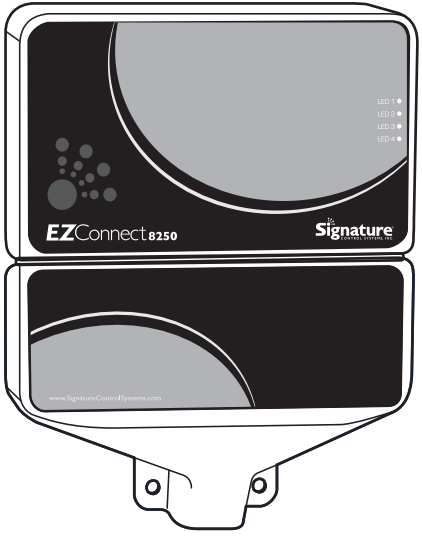
Signature®
CONTROL SYSTEMS, INC.



EZConnect™

8250 Series

Irrigation Controller

Quick Start Guide

www.scs-share.com

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FEATURES

- No complex keypad or display; simple operation via any browser enabled web based device and/or and iOS application
- Stacking start times
- Twelve programmable zones
- Twelve independent programs
- Twenty four events per program
- True calendar clock (Leap year compatible)
- Scheduling options:
  - 12-month calendar
  - Odd/Even
  - Interval (1-31 days)
- Zone run times from one minute to 11 hours 59 minutes
- Cycle test, Manual test with manual advance
- Input and output surge protection
- 1.0 Amp self resetting polyswitch for short-circuit zone protection
- Two sensor inputs: Moisture sensor; Flow sensor; Temperature sensor; Rain Sensor; Wind sensor
- Two expansion ports
- No need for complicated Wi Fi setup; uses power line adaptors to connect remotely located controllers to internet [adaptors sold separately]

• *Please visit www.signaturecontrolsystems.com for the latest Installation & Users Guide.*

INSTALLATION INSTRUCTIONS

The EZ Connect™ 8250 Series can be easily mounted indoors. Find a location near a 120V receptacle (230/240V for international models). Install the EZ Connect™ 8250 Series near eye level if possible. Install the top screw in the wall and adjust the depth for a snug fit. Remove the wiring skirt and suspend the controller on the first mounting screw and insert and tighten the second screw through the lower hole provided in the case (pre-drilled or anchors as necessary).

LOW VOLTAGE WIRING

Low voltage output cables should be enclosed in conduit affixed near the controller. (For field connection, AC wires must have an insulation rated at 75° C minimum). Conduit should be secured near the case (follow local codes). Field wiring is best accomplished with the AC disconnected from the unit.

TERMINAL STRIP

All zone, pump and sensor wire connections made inside the EZ Connect™ 8250 Series utilize screw type connectors that require a small screwdriver. The terminal strips in the controller accept 12 AWG (2.1mm) wire or smaller. (See *Figure 2 on page 14*)

CONNECTING MASTER VALVE OR PUMP-START RELAY

The EZ Connect™ 8250 Series is equipped with a shared circuit to operate either a pumpstart relay or a master valve. Connect one wire from the pump-start relay to COM (common) on terminal strip, the other to PMP/MV (pump/master valve) on the terminal strip. Refer to the pump-start relay manufacturer's instructions for specific installation details. (See *Figure 2 on page 14*)

CONNECTING RAIN/MOISTURE SENSOR

The EZ Connect™ 8250 Series is equipped with run two normally open, normally closed, or pulse type flow sensor ports. Each sensor port is user defined via the SCS-Share.com web site or the SCS-Share iPhone App. to connect a sensor connect the sensor wires to either S1 or S2 terminals. Refer to the sensor manufacturer's instructions for specific installation details. Define sensor type via SCS-Share. (See *Figure 2 on page 14*)

NOTE: Manual operations will ignore the rain sensor

CONNECTING THE TRANSFORMER

120 VAC in United States, Canada and Mexico; 230 VAC in Europe, and 240 VAC in UK, Middle East, Australia and South Africa

NOTE: Refer to and follow local codes if different from these instructions.

CAUTION: Disconnect power

Connect the AC Power from the transformer to terminal strips and route the cable through the slot provided in the case. (See *Figure 2 on page 14*). Attach the wiring skirt to the unit.

Plug the AC power adaptor into the nearest receptacle.

INTERNET CONNECTIONS

There are 3 easy ways to connect to the Internet

1. Direct Ethernet Connection - Simply plug network cable into the Ethernet jack located on the edge of the circuit board. (See page 8)
2. WiFi Network (Sold separately) (See page 9-10)
3. Power Line Network (Sold separately) (See page 11-13)

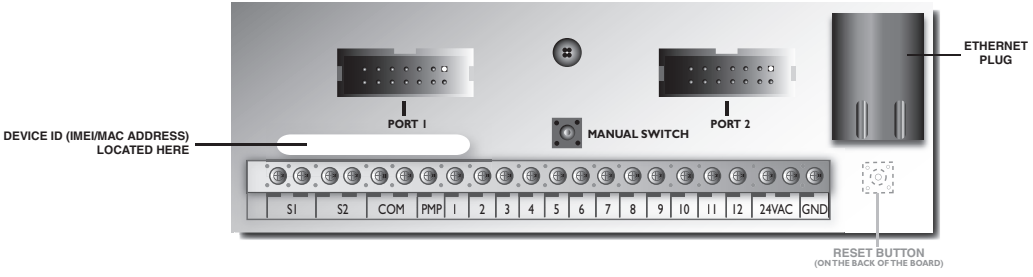
ACCESSORIES

Each EZ Connect™ is equipped with two expansion ports for any combination of the following add on modules: Sensor Expansion Module, 2-Wire Decoder Module, N.O. Relay Module.

