

**TeleEye III<sup>+</sup>**

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**3G Mobile Video Surveillance Solution**

(3G-202 Mobile Video Transmitter  
/3G-630 Mobile Camera)

**User Manual**



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Version 0.06

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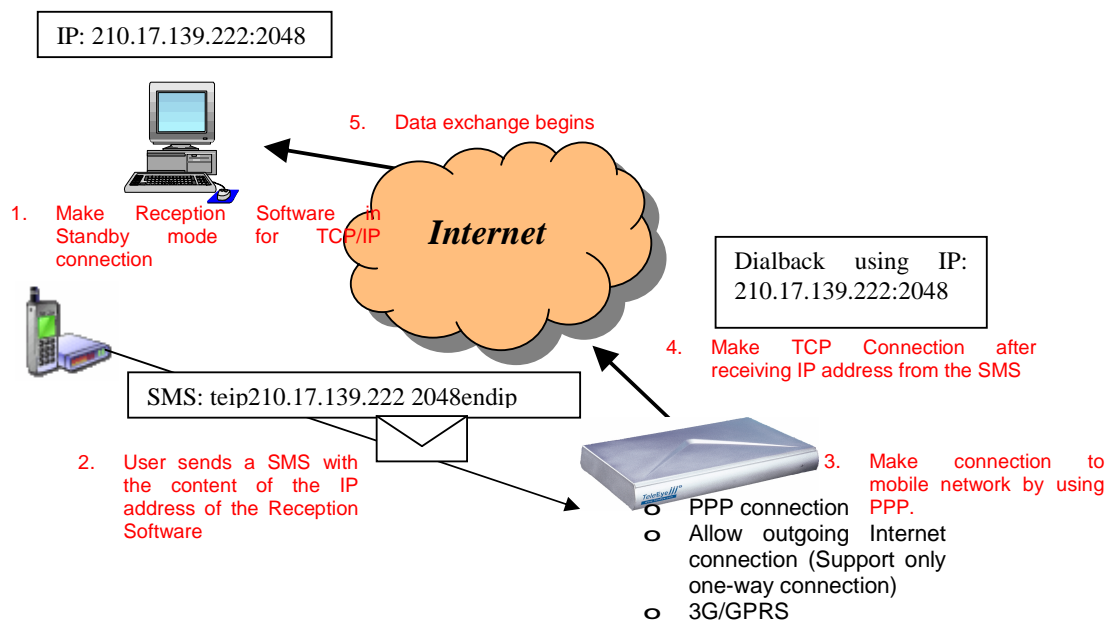
## 1 Introduction

“TeleEye III+ 3G Mobile Video Surveillance Solution” is used in mobile network with 3G-202 Mobile Video Transmitter or 3G-630 Mobile Camera. The Solution can be used in virtual IP network such as GPRS and 3G. In these mobile networks, only outgoing connection is allowed. We can make use of SMS to trigger the video transmitter or network camera so that it will dial back to the reception site from outgoing connection.

## 2 System Involvement

- n **3G-202 Mobile Video Transmitter or 3G-630 Mobile Camera with Novatel Wireless U530/U630**
  - u host by user, remote site
  - u allow outgoing Internet connection (Support only one-way connection)
- n **Reception Software**
  - u host by user, monitoring station (Support outgoing Internet socket connection with any ports)
- n **Minimum PC Requirement**
  - u CPU: Pentium IV 1.3GHz or above
  - u RAM: 256MB or above
  - u OS: MS Windows 2000 Professional/ XP Home/ XP Professional

## 3 System Architecture



## 4 System setting needed for using SMS

### 4.1 PPP mode setup:

4.1.1 First you should have a SIM card with 3G or GPRS connection service from service providers.

4.1.2 Run Transmitter Configuration, and make connection to your Transmitter by **TCP/IP**.

4.1.3 Click the **PPP Mode** tab, and you will see the following windows.

4.1.4 Click **Enable PPP (Point-to-Point Protocol) Mode (1)** to enable the PPP mode for mobile network connections.

4.1.5 Fill in the **User name (2)**, **Password (3)** for PPP authentication if it is needed.

4.1.6 Fill in the **Prefix (4)** and **Phone No. (5)** and **Extra AT Command (6)** for Dialup settings For the Extra AT Command. You just have to enter **at+cgdcont=1,"IP","[APN]"**, where **[APN]** is specific for different service providers.

