

## INSTALLATION & OPERATING INSTRUCTIONS FOR ELECTRONIC CONTROLS IC-TMSV-120/60, IC-TMSV-120/60-L & IC-TMSV-240/60 IC-TMSPV-120/60, IC-TMSPV-120/60-L & IC-TMSPV-240/60

### IMPORTANT: KEEP FOR WARRANTY

Bathtub manufacturer

Purchase date

Dealer name

Phone

Electronic control model and serial number

Blower model and serial number

Pump model and serial number

Thank you for your confidence in CG AIR SYSTÈMES INC. We can assure you that CG AIR SYSTÈMES INC. uses the best materials and applies the most strict quality control measures to ensure that each and every unit meets the highest standards of quality. Furthermore, all CG AIR SYSTÈMES INC. components comply with the requirements of the Canadian Standards Association (CSA) and Underwriters Laboratories (UL).

### FUNCTIONS

The system will stop automatically after 20 minutes.

#### PUMP MODE:

##### Optional water level detectors:

Strategically installed in the bathtub, these will prevent your pump from starting without the minimum water required.




#### BLOWER MODE:

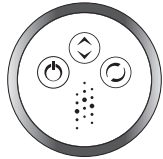
**Advanced function:** An automatic drying cycle will start 20 minutes after the blower is turned off.

**Optional water level detectors:** These activate a drying cycle 20 minutes after the bathtub is emptied even if the system was not used.




### FUNCTIONS: SINGLE SYSTEM (1 KEYPAD TO ACTIVATE 1 TMS CONTROL)

#### TMS KEYPAD - VARIABLE SPEED

-  ▶ Press this key to start or stop the blower or the pump.
-  ▶ Press and hold this key to increase or decrease the blower or the pump speed until desired level.
-  ▶ 1<sup>st</sup> press; speed will vary gradually from maximum to minimum.
- ▶ 2<sup>nd</sup> press; speed will go directly to minimum and then straight back to maximum.
- ▶ 3<sup>rd</sup> press; returns to maximum speed.



#### TMS KEYPAD - VARIABLE SPEED WITH AUXILIARY OUTPUT

-  ▶ Press once to start the blower or the pump.
- ▶ Press a second time to stop the blower or the pump.
- ▶ Press and hold 3 sec., speed will gradually vary between maximum and minimum.
- ▶ Press and hold 6 sec., speed will go directly to minimum and then straight back to maximum.
-  ▶ Press and hold this key to increase or decrease the blower or the pump speed until desired level.
-  ▶ Press this key to start or stop the auxiliary equipment. They always start at maximum speed.



### FUNCTIONS: DOUBLE SYSTEM (1 KEYPAD TO ACTIVATE 2 TMS CONTROLS)





Here is an example of a keypad which activates two TMS controls:







**1 VARIABLE SPEED CONTROL**  
 +  
**1 SPEED CONTROL WITH AUXILIARY OUTPUT**

Depending on which control is used to operate the system, button icons may differ.

#### TMS KEYPAD - 1 SPEED

-  ▶ Press this key to start the blower or the pump.
-  ▶ Press this key to stop the blower or the pump.

#### TMS KEYPAD - 1 SPEED WITH AUXILIARY OUTPUT

-   ▶ Press this key to start the blower or the pump
-   ▶ Press this key to stop the blower or the pump
-   ▶ Press this key to start or stop the auxiliary equipment.