EMERGENCY STATION CYCLE

To start a manual cycle press and hold the manual switch (See Figure 1 below) for five seconds release when the four indicator LED's flash. Station one will start for the default run time of three min. The EZ Connect™ incorporates Signature's Manual Advance feature in the MANUAL procedure. Manual Advance allows you to cease the currently running zone and immediately advance to any new zone you select. With the MANUAL procedure running a zone, press the manual switch to advance to a new zone. The indicator LED's sequentially light as each station advances. (led1, led2, led3, led4, led1 and so on) To stop a manual cycle press and hold the manual switch for five seconds release when the led indicators flash.

Figure 1



WATER MANAGEMENT FEATURES

The EZ Connect™ 8250 Series can run conventional time based watering schedules or ET-based scheduling via the purchase of the Intelligent Irrigation Option from the Dealer or directly from www.signaturecontrolsystems.com.

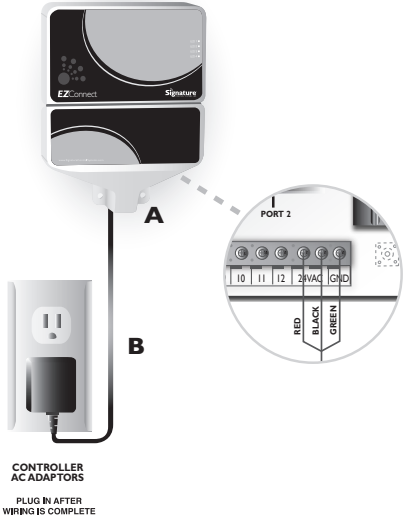
• *Please visit www.signaturecontrolsystems.com for the latest Installation & Users Guide.*

Direct Ethernet Connection

1. POWER ON YOUR 8250 SERIES CONTROLLER

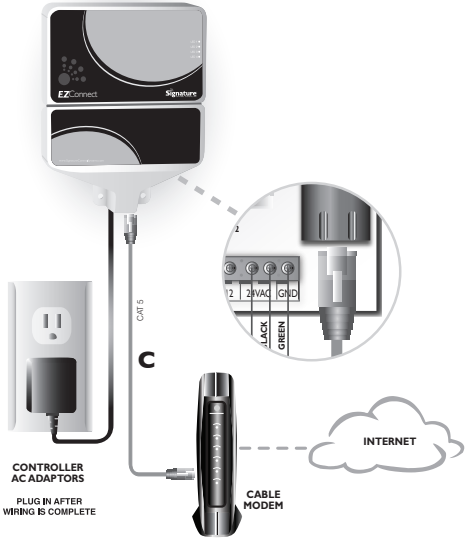
A. Mount n interior wall & complete the wiring

B. Connect incoming power supply wires to terminals as shown. CAUTION only power on controller and adaptor, once all wiring is complete.



2. CONNECT TO ETHERNET MODEM

C. Connect the controller via an Ethernet cable to an Ethernet port or a spare port on the modem connected to the internet.



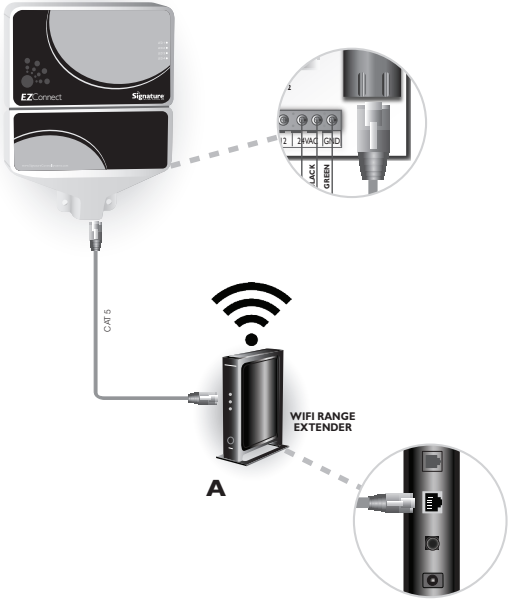
WIFI Network

1. PREPARE YOUR MODEM & ROUTER

Follow your modem's and router's manufacture manual

2. CONNECT YOUR WIFI EXTENDER

A. Plug in your WiFi extender and follow the manufacturers installation steps.

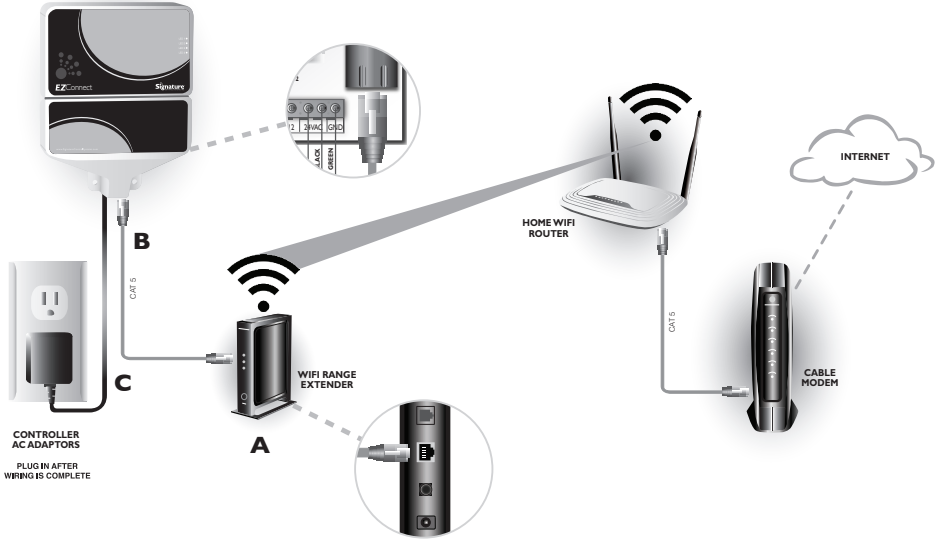


WIFI Network - Continued

3. CONNECT YOUR 8250 SERIES CONTROLLER

B. Connect WiFi extender with 8250 series controller with CAT 5 cable as supplied with the WiFi extender.

C. Plug in controller AC adaptors after wiring is complete



Power Line Network

1. PREPARE YOUR MODEM & ROUTER

Follow the manufacturers installation procedures and steps.

