



# Conettix ITS-DX4020-G GPRS/GSM IP Communicator



## Quick Start Guide

For complete installation, configuration, and testing instructions, refer to the **Conettix ITS-DX4020-G Installation and Operation Guide** (P/N: F01U163066) provided on the supplied CD-ROM.

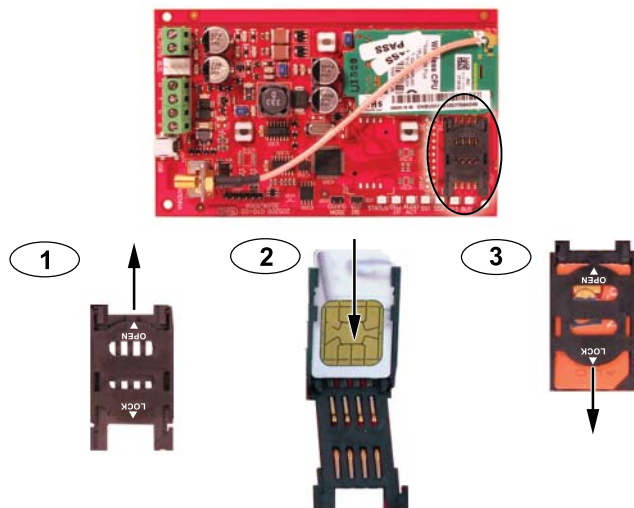
Control Panel Compatibility	
FPD-7024	Version 2.10 or later
GV2 Series	Version 7.07 or 7.08 (D9412GV2, D7412GV2, D7212GV2)
GV3 Series	D9412GV3, D7412GV3, D7212GV3
GV4 Series	D9412GV4, D7412GV4, D7212GV4

### 1 Disconnect the Power

Before installing the ITS-DX4020-G, disconnect all power to the control panel (AC and standby battery).

