

GS3055-I CF

GSM-GPRS INTERFACE

Installation Manual



WARNING: This manual contains information on limitations regarding product use and function and information on the limitations as to liability of the manufacturer.

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Introduction

The GS3055-I CF is a complete UL commercial fire and/or burglary solution for a wireless communicator that can send status change events information over the GSM GPRS Network from the Alarm Control Panel at the protected premises to a supervising station. The device is compatible with UL listed alarm receivers Models SG-SYSTEM III (using SG-DRL3-IP line card), SG-SYSTEM II and SG-SYSTEM I.

Features

- Compatible with listed alarm control panels that have an integrated DACT and support a 4 or 10-digit Contact ID Communication Format
- Complete solution CF Kit includes tamper protection output, listed power supply and battery standby capability for 24h,
- Telephone line Overvoltage protection and monitoring with automatic switch over to the GSM network communication path when a phone line trouble condition exists,
- GSM network connection and signal strength indicator,
- 4 Input lines and 4 Open collector outputs available for interfacing with the alarm control panel
- Internet/Intranet IP communication over the GSM GPRS network.

Technical Specifications

Input Voltage:	120V/60HZ/0.3A
Standby Voltage:	12V/7Ah
Standby Time:	24h (NSC) plus 5 minutes alarm
Standby Battery:	Sealed, rechargeable type, replace every 3-5 years
Low Battery Trouble Indication Threshold:	11.5Vdc
Battery Deep Discharge Protection (cut-off)	9.5Vdc
Recharging Current:	700mA (max.)
Inputs:	12V/1mA, 4 available, supervised
Outputs:	12V/50mA, 4 open-collector available, not supervised
Internal Event Buffer:	256 events (not viewable)
Loop Resistance:	1k Ohm (max. loop resistance between devices connected in series on T1/R1)
Operating Frequency:	850/1900MHz (Dual Band GSM Radio)
Antenna Gain:	1.5dB (product shall be used only with the supplied antenna)
Operating temperature:	0°C - 49°C (32°F - 120°F)
Humidity:	93%RH maximum (non-condensing)
Metal enclosure:	red painted, with hardwired transformer and high voltage connection box included
Dimensions:	290mm x 254mm x 75mm (11-1/2' x 10' x 3')
Weight:	5.8Kg (12.8 lbs) (including standby battery)

*This equipment, GS3055-I CF, is fixed and shall be installed by Service Persons only (Service Person is defined as a person having the appropriate technical training and experience necessary to be aware of hazards to which that person may be exposed in performing a task and of measures to minimize the risks to that person or other persons) according to the local rules and regulations. It shall be installed and used within an environment that provides the pollution degree max 2, over voltages category II, in non-hazardous, indoor locations only. This manual shall be used with the Installation Manual of the alarm control panel. All instructions specified within that manual must be observed. **WARNING: The metal shell of the RS232 connector is not earthed! Before connecting to this port, check the metal shell for HAZARDOUS VOLTAGES!***

Description

The GS3055-I CF has the capability of communicating alarm signals via the GPRS data network. The capability enables a fast reliable path to central stations equipped with a Sur-Gard System III, System II, or SG-SYSTEM I receiver. By connecting a GS3055-I CF to a control panel's standard PSTN interface, telephone based Contact ID signals are decoded and seamlessly routed through the GPRS network to any of the compatible receiver options.

The performance of the GS3055-I CF depends greatly on GSM Network coverage, therefore, it should not be mounted without first performing placement tests to determine the best location for reception (minimum one green LED is ON). Optional antenna kits are available.

The GS3055-I CF requires enrollment with CONNECT 24 to operate. Dealer application forms and additional information on the CONNECT 24 Voice Response Unit (VRU) and web user-interface can be found at www.connect24.com or at the following telephone numbers:

USA 1-888-251-7458

CANADA 1-888-955-5583

Approvals Information

For Commercial Fire Monitoring Installations:

The GS3055-ICF can be used in the following configurations:

1. Standalone communicator, single communication technology - 5 minutes supervision (Heartbeat sent to supervising station every 5 minutes or less)
2. Back-up communicator line for a DACT (no heartbeat sent).
 - Alarm signals must be sent first over the primary communication path (DACT) and if this is known to have failed, over the secondary communication paths (Other transmission technologies)
 - Primary: Compatible Listed control unit's land line to central station (primary).
 - Secondary: GS3055-I CF transmission through GSM-GPRS network to central station.
 - Every 24 hours a check-in signal must be sent to the central station over the primary dialer. The GS3055-I CF sends a heartbeat test transmission to the supervising station every 24 hours.
 - Each communication path shall be monitored for integrity (DACT shall have line monitoring enabled and GS3055-ICF shall have cellular connection supervision enabled).

