

TechBook

Y series

optimize your customers' spa experience



universal fit

immediate boost

future expandablity

GECKO®

Table of contents

Warnings 2

Introduction 3

Features 4

Overview

- in.ye overview 5
- in.ye dimensions 5
- in.yt overview 6
- in.yt dimensions 6

Installation

- Floor installation procedure with optional guide plate 7
- Floor installation procedure without guide plate 7
- Wall installation procedure with optional wall mounting brackets 8
- Keypad installation 8

Connections

- Connection of main keypad 9
- heat.wav water heater connections 10
- Connecting high voltage accessories: all models 11
- Connecting high voltage accessories: North American model in.ye 11
- Connecting high voltage accessories: North American model in.yt 12
- Connecting high voltage accessories: European model in.ye 13
- Connecting high voltage accessories: European model in.yt 14
- AMP output connectors and typical accessories 15
- Completing the installation 17

Wiring

- AMP connector and housing 18

Electrical wiring

- Electrical wiring: all models 19
- Electrical wiring: North Amercian model in.ye and in.yt 20
- Electrical wiring: European model in.ye 21
- Electrical wiring: European model in.yt 22

Controler power up 23

Compatible keypads 24

Troubleshooting 25

Specifications 26

Warnings

WARNINGS:

Before installing or connecting the unit, please read the following.

* FOR UNITS FOR USE IN OTHER THAN SINGLE-FAMILY DWELLINGS, A CLEARLY LABELED EMERGENCY SWITCH SHALL BE PROVIDED AS PART OF THE INSTALLATION. THE SWITCH SHALL BE READILY ACCESSIBLE TO THE OCCUPANTS AND SHALL BE INSTALLED AT LEAST 5' (1.52 M) AWAY, ADJACENT TO, AND WITHIN SIGHT OF THE UNIT.

* ANY DAMAGED CABLE MUST BE IMMEDIATELY REPLACED BY QUALIFIED PERSONNEL.

* TURN POWER OFF BEFORE SERVICING OR MODIFYING ANY CABLE CONNECTIONS IN THIS UNIT.

* TO PREVENT ELECTRIC SHOCK HAZARD AND/OR WATER DAMAGE TO THIS CONTROL, ALL UNUSED BUSHING CONDUITS MUST BE PLUGGED WITH THE ATTACHED NIPPLE.

* THIS CONTROLLER MUST NOT BE INSTALLED IN PROXIMITY OF HIGHLY FLAMMABLE MATERIALS.

* LOW SUPPLY VOLTAGE OR IMPROPER WIRING MAY CAUSE DAMAGE TO THIS CONTROL SYSTEM. READ AND FOLLOW ALL WIRING INSTRUCTIONS WHEN CONNECTING TO POWER SUPPLY.

* THIS PACK CONTAINS NO USER SERVICEABLE PARTS. CONTACT AN AUTHORIZED SERVICE CENTER FOR SERVICE.

* ALL CONNECTIONS MUST BE MADE BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ANY STATE, PROVINCIAL OR LOCAL ELECTRICAL CODE IN EFFECT AT THE TIME OF THE INSTALLATION.

* PRODUCT MUST BE DISPOSED OF SEPARATELY IN ACCORDANCE WITH LOCAL WASTE DISPOSAL LEGISLATION.

* THIS APPLIANCE IS NOT INTENDED FOR USE BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES, OR LACK OF EXPERIENCE AND KNOWLEDGE, UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING USE OF THE APPLIANCE BY A PERSON RESPONSIBLE FOR THEIR SAFETY.

* CHILDREN SHOULD BE SUPERVISED TO ENSURE THAT THEY DO NOT PLAY WITH THE APPLIANCE.

* MEANS FOR DISCONNECTION MUST BE INCORPORATED IN THE FIXED WIRING IN ACCORDANCE WITH THE WIRING RULES.

* CAUTION: IN ORDER TO AVOID A HAZARD DUE TO INADVERTENT RESETTING OF THE THERMAL CUT-OUT, THIS APPLIANCE MUST NOT BE SUPPLIED THROUGH AN EXTERNAL SWITCHING DEVICE, SUCH AS A TIMER, OR CONNECTED TO A CIRCUIT THAT IS REGULARLY SWITCHED ON AND OFF BY THE UTILITY.

* PARTS CONTAINING LIVE PARTS, EXCEPT PARTS SUPPLIED WITH SAFETY EXTRA-LOW VOLTAGE NOT EXCEEDING 12 V, MUST BE INACCESSIBLE TO A PERSON IN THE BATH OR SPA.

* PARTS INCORPORATING ELECTRICAL COMPONENTS, EXCEPT REMOTE CONTROL DEVICES, MUST BE LOCATED OR FIXED SO THAT THEY CANNOT FALL INTO THE BATH OR SPA.

* PARTS ARE TO BE INSTALLED IN THE CORRECT ZONE AND EQUIPOTENTIAL BONDING CARRIED-OUT IN ACCORDANCE WITH THE WIRING RULES.

*CLEARANCE AND MINIMUM DISTANCE BETWEEN THE VARIOUS PARTS OF THE APPLIANCE AND THE SURROUNDING STRUCTURE ARE NOT SPECIFIED AS LONG AS THEY ARE SUFFICIENT SO THAT THE AMBIENT TEMPERATURE AROUND THE CONTROLLER DOES NOT EXCEED 60°C.

Aeware®, Gecko®, and their respective logos are Registered Trademarks of Gecko Alliance Group.
in.ye™, in.yt™, in.keys™, in.touch™, in.k200™, in.k400™, in.k450™, in.k600™, K-19™, K-35™, K-8™, in.k1000™, in.k800™, in.k500™, in.k300™, in.flo™, in.put™, in.seal™, in.link™, in.t.cip™, in.stik™, heat.wav™, Y Series™, and their respective logos are Trademarks of Gecko Alliance Group.

All other product or company names that may be mentioned in this publication are tradenames, trademarks or registered trademarks of their respective owners.



Y series

optimize your customers' spa experience

The Y Series offers the kind of simplicity that makes for a genuine top-of-its-class product. It is the natural choice for anyone who wants an easy-to-understand multi-application solution.

You don't have to wonder about compatibility; instead, there's just the comforting certainty that when you invest in the Y Series, all spa configurations are supported. What's more, it also takes into account future compatibility, so you can have peace of mind knowing that you can enjoy your spa pack for years to come.

Features

The Y Series systems boast a long list of technical features. Each of them contributes to bringing the most advanced solutions available to Y Series equipped spa owners:

in.seal
watertight protection

in.seal provides an extra level of protection against water infiltration. Connectors and power box are designed to be watertight (IPX5).

in.flo
dry-fire protection

in.flo is an all-electronic dry-fire protection that is built on the heat.wav heater. The in.flo eliminates the burden of adjustments, calibrations and failures associated to usual water flow sensors.

in.stik
automated software upload

The in.stik is a pen drive with an in.link connector very similar to a USB memory stick. It connects to the spa pack and contains data to program or configure its system. The system executes the data upload automatically.

in.t.cip
water temperature algorithm

in.t.cip is an intelligent water temperature refresh algorithm that calculates optimal time to start pumps and get water temperature readings. in.t.cip continuously readjusts the heater start time (according to exterior temperature).

in.touch
you're always in touch with your relaxation

All Y Series packs support the in.touch WiFi interface, allowing you to use your favorite iOS device to communicate with your spa.

in.link
ingenious plugs and connectors

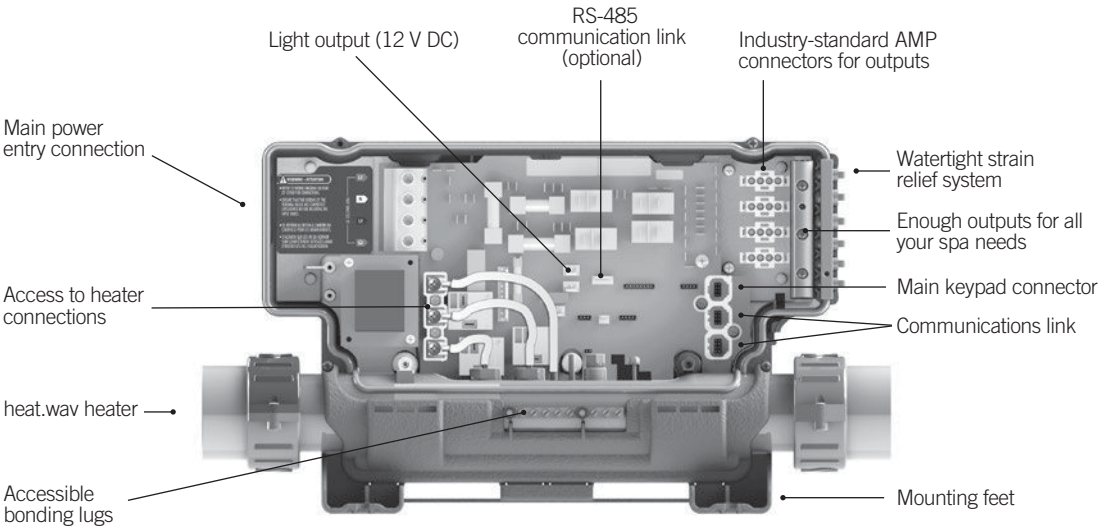
The Y Series is only compatible with the low-voltage family of in.link connectors, such as those used by keypads and similar low-voltage accessories.