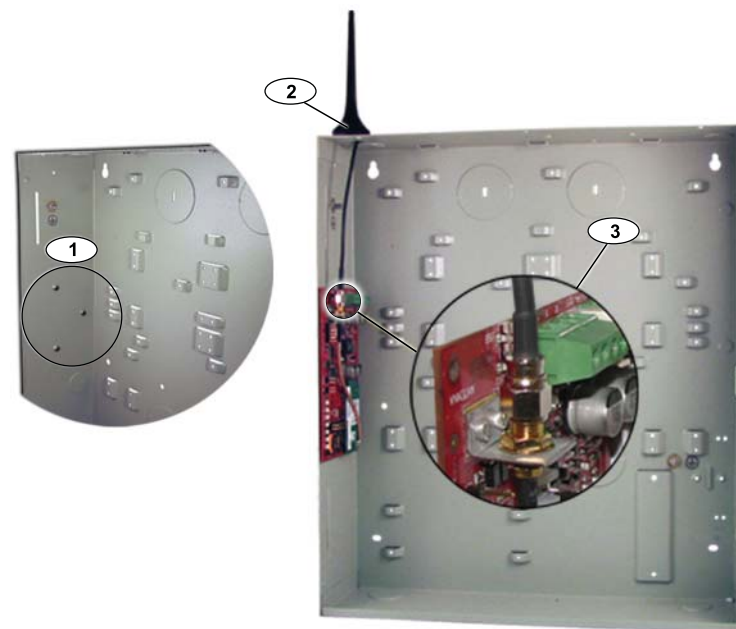
### 2 Insert the SIM Card

1. Open the SIM card holder.
2. Insert the SIM card into the card guide.
3. Close the SIM card holder.



### 3 Mount the ITS-DX4020-G

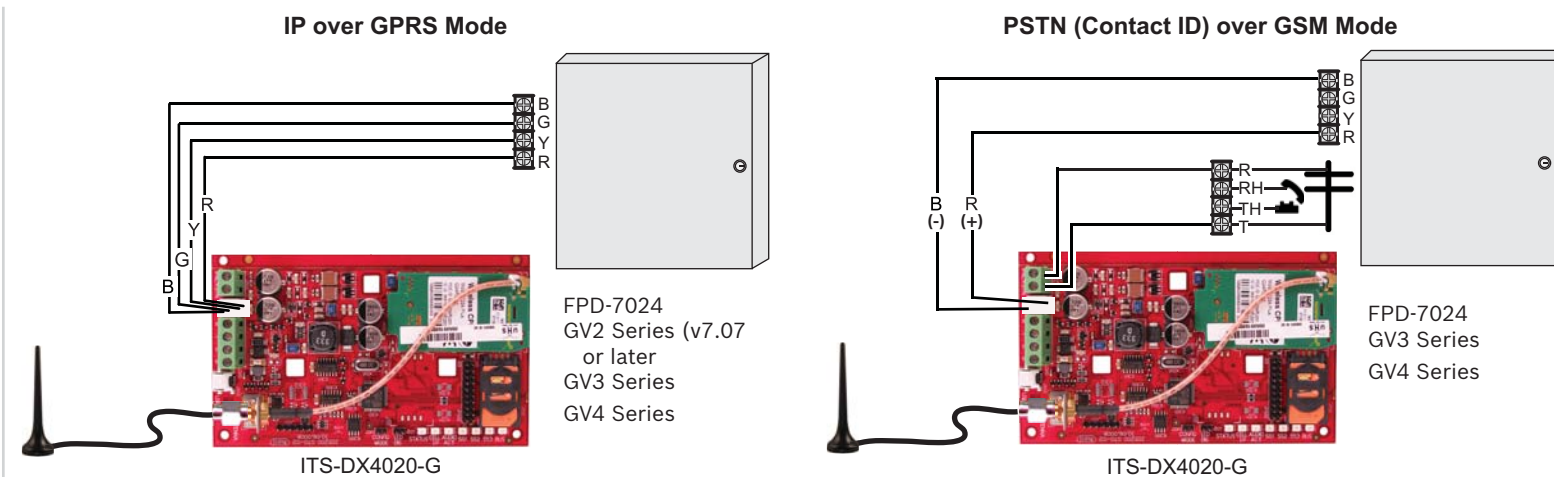
1. Mount the ITS-DX4020-G on the control panel enclosure using the supplied mounting screws. Use any of the standard three-hole mounting patterns on the control panel enclosure. If necessary, remove the three mounting knockouts.
2. Mount the magnetic antenna to a metallic surface.
3. Connect the antenna cable to the threaded ANTENNA connector on the ITS-DX4020-G.



### 4 Connect to the Control Panel

Connect the ITS-DX4020-G to the control panel as shown below.

- **IP over GPRS Mode:** All compatible control panels
- **PSTN (Contact ID) over GSM:** FPD-7024, GV3 Series, GV4 Series



### 5 Apply Power

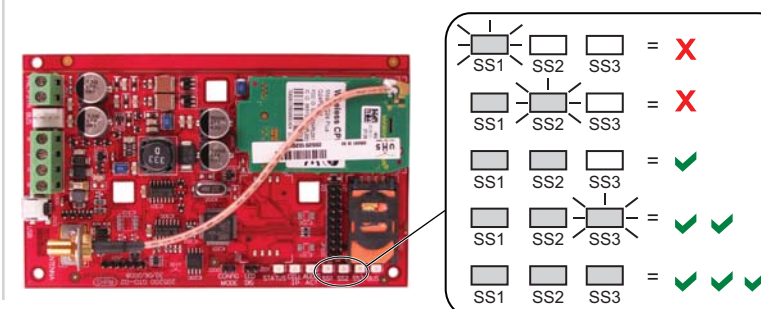
Connect power to the system (AC and standby battery).

### 6 Check Signal Strength

Check the signal strength LEDs (SS1, SS2, and SS3).

- If signal strength is acceptable, you are ready to configure the ITS-DX4020-G.
- If signal strength is unacceptable, check the site for possible causes of signal interference.

**NOTE:** Depending on the SIM card used, first-time registration might take up to 3 minutes to complete. When the SIM card registration is complete, the signal strength LEDs will light.