## CAUTION

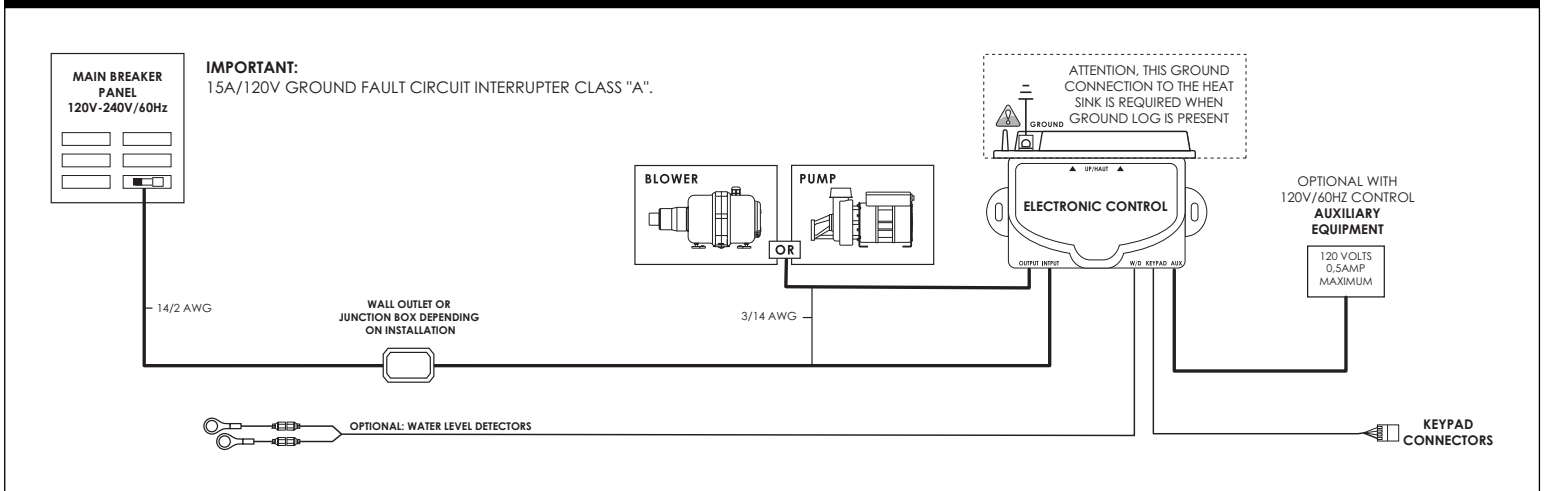
1. Read these instructions and rules carefully. Failure to follow them could cause a unit malfunction. Warning! A malfunction could cause serious bodily injuries, and/or property damages.
2. Check your local electrical safety and plumbing codes. The installation must comply with these guidelines.
3. No modifications, additions or deletions should be made to the electronic control without factory approval.
4. This electronic control should not be located near a heat source except for pumps, blowers or other electronic controls.
5. Wiring should be permanent. Do not use an extension cord. Have the electrical part of the installation done by, or approved by, a qualified electrician.
6. Always shut off the electrical power to the breaker panel before servicing.
7. Ensure that a Class A ground fault circuit interrupter (G.F.C.I.) is installed as part of the wiring.

