GV-NET/IO Card V3.1

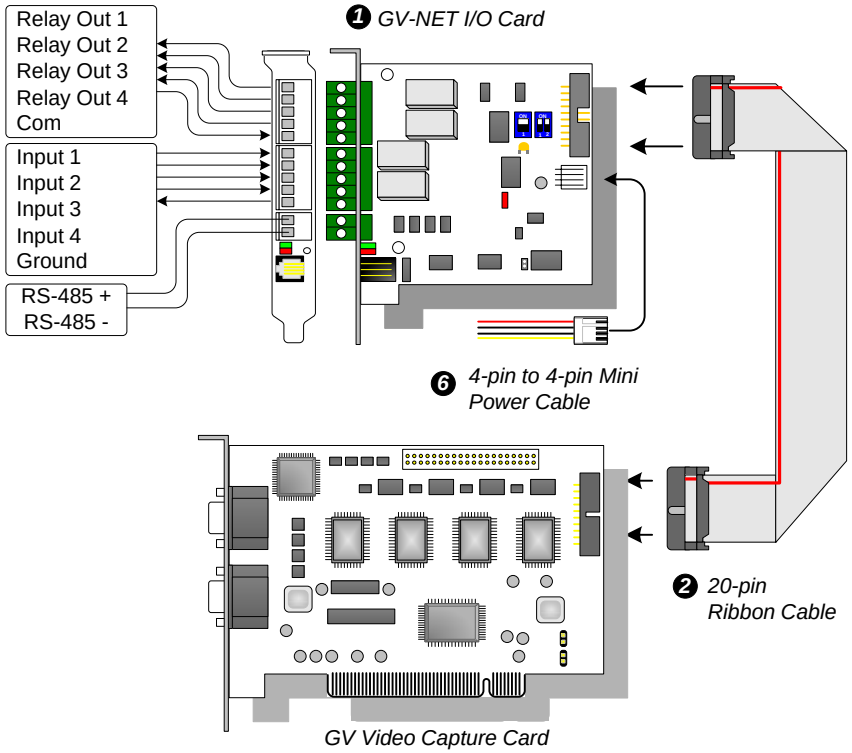
The GV-NET/IO provides 4 inputs and 4 relay outputs. The new version of GV-NET/IO Card supports both DC and AC output voltages, and provides a USB port as well.

Key Features

1. A USB port is provided for PC connection, and it is used with 30 DC output voltage.
2. It can switch between two modes, NET/IO Card Mode and I/O Box Mode, which expands its capability.
3. Up to 4 GV-NET/IO Cards can be chained together when it is on the I/O Box mode.
4. It can act as an independent device when it is on the I/O Box mode.

Packing List

1. *GV-NET I/O Card x1*
2. *20-pin Ribbon Cable (4 Connectors) x1*
3. *RJ-11 to DB9 Cable x1*
4. *RJ-11 to USB Cable x 1*
5. *3-pin Internal USB Cable x 1*
6. *4-pin to 4-pin Mini Power Cable x 1*
7. *Installation Guide x 1*

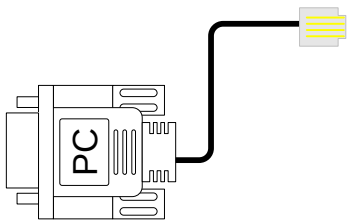


Specifications

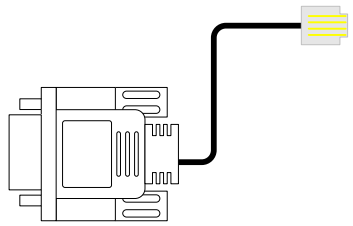
Input	Input	4	
	Input Signal	9~30V AC/DC	
Output	Relay Output	4	
	Relay Status	Normal Open	
	Relay Capacitance	USB Connection	30V DC, 3A
		RS-232 Connection	125 / 250V AC, 3A 30V DC, 3A
Interface	RJ-11 to DB9		
	RJ-11 to USB		
	3-pin internal USB to internal USB		
Mode Switch	I/O Box Mode	Without GV-Video Capture Card	
	NET/IO Card Mode	With GV-Video Capture Card	
Address	1-4		
Communication	RS-485, USB, RS-232		
Environmental Conditions	0~50 degree C , 5%~95% (non-condensing)		
Dimensions	99 (W) x 90 (H) mm		

Important: The supplied RJ-11 to DB9 Cable of older versions is not compatible with the GV-NET/IO Card V3.1.

