

ALLIED ELECTRONICS, INC
STATION SITE CONTROLLER (SSC)

Installation and Start Up Guide

ARCO / ANDI
to Wayne PIB



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1. General Information

1.1. Installation Environment

1. The Allied Electronics Station Site Controller (SSC) operates on 115 VAC @60hz,36 watts. The SSC is supplied with approximately 8ft. of 115 VAC power cord, and should be connected to an approved isolated ground receptacle on its own dedicated circuit. The SSC must be installed in a temperature controlled environment (between 32^o F and 100^o F).
2. Allied Electronics recommends that the SSC be installed with a UL Listed Escort Power Conditioner to protect against power surges, low voltage (brown outs), and lightning.
3. The SSC must be installed in accordance with the National Electrical Code (NFPA 70), the Automotive and Marine Service Station Code (NFPA 30A), and all state and local electrical codes.
4. The SSC must be installed indoors, above the Class 1, Division 2 Hazardous location.
5. All field wiring (that is, all wiring connected directly to dispensing devices) should be oil and gas resistant, as required by Paragraph 501-13 of the NEC, and should be sealed in accordance with Article 500 of the NEC.
6. For use with peripheral devices which are UL Listed, have an EIA RS232C (or RS422A) communication protocol, and are installed over a hazardous location.

1.2. Warranty

The SSC has a one year parts warranty only, from date of installation, which can either be phoned in or submitted using the warranty/registration card enclosed in every SSC. If the start up information is not registered with our office within thirty (30) days of installation, warranty will begin from the date of shipment. Allied will warrant all parts against defects but not against physical damage or improper installation. All parts being returned "under warranty" must be accompanied with a Allied RMA number. When calling Allied for RMA numbers for SSC main boards, you will be asked for the main board serial number, located on the upper left hand corner inside box, and a description of the problem.

1.3. FCC Warning

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class "A" computing device pursuant to Subpart B of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1.4. Overview

The SSC interfaces to the following devices:

See the “Technical Tips” section for dispenser models that are supported.

Wayne Dispensers & CATs

1. Wayne Dispensers via a 7-wire Fully Populated RS-232 communication board connected to the Wayne PIB which is located in the Electronic Central.
2. Wayne CATs, Graphic displays, Debit MSM modules and Cash acceptors via an RS-485 interface board connected to either a J-Box or the CAT IF board.

Schlumberger/Tokheim Dispensers and PIC (Payment Island Cashier)

1. Schlumberger PIC via a fully populated RS232 board connected to the SAM/SSM (Schlumberger Security Module).

Point - Of - Sale (POS)

ARCO PC Based Point -Of -Sale Computer via a fully populated RS-232 board.

Helix PIC (Payment Island Cashier)

Helix PIC via a 4-channel RS-485 interface board that is connected to the Allied Isolation box or can be hard wired directly to the individual CATs via a junction box.

Tank gauge

1. Veeder Root TLS 250, 350 & 350R or equivalent tank gauge system via a fully populated RS-232 board.
2. Any Tank Gauge system that uses the Veeder Root protocol.

2. Installation Information

2.1. Procedures

1. Hardware Installation

- a. Mount SSC unit onto wall.
- b. Route and connect all communication cables as labeled.
Refer to “*Configuration Diagrams*” section.
- c. Apply AC power to unit.

The SSC software will first initialize the hardware and then run some internal diagnostics before starting the application program. To indicate that the software is active, the SSC will display the following:

- d. The prompt will display, ⇨ [SSC System Reset]
 [Initializing ...]

SSC will next show the following on the display for several seconds.

- ⇨ [Software Version]
 [SSC Warm Start]

SSC will then show the following on the display when ready.

- ⇨ [Software Version]
 [Date & Time]

If you have these prompts, then proceed to next step, if not refer to the “*Power-Up Diagnostics*” of the Technical Tips section.

