# X-CORE®

QUICK START GUIDE



X-Core Irrigation Controller Programming Guide

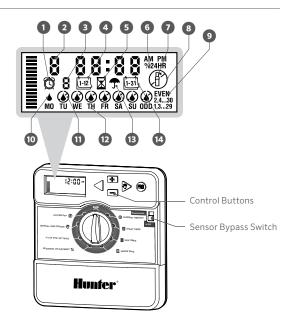




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## X-Core Components



0	Start Time Symbol	8	Sprinkler Off Days
2	Station Number	9	Odd/Even/Interval Days
3	Program Indicator	10	Active Water Day
4	Month Symbol	0	Non-Active Water Day
5	Run Time Symbol	<b>D</b>	Day of Week
6	Seasonal Adjust (%)	B	Rain Sensor Active/Bypass
0	Station Running	14	Day Symbol

#### SETTING THE CURRENT DATE AND TIME

- 1. Turn the dial to the **DATE/TIME** position.
- 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.
- Press the ➤ button to move to hours. Use the + and buttons to change the hour shown on the display.
- Press the ➤ button to move on to minutes. Use the + and buttons to change the minutes shown in the display.
- 8. Turn the dial to the **RUN** position. Date and time are now set.

**IMPORTANT:** The controller dial must be in **RUN** position to enable automatic irrigation.

#### **SETTING A PROGRAM START TIME**

- Turn the dial to the START TIMES position.
- Use the PRG button to select program (A, B, or C).
- 3. Use the + and buttons to change the Start Time. The Start Time advances in 15-minute increments.
- Press the ➤ button to add another Start Time, or PRG button to set a Start Time for the next program.
- 5. Turn the dial to the **RUN** position.

#### **ELIMINATING A PROGRAM START TIME**

- 1. Turn the dial to the **START TIMES** position.
- Press the right arrow to locate the desired START TIME.
- Press the + or buttons to reach OFF located between 11:45 PM and 12:00 AM.
- Press the PRG button to view/edit additional programs. Repeat steps 1-3 if necessary.

#### **SETTING A STATION RUN TIME**

- Turn the dial to the RUN TIMES position.
- 2. Use the **PRG** button to select program (**A**, **B**, or **C**).
- Use the + and buttons to change the station run time on the display. You can set station run times from 1 minute to 4 hours.
- 4. Press the ▶ button to advance to the next station.
- Repeat for each station.

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#### SETTING WATER DAYS

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

#### SELECTING ODD OR EVEN DAYS TO WATER

- Press ➤ past all days of week to ODD or EVEN.
- Press + to select or to cancel ODD or EVEN.

#### SELECTING INTERVAL WATERING

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

**NOTE:** To exit interval mode, press the ▶ or ◄ repeatedly until specific days of the week appear.

#### SEASONAL ADJUST

- Changes all run times by a percentage for local conditions.
- Press + or to change from 10% to 150% of original run times.

#### MANUAL SINGLE STATION

- Turn dial to Manual Single Station 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.
- Press and hold ▶ button for three seconds.
- 3. Press **PRG** to select program.
- Release button for two seconds. Program will begin.
- 5. Press ▶ to advance to another station within the Program.

#### **ONE-TOUCH MANUAL START AND ADVANCE**

- 1. Hold down the right button for two seconds.
- 2. Press the PRG button to select program.
- 3. Press the left or right button to select a station.
- 4. Press the + or button to change the run time.
- After a two-second pause, the program will begin. At any time during manual cycle, use the left or right buttons to navigate from station to station manually.

#### **TEST PROGRAM**

Runs all stations for a test run time.

- Press and hold PRG for three seconds.
- 2. Station 1 appears. Press + or to enter run time.
- 3. Wait two seconds, each station will run for test run time.

#### SYSTEM OFF

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

#### **PROGRAMMABLE RAIN OFF**

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

#### **SENSOR BYPASS**

Overrides sensor shutdown to allow watering.

- Move sensor BYPASS switch to BYPASS position.
- 2. Return switch to **ACTIVE** to allow sensor shutdown.

