



# Integration Note

Manufacturer:	Hunter Industries
Model Number(s):	SRC, SRC Plus, Pro-C, ICC, X-CORE, I-CORE
Minimum Core Module Version:	
Document Revision Date:	2/17/2017

## OVERVIEW AND SUPPORTED FEATURES

Installing a Hunter irrigation controller can be broken down into the following steps:

1. Work with the client and the irrigation contractor to determine which Hunter controller to use, and how to organize the Zone Groups. See **Suggested Design Procedure** below.
2. Install and connect the **SerialBrick – Irrigation** electrically to the Hunter controller. See **Installation Overview** for the list of steps required.

**IMPORTANT NOTE for I-CORE: The I-CORE Irrigation System requires that you use REV C of the Serial Brick for Irrigation in order to function.**

3. Integrate the irrigation system into the ELAN system and test proper operation. This step is outlined in **ELAN Configuration Details**.

### HUNTER IRRIGATION SYSTEMS SUPPORT THE FOLLOWING FEATURES:

**Familiar Product:** The Hunter controllers are familiar to the industry, and can be well understood by all irrigation contractors.

**Manual Control:** Hunter controllers can be easily run in manual mode right at the controller to test operation, check for broken or clogged heads, and perform other standard maintenance, without requiring access to the ELAN system.

**Rain Sensor:** All supported Hunter controllers allow the connection of a rain sensor to prevent watering when not needed. The ELAN system detects the status of the rain sensor and displays it in the history view (version 4 and later).

**Devices Supported:** The X-CORE, I-CORE, SRC, Pro-C and ICC lines of controllers support a wide variety of residential, light commercial and commercial installations. Anywhere from 3 to 48 zones are supported, with various plastic and stainless steel enclosure options. Refer to the table in **Suggested Design Procedure** for details of the Hunter lines: refer to the Hunter Web site for more details ([www.hunterindustries.com](http://www.hunterindustries.com)).

Any feature not specifically noted as “supported” is not supported.

### IMPORTANT NOTES WHEN WORKING WITH THE HUNTER CONTROLLER:

The **I-CORE** Irrigation System requires that you use **REV C** of the Serial Brick for Irrigation in order to function.

The **SerialBrick-Irrigation** **must** be installed in close proximity to the irrigation controller.

The ELAN system communicates with the Hunter controllers using the Hunter SmartPort®, which is a one-way communication link. As a result, any schedule information on the controller cannot be read by the ELAN system.

The Hunter irrigation controller should be left in the **OFF** position for day-to-day operation by the ELAN system. With the controller in the **OFF** position, the ELAN system will be able to turn on and off any zone, as well as detect the state of the rain sensor.

Manual operation of any zone directly from the irrigation controller is available at any time, as with any standard Hunter installation. Return the controller to the **OFF** position when finished.

## SUGGESTED DESIGN PROCEDURE

### STEP 1: DETERMINE AN APPROPRIATE PANEL

Model	Stations (Zones)	Comments
X-CORE	2, 4, 6, or 8	Plastic Indoor or Outdoor
I-CORE	6 to 42	Plastic or Metal, Indoor or Outdoor
SRC Plus	6 or 9	Plastic, Indoor, Wall Mount
Pro-C	3, 6, 9, 12 or 15	Plastic, Indoor or Outdoor, Wall Mount
ICC (Plastic)	8 to 32	Plastic, Indoor or Outdoor, Wall Mount
ICC (Plastic Pedestal, or Metal)	8 to 48	Plastic (Pedestal) or Metal (Wall Mount or Pedestal), Indoor or Outdoor

The irrigation contractor will typically work with the client to determine how many zones are needed, and where the zones will be placed.

During this planning process, work with the client and the irrigation contractor to assist in the selection of a controller that will satisfy their requirements and also tie into the ELAN system. Refer to the table above and the details available on the Hunter Web site.

### STEP 2: ORGANIZE THE ZONES INTO GROUPS

Before configuring the ELAN system, you should work with the client (with input from the irrigation contractor or landscaper) to put the zones into groups: one group for each primary plant type or area.

Typical Zone Groups include:

- Lawn: these zones cover grass areas and are typically watered every few days for a relatively long time to promote deep root growth.
- Flower Beds: these are zones in a garden that may be watered every day for a relatively short period of time.

Organizing the zones into Zone Groups is important because the ELAN Viewer interface displays and manages the irrigation scheduling by Zone Groups. As an example, the user selects the days to water for each Zone Group, not for each zone.