2. Programming steps

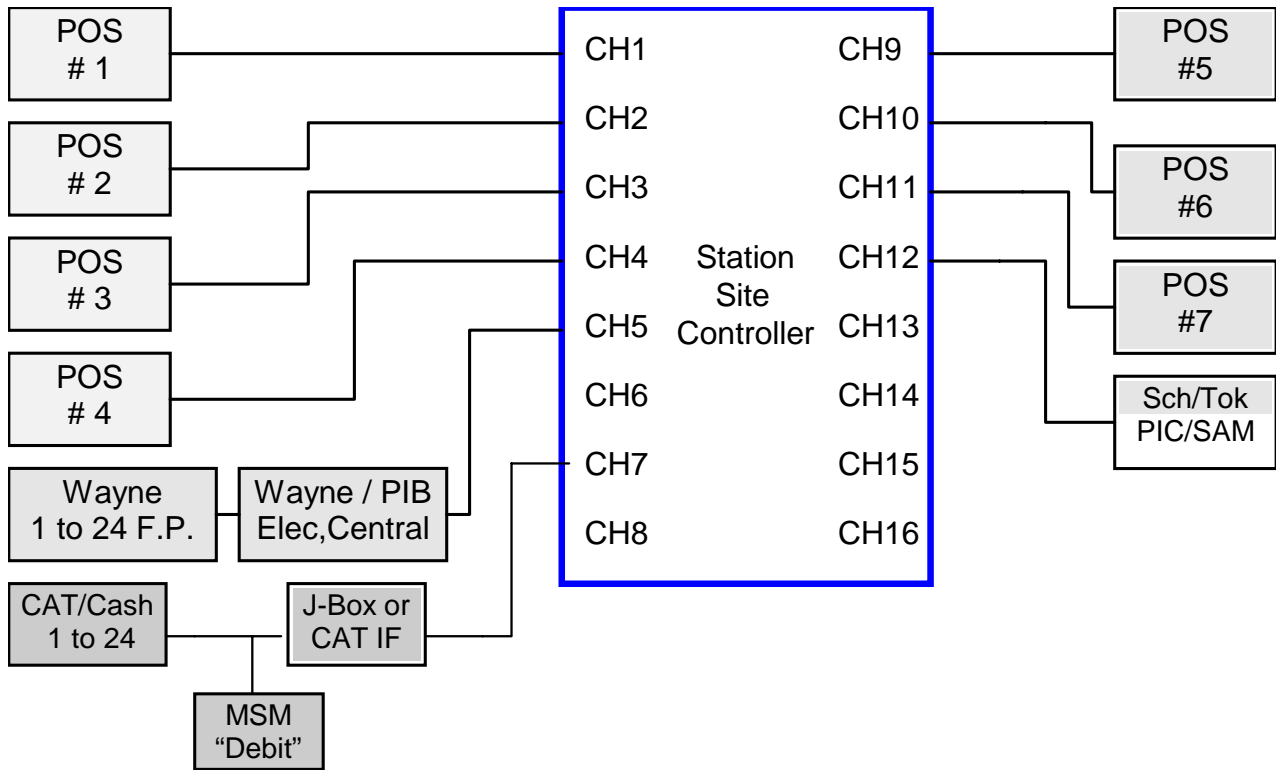
- a. Program the dispensers*.
- b. Program the SSC via the POS**.

Note* - Dispenser programming is not within the scope of this manual.

Note** - It is not within the scope of this manual to supply complete step-by-step programming of the POS.