#### **SCHEDULING TIPS**

- A program is a watering schedule that includes Start Time(s), Run Time(s), and Water Day(s).
- A Start Time is the time of day the Stations in the Program start watering.
- A Run Time is the watering length per Station (zone).
- One Start Time is needed to run the entire program.

#### **FULL RESET**

- Press and hold down the -, ▶, and PRG buttons simultaneously.
- Press and release the RESET button on the right side of the controller.
- 3. When DONE appears on the LCD, release the ¬, ► and PRG buttons. The display should now show 12:00 AM. The memory has now been cleared and the controller may be reprogrammed.

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## Troubleshooting

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 <b>ERR</b> message.		
DISPLAY SHOWS P "ERR"	Short in P/MV wiring or solenoid.	Check wiring and solenoid at <b>P/MV</b> . 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. Verify that controller has been wired correctly.		
	of other smartport device.	Wire from SmartPort	Attach wire to:	
		Red	24 VAC (AC terminal 1)	
		White	24 VAC (AC terminal 2)	
		Blue	Remote terminal (REM)	
DISPLAY SHOWS  WATERING BUT NO WATERING 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 to open.		
FROZEN OR GARBLED DISPLAY	Power surge occurred.	Reset controller.		
RAIN SENSOR DOES NOT STOP IRRIGATION	Jumper wire is not removed. Sensor switch in <b>BYPASS</b> position.	Remove jumper wire on <b>SEN</b> terminals. Set sensor switch to Active position.		
CONTROLLER SEEMS TO WATER CONTINUOUSLY	Too many <b>START TIMES</b> .	One Start Time operates all stations in a program. Remove unnecessary Start Times.		

Feature	Where Found	Description
PROGRAMMABLE SENSOR OVERRIDE	Hold - and turn to <b>START TIMES.</b>	Sets individual stations to ignore sensor shutdowns. Select stations with ◀ or ▶, (use +/-) to change to <b>OFF</b> to ignore sensor.
CYCLE AND SOAK	Hold + and turn to <b>RUN TIMES</b> . Enter Cycle, press <b>PRG</b> 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 <b>RUN TIMES.</b>	Inserts a delay (seconds or minutes) between stations in a run time, for slow valves or recharging tanks.
SOLAR SYNC® DELAY	Hold - and turn to SOLAR SYNC.	Allows the user to postpone seasonal adjustment changes from being made by Solar Sync for up to 99 days. Use the +/- to increase/decrease the number of days the delay should run.
HIDE PROGRAMS	Hold – and turn to WATER DAYS.	Use +/- to change from 4 to 1 to hide extra programs. Option 1 will show only program A, Start Time 1. Option 4 will show all programs and Start Times.
CLIK-DELAY Hold + and turn to OFF. Set number of days for watering to activated and restored.		Set number of days for watering to remain off, after sensor has been activated and restored.
TOTAL RUN TIME	Turn to <b>RUN TIMES</b> . Press <b>◄</b> when station 1 is shown, <b>PRG</b> to select other programs.	Calculates and displays total of all run times in a program Start Time.
EASY RETRIEVE®	Hold + and PRG to Save. Hold - and PRG to Restore.	Saves all program information to restore at a later time.
TOTAL RESET Hold PRG and press RESET Returns to factory defaults and erases water button.		Returns to factory defaults and erases watering schedule and settings.
QUICKCHECK™	+, -, <b>-</b> , <b>&gt;</b> together, then <b>+</b> .	Checks all stations for wiring problems.

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This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by taking one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that of which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of FCC rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Hunter Industries could void the user's authority to operate this device. If necessary, consult a representative of Hunter Industries Inc. or an experienced radio/television technician for additional suggestions.

The following statement is applicable when irrigation controller is used with accessory Wi-Fi device: To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation.

To ensure compliance, operation at closer than this distance is not recommended. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

#### Certificate of Conformity to European Directives

Hunter Industries declares that the irrigation controller complies with the standards of the European Directives of "electromagnetic compatibility" (2014/30/EU), "low voltage" (2014/35/EU), and "radio equipment" (2014/53/EU).

#### Innovation, Science and Economic Development Canada (ISED) Compliance Notice

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

- 1. This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- L'appareil ne doit pas produire de brouillage, et
- L'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.