



## Connecting a SpitFire III VBIR

VBrick "control devices" let you configure a video source device so that it can be controlled by end users using the Portal Server, a remote control, or a VBIR. (An example of a video source device is a DVD or VCR directly connected to a VBrick encoder.) VBrick currently supports DVDs and VCRs from several different manufacturers as well as the VBrick VBIR remote controller that can be customized for use with a wide variety of source devices. *This application note explains how to setup the SpitFire III VBIR for use with an external device.*

VBrick's SpitFire VBIR is an external hardware device that uses the passthrough port on a VBrick appliance to send control commands from the Portal Server to third-party devices like VCRs and DVD players via an infrared link (or an emitter cable). The VBIR can be programmed with codes that are compatible with devices from many manufacturers. For more about configuring and programming VBIRs, see "Adding User-Defined VBIRs" in the *VEMS Portal Server Admin Guide*. The information in this topic is arranged as follows:


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**Note** This document explains how to connect a SpitFire VBIR to a JVC HR-XVC11B DVD/VCR or a Magnavox DV225MG9 DVD/VCR. These are the only DVD/VCR devices that are currently sold and supported by VBrick.

### *Configuring a VBIR*

If you intend to control a JVC HR-XVC11B DVD/VCR or a Magnavox DV225MG9 DVD/VCR with the Portal Server, you will need to download a command library file for the DVD/VCR onto your SpitFIRE.

- ▼ To download the library file:
  1. Connect a USB cable to a USB port on a Windows PC.
  2. Download the SpitFIRE "remote control" application zip file from the VBrick download site into a temporary work directory on the PC.
  3. Extract all the contents from the zip file into the temp directory.
  4. Run the **SETUP.EXE** program in the temp directory.
  5. The SpitFIREIII Setup will run. In the SpitFIREIII Setup dialog box click the **OK** button.

6. Click the  button to install to the default location for the SpitFIRE III program files directory (C:\Program Files\SpitFireIII). Choose a different location by clicking the **Change Directory** button.
7. The installation will run. Click the **OK** button when the **SpitFIREIII Setup** dialog box displays the **SpitFIREIII Setup was completed successfully** message.
8. Perform one of the following steps:
  - a. To control the JVC device, copy the **HRXVC11B.BIN** file from the temp directory to the location selected in Step 6 (default: C:\Program Files\SpitFireIII).
  - b. To control the Magnavox device, copy the **DV225MG9.BIN** file from the temp directory to the location selected in Step 6.
9. From the **Start** menu select **Programs > SpitFire**. The SpitFIRE "remote control" UI will open (Figure 1).



**Figure 1.**

10. On the rear of the SpitFIRE device set the switch to USB (Figure 2).



**Figure 2.**

11. Connect the USB cable from the PC to the USB port on the rear of the SpitFIRE device.
12. From the **Connect** menu item in the SpitFIRE remote control UI, select **Auto Detect** (Figure 3). When the SpitFIRE device is connected, the **SpitFIRE Status** panels will report **Connected to Com** and **Com Port communication active**.

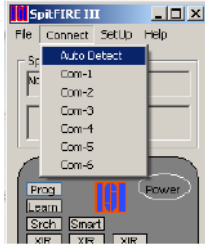


Figure 3.

13. In the **File** menu item in the SpitFIRE remote control UI, select **Upgrade Library** (Figure 4). The **Down Load External Library to SpitFIRE III** dialog box will open (Figure 5).

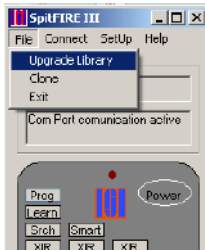


Figure 4.

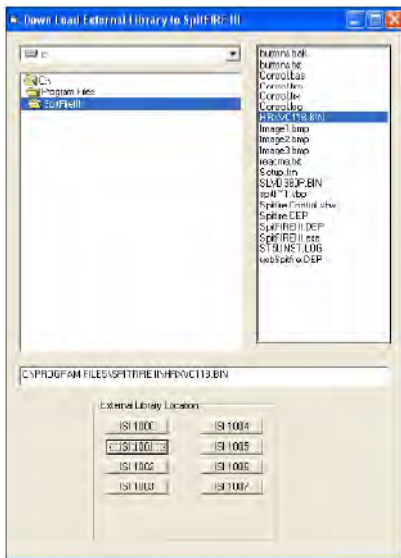


Figure 5.

