

FSC-3000

Fire Station Controller

Install & User Manual



Genave / NRC, Inc.

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<u>Warning</u>



If incorrectly used, this equipment can cause severe injury. Those who use and maintain the equipment should be trained in its proper use, warned of its dangers, and should read the manuals before attempting to set up, operate, adjust or service the equipment. Keep this manual for future reference.

Important Safety Information

Installation & Service Precautions

• Electrocution, severe personal injury and damage to equipment can occur during installation or servicing this equipment. All electrical work should be performed by, or under the supervision of an experienced electrician and in accordance with all applicable electrical, fire, building and safety codes.

•You must test the system and equipment to insure it is operating correctly after the installation, as well as after any work has been performed.

System Operation

- •Training is necessary to ensure those responsible can correctly use the system. Periodic tests can serve to accomplish the training for the operators, in addition to verifying system readiness.
- •You must carefully read and completely understand all the information about the system including its abilities and its limitations. Since no control system is infallible, you must have contingency plans for control, in the event the primary systems do not perform as expected, for any reason.

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FSC-3000 Hardware

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Product Overview

Basics

The FSC-3000 is a receiver-controller unit designed to be activated by the same signals used to alert fire station personnel. The unit has 8 isolated inputs and 5 relay outputs as well as a 600 Ohm audio output. The unit is fully programmable as to its functions, frequencies and time clock. Hence, it can control overhead bay doors, turn on bay lights, turn off gas to the station's stove, perform daily signal tests, etc...

Enclosure

The enclosure is a standard 19 inch, 3 unit high, aluminum chassis.

Front



Back



Programming

The unit is programmed via ComStarG software from Genave. Please contact Genave for training on the ComStarG software.

Connections

AC Input

The FSC-3000 can be connected to any AC power source ranging from 100 to 240 Volts and from 47 to 63 Hz.

The AC port accepts a standard IEC-320 (computer power cord) cable.

The unit comes equipped with a 5mm x 20mm 2 Amp fuse and a spare fuse in the fuse drawer.

For further information please refer to: Qualtek 719W-00/04 Datasheet or the RXC-3000 manual.



DC Input

The FSC-3000 can be operated from DC voltage supply. The DC input port can accept wire gauges between 22 Awg and 12 Awg.

The DC supply input port is UNFUSED but it has an inline blocking diode to prevent current from the FSC-3000's internal AC power supply from coming out the DC port. The acceptable DC input voltage range is 12 VDC to 13.8 VDC.



Chassis Ground

The FSC-3000 has a chassis ground point that is bonded to the ground pin on the AC Input connector. It is advised that this pin be bonded to earth per NEC rules and to stabilize voltages and signals into the FSC-3000.

RF Input Port

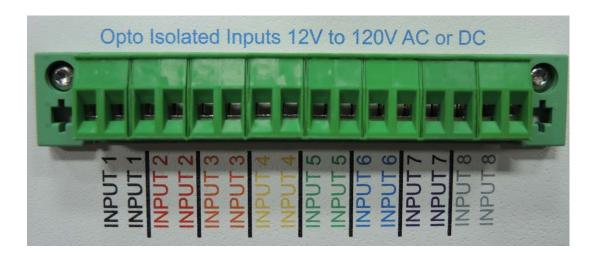
The antenna port is a standard 50 Ohm BNC connection.

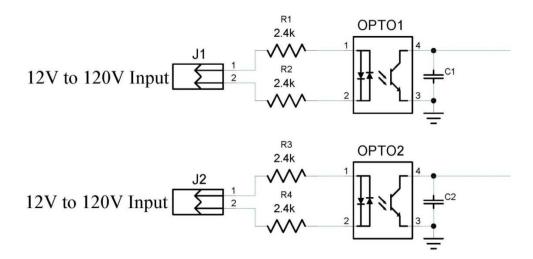
Please refer to the RXC-3000 manual for further information.



Isolated Inputs

The FSC-3000 has 8 independent and isolated inputs that accept voltages ranging from 12V to 120V AC or DC. Since the opto-isolator is a current driven device, switches/controls can be remotely placed at a great distance from the FSC-3000. As long as the current is sufficient to activate the opto-isolator, the input to the RXC will be held low (Active). Please refer to the RXC-3000 manual for further information.





The image above shows inputs 1 and 2. The input impedance for each input is 4800 Ohms. Currents greater than 2 mA, will activate the opto-isolator for the channel. Each of the opto-isolators connect to the associated input of the control board. Hence "Opto1" controls Input 1 of the control board.

Relay Outputs

Each of the 5 relay outputs of the FSC-3000 are a "1 Form C" relay with 1 Normally Open (NO) and 1 Normally Closed (NC) contact points.

Each of the 5 relays can handle voltages up to 250 VAC and 100 VDC. The contact rating for the relay is 5 Amps AC or DC.

Each relay is independent and isolated from the other relays.

Please refer to the RXC-3000 manual for further information.



600 Ohm Audio

The FSC-3000 is capable of driving a 600 Ohm audio port. The maximum audio volume from the port is 2Vp-p. It has a DC resistance (DCR) of 58 Ohms. Control of any external amplifier will have to be done via the relay outputs. Audio levels are set via the audio potentiometers on the control board. Please refer to the RXC-3000 manual for further information.



USB Port

Communication and programming of the FSC-3000 is performed through the USB port. The port is a USB "Mini-B" type, Full USB-2.0 speed compliant device.



Reset Button

The reset button on the front of the unit is directly connected to Input #4 of the control board. The action associated with the input must be programmed into the unit via the ComStarG software.



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Notes:			

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