

Appliance Setup

This chapter explains how to set up and configure all VBrick MPEG and WM network appliances. The information here is more detailed than the *Quick Start Guide* that came with the appliance. **You can use this document or the Quick Start Guide to set up and configure an appliance.** Before you do anything else, be sure to unpack and inspect the VBrick appliance. Each shipment comes with:

- A VBrick MPEG-2, MPEG-4, or WM appliance.
- Power supply.
- A Product CD that introduces the appliance and has all documentation.
- A serial port cable and adapter.
- An IR Remote Control unit.
- A cable and adapter kit, which includes an Ethernet cable.

Setting Up the Appliance

The VBrick Appliance is shipped with all appropriate cables and a handheld IR remote control unit. Your appliance has two available slots. Depending on what options you purchased, you may have a single encoder, a dual encoder, or a mixed model (e.g. one encoder and one decoder). You can also mix and match formats with an MPEG-2 encoder, for example, in Slot1 and a WM encoder in Slot2. *The following picture shows an appliance configured with Slot1 on the upper left side. A second encoder slot would be configured in Slot2 on the right.* The appliance you actually purchased may vary from this illustration depending on the type and configuration but the basic elements are common to all appliances. See [VBrick Appliance Models](#) on page 49 for more information.



Figure 1. WM Appliance Rear Panel – Left to Right

Composite In	Composite video cable in.
S-Video In	S-Video cable in.
Mic In	AudioMate microphone connection.
Audio In Left/Right	Audio in left and right channels.
Power In 24VDC	Power input. LED illuminates when power is applied.



COM 1	Dedicated serial port for Serial Port Passthrough.
COM 2 (Term)	Use to connect a terminal (or a PC running terminal emulation software) in order to manage the appliance using Hyperterminal. See "Connecting with HyperTerminal" in the <i>Network Appliance Installation Guide</i> . Optional serial port for Serial Port Passthrough.
Relay	Use with Serial Port Passthrough to signal external devices.
Ethernet	Connect to the local area network.
Power Out 12VDC	Power output. Connect external devices such as a camera.
LEDs	Activity – indicates there is activity on the network. Link – indicates the appliance is connected to the network 10/100 – On indicates the appliance is running at 100 Mbps. Off indicates the appliance is running at 10 Mbps.



Figure 2. WM Appliance Front Panel – Left to Right

LCD Display	Shows IP Address, system status, error messages, and Edit state. Used with Local Edit on IR remote control.
Infrared Sensor	Located between LCD and fan housing. Used for IR remote control.

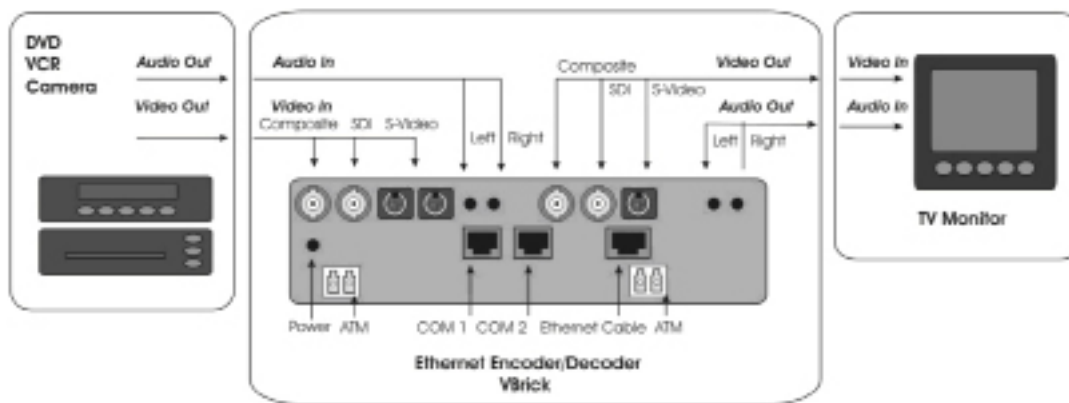


Figure 3. MPEG Appliance Setup Schematic

1. Connect a Video Input Source

An audio/video cable allows the VBrick appliance to receive audio/video from your input source (a camera, VCR, DVD, etc.) Be sure that all power switches are **Off** on all source equipment before plugging into the connectors on the VBrick appliance.



▼ To connect input audio/video to the appliance:

1. From a video input source (for example, a camera, DVD, or VCR), connect a BNC (composite video) cable to **Composite In**, **S-Video**, (or optionally **SDI** connector) on Slot1 of the VBrick appliance.
2. Connect **Left** and **Right** cables from the audio source to **Audio In** on the appliance.

