

# Gasboy CFN Interface Module

## Installation Guide

# Notice

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# Introduction

## General

This manual contains procedures to install a Gasboy CFN Interface Module into the following Veeder-Root Consoles:

- TLS-300
- TLS-350
- TLS-350R

When installed in the TLS-300/TLS-350 Consoles, the Gasboy Interface Module is used as a RS-422 4-wire serial interface on the Gasboy CFN network. When installed in the TLS-350R w/BIR Console, the Gasboy Interface Module is used as a RS-422 4-wire serial interface, or as a dispenser interface on the Gasboy CFN network.

For additional information regarding Interface Modules, refer to the appropriate console's System Setup manual. If this is a new installation or if site preparation is necessary, refer to the console's Site Preparation and Installation manual, or contact your Veeder-Root representative for assistance.

## Gasboy Interface Modules and Installation Kits

Gasboy Interface Modules and required installation kits discussed in this manual are shown in Table 1.

**Table 1.- Gasboy CFN Interface Module (IM) and Installation Kit Guide**

Dispenser Controller/ POS Type	IM P/N w/ Console	IM P/N w/o Console	Junction Box-to-Console Cable Length (ft)	IM Install Kit P/N	Notes
CFN2 & Profit Point	331001-002 (TLS-350) 331001-003 (TLS-350R)	331664-001 <sup>1</sup> (TLS-300) 847490-471 (TLS-350) 847490-472 (TLS-350R)	5	331088-005 <sup>2</sup>	A Gasboy site controller version 2.0 or later is required. A Gasboy junction box, Gasboy P/N C05020 should be ordered for installation. No Blending. Network POS required.
			10	331088-010 <sup>2</sup>	
			25	331088-025 <sup>2</sup>	
			50	331088-050 <sup>2</sup>	
			100	331088-100 <sup>2</sup>	
			200	331088-200 <sup>2</sup>	

<sup>1</sup>Includes Interface Module and bracket securing screw. .  
<sup>2</sup>Kits contains cord grip and Interface Module-to-junction box cable (P/N 331087-XXX).

## Gasboy Interface Requirements

In addition to the console/IM/installation kits combinations described in Table 1 above, the following restrictions apply.

### CONSOLE SOFTWARE REQUIREMENTS

Console system software: 349511-1XX-A, or 3XX-A (or higher)

### GASBOY SYSTEM REQUIREMENTS FOR BIR INTERFACE

- Site Controller II with Version 2 or later software, and have "Send All Messages" feature

- All Profit Point Broadcast messaging enabled
- Gasboy Junction Box P/N C05020
- Non-blended dispensers

**GASBOY SYSTEM REQUIREMENTS FOR RS-422/485 INTERFACE TANK/LEVEL REPORTING**

- CFNI and CFN II Systems are compatible for Tank/Level reporting
- Gasboy Junction Box P/N C05020

**Contractor Certification Requirements**

Veeder-Root requires the following minimum training certifications for contractors who will install and setup the equipment discussed in this manual:

- Level 1** Contractors holding valid Level 1 Certification are approved to perform wiring and conduit routing, equipment mounting, probe and sensor installation, tank and line preparation, and line leak detector installation.
- Level 2/3** Contractors holding valid Level 2 or 3 Certifications are approved to perform installation checkout, startup, programming and operations training, troubleshooting and servicing for all Veeder-Root Tank Monitoring Systems, including Line Leak Detection and associated accessories.





Warranty Registrations may only be submitted by selected Distributors.

**Related Manuals**

- 576013-273 TLS-300 Series System Setup Manual
- 576013-623 TLS-350 Series System Setup Manual
- 577013-528 Serial Comm Modules for TLS-350 Series Consoles - Installation Guide



**Safety Symbols**

The following safety symbols are used throughout this manual to alert you to important safety hazards and precautions.

 <p><b>EXPLOSIVE</b> Fuels and their vapors are extremely explosive if ignited.</p>	 <p><b>ELECTRICITY</b> High voltage exists in, and is supplied to, the device. A potential shock hazard exists.</p>
 <p><b>TURN POWER OFF</b> Live power to a device creates a potential shock hazard. Turn Off power to the device and associated accessories when servicing the unit.</p>	 <p><b>READ ALL RELATED MANUALS</b> Knowledge of all related procedures before you begin work is important. Read and understand all manuals thoroughly. If you do not understand a procedure, ask someone who does.</p>

## Safety Warnings

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 <b>WARNING</b>	
	<p>You are working with a device in which potentially lethal voltages may be present. Death or injury may result if safety precautions are not followed.</p> <ol style="list-style-type: none"><li>1. Read all instructions and symbol warnings.</li><li>2. Turn power off before installing this kit.</li></ol>

# Gasboy Interface Module Setup

Installation of the Gasboy Interface Module consists of; configuring the module to communicate with the CFN network, installing the module in the console, and connecting the module to the CFN network junction box.