## INSTALLATION OVERVIEW

The following steps are needed for installation.

Refer to the diagrams that follow for various wiring scenarios.

1. During the rough-in phase, run a Cat5 cable from the irrigation controller location to the ELAN system.

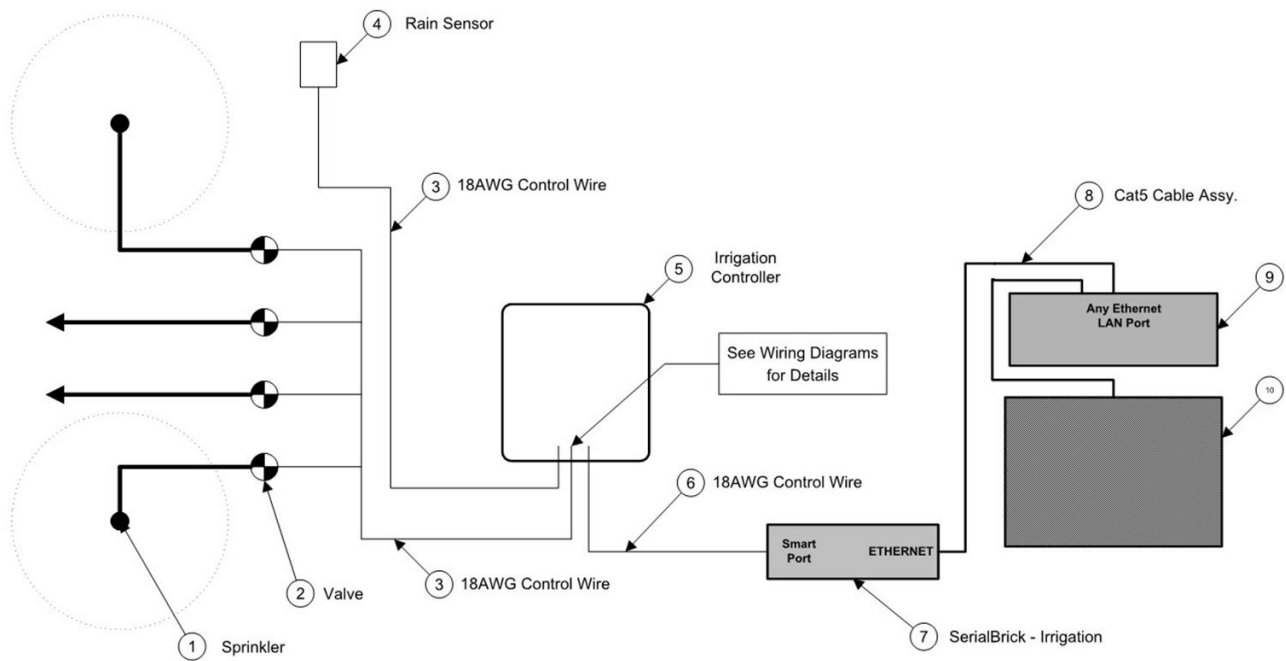
2. Install the irrigation controller and test that all zones function normally in manual mode using the Hunter panel control.

**NOTE: The I-CORE Irrigation System requires that you use REV C of the Serial Brick for Irrigation in order to function.**

3. Install the **SerialBrick – Irrigation** adjacent to the irrigation controller. The **SerialBrick – Irrigation** **must** be installed in close proximity to the irrigation controller location in a weather proof environment. You may wish to install a single-gang outlet adjacent to the controller to cleanly terminate the Cat5 to an RJ45 Female connector.
4. Electrically connect the **SerialBrick – Irrigation** to the Hunter SmartPort® and to the Ethernet network. Refer to the wiring diagrams below.

## CONNECTION DIAGRAM

The diagram below shows an overview of a typical system. Refer to the **Bill of Materials** for additional detail, including specific part numbers.