in.put
input terminal block

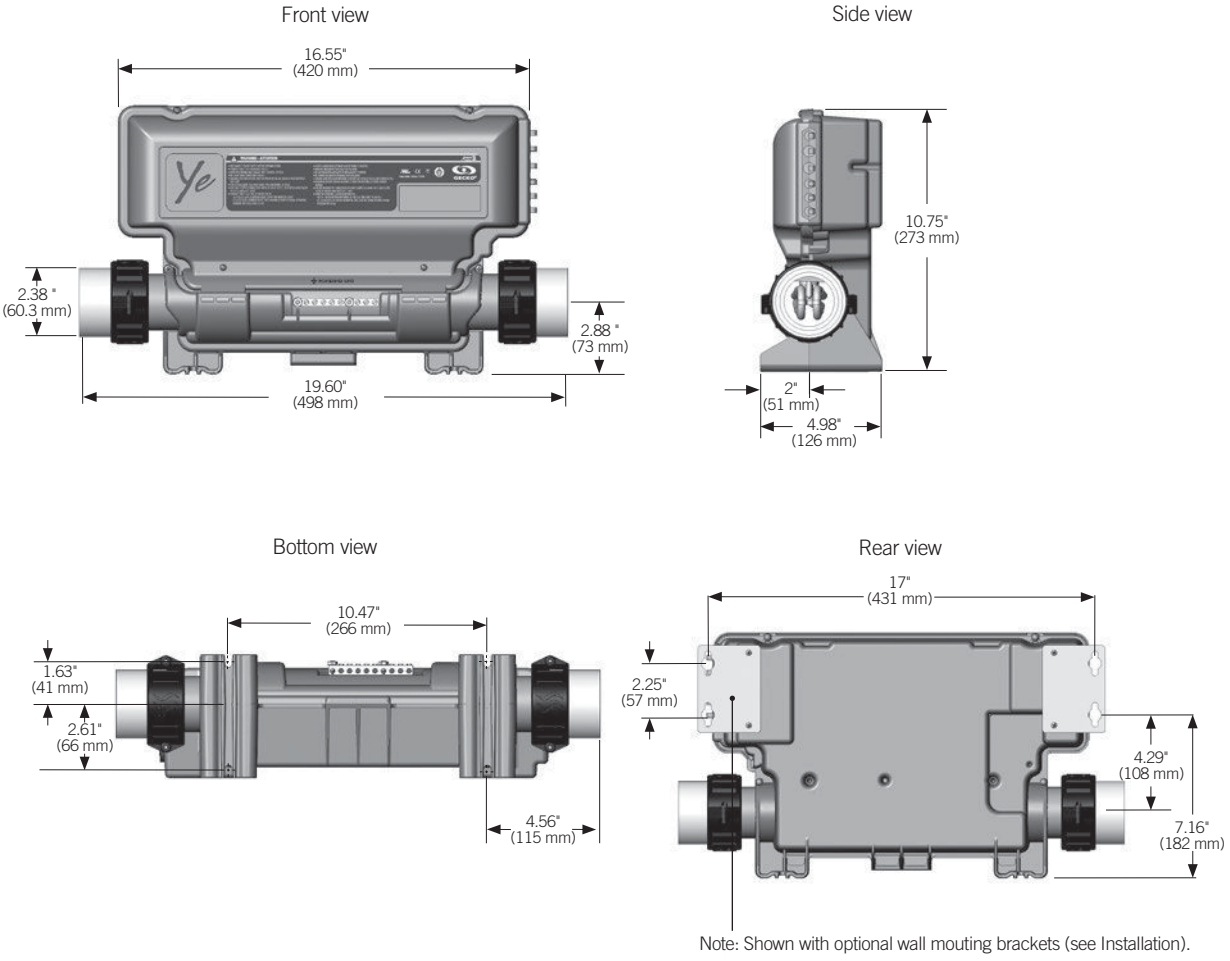
in.put was designed to ease wire insertion (up to # 4 AWG) and connections. Tighter input connection reduces heat generated for increased component lifetime.

Overview

in.ye overview



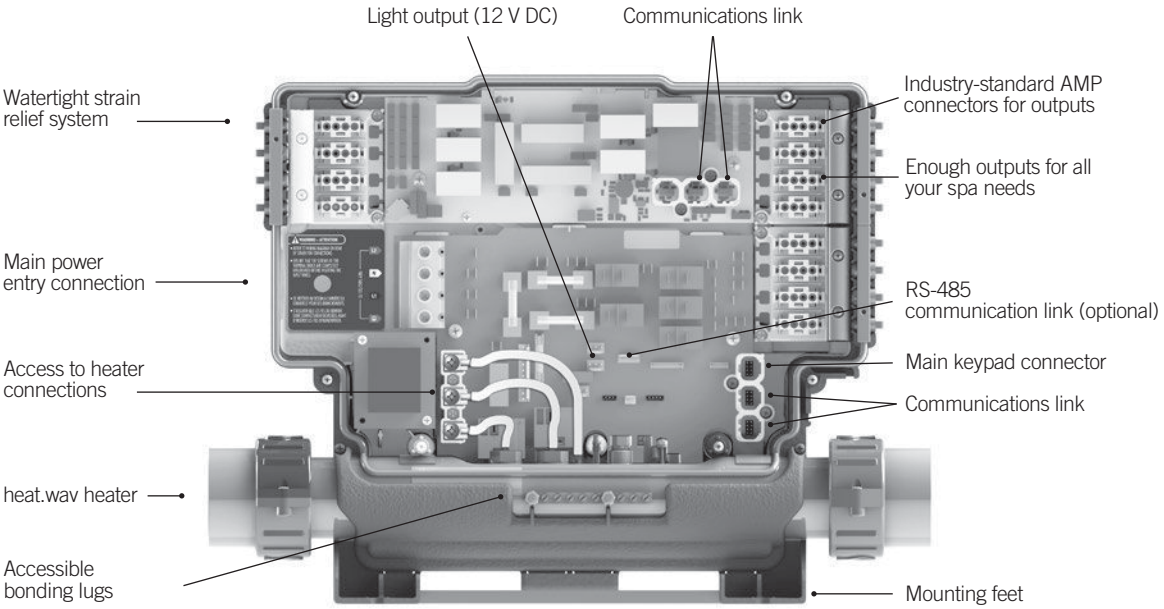
in.ye dimensions



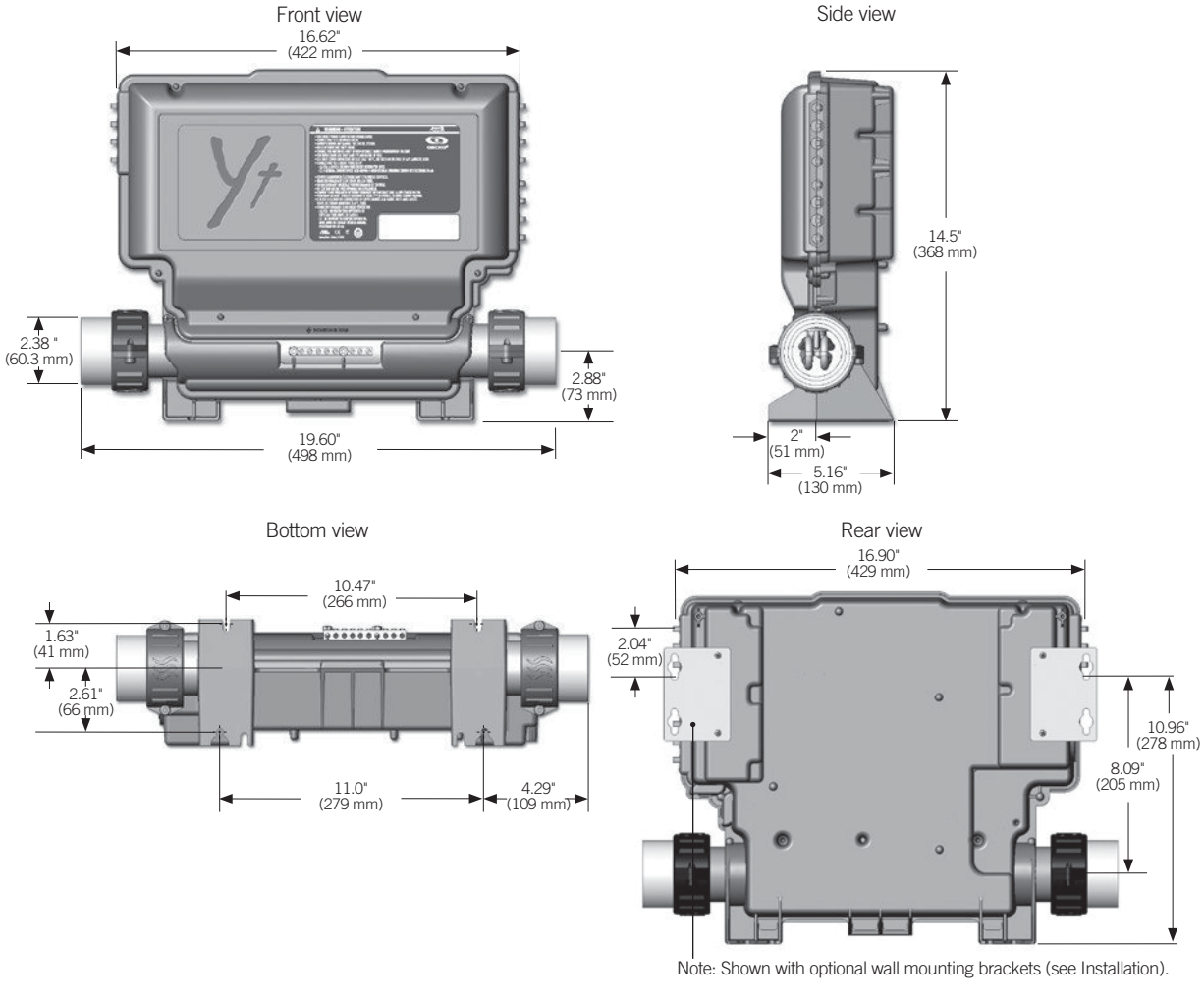
Note: Shown with optional wall mouting brackets (see Installation).

