IDIS DVR properties.

Model	ED416
Video Input	16 Channels
POS Support	16 POS
Interface POS	LAN 16 POS, RS-232 1 POS, RS-485 1 POS, USB 8 POS
Live text overlay	Yes
Playback overlay	Yes
Full data recording	Yes
Exception recording	Yes

Configuration of TCPIP232 Client Server and IDIS

1. Connect a laptop or PC to a serial port on the TCPIP232 Client Server with crossover cable. Open up the Hyperterminal program and configure the parameters of the terminal emulation software to work with the TCPIP232 Client Server serial port. The default port setting are.



Power up the TCPIP232 Client Server and press ESC key (1BH) , [(5BH) , and P (50H) within 5 second to enter to the TCPIP232 Client Server Menu settings.

* IP Address	LAN	Settings	
- Mode - Telnet			
- Exit			

2. Configure an IP Address and Subnet Mask same network with IDIS DVR.

	IP Address	Settings
×	IP Address	Ĭ92.168.2.244
-	Destination IP	192.168.2.240
-	Subnet Mask	255.255.255.0
-	Gateway	192.168.2.1
-	Exit	

3. Mode Settings to be Client with the Protocol setting to be TCP or UDP along IDIS DVR Text-In setting and Destination Port is the same IDIS DVR Text-In port setting.



4. Exit all menu setting then TCPIP232 Client Server will reboot and back to operation mode.

TCPIP232 Client Server connecting for work with IDIS DVR via RJ45 network.



Using the IDIS DVR with the USB hub and USB to RS232 converter.



Connection diagram of RS-232 Cable between the VSI-Pro Max and USB232 Cable show below.

DB9F (USB232 Cable)	DB9M (VSI-Pro Max)
Pin 2 (RX)	 Pin 3 (TX)
Pin 5 (GND)	 Pin 5 (GND)

The bus enumeration process of USB Host is important for the connection of the IDIS DVR with USB hub and USB232 converter.

When a USB device is attached to or removed from the USB, the host uses a process known as bus enumeration to identify and manage the device state changes necessary.

When a USB device is attached to a powered port, the following actions are taken:

1. The hub to which the USB device is now attached informs the host of the event via a reply on its status change pipe. At this point, the USB device is in the Powered state and the port to which it is attached is disabled.

2. The host determines the exact nature of the change by querying the hub.

3. Now that the host knows the port to which the new device has been attached, the host then waits for at least 100 ms to allow completion of an insertion process and for power at the device to become stable. The host then issues a port enable and reset command to that port.

4. The hub performs the required reset processing for that port. When the reset signal is released, the port has been enabled. The USB device is now in the Default state and can draw no more than 100 mA from VBUS. All of its registers and states have been reset and it answers to the default address.

5. The host assigns a **unique address to the USB device**, moving the device to the Address state.

6. Before the USB device receives a unique address, its Default Control Pipe is still accessible via the default address. The host reads the device descriptor to determine what actual maximum data payload size this USB device's default pipe can use.

7. The host reads the configuration information from the device by reading each configuration zero to n-1, where n is the number of configurations. This process may take several milliseconds to complete.

8. Based on the configuration information and how the USB device will be used, the host assigns a configuration value to the device. The device is now in the Configured state and all of the endpoints in this configuration have taken on their described characteristics. The USB device may now draw the amount of VBUS power described in its descriptor for the selected configuration. From the device's point of view, it is now ready for use.

When the USB device is removed, the hub again sends a notification to the host. Detaching a device disables the port to which it had been attached. Upon receiving the detach notification, the host will update its local topological information.

The process of connection between IDIS DVR with USB hub and USB to RS232 converter.

The IDIS DVR request the bus enumeration process for USB host in the IDIS DVR. You can use the 2 X 4 channel USB hub and USB to RS232 converters with the IDIS DVR for receiving the transaction from the 8 serial devices when you install as follows

1. Power up the IDIS DVR.

2. Plug the USB hub no.1 and USB hub no.2 into the USB port of IDIS DVR respectively.

3. Plug the USB to RS232 converter of the first channel to the USB hub and wait a minute for bus enumeration process of USB host of the IDIS DVR has finish.

4. Plug the USB to RS232 converter of the second channel to the USB hub and wait a minute for bus enumeration process of USB host of the IDIS DVR has finish.

5. Plug the USB to RS232 converters of the third, fourth, fifth,..., eighth channel to the USB hub respectively.

The problem of USB host of IDIS DVR with the USB to RS232 converters or USB hubs and USB to RS232 converter.

When the IDIS DVR has power down and then power up again, the bus enumeration process of the IDIS DVR will restart. This situation, the address of USB devices will be change then the transaction will send to wrong channel.