## INSTALLATION

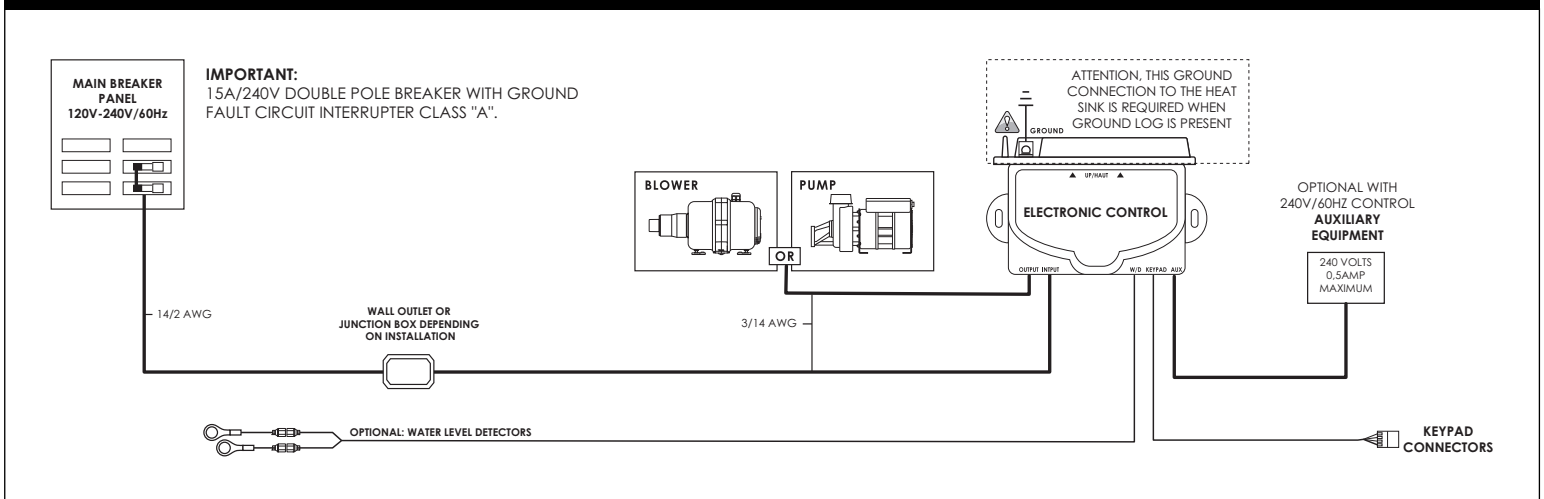
1. For an electronic control not provided with NEMA plugs, connect the factory pre-installed 14/3 type SJ cable to a junction box (not provided by the manufacturer). Depending on your model, run a separate **120V, 60Hz, 15A max or 240V, 60Hz, 15A max G.F.C.I. (Class A protected) electric circuit from the main fuse box to the junction box**. Use a 14 gage cable with 3 conductors (2 wires plus ground) in connections up to 100 feet (30,4m) from the main fuse box. Refer to your local electrical code if the distance between the installation site of the bathtub unit and the main fuse box is more than 100 feet (30,4m).
2. **IMPORTANT:** Locate the side to be placed on top as indicated on the control box (UP/HAUT). Fix the electronic control box firmly with two screws.
3. Connect the keypad to the control box cable (indicated by the word "KEYPAD" on the control box).
4. Connect the power output cable to the blower or pump. Use a junction box if your electronic control and/or blower or pump are not provided with molded plugs.
5. Connect the terminal lug on the heatsink to the ground with an uninsulated wire of 8 gage minimum.
6. Verify connection and functioning of all components of the system before finalizing the installation.
7. The auxiliary output option makes it possible to connect a piece of equipment of 120Volts / 0,5Amp maximum. (**Only available with 120V/60Hz control**)
8. For optional water level detectors, see section **WATER LEVEL DETECTORS**.