2. PLUG IN MASTER POWERLINE ADAPTOR

Follow your powerline adaptor's manufacture manual

3. CONNECT POWERLINE ADAPTOR MASTER WITH ROUTER

A. Plug in your powerline adaptor master

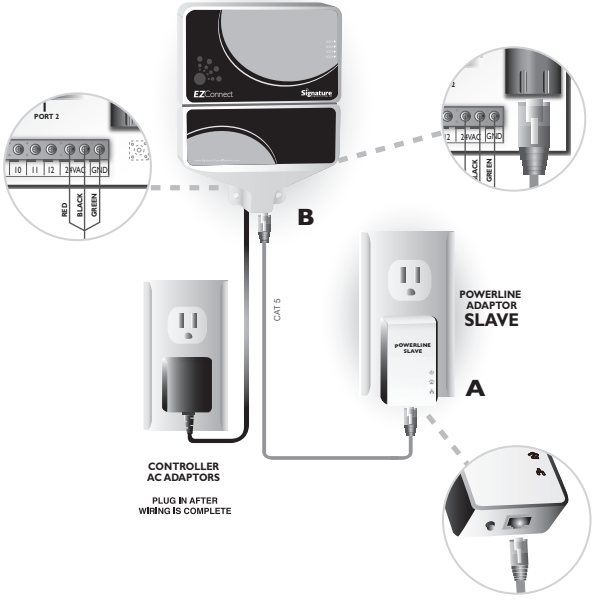
B. Connect powerline adaptor master to the router internet poty with CAT 5

Power Line Network - Continue

4. CONNECT YOUR 8250 SERIES CONTROLLER

A. Connect powerline adaptor with 8250 series controller with CAT 5

B. Plug in controller AC adaptors after wiring is complete



6. POWER LINE NETWORK

Powerline adapter takes advantage of your home's existing electrical wires to transfer data while simultaneously transferring traditional power. Once your Controller has been properly connected, your Controller will connect to the internet as shown below.

