

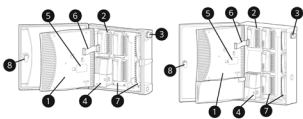
ICC 2 INSTALLATION GUIDE | Hunter®



7 <http://hunter.direct/icc2help>

hunterindustries.com

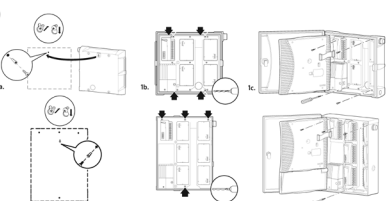
LT-666-IG-ICC2 10/16



EN CONTROLLER COMPONENTS

ICC 2 is a water-resistant outdoor controller. Avoid direct sprinkler spray and minimize direct sunlight. Avoid powerful electrical sources, such as transformers and pump panels. Leave room to open the cabinet door.

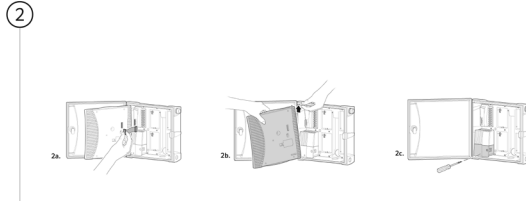
- 1 Facepack/Control Panel- 304700
- 2 Power Module- 304500
- 3 SmartPort Connector- ICAMWH
- 4 Transformer- 154628
- 5 Battery Compartment- n/a
- 6 Ribbon Cable- B9900
- 7 Station Output Modules (ICM-800 or ICM-400)
- 8 Door Lock- 387300



EN WALL MOUNTING

Remove controller door and control panel for easier access.

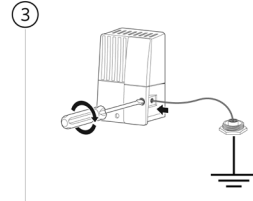
- 1a. Use enclosed hole template to mark and drill mounting holes. Leave enough room to open the door. Allow for screw anchors if necessary. Install top-center screw first, and leave the screw head 1/8" (6 mm) out from the wall.
- 1b. Hang the controller on the screw head.
- 1c. Secure the controller in place by installing screws in the remaining holes from inside the cabinet. Replace control panel and door.



EN WIRING CONTROLLER POWER

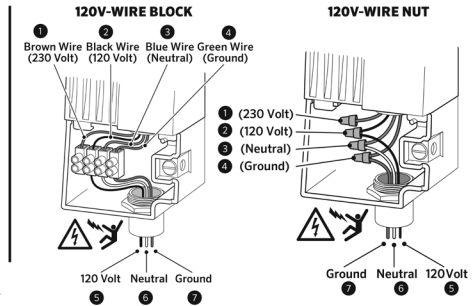
Connecting the controller to primary AC power should be done by a licensed electrician following all local codes. Install in approved conduit and fittings. The controller can operate with either 120VAC or 230VAC power. Supply wires must be 14AWG/ 2 mm² or larger.

- 2a. Turn AC power off at the source, and verify that it is off.
- 2b. Disconnect the facepack ribbon cable, and remove the facepack.
- 2c. Remove the cover from the junction box.
- 2d. Strip about 0.5" (13 mm) of insulation from the end of each AC power wire.
- 2e. Route the wires through the conduit opening inside the junction box.
- 2f. Connect AC wiring as shown in the next column, using supplied terminal block (or taped wire nuts where permissible).
- 2g. Replace cover, turn on power, and test.



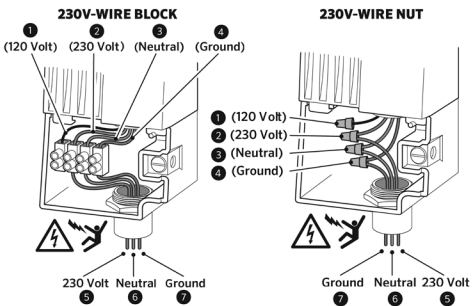
EN EARTH GROUND CONNECTION (LIGHTNING PROTECTION)

- 3a. Insert copper wire from earth ground hardware, and tighten screw in front.
- 3b. Minimum 10 AWG/5mm² wire to earth ground hardware.
- 3c. Add copper-clad steel ground rods and/or plates sufficient to achieve 100 or less resistance at a minimum 8/2.5 m away from controller.