Overview

in.yt overview



in.yt dimensions



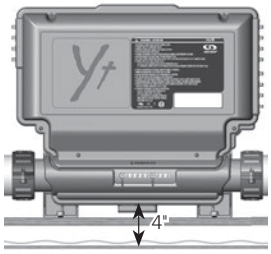
Note: Shown with optional wall mounting brackets (see Installation).

Installation

Important! Read before starting:
Please note that countersunk screws should not be used as they can damage the power box support.

The heat.wav element must be installed on the circuit of the main circulation pump (either the pressure or the suction side).

⚠ **Warning!**
Beware of the application of some products commonly used against corrosion (such as WD-40 family products) as they could damage the pack, due to a negative chemical reaction between some industrial oils and its plastic enclosure. Any other materials which may come in contact with the enclosure must be carefully evaluated under end use conditions for compatibility.



Note: The spa pack must be installed at least 4" (100 mm) above potential flood level. If floor is on ground level, pack should be raised at least 4" (100 mm).

Floor installation procedure with optional guide plate

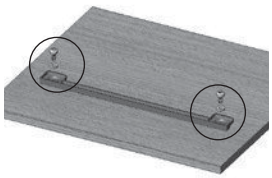
The following material is recommended:

4- # 10 screws of appropriate length with round, truss or pan head.

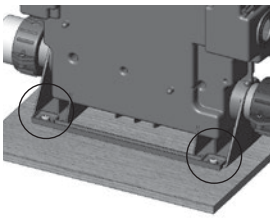
4- washers .5" OD x .0625" thickness (12 mm OD x 1.5 mm)

Guide plate

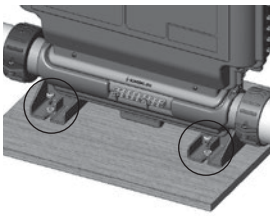
Part numbers:
9917-102148 (in.ye guide plate)
9917-100873 (in.yt guide plate)



Select the location on the floor for spa pack and firmly attach guide plate to wooden base with 2 screws backed by 2 washers.



Slide back side of the unit's feet into the guide plate. It should easily slide into place.



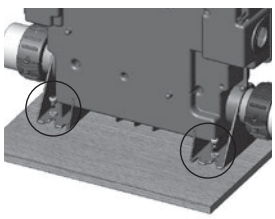
Now firmly attach unit to wooden base by using the remaining 2 screws backed by 2 washers to attach the front feet.

Floor installation procedure without guide plate

The following material is recommended:

4- # 10 screws of appropriate length with round, truss or pan head.

4- washers .5 OD" x .0625" thickness (12 mm OD x 1.5 mm)

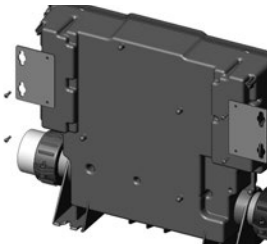


Select the most appropriate location on the floor for the spa pack and firmly attach the 2 rear feet to the wooden base using 2 screws backed by 2 washers.



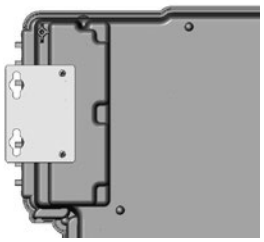
Now firmly attach the front feet of the pack to the wooden floor using 2 more screws backed by 2 washers.

Wall installation procedure with optional wall mounting brackets



Install mounting brackets on both sides of the rear of the unit, using screws provided with bracket.

Torque screws to 13 in. lb max (1.49 N.m).

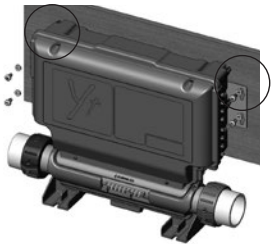


The following material is recommended:

4- # 10 screws of appropriate length with round, truss or pan head.

4- washers .5 OD" x .0625" thickness (12 mm OD x 1.5 mm)

Use 2 standard 2" x 4" or 2" x 6" wall studs, spaced 17-inch from center to center to fix the spa pack.



Firmly attach, one at a time, upper mounting holes on each side of the spa pack with 2 screws backed by 2 washers.

Firmly attach lower mounting holes on each side of the pack with the 2 remaining screws and 2 washers.

Lower mounting holes are 2" (51 mm) below upper holes.

Part number:
Wall mount bracket kit
100 pcs - 9920-101474
(with 200 screws to attach to pack)

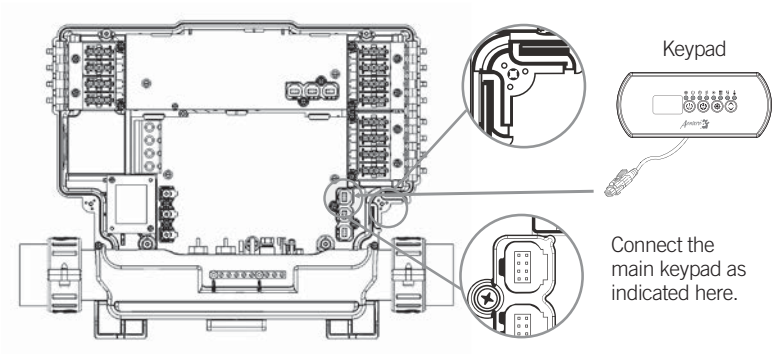
Keypad installation

For detailed instructions and drilling template, refer to the compatible keypad section and select your keypad to be redirected to the corresponding techbook.

Connection of main keypad

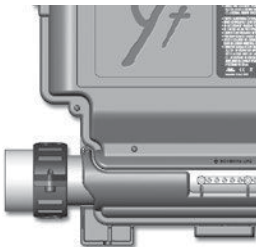
Note: always shut power down before connecting an accessory to the in.ye or the in.yt.

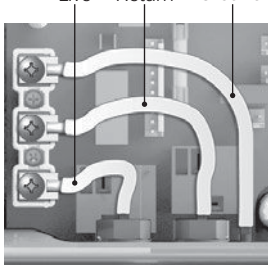
To connect the keypad, remove the cover, then insert the in.link connector into the appropriate keypad connector (as illustrated). Route the cable through one of the molded strain relief channels on the bottom right side of the spa pack (as illustrated). Fill the remaining space with the foam gaskets supplied. Don't forget to replace the cover and all screws (torque to 8 in. lb max (0.9 N.m)).

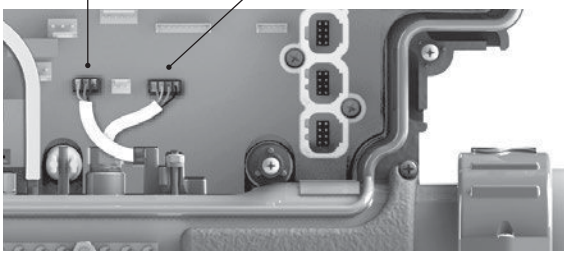


Connections

heat.wav water heater connections







All Y Series systems come with a high performance heat.wav heater. With no pressure switch, it features in.flo integrated dry-fire protection.

The heat.wav heater is factory configured for 240 V / 4 kW, but it can be converted to a dedicated 120 V / 1 kW by simply adding a cable connection. (120 V conversion is available on North American in.ye-3 models only).

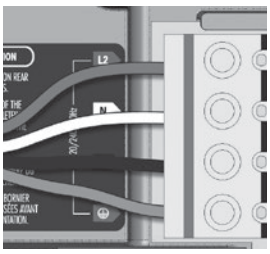
The heat.wav heater is also offered in 240 V / 5,5 kW or 240 V / 2 kW versions.

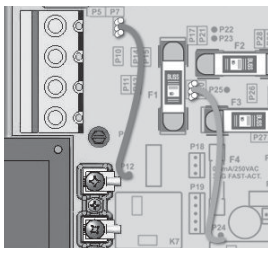
heat.wav specification summary:
- Supports 120 V or 240 V
- Incoloy® heater element
- Protected by external breaker (not fused)*

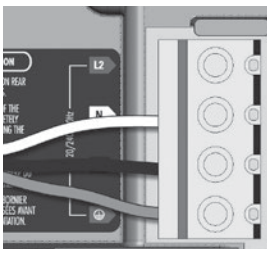
**Note : European models are 230-240 V only and are fuse protected.*

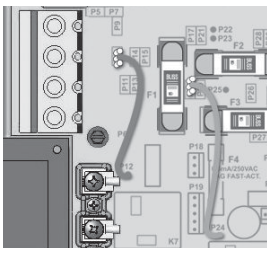
Part numbers:
9917-101959 (cable for conversion)
9920-101449 (5.5 kW heat.wav heater)

All heater connections are accessible when the cover is removed. Connections include the in.flo dry-fire protection, hi-limit/regulation probe connectors, power and ground cable connections.









