Signature®
CONTROL SYSTEMS, INC.

*EZ*Connect™
8250 Series
Irrigation Controller

Quick Start Guide

99903388 Rev A

TABLE OF CONTENTS

FEATURES

- No complex keypad or display; simple operation via any browser enabled web based device and/or and iOS application
- Stacking start times
- Twenty independent programs
- Twenty four events per program
- True calendar clock (Leap year compatible)
- Scheduling options:
    12-month calendar
    Odd/Even
- 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]

INSTALLATION INSTRUCTIONS

The EZ Connect™ 8250 Series can be easily mounted indoors. Find a location near a 120V receptacle (230/240V for PT,FR,IT,ES 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 1*)

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 1*)

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 1*)

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 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 1*). Attach the wiring skirt to the unit.
Plug the AC power adaptor into the nearest receptacle.

INTERNET CONNECTIONS

To connect to the Internet simply plug network cable into the Ethernet jack lactated on the edge of the circuit board. (See *Figure 1*) WiFi and Ethernet over power adapters sold separately.

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, Station Expansion Module
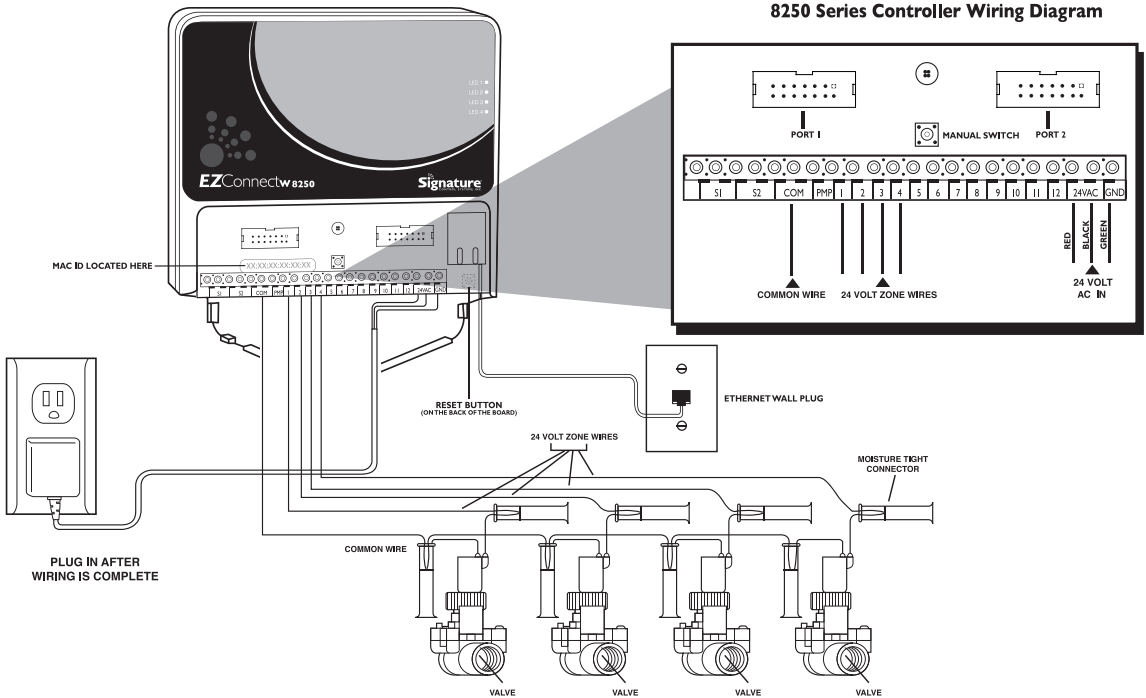
MANUAL CYCLE

To start a manual cycle press and hold the manual button for five seconds release when the four indicator LED's flash. Station one will start for the default run time of three min. (See Figure 1). 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 button 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 button for five seconds release when the led indicators flash.

WATER MANAGEMENT FEATURES

The EZ Connect™ 8250 Series will run conventional time based watering schedules, water budget by month per program from 0-200 percent, or smart water ET-based scheduling.

NOTE: To request additional zip codes and/or sites and to enable Smart Water and/or Weather Service the user can contact SCS. This process will be automated in the near future by integrating these features into SCS Shop (https://www.signaturecontrolsystems.com/Support/SCSShop/).

