

# Quick Start Guide (VB1xx/VB2xx/VB3xx)

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## About this Quick Start Guide

This quick start is for helping new customers get their Sencore VideoBRIDGE equipment setup and running as quickly as possible, with a minimum of effort.

The guide covers the following Sencore VideoBRIDGE devices: **VB120, VB12, VB12-RF, VB20, VB220 and VB330**

Optional interface modules, like demodulators, do not require initial set-up. Individual probes in a chassis must be configured separately. These modules will each have a USB port.

## Read the Safety Chapter of the User's Manual

The current version of the full User's Manual can be obtained from the individual product pages on our website: [www.sencore.com](http://www.sencore.com) or by emailing Sencore ProCare support at [procare@sencore.com](mailto:procare@sencore.com).

**Read the safety chapter of the User's Manual, to avoid potential hazard.**

A comprehensive Quick Installation Guide is found in section 4.1 of the User's Manual.

## Unpack Equipment

Check that there are no obvious damages to equipment due to transport. If equipment appears to be damaged, please contact Sencore ProCare for support.

In addition to the Sencore VideoBRIDGE hardware itself, the shipment should include a power cable (two for enhanced chassis) and a USB cable.

## Equipment Installation and Power Up

Equipment designed for rack installation should be securely connected to the rack using rack screws suitable for the rack type. Note that there should be sufficient room for air to freely flow around the unit, ensuring proper cooling. Also note the direction of air flow for your chassis type prior to installation (refer to the User's Manual).

When the equipment is installed, it can be powered up by connecting it to a power outlet using the power cable(s). Sencore VideoBRIDGE devices for AC mains can operate in the range 100–240VAC. Refer to the User's Manual for a description of DC power connection.

## Establish Ethernet Management Connection

In order to access the regular device graphical user interface, it is necessary to establish an Ethernet connection to the device. There are two alternative ways to set the device's management IP address:

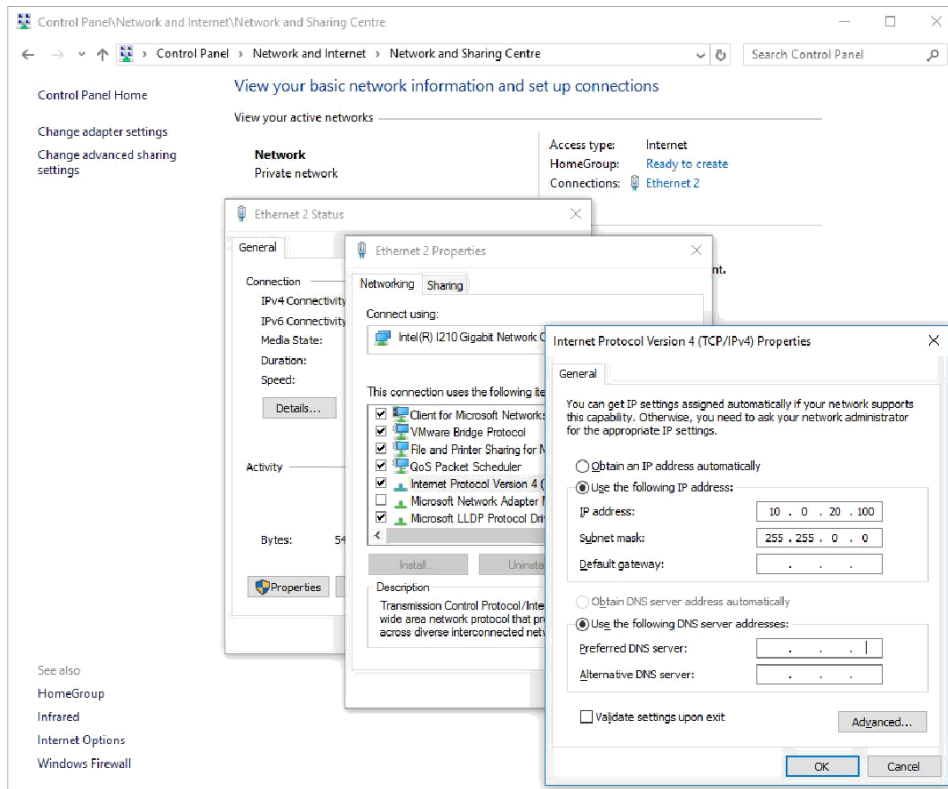


Figure 1: Setting the IP address manually in Windows

using the pre-set management IP address or connecting to the device via USB.

