# X-CORE® CONTROLLER

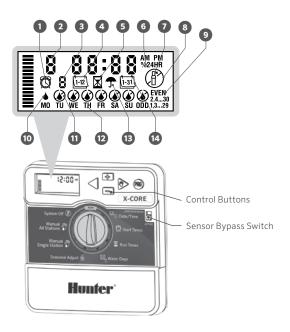
**QUICK START GUIDE** 



X-Core Irrigation Controller Programming Guide







0	Start Time Symbol	8	Sprinkler Off Days
2	Station Number	9	Odd/Even/Interval Days
3	Program Indicator	0	Active Water Day
4	Month Symbol	0	Non-Active Water Day
6	Run Time Symbol	<b>1</b>	Day of Week
6	Seasonal Adjust (%)	13	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.
- 2. The current year will flash. Use the + and buttons to change the year. Push the ▶ button to set the month.
- The month will flash. Use the + and buttons to change the month. Press the ▶ button to advance to the day setting.
- The day will flash. Use the + and buttons to change the day of the month. Press the ► button to advance to the time setting.
- 5. The time will display. Use the + and buttons to select AM, PM, or 24 HR to show 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.
- 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.

# **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.
- 3. A Run Time is the watering length per Station (zone).
- 4. One Start Time is needed to run the entire program.

#### SETTING A PROGRAM START TIME

- 1. Turn the dial to the **START TIMES** position.
- 2. 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.
- 4. 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.
- 2. 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.
- 4. Press the **PRG** button to view/edit additional programs. Repeat steps 1–3 if necessary.

# SETTING A STATION RUN TIME

- 1. Turn the dial to the **RUN TIMES** position.
- 2. Use the PRG button to select program (A, B, or C).
- 3. 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.
- 5. Repeat for each station.

#### SETTING WATER DAYS

- 1. Turn the dial to the **WATER DAYS** position.
- 2. 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 will show the currently selected day of the week. Press + or - to select days for watering ♠ or no water.

#### SELECTING ODD OR EVEN DAYS TO WATER

- 1. Press ▶ past all days of week to **ODD** or **EVEN**.
- 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.

**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

- 1. 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.
- 2. Press and hold ▶ button for three seconds.
- 3. Press PRG to select program.
- 4. 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.
- 5. 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.

- 1. 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  $\mbox{\bf OFF}$  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 0. 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.

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

#### **FULL RESET**

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

# 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 ERR 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.		
		Wire from SmartPort	Attach wire to:	
		Red	24 VAC (AC terminal 1)	
		White	24 VAC (AC terminal 2)	
		Blue	Remote terminal (REM)	
DISPLAY SHOWS "NO SS"	Solar Sync Sensor not connected properly	If Solar Sync is not connected, press the reset button on the right-hand side of the controller.		
DISPLAY SHOWS  WATERING BUT NO WATERING IS OCCURRING	Problem in field wiring or solenoids; no. No water pressure to system	Check field wiring (voltmeter) and Check valve solenoid(s). Verify water source is open.		
FROZEN OR GARBLED DISPLAY	Power surge occurred	Press the reset button in the lower wiring compartment.		
RAIN SENSOR DOES NOT STOP IRRIGATION	Jumper wire is not removed; 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 ▶, and 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 <b>SOLAR SYNC</b> .	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 + or - 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 <b>OFF.</b>	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 ◀ 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 <b>PRG</b> to Save. Hold - and <b>PRG</b> to Restore.	Saves all program information to restore at a later time.
TOTAL RESET	Hold <b>PRG</b> and press <b>RESET</b> button.	Returns to factory defaults and erases watering schedule and settings.
QUICKCHECK™	Press +, ¬, ∢, ▶ simultaneously, then +.	Checks all stations for wiring problems.

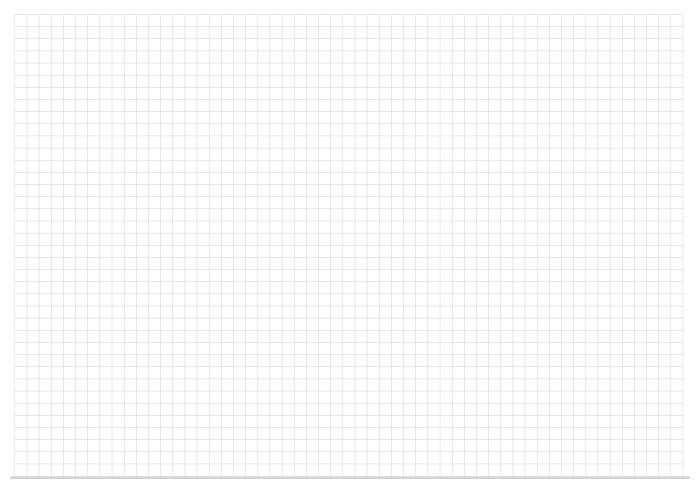
# **FCC Notice**

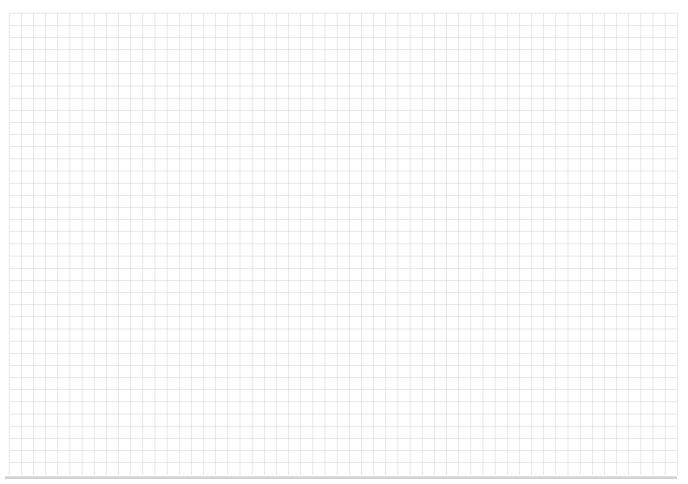
This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate 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.

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.









Helping our customers succeed is what drives us. While our passion for innovation and engineering is built into everything we do, it is our commitment to exceptional support that we hope will keep you in the Hunter family of customers for years to come.

Denise Mullikin, President, Landscape Division