2.2. Configuration Diagrams

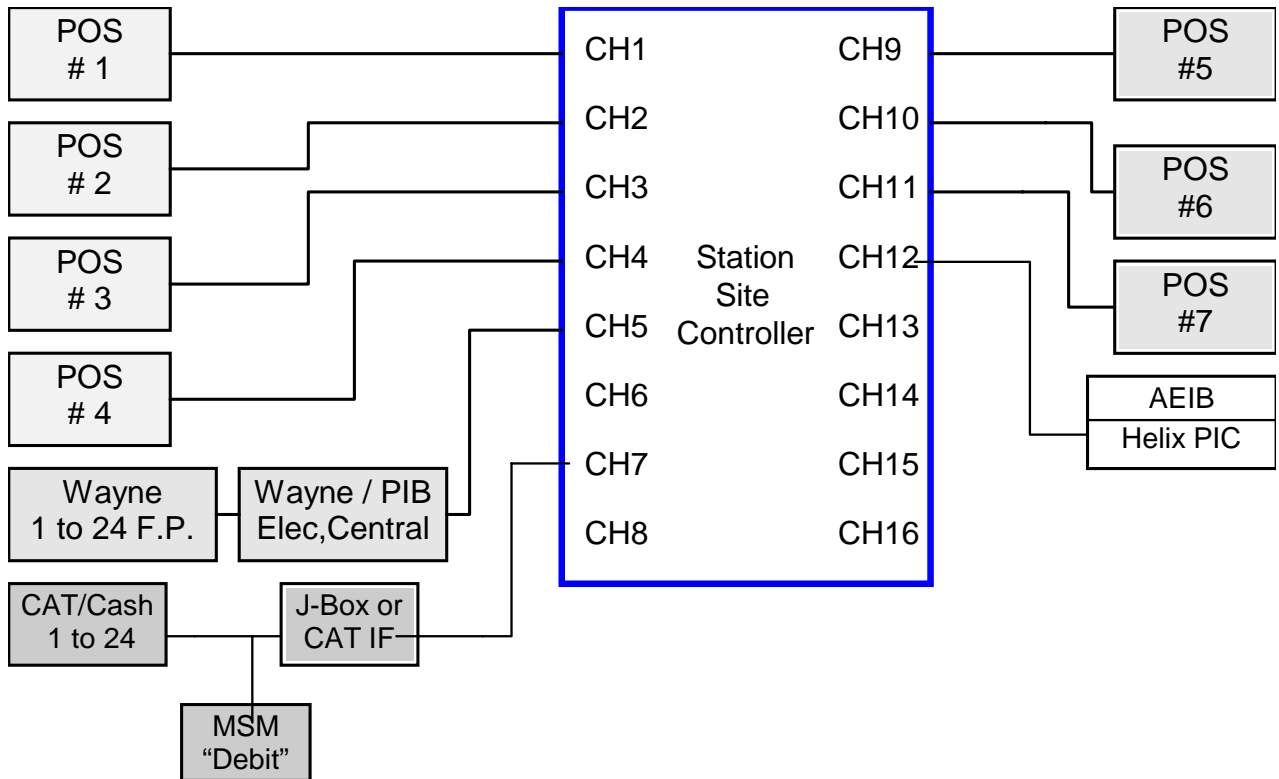
2.2.1. SSC to Wayne PIB with the Schlumberger/Tokheim PIC



Communication Boards

CH1 (POS)	399-1610-F (RS-232 Fully Populated board)
CH2 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH3 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH4 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH5 (Dispenser)	399-1610-F (RS-232 Fully Populated board)
CH7 (CATs) "Optional"	499-3710 (RS-485 board)
CH9 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH10 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH11 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH12 (Schl/Tokheim PIC)	399-1610-F (RS-232 Fully Populated board)

2.2.2. SSC to Wayne PIB with the Helix PIC



Communication Boards

CH1 (POS)	399-1610-F (RS-232 Fully Populated board)
CH2 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH3 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH4 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH5 (Dispenser)	399-1610-F (RS-232 Fully Populated board)
CH7 (CATs) "Optional"	499-3710 (RS-485 board)
CH9 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH10 (POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH11(POS) "Optional"	399-1610-F (RS-232 Fully Populated board)
CH12 (Allied Isolation Box/Helix PIC).....	499-4710 (4 channel RS485 board)

2.3. Cable Pin Assignments

2.3.1. POS Communication Cables

The SSC supports up to 7 POSs. The POS is a PC Based computer, which runs the Point-Of-Sale software. The serial port on the POS can be either a DB-25 or a DB-9 connector.

Note: The following cable configuration is being provided as an installation guide. Allied does not supply the POS cables with the ARCO ANDI/POS box.