Connections for 240 V heaters (North American installations only)

BROWN wire must be correctly connected between P12 and P9.

For early North American version installations the YELLOW wire must be between P25 and P20. the ORANGE wire must be between P24 and P16.

Connections for 120 V heaters (1 kW)

BROWN wire must be correctly connected between P12 and P10.

Note: To convert model to a 120 V system, the white (common) accessory wire must be moved. See wiring diagram for details.

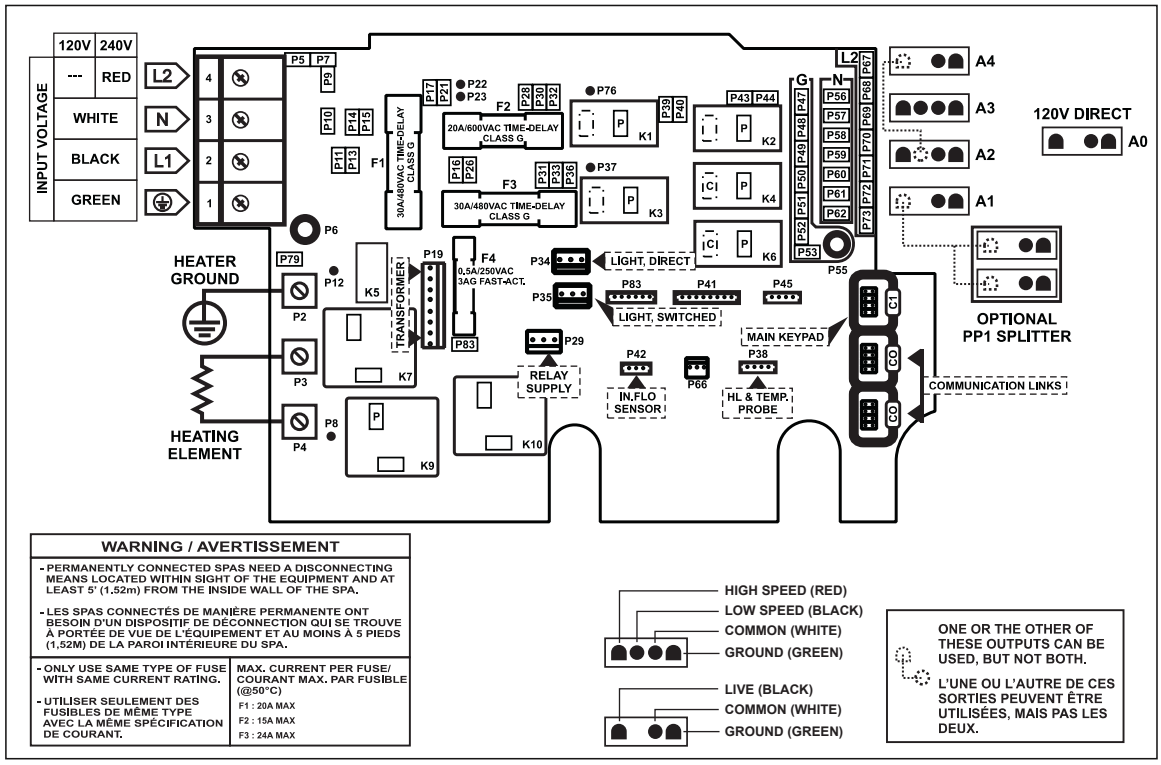
Connections

Connecting high voltage accessories: all models

Two options are available with Y Series spa packs for connecting high voltage accessories: 0.250” quick-connect terminals, or AMP connectors conform to industry standards.

Connecting high voltage accessories: North American model in.ye

For the connection to the 0.250 inch terminals, the high voltage accessories must be provided with female quick connect terminals, straight and non-insulated for all types of connections, including the ground. Accessories of 120 V or 240 V may be connected to the corresponding terminals of the printed circuit of the in.ye. Refer to the following tables for correct connections. Note that all female terminals must be correctly and completely seated on the printed circuit terminals for proper current ratings.



Direct output 1
(A0 / Floating connector) (in.ye-5 only)

Voltage	120 V	240 V
Green / ground	P47	P47
Black / line	P32	P32
White / common	P56	P67

Pump 1 (A3)

Voltage	120 V	240 V
Green / ground	P49	P49
Black / low speed	K2-P	K2-P
Red / high speed	K4-P	K4-P
White / common	P58	P69

Pump 2 (A2)
(in.ye-5 only)

Voltage	120 V	240 V
Green / ground	P50	P50
Black / low speed	K6-P	K6-P
Red / high speed	K3-P	K3-P
White / common	P59	P70

Pump 3 (A4)
(in.ye-5 only)

Voltage	120 V	240 V
Green / ground	P48	P48
Black / line	K6-P	K6-P
White / common	P57	P68

Circulation pump* (A1)

Voltage	120 V	240 V
Green / ground	P51	P51
Black / line	K1-P	K1-P
White / common	P60	P71

Pump 2 (A2)
(in.ye-3 only)

Voltage	120 V	240 V
Green / ground	P50	P50
Black / low speed	K2-P	K2-P
White / common	P59	P70

Light (12 V AC, 1A Max.)

Always on	P34
Relay	P35

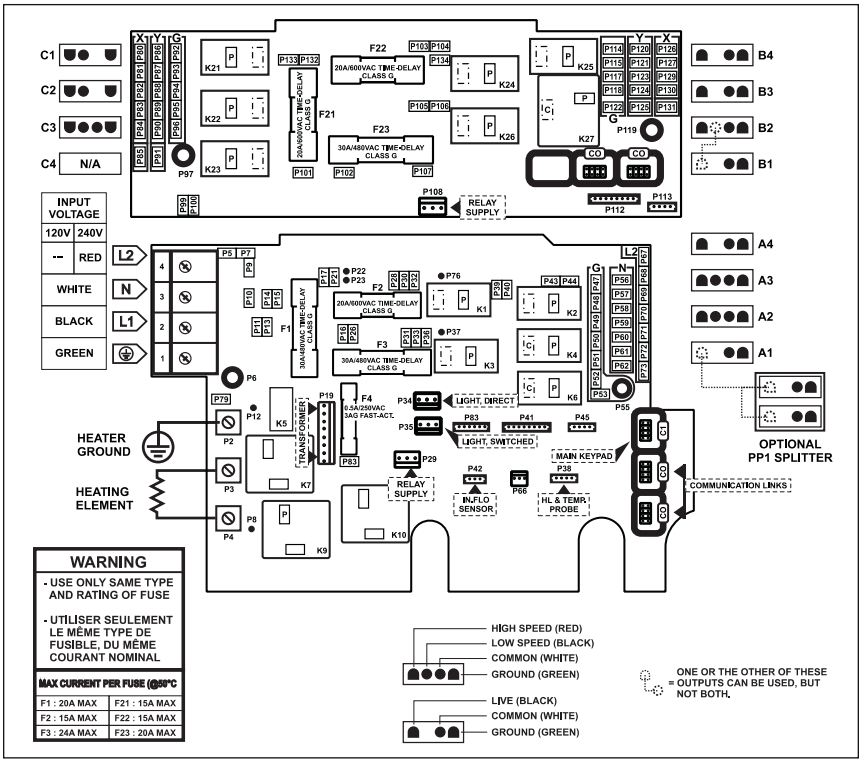
** Ozonator and circulation pump can be combined on the same output via the optional splitter PP1.*

This table shows typical connections. OEMs may have a different connection scheme.

Connections

Connecting high voltage accessories: North American model in.yt

For the connection to the 0.250 inch terminals, the high voltage accessories must be provided with female quick connect terminals, straight and non-insulated for all types of connections, including the ground. Accessories of 120 V or 240 V may be connected to the corresponding terminals of the printed circuit of the in.yt. Refer to the following tables for correct connections. Note that all female terminals must be correctly and completely seated on the printed circuit terminals for proper current ratings.



