

**Liberty 8.5.1 Release Notes**  
*Barry Hicks, Video Design Software*  
12/7/2006

These notes describe Liberty’s interface to the BlueFish444 video board, added in Liberty 8.5.1. They assume that the BlueFish444 board is already installed in your system, and that the BlueFish drivers have also been installed (for reference, we tested with the latest released drivers from <http://www.bluefish444.com/> , BlueFish444Installer\_5\_2\_10.zip, at the time this document was written).

When you start Liberty, go to the Configuration Environment, and in the Hardware Options panel, select “BlueFish444” in the list. Also, in the Video Configuration panel, select the “Video” button (below the device list), and then toggle on the Type window (to the right of the Type label) so that it reads “BlueFish444”. Then press the green “Configure” button to initialize the board. You should see the message “Done Initializing VTR’s” in Liberty’s Prompt Window at the bottom of the screen if this succeeds. Refer to Figures 1A and 1B below.

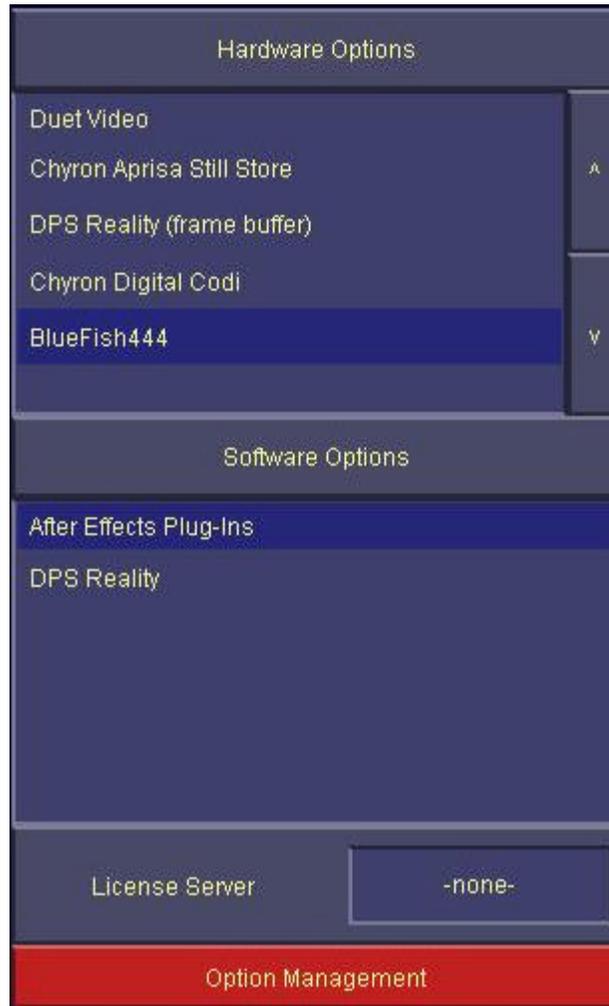


Figure 1A. Liberty Option Management Menu with BlueFish Settings

Defining VTR		1	as
^	none		
	Accom WSD		
v	SDL QuickFrame/Diskovery		
	SDL HD1.5+		
	ProntoVideo		
Control		Video	
Type	BlueFish444		
Address			
Serial Control Setup	Device Specific Settings	Configure	
Video Configuration			

Figure 1B. – Liberty Video Configuration Panel with BlueFish settings.

Once you have configured the board, press the “Device Specific Settings” button next to the “Configure” button. This brings up the BlueFish Video Setup menu, as shown in Figure 2 below. At the top of this menu are three status buttons showing the type of BlueFish board installed in your system, along with the states of the video and genlock signals coming into the board. Below this are configuration settings that you can adjust. For most of these, the defaults should be acceptable. You will need to change the “Video Mode” button to switch between standard and high definition (or between PAL and NTSC). More details on this later on.



*Figure 2 – BlueFish Video Setup Menu.*

There is also a “Show Info” button. Pressing this button will display additional BlueFish status and configuration info to Liberty’s Debug Window. Press the green OK button to exit the Setup Menu.