For UL Central Station Commercial Burglary Installations:

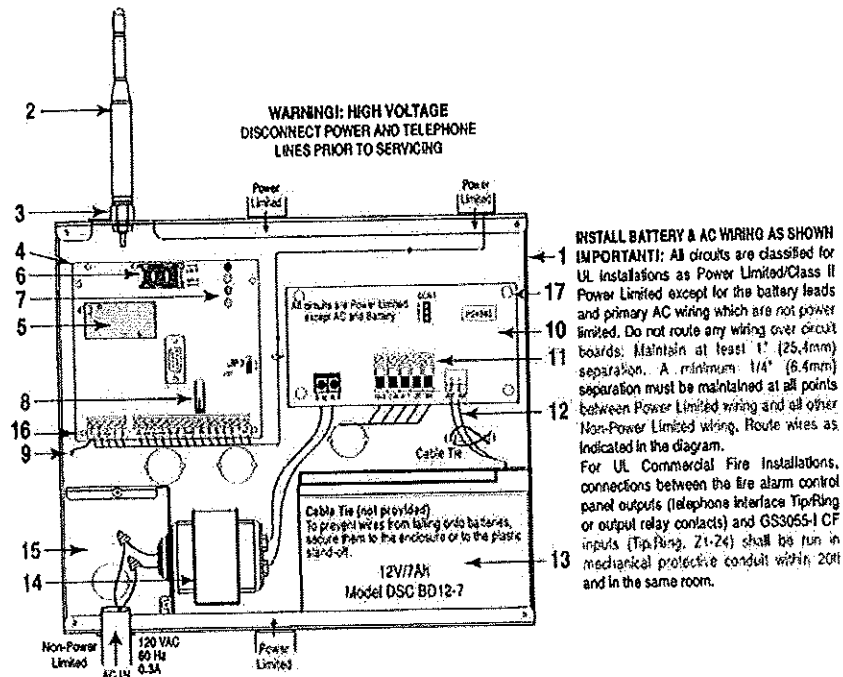
The GS3055-I CF can be used in the following configurations:

1. Standalone communicator, single line-200 second supervision (Heartbeat sent to supervising station every 135s, alarm receiver supervision window set to 200s).
2. Primary communicator line for a DACT (Heartbeat sent to supervising station every 135s, alarm receiver supervision window set to 200s).
3. Back-up communicator line for a DACT (no heartbeat sent).

The GS3055-ICF is designed to work with the Contact ID communication format as described in SIA DC-05 Standard. Before completing the field installation of the alarm monitoring system please ensure communication with the supervising central station is successful by sending several events and getting confirmation that they have been received.

Identification of Parts

The numbers in square brackets [] in this manual refer to the main parts of the GS3055-I CF (see Fig.1 below) described in this section.



NOTES: Connection of metal-clad cable, conduit, metal raceway or the like is permitted as a means for grounding. Use the supplied starwashers to secure the mains connection box cover and the front cover of the enclosure.

PARTS	
1	GS3055-I CF Metal Enclosure
2	External Antenna (supplied)
3	Antenna mounting hardware
4	GS3055-I CF PCB Assembly
5	GSM Radio with Connector for Antenna
6	SIM Card Socket
7	Status LEDs
8	Tamper Switch
9	GS3055-I CF Connections (see Fig. 2 for details)
10	Power Supply PCB Assembly
11	Power Supply Connections (see Fig. 3 for details)
12	Standby Battery Leads
13	Standby Battery 12V/7Ah
14	Transformer 16.5V/37VA
15	Mains Connections Box with Cover

Figure 1 - Parts

Installation of GS3055-I CF

CONNECT 24 Enrollment Information

Only authorized dealers can enroll a GS3055-I CF with CONNECT 24. Dealer application forms and additional information on the CONNECT 24 Voice Response Unit can be found at the CONNECT 24 web site www.connect24.com. Please contact CONNECT 24 at the number below for assistance:

USA 1-888-251-7458

CANADA 1-888-955-5583

NOTE: Steps 1 and 2 should be completed before powering the GS3055-I CF unit.