SSC (CH1 - CH4 & CH9 - CH12) To POS (Serial Port) DB-25 Cable

SSC			POS		
DB25 Female			DB25 Female		
Pins			Pins		
TXD	2	-----	Black	-----	3 RXD
RXD	3	-----	White	-----	2 TXD
RTS	4	-----	Green	-----	5 CTS
CTS	5	-----	Red	-----	4 RTS
GND	7	-----	Blue	-----	7 GND
DSR	6	-----	Brown	-----	11 N/C
					20 DTR
DTR	11	-----	Orange	-----	6 DSR
N/C	20	-----		-----	

SSC (CH1 - CH4 & CH9 - CH12) To POS (Serial Port) DB-9 Cable

SSC			POS		
DB25 Female			DB9 Female		
Pins			Pins		
TXD	2	-----	Black	-----	2 RXD
RXD	3	-----	White	-----	3 TXD
RTS	4	-----	Red	-----	8 CTS
CTS	5	-----	Green	-----	7 RTS
DSR	6	-----	Brown	-----	4 DTR
GND	7	-----	Blue	-----	5 GND
DTR	11	-----	Orange	-----	6 DSR

2.3.2. Wayne PIB/Electronic Central

The SSC uses a Fully Populated RS232 communication board in Channel 5 to interface to the Wayne PIB/dispensers. Up to 24 fueling positions may be connected. Channel 5 must have a 7-wire custom cable which terminates in a female DB-25 connector.

SSC (CH5) To the Wayne Cable (Female DB-25)

SSC DB25 Female Pins				Wayne/PIB DB25 Female Pins
TXD 2	-----	Black	-----	3 RXD
RXD 3	-----	White	-----	2 TXD
RTS 4	-----	Red	-----	5 CTS
CTS 5	-----	Green	-----	4 RTS
DSR 6	-----	Orange	-----	11 DTR
N/C 8	-----		-----	20 N/C
GND 7	-----	Brown	-----	7 GND
DTR 11	-----	Blue	-----	8 DCD
N/C 20	-----		-----	6 N/C

2.3.3. Wayne CAT

Up to 24 Wayne CATs may be connected to the SSC at Channel 7.

SSC (CH7) To the Wayne CAT Cable

SSC DB25 Female Pins				4" X 4" J - Box
1	-----	Shield	-----	Drain
2	-----	Red	-----	RS-485 +
3	-----	Black	-----	RS-485 -

Note: a #18 awg 2 conductor shielded cable rated at 600 volts oil and gas resistant must be used for cat communication, Allied part #28218 or equivalent.

Caution: The CAT cable cannot be installed in the same conduit as the intercom cable or high voltage lines. Serious damage to the CAT and or the SSC may result if the cable is not installed properly.

2.3.4. Schlumberger/Tokheim PIC via the (SAM/SSM)

The SSC uses channel 12 to interface to the SAM/SSM.

The SSM (Schlumberger Security Module) is required for the Payment Island Cashier (PIC) systems with debit and cash acceptor support.

Port 2 on the SAM/SSM has a Female DB-9 connector, which is to be connected to Channel 12 of the SSC. The cable pinouts are as follows:

SSC (CH12) To the SAM/SSM (Port 2)

SSC				SAM/SSM	
DB25 Female				DB-9 Male	
Pins				Pins	
Drain	1 -----	Shield	-----	N/C	
TXD	2 -----	White	-----	3	RXD
RXD	3 -----	Red	-----	2	TXD
GND	7 -----	Black	-----	7	GND
	4 <input type="checkbox"/>				
	5 <input type="checkbox"/>				
	6 <input type="checkbox"/>				
	11 <input type="checkbox"/>				

2.3.5. Helix PIC via the Allied Isolation Box

The SSC uses a 4-channel RS485 board to communicate to the Helix Pics. Up to 8 PICS (**see note below**) may be connected to channel 12 of the SSC. Channel 12 must be connected to J1 of the Allied Isolation box.