## Gasboy Interface Module Configuration

Get the Gasboy Interface Module (see Figure 1) and perform the following setup verifications.

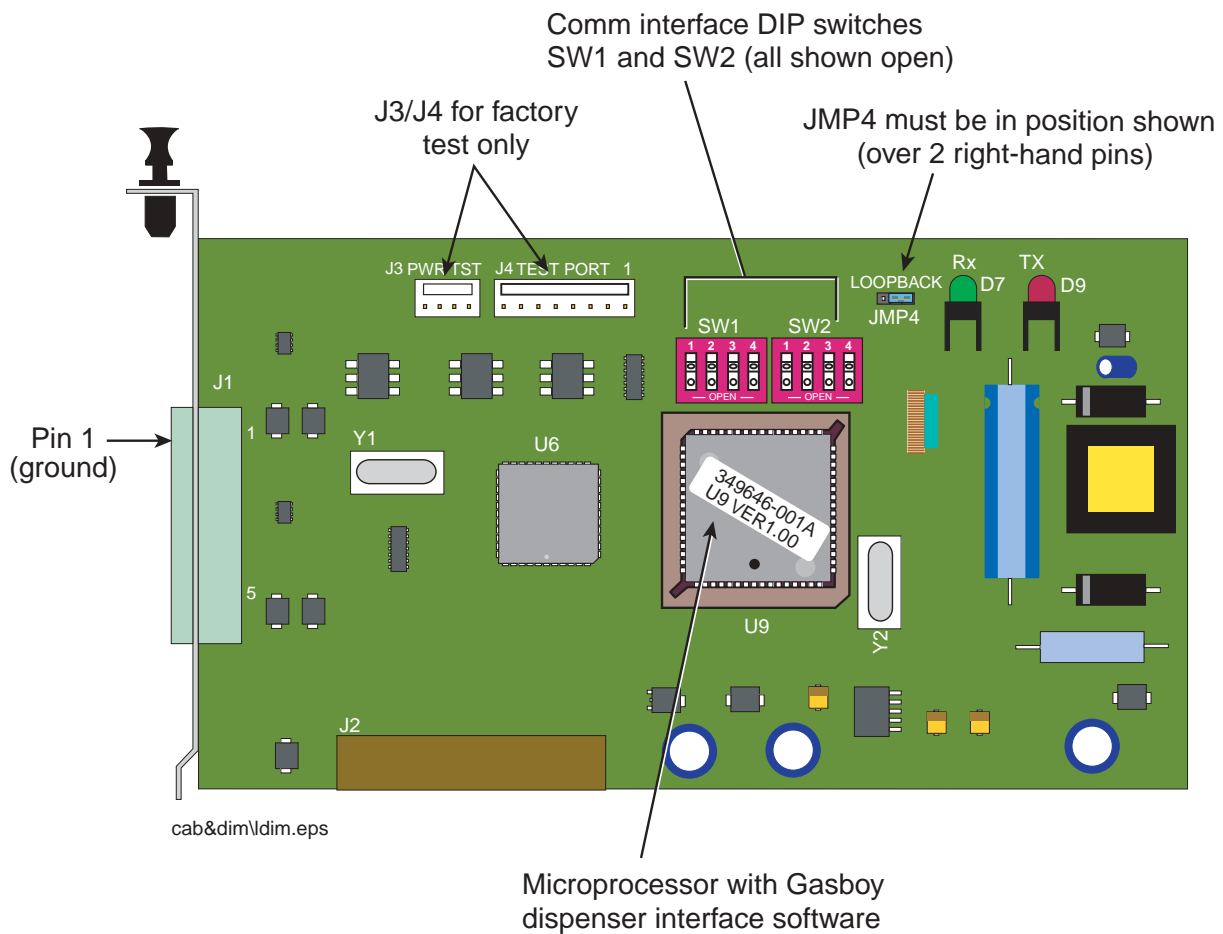


Figure 1. Gasboy Interface Module

1. Make sure the JMP4 jumper is in the position shown in Figure 1 (over the 2 right-hand pins). Important! if this jumper is over the two left-hand pins, the IM will be disabled.
2. Set the CFN comm interface dip switches (SW1/SW2 in the figure above) to positions that will match the site's CFN comm interface settings. Table 2 shows the available Gasboy comm interface settings for the Interface Module. Select one of the three combinations of SW1/SW2 DIP switch settings as required.