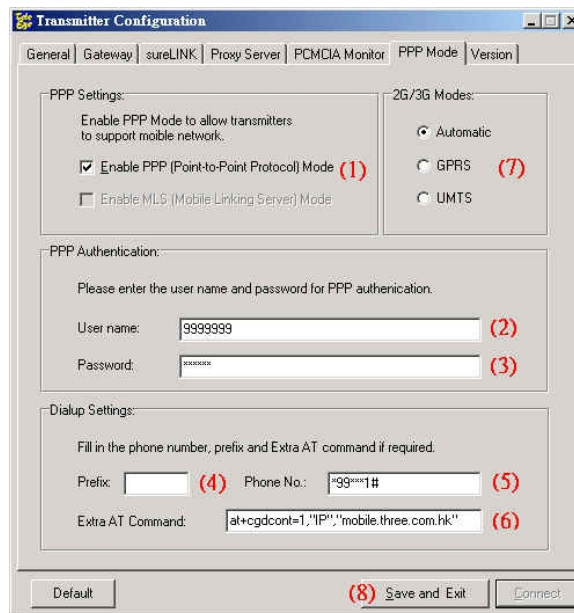
4.1.7 You can select which mobile network to be used. It can be set in **2G/3G modes (7)**.

Automatic – The transmitters will auto detect the current available network.

GPRS – The transmitters will set to use GPRS mobile network.

UMTS - The transmitters will set to use UMTS mobile network.

4.1.8 Click **Save and Exit (8)** to confirm the settings.

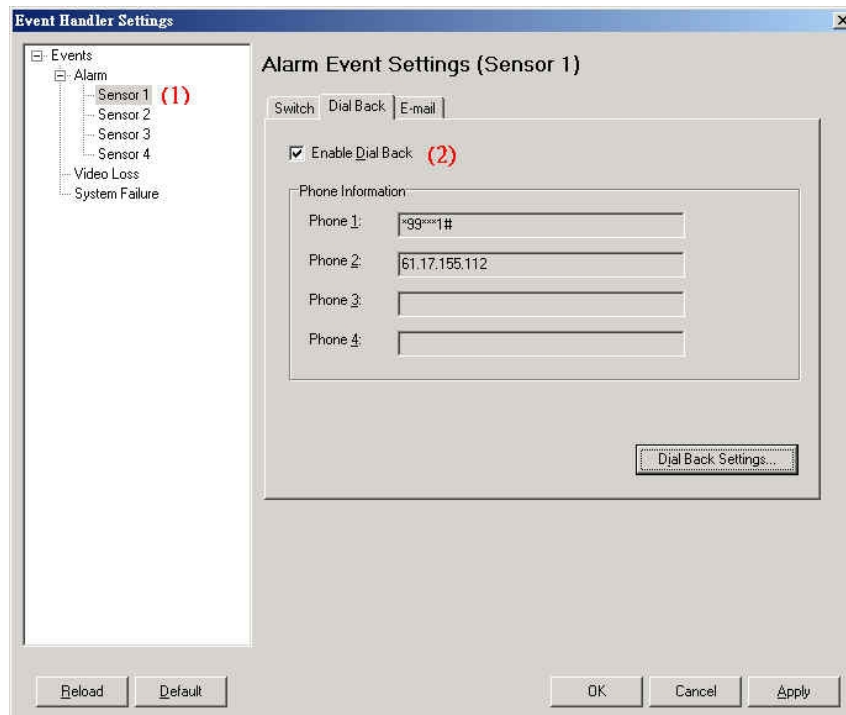


## 4.2 Reception Software Setup:

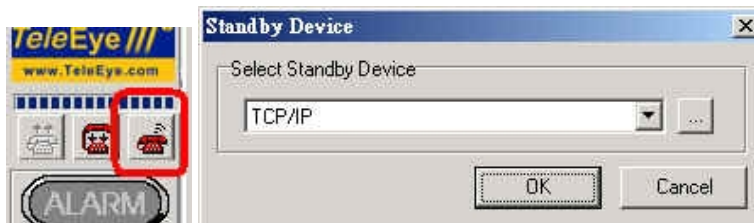
4.2.1 Run Reception Software (WRS-3AD). Connect to the transmitter.