Note: Up to 8 PICS may be connected to the SSC at channel 12

SSC (CH12) Helix RJ45 adapter set to the Allied Isolation box

SSC DB25 Female Pins		CAT 5 Cable (T568B Spec.)		J1Allied Isolation Box
2	-----	Wht/Org	-----	1 RT1 +
3	-----	Orange	-----	2 RT1 -
6	-----	Wht/Grn	-----	3 RT2 +
7	-----	Green	-----	6 RT2 -
8	-----	Wht/Blu	-----	5 RT3 +
9	-----	Blue	-----	4 RT3 -
10	-----	Wht/Brn	-----	7 RT4 +
11	-----	Brown	-----	8 RT4 -

2.3.5.1. SSC/Helix to the Allied Isolation Box

Up to 8 HELIX/PICS may be connected to the Allied Isolation Box

SSC/Helix (CH7) To Allied Isolation box

SSC/Helix DB25 Female Pins				Allied Isolation box
1	-----	Shield	-----	Drain
2	-----	Red	-----	Data wire +
3	-----	Black	-----	Data wire -

Note: The SSC/Helix can communicate with dual or single sided Helix PICS.

Caution: The Helix cable cannot be installed in the same conduit as the intercom cable or high voltage lines. Serious damage to the Helix and or the SSC may result if the cable is not installed properly.

3. Programming

3.1. Wayne Addressing

3.1.1. Wayne CAT Interface Board

The following is a list of the jumper settings for the Wayne CAT IF board when used with the ANDI.

Jumper	Position
JP1, JP2, JP4 – JP6, JP10, JP11 – JP28, JP30, JP31	1 & 2
JP3, JP8, JP9, JP29	None
JP7	2 & 3

3.1.2. Wayne Dispensers and CATs

Channel 5 has been designated to communicate with the Wayne dispensers via the PIB, which must be set to 1200 or 9600 baud, and can communicate with up to 24 fueling positions.

The SSC uses Channel 7 to communicate with the Wayne CATs. A communication cable connects Channel 7 to a junction box for connection to the CATs. If a CAT IF board is present it is installed in the Electronic Central. In this case all of the CATs are connected to the motherboard inside of the EC.

Example:

Fueling Position	Fueling Positions		CAT	
	Address	SSC Channel	Address	SSC Channel
1	1	CH-5	1	CH-7
2	2	CH-5	2	CH-7
3	3	CH-5	3	CH-7
4	4	CH-5	4	CH-7
5	5	CH-5	5	CH-7
6	6	CH-5	6	CH-7
7	7	CH-5	7	CH-7
8	8	CH-5	8	CH-7
9	9	CH-5	9	CH-7
10	10	CH-5	10	CH-7
11	11	CH-5	11	CH-7
12	12	CH-5	12	CH-7
13	13	CH-5	13	CH-7
14	14	CH-5	14	CH-7
15	15	CH-5	14	CH-7
16	16	CH-5	16	CH-7
17	17	CH-5	17	CH-7
18	18	CH-5	18	CH-7
19	19	CH-5	19	CH-7
20	20	CH-5	20	CH-7
21	21	CH-5	21	CH-7
22	22	CH-5	22	CH-7
23	23	CH-5	23	CH-7
24	24	CH-5	24	CH-7

3.1.3. Wayne “Vista” Dispensers

The following parameters must be set in the Wayne “Vista” dispensers and in the 2400 console in order for the system to function correctly.

Vista Dispenser		
Model	Option #2 (<i>Macro</i>)	Option #51 (<i>Blend Ratios</i>)
V390 D1, (<i>non-blend</i>)	5	N/A
V395 D1, (<i>variable blend</i>)	13	Must match mode 17 in the 2400 console
V580, (<i>variable blend</i>)	10	Must match mode 17 in the 2400 console
V580 D3, (<i>variable blend</i>)	11	Must match mode 17 in the 2400 console
V590 Uni-hose, (<i>fixed blend</i>)	10	Must match mode 17 in the 2400 console
V590 D1, (<i>fixed blend</i>)	7	Must match mode 17 in the 2400 console

2400 console		
Mode	Sub-mode	Setting
03 (<i>FP to tank assignment</i>)	FP #	Pure products, ex. (0534, 0540)
18 (<i>Grade to position assignment</i>)	FP #	POS FP config. must match mode 18
17 (<i>Blend ratio to grade</i>)	06 (<i>blended product</i>)	Must match option 51 in the dispenser

3.1.3.1. Wayne “Vista” Blending Dispensers

Variable Blenders

The ANDI interfaces to the following Wayne variable blenders.