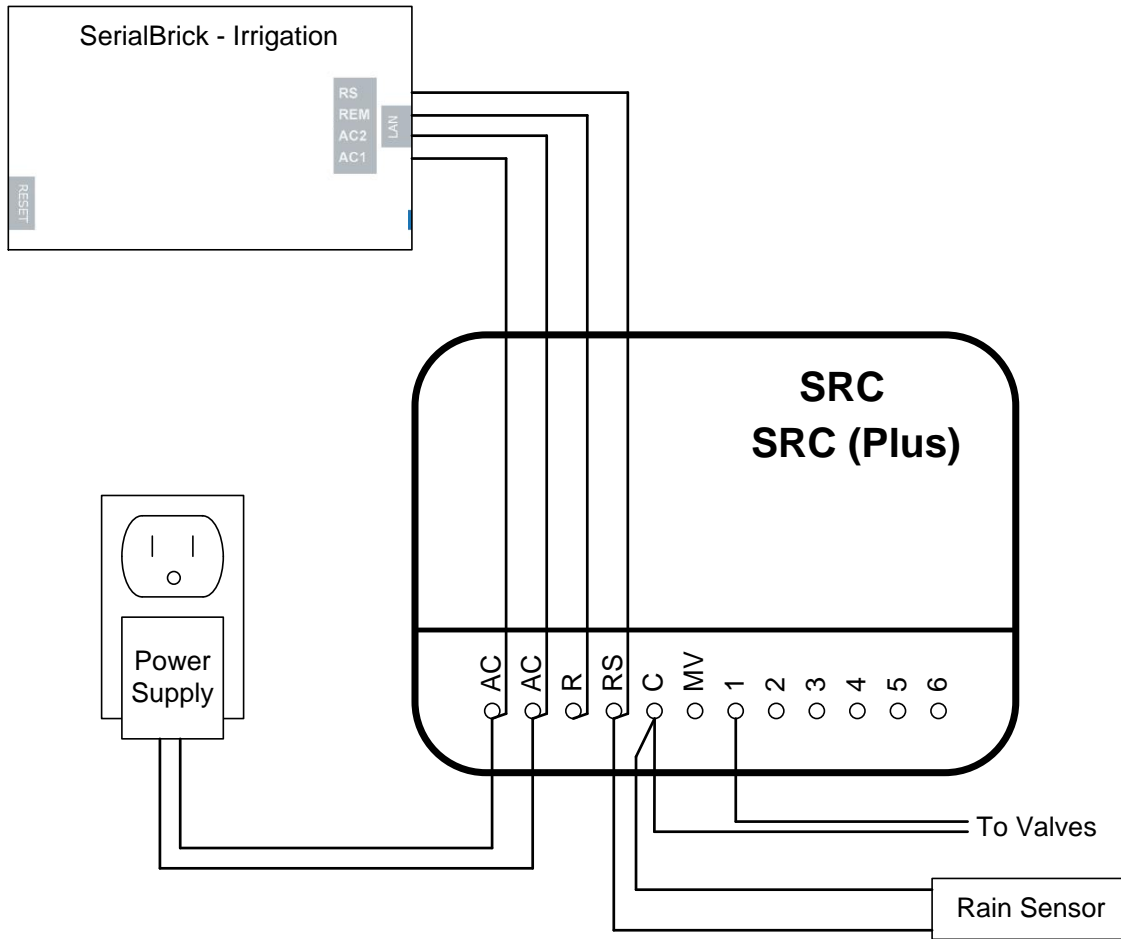


## BILL OF MATERIALS

#	Device	Manufacturer	Part Number	Protocol	Connector Type	Notes
1	Sprinkler	Various	N/A	N/A	N/A	
2	Valve	Various	N/A	24VAC	Pigtail	
3	18AWG Control Wire	Various	N/A	24VAC	Pigtail	
4	Rain Sensor	Hunter	Mini-Click	Various	Pigtail	
5	Irrigation Controller	Hunter	SRC, SRC Plus, Pro-C, ICC, XCORE	24VAC X SmartPort	Terminal Strip	
6	18AWG Control Wire	Installer	N/A	SmartPort	Pigtail	
7	SerialBrick - Irrigation	ELAN	HWEB101	SmartPort X IP	Terminal Strip X RJ-45 Female	REVC Required for iCore
8	Cat5 Cable Assy.	Installer	N/A	IP	RJ-45 Male X RJ-45 Male	
9	Network Switch	Various	N/A	IP	RJ-45 Female X RJ-45 Female	Use any available LAN port
10	ELAN System Controller	ELAN	Various	IP	RJ-45 Female	

**Note:** The EdgeBrick must be placed in close proximity to the Hunter panel (within 10 feet), and the length of the run placed on the Ethernet side of the EdgeBrick.