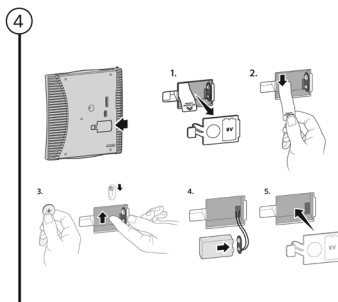
EN 120VAC CONNECTIONS

Transformer	Wire	Power Source
1 Brown	230V (not used)	-- --
2 Black	120V Hot	5 Black 120V Hot
3 Blue	Neutral	6 White Neutral
4 Green	Ground	7 Green Ground



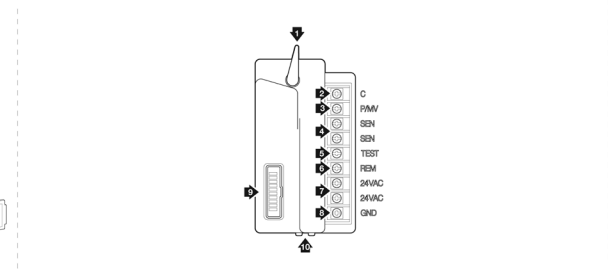
EN 230VAC CONNECTIONS

Transformer	Wire	Power Source
1 Black	120V (not used)	-- --
2 Brown	230V Hot	5 Brown 230V Hot
3 Blue	Neutral	6 Blue or White Neutral
4 Green	Ground	7 Green Ground



EN BATTERY ACTIVATION

To replace the battery, move lever down to eject the old one. Remove tab on rear of control panel to activate date/time backup CR 2032 battery. Optional 9VDC battery is only used to power control panel when removed from cabinet.



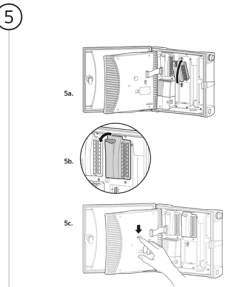
EN POWER MODULE CONNECTIONS

- 1 Locking Lever: Down to lock module in place, up to remove module.
- 2 C (Common Wire connection): Makes common connection for PMV and/or station wiring.
- 3 PMV: Pump Master Valve connection: Up to 0.56 A for master valve or Pump Start Relay activation.
- 4 SEN (x2) Sensor input: Standard inputs for Hunter normally-closed Clik™ sensors or Solar Eye™ sensor.
- 5 Test: 24VAC (always on): Used to test and locate valve wires.

- 6 REM: Remote Control input: Pre-wired to Hunter SmartPort™ connector (plug on right side of wall mount).
- 7 24VAC (x2) Transformer connection: Connects 24V yellow wires from transformer.
- 8 GND: Connects green safety ground wire from transformer.
- 9 Ribbon Cable Connection: Connects controller to control panel.
- 10 Installation tabs: Insert into module slot first, to tip and install module.

EN STATION MODULES (ICM-800 SHOWN)

- 1 Locking Lever: Up to remove or install module in place.
- 2 C (Common Wire connection): Makes common connections for station wiring.
- 3 Station Terminals: Numbered connections for each 24VAC station output wire to valves.
- 4 Installation tabs: Insert into module slot first, then tip and install module.



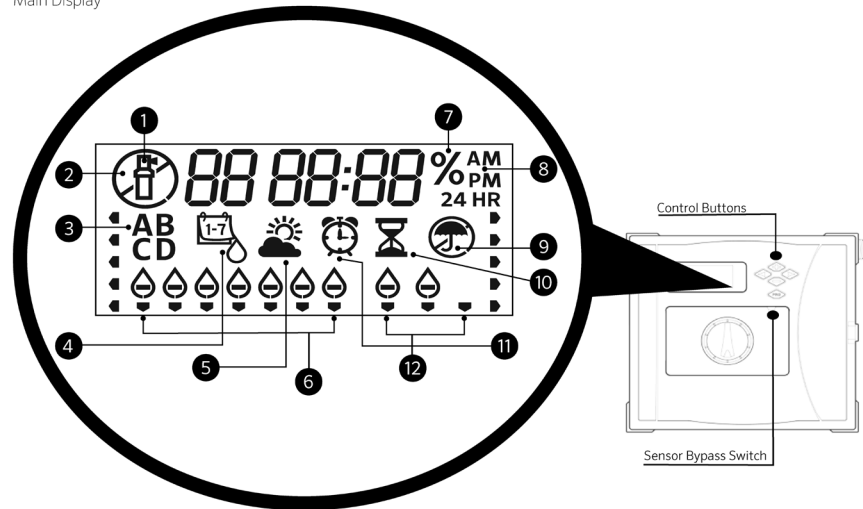
EN ADD A STATION OUTPUT MODULE

- To add a station output module, insert tabs on module in one end of slot.
- 5a. Open locking lever (up), to module into place, making connection.
 - 5b. Flip lever down to lock into position.
 - 5c. Press Reset button on back of control panel to register new module.