- 580 D1** - Single hose. Multi product dispenser without diesel.
- 580 D3** - Single hose. Multi product dispenser without diesel.
- 395** - Single hose + 1. Multi product dispenser with diesel.

Fixed Blenders

The ANDI interfaces to the following Wayne fixed blenders.

- 590** - Multi hose, multi product dispenser without diesel.
- 590U** - Single hose, multi product dispenser without diesel. Uses the same configuration as the 580.

Dispenser and 2400 Console Settings

For the Wayne blenders to operate properly, several options must be set at the dispenser, at the Decade 2400 console and also at the POS.

1- Dispenser Macro

The dispenser options are set via a macro. Below are the proper macro settings for the variable blenders.

Model Type	Macro Setting
590	7
395	13
580 D1 & 590U	10
580 D3	11

2- 2400 Console Programming

Additional programming parameters must be set via the Decade 2400 console for proper dispenser operation.

a) Set Mode 18 for each fueling point. Mode 18 is the ***Grade to Position*** assignment for each fueling point. The table below summarizes proper mode setting for each type of blending dispenser.

Model Type	Mode 18 Setting
590	0465000
395	1005640
580 D1 & 590U	0050604
580 D3	0056400

b) Set Mode 03 for each fueling point. Mode 03 programs the ***Grade*** assignment for each fueling point. Below summarizes the proper setting for each type of blending dispenser.

Model Type	Mode 03 Setting
590	0540
395	0541
580 D1 & 590U	0540
580 D3	0540

c) Set Mode 17, sub- mode 6 (***blend grade***). This sets the Blend Ratio for product 6. This blend ratio must match the ratio that is set at the dispenser in option 51 and also at the POS in the ***Blended Fuels Ratios Menu***.

POS Product to Position Mapping

The following is a list of the Wayne product identification numbers:

- 1- Diesel
- 2- Not Used
- 3- Mid grade, ***Non Blended Product***
- 4- Low grade
- 5- High grade
- 6- Blended product

The POS fuel product I.D. numbers must match the Wayne product I.D. numbers. If the product I.D. numbers do not match and if there is a card reader at the dispenser the card reader will display ***“Blend Grade Assign ERROR”***, after configuration. Once the product mapping is corrected, the dispenser card reader will display the idle prompt.

The tables below list the proper fueling point ***“product to position”*** assignment for each blender type. This programming is done via the ***Fueling Point Configuration Menu*** at the POS.

For proper operation the fueling point “product to position” assignment must match the configuration of mode 18 which is programmed via the Wayne Decade 2400 console.

The ***blender type*** setting is not used and should be set to zero (0).

Model 590

Position	Product
1	Not assigned
2	Low grade
3	Blended product
4	High grade
5	Not assigned
6	Not assigned
7	Not assigned
8	Not assigned

**** The low grade and the high grade products may be switched depending on the position of the dispenser and the installation of the product lines.***

The **blender type** setting is not used and should be set to zero (0).

Model 395

Position	Product
1	Diesel
2	Not assigned
3	Not assigned
4	High grade
5	Blended product
6	Low grade
7	Not assigned
8	Not assigned

** The low grade and the high grade products may be switched depending on the position of the dispenser and the installation of the product lines.*

The **blender type** setting is not used and should be set to zero (0).

Models 580 D1 & 590 U

Position	Product
1	Not assigned
2	Not assigned
3	High grade
4	Not assigned
5	Blended product
6	Not assigned
7	Low grade
8	Not assigned

** The low grade and the high grade products may be switched depending on the position of the dispenser and the installation of the product lines.*

The **blender type** setting is not used and should be set to zero (0).