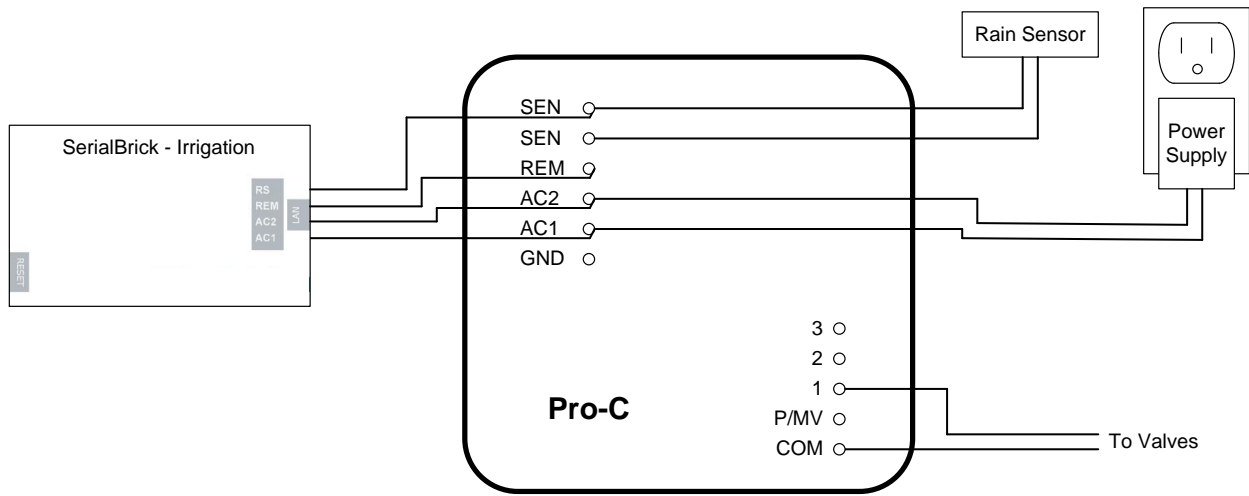
**WIRING DIAGRAM 1: HUNTER SRC, SRC PLUS**



**Note:** If no rain sensor is being used, short the rain sensor pins instead to simulate a “no rain” state. Failing to either attach a rain sensor or short the pins will prevent ELAN from controlling the Hunter panel.

**IMPORTANT NOTE FOR RAIN SENSOR:** The Hunter documentation instructs you to connect the common from the valves to the RS terminal, while we show the common going to the C terminal above. To enable manual control from the ELAN Viewer when the rain sensor is open, you must wire the common to the C terminal as shown.