ICC 2® IRRIGATION CONTROLLER QUICK START PROGRAMMING GUIDE

Main Display



- ① Station running
- ② Sprinkler Off Days
- ③ Program Indicators
- ④ Water Days Symbol
- ⑤ Solar Sync Symbol
- ⑥ Days of the Week

- ⑦ Season Adjust %
- ⑧ Time mode (AM/PM/24)
- ⑨ Rain Sensor Active/Override
- ⑩ Run Time Symbol
- ⑪ Start Time Symbol
- ⑫ Odd/Even/Interval Days

Dial Must Be In RUN Position For Automatic Irrigation!

Turn the dial to the **RUN** position. Date and time are now set.

Setting Current Date and Time

1. Turn the dial to the **DATE/TIME** position.
2. The current year will be flashing. Use the + and - buttons to change the year. Push the ► button to proceed to setting the month.
3. The month will be flashing. Use the + and - buttons to change the month. Press the ► button to proceed to the day setting.
4. The day will be flashing. Use the + and - buttons to change the day of the month. Press the ► button to proceed to the time setting.
5. The time will be displayed. Use the + and - buttons to select AM, PM, or 24 hr to display all times in 24-hour mode.
6. Press the ► button to move to hours. Use the + and - buttons to change the hour shown on the display.
7. Press the ► button to move on to minutes. Use the + and - buttons to change the minutes shown in the display.

Setting Program Start Times

1. Turn the dial to the **START TIMES** position.
2. Press the **PRG** button to select A, B, C or D.
3. Use the + and - buttons to change the start time. The start time advances in 15-minute increments.
4. Press the ► button to add another start time, or **PRG** button to set a start time for the next program.

Note: Controller can run 2 programs at once.

Eliminating a Program Start Time

With the dial set to the **START TIMES** position, push the + and - buttons until you reach 12:00 AM (Midnight). From this position, push the - button once to reach the **"OFF"** position.

Setting Station Run Times

1. Turn the dial to the **RUN TIMES** position.
2. Use the **PRG** button to select program (A, B, C, or D).
3. Use the + and - buttons to change the station run time on the display. You may set station run times from 1 minute to 12 hours.

4. Press the ► button to advance to the next station.
5. Repeat for each station.

Total Run Time Calculator

1. Turn the dial to **RUN TIMES**.
2. Press ◀ to view total time for all stations in program.
3. Press **PRG** to see total times for other programs.

Setting Water Days

1. Turn the dial to the **WATER DAYS** position.
2. The display will show the last program selected. (A, B, C, or D). Switch to another program by pressing the **PRG** button.
3. The pointer at the bottom of the screen shows the currently selected day of the week. Press + or - to select days for watering [drop] or no water [-].

Selecting Odd or Even Days to Water

1. Press ► past all days of week to **ODD** or **EVEN**.
2. Press + to select or - to cancel **ODD** or **EVEN**.

Selecting Interval Watering

1. Press ► past **ODD** and **EVEN** to **INT**.
2. Press + or - to set interval days.
3. Press + or - to set number of days to next watering.

Pump (PMV)

Press ► to select stations.
Press + or - to set **PMV** output **ON** or **OFF** for station. (PMV is normally on for all stations).

Seasonal Adjust

Changes all run times by a percentage for local conditions.
Press + or - to change from 5% to 300% of original run times.

Solar Sync

Sets up and adjusts optional Hunter Solar Sync sensor.

1. Press + or - to select Region, 1-4 (see Solar Sync manual).
2. Press + or - to increase or decrease watering (see Solar Sync manual).

Manual Station

1. Turn dial to Manual position.
2. Press ► to select station. Use + or - to set manual run time.
3. Turn dial to Run position to begin immediately.

Manual - Program

1. Turn dial to **RUN** position.
2. Press and hold ► button for 3 seconds.
3. Press **PRG** to select program.
4. Release button for 2 seconds. Program will begin.
5. Press ► to advance to another station within the Program.

System Off

Turn dial to System **OFF** position. No watering will occur in this dial position.