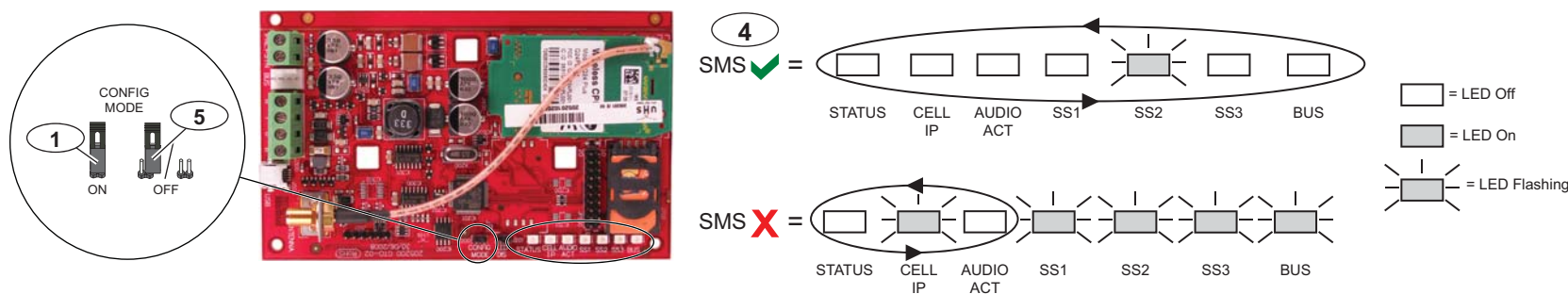


# 7 Configure the ITS-DX4020-G

You can configure the ITS-DX4020-G by sending a text message from your mobile phone or by using the USB interface from a PC or laptop.

## SMS (Text Message) Configuration

- Place the supplied jumper plug across the CONFIG MODE jumper pins.
- Compose the SMS (see the table below for sample messages).
- Send the SMS to the phone number assigned to the SIM card in the ITS-DX4020-G.
- Check the diagnostic LEDs on the ITS-DX4020-G to ensure that the SMS was properly received.
- When the ITS-DX4020-G is successfully configured, remove the jumper plug from the CONFIG MODE pins. The ITS-DX4020-G restarts.



- Separate each command line in the SMS with either a line feed <LF>, a carriage return <CR> or <↵ENTER>, or a semi-colon (;). Any of these characters is acceptable to separate command lines. Refer to your cellular phone's documentation for available characters.

ITS-DX4020-G SMS Settings	IP Over GPRS Mode				PSTN (Contact ID) Over GSM Mode
	FPD-7024	GV2 Series	GV3 Series	GV4 Series	FPD-7024, GV3, or GV4 Series
%1 = Start SMS	%1	%1	%1	%1	%1
1 = Password	1=4020G	1=4020G	1=4020G	1=4020G	1=4020G
4 = SIM PIN (if required)					
10 = GPRS APN	10=<your APN>	10=<your APN>	10=<your APN>	10=<your APN>	
11 = GPRS Username (if required)					
12 = GPRS Password (if required)					
14 = Bus Address	14=250	14=88	14=88 or 92	14=88 or 92	14=0
17 = Comm Path	17=2	17=2	17=2	17=2	17=3
! = End SMS	!	!	!	!	!

## USB Configuration

For complete USB configuration instructions, refer to the **Conettix ITS-DX4020-G Installation and Operation Guide** on the supplied CD-ROM.

- Connect the ITS-DX4020-G to the target PC or laptop with a USB-to-mini-USB cable (not supplied).
- Download the **ITS-DX4020-G.inf** file from the supplied CD-ROM and install it on the target PC or laptop.
- On the ITS-DX4020-G, short the CONFIG MODE jumper pins with the supplied jumper plug.
- From Windows, start a terminal session (use HyperTerminal or Tera Term).
- In the terminal session, configure a new virtual serial COM port (for example, COM4):  
**Baud rate:** 9600; **Data bits:** 8; **Parity:** None; **Stop bits:** 1; **Flow control:** None
- Press [Enter] on the keyboard. The USB Login window opens.
- Enter the login password (default: **4020G** all uppercase) and press [Enter].
- Configure the ITS-DX4020-G as needed using USB menu Options 8 (Change Basic Parameters). The table above shows the parameters that must be set as a minimum.
- When configuration is complete, select Option 6 (Save and Reboot) from the USB menu to save all changes and to restart the ITS-DX4020-G.