4.2.2 Setting up alarm dial back. **Event/Event Handler**

4.2.3 Click Alarm and select one of the **sensors (1)** and Click **Dial Back Settings...** button to set the **dialback phone** if it is not set. The **Phone 1 entry** should be the Phone No of the PPP mobile connection account, and the **Phone 2 entry** should be the IP and the Port of the user's PC with TeleWin. The format is [IP][SPACE][PORT], for example "61.17.155.112 2048". If it has been set, then click **Enable Dial Back** check box and click **Apply** for confirm the settings.

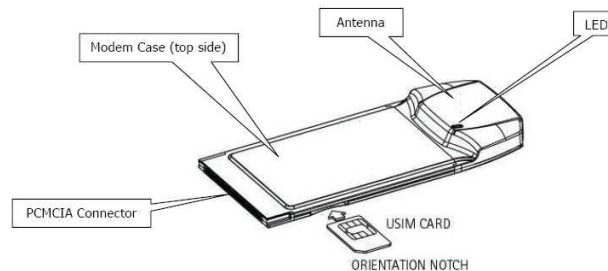


4.2.4 Enable stand by mode for **TCP/IP** connection and Click on the "..." button to set the **dialback port**. Click **OK** button to finish settings.



### 4.3 Insert Novatel U530/U630 with SIM Card to the transmitter.

4.3.1 The contact points of the SIM card must face upwards, and the orientation that is not notch must be positioned as shown in the picture.



4.3.2 Insert the Novatel U530/U630 with SIM Card in to the transmitter. The LED will show RED first.

4.3.3 After inserting the Novatel U530/U630, it will first set to either 2G or 3G mode depends on the settings in the Transmitter. If it is set to use Automatic detection, it will detect the network automatically and set to use either 2G or 3G mode. (If the network service is detected, the LED will change to BLUE for 3G network or to GREEN for 2G network.)

4.3.4 Wait for the service to be detected first and when the Novatel U530/U630 is inserted to the transmitter. It will delete all the stored SMS in the SIM card.

4.3.5 Now, you can send a SMS to inform the transmitter that it should now dialback and connect to the reception site.

4.3.6 For information on how to send a SMS with mobile phone, you can check the user manual of the mobile phone.

General steps for inputting SMS in mobile phone:

1. Get into the phone menu.
2. Usually there is an option call "Messages", enter this option.
3. Usually there is an option call "Short messages", and then allows user to create a SMS.
4. Input the SMS in the following format. And then click "sends" to send the SMS to the transmitter.

SMS format:

Index:	Format:	Description
0	teip[IP][SPACE][PORT]e ndip Example: teip210.17.139.77 2048endip	It will be used, when the Port is set different from previous saved port. teip: Case insensitive, the header of the SMS message endip: Case insensitive, the footer of the SMS message [IP]: The IP address of the user's PC with TeleWin There is a space in between IP and Port [Port]: The dial back port (0 – 65535)
1	teip[IP]endip Example: teip210.17.139.77endip	It will be used, when the Port is set the same of previous saved port.
2	teipendip	It will use the previous SMS dial back IP and Port setting. (The default setting is IP:192.168.0.2 Port:2048)

4.3.7 After typing in the SMS content, you can send the SMS to your SIM card's phone number.

4.3.8 If the SMS message is sent to the transmitter, the transmitter will first check the format and then dial up PPP using the preset setting.

4.3.9 If dial up PPP is successful, it will try to connect to the Reception software by using the IP and Port stored in the SMS.

4.3.10 If dial back is successful, live video will be shown in the Reception software.

Notes: Currently, “**TeleEye III+ 3G Mobile Video Surveillance Solution**” can only be worked as a viewer. Changing of Transmitter settings is not allowed after performing the dialback. It includes Transmitter Information, Date / Time, Transmitter Password, Connection Speed, Answer Ring Count, Throughput Control and Password Control.