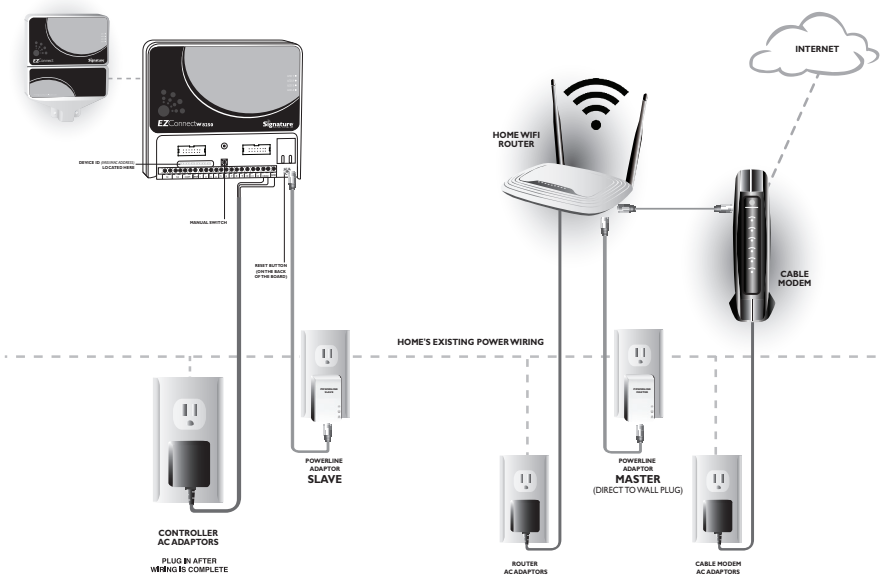


Figure 2

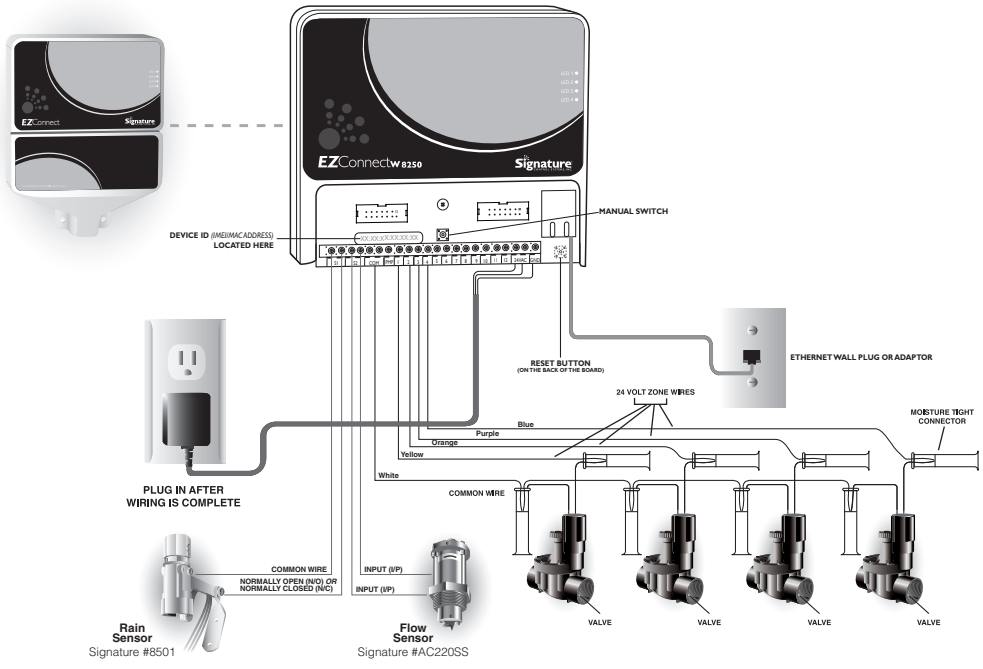
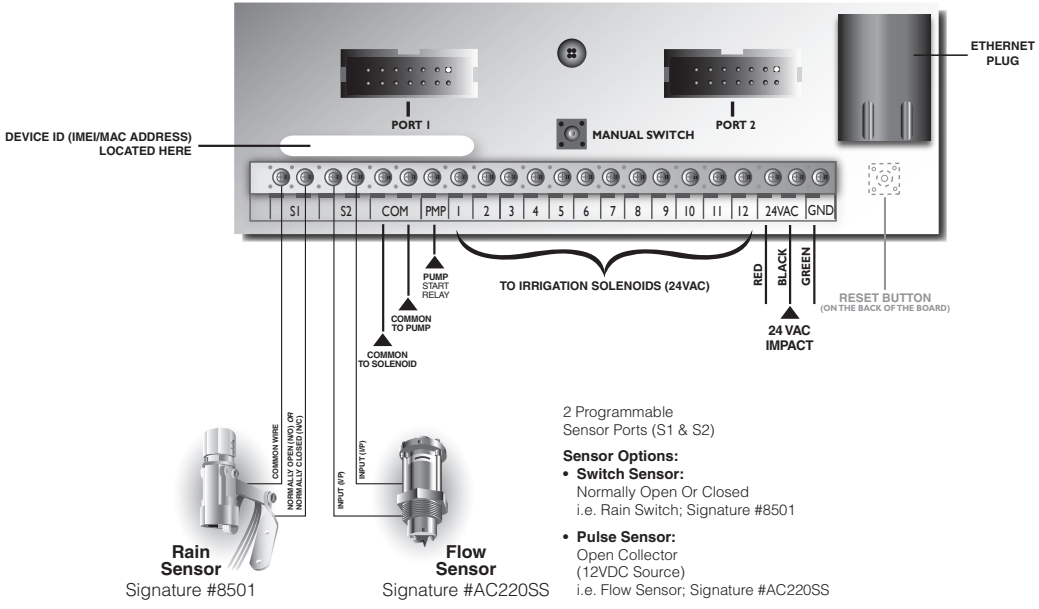

EZConnectw 8250
Signature
MANUAL SWITCH
DEVICE ID (IMEI/MAC ADDRESS) LOCATED HERE
RESET BUTTON (ON THE BACK OF THE BOARD)
ETHERNET WALL PLUG OR ADAPTOR
24 VOLT ZONE WIRES
MOISTURE TIGHT CONNECTOR
Blue
Purple
Orange
Yellow
White
COMMON WIRE
PLUG IN AFTER WIRING IS COMPLETE
COMMON WIRE
NORMALLY OPEN (N/O) OR NORMALLY CLOSED (N/C)
INPUT (I/P)
INPUT (I/P)
VALVE
VALVE
VALVE
VALVE
Rain Sensor
Signature #8501
Flow Sensor
Signature #AC220SS

Figure 3



2 Programmable
Sensor Ports (S1 & S2)

Sensor Options:

- **Switch Sensor:**
  Normally Open Or Closed
  i.e. Rain Switch; Signature #8501
- **Pulse Sensor:**
  Open Collector
  (12VDC Source)
  i.e. Flow Sensor; Signature #AC220SS

PLEASE READ THIS FIRST

SCS-Share.com Account Creation And Setup

- To start, please go to www.scs-share.com using a web browser on a desktop, laptop, or tablet.
- Please follow the instructions on "SCS-Share.com Initial Setup"
  IMPORTANT: To create your new account using admin functions such as adding Controller(s), Zip/City, and User Accounts. Please review the information from page 17 - page 21

iPhone And iPad Users

- Please follow "SCS-Share.com Account Creation And Setup".
- After you create your account on the web, you can visit the App store from your iPhone or iPad to download "SCS-Share" - a free App which is designed for controller functions such as Manual Operation, Programming, and Manual Programming.
- To download "SCS-Share", please follow instructions on "IOS Installation Guide"
  Please review the information from page 22 - page 24

Android Smartphone And Tablet Users

- Please follow "SCS-Share.com Account Creation And Setup".
- After you create your account on the web, you can visit the Google Play store from your Android smartphone or tablet to download "SCS-Share" - a free App which is designed for controller functions such as Manual Operation, Programming, and Manual Programming.
- To download "SCS-Share", please follow instructions on "Android Installation Guide"
  Please review the information from page 25 - page 27

SCS-SHARE.COM INITIAL SETUP (via scs-share.com)