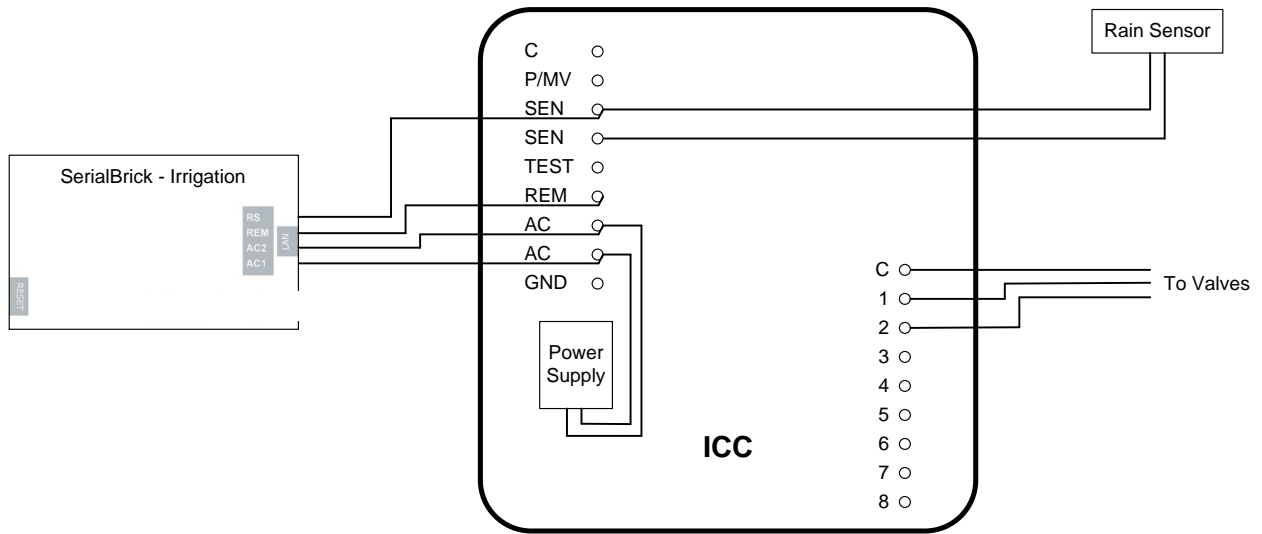
**WIRING DIAGRAM 2: HUNTER PRO-C**



**Note:** The **TOP** rain sensor terminal of the Pro-C goes to the **RS** terminal on the **SerialBrick - Irrigation**.

**Important Note:** If no rain sensor is being used, short the rain sensor pins instead to simulate a “no rain” state. Failing to either attach a rain sensor or short the pins will prevent ELAN from controlling the Hunter panel.