# 8 Test the ITS-DX4020-G

Contact the central monitoring station for destination IP address and port number settings. Provide the central monitoring station with the poll rate setting.

Test the system to ensure that it can send reports from the ITS-DX4020-G to the central monitoring station in the selected mode of operation.

LED	Function
STATUS	Indicates the overall health of the device. <ul style="list-style-type: none"> <li><b>ON:</b> Normal operation.</li> <li><b>Flash:</b> A trouble condition exists.</li> <li><b>OFF:</b> No power to the device.</li> </ul> When the LED DIS jumper pins are first shorted, the STATUS LED flashes the firmware version. After that, the STATUS LED flashes once every 4 sec to indicate that the ITS-DX4020-G is powered up.
CELL IP	Indicates the IP connection status. <ul style="list-style-type: none"> <li><b>ON:</b> The ITS-DX4020-G is connected to the central station receiver through the GPRS network.</li> <li><b>Flash:</b> The ITS-DX4020-G is connected to the GPRS network, but not to the central station receiver.</li> <li><b>OFF:</b> The ITS-DX4020-G is not connected to the GPRS network, or the module is configured for Contact ID over GSM.</li> </ul>
AUDIO ACT	Indicates the PSTN connection status. <ul style="list-style-type: none"> <li><b>ON:</b> The PSTN connection is in use (off-hook).</li> <li><b>OFF:</b> The PSTN connection is not in use (on-hook).</li> </ul>
SS1, SS2, SS3	These LEDs indicate the wireless signal strength of the ITS-DX4020-G. <ul style="list-style-type: none"> <li><b>Registering on the GSM network:</b> SS1 flashes, SS2 and SS3 OFF</li> <li><b>Unacceptable:</b> All three LEDs are off; or SS1 ON, SS2 and SS3 OFF</li> <li><b>Marginal:</b> SS1 ON, SS2 flashes, SS3 OFF</li> <li><b>Good:</b> SS1 and SS2 ON, SS3 OFF</li> <li><b>Very Good:</b> SS1 and SS2 ON, SS3 flashes</li> <li><b>Excellent:</b> All three LEDs ON</li> </ul>
BUS	Indicates bus connection status. <ul style="list-style-type: none"> <li><b>ON:</b> Active communication exists between the ITS-DX4020-G and the control panel.</li> <li><b>Flash:</b> The ITS-DX4020-G is initializing, or a problem exists with the bus connection to the control panel.</li> <li><b>OFF:</b> The ITS-DX4020-G is not configured for bus communication.</li> </ul>

## Installation Complete

## Technical Specifications

Electrical	
Operating Current	<ul style="list-style-type: none"> <li><b>Standby:</b> 65 mA</li> <li><b>Alarm:</b> 200 mA</li> </ul>
Operating Voltage	12 VDC nominal
Maximum Wire Resistance for Control Panel Connections	1.6 ohms
Maximum Wire Distance	<ul style="list-style-type: none"> <li><b>22 AWG:</b> 30.5 m (100ft)</li> <li><b>18 AWG:</b> 61 m (200 ft)</li> </ul>
Ripple/Noise	200 mVpp maximum
PSTN FSX Port	17 V minimum supplied
Radio	GSM Quad band radio; 850 MHz and 1900 MHz
Other	
Antenna	<ul style="list-style-type: none"> <li>Magnetic base omni-directional antenna</li> <li>2.5 m (8.2 ft) cable with SMA connector</li> </ul>
SIM Card	3 V/1.8 V SIM (compliant with GSM 11.12 recommendation)
USB	Mini-B connector (cable not supplied)