Model 580 D3

Position	Product
1	Not assigned
2	Not assigned
3	High grade
4	Blended product
5	Low grade
6	Not assigned
7	Not assigned
8	Not assigned

** The low grade and the high grade products may be switched depending on the position of the dispenser and the installation of the product lines.*

3.1.3.2. Wayne Blending Quick Reference Guide

Dispenser Model	Dispenser Macro	Mode 03 setting	Mode 18 setting	POS FP Positions
395	13	0541	1 0 0 5 6 4 0	1- Diesel 2- Not Assigned 3- Not Assigned 4- High grade 5- Blend grade 6- Low grade 7- Not Assigned 8- Not Assigned
580 D1 & 590 U	10	0540	0 0 5 0 6 0 4	1- Not Assigned 2- Not Assigned 3- High grade 4- Not Assigned 5- Blend grade 6- Not Assigned 7- Low grade 8- Not Assigned
580 D3	11	0540	0 0 5 6 4 0 0	1- Not Assigned 2- Not Assigned 3- High grade 4- Blend grade 5- Low grade 6- Not Assigned 7- Not Assigned 8- Not Assigned
590	07	540	0 4 6 5 0 0 0	1- Not Assigned 2- Low grade 3- Blend grade 4- High grade 5- Not Assigned 6- Not Assigned 7- Not Assigned 8- Not Assigned

Note: "Not Assigned" = 0 product value.

3.2. PIC Addressing (Payment Island Cashier)

3.2.1. Schlumberger/Tokheim PIC

Channel 12 of the ANDI box has been designated to communicate with the Schlumberger/Tokheim PICs (via the SAM). Each PIC can be configured (via the POS) to control any or all of the fueling positions. The PICs can be addressed from 1-8. (See *example*)

3.2.1.1. Schlum/Tok Access/Security Module (SAM/SSM) for Debit

The Schlumberger/Tokheim Access/Security Module (SAM/SSM) must be ordered from Schlumberger for a specific Network application. The following switches in the SAM/SSM must be set for proper operation.

SAM/SSM Switch #1		SAM/SSM Switch #3	
Position	Setting	Position	Setting
1	off	1	off
2	on - DUKPT off - MK/SK	2	on
3	off	3	off
4	off	4	on
5	on	5	off
6	off	6	on
7	off		
8	on		

Example:

PIC Address	SSC Channel
1	CH-12
2	CH-12
3	CH-12
4	CH-12
5	CH-12
6	CH-12
7	CH-12
8	CH-12

3.2.2. Helix PIC

Channel 12 of the ANDI box has been designated to communicate with the Helix PICs (Via the Allied Isolation box). Each PIC can be configured (via the POS) to control any or all of the fueling positions. The PICs can be addressed from 1-8. (See *example*)

Note: The Helix PIC IDs must also be setup thru the keypad on the PIC itself.

Example:

PIC Address	SSC Channel
1	CH-12
2	CH-12
3	CH-12
4	CH-12
5	CH-12
6	CH-12
7	CH-12
8	CH-12

3.3. SSC Parameters Values and Options

The SSC keypad is not used to configure the SSC. The SSC configuration is done by the POS. The POS has to download all required parameters to the SSC. The SSC will start polling the dispensers only after the POS has downloaded station configuration data. If the SSC has not receive the download from the POS you will see [CHXX Await Cnfg.] This means the SSC is waiting to be configured before this Channel becomes active.

Parameters Downloaded from POS:

- DPT and PIC Configuration
- Fuel Information
- Product Information
- Cash / Credit Limits
- Mode of Service
- Default Price Level
- Sale Stacking
- Number of fueling positions

3.4. Keypads

3.4.1. Wayne

Type 1

1	2	3		Pay Outside Credit
4	5	6	Pay Inside Cash	Pay Inside Credit
7	8	9	No	Yes
Clear	0	Enter	Help	Cancel

Type 2

1	2	3		Pay Outside
4	5	6		Pay Inside
7	8	9	No	Yes
Clear	0	Enter	Help	Cancel

Type 3

1	2	3	Pay Outside Debit	Pay Outside Credit
4	5	6	Pay Inside Cash	Pay Inside Credit
7	8	9	No	Yes
Clear	0	Enter	Help	Cancel