Programmable Rain Off

1. Turn dial to System **OFF** position, wait for OFF to stop blinking.
2. Press + or - to set the number of days to remain off.
3. Turn dial back to **RUN** position. Display will show days off remaining, and watering will resume when Off days reach 0. To cancel Rain Off, turn dial to OFF, wait until OFF stops blinking, then turn dial back to Run.

Test

Runs all stations for a test run time.
1. Press and hold **PRG** for 3 seconds.
2. Station 1 appears. Press + or - to enter run time.
3. Wait 2 seconds, each station will run for test run time.

Quick Check

Checks all station for wiring short circuits.

1. Press +, -, <, > at the same time. Whole display illuminates.
2. Press + to begin the check. # **ERR** shows station with fault.

Sensor Bypass

Overrides sensor shutdown to allow watering.
1. Move Sensor **BYPASS** switch to **BYPASS** position.
2. Return switch to **ACTIVE** to allow sensor shutdown.

Easy Retrieve

Saves and restores all watering programs. To save:
1. Turn dial to **RUN**.
2. Press and hold + and **PRG** for 3 seconds.
3. Display scrolls until save is complete.
To Restore: Press and hold - and **PRG** for 3 seconds.
Display scrolls right to left and shows **"doNE"** when restore is complete.

Reset

Open inner door (control panel).
Press **RESET** button on back of door.
Controller restarts.

Controller Total Reset (Erase All)

1. Open inner door (control panel).
2. Press and hold **PRG** button.
3. Press and release the **RESET** button.
4. Wait 5 seconds or until display says **"doNE"**, release **PRG** button. Controller is erased.

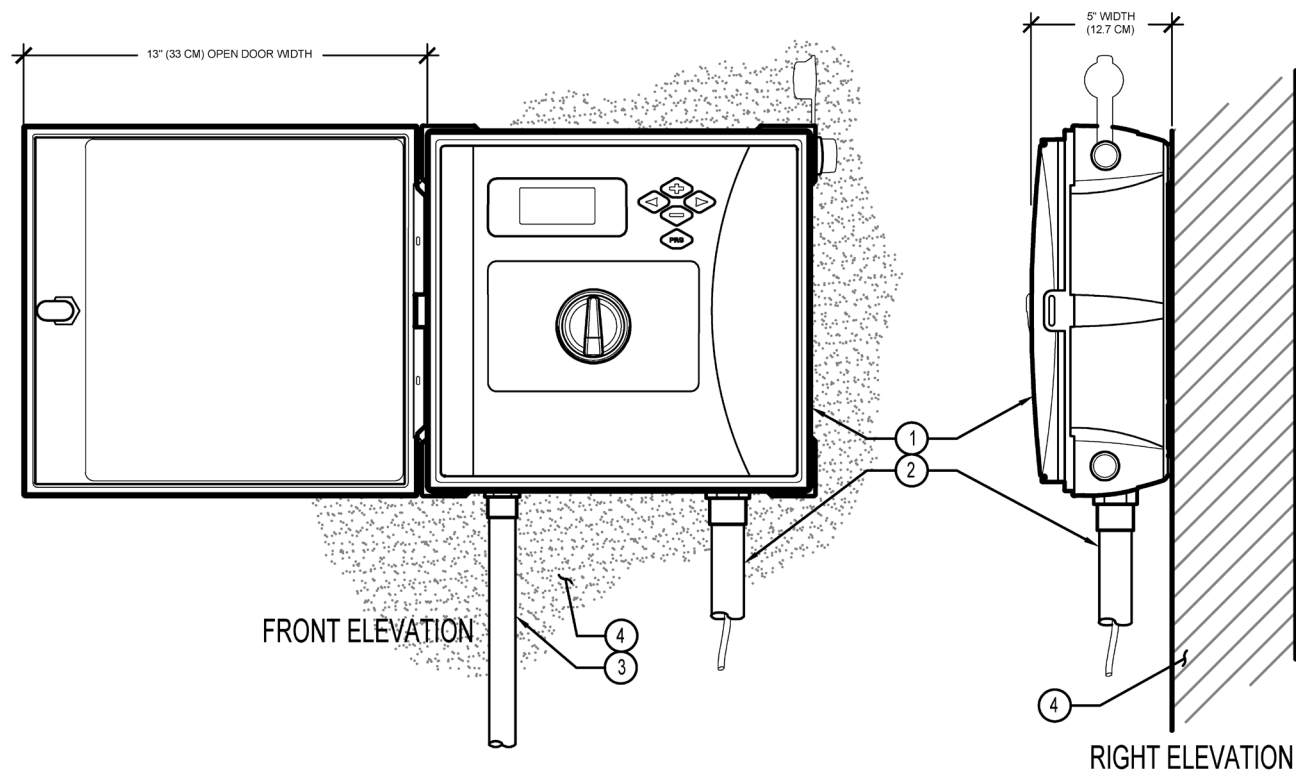
For complete product information
visit www.Hunterindustries.com