EZConnect 8250

Figure 1

8250 Series Controller Wiring Diagram

MAC ID LOCATED HERE

PORT 1   MANUAL SWITCH   PORT 2

S1   S2   COM   PMP   1   2   3   4   5   6   7   8   9   10   11   12   24VAC   GND

RED   BLACK   GREEN

COMMON WIRE   24 VOLT ZONE WIRES   24 VOLT AC IN

RESET BUTTON
(ON THE BACK OF THE BOARD)

ETHERNET WALL PLUG

24 VOLT ZONE WIRES

MOISTURE TIGHT CONNECTOR

COMMON WIRE

PLUG IN AFTER
WIRING IS COMPLETE

VALVE   VALVE   VALVE   VALVE

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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 9 - page 14

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 15 - page 16

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" link

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. Smart Water and Weather Service are disabled

Note: To request additional zip codes and/or sites and to enable Smart Water and/or Weather Service the user can contact SCS. This process will be automated in the near future by integrating these features into SCS Shop (https://www.signaturecontrolsystems.com/Support/SCSShop/).

General Information	Language: English
First Name*:	
Last Name*:	
Company:	
Phone Number*:	
Email Address*:	? Verify
Validation Code*:	
Address Line 1*:	
Address Line 2:	
City*:	
State/Country*:	
Zip*:	
Site Information	
Site Name*:	My Site
Time Zone:	(GMT) GMT: Greenwich Mean
Apply Daylight Saving Time?	Yes
From: 03/01/2013	To: 11/01/2013
Daylight Savings Start Time:	00:00
Daylight Savings Offset (minutes):	60
Admin Account	
Username*:	
Password*:	
Confirm Password*:	

* Required   Next   Close

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- **First Login and Initial Setup (via scs-share.com)**
  - ● **Adding A Zip Code or City**
    1. Click on the Manage Zip/City button, then click on "Add City" or "Add Zip" button and save your settings

Zip Code	
Zip Code Limit:	10
Zip Code/City:	92618 ▼

    Add City   Add Zip   Edit   Delete   Close

    2. The default zip code/city limit for each site is one, please contact SCS if you have controllers in different cities and need to increase your zip code/city limit
    3. You can make changes to your city and/or zip code through the same steps

- **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 click on "Add Controller" button (See *Figure 1* for location)

Any underlined text is editable by a click.			My Weather	Manage Site	Manage Zip/City	Add Controller
Type	Controller	Zip Code/City	Zones	Status	Time	
Galaxy	8255 Galaxy RT DC LeapFrog (Aaron)	61615	6	✘	🕐	Select Edit Delete
SoloRain	8255 Solorain 8014 (Aaron)	61615	1	?	🕐	Select Edit Delete
Galaxy	9142 (Aaron)	61615	8	✘	🕐	Select Edit Delete
Galaxy	Eric 9498	92618	8	✘	🕐	Select Edit Delete
EZPRO	9233 EZ Pro 8603 (Aaron)	61615	24	✘	🕐	Select Edit Delete
EZPRO	8394 EZ Pro 8603 SCS Europe	Paris	24	✔	🕐	Select Edit Delete
EZConnect	9003 (Amir)	74116	12	✔	🕐	Select Edit Delete
EZConnect	900C (Eric)	92618	12	✘	🕐	Select Edit Delete
EZConnect	9011 (Michel)	Paris	12	✘	🕐	Select Edit Delete
EZConnect	9015 (Dale)	61615	12	✔	🕐	Select Edit Delete

4. Enter the Device ID, a name, and select your controller type. If you don't know your controller type, leave it as "EZ Pro™ 8603" and the website will automatically detect your controller type as long as it is connected. **If your controller is a SoloRain® the website will not be able to detect the type automatically, please make sure that you select the correct SoloRain® type.**

Controller Information	
Type:	EZ Pro 8603
Name:	
Device ID:	
Address:	001
Zip Code/City:	92618

5. Repeat these steps for all your controllers
6. Once all controllers are added to your site, click on "Add" hyperlink under the "Zones" heading to read the number of zones. Here you can assign a Name/Description to each zone. Repeat this step for all controllers

Zone Setup	
Zone	Description
1:	Zone 1
2:	Zone 2
3:	Zone 3
4:	Zone 4
5:	Zone 5
6:	Zone 6
7:	Zone 7
8:	Zone 8
9:	Zone 9

7. If all controllers on this site have the same zip code or city you can apply the assignment to all controllers in one step by clicking on the "Manage Site" button, selecting the appropriate zip code or city and check the "Apply zip/city to all controllers on this site" checkbox.

