



## **High Resolution Video Scaling Engine**

### **Addendum to the Product Guide**

This addendum describes the new features that have been added to the iScan HD with the latest software release 5.6 - 1.31. This document should be used along with the iScan HD Product Guide (version 1.5) which is consistent with software version 3.4 - 1.08.

#### **New Features**

- (1) SDI Input Support
- (2) Film Bias Mode
- (3) Automation Controls (Serial Port)
- (4) Discrete IR Codes
- (5) Sync Polarity Control
- (6) CEA-861B 50Hz Formats
- (7) New Output Aspect Ratio
- (8) 60Hz Default Frame Rate



### SDI Input Support

When the optional SDI board is installed, the SDI input can be selected using the remote control or the **Input Select** button on the front panel. The front panel display will show "SDI" when the SDI input is selected.

The **SDI Line Offset** function in the **Input Adjustment** menu allows the user to shift the image up if needed. The SDI line offset can be set independently for both NTSC and PAL/SECAM input formats. This function can be accessed using the **Input Adjust** button. The front panel display will show "LINE" when this function is selected.

### Film Bias Mode

The Film Bias Mode function may improve progressive source detection in some cases. For example, it may improve the detection of PAL film sources. This function can be accessed using the **Input Adjust** button. First, select the **Film Mode** function and then select **Film Bias**. The front panel display will show "BIAS" when this function is selected.

### Automation Controls (Serial Port)

Automation system controllers can control the iScan HD through the serial (RS-232) port using the protocol specified in the iScan HD Serial Automation Protocol document. This document can be downloaded directly from DVDO's website at [www.dvdo.com/faq/faq\\_pro\\_man.html](http://www.dvdo.com/faq/faq_pro_man.html)

The Serial Port baud rate defaults to 19200 bps but can be changed in the Configuration menu by using the **Configuration** button. First, access the serial port function. The front panel display (FPD) will show "R232". Then select the desired baud rate.

The supported baud rates are

Serial Port Rate	FPD shows	Serial Port Rate	FPD shows
1200 bps	1.2K	14400 bps	14.4K
2400 bps	2.4K	19200 bps	19.2K
4800 bps	4.8K	38400 bps	38.4K
9600 bps	9.6K	57600 bps	57.6K

### Discrete IR Codes

The iScan HD can also be controlled with direct commands through the infrared (IR) interface using the protocol specified in the iScan HD Discrete IR Codes document.

This document can be downloaded directly from DVDO's website at [www.dvdo.com/faq/faq\\_pro\\_man.html](http://www.dvdo.com/faq/faq_pro_man.html).

### Sync Polarity Control

When the iScan HD output format is set for separate Hsync and Vsync, the polarity of the Hsync and Vsync signals can be independently set. The preset output formats with separate Hsync

and Vsync default to Hsync and Vsync negative except SVGA (800x600). The SVGA output format defaults to Hsync positive and Vsync positive.

This function can be accessed using the **Output Setup** button. First, select the **Sync Type** function and then select the desired sync polarity. The table below shows the sync polarity selection and what is shown on the front panel display (FPD).

Hsync Polarity	Vsync Polarity	FPD shows
Positive	Positive	H+V+
Positive	Negative	H+V-
Negative	Positive	H-V+
Negative	Negative	H-V-

### CEA-861B 50Hz Formats

The previous version of the software has predefined formats for 720p, 1080i and 1080p. These formats have been renamed '720p-60', '1080i-60' and '1080p-60' in the **On-Screen Display** (OSD).

Three new formats labeled '720-50', '1080i-50' and '1080p-50' have been added to the preset output formats. These formats are compliant with the CEA-861B specification for the DVI output when the input is 50Hz.

The table below summarizes the differences between the previous and new software version and what is shown on the OSD and Front Panel Display (FPD).

Version 1.08		Version 1.31	
OSD	FPD	OSD	FPD
-	-	720p-50	72P5
720p	720P	720p-60	72P6
-	-	1080i-50	18I5
1080i	108I	1080i-60	18I6
-	-	1080p-50	18P5
1080p	108P	1080p-60	18P6

In general, 60Hz output formats should be used when the input is 60Hz and 50Hz output formats when the input is 50Hz.

### New Output Aspect Ratio

A new preset output aspect ratio, 5:4, has been added to support 1280x1024 format displays. This function can be accessed using the **Output Setup** button. First, select the **Aspect Ratio** function and then select the 5:4 aspect ratio. The front panel display will show "5/4" when this function is selected.

### 60Hz Default Frame Rate

The iScan HD defaults to 60Hz output frame rate regardless of the input frame rate to improve compatibility with displays. Most displays will show an image with a 60Hz frame rate.