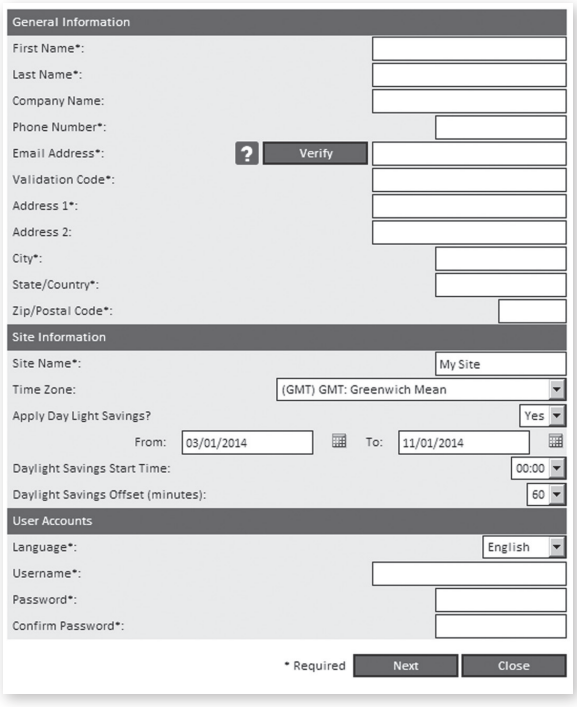
• Creating A New Account

1. Open http://scs-share.com/
2. Click on "Create New Account" Button
3. Fill out the sign up form

Note: Make sure all leading and trailing blank spaces are removed from the Validation Code

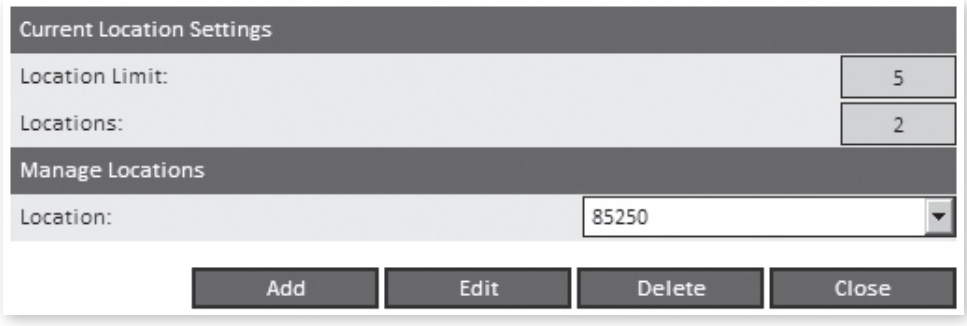
4. The account is active and ready to use
5. All new accounts have the following default settings.
   a. One zip code or city limit
   b. One site limit
   c. Intelligent Water and Weather Service is disabled and sold seperately.
   d. Contact Signature or the Dealer to buy Intelligent Water & Weather Service

Note: To request additional zip codes and/or sites and to enable Smart Water and/or Weather Service the user can contact SCS.



- **First Login and Initial Setup (via scs-share.com)**
  - **Adding A Zip Code (USA) or City (INTL)**
    1. Go to "Account Function"→"Manage Locations", then click on "Add City" or "Add Zip" button and save your settings

Note: Please add a city for international and a zip code for USA



- **Adding A Controller**

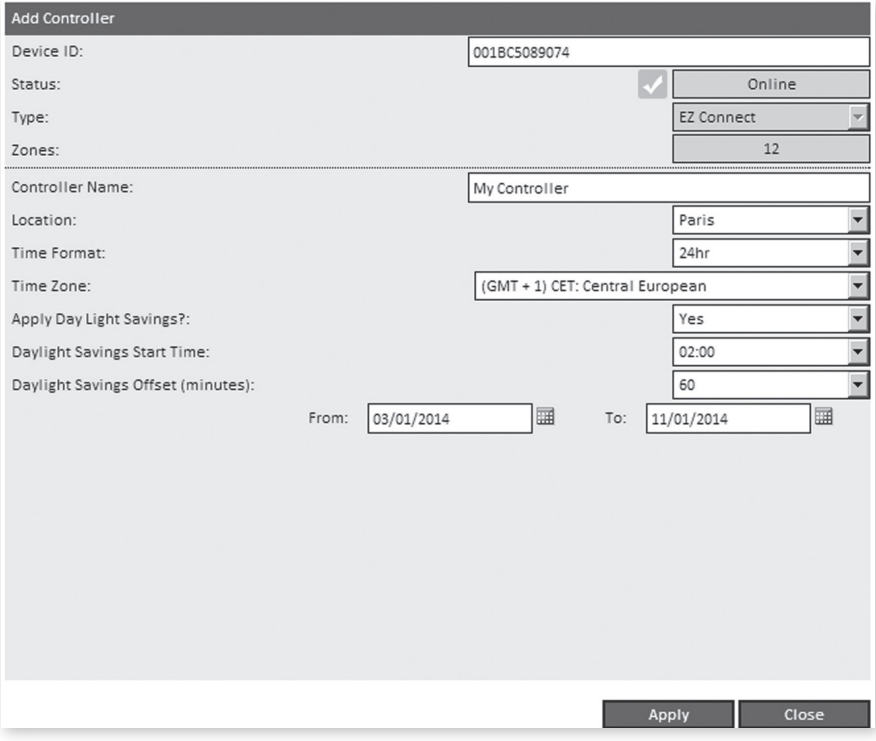
1. Plug in your controller(s) and make sure they have connection/signal

2. Login at scs-share.com using the admin username/password that was set in "Creating a new account" step

3. Have your Device ID (IMEI/MAC Address) ready and go to "Site Function"→ "Add Controller" button
   (See *Figure 1* on page 7 for the location of your Device ID)

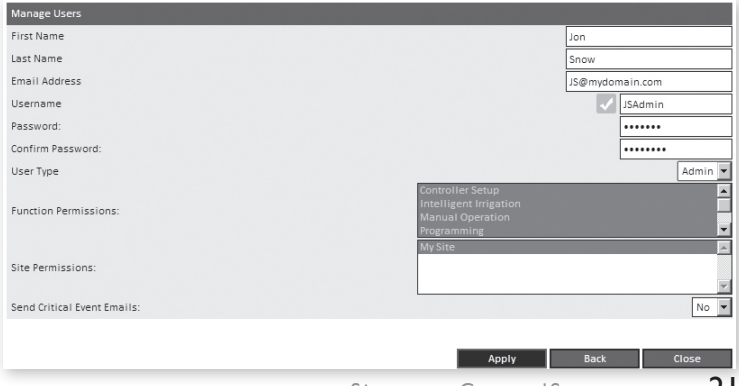
4. Enter the Device ID, a name, and select a location and other details. The website will automatically detect your controller type as long as it is connected.