You will also want to set your Canvas Resolution to match that of the BlueFish board's Video Mode (for example, 720 x 486 for SD NTSC). Use Liberty's Canvas Configuration Menu to set the Canvas Resolution.

When you exit Liberty, the above settings will be saved, and will still be in effect next time you run Liberty.

### ***Video Grab***

To do a Video Grab, go to Liberty's Paint environment and press the Grab button in the Transfer Panel. This will grab the current frame of video input from the BlueFish board to Liberty's Canvas (if you press Grab before you've configured the BlueFish board, Liberty will ask if you want to configure the board now - answer yes, then press Grab again to grab in this case).



*Figure 3. Liberty Paint Menu with Grab and Show buttons in Transfer Panel*

You can ignore the Grab Popup (the corner button of the Grab button), as there are no further settings to adjust in this case.

## ***Video Show***

Pressing the Show button in Liberty's Transfer Panel shows the Canvas to video output on the BlueFish board. Liberty can show the canvas as a single frame, or as continuous live update of the Canvas to video output ("Realtime Show"). To configure how Show works, use the Show Popup.

Press the corner button of the Show button in Liberty's Transfer Panel to bring up the Show Popup (refer to Figure 4 below).



*Figure 4. Liberty's Show Popup.*

For "Real-Time Show" mode, turn on the "Realtime Show" button. For "Single Frame Show" mode, turn on the "NonRealtime Show" button.

You can also toggle the following buttons on or off, depending on your preference:

- Reduce Flicker: When on, Liberty applies a 1-2-1 vertical filter to the image prior to Show, to remove interlacing artifacts.
- UnPremult Alpha: Turn this button on if you're seeing dark halos around transparent objects on your video output. Otherwise, you can leave this button off.
- Show BG Color: When on, Liberty shows the background color on the video output in transparent areas of the canvas. Otherwise, Liberty shows black in the transparent areas of the canvas.

*Note that with Realtime Show, there may be a slight performance penalty when any of the above three buttons are enabled.*

Once you are happy with the above Show settings, press the green OK button to exit the Show Popup. Once you have done this, the main Show button in the Transfer Panel has the following effect:

- When Realtime Show is on, turn on the main Show button to enable live update of Liberty's Canvas to Video Output. As long as Show is on, any operations that you do on the canvas will be updated live to the BlueFish board's frame buffer. This may result in a slight performance penalty, so you may want to turn the main Show button off if this becomes an issue for certain operations. Also, be sure to turn the main Show button off prior to re-entering the Show Popup to make further adjustments (you can turn on the main Show button again once you've exited the Show Popup).
- When Non Realtime Show is on, pressing the main Show button shows the contents of the canvas (as a single frame) to Video Output (to the BlueFish board's frame buffer). No further updates are done until you press Show again.

Liberty also obeys your most recent settings in the Show Popup when outputting video with the main Show button (for example, displaying background color or not).

If you press the main Show button before configuring the BlueFish board, Liberty will ask if you want to configure the board now. Press Yes in this case, then press Show again to output video.

Liberty outputs both Fill and Key for BlueFish boards that support it. In 4:2:2:4 mode, you should see the Fill (the RGB from Liberty's Canvas) on video output 1, and the Key (the Alpha from Liberty's Canvas) on video output 2.

## Changing Video Resolutions

To change video resolutions (if your BlueFish board supports it), do the following:

1. Start the BlueFish Feature App on the Windows Desktop. Refer to Figure 5 below:

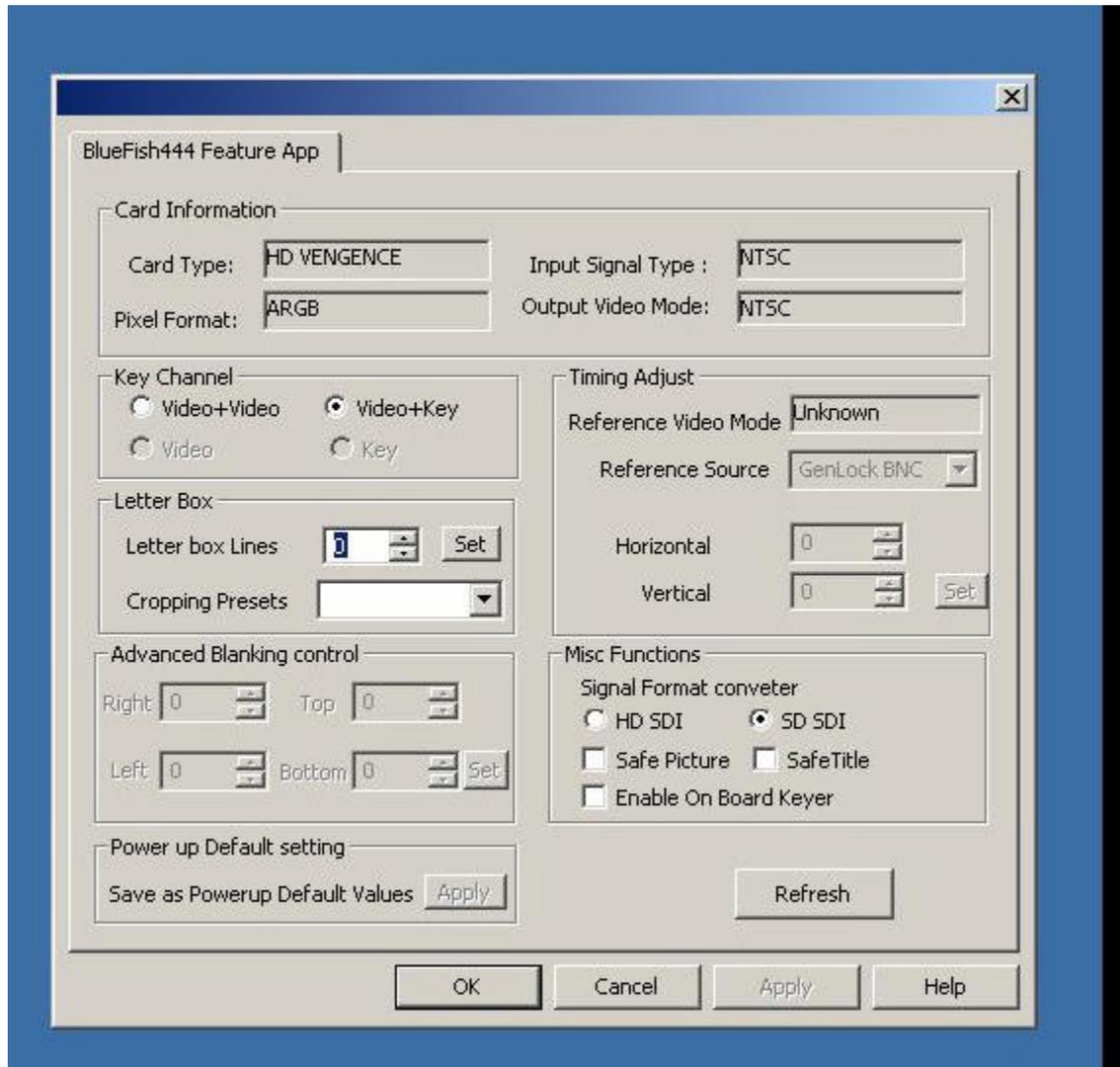


Figure 5. BlueFish Feature App.

Under “Misc Functions”, be sure that “HD SDI” is set for Hi-Def, or “SD SDI” is set for Standard Def.

2. Start Liberty, and in the Configuration Environment, be sure the Canvas Resolution is set to match your desired video resolution (for example, 720x576 for SD PAL, 1920x1080 for HD 1080, etc).
3. In Liberty's BlueFish Video Setup menu, set the Video Mode by toggling its window (for example, to 1080P 2400). Access Liberty's BlueFish Video Setup menu by pressing "Device Specific Settings" in Liberty's Video Configuration Panel.
4. Confirm that the physical connectors on the BlueFish board are connected to live video inputs and outputs of the proper resolution.

***For More Info***

Note that you can download the latest BlueFish drivers and documentation from the following web link:

<http://www.bluefish444.com/support/downloads/>

You can also contact VDS for technical support at (631) 249-4399 or [support@videodesignsoftware.com](mailto:support@videodesignsoftware.com).