Version 3.1
With a PC Mark



Older Versions
Without a PC Mark

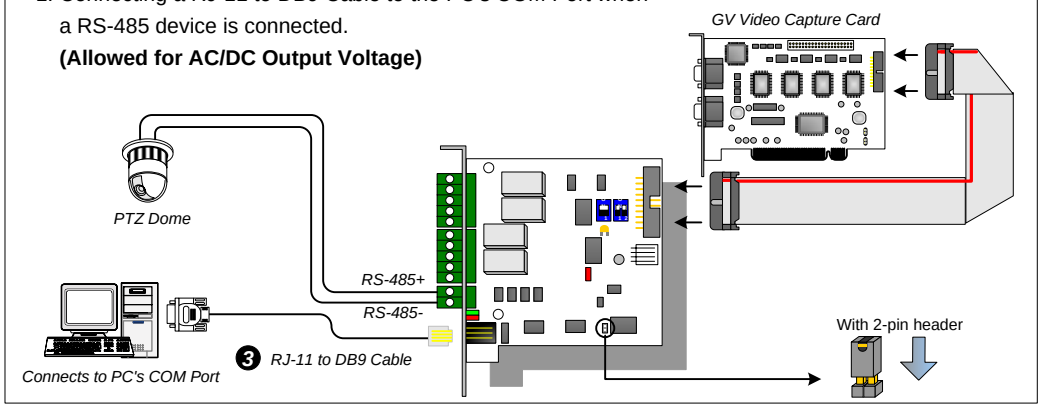


Connections In NET/IO Card Mode

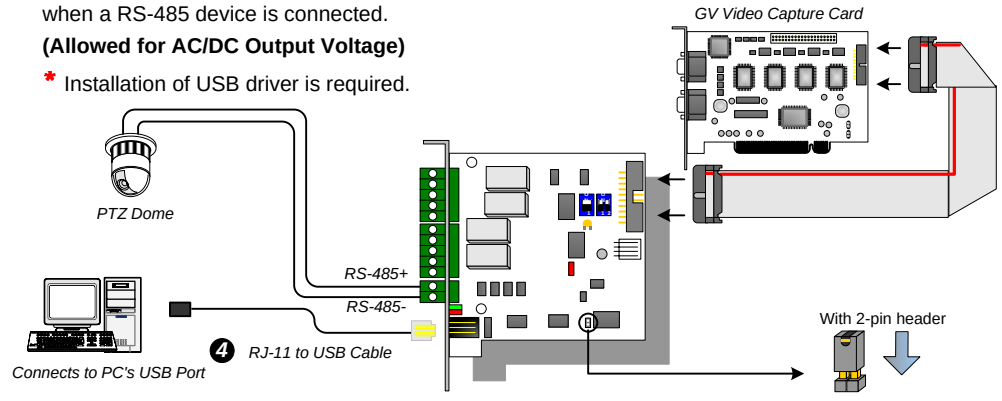
For the connections in the NET/IO Card Mode, please follow the instructions below:

1. It is required to connect the GV-NET/IO Card to GV Video Capture Card with the 20-pin Ribbon Cable.
2. If you want to connect the GV-NET/IO Card to the RS-485 devices, you have 3 ways of connections. See the pictures below.