5. Repeat these steps for all your controllers


Add Controller
Device ID:
001BC5089074
Status:
Online
Type:
EZ Connect
Zones:
12
Controller Name:
My Controller
Location:
Paris
Time Format:
24hr
Time Zone:
(GMT + 1) CET: Central European
Apply Day Light Savings?:
Yes
Daylight Savings Start Time:
02:00
Daylight Savings Offset (minutes):
60
From:
03/01/2014
To:
11/01/2014
Apply
Close

- **Adding User Accounts**

1. Each account can have multiple users (there is no limit on the number of user accounts)
2. Each user account can either be "Admin" or "User"
3. "Admin" accounts have access to all functions and features by default and can add, edit, and delete other user accounts
4. "User" accounts have limited access to functions and features (selected by the Admin) and can't add, edit, and delete other user accounts
5. To add a user account login using an "Admin" account and go to "Account Function"→ "User Management" and then the "Add New User" button
6. Here you can select the user type and assign a username and password. If the user type is "User" you need to select which functions they can have access to

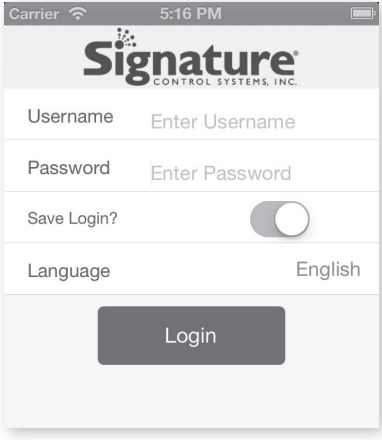


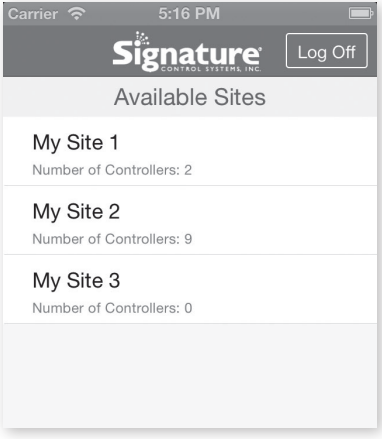
iOS INSTALLATION GUIDE

- Open the App Store App from your device.
- Press the search tab
- Type in SCS Share in the search bar and press enter
- Press the install button on the SCS Share app and the app will automatically download to your device.

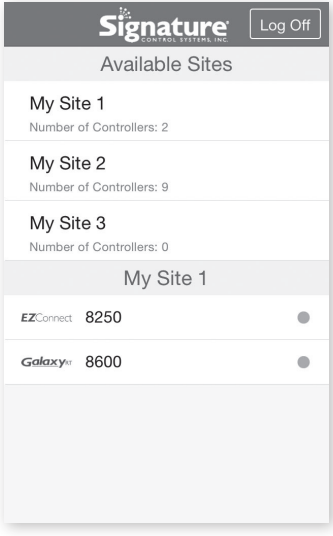
Download on the App Store

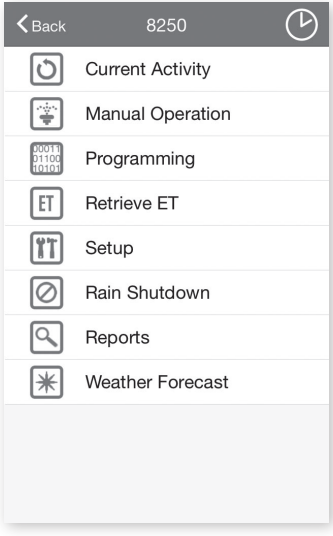
- Make sure that you have done the initial account setup on SCS-Share.com
- Once you have your account set up you can log into that same account on your iOS device from the login screen
- After you log in you will see a user license agreement popup for this app





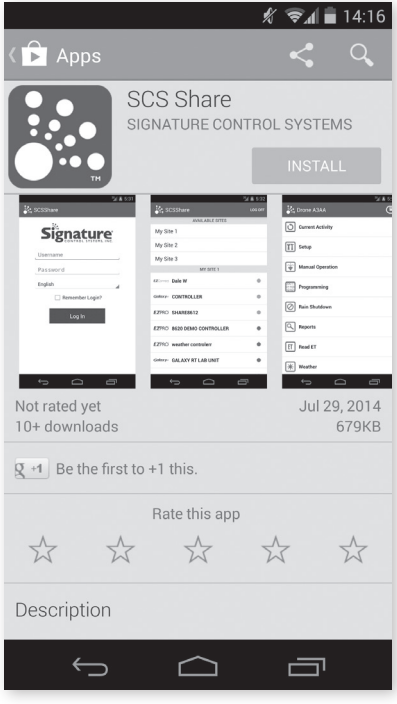
- After reading this agreement and then select agree, you will see all of your sites that you set up
- Press each site to see the controllers on that site
- Press the controller with green online signal and you will be taken to the controller screen. From there you will be able to use Programming, Manual Operation and many other functions available for your controller.