Direct output 1 (A4)

Voltage	120 V	240 V
Green / ground	P48	P48
Black / line	P32	P32
White / common	P57	P68

Direct output 2 (C1)

Voltage	120 V	240 V
Green / ground	P92	P92
Black / line	P132	P132
White / common	P86	P80

Auxiliary (B1)
(in.yt-12 only)

Voltage	120 V	240 V
Green / ground	P118	P118
Black / line	K26-P	K26-P
White / common	P124	P130

Pump 1 (A3)

Voltage	120 V	240 V
Green / ground	P49	P49
Black / low speed	K2-P	K2-P
Red / high speed	K4-P	K4-P
White / common	P58	P69

Pump 2 (A2)

Voltage	120 V	240 V
Green / ground	P50	P50
Black / low speed	K6-P	K6-P
Red / high speed	K3-P	K3-P
White / common	P59	P70

Pump 3 (C3)

Voltage	120 V	240 V
Green / ground	P94	P94
Black / low speed	K22-P	K22-P
Red / high speed	K21-P	K21-P
White / common	P88	P82

Pump 4 (B2)
(in.yt-12 only)

Voltage	120 V	240 V
Green / ground	P117	P117
Black / low speed	K26-P	K26-P
Red / high speed	K27-P	K27-P
White / common	P123	P129

Pump 5 (B3)
(in.yt-12 only)

Voltage	120 V	240 V
Green / ground	P115	P115
Black / line	K24-P	K24-P
White / common	P121	P127

Blower (B4)
(in.yt-12 only)

Voltage	120 V	240 V
Green / ground	P114	P114
Black / line	K25-P	K25-P
White / common	P120	P126

Circulation pump (C2)
(in.yt-7)

Voltage	120 V	240 V
Green / ground	P93	P93
Black / line	K22-P	K22-P
White / common	P87	P81

Circulation pump (C2)
(in.yt-12)

Voltage	120 V	240 V
Green / ground	P93	P93
Black / line	K23-P	K23-P
White / common	P87	P81

Ozonator (A1)

Voltage	120 V	240 V
Green / ground	P51	P51
Black / line	K1-P	K1-P
White / common	P60	P71

Light (12 V AC, 1A Max.)

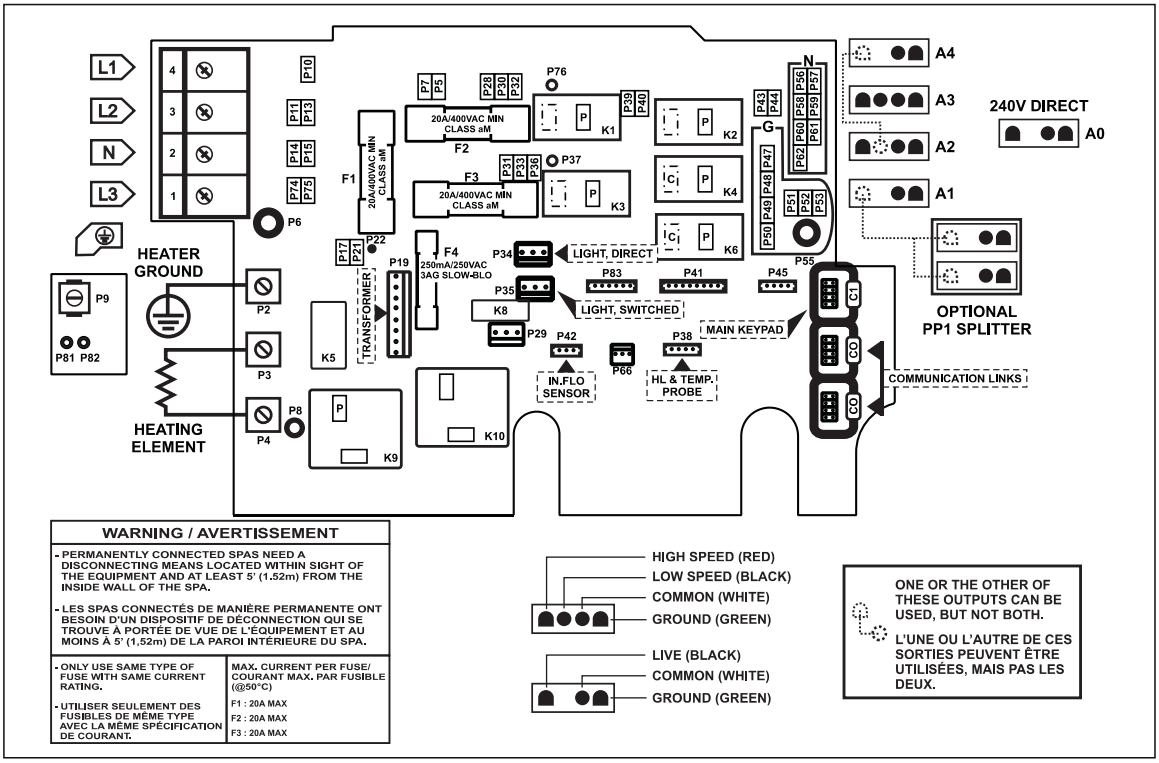
Always on	P34
Relay	P35

This table shows typical connections. OEMs may have a different connection scheme.

Connections

Connecting high voltage accessories: European model in.ye

For the connection to the 0.250 inch terminals, the high voltage accessories must be provided with female quick connect terminals, straight and non-insulated for all types of connections, including the ground. Only 230 V accessories may be connected to the corresponding terminals of the printed circuit of the in.ye. Refer to the following tables for correct connections. Note that all female terminals must be correctly and completely seated on the printed circuit terminals for proper current ratings.



Direct output 1 (A0 / Floating connector) (in.ye-5-CE only)

Voltage	230 V
Green / ground	P47
Black / line	P32
White / common	P56

Pump 1 (A3)

Voltage	230 V
Green / ground	P49
Black / low speed	K2-P
Red / high speed	K1-P
White / common	P58

Pump 1 (A2) (in.ye-5-CE)

Voltage	230 V
Green / ground	P50
Black / low speed	K6-P
Red / high speed	K3-P
White / common	P59

Pump 3 (A4) (in.ye-5-CE only)

Voltage	230 V
Green / ground	P48
Black / line	K6-P
White / common	P57

Pump 2 (A2) (in.ye-3-CE)

Voltage	230 V
Green / ground	P50
Black / low speed	K2-P
White / common	P59

Circulation pump* (A1)

Voltage	230 V
Green / ground	P51
Black / line	K4-P
White / common	P60

Light (12 V AC, 1A Max.)

Always on	P34
Relay	P35

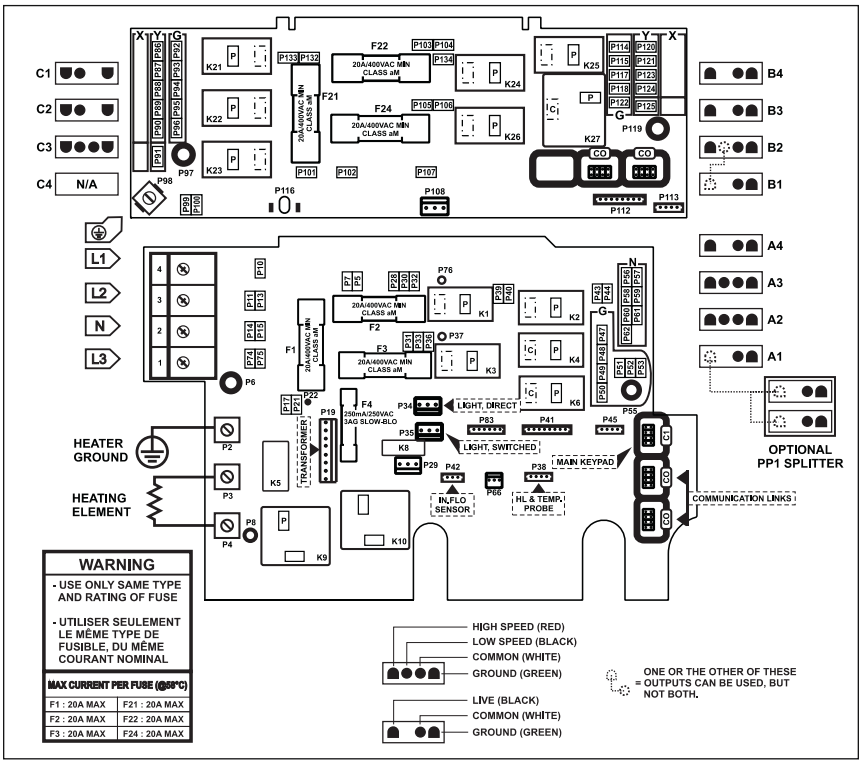
** Ozonator and circulation pump can be combined on the same output via the optional splitter PP1.*

This table shows typical connections. OEMs may have a different connection scheme.

Connections

Connecting high voltage accessories: European model in.yt

For the connection to the 0.250 inch terminals, the high voltage accessories must be provided with female quick connect terminals, straight and non-insulated for all types of connections, including the ground. Only 230 V accessories may be connected to the corresponding terminals of the printed circuit of the in.yt. Refer to the following tables for correct connections. Note that all female terminals must be correctly and completely seated on the printed circuit terminals for proper current ratings.



Direct output 1 (A4)

Voltage	230 V
Green / ground	P48
Black / line	P32
White / common	P57

Direct output 2 (C1)

Voltage	230 V
Green / ground	P92
Black / line	P132
White / common	P86

Auxiliary (B1)
(in.yt-12-ce only)

Voltage	230 V
Green / ground	P118
Black / line	K26-P
White / common	P124

Pump 1 (A3)

Voltage	230 V
Green / ground	P49
Black / low speed	K2-P
Red / high speed	K1-P
White / common	P58

Pump 2 (A2)

Voltage	230 V
Green / ground	P50
Black / low speed	K6-P
Red / high speed	K3-P
White / common	P59

Pump 3 (C3)

Voltage	230 V
Green / ground	P94
Black / low speed	K22-P
Red / high speed	K21-P
White / common	P88

Pump 4 (B2)
(in.yt-ce only)

Voltage	230 V
Green / ground	P117
Black / low speed	K26-P
Red / high speed	K27-P
White / common	P123

Pump 5 (B3)
(in.yt-12-ce only)

Voltage	230 V
Green / ground	P115
Black / line	K24-P
White / common	P121

Blower (B4)
(in.yt-12-ce only)

Voltage	230 V
Green / ground	P114
Black / line	K25-P
White / common	P120

Circulation pump (C2)
(in.yt-12-CE)

Voltage	230 V
Green / ground	P93
Black / line	K23-P
White / common	P87

Ozonator (A1)

Voltage	230 V
Green / ground	P51
Black / line	K4-P
White / common	P60

Circulation pump (C2)
(in.yt-7-CE)

Voltage	230 V
Green / ground	P93
Black / line	K22-P
White / common	P87

Light (12 V AC, 1A Max.)

