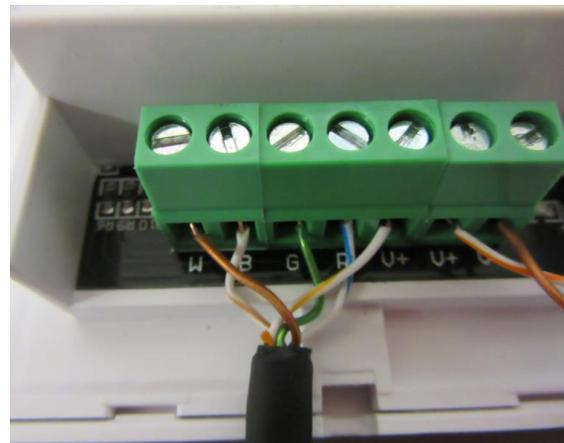- The white with orange stripe wire will connect to the "V+" position.

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 RGBW output cable as shown at right (if not already done at the factory)

Wires should be connected as follows:
- White/blue wire to "R"
- Green wire to "G"
- White/brown wire to "B"
- Solid Brown wire to "W"
- White/Orange wire to "V+"

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

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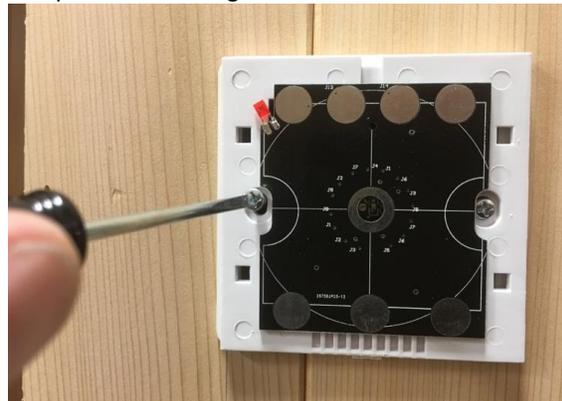
Secure the panel to your enclosure using the two M3.5 x 30mm screws that were included with your kit.

- 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.
 Assemble the LED light fixtures.

Remove the clear glass lens by un-screwing the lens assembly from the fixture housing.

Insert one of the LED bulbs into the front of the housing and screw the lens assembly back in place to secure the bulb.

Step 6.
 Mounting lights in ceiling.

  The steps shown here are with the assumption that you have clear access to the top of your ceiling. If you do not have access to the top after the T&G has been installed then you will want to pre-install of your distribution wiring right after the framing is done but before any interior finishing has taken place.
  This will require careful planning to make sure the cables are long enough to reach the desired location of each fixture. A simple trick to this is to lay-out the lights on the sauna floor in the desired pattern. Connect all of the cables to make sure there is enough length to reach all lights. Transfer your dimensions from the floor to the ceiling and install your CAT5 distribution cables to the locations needed before adding the ceiling T&G. Allow enough cable to extend at least 6" through opening in T&G material.

Using a drill-mounted hole saw, cut a 2 ¾" hole at each of the desired locations in your ceiling. Carefully compress the two spring clips on the fixture and insert them into the hole until they are past the thickness of the ceiling material. Slowly allow the clips to pull the fixture up into the hole to secure it to the ceiling.

The silicone gasket should lie flat between the fixture and the ceiling. If it does not, pull the fixture down to remove any wrinkles in the fixture and re-install using the step described above.

This panel is blank

Step 7:
Make all electrical connections

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

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

If the CAT5 cables provided in your kit are not long enough, you may source any CAT5 cable with RJ45 ends 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 output 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 RGBW LED light bulbs 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.

Next, connect the 12vdc input cable from the touch control to the 12vdc transformer using the same method as described above. The black and red wires from the transformer will need to be connected to a constant 120vac/15amp power source. Once this is done, you should have completely functional LED lighting system.

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

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.

Technical Specifications
Control:
- 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

RGBW Bulbs:
- Male RJ45 connection
- Voltage: 12vdc
- Power Consumption: 1w/each bulb
- Operating Temperature: -40 – 100°C (not suitable for wood burning sauna)

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
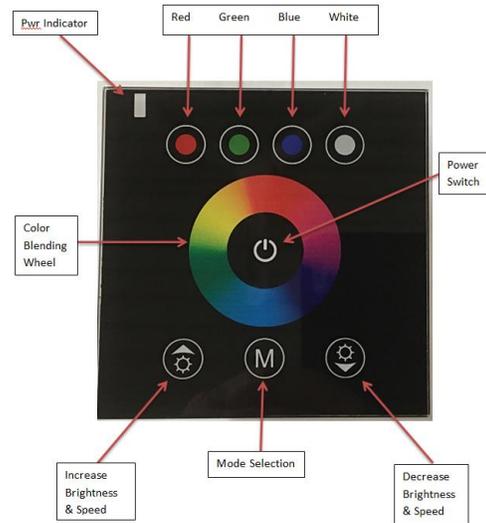
NO.	MODE	NO.	MODE
1	Seven Colors fade in & out	7	Static Red
2	Seven colors fade in & out 2	8	Static Green
3	RGB fade in & out, RGB	9	Static Blue
4	RGB fade in & out 2	10	Static Yellow
5	Seven color jump	11	Static Purple
6	RGB Jump	12	Static Cyan
/		13	Static White
	Speed adjustable, Brightness Unadjustable		Brightness adjustable, Speed Unadjustable