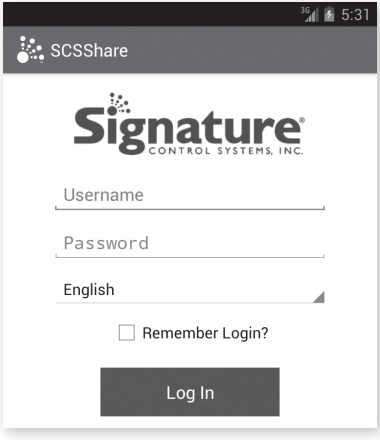
ANDROID INSTALLATION GUIDE

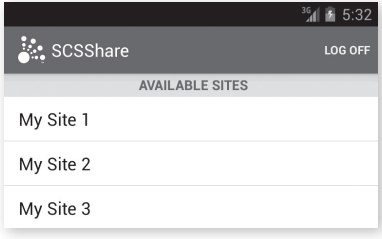
- Open the Google Play Store App from your device.
- Press the search tab
- Type in SCS Share in the search bar and press enter
- Press the install button on the SCS Share app and the app will automatically download to your device.



ANDROID APP ON Google play

- Make sure that you have done the initial account setup on SCS-Share.com
- Once you have your account set up you can log into that same account on your Android device from the login screen
- After you log in you will see a user license agreement popup for this app





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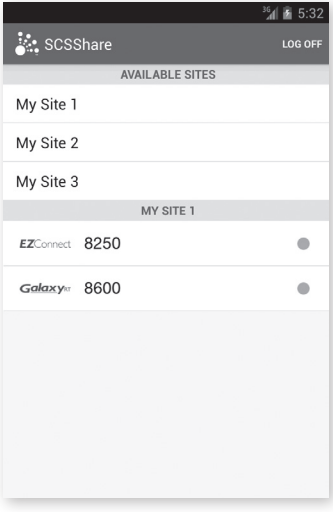

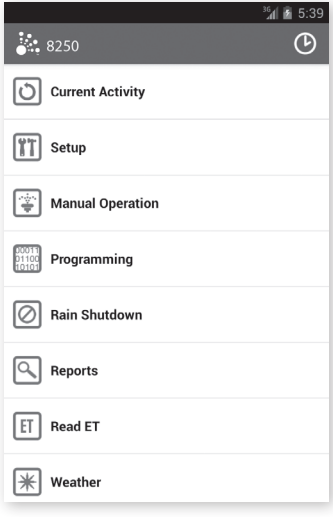

TECHNICAL DATA

1. **Transformer**
   24 VAC internal transformer; 20 VA, .83A for zones and logic.
   The transformer can run a pump or master valve and one zone valve, maximum.
2. **Surge Protection**
   600 watts TVS on zone outputs
   9J Mov on secondaries. (See Circuit Breaker below)
3. **Sensor Operation**
   The EZ Connect™ 8250 Series is equipped with two normally open, normally closed, or pulse type flow sensor ports. Each sensor port is user defined via the SCS-Share.com web site or the SCS-Share iPhone App.
4. **Zone Lines**
   The EZ Connect™ 8250 series irrigation controller will operate a maximum of two (2) solenoids concurrently, providing one is the pump/master valve. Each zone output can operate one or two solenoids.
   1 inrush .52A max
   1 hold .33A max

   ** EZ Connect can operate up to 2 stations and an MV/Pump start concurrently, however the total current cannot exceed approximately 0.6A. An internal current monitoring circuit will shut down the active stations in the case of an overload condition.*
5. **Temperature Range**
   Operating: -20° to +55° C (23° to 131° Fahrenheit)
   Storage: -30° to +85° C (-22° to 185° Fahrenheit)
6. **Circuit Breaker**
   An electronic poly-switch is incorporated on the interconnect PCB of the controller. This type of circuit breaker does not require resetting or replacement by the user.

LED State	LED 1	LED 2	LED 3	LED 4
NORMAL MODE				
1 Sec RTC tick	FLASH			
SNTP server contacted and Time update received		ON		
TCP Socket to SCS server established.		FLASH		
Data being received on TCP port			ON	
STATION TEST MODE				
Station 1, 5, or 9 active	ON			
Station 2, 6, or 10 active		ON		
Station 3, 7, or 11 active			ON	
Station 4, 8, or 12 active				ON

STATEMENT OF CONDITIONS

In the interest of improving internal design, operational function, and/or reliability, Signature Control Systems, Inc. reserves the right to make changes to the product described in this document without notice.
Signature Control Systems, Inc. does not assume any liability that may occur due to the use or application of the product(s) or circuit layout(s) described herein.

Federal Communications Commission (FCC) Compliance Notice: Radio Frequency Notice

This device complies with part 15 of the 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.

Note: 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, the user is encouraged to try to correct the interference by 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (SIGNATURE CONTROL SYSTEMS Model EZ Connect™ does not exceed the Class B limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

DECLARATION OF CONFORMITY

Application of Council Directive: 2004/108/EC

Standards To Which Conformity Is Declared:	**EN55014-1: 2006 + A1: 2009 Class B** EN55022 Radiated Emissions, EN55022 Conducted Emissions EN61000-3-2, EN61000-3-3 **EN55014-2: 1997 + A2: 2008** EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11
Manufacturer's Name:	Signature Control Systems, Inc.
Manufacturer's Address:	16485 Laguna Canyon Rd., Suite 130, Irvine, California 92618 949-580-3640
Equipment Description:	Irrigation Controller
Equipment Class:	Requirements for household appliances, electric tools and similar apparatus
Model Numbers:	EZ Connect™

Manufacturer: Signature Control Systems, Inc.	**Legal Representative:** Signature Control Systems, Inc.
Name: Aaron M. Coakley	**Name:** Brian J. Smith
Signature:	**Signature:**
Position: Electronics Project Engineer	**Position:** President & CEO
Date: December 2009	**Date:** December 2009