**Table 2.- Gasboy Interface Module SW1/SW2 Comm Interface Settings**

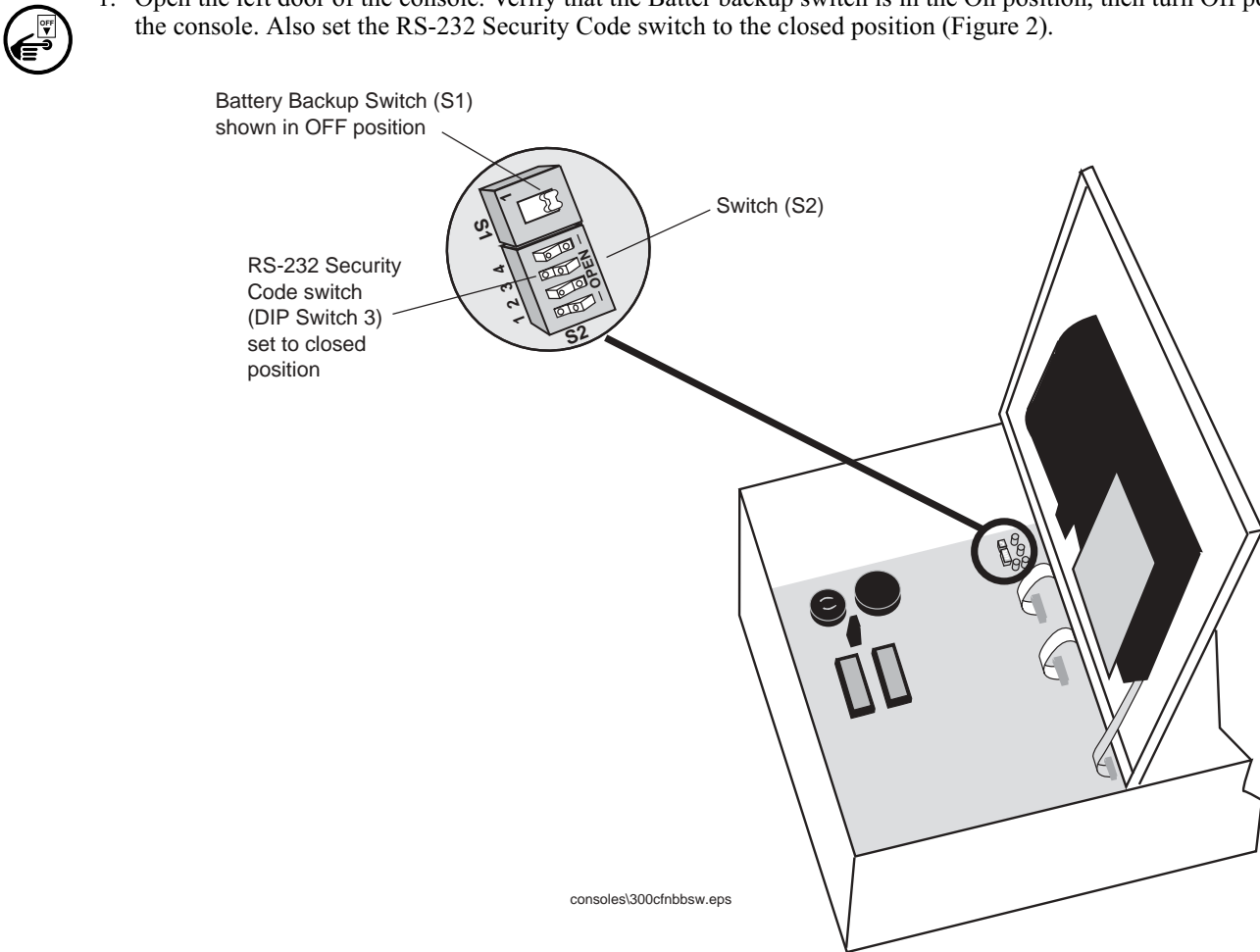
Comm Interface Settings			SW1 DIP Switch Positions				SW2 DIP Switch Positions			
Baud Rate	Data Bits	Parity	1	2	3	4	1	2	3	4
9600	8	None	o	o	o	o	o	o	o	o
	7	Even	o	o	o	X	o	o	o	o
	7	Odd	o	o	X	o	o	o	o	o