Any underlined text is editable by a click.					My Weather		Manage Site		Golbal Off		Add Controller
Type	Controller	Zip Code/City				Zones	Status	Time			
Galaxy xt	8255 Galaxy RT DC LeapFrog (Aaron)	Select ▼	Save	Cancel		6	✗	⏲	Select	Edit	Delete
		Select									
SoloRain	8255 Solorain 8014 (Aaron)	92618				1	?	⏲	Select	Edit	Delete
		61615									
Galaxy xt	9142 (Aaron)	18951				8	✗	⏲	Select	Edit	Delete
		Roodepoort									
Galaxy xt	Eric 9498	Paris				8	✓	⏲	Select	Edit	Delete
		74116									
EZPRO	9233 EZ Pro 8603 (Aaron)					24	✗	⏲	Select	Edit	Delete
EZPRO	8394 EZ Pro 8603 SCS Europe	Paris				24	✓	⏲	Select	Edit	Delete
EZConnect	9003 (Amir)	74116				12	✓	⏲	Select	Edit	Delete
EZConnect	900C (Eric)	92618				12	✗	⏲	Select	Edit	Delete
EZConnect	9011 (Michel)	Paris				12	✓	⏲	Select	Edit	Delete
EZConnect	9015 (Dale)	61615				12	✓	⏲	Select	Edit	Delete

- **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 click on "My Account" hyperlink on the top right corner. Then click on "User Management" button 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

User Management - Add/Edit User	
User Type:	Admin
Language:	English
First Name:	Aaron
Last Name:	Coakley
Email Address:	Aaron.Coakley@scsmail.com
Username:	AaronShare
Password:	•••••
Confirm Password:	•••••

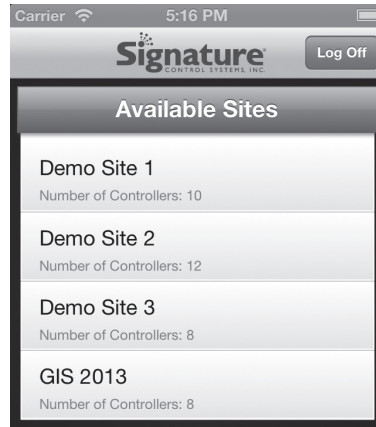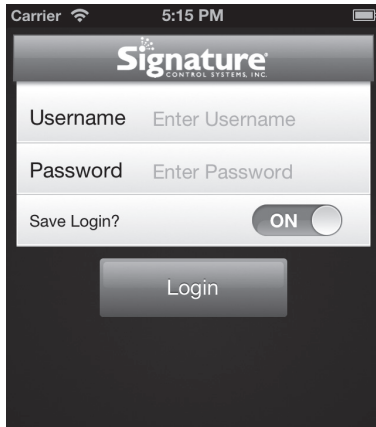| Function Permissions			
☑ Manual Operation	☑ Rain Shutdown	☑ Programming	☑ Manual Program
☑ Controller Setup	☑ Reports	☑ Intelligent Irrigation	☑ Manage Site
☑ Add Controller	☑ Edit Controller	☑ Delete Controller	☑ Edit Zip/City

Save   Back   Close

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.

- 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 all of your sites that you set up
- Press each site to see the controllers on that site
- Press the controller and you will be taken to the controller screen. From there you will be able to use Programming, Manual On/Off and many other functions available for your controller.

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 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.

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.
    I inrush .52A max
    I hold .33A max

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 reserves the right to make changes to the product described in this document without notice.
Signature Control Systems 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:	18 Goodyear, Suite 110 Irvine, CA 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:	**Date:**

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	MANUFACTURING FACILITY	EUROPE & MIDDLE EAST	REGIONAL OFFICES	
18 Goodyear • Suite 110	8800 N. Allen Rd.,	5 rue de la Vallee Yart	**ASIA**	**MEXICO, CENTRAL AMERICA**
Irvine • California • 92618	Peoria • Illinois • 61615	78640 Saint Germain de la Grange	NanXian Plaza • MinZhi Street • Shenzhen, • Guangdon Province • 518131	Ribera Escondida 118 • Riberas Del Campestre 38080 Celaya • Gto. • Mexico
Tel: 949.580.3640	Tel: 949.580.3640	France	Tel: (86) 136.00419465 • Fax: (86) 755.83275012	Tel/Fax: +52 (461) 614.2322
Fax: 949.580.3645	Fax: 949.580.3645	Tel:+33.13.489.9056 • Fax +33.13.489.6025	**SOUTH AMERICA**	**AFRICA**
			Av Paseo Los Bravos 6000 • Lo Barnechea • Santiago • Chile	P.O. Box 1260 • Strubensvalley 1735 • Roodepoort • South Africa
			Tel/Fax: +56 229.556220	Office & Mobile: +27 82 553 9093 • Fax: 086 670 6318

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:

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CONTROL SYSTEMS, INC.

www.SignatureControlSystems.com

FOR MORE INFORMATION

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France
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