STEP 1 - Activate Your SIM Card

Your SIM card must be activated with Connect 24 prior to use. Please call the Voice Response Unit (VRU) at least 24 hours prior to installation at 1-866-910-3865.

STEP 2 - Initialize the GS3055-I CF with Connect 24

Call the VRU at the toll-free number. Follow the voice prompts and enter in your profile number, installer ID number, installer PIN number and central station number. Ensure all information is available before calling the VRU. All this information can be found in your VRU Enrollment Package.

NOTE: For UL Commercial Fire listed products the supervision heartbeat shall be enabled.

STEP 3 - Determine Best Signal Location

1. Remove the screws and the front cover of the GS3055-I CF metal enclosure [1].
2. Fit the antenna [2] (ensure that the bolt [3] is fastened tightly).
3. Connect the antenna to the GSM Radio [5] and ensure the connector is secure..

NOTE: Before inserting or removing the SIM card, please ensure the unit is powered down.

4. Ensure the SIM card is placed in its socket [6]
5. Power up the GS3055-I CF module [4] and check signal strength on status LEDs [7].
 - Use a DC power source rated 12V/0.7A connected to +/- 12V terminals [9]
 - Allow unit to power up
 - The green LEDs will indicate the signal strength. The bottom green LED must be ON for the location to be acceptable. Please refer to the "Status LEDs" section for more information.
6. Power down the GS3055-I CF by removing the DC power source.

STEP 4 - Connect the GS3055-I CF

1. Using the cabinet, mark the 4 screw locations then drill the anchor screw holes.

NOTE: Check for cable conduits and water pipes before drilling.

2. Using anchor screws (not included), mount the cabinet to the wall.
3. Run the cables, then pull them through the cable entry or the knockouts provided.
4. Complete the connections to the terminal blocks [9], [11]. **Ensure power and Telco circuit connections are made only after the cabinet has been secured to the building or structure and has been connected to the protective earth ground.** Descriptions of the terminals can be found in the "Connecting the GS3055-I CF" section.
5. Using the 4 screws, reattach the front cover securely to the cabinet [1].

NOTE: Please refer to Figures 2 and 3 at the end of this manual for wiring diagrams.

GS3055-I CF Connections Descriptions

GS3055-I CF Module

⊥ (1) Earth Ground - This terminal must be connected to the Mains Earth, in order to comply with the Telecommunications Network Safety Standards (Overvoltage Protection Requirements).

TIP (2) / RNG (3) External telephone line - These terminals must be connected directly to the incoming telephone line.

T1 (4) / R1 (5) Internal telephone line - These terminals must be connected to the TIP and RING of the control panel.

COM(6,14) Common - This terminal is connected internally to Power Ground.

PGM1 (7), PGM2 (8), PGM3 (9), PGM4 (10) Programmable type open-collector outputs. These outputs can be activated by programmed events, refer to "Outputs" section for details. The maximum current sink of each output must not exceed 50mA. PGM1, PGM2 and PGM3 are active low and PGM4 is active high.

AUX+ (11) Auxillary 12V Output - Special applications output, power-limited, 200mA PTC Protected. This terminal is used in conjunction with the PGM outputs to activate a supervision relay. Recommended relay: DSC Model RM-2.

NOTE: Current drawn from this terminal is directly drawn from the power supply.

Tamper (12-13) - These terminals are connected in series to the Tamper microswitch (8). They will be closed when the cabinet is properly closed, and will open when the front cover is removed.

Z1-Z4 (15-16-17-18) Inputs - These terminals are set up to trigger events. Refer to "Inputs Activation Mode" section for details.

+12V (19), -12V (20) Device Power Supply - These terminals must be connected to the output of the power supply (10). When the connections are completed, connect the Red and Black wires (12) to a 12V, 7Ah battery (13).

Power Supply Module

AC - Supervised input, connect the secondary of the transformer to these terminals. Connect the primary of the transformer to a dedicated electrical circuit.

+12V/COM - Special application output circuit, power limited, connect to GS3055-I CF power input circuit. Connect the +12V output to +12V input on the GS3055-I CF module and the COM output to the -12V input on the GS3055-I CF module.

ACT (AC Trouble) - This open collector output activates when an AC Trouble is detected: Rated 50mA.