o = open, X = closed

## Installing the Gasboy Interface Module in the Console

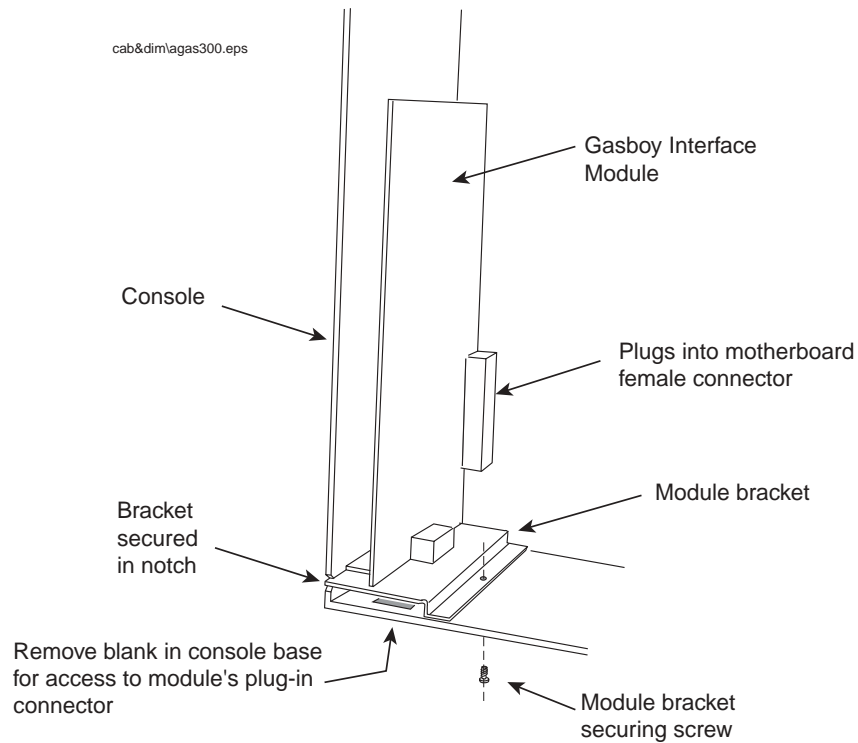
### TLS-300 CONSOLES

1. Open the left door of the console. Verify that the Battery backup switch is in the On position, then turn Off power to the console. Also set the RS-232 Security Code switch to the closed position (Figure 2).



**Figure 2. TLS-300 Console Battery Backup Switch Location**

2. Remove knockout blank from left bottom of console. Slide in the configured Gasboy Interface Module until the motherboard connector is snugly seated and the left edge of the module's bracket is in the notch cutout in the left side of the console. Attach securing screw (see Figure 3).



**Figure 3. Installing Gasboy Interface Module in TLS-300 Console**

**TLS-350 SERIES CONSOLES**

1. Open the left door of the console. Verify that the Batter backup switch is in the On position, then turn Off power to the console. Also set the RS-232 Security Code switch (DIP switch 2) to the closed position (Figure 3).