SaunaChrome RGBW Touch Control Wiring Diagram
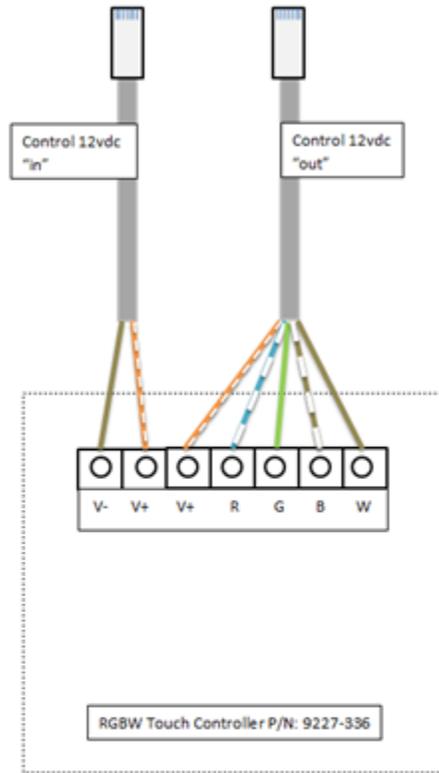
Control 12vdc "in"

Control 12vdc "out"

| V- | V+ | V+ | R | G | B | W |

RGBW Touch Controller P/N: 9227-336

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	Red LED
6	Green	Green LED
7	White/Brown	Blue LED
8	Brown	White LED

Control 12vdc "OUT"

Quick Installation Diagram

Up to 8 MR16 RGBW bulbs can be connected to your 8-port splitter. If additional bulbs are needed, you will have to use the APV-60-12 power supply and add another 8-port splitter. Do NOT exceed the wattage rating of your transformer!
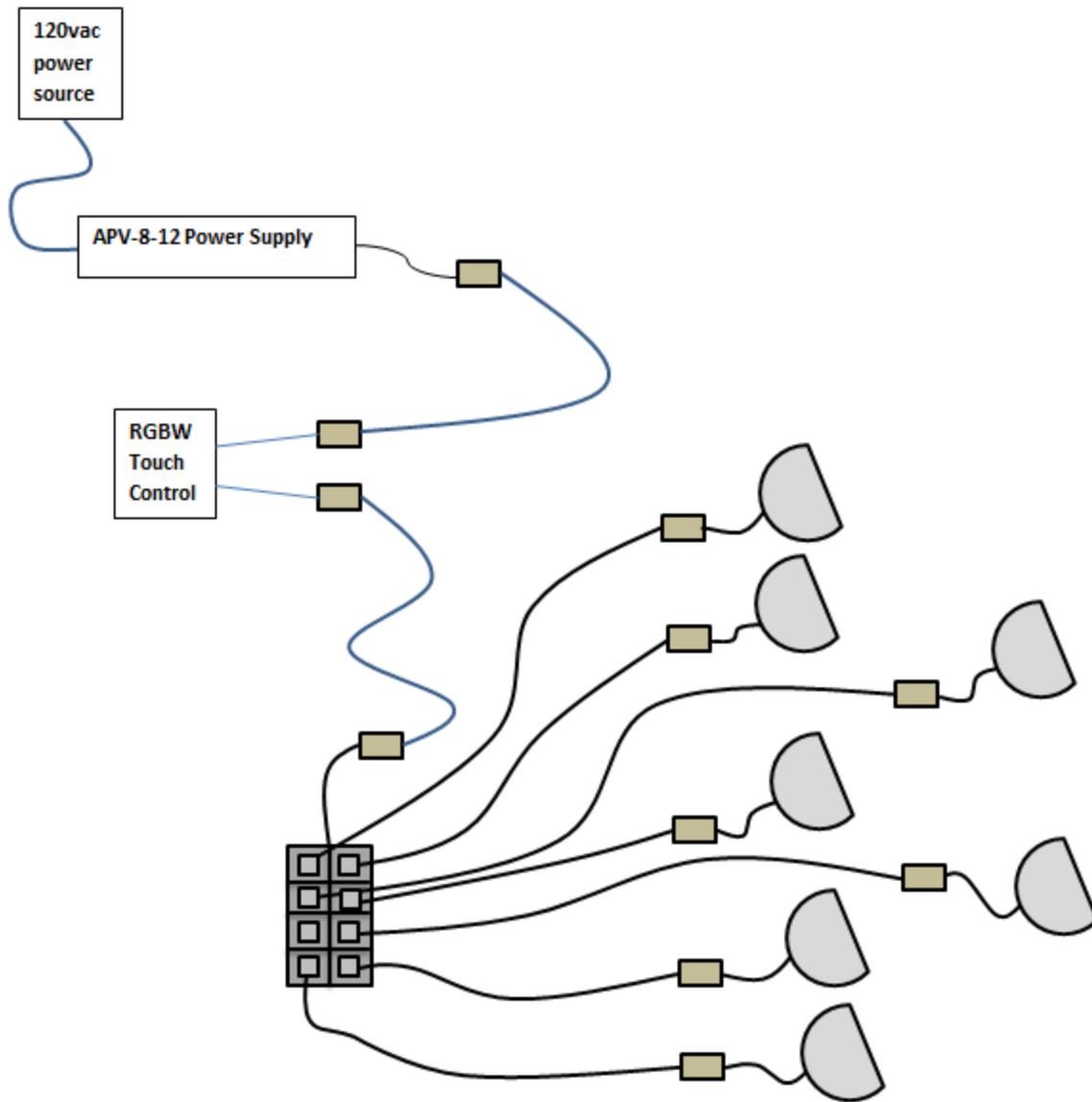
Multiply the number of MR16 RGBW bulbs used x 1 watt to determine the size of transformer needed for your project. TyloHelo Technical Support or Sales Consultants can help you determine the correct transformer needed.