## INSTALLATION: SINGLE SYSTEM (1 KEYPAD TO ACTIVATE 1 TMS CONTROL)

### INSTALLATION FOR UL AND CSA CERTIFICATIONS - 120 VOLTS

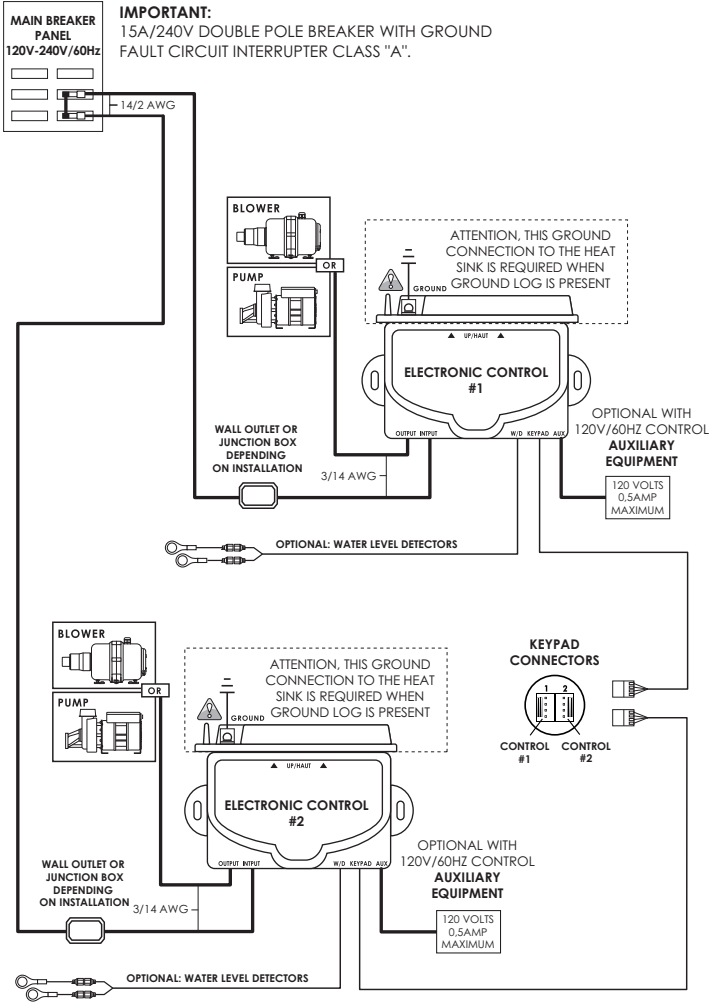


### INSTALLATION FOR UL AND CSA CERTIFICATIONS- 240 VOLTS

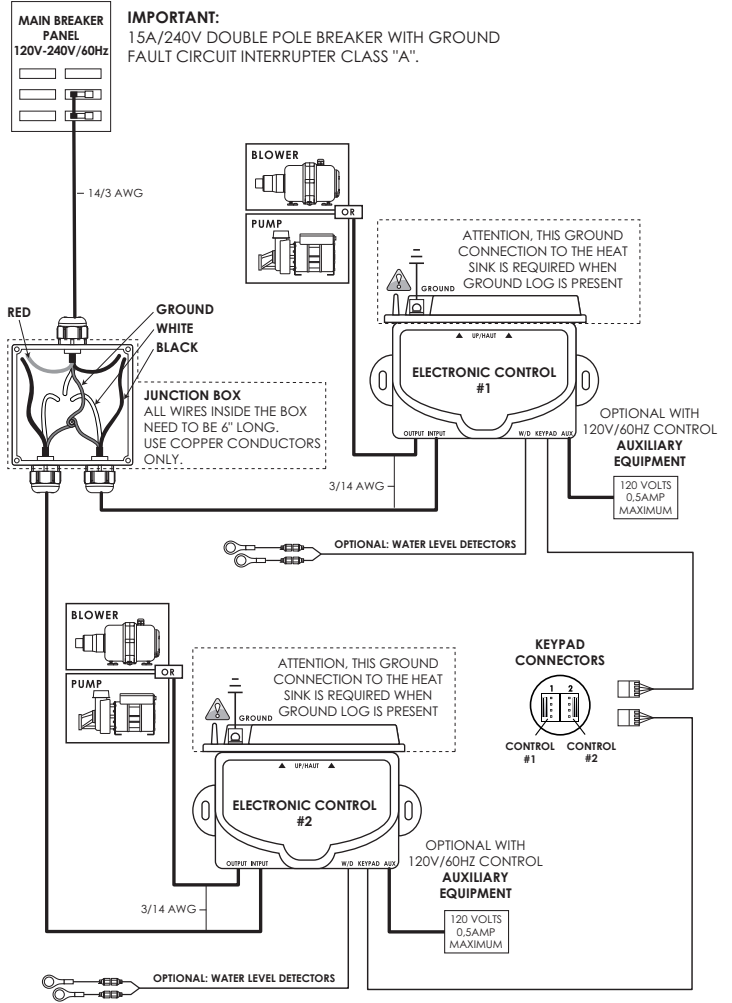