**WIRING DIAGRAM 3: HUNTER ICC**

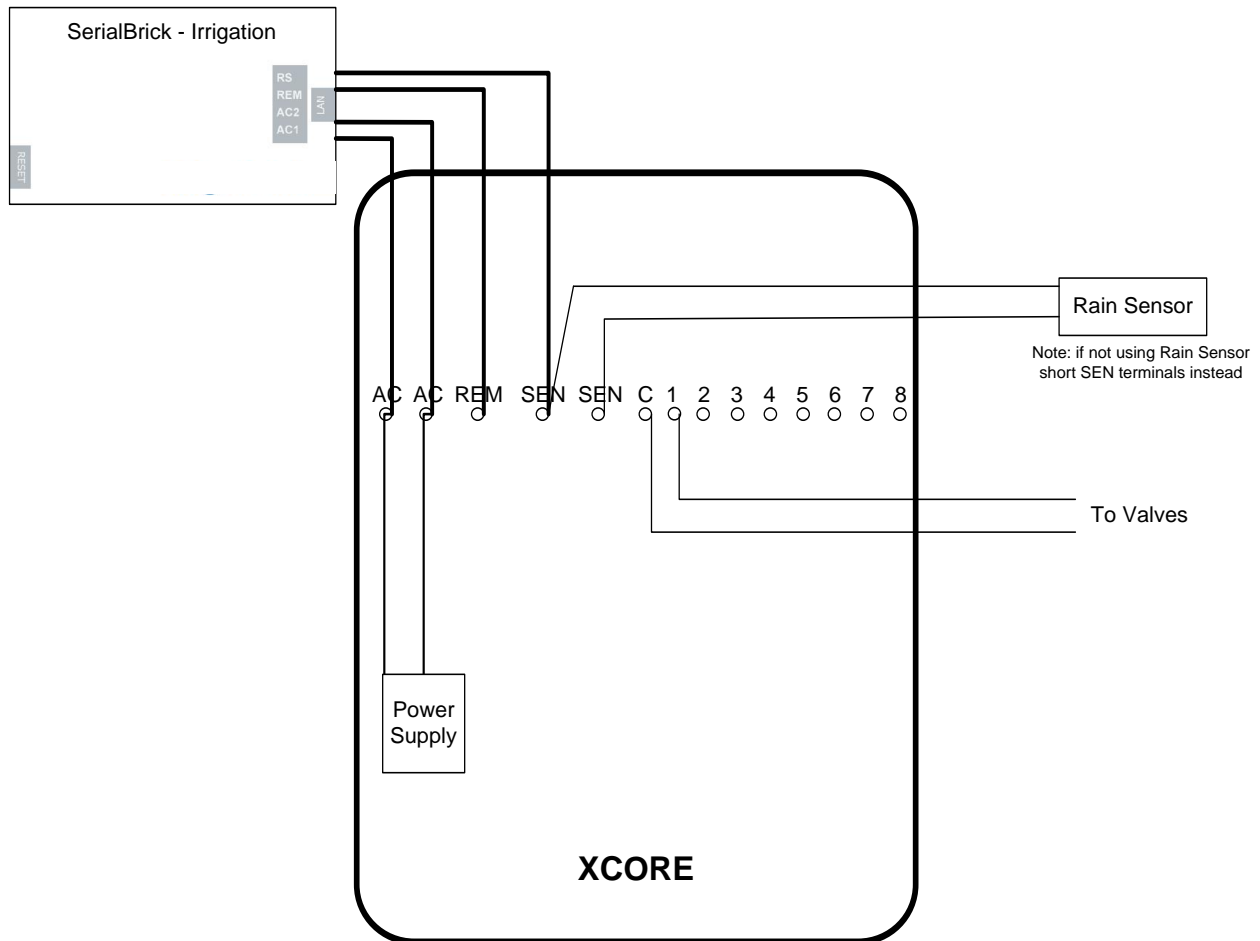


**Note:** The **TOP** rain sensor terminal of the ICC goes to the **RS** terminal on the **SerialBrick - Irrigation**.

**Important Note:** If no rain sensor is being used, short the rain sensor pins instead to simulate a “no rain” state. Failing to either attach a rain sensor or short the pins will prevent ELAN from controlling the Hunter panel.

## WIRING DIAGRAM 4: HUNTER X-CORE

**Important Notes:** The X-CORE may support more advanced sensors, such as solar sensors, but these have not been evaluated with ELAN and are not expected to function.



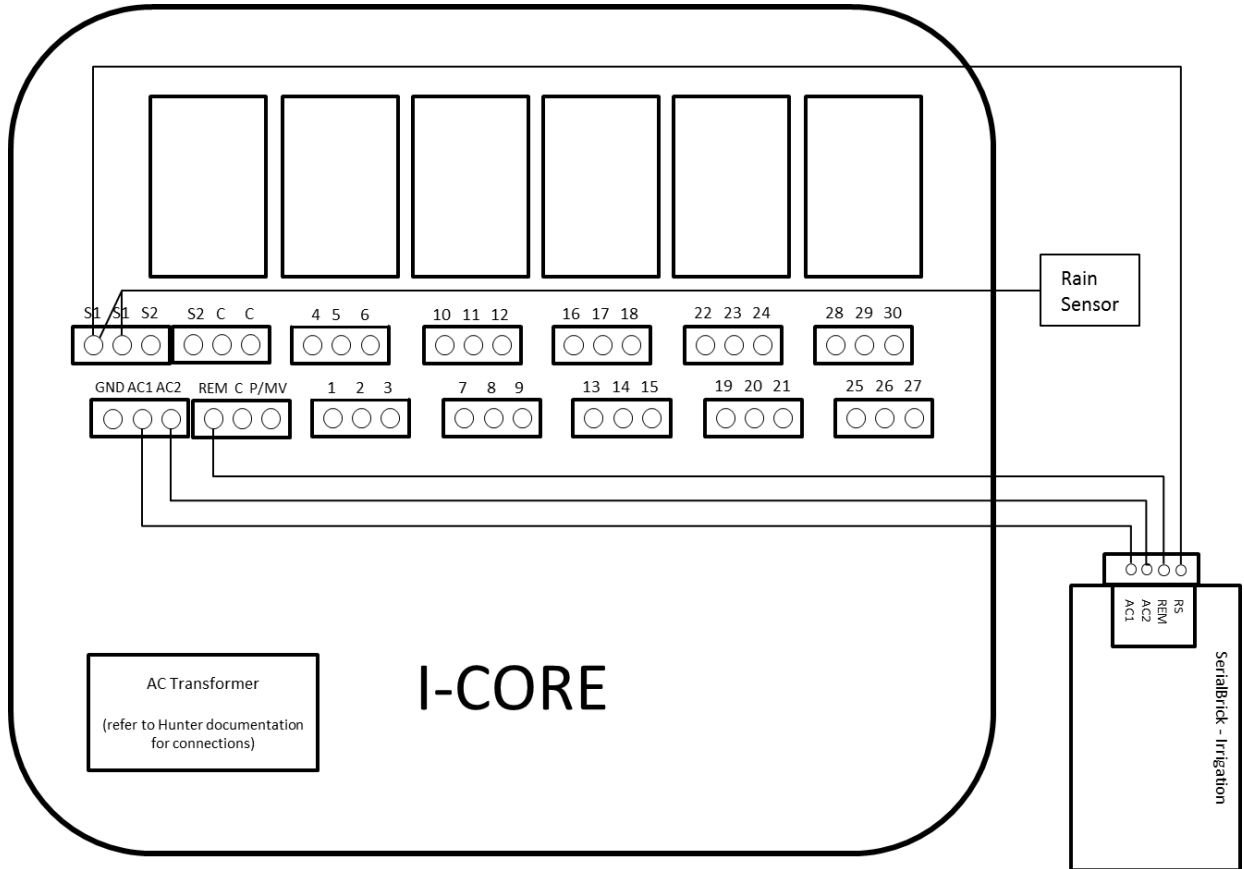
**Note:** The **LEFT** SEN terminal of the X-CORE goes to the **RS** terminal on the **SerialBrick - Irrigation**.