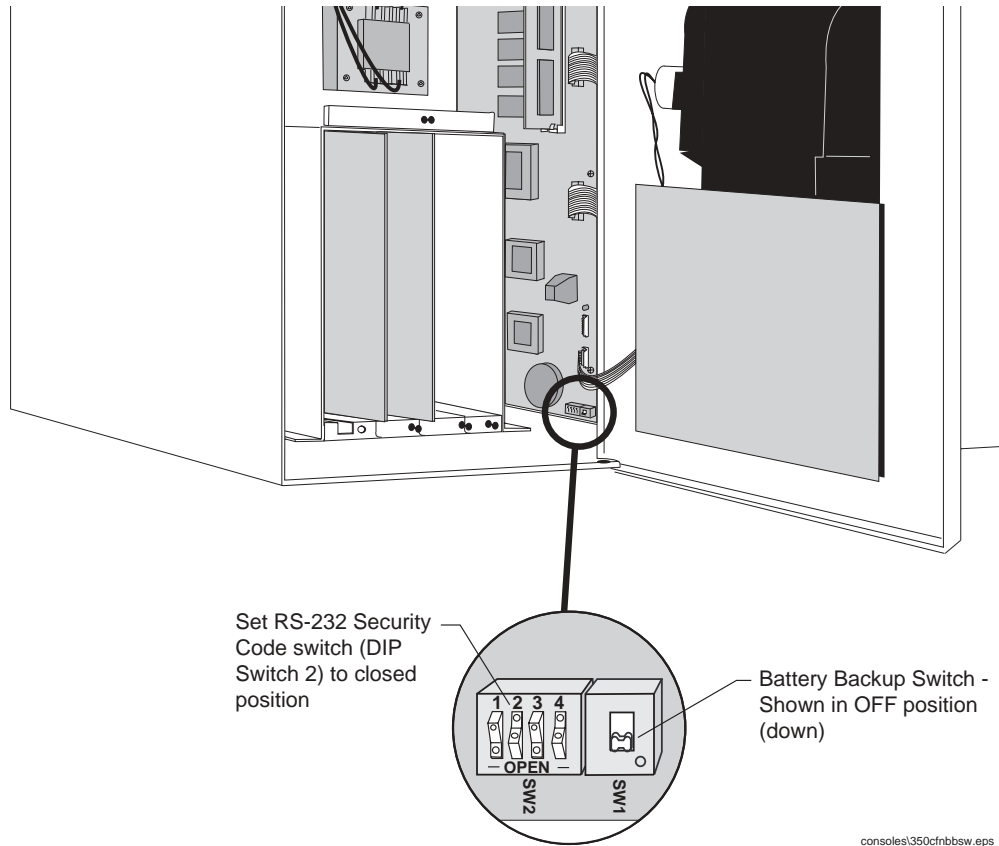


Figure 4. TLS-350 Series Battery Backup Switch Location

2. Avoid shorting high voltage across any component or module to the intrinsically safe section of the console. This could result in an explosion near the device.
3. Remove the blank cover plate from an open slot in the communication compartment. Important Note: The Gasboy Interface Module can only be installed in slots 1, 2, or 3 of the console’s Comm Bay card cage (Figure 5).  
 If your console has a snap connector which secures the cover plate in the card cage, pull it out and lift out the cover plate.  
 If your console has “knockout” cover plates, open the printer door and insert a flat blade screw driver in the slot provided in the front of the cover plate you are removing and twist it to break the front set of metal securing tabs (Figure 5). Once the front tabs are broken, carefully rock the loosened end of the plate until the rear set of securing tabs break. Remove and discard the cover plate.
4. Slide the module into the open slot until the motherboard connector is snugly seated. Do not apply excessive force when installing the module. With your thumb, push in the black retaining fastener on the end plate until it snaps into the hole in the card cage.
5. When you are finished, make sure any unused slots in the comm cage have a blank end plate installed.
6. Check that the 5-pin plug in the module’s bracket is accessible through the slot opening in the bottom of the console once the module is installed.