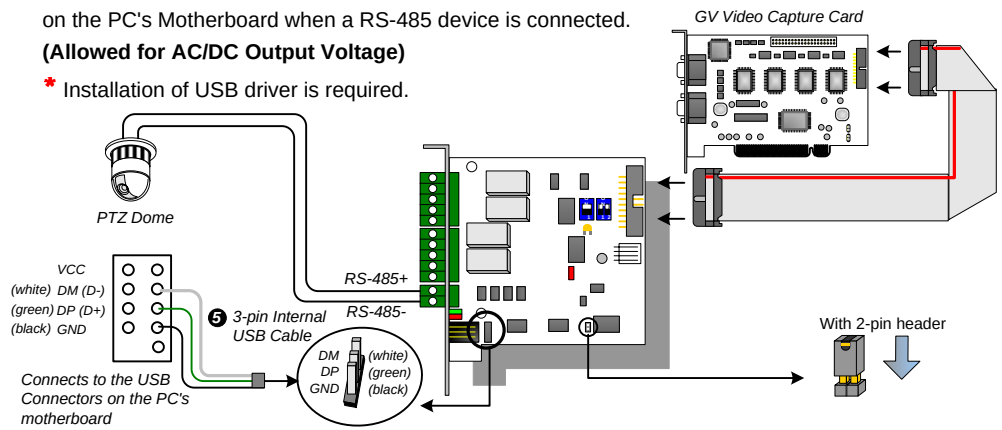
1. Connecting a RJ-11 to DB9 Cable to the PC's COM Port when a RS-485 device is connected.
(Allowed for AC/DC Output Voltage)



2. Connecting a RJ-11 to USB Cable to the PC's USB Port when a RS-485 device is connected.
(Allowed for AC/DC Output Voltage)
* Installation of USB driver is required.



3. Connecting a 3-Pin Internal USB Cable to the USB Connectors on the PC's Motherboard when a RS-485 device is connected.
(Allowed for AC/DC Output Voltage)
* Installation of USB driver is required.

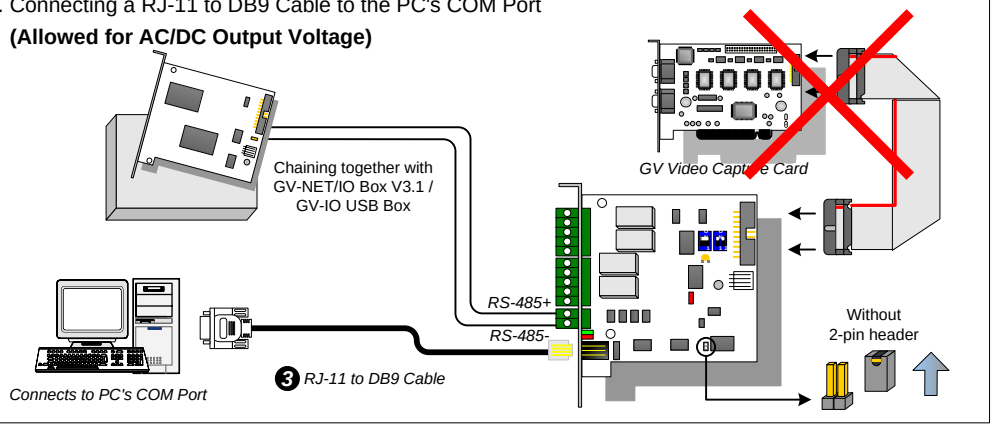


Connections In I/O Box Mode

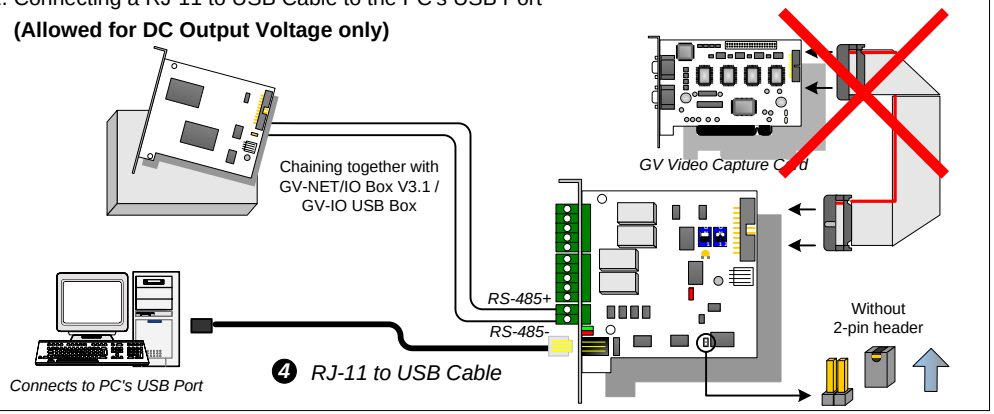
For the connections in the I/O Box Mode, please follow the instructions below:

1. It is not necessary to connect the GV-NET/IO Card to GV Video Capture Card.
2. Connect the GV-NET/IO Card to the PC by one of the following 3 ways. See the pictures below.

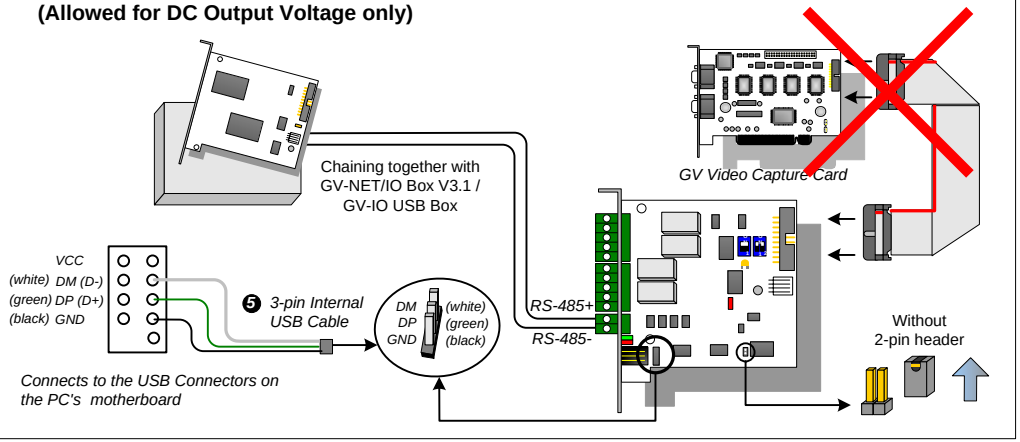
1. Connecting a RJ-11 to DB9 Cable to the PC's COM Port
(Allowed for AC/DC Output Voltage)



2. Connecting a RJ-11 to USB Cable to the PC's USB Port
(Allowed for DC Output Voltage only)



3. Connecting a 3-Pin Internal USB Cable to the USB Connectors on the PC's Motherboard
(Allowed for DC Output Voltage only)

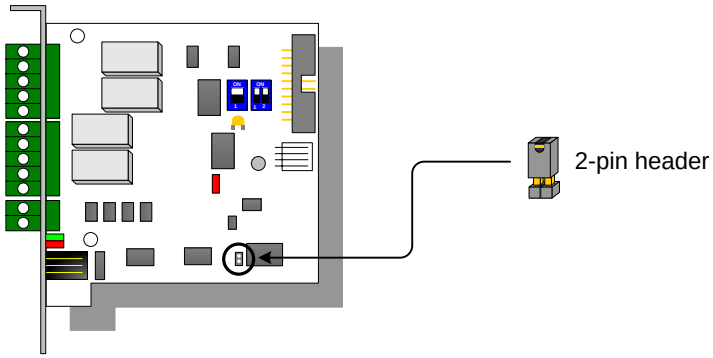


Switching Modes

The GV-NET/IO Card provides two modes for users to expand its capability: I/O Box Mode and NET/IO Card Mode. With a mode-switch jumper to insert on the 2-pin header, you can switch between modes.