14. Using the directory tree in the left panel of the **Down Load External Library to SpitFIRE III** dialog box, find the SpitFIRE III program files directory chosen in Step 6. From the file list in the right panel of the dialog box, find and double-click the **.BIN** file you copied in Step 8. The path to the **.BIN** file will be displayed in the bottom text box.
15. Locate the buttons in **External Library Location** area of the Down Load External Library to SpitFIRE III dialog box:
  - a. To control a JVC unit, click the **ISI 1001** button.
  - b. To control a Magnavox device, click the **ISI 1002** button.
16. The Innotech Systems dialog box will open. The path to the **.BIN** file will be displayed in the **Enter IR File Name** textbox (Figure 6).



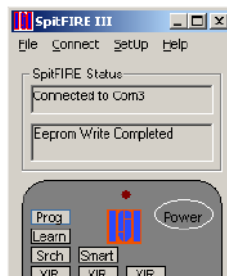
**Figure 6.**

17. Click the **OK** button in the **Innotech Systems** dialog box. The library download will begin.
18. Status of the download is displayed in the lower **SpitFIRE Status** panel in the SpitFire remote control user interface (Figure 7).



**Figure 7.**

19. When the download is done, **Eeprom Write Completed** will be displayed in the lower **SpitFIRE Status** panel (Figure 8).



**Figure 8.**

20. Disconnect the USB cable from the SpitFIRE device.
21. Set the switch on the rear of the SpitFIRE device to **RS232**.
22. Select **Exit** from the **File** menu item in the SpitFIRE remote control UI to close the application.

## ***Connecting a VBIR***

To setup a "control device" that can be remotely controlled from the Portal Server, you connect the VBIR SpitFire III to COM1 on a VB6000 series VBrick encoder using the flat, silver ribbon cable with RJ-45 connectors at each end. One end connects to the VBrick; the other end connects to an RJ-45-to-serial adapter and then to a DB-9 M/F Null Modem adapter as shown in Figure 9. Connect the VBIR to **COM1** or **COM2** depending on whether the encoder is in slot 1 or slot 2 of the appliance. Connect both the power and XIR cable (if necessary—for the emitter) to the VBIR making sure the adhesive lead on the XIR cable is securely attached to front of the VCR or DVD player. The emitter is used when there is no direct line-of-sight to a control device, for example when the VCR is in a cabinet. On the back of the VBIR, make sure the SpitFire is set to **RS-232** mode.



Figure 9. Connecting a VBIR

## VBrick Configuration

You also need to configure the passthrough state and baud rate of the VBrick associated with the control device. In the IWS management application, go to **Configuration: Passthrough** and set **Passthrough State** to **Responder** and **Baud Rate** to 2400 as circled below. (See the appropriate MPEG or WM Appliance *Admin Guide* for more information about configuring a VBrick appliance for passthrough.)