## Using the pre-set management IP address

The Sencore VideoBRIDGE devices are shipped with the following factory settings:

<b>Management (eth1) IP address:</b>	10.0.20.101
<b>Management (eth1) subnet mask:</b>	255.255.0.0

In order to connect to the eth1 management port, the PC used for setup should have corresponding network settings. Connect a PC directly to the device's eth1 management port using an Ethernet cable.

For Windows, the network parameters are set in the **Control Panel — Network and Internet — Network and Sharing Center — Network Connection — Properties — Internet Protocol Version 4 Properties** view, as shown in figure 1. Select the user defined address, and set the PC's IP address to 10.0.20.100 and the subnet mask to 255.255.0.0.

When the IP address of the PC has been set to match the device's factory setting, the permanent network settings can be configured through the regular web browser interface.

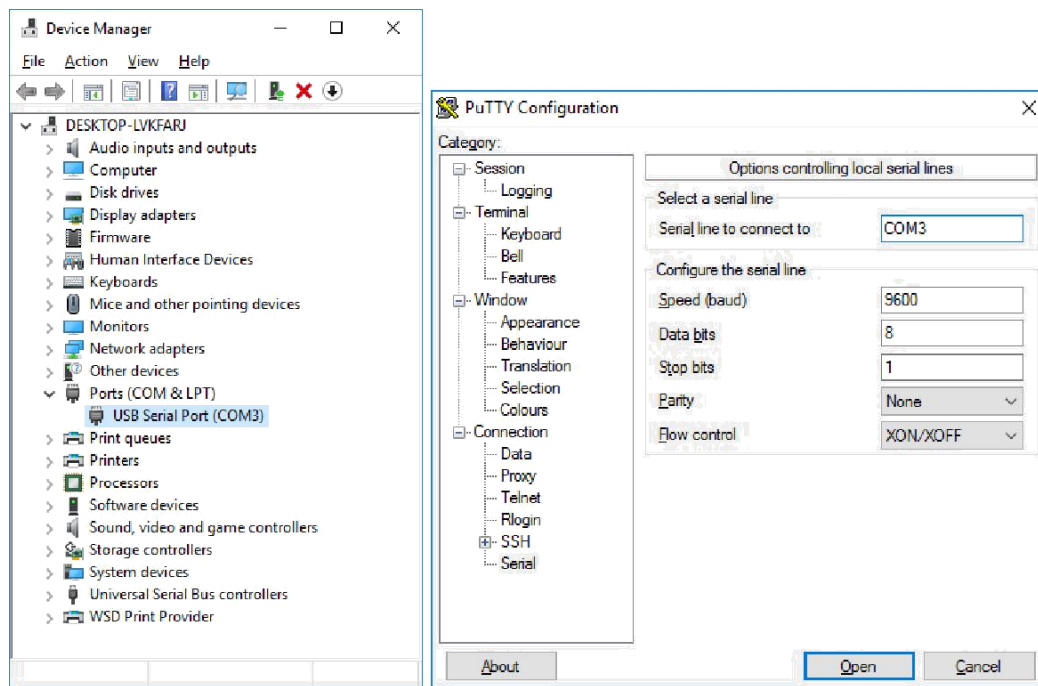


Figure 2: Connecting to the serial console over USB

## Connecting to the device via USB

If the Sencore VideoBRIDGE device cannot be reached through Ethernet communication, the initial set-up may be performed via serial console emulated over USB. For the initial set-up, you must do the following:

1. Installing a driver for the USB communication, if not already supported by the operating system
2. Setting the management IP address

Most operating systems will have native support for the needed FT232 driver. When a USB cable is connected between a PC and the Sencore VideoBRIDGE device, the operating system will detect a new USB device. For Windows, the new device will appear as a COM port in the **Device Manager** view as shown in figure 2.

If your operating system does not detect the Sencore VideoBRIDGE device, you may have to download and install a driver for it. The driver may be downloaded directly from the chip manufacturer at <http://www.ftdichip.com/>. Select first Drivers, then VCP followed by the operating system (VCP is short for Virtual COM Port).

If it is not already connected, connect the USB cable between the USB port on the probe and a USB port on the PC.



Start a terminal program. Windows XP users can use Hyperterm, Linux users can use minicom. For modern versions of Windows, that do not ship with a terminal program, the free application **PuTTY** may be downloaded from <http://www.chiark.greenend.org.uk/~sgtatham/putty/>.

Select the new COM port that should appear as the USB cable is plugged in (Linux users should check `/var/log/messages` to see what device to use) and establish a serial connection to the Sencore VideoBRIDGE device using these communication parameters:

Baud rate: 9600

Data bits: 8

Parity: None

Stop bits: 1

Flow control: None

Press ENTER a few times to bring up the login prompt. Log in using the user name **admin** and the password **elvis**.

A simple text based menu system like the one in figure 3 should now be displayed. To change a setting, press the appropriate character from the left-most column, enter the new value and confirm by pressing ENTER. If DHCP is enabled, you can find the currently assigned IP address by selecting the **ethStatusDoc** option.

The Sencore VideoBRIDGE device is equipped with two network interfaces called management (or eth1) and data/video (or eth0). It is necessary to configure at least one of these interfaces from the terminal and then do the rest of the setup from a web browser. Depending on the installed license, an additional data interface, labelled data2 (eth2) may also be available.

The Sencore VideoBRIDGE device supports both in-band management (i.e. using eth0 for both data/video and management) and separate management (i.e. using eth1 for management). In any case make sure that the subnets configured for eth0 and eth1 do not overlap – otherwise the probe will not work properly. Note that if IP addresses for eth0 and eth1 are configured so that the subnets overlap, the IP address of one of the ports will be automatically set to 1.1.1.1 by the Sencore VideoBRIDGE device.

To configure the management interface, edit values for `ipaddress`, `netmask` and `mm_gateway` or enable `dhcp` instead.

Make sure Management is enabled (set to true) – otherwise management via web will not be possible.

To configure the data/video interface, enter values for `data_ipa`, `data_mask`, `data_gateway` or alternatively enable `data_dhcp`. Set `data_management` to true to enable web access via the data interface.

```

Menu: /ewe/probe/core/setup/ethernet/
=====
<0> Back      <9> Exit
<1> ethStatusDoc
-----
<A> data_medium      - Copper      Input for the video traffic
<B> data_dhcp        - false       RJ45 data port (eth0) DHCP
<C> data_ipa         - 10.0.30.101 RJ45 data port (eth0) IP address
<D> data_mask        - 255.255.255.0 RJ45 data port (eth0) netmask
<E> data_gateway     - 10.0.30.1   RJ45 data port (eth0) IPv4 GW
<F> data_management - true        RJ45 data port (eth0) web-server
<G> dhcp             - false       Management port (eth1) DHCP
<H> ipaddress        - 10.0.20.101 Management port (eth1) IP address
<I> netmask          - 255.255.255.0 Management port (eth1) netmask
<J> mm_gateway       - 10.0.20.1   Management port (eth1) IPv4 GW
<K> management       - true        Management port (eth1) web-server
<L> gateway_interface - eth0        Force default interface
<M> dns_server       - 208.67.222.222 DNS Server
<N> reboot           - false
-----

```

Figure 3: Text-based menu displayed when connecting over USB

When all the listed parameters have been configured, the Sencore VideoBRIDGE device must be rebooted to let the parameters take effect. This is achieved by selecting the **reboot** option and confirming by selecting 't' for TRUE.

## Verifying Correct Initial Set-Up of the Device

Once the probe management network interface have been configured, all further configuration takes place using a web browser over HTTP.

Launch a web browser application on the management PC. The following web browsers are supported:

Microsoft Edge

Microsoft Internet Explorer 11 or higher

Mozilla Firefox 29 or higher

Google Chrome

Apple Safari

Type the IP address of the probe in the browser URL field and press ENTER. The IP address of the probe is that of the eth0 or eth1 port (the one used for management) as set in the initial set-up procedure.

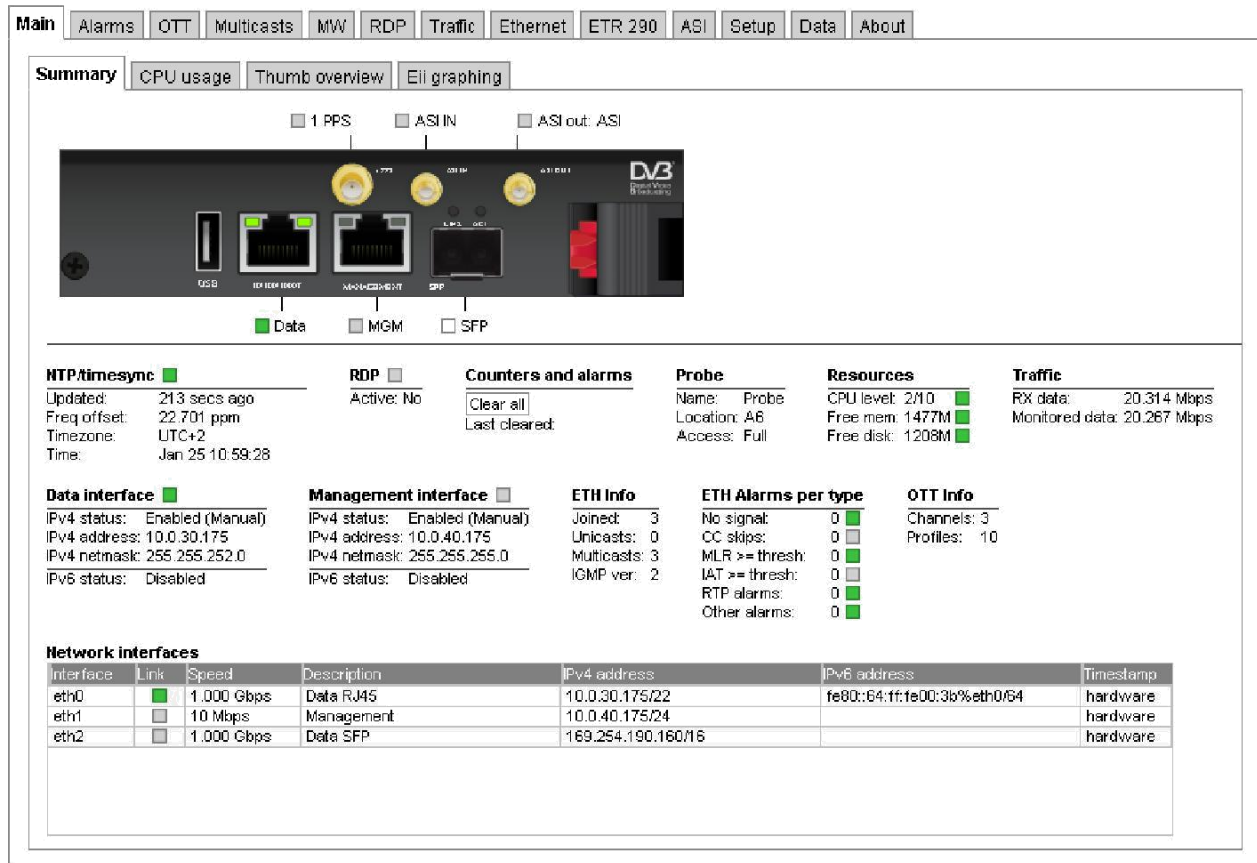


Figure 4: Web-based management view

The default management view should be displayed inside the browser. This should look similar to figure 4, depending on the options installed.

## Check Licensing

Check that the device licensing is correct. This is done in the **About — License** view.

## Set Network Parameters

Set Ethernet network parameters. This is done in the **Setup — Ethernet** view. Refer to the User's Manual for further instructions.

## Connect Media Signals

Connect media signal cables. Depending on the device hardware and software options this might include:

- Ethernet cable carrying multicast and/or unicast streams

- Coax cable carrying an ASI/MPEG-2 transport stream RF cable carrying a modulated signal

## Define Input Signals

### ASI

An ASI signal needs no parameter settings; it is automatically detected by the probe and monitored by default. Refer to the User's Manual for configuration of the optional VB242 Multiple ASI Input module.

### Ethernet

The probe will only monitor streams that are configured and joined. This is done in the **Ethernet — Multicasts** view.

### RF signal

RF parameters are set in the **<Demod> — Tuning Setup** view. Check the RF input LED for signal lock once parameters have been set.

### Verify Correct Operation

When input signal definition has been performed the device will start monitoring. Check relevant monitoring views for correct device operation.

## Support

Contact Sencore ProCare for support, if required.

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