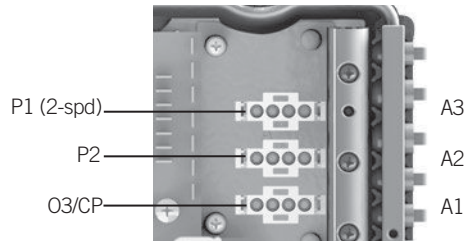
Always on	P34
Relay	P35

This table shows typical connections. OEMs may have a different connection scheme.

Connections

AMP output connectors and typical accessories

in.ye-3



N/A — Top AMP connector unavailable

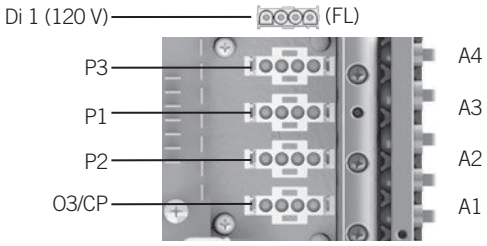
A3 — Output 2 (Output 4 on CE), Output 5 — **P1 (2-speed)**

A2 — Output 5 — **P2 (1-speed)** - *see note*

A1 — Output 4 (Output 2 on CE) — **O3/CP**

Note: If P2 is used, P1L cannot be used.

in.ye-5



A4 — Output 3 — **P3 (1-speed)** - *see note*

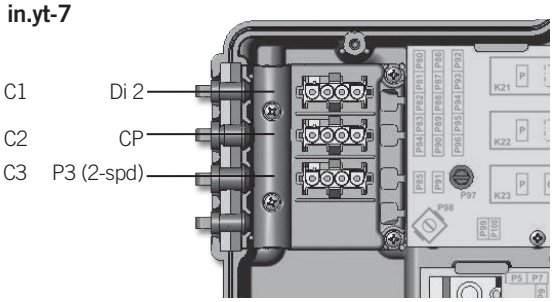
A3 — Output 2 (Output 4 on CE), Output 5 — **P1 (2-speed)**

A2 — Output 1, Output 3 — **P2 (2-speed)**

A1 — Output 4 (Output 2 on CE) — **O3/CP**

Note: If P3 is used, P2L cannot be used.

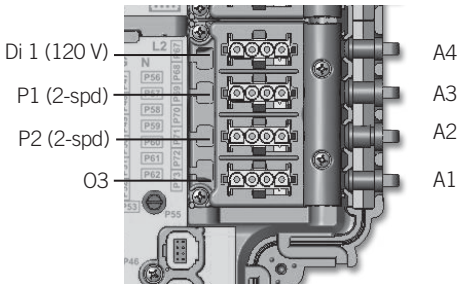
in.yt-7



C1 — Output 14 — **Di 2**

C2 — Output 6 — **CP**

C3 — Output 6, Output 8 — **P3 (2-speed)** - *see note*



A4 — Output 13 — **Di 1 (120 V)**

A3 — Output 2 (Output 4 on CE), Output 5 — **P1 (2-speed)**

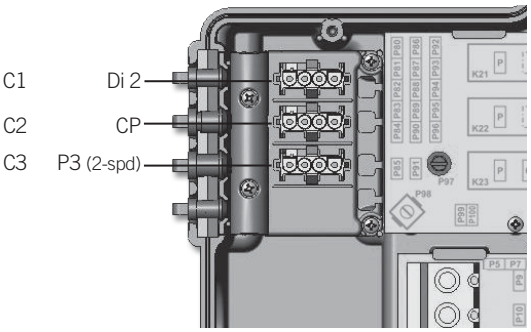
A2 — Output 1, Output 3 — **P2 (2-speed)**

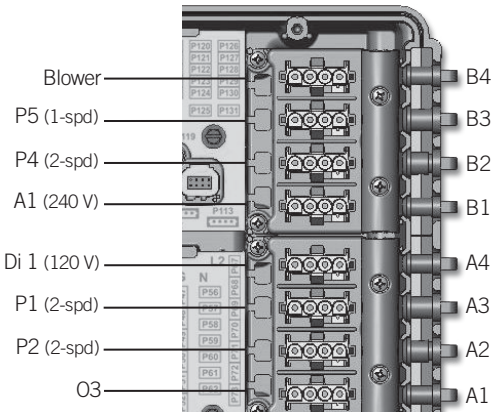
A1 — Output 4 (Output 2 on CE) — **O3**

Note: If P3, 2 speed is used, CP must be on connector A1 with the ozonator.

Connections

in.yt-12





C1 — Output 14 — **Di 2**

C2 — Output 7 — **CP**

C3 — Output 6, Output 8 — **P3 (2-speed)**

B4 — Output 11 — **Blower**

B3 — Output 12 — **P5 (1-speed)**

B2 — Output 9, Output 10 — **P4 (2-speed)** *see note*

B1 — Output 10 — **AUX 1**

A4 — Output 13 — **Di 1 (120 V)**

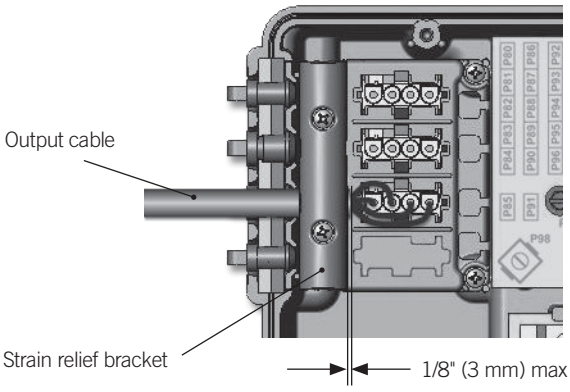
A3 — Output 2 (Output 4 on CE), Output 5 — **P1 (2-speed)**

A2 — Output 1, Output 3 — **P2 (2-speed)**

A1 — Output 4 (Output 2 on CE) — **O3**

Note: If P4 2 speed is used, AUX 1 can not be used.

Completing the installation

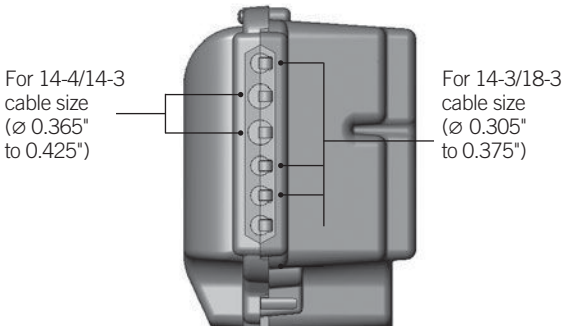


Once all cables of high voltage accessories are routed through the openings provided for this purpose on each sides of the enclosure of the control system, you can replace the strain relief brackets.

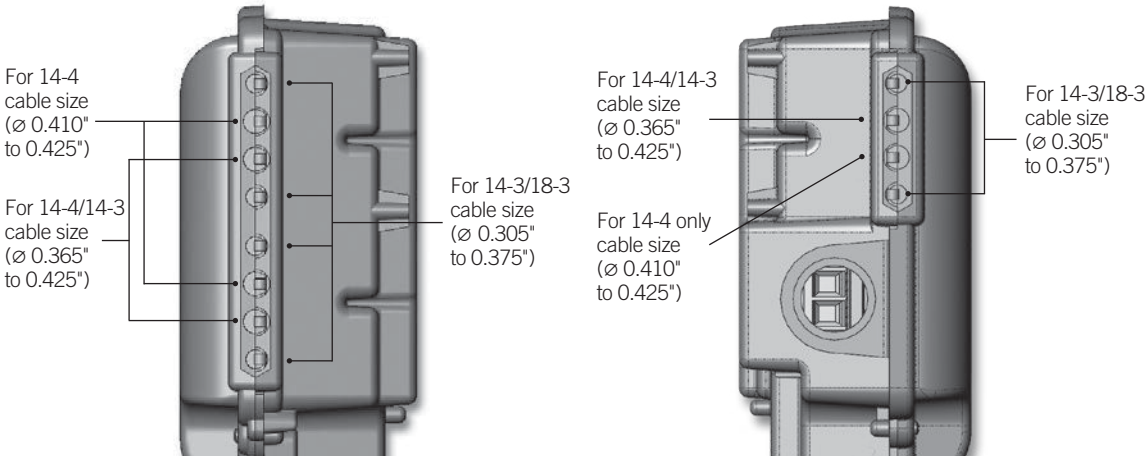
Replace the cover. Do not over tighten cover screws (torque to 8 in. lb max (0.9 N.m)

The cable jacket must not exceed the strain relief bracket more than 1/8" (3 mm).