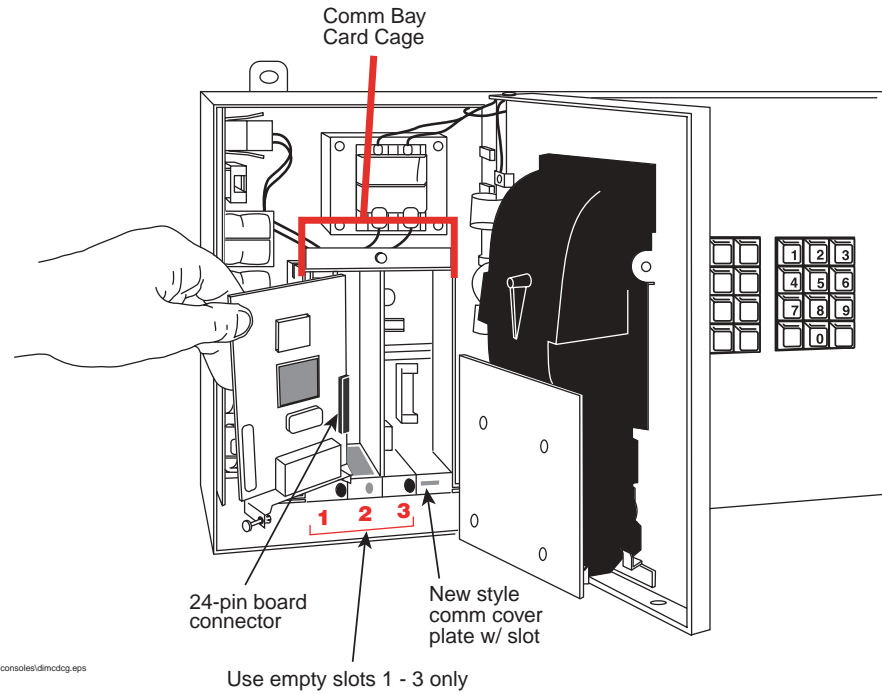


Figure 5. TLS-350 Series Gasboy Interface Module Installation

## Connecting the Module to the CFN Network

### TLS-300 AND TLS-350 CONSOLES

1. Connect the CFN junction box to the Island connector on the rear panel of the Site Controller (see Figure 6).

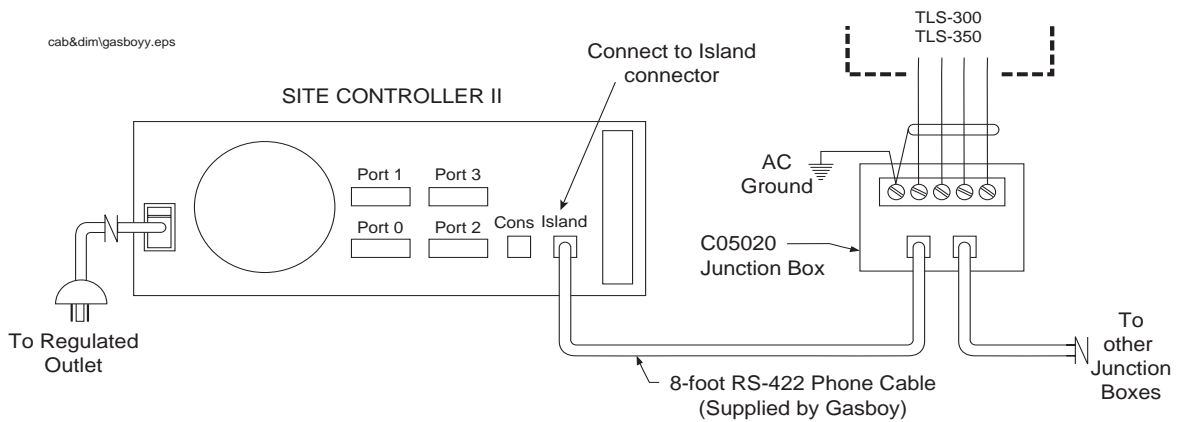


Figure 6. Connecting Site Controller to Junction Box - w/o BIR

- Refer to Figure 7 and locate the terminal block inside the Gasboy junction box (P/N C05020).