Hunter®

HIDDEN AND ADVANCED FEATURES		
Feature	Where Found	Description
PROGRAMMABLE SENSOR OVERRIDE	Hold – and turn to Start Times	Sets individual stations to ignore sensor shutdowns. Select stations with ◀ or ▶ , (use +/-) to change to OFF to ignore sensor.
CYCLE AND SOAK	Hold + and turn to Run Times. Enter Cycle, press PRG to set Soak	Sets max time a station can run at once, and minimum time it must wait before another cycle. Divides run time into segments to prevent runoff.
DELAY BETWEEN STATIONS	Hold – and turn to Run Times	Inserts a delay (seconds or minutes) between stations in a run time, for slow valves or recharging tanks.
HIDE PROGRAMS	Hold – and turn to Water Days	Use +/- to change from 4 to 1 to hide extra programs. 1 will show only program A, start time 1. 4 will show all programs and start times.
SOLAR SYNC DELAY	Hold + and turn to Solar Sync	Set number of days before Solar Sync begins adjusting run times. Allows landscape establishment for a set period of days, before Solar Sync begins adjusting automatically.
CLIK DELAY	Hold + and turn to Off	Set number of days for watering to remain off, after sensor has been activated and restored.
TOTAL RUN TIME	Turn to Run Times. Press ◀ when station 1 is shown, PRG to select other programs.	Calculates and displays total of all run times in a program start time.
TEST PROGRAM	Hold PRG 3 secs.	Runs all stations in controller for the time entered for test or diagnostic purposes.
EASY RETRIEVE™	Hold + and PRG to Save Hold – and PRG to Restore	Saves all program information to restore at a later time.
TOTAL RESET	PRG and RESET button	Erases all watering information.
QUICK CHECK™	+ , – , ◀ , ▶ together, then +	Checks all stations for wiring problems.
RUN PROGRAM	Hold ▶ , PRG to select	Runs all stations in selected program; use ▶ to advance to next station manually.

TROUBLESHOOTING GUIDE		
Display	Possible Cause	Solutions
DISPLAY SHOWS "ERR" WITH NUMBER	Short in field wiring, or bad solenoid.	Check field wiring and valve solenoid. Press any button to clear ERR message.
DISPLAY SHOWS P "ERR"	Short in Pump/Master Valve wiring or solenoid.	Check wiring and solenoid at PMV . Check specifications for Pump Start Relay.
DISPLAY SHOWS SP "ERR"	SmartPort error. Electrical noise is present near connection to remote or other SmartPort device.	Move connections away from sources of electrical noise.
DISPLAY SHOWS "NO AC"	There is no AC power to the controller.	Check fuse/breaker and incoming power supply to controller.
DISPLAY SHOWS WATERING BUT NO WATER IS OCCURRING	Problem in field wiring.Problem with solenoids. No water pressure to system.	Check field wiring (voltmeter). Check valve solenoid(s). Verify water source is open.
FROZEN OR GARBLED DISPLAY	Power surge	Reset controller.
RAIN SENSOR DOES NOT STOP IRRIGATION	Jumper wire is not removed. Sensor switch in BYPASS position.	Remove jumper wire on SEN terminals. Set sensor switch to Active position.
CONTROLLER SEEMS TO WATER CONTINUOUSLY	Too many start times.	One Start Time operates all stations in a program. Remove unnecessary start times.





LEGEND:

- ① IRRIGATION CONTROLLER (I2C-800-PL) PER PLAN
- ② IRRIGATION CONTROL WIRE IN CONDUIT
SIZE AND TYPE PER LOCAL CODES
- ③ ELECTRICAL SUPPLY CONDUIT
CONNECT TO POWER SOURCE, J-BOX INSIDE
CONTROLLER
- ④ ADJACENT SURFACE TO MOUNT CONTROLLER PER PLAN

NOTE
MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL,
CONTROLLER SHALL BE HARD-WIRED TO GROUNDED
110 VAC POWER SOURCE

XX IRRIGATION CONTROLLER (I2C-800-PL)
Hunter C.ICC2.01

NOT TO SCALE