NOTE: AC Trouble output shall be connected to an input on the alarm control panel that provides immediate local annunciation and delayed remote transmission for 1 to 3 hours. If such input is not able to provide the delay for AC loss transmission, input 1 of the GS3055-I CF can be used. When input 1 is triggered, the GS3055-I CF will immediately annunciate an AC trouble by flashing the RED status LED 9 times, and will delay the AC loss event transmission by 2 hours.

LBT (Battery Trouble) - This open collector output activates when a Battery Trouble condition is detected: Rated 50mA.

TEST (Charger Trouble) - This open collector output activates when the charging circuit is in a trouble condition: Rated 50mA.

These outputs shall be connected to zone inputs of an alarm control panel in order to provide the required trouble supervision (visual and audible indication required at the control panel). The outputs are active low (switched to ground) and can be connected to a control panel directly or by using a listed supervision relay (suggested model: DSC, RM-2 Relay).

+BAT/-BAT - This connector is used to connect the standby battery, non-power limited. Use single lead battery wire assembly provided.

NOTE: When disposing of batteries, follow the instructions and and precautions printed on the batteries, and contact your municipal offices for information on the disposal of used batteries.

Status LEDs

The GS3055-I CF has 4 LEDs used for local indication of module functionality, status (trouble conditions) and receiving signal strength.

▲ **RED** — This LED is Normally OFF, it will blink in the event of trouble. This LED will switch ON within 3 minutes in the event of GSM Radio [5] trouble, or when the GSM Network is unavailable (NO SERVICE). If this LED blinks, the following list will indicate the specific trouble based on the number of blinks, by priority. On power-up, the GS3055-I CF will check for trouble conditions to be restored in the order listed below. It will indicate the status of the highest priority, unrestored trouble condition with the corresponding number of flashes of the RED LED.

When the highest priority trouble condition has been cleared, the next highest priority trouble condition will be displayed.

- 1 flash - Power Trouble (*Low input voltage*)
- 2 flashes - Radio/SIM Failure (*Check SIM Card connection*)
- 3 flashes - GSM Network Problem (*SIM Card not active, poor signal strength, antenna not connected*)
- 4 flashes - Insufficient Signal Strength (*Poor location*)
- 5 flashes - Connect 24 Configuration SMS Failure (*Improper VRU programming*)

When the configuration is ready, remove power for 2-3 seconds to allow the unit to restart and recheck status.

- 6 flashes - Receiver Not Initializing (*Improper VRU programming*)
- 8 flashes - Primary Receiver absent (*Receiver not acknowledging*)
- 9 flashes - AC Trouble (Input 1) triggered.
- Off - No Troubles

■ **YELLOW** — This LED will switch ON when the interface switches to the GSM Network (due to land line trouble). This LED can also blink quickly once (GPRS TX) or twice (GPRS RX).

NOTE: The top two LEDs will blink during the initialization activation stages.

Y **GREEN (Top)** — When this LED is ON, the reception is optimal. This LED will switch ON only when the other GREEN LED is ON.

Y **GREEN (Bottom)** — If this LED is OFF and the RED LED is ON, the GSM Network service is unavailable (NO SERVICE). This LED will Blink when the GSM Network reception is bad. If this LED is ON, the GS3055-I CF will be able to communicate to the GSM network.

Operating Modes

Simulated Land Line (Dialler) Mode

The simulated land line mode provides the alarm control panel (with dialler interface) with a backup communication path in the event of PSTN line trouble. If the voltage on the land line terminals (TIP/RING) drops below 4V for a period of between 10 to 45 seconds (depending on the device connected to the T1/R1 terminals), the GS3055-I CF will switch the connected alarm control panel to the GSM Network for approximately 30-40 seconds. At the end of this interval, it will check the land line.

- If the land line is restored, it will switch the connected alarm control panel back to the land line;
- If the land line is still down, it will continue to simulate the land line until it is restored. The GS3055-I CF will not switch during ongoing calls.

In this mode the communication of an event follows the sequence below:

- When an event is triggered, the alarm control panel dialler goes off-hook
- The GS3055-I CF will assert dial tone
- The Alarm Control Panel dials the number of the central station. Ensure the alarm control panel inserts a 1-second pause (minimum), or has dial tone search enabled before dialing the number
- The GS3055-I CF detects the DTMF dialing and stops the dial tone

NOTE: The GS3055-I CF is unable to decode pulse dialling.