**Important Note:** If no rain sensor is being used, short the rain sensor pins instead to simulate a "no rain" state. Failing to either attach a rain sensor or short the pins will prevent ELAN from controlling the Hunter panel.

## WIRING DIAGRAM 5: HUNTER I-CORE

### Important Notes:

1. The I-CORE panel requires a rev C SerialBrick Irrigation.
2. The I-CORE panel supports up to 3 weather sensors. ELAN will only track the state of Sensor 1.
3. The I-CORE may support more advanced sensors, such as solar sensors, but these have not been evaluated with ELAN and are not expected to function.
4. The I-CORE supports custom settings for which zones the rain sensor will have an effect on. ELAN does not support this and will block watering of all zones when the sensor is active.



**Note:** The **LEFT** S1 terminal of the I-CORE goes to the **RS** terminal on the **SerialBrick - Irrigation**.

**Important Note:** If no rain sensor is being used, short the rain sensor pins instead to simulate a “no rain” state. Failing to either attach a rain sensor or short the pins will prevent ELAN from controlling the Hunter panel.



## ELAN CONFIGURATION DETAILS

The following table provides settings used in the ELAN Configurator when connecting to a Hunter irrigation controller. Please refer to the Configurator Reference Guide for more details.

In the table below:

- “<Select>” Select the appropriate item from the list (or drop-down) in the Configurator.
- “<User Defined>”, etc. Type in the desired name for the item.
- “<Auto Detect>”, etc. The system will auto detect this variable.

Devices	Variable Name	Setting	Comments
<b>Communication Devices</b>	<b>Name</b>	<Auto Detect> (Default: <b>Hunter 00-00-00</b> ) (See Note 1)	
	<b>Type</b>	<b>(IP to Serial) SerialBrick</b>	
	<b>Select Brick</b>	<Select>	
	<b>Communication Type</b>	<b>Standard Connection</b>	
	<b>Location</b>	<User Defined> (Not Required)	
<b>Irrigation Controller</b>	<b>Name</b>	<User Defined> (Default: <b>Hunter SRC, Pro-C, ICC</b> )	
	<b>Device Type</b>	<b>Hunter SRC, Pro-C, ICC</b>	
	<b>Location</b>	<User Defined> (Not Required)	
	<b>COM Device</b>	<Auto Detect> (Default: <b>Hunter 00-00-00</b> ) (See Note 1)	
<b>Irrigation Zone Groups</b>	<b>Name</b>	<User Defined>	You must add at least one zone group.
<b>Irrigation Zones</b>	<b>Controller</b>	<Auto Detect>	
	<b>Zone Number</b>	<User Defined> (Default: 1)	This is the Hunter station number or terminal number
	<b>Group</b>	<Select>	
	<b>Zone Name</b>	<User Defined> (Default: <b>New Zone</b> )	
<b>Irrigation Periods</b>	<b>Period Name</b>	<User Defined> (Default: <b>New Period</b> ) (See Note 2)	Add one period for each desired start time.
<b>Notes:</b>			
1. The g! system reads the name from the <b>SerialBrick</b> . The name by default is <b>Hunter: 00-00-00</b> , where the 00-00-00 will show the actual serial number.			
2. There is one period (Morning) by default. Add one period for each addition start time desired, such as <b>Noon</b> , and <b>Evening</b> .			

## COMMON MISTAKES

1. Wiring the **AC1** and **AC2** terminals on the **SerialBrick** – Irrigation backwards. Check the wiring diagram for your model of controller.
2. On the SRC or SRC Plus, failing to wire the rain sensor according to the diagram show in this Integration Note. If you follow the instructions provided in the Hunter documentation then you will not be able to manually turn on a zone from the **ELAN** system (to check the spray pattern, for example) when the rain sensor is open.
3. On the Pro-C and ICC, wiring the rain sensor to the wrong **SEN** terminal. Check the wiring diagram for your model of controller.
4. If the Hunter panel is showing **Err** in its display then the wiring length between the SerialBrick and the Hunter panel may be too long. In this case relocate the SerialBrick closer to the Hunter panel.
5. Not using REV C of the irrigation brick with the I-CORE Panel.