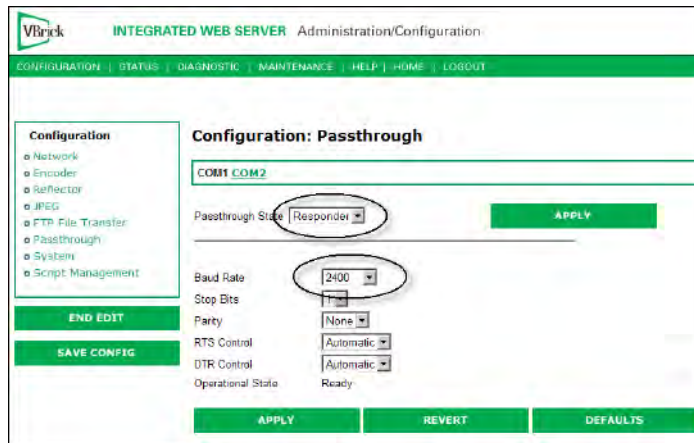
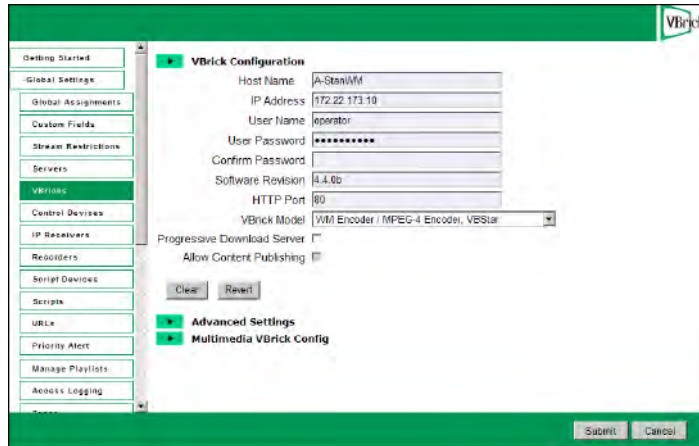


Figure 10. VBrick Appliance – Passthrough Configuration

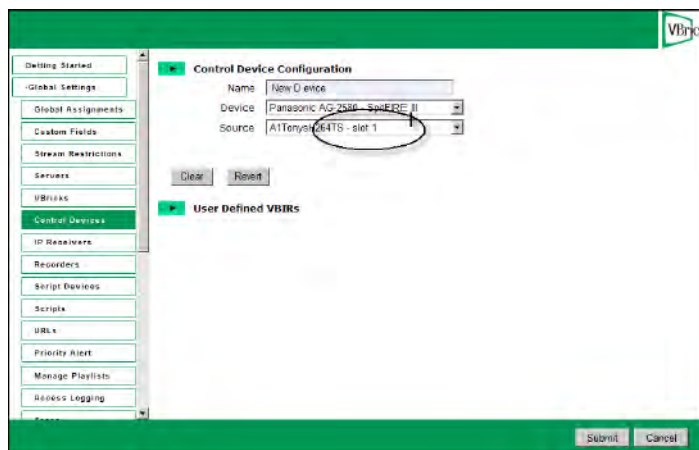
## Portal Server Configuration

The VBrick and the control device must both be configured in the Portal Server. First go to **Global Settings > VBricks** on the Portal Server Admin pages and add the VBrick to which you have physically connected the VBIR. Enter and confirm the password and other information.



**Figure 11.** Portal Server – VBrick Configuration

Then go to **Global Settings > Control Devices** and configure the control device. First select the DVD/VCR Device from the dropdown list. Then select the **Source** encoder to which you have physically connected the VBIR. Select **slot 1** or **slot 2** depending on whether the VBIR is connected to COM1 or COM2 respectively on the encoder. After completing these steps exit the application and you are done. You can now control the DVD/VCR from the Portal Server interface via the VBIR.



**Figure 12.** Portal Server – Control Device Configuration

**Note** When the COM2 **Passthrough State** is set to **Responder** it can no longer be used for a serial connection to the Command Line Interface. The **Passthrough State** must be **Disabled** before it can be used to connect to the CLI. See the ETV Portal Server *Admin Guide* if you need help or more information about control devices.

## Learning IR Commands

The VEMS Portal Server VBIR supports the SpitFIRE device internal library. This library is a database in flash memory of several thousand IR command sets accessed by a three-digit code. In the VEMS Portal Server Admin Console, a three-digit internal library code is specified by selecting a SpitFire source device from the dropdown list during configuration of a control device.

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If none of the codes in the SpitFire internal library represent the IR command set used by a particular source device, the SpitFire VBIR can be set to learn and store IR commands like a universal remote. Once commands are learned on a SpitFire they can be written as an extended (download) command library to a storage file on a PC. The learned commands in the stored file can also be uploaded and "cloned" to another SpitFire. For more information, go to [www.VBrick.com/documentation](http://www.VBrick.com/documentation) and see the application note "*Learning IR Commands on the VBIR.*"