in.ye



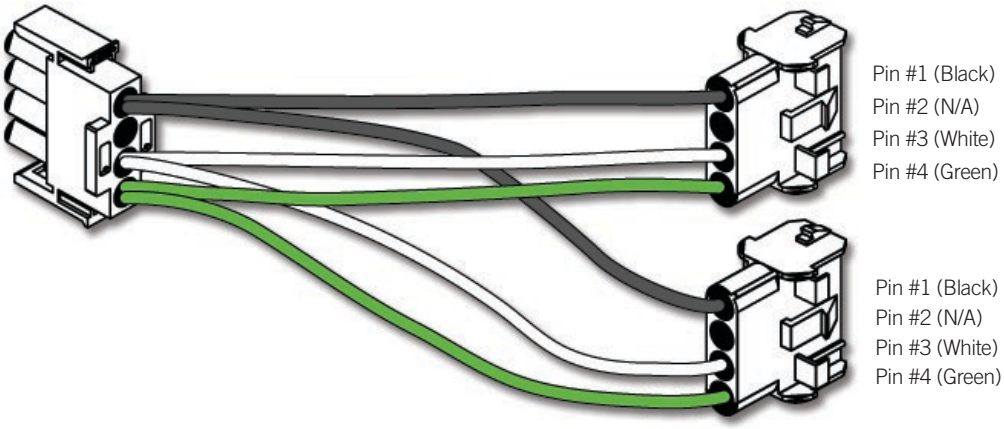
in.yt



Output cable opening size

AMP connector and housing

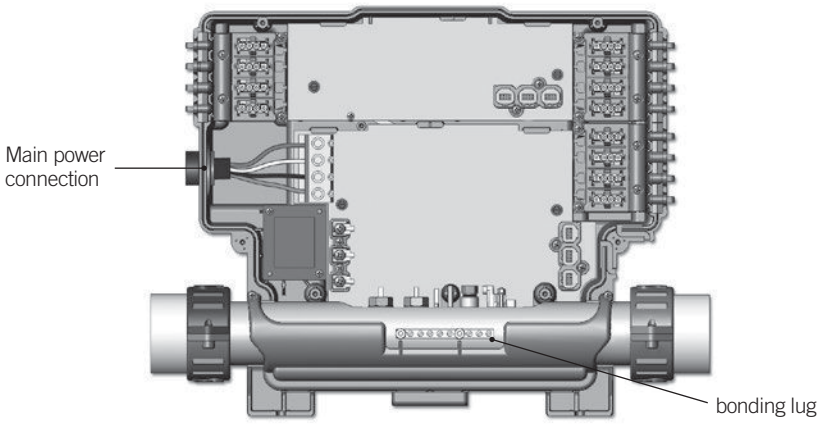
A special PP-1 splitter can be ordered (Part #: 9920-401369) and used to split an output into 2 parallel outputs (i.e. a single output could be used to drive two accessories like an ozonator and a UV generator, or a CP). Both accessories driven must be of the same operating voltage (120 V or 240 V).



Electrical wiring

Electrical wiring: all models

Warning
Disconnect power before starting electrical work. Wiring must be completed by a qualified electrician and must be done in accordance with the local electrical code.



To complete the electrical connections of our in.ye or in.yt control system you will need a Phillips screwdriver and a flat-head screwdriver.

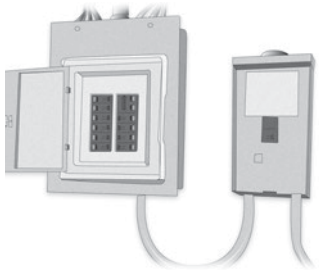
Remove the screws from the system control lid and remove it.

Remove 5 1/2" (142 mm) of cable insulation.

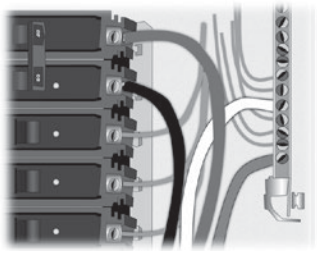
Strip away 1" (25 mm) of insulation from each wire.

Pull the cable through the cutout of the box and secure it with a NPT strain relief* (hole diameter 1,335" [34,42 mm]). Ensure that the NPT strain relief clamps around the outer sheath of the cable.

** For CE use an IEC certified plastic bushing that will maintain the IPX5 rating.*



Main electrical box GFCI panel



Warning

For units for use in other than single-family dwellings, a clearly labeled emergency switch shall be provided as part of the installation. The switch shall be readily accessible to the occupants and shall be installed at least 5' (1.52 m) away, adjacent to, and within sight of the unit.

This product must always be connected to a circuit protected by a ground fault interrupter.

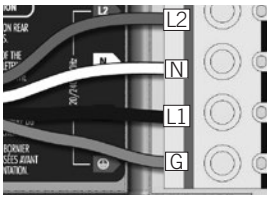
Proper wiring of the electrical service box, GFCI and Y Series terminal block is essential!

Check your electrical code for local regulations. Only copper wire should be used, never aluminum.

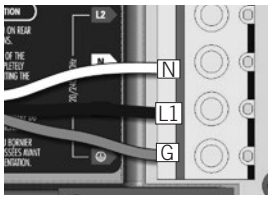
Disposal of the product
The appliance (or the product) must be disposed of separately in accordance with the local waste disposal legislation in force.

Electrical wiring: North Amercian model in.ye and in.yt

Refer to wiring diagram in the enclosure box lid for more information.



240 V (4 wires)



120 V (*3 wires)

* If connected to a 3 wires system, the heat.wave and accessories will not operate at 240 V.

Refer to the section « Connections for 120 V heaters ».

Note: To convert model to a 120 V system, the white (common) accessory wire must be moved. See wiring diagram for details.

Insert each wire into the appropriate socket of the main entry terminal block according to the color code indicated on the sticker. Use a flat-head screwdriver to tighten the screws on the terminal.

After making sure wires are securley connected, push them back into the box and replace the cover. Do not over tighten cover screws (torque to 8 in. lb max {0.9 N.m}).

Connect the bonding conductor to the bonding lug on the front of the spa pack (a grounded electrode conductor should be used to connect the equipment grounding conductors).

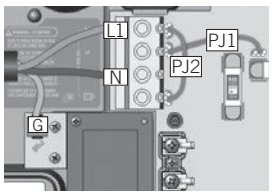
Electrical wiring

Electrical wiring: European model in.ye

Refer to wiring diagram in the enclosure box lid for more information.

Warning
in.ye.ce models must always be connected to a circuit protected by a Residual-Current Device (RCD) having a rated operating residual-current not exceeding 30 mA.

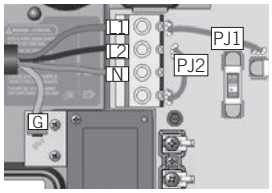
Correct wiring of the electrical service box, RCD, and pack terminal block is essential!
Check your electrical code for local regulations. Only copper wire should be used, never aluminum.



1-phase

Connect PJ1 between P7 and P13.

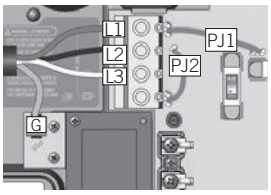
Connect PJ2 between P10 and P74.



2-phase

Connect PJ1 between P7 and P10.

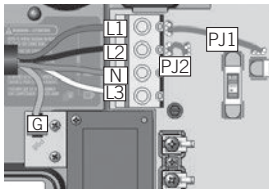
Connect PJ2 between P13 and P74.



3-phase Delta (no neutral)

Connect PJ1 between P7 and P10.

Connect PJ2 between P13 and P74.



3-phase
with single neutral

Connect PJ1 between P7 and P10.

Connect PJ2 between P11 and P13.

Insert each wire into the appropriate socket of the main entry terminal block according to the color code indicated on the sticker. Use a flat-head screwdriver to tighten the screws on the terminal.

After making sure wires are securley connected, push them back into the box and replace the cover. Do not over tighten cover screws (torque to 8 in. lb max {0.9 N.m}).

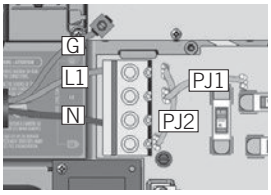
Connect the bonding conductor to the bonding lug on the front of the spa pack (a grounded electrode conductor should be used to connect the equipment grounding conductors).

Electrical wiring

Electrical wiring: European model in.yt

Refer to wiring diagram in the enclosure box lid for more information.

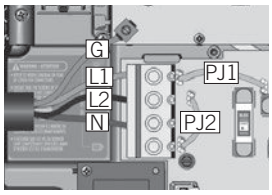
> ⚠ **Warning**
> in.yt.ce models must always be connected to a circuit protected by a Residual-Current Device (RCD) having a rated operating residual-current not exceeding 30 mA. Correct wiring of the electrical service box, RCD, and pack terminal block is essential! Check your electrical code for local regulations. Only copper wire should be used, never aluminum.



1-phase

Connect PJ1 between P7 and P13.

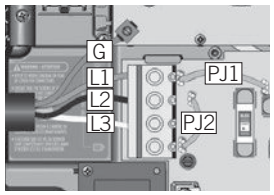
Connect PJ2 between P10 and P74.



2-phase

Connect PJ1 between P7 and P10.

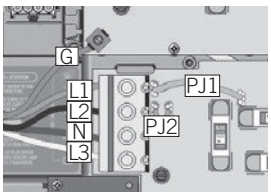
Connect PJ2 between P13 and P74.