- The GS3055-I CF will send the required Contact ID dual tone handshake to the alarm control panel
- After receiving the handshake, the alarm control panel transmits the event alarm message in Contact ID format
- The GS3055-I CF decodes and transforms the Contact ID digits into an IP packet and sends it to the Supervising Station Receiver over the GSM GPRS network

- The receiver acknowledges the received event and sends a command to the GS3055-I CF to generate the corresponding 1400Hz kiss-off signal for 800ms minimum
- After the GS3055-I CF generates the kiss-off, the alarm control panel goes on-hook if no more events need to be sent, or it can send the next event

Inputs Activation Mode

The GS3055-I CF also has 4 inputs that can be used to trigger specific event transmissions. The events associated with these inputs will be transmitted using Contact ID Communication Format. The default settings for these inputs (as they should be correlated at the supervising station) are:

INPUT 1 - AC LOSS INPUT 3 - FIRE ALARM
 INPUT 2 - FIRE SUPERVISORY INPUT 4 - TROUBLE

For UL Commercial Fire Listing, the GS3055-I CF operating in this mode shall be used in conjunction with a listed primary communication method.

These inputs are normally open type and will activate when a short condition is detected between the terminal and the COM. Refer to the GS3055-I CF Wiring Diagram (Figure 2) at the back of this manual.

NOTE: When the GS3055-I CF is configured in Land Line Mode, these inputs should be restricted to monitoring of trouble conditions.

NOTE: For UL listing, connections between alarm panel outputs and GS3055-I CF inputs shall be run in mechanical protective conduit within 20ft and in the same room. To reduce interference with the antenna, it is recommended that metal conduit is not connected to the knock-outs on the top of the cabinet.

Outputs

The GS3055-I CF has 4 open collector outputs, switched to ground, capable of a maximum of 50mA. Internal events on the GS3055-I CF can trigger the outputs to turn on an LED or activate an input on the alarm control panel. The default settings are as follows:

OUTPUT 1 - Land Line Trouble: Output is normally high and will switch to ground when the telephone line is down.

OUTPUT 2 - GSM Module or Network Trouble: Output is normally high and will switch to ground when the GS3055-I CF cannot connect or communicate to the GSM network.

OUTPUT 3 - Activation: Output is normally high and will switch to ground during activation.

OUTPUT 4 - General Module Trouble: Output is normally low and will switch to high when any of the previous troubles occur and/or a Failure to Communicate (FTC) trouble is detected.

NOTE: Once an output has been activated automatically, it will not restore its state until all the causes of activation are cleared.

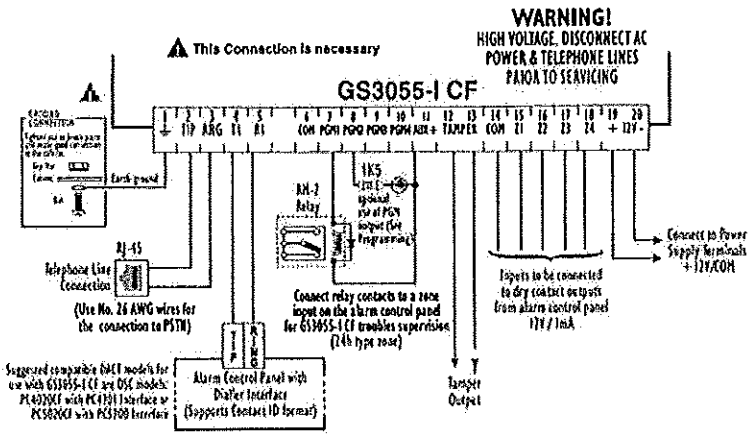
Contact ID Events Description

Event Codes

Input 1 Activation:	E301 AC LOSS ZONE 991
Input 1 Restoral:	R301 AC LOSS ZONE 991
Input 2 Activation:	E200 Fire Supervisory ZONE 992
Input 2 Restoral:	R200 Fire Supervisory ZONE 992
Input 3 Activation:	E110 FIRE ZONE 993
Input 3 Restoral:	R110 FIRE ZONE 993
Input 4 Activation:	E300 System Trouble ZONE 994
Input 4 Restoral:	R300 System Trouble ZONE 994
PSTN Line Down:	E351 TELCO 1 FAULT 000
PSTN Line Restoral:	R351 TELCO 1 FAULT 000
Periodic Report:	E603 Periodic RF Xmission 000
Periodic report with off-normal condition ..	E608 Periodic Test Xmission with System Trouble Present 000
GSM UNIT ACTIVATION:	R552 Radio Xmitter Disabled 000
GSM INTERNAL BUFFER FULL:	E624 EVENT LOG OVERFLOW 000
FTC RESTORAL:	R354 FAILURE TO COMMUNICATE 000

NOTE: The GS3055-I CF does not support local or remote programming. Upon activation through Connect 24 the product will operate as described in the previous sections of this manual.