# INSTALLATION: DOUBLE SYSTEM (1 KEYPAD TO ACTIVATE 2 TMS CONTROLS)

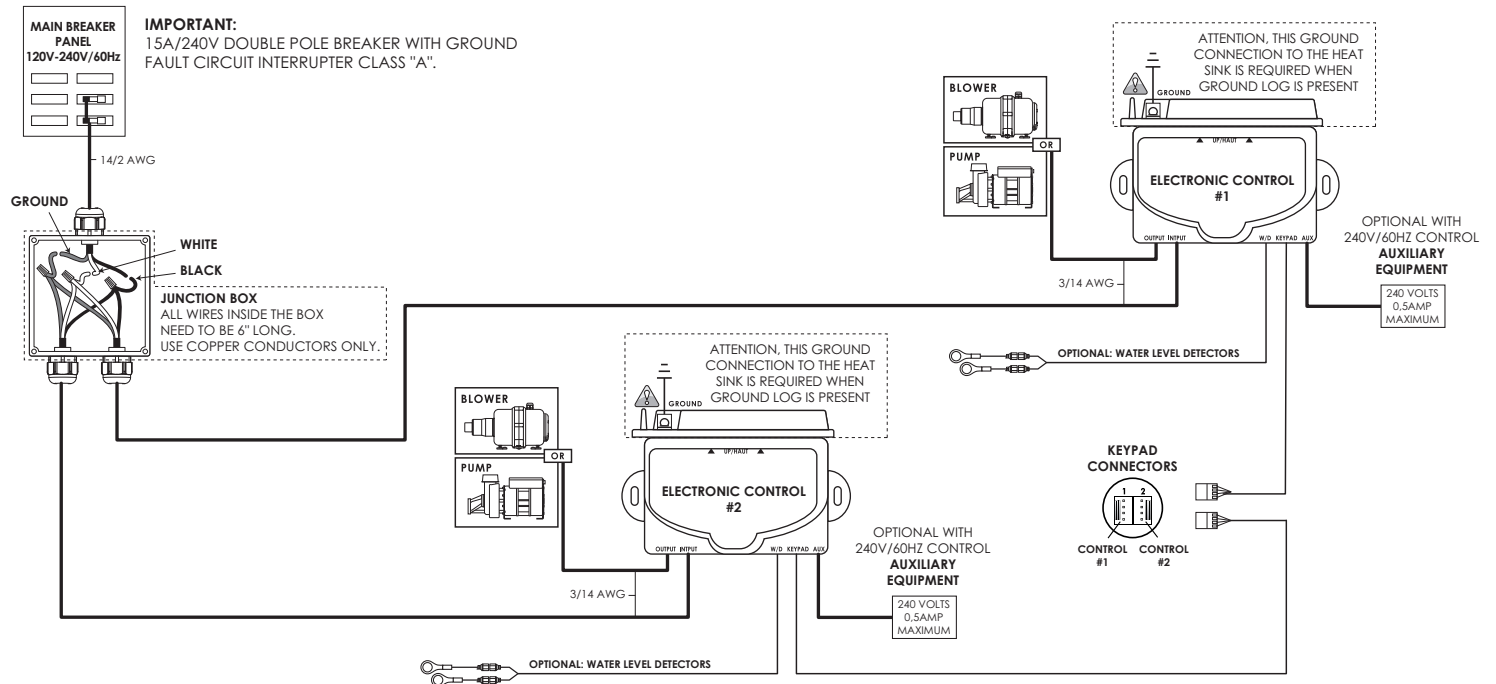
## INSTALLATION FOR UL CERTIFICATION - 120 VOLTS



## INSTALLATION FOR UL OR CSA CERTIFICATIONS - 120 VOLTS



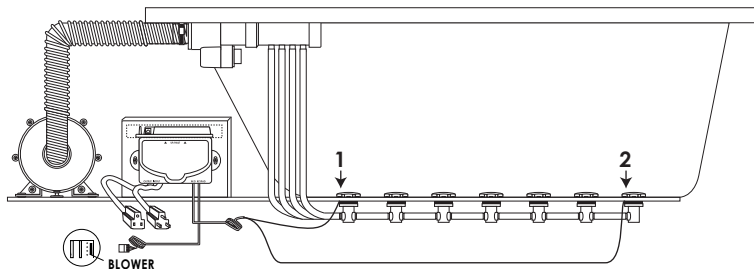
## INSTALLATION FOR UL OR CSA CERTIFICATIONS - 240 VOLTS



