

# VB-30mu Quick Setup Guide

4 pin plug for PTZ control

9 pin plug for triggers

GSM modem (optional)

USB extension (optional)

# **Box contents**

VB-30mu Encoder 12V DC power supply with locking DC plug 4 channel BNC to 9-Way D-SUB connector 1 channel BNC to 9-Way D-SUB connector

Hardware setup

## Power supply

The VB-30mu has a DC jack connector that only accepts 12V DC input. To connect DC power, push the power supply into the power plug until it's firmly attached and tighten the collar until finger tight. Now you can supply the DC power and operate your VB-30mu.



# Caution

The VB-30mu 2.5mm centre pin is positive 12V DC. Please make sure the voltage and polarity of DC power is correct before you connect it to VB-30mu. Supplying a voltage over 12V will damage the system.

#### <u>Video</u>

Connect the VB-30mu to analogue video sources using either the 4 channel BNC to 9-Way D-SUB connector cable or the single channel BNC to 9-Way D-SUB connector cable. This cable is plugged into the port indicated below using the 9-Way D-SUB connector. The camera feed(s) are then connected to the BNC connectors labelled V1 to V4.





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# Data

If supplied, a 3G or 4G mobile data modem is used to connect the VB-30 to the internet. A SIM card with a data allowance is required for the modem to operate. Dependant on the SIM card operator you may have to enter the operator's APN, user and password in to the profile configuration web pages of the 3G/4G modem. This can be done using a PC or laptop. Please refer to the data modem manufacturers documentation online to configure the modem. Once the modem is configured it can simply be plugged into the VB-30 for normal operation.

The VB-30mu also can be connected to the internet via a local area network. There is one RJ45 Gigabit Ethernet network connection on the front panel. The port as shown below is configured to use DHCP when a DHCP server is available. If a DHCP server is not available it will failback to use an alternate IP address. This IP address is 192.168.2.253 with a subnet of 255.255.255.0.



#### Pan, Tilt & Zoom

The VB-30mu is capable of controlling PTZ cameras using multiple protocols pre-programmed into the software. The hardware connection is be made using the 4 pin plug on the front panel. The unit is set to use the RS485 interface by default, this port represented in the software as COM port 2.



RS485 output is configured on COM2 (indicated below) using PIN 1 (TX-) and PIN 2 (TX+). RS232 output is configured on COM2 (indicated below) using PIN 2 (TXD) and PIN 3 (RXD).





## Selecting RS-485 or RS-232 for COM2

To do this you will need a monitor & keyboard plugged into the VB-30mu. Firstly pull the power from the VB-30mu. Then reapply power and as soon as you have done this you need to keep pressing and releasing the delete key. This will then take you to the Setup Utility.

- Using the right arrow go from the Main to the Advanced tab.
- Using the down arrow highlight SIO FINTEK81803 then press enter
- Again using the down arrow press 2x to highlight 'type' which should at this time be set to the default RS485. Press enter then scroll to RS232 and press enter. Press F10 and it will ask you to exit and save change. Press Enter on the Yes command.

Your COM PORT is now RS-232 Use the same procedure to

# Software setup

## **Configuration**

The VB-30mu can be configured using a USB disk and configuration file called 'update.ini'. The update.ini file has to be formatted correctly and must be saved to the root of the USB disk (for example f:\update.ini). The update.ini file can be edited using Windows notepad but we would suggest you download and install notepad++ from <u>https://notepad-plus-plus.org/</u> to edit the file. The file can be created and edited manually but you can also request a pre-formatted file from <u>orders@vemotion.com</u>. The file can be sent with your settings already entered if you provide the relevant information when you request it.

The encoder requires an IP address or FQDN (vma.vemotion.com) to connect to the Vemotion Streaming Server software. If the system is to be used over the internet the Vemotion Streaming Server IP address must be a public static address or must have the relevant ports open and forwarded to the Vemotion Streaming Servers internal IP address, if a router is used.

If the Vemotion Streaming Server TCP ports are changed from default (8000) then the encoder needs to be configured with the correct ports. This can also be done in the update.ini file.

The encoder uses a unique 'Encoder ID' to identify which stream to connect to on the Vemotion Streaming Server. This 'Encoder ID' has to match identically with one configured on the Vemotion Streaming Server.

To change the Vemotion Streaming Server IP address, port and Encoder ID on the encoder the following lines must exist in the update.ini file.

[ENCODER] SERVERHOST= SERVERPORT= STREAMID=

To modify the settings append the IP address, port and stream ID to the end of each line.

[ENCODER] SERVERHOST=nnn.nnn.nnn SERVERPORT=nnnn STREAMID=VBOXnnn-n



To leave any encoder settings unchanged comment out the line(s) as below.

[ENCODER] SERVERHOST=vma.vemotion.com ;SERVERPORT= STREAMID=VBOXnnn-n

Additional settings can be modified using the update.ini file. For more information email orders@vemotion.com.

Once you are happy with your settings, save update.ini to the root of a USB disk (eg. f:\update.ini).

It is advisable to ensure the encoder has been powered on for at least 2 minutes before inserting the USB disk into one of the encoder USB ports. Wait for approximately 30 seconds for the changes to take effect before removing the USB disk.

The encoder will now be configured to use the Vemotion Streaming Server, port and stream ID specified in the update.ini file. Please check your Vemotion Streaming Server to confirm the encoder connection has been successful.

More information relating to the Vemotion Streaming Server configuration can be found in the online guide downloadable from <a href="http://www.http://www