SIGNATURE CONTROL SYSTEMS, INC LIMITED WARRANTY AND DISCLAIMER: TURF PRODUCTS

1) Signature Control Systems, Inc. ["SCS"] warrants to the owner (the "Buyer") that all new products, as featured in the current Signature Turf Catalog at date of purchase will be free from original defects in materials and workmanship for the time periods described below, provided they are used for approved purposes under manufacturer's recommended specifications.
2) This warranty is given expressly and in place of all other expressed or implied warranties of merchantability and fitness for a particular purpose. This is the only warranty made by Signature Control Systems, Inc for Turf products. This warranty gives you specific legal rights and you may have other rights which vary from state to state.
3) During the warranty period, SCS will repair or replace, at SCS's sole discretion, any part to be found defective with prior written authorization. Buyers remedy is limited solely to the replacement or repair of the defective parts.
4) This warranty does not apply (i) to Acts of God including without limitation, lightning and flooding; or (ii) to products not manufactured by SCS when used in conjunction with SCS products; or (iii) where equipment is used, or installation is performed in any manner contrary to SCS's specifications and instructions, nor where equipment is altered or modified.
5) **Signature Control Systems, Inc. reserves the right to redesign, alter or modify its products at anytime and does not, and will not, assume any liability with respect to obsolete inventory arising there from.**
6) Neither SCS or its affiliates are liable for any indirect, incidental or consequential damages in connection with the use of equipment, including but not limited to: vegetation loss, the cost of substitute equipment or services required during periods of malfunction or resulting non-use, property damage or personal injury resulting from installer's actions, whether negligent or otherwise.
7) No agent or representative of SCS, nor of any distributor, retailer, lessor or installer of the system, has any express or implied authority to make any representation, promise, guarantee or warranty not stated here. SCS disclaims any warranty of merchantability or fitness for a particular purpose, or any other warranties that extend beyond those described here.
8) Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. All implied warranties, including those of merchantability and fitness for use, are limited to the duration of this express warranty.
9) Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.
10) **STANDARD PRODUCTS LIMITED 1-YEAR WARRANTY:** All SCS products are covered by this warranty for a period of one year from the date of supply except as noted below:
    a) Signature Turf Gear Drive Rotors, Spray-Heads & Valves: Five (5) years; from original sale date.
    b) Signature Turf & Satellite Controllers: Two (2) years; from original sale date.
    c) Repairs & Refurbished Components: Balance of product warranty or three (3) months, from repair date, whichever occurs first, on materials and labor only.
    d) Brass Quick Coupler Valve Bodies: Five (5) years; from original sale date.
    e) Solenoid Coils: One (1) year; from original sale date.
11) **TECHNICAL ADVICE:** SCS warranties as hereinabove set forth shall not be enlarged, diminished or affected by, and no obligation or liability shall arise or grow out of, SCS rendering of technical advice or service in connection with Buyer's order or the products furnished.
12) **QUESTIONS:** If you have any questions concerning the warranty or its application, please email your question to info@scsmail.com or write to:
    Signature Control Systems, Inc
    Turf Division
    8800 N. Allen Rd. • Peoria, Illinois 61615
    U.S.A.
    Attention: Customer Service.
13) **CLAIMED DEFECTIVE MERCHANDISE POLICY.** Products returned to the retailer or distributor and claimed defective must be inspected by an authorized SCS representative to determine warranty compliance. If approval is granted, products will be repaired or replaced, or a credit memorandum covering the net purchase price will be issued.
14) **In the event of a defect:** If a defect arises in a Signature product or part within the warranty period, you should contact your Signature retailer, distributor, or Signature Control Systems, Inc. at www.signaturecontrolsystems.com or one of the following locations:

WORLD HEADQUARTERS
16485 Laguna Canyon Rd., Suite 130,
Irvine • California • 92618
Tel: 949.580.3640
Fax: 949.580.3645

MANUFACTURING FACILITY
8800 N. Allen Rd.,
Peoria • Illinois • 61615
Tel: 949.580.3640
Fax: 949.580.3645

EUROPE & MIDDLE EAST
5 rue de la Vallee Yart
78640 Saint Germain de la Grange
France
Tel: +33.13.489.9056
Fax: +33.13.489.6025

REGIONAL OFFICES
ASIA Shenzhen • Guangdon Province • 518131
Tel: (86) 136.00419465 • Fax: (86) 755.83275012
AFRICA Roodepoort • South Africa
Office & Mobile: +27 82 553 9093 • Fax: 086 670 6318
AUSTRALIA Glen Osmond 5064 • South Australia
Tel: +61 (0) 417 862 269 • Fax +61 (0) 8 8338 2021

MEXICO, CENTRAL AMERICA Guanajuato • Mexico
Tel/Fax: +52 (461) 614.2322
SOUTH AMERICA Santiago • Chile
Tel/Fax: +56 229.556220

15) **SERVICE TIME-LINE:** Signature may, at its option, require that product or part be returned to a Signature service point or your retailer or distributor. Signature will determine whether the claimed defect is covered by the warranty. If covered, the product will be repaired or replaced. Please allow 4 to 6 weeks for completion of repairs or replacement and return of the product or part. If a product or part is replaced, the replacement is warranted only for the remainder of the original product or part warranty period.

NOTES:

Signature®
CONTROL SYSTEMS, INC.

www.SignatureControlSystems.com

FOR MORE INFORMATION

SIGNATURE CONTROL SYSTEMS, INC.

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EUROPE & MIDDLE EAST
5 rue de la Vallee Yart • 78640 Saint Germain de la Grange • France
Tel: +33.13.489.9056 • Fax: +33.13.489.6025

USA TOLL FREE:
866.4SIGNATURE

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