3-phase Delta (no neutral)

Connect PJ1 between P7 and P10.

Connect PJ2 between P13 and P74.



3-phase with single neutral

Connect PJ1 between P7 and P10.

Connect PJ2 between P11 and P13.

Insert each wire into the appropriate socket of the main entry terminal block according to the color code indicated on the sticker. Use a flat-head screwdriver to tighten the screws on the terminal.

After making sure wires are securley connected, push them back into the box and replace the cover. Do not over tighten cover screws (torque to 8 in. lb max {0.9 N.m}).

Connect the bonding conductor to the bonding lug on the front of the spa pack (a grounded electrode conductor should be used to connect the equipment grounding conductors).

Controler power up

Start up of your control system

To perform the control system start up, refer to the manual:
Start up guide and basic configuration



Compatible keypads

List of compatible keypads for the Y series control system

For more information on the compatible keypads for your control system refer to the corresponding Techbook.



K-19 main keypad
LED display, 4 keys



K-35 main keypad
LED display, 6 keys



in.k200 main keypad
LED display, 4 keys



in.k600 static main keypad
LCD display, 11 keys



K-4 main keypad
LCD display, 8 keys



K-8 main keypad
LCD display, 8 keys



in.k450 main keypad
LCD display, 7 keys



in.k300 main keypad
LCD display, 4 keys



in.k500 main keypad
Color LCD display, 7 keys



in.k800 main keypad
Color LCD display, 10 keys



in.k1000 main keypad
Color LCD capacitive touchscreen display

Troubleshooting information for your control system

You come across a problem with your control system, for the troubleshooting of your control system, refer to the manual: Troubleshooting guide



Specifications

Environmental ratings

Operating temperature:	32˚F (0°C) to 136˚F (58˚C)
Storage temperature:	-13°F (-25°C) to 185°F (85°C)
Humidity:	Up to 85% RH, non condensing
Level of waterproofing:	IPX5

Mechanical

in.ye

Weight:	Up to 9.7 lbs (4.4 kg)
Dimensions (W x H x D):	19.60" x 10.75" x 4.98" (497 x 273 x 126 mm)

in.yt

Weight:	Up to 12 lbs (5.45 kg)
Dimensions (W x H x D):	19.6" x 14.5" x 5.1" (497 x 368 x 130 mm)

Specifications

in.ye & in.yt North American electrical specifications

Input rating: 120/240 V nominal (+5/-10 %)
60 Hz, (2 lines required with neutral) 48 A max.

or (in.ye-3 only): 120 V nominal only (+5/-10 %)
60 Hz, (single line with neutral) 16 A max.

Heat.wav rating:

Voltage: 120 V or 240 V, 60 Hz

Wattage: 5,5 kW at 240 V, 4 kW at 240 V or 1 kW at 120 V

Flow rate: Minimum of 18 GPM (68 LPM) is required

Output	Voltage	Maximum current	Typical Device	ye-3*1	ye-5	yt-7	yt-8	yt-12
Output 1	120 or 240 V	15 FLA/60 LRA (inrush)	Pump 2 high speed		●	●	●	●
Output 2	120 or 240 V	15 FLA/60 LRA (inrush)	Pump 1 high speed	●	●	●	●	●
Output 3	120 or 240 V	15 FLA/60 LRA (inrush)	Pump 2 low speed		●	●	●	●
Output 4	120 or 240 V	15 FLA/60 LRA (inrush)	Ozonator	●	●	●	●	●
Output 5	120 or 240 V	15 FLA/60 LRA (inrush)	Pump 1 low speed	●	●	●	●	●
Output 6	120 or 240 V	15 FLA/60 LRA (inrush)	Pump 3 low speed			●	●*2	●
Output 7	120 or 240 V	15 FLA/60 LRA (inrush)	Circulation pump				●	●
Output 8	120 or 240 V	15 FLA/60 LRA (inrush)	Pump 3 high speed			●		●
Output 9	120 or 240 V	20 FLA/80 LRA (inrush)	Pump 4 high speed				●*3	●
Output 10	120 or 240 V	15 FLA/60 LRA (inrush)	Pump 4 low speed				●*4	●
Output 11	120 or 240 V	15 FLA/60 LRA (inrush)	Blower					●
Output 12	120 or 240 V	15 FLA/60 LRA (inrush)	Pump 5					●
Direct out 1	120 or 240 V	5 A	Audio/video		●	●	●	●
Direct out 2	120 or 240 V	5 A	Audio/video			●	●	●

Important:
The maximum current for output 2 on fuse F1 may not exceed 20 A.
The maximum current for outputs 4, 5 and Direct 1 on fuse F2 may not exceed 15 A.
The maximum current for outputs 1 and 3 on fuse F3 may not exceed 20 A.
The maximum current for outputs 6 to 8 and Direct 2 on fuse F21 may not exceed 15 A.
The maximum current for outputs 11 and 12 on fuse F22 may not exceed 15 A.
The maximum current for outputs 9 and 10 on fuse F23 may not exceed 20 A.
The total maximum current for the fuses F22 and F23 may not exceed 30 A.

*1 This model can be converted to a dedicated 120 V model.
*2 The typical accessory for the output 6 on a in.yt-8 is a pump 3 high speed.
*3 It's possible to configure the output 9 as a secondary heater on the in.yt-8.
*4 The output 10 of the in.yt-8 is limited to 1A. This output is normally used with low current accessories.

UL/CSA Standards

UL 1563 Sixth Ed. (2012)
UL File: E182156
CAN/CSA C22.2 No. 218.1-13 (2013)

Specifications

in.ye & in.yt European electrical specifications:

Input rating: 230/240 V nominal (+5/-10 %)
50 Hz, (3 lines required with neutral), three-phased system 16 A Max per phase.

or 230/240 V nominal (+5/-10 %)
50 Hz, (2 lines required with neutral), dual-phase system 20 A Max per phase.

or 230/240 V nominal (+5/-10 %)
50 Hz, (1 line required with neutral), single-phase system 48 A max.

heat.wav rating:

Voltage: 230/240 V, 50 Hz

Wattage: 3,8 kW at 230 V or 2,8 kW at 230 V

Flow rate: A minimum of 18 GPM (68,1 LPM) is required

Output	Voltage	Maximum current	Typical Device	ye-3	ye-5	yt-7	yt-8	yt-12
Output 1	230/240 V	15 FLA/60 LRA (in-rush)	Pump 2 high speed		●	●	●	●
Output 2	230/240 V	15 FLA/60 LRA (in-rush)	Ozonator	●	●	●	●	●
Output 3	230/240 V	15 FLA/60 LRA (in-rush)	Pump 2 low speed		●	●	●	●
Output 4	230/240 V	15 FLA/60 LRA (in-rush)	Pump 1 high speed	●	●	●	●	●
Output 5	230/240 V	15 FLA/60 LRA (in-rush)	Pump 1 low speed	●	●	●	●	●
Output 6	230/240 V	15 FLA/60 LRA (in-rushl)	Pump 3 low speed			●	●*1	●
Output 7	230/240 V	15 FLA/60 LRA (in-rush)	Circulation pump				●	●
Output 8	230/240 V	15 FLA/60 LRA (in-rush)	Pump 3 high speed			●		●
Output 9	230/240 V	20 FLA/80 LRA (in-rush)	Pump 4 high speed				●*2	●
Output 10	230/240 V	15 FLA/60 LRA (in-rush)	Pump 4 low speed				●*3	●
Output 11	230/240 V	15 FLA/60 LRA (in-rush)	Blower					●
Output 12	230/240 V	15 FLA/60 LRA (in-rush)	Pump 5					●
Direct out 1	230/240 V	5 A	Audio/video		●	●	●	●
Direct out 2	230/240 V	5 A	Audio/video			●	●	●

Important:
The maximum current for output 2 and heater output on fuse F1 may not exceed 20A.
The maximum current for outputs 4, 5 and direct 1 on fuse F2 may not exceed 20A.
The maximum current for outputs 1 and 3 on fuse F3 may not exceed 20A.
The maximum current for outputs 6 to 8 and direct 2 on fuse F21 may not exceed 20A.
The maximum current for outputs 11 and 12 on fuse F22 may not exceed 20A.
The maximum current for outputs 9 and 10 on fuse F23 may not exceed 20A.
The total maximum current for the fuses F22 and F23 may not exceed 30 A.

*1 The typical accessory for the output 6 on a in.yt-8 is a pump 3 high speed.
*2 It's possible to configure the output 9 as a secondary heater on the in.yt-8.
*3 The output 10 of the in.yt-8 is limited to 1A. This output is normally used with low current accessories.

European and international standards

IEC 60335-1 : 2010
IEC 60335-2-60 : 2002, A1 : 2004, A2 : 2008
EN 60335-2-60 : 2003, A1 : 2005, A2 : 2008, A11 : 2011, A12 : 2010
EN 60335-1 : 2012
EN 62233 : 2008

EN55014-1
EN55014-2
EN61000-3-2
EN61000-3-3



9919-101184-E
Rev. 04-2021

© Groupe Gecko Alliance inc., 2021
All trademarks or registered trademarks
are the property of their respective owners.

Gecko Alliance
450 des Canetons, Québec (Qc), G2E 5W6 Canada, 1.800.78.GECKO
www.geckoalliance.com

Printed in Canada