APPENDIX - Wiring diagrams



WARNING: Incorrect connections may result in PTC failure or improper operation. Inspect wiring and ensure connections are correct before applying power. All circuits are classified for UL installations as Power Limited/Class II Power Limited except for the battery loads which are not power limited. Do not route any wiring over circuit boards. Maintain at least 1" (25.4mm) separation. A minimum 1/4" (6.4mm) separation must be maintained at all points between Power Limited wiring and all other Non-Power Limited wiring. Route wires as indicated in the diagram.

Fig. 2 - GS3055-I CF Module Wiring Diagram

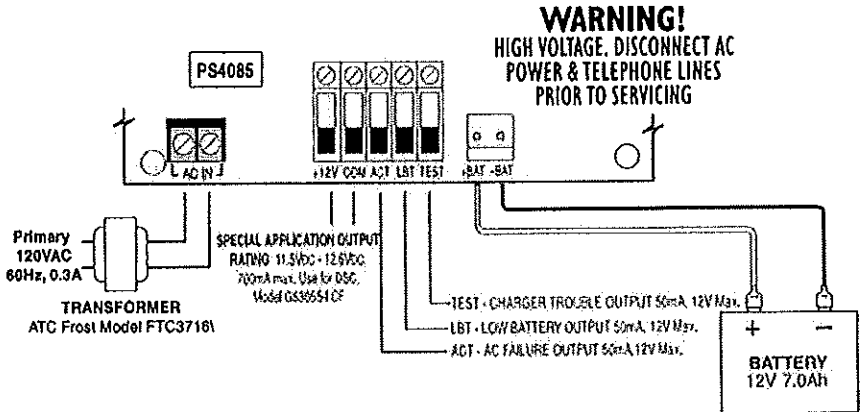


Fig. 3 - Power Supply Wiring Diagram

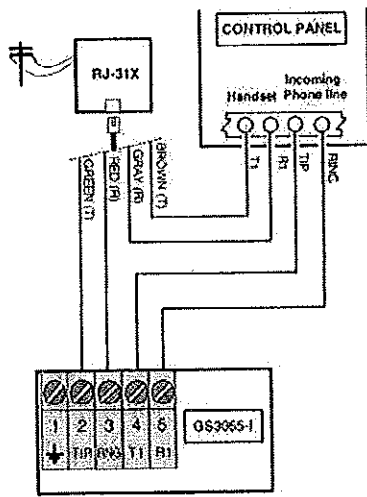
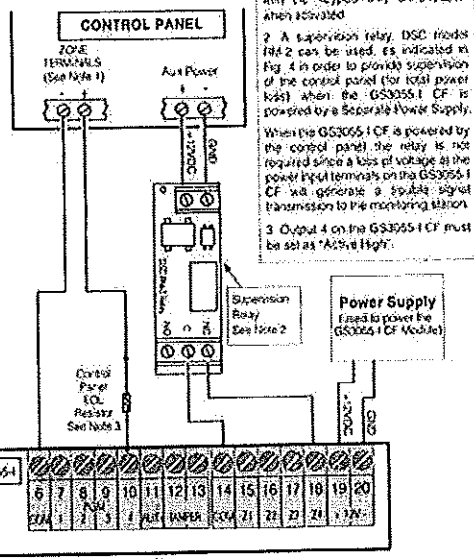


Fig. 4 - Telephone Connection



NOTES:

1. Program the Control Panels input ZonePoint as 24th "Supervisory" type with the keypad only annunciation when activated.
2. A Supervision relay, DSC model RA2 can be used, as indicated in Fig. 4 in order to provide supervision of the control panel (for total power loss) when the GS3055-1 CF is powered by a Separate Power Supply. When the GS3055-1 CF is powered by the control panel, the relay is not required since a loss of voltage at the power input terminals on the GS3055-1 CF will generate a trouble signal transmission to the monitoring station.
3. Output 4 on the GS3055-1 CF must be set as "Active High".

