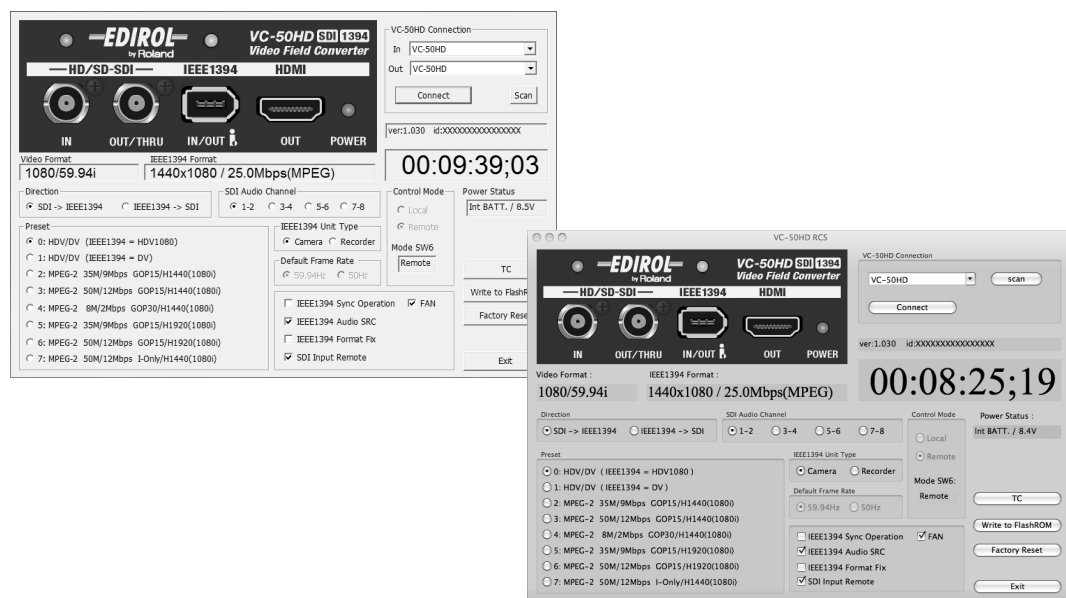


VC-50HD Video Field Converter Remote Control Software VC-50HD RCS

Owner's Manual

Thank you for using the VC-50HD Video Field Converter. This document explains the VC-50HD's dedicated remote control software. By connecting the VC-50HD to your computer via USB, you'll be able to make settings in greater detail than can be made with the VC-50HD alone.

* For details on the operating requirements of this software, refer to "System Requirements" (p. 2).



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System Requirements

The destination computer must meet the requirements described below.

- * Note : These programs have been confirmed to run on standard computers that meet the conditions described below, but operation under these conditions in all cases is not assured. Please be aware that even on computers meeting these requirements, processing capacity may vary due to differences in device-specific settings or specifications, or in usage environment.
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Operating System

- Windows XP Home Edition / Professional SP2 or later
- Windows Vista SP1 or later
- * 64-bit versions of Windows Vista are not supported.
- * Windows XP Media Center Edition is not supported.
- Mac OS X 10.5 or later

CPU

- Windows Pentium/Celeron 1.6GHz or higher
- Mac OS X Intel Processor

Memory (RAM)

512MB or more

Graphics

800 x 600 dots or more

65,536 colors (16 bit color) or more

USB Port

Hi-speed USB (compliant with USB