## 5. Troubleshooting:

Problems related to the mobile camera 3G-630/3G-202:

1. SMS has been sent to a 3G-630/3G-202, but the Host still cannot view the video within a minute?

Case:	Meaning:	Checking step:	Solution
The LED of the U630 (Data card) is either Blue or Green without blinking	3G-630/3G-202 is in online state.	Check if you have inputted correct IP and Port in the SMS. (It can be checked by reading the history of all the SMS sent in your mobile phone device.)	Re-send a SMS after manually power reboot of the 3G-630/3G-202 or wait for timeout. (Read Read 4.3.6).
		Check if your PC with reception software is accessible from the Internet. If your PC is located in private network, ensure that port mapping has been done, so that there is a public accessible IP and Port that is mapped to your standby PC. For checking your public Internet IP, you can use website like <a href="http://www.whatismyip.com">http://www.whatismyip.com</a> to check it.	Re-send a SMS after manually power reboot of the 3G-630/3G-202 or wait for timeout.
		Check if the reception software is in standby state, and the port and device are correct. (Run reception software and check the standby device setting.)	Set the standby port and device and power reboot of the 3G-630/3G-202. (Read 4.2.4).
		Check if the stand-by port is correct. (You can check it in the reception software.)	Re-set the stand-by port.
The LED of the 3G-630/3G-202 is either Blue or Green, but it is blinking	3G-630/3G-202 is not in online state. But it can reach the service.	Check if your SMS has inputted correct format. (It can be checked by reading the history of all the SMS sent in your mobile phone device)	Resend SMS. (Read 4.3.6). Ensure there is no extra space or characters in between the message.
		Check if you have inputted correct phone number of the SIM card that is being used in the 3G-630/3G-202. (It can be checked by reading the history of all the SMS sent in your mobile phone device.)	Re-send a SMS with correct phone number. It would be better to test the SMS service first. Put the 3G SIM into your mobile phone, and try sending an SMS from another mobile phone to your mobile phone, so that you can ensure that the SMS service is available in your SIM.
		Check if PPP mode is enabled in the 3G-630/3G-202. (It can be checked by connecting Transmitter configuration to the 3G-630/3G-202 and read the setting in the Tab "PPP".)	Enable it in the Transmitter configuration.
		Check the setting of the 3G-630/3G-202. It includes all the setting related to dial PPP. (It can be checked by connecting Transmitter configuration to the 3G-630 and read the setting in the Tab "PPP".)	Reset the setting of the 3G-630/3G-202.



		Check if Any of the alarm sensors has enabled Alarm Dial Back. (It can be checked by connecting Reception software to the 3G-630/3G-202 and read the setting in Event/Event Handler/alarm/alarm sensor[X]/Dial back)	Enable anyone of the alarm sensor and enable dialback by Reception Software.
		If all the above solution doesn't work, try to re-send a SMS again.	
The LED of the 3G-U630 is in Red color and it is blinking	3G-630/3G-202 cannot read the SIM.	Check if your SIM has inputted to the U630 or it is inserted in a correct orientation.	Reinsert the SIM. (Read 4.3.1)

2. Auto disconnected every 15 minutes.

Case:	Meaning:	Checking step:	Solution
After connection, and viewing video, but the connect is drop after 15 minutes.	-	Check the setting in Event/Alarm/Options in the Reception software that connected to the 3G-630/3G-202.	If Manual Stop is not enabled, enable it.

Problems related to 3G-630 / NF630 / VTC-1CA:

3. “UNREGISTERED TRANSMITTER” message is appeared when I connected to the remote site.

Case:	Meaning:	Checking step:	Solution:
And “UNREGISTERED TRANSMITTER” message is appeared in the Reception Software	3G-630/3G-202 is in online state. And connected to the Reception Software.	Check if you have completed the transmitter registration procedure from the Transmitter Registration menu.	Do registration procedure or disable the registration checking in the 3G-630/3G-202 by transmitter configuration.

4. The image quality is unacceptable.

Case:	Meaning:	Checking step:	Solution:
The image quality is unacceptable.	-	-	Try to increase the quality setting in the <b>control</b> menu. Adjust the brightness, contrast or the camera. Make sure your windows display setting is in high color mode in Windows Control Panel.