Fig. 5 - Optional Power Supply And Supervision Wiring Diagram

FCC COMPLIANCE STATEMENT

CAUTION: Changes or modifications not expressly approved by Digital Security Controls could void your authority to use this equipment. This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for Class B device in accordance with the specifications in Subpart "B" of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in any residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to television or radio 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:

- Re-orient the receiving antenna
- Relocate the alarm control with respect to the receiver
- Move the alarm control away from the receiver
- Connect the alarm control into a different outlet so that alarm control and receiver are on different circuits

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC helpful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock # 004-000-00345-4.

IMPORTANT INFORMATION

This equipment complies with Part 68 of the FCC Rules. On the side of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this number must be provided to the Telephone Company.

GS3055-1 CF Product Identifier US: F33AL00BGS3055

REN 0.0B

USOC Jack: RJ-31X

Telephone Connection Requirements

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details Ringer Equivalence Number (REN).

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call.

In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the local RENs, contact the local Telephone Company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US: AA AEQ#TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is REN of 0.3). For earlier products, the REN is separately shown on the label.

Incidence of Harm

If this equipment GS3055-1 CF causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the Telephone Company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

Changes in Telephone Company Equipment or Facilities

The Telephone Company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the Telephone Company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

Equipment Maintenance Facility

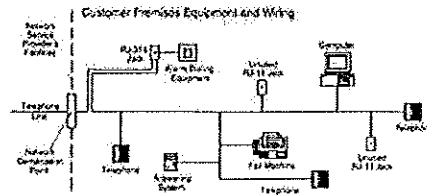
If trouble is experienced with this equipment for repair or warranty information, please contact the facility indicated below. If the equipment is causing harm to the telephone network, the Telephone Company may request that you disconnect the equipment until the problem is solved. This equipment is of a type that is not intended to be repaired by the end user.

DSC c/o APL Logistics, 757 Douglas Hill Rd., Lithia Springs, GA 30122

Additional Information

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

Alarm dialling equipment must be able to seize the telephone line and place a call in an emergency situation. It must be able to do this even if other equipment (telephone, answering system, computer modem, etc.) already has the telephone line in use. To do so, alarm dialling equipment must be connected to a properly installed RJ-31X jack that is electrically in series with and ahead of all other equipment attached to the same telephone line. Proper installation is depicted in the figure below. If you have any questions concerning these instructions, you should consult your telephone company or a qualified installer about installing the RJ-31X jack and alarm dialling equipment for you.



Industry Canada Compliance Statement

This Equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that that Industry Canada approved the equipment. The Ringer Equivalence Number (REN) for this terminal equipment is 0.0. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all devices does not exceed 5.

Cet équipement est conforme aux spécifications techniques applicables aux équipements terminaux d'Industrie Canada. Ceci est confirmé par le numéro d'enregistrement. L'abréviation IC précédant le numéro d'enregistrement signifie que l'enregistrement a été effectué sur la base de la Déclaration de conformité indiquant que le produit est conforme aux spécifications techniques d'Industrie Canada. Ceci n'implique pas que le produit ait été approuvé par Industrie Canada.

Le nombre équivalent de sonneries (REN) de cet appareil terminal est 0.0. Le REN attribué à chaque équipement terminal fournit une indication sur le nombre maximum de terminaux pouvant être connectés sur une interface téléphonique. La terminaison sur une interface peut constituer n'importe quelle combinaison d'appareils, à la condition seulement que la somme des Nombres équivalents de sonneries de tous les appareils ne soit pas supérieure à 5.

This Class B digital apparatus meets all requirements of the Canadian interference-causing equipment regulations. Cet appareil numérique de la Classe B respecte toutes les exigences de règlement sur le matériel brouilleur du Canada.

The term "IC" before the radio certification number only signifies that Industry Canada technical specifications were met. This manual is applicable to the following GS3055-1 CF Cellular Alarm Communicator Models:

GS3055-1 FCC ID: F3306GS30551 and IC: 160A-GS30551

GS3055-2 FCC ID: F3306GS30552 and IC: 160A-GS30552

WARNING: To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 20cm or more must be maintained between the antenna of this device and persons during device operation.

Printed in Canada



29007393R005