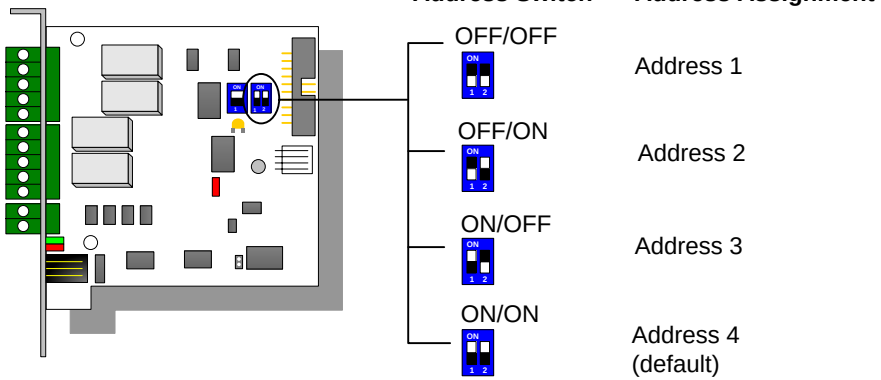
NET/IO Card Mode (default): With the switch jumper inserted, this default mode acts as a GV-NET/IO Card . It is required to connect the GV-NET/IO Card to the GV-Video Capture Card for usage.

I/O Box Mode: Without the switch jumper inserted, the GV-NET/IO Card can work as an independent device. It is NOT necessary to connect to the GV Video Capture Card for usage.



Extended Connections

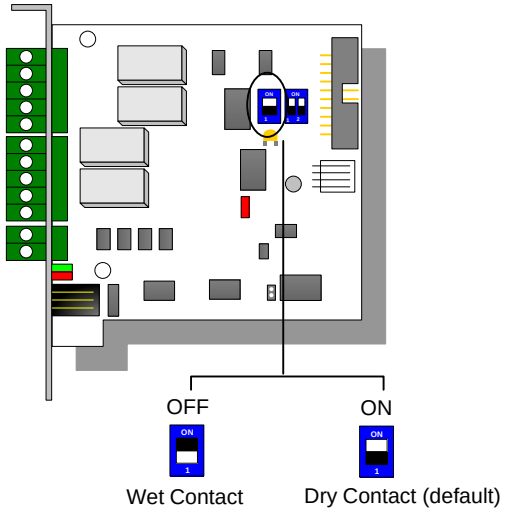
Via the RS-485 connectors, up to 4 GV-NET/IO Cards can be chained together when the GV-NET/IO Card is on the I/O Box mode. For extended connections, the address assignment is shown below.



NOTE: When the GV-NET/IO Card is set to the I/O Box Mode, it can have extended connections with GV-I/O Boxes.

DIP Switch

The GV-NET/IO Card accepts input devices of dry contact or wet contact. Use the switch to change to dry contact and 9~30V wet contact.



Caution: To prevent the noise interference in I/O operation, tightly screw the GV-NET/IO Card to the PC case.

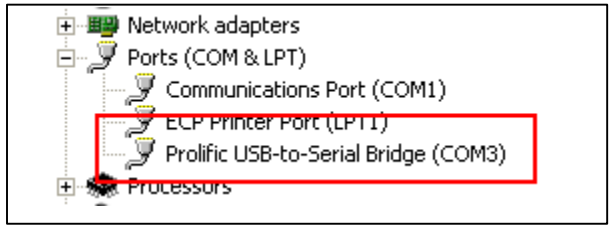
USB Driver Installation

To use the USB function, it is required to install the driver on the PC. Follow these steps to install the driver:

(1) Insert the software CD. It will run automatically and pop up a window.

(2) Select **Install or Remove GeoVision GV-Series Driver** and then click **Install GeoVision USB Devices Driver**. This dialog box appears.

(3) Click **Install** to install the drivers. When the installation is complete, this message will appear: *Install done!*

(4) Click **Exit** to close the dialog box.

(5) To verify the drivers are installed correctly, go to Device Manager. Expanding the Ports field, you should see one entry for Profile USB-to-Serial Bridge.