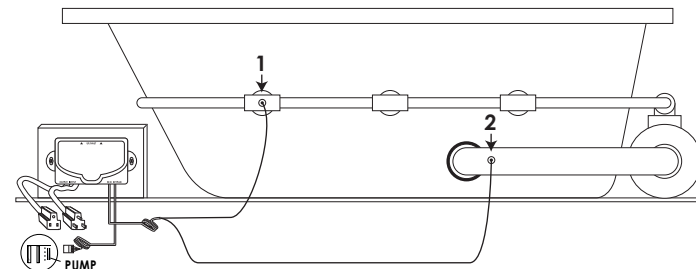
## WATER LEVEL DETECTORS

### SINGLE SYSTEM (1 KEYPAD TO ACTIVATE 1 TMS CONTROL)

#### BLOWER SYSTEM

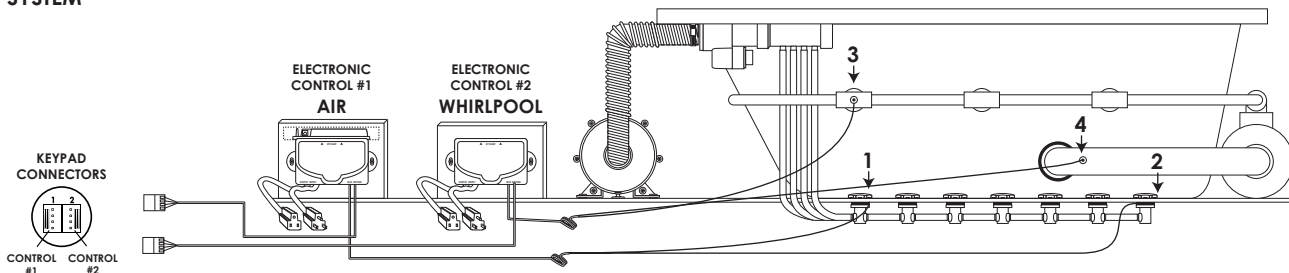


#### PUMP SYSTEM



### DOUBLE SYSTEM (1 KEYPAD TO ACTIVATE 2 TMS CONTROLS)

#### BLOWER & PUMP SYSTEM



## WARRANTY

All electronic controls are warranted to be free of defects in manufacturing, material and workmanship for a period of one year from the date of purchase by the owner/end-user.

### Limitations

This warranty does not apply to the bathtub and/or spa but solely to the components manufactured by CG AIR SYSTÈMES INC.

This warranty shall not apply to the following incorrect operating procedures, breakage or damages caused by fault, abuse, misuse, carelessness, misapplication, alteration, modification, improper maintenance of the unit, as well as an act of God, fire, chemical or natural corrosion or any other casualty.

The owner of the product covered by the present warranty is entirely responsible for the proper installation of the product in accordance with the installation manual provided. CG AIR SYSTÈMES INC. neither installs nor supervises nor contracts for the installation and consequently cannot be held responsible for the installation.

CG AIR SYSTÈMES INC. is not responsible for any damages or claims resulting from defects that could have been discovered, repaired or avoided by inspection and testing prior to installation.

CG AIR SYSTÈMES INC. makes no express warranty, no warranty for merchantability, no warranty of fitness for particular purposes, neither any other warranty implied or statutory for its products other than specified above.

In no event shall CG AIR SYSTÈMES INC.'s liability exceed the purchase price of the defective part.

If any such product proves to be defective within the warranty period, CG AIR SYSTÈMES INC. reserves the right to repair or replace the defective product with one of equal value.

### Commercial limitations

In addition to the above conditions and limitations, if the product is to be used as a display, the warranty period begins when the product has been placed on display. Under no circumstances will CG AIR SYSTÈMES INC. be responsible for any profit loss due to a malfunction of the unit. This warranty gives the owner/end-user specific legal rights and the owner/end-user may have other rights which vary from one state/province to another.

CG AIR SYSTÈMES INC. reserves the right to discontinue and/or change models, colors and specifications in design together with replacement parts without notice and without incurring any obligations.

## TROUBLESHOOTING

**Always switch off power before servicing.**

**The electronic control fails to operate:**

1. Verify electric power supply. Reset circuit or replace fuse if necessary.
2. Verify all electrical connections (including keypad connection).
3. Verify that the Ground Fault Circuit Interrupter (G.F.C.I.) has not tripped.
4. If the system has been functioning for quite some time, it is possible that the thermal protection has shut off the motor. It is programmed to switch off the system and to wait for at least 30 minutes before using it again. Verify that air is flowing through all jets. If not, cover the jets with warm water, then switch system ON and OFF several times. The air outlets should be cleared. If this is not sufficient, carefully knock on the jet heads with the handle of a screw driver or a similar plastic tool while the blower is running.
5. If you have added a keypad extension, make sure that it has been certified by the manufacturer of the electronic control. It could be the cause of your problem.

**The blower or pump never stops:**

1. Verify that the blower is well connected to the control box.
2. Verify the keypad connection.
3. Verify that there is no water reaching the electrical components under your bathtub.

**The pump starts but stops after about 1 second:**

1. Verify the keypad connection.
2. The water level sensor does not detect water in the bathtub. Water must reach at least 2 inches (5cm) above the highest jet, add water and restart. If there is sufficient water, the water level detectors may not be installed properly.
3. Contact your dealer for further troubleshooting.

**For further details visit our web site at: [www.cgair.com](http://www.cgair.com)**