Type 4

1	2	3	Pay Inside	Pay Outside
4	5	6		
7	8	9	No	Yes
Clear	0	Enter	Help	Cancel

Type 6

1	2	3	Yes
4	5	6	No
7	8	9	Help
Clear	0	Enter	Cancel

Type 7

1	2	3	Yes
4	5	6	No
7	8	9	
Clear	0	Enter	Cancel

Type 8

1	2	3	Yes
4	5	6	No
7	8	9	Help
Clear	0	Cancel	Enter

Type 9

1	2	3		
4	5	6		
7	8	9	Yes	Help
Clear	0	Enter	No	Cancel

Type A

1	2	3		Pay Outside Credit
4	5	6		Pay Inside
7	8	9	No	Yes
Clear	0	Enter	Help	Cancel

Type B

1	2	3	Pay Outside Debit	Pay Outside Credit
4	5	6		Pay Inside
7	8	9	No	Yes
Clear	0	Enter	Help	Cancel

Type C

1	2	3		Pay Outside Credit
4	5	6	Pay Outside Cash	Pay Inside
7	8	9	No	Yes
Clear	0	Enter	Help	Cancel

Type D

1	2	3	Pay Outside Debit	Pay Outside Credit
4	5	6	Pay Outside Cash	Pay Inside
7	8	9	No	Yes
Clear	0	Enter	Help	Cancel

Type E

1	2	3	Yes
4	5	6	No
7	8	9	Help
Clear	0	Enter	Cancel

Type F

1	2	3	Yes
4	5	6	No
7	8	9	Cancel
Clear	0	Enter	Debit

Type G

1	2	3	Pay Inside	
4	5	6	Pay Outside Credit	Pay Outside Debit
7	8	9	Help	Cancel
Clear	0	Enter	Yes	No

Type H

1	2	3	Credit	
4	5	6	Debit	
7	8	9	No	Yes
Clear	0	Enter	Help	Clear/Cancel

Type I (FCL)

1	2	3	Yes	French
4	5	6	No	
7	8	9	Help	
Clear	0	Enter	Cancel	

Type J

1	2	3	Pay Outside	
4	5	6	Pay Inside	
7	8	9	Yes	Help
Clear	0	Enter	No	Cancel

3.4.2. Schlumberger PIC

Enter	1	2	3
Receipt	4	5	6
English Espanol	7	8	9
Cancel	Clear	0	

3.5. Peripheral Devices

3.5.1. Tank Gauge Systems

The ANDI/SSC uses Channel 13 to interface to either the Veeder-Root tank gauge system or the Red Jacket "ST Model" tank gauge system. The SSC is connected to the Serial board on a Device and it may be connected to the DIM board on a TLS 350R.

When the SSC is connected to the DIM board on a TLS 350R it will send real-time fuel transaction data i.e. sale started, sale complete, volume dispensed, meter reading etc. This is accomplished by implementing the Veeder-Root Dispenser Interface Protocol (a proprietary interface defined by Veeder-Root. to the TLS 350R). This will allow the TLS to utilize the AccuChart Automatic Tank Calibration feature for underground storage tank reconciliation.

Configure the TLS-250/350/350R or the Red Jacket communication parameters as follows:

Baud Rate - 9600, Parity - Odd, Stop Bits - 1, Data Bits - 7

Notes:

On a TLS-250 the communication parameters are set using a rotary switch and some DIP switches, (please refer to the TLS 250 manual).

On a TLS-350/350R the communication parameters are programmed via the TLS keyboard (please refer to the TLS 350/350R manual).

No additional SSC configuration is needed, the SSC will automatically check if it is connected to a DIM card. If not, the SSC will not send any Dispenser Interface commands to the TLS. Communicating with other devices requires POS programming.

To display the TLS link status press the "D" key on the SSC keyboard.

CH-13 Link Up
TLS RS-232 FP

Once the SSC detects it is connected to a DIM board the device name changes to TLS-R

CH-13 Link Up
TLS-R RS-232 FP