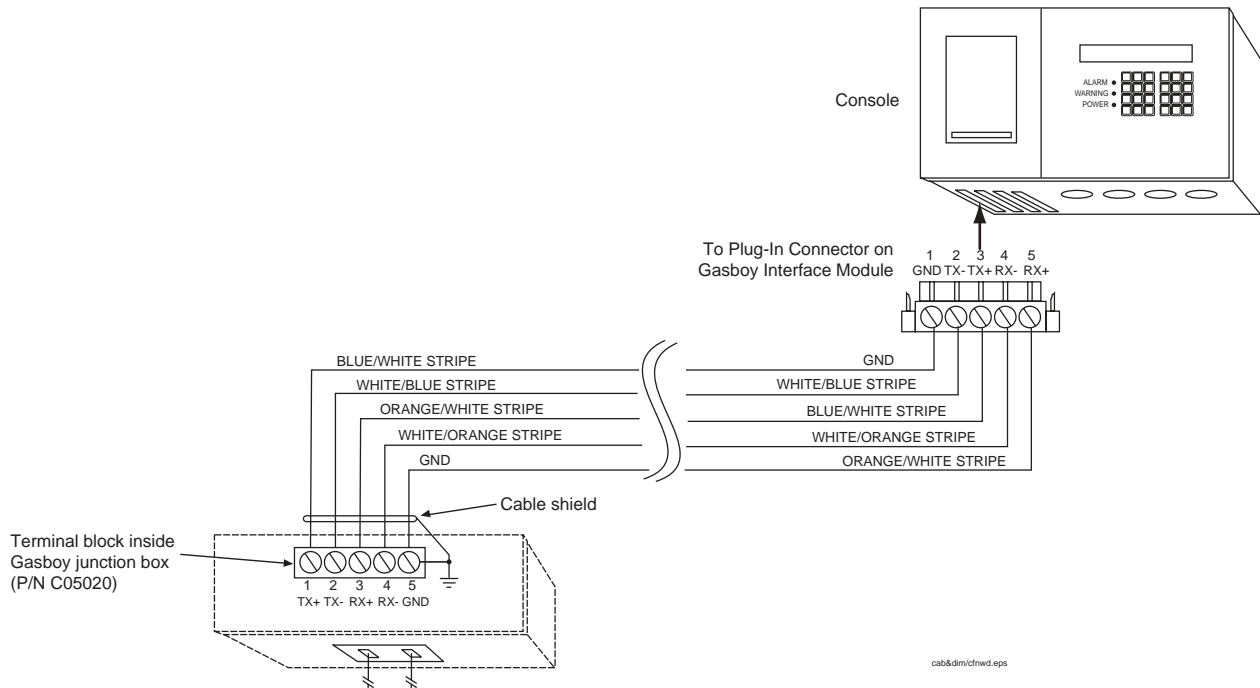


Figure 7. Junction box to console wiring diagram

- Connect the cable leads to the Gasboy terminal block as shown in Figure 7. If the cable must be shortened, remove any excess at the console end of the cable (the connector can be easily disassembled and reassembled). Junction box screw terminal positions could vary, so refer to manufacturer’s installation manual. When wiring to the junction box, keep wires physically separated by spacing them away from any other wiring or conduits.

### TLS-350R WITH BIR CONSOLE

- Connect the CFN junction box to the Cons (console) connector on the rear panel of the Site Controller (see Figure 8). Do not use the Island Loop when BIR is enabled

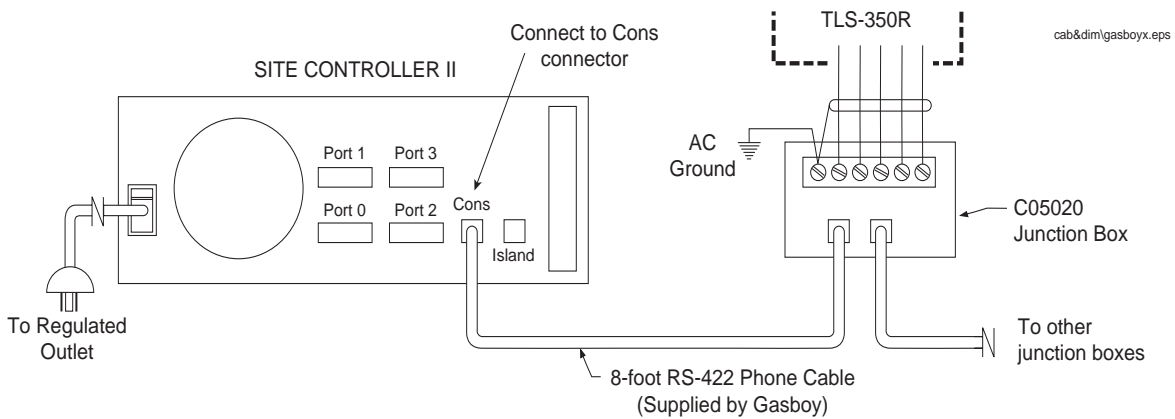


Figure 8. Connecting Site Controller to Junction Box - w/BIR

2. Refer to Figure 7 and locate the terminal block inside the Gasboy junction box (P/N C05020).
3. Connect the cable leads to the Gasboy terminal block as shown in Figure 7. If the cable must be shortened, remove any excess at the console end of the cable (the connector can be easily disassembled and reassembled). Junction box screw terminal positions could vary, so refer to manufacturer's installation manual. When wiring to the junction box, keep wires physically separated by spacing them away from any other wiring or conduits.

## Console Setup

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### ALL CONSOLES

1. Turn On power to the console
2. Press front panel MODE key to access Setup Mode. Press FUNCTION key to access Communication Setup.
3. Within Communication Setup, press STEP key to access each of the parameters in Table 3, then select the settings shown.

**Table 3.- Console Comm Settings for CFN Interface Module**

Setup Parameter	Setting
Baud Rate	9600
Parity	Odd
Stop Bit	1
Data Length	7
Security Code	00001
RS-232 End of Message	Enabled



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