2. Connect a Video Monitor

MPEG appliances only. Connect a video monitor to the **Video Out** BNC, **S-Video** or **SDI** connector on the rear of the VBrick (Slot2). Make sure the TV monitor is set to video mode. To see if the TV monitor is in the correct mode, you can connect the video source directly to the TV monitor. Also connect the **Left** and **Right Audio Out** connectors to the monitor or to amplified external speakers.

3. Connect to the IP Network

Use an Ethernet cable to connect the appliance to the IP network.

▼ To connect to the IP network:

1. Plug one end of the Ethernet cable into the Ethernet port on the VBrick appliance.
2. Plug the other end of the Ethernet cable into the network switch.
3. The green LEDs to the right of the Ethernet port will illuminate and the **Activity** light will flicker when the appliance is powered on.

4. Power-on the Appliance

▼ To power-up the unit:

1. Insert the power connector that comes with the unit into the power receptacle on the rear of the appliance.
2. Connect the other end to a conventional 110/220 VAC power source.
3. The green **Power In** LED on the back of the VBrick will illuminate and the front panel will display status messages during self-test and reboot. This can take several minutes.
4. *MPEG appliances only.* During a portion of the initial power-on sequence, a color bar test will appear on the monitor. You should see a solid network **Link** light and a blinking **Activity** light.

5. Set the IP Address

All VBrick appliances are configured by default with DHCP (Dynamic Host Configuration Protocol) enabled. This means that when you power on the appliance on, if a DHCP server is present on your network, the VBrick will automatically get its **IP Address** and **Subnet Mask** from the DHCP server. If the VBrick cannot get an IP address from the DHCP server (or a server is not present), you will need to set the IP address manually using either the handheld IR Remote Control or HyperTerminal as explained below. *Once the IP Address is set, you can use the Integrated Web Server (IWS) to configure and manage the appliance.*

Get the IP Address from a DHCP Server

▼ To get an IP address from the DHCP server:

1. Connect the appliance to the network and power it on as explained above. All VBrick appliances are configured by default with DHCP enabled. This means that when you



power on the appliance on, if a DHCP server is present on your network, the VBrick will automatically get its **IP Address** and **Subnet Mask** from the DHCP server. If this happens you are done. Go to [7. Verify Operation](#) on page 6.

2. If the VBrick cannot connect to a DHCP server, it will wait two minutes and then start in limited run mode using the default IP Address of **172.17.5.5**. After 15 minutes, it will automatically reset and again try to obtain a DHCP address. The LCD screen on the front panel will display a **DHCP failed** message and then read **VBrick Systems** and continue to cycle through screens, one of which is the configured IP Address.

If you want to configure a static IP address, you must do it while the unit is operating in limited run mode. You cannot access the appliance while it is searching for DHCP server. You can set a static IP address with the Remote Control or with HyperTerminal as explained below.

3. If DHCP is successful, the monitor (MPEG appliances only) will display the VBrick logo in the lower right corner, and audio and video will be present. If the DHCP server supplies the Gateway Address or DNS server address, these parameters will replace the user-entered Gateway and DNS settings. If the DHCP server does not provide Gateway information, and if a Gateway is required for your network, you will need to manually enter a Gateway IP address.

▼ To configure a gateway with the remote control:

1. Enter a **Subnet Mask** and press **Select**.
2. Enter a **Gateway IP Address** (see note below) and press **Select**. The appliance will reboot with the IP address, subnet mask, and gateway configured.
3. *MPEG appliances only.* Connect the VBrick to another VBrick over the network using an Ethernet switch. For unicast, the destination IP Address of one VBrick should be the IP Address of the other VBrick. Make sure the respective destination and receive ports also match.

Note If the DHCP server supplies the Gateway Address or DNS server address, these parameters will replace any user-entered Gateway and DNS settings. If the DHCP server does not provide Gateway information, and if a Gateway is required for your network, you will need to enter it manually.

Setting the IP Address with the Remote Control

As noted, VBrick WM Appliances are shipped with a factory default address of **172.17.5.5**. If necessary, you can change this IP address using the handheld IR Remote control. *Remember that you cannot have multiple VBricks with the same IP address.* Use the * button for the decimal point and the **Left** and **Right** buttons to erase.

▼ To set a static IP address with the IR Remote control:

1. Aim the remote control at the IR port on the front panel and press **Local Edit**. The display on the front panel of the VBrick will request the password.
2. Press **23646** ("admin" numerically) and press **Select** on the remote control.
3. If the network is DHCP-capable and you want the network to select an IP address, press "Y" and then press **Select**. The VBrick will reboot and obtain an IP address. Otherwise press **Select** to continue.
4. Enter desired IP address. (Use the * button for the decimal point and the left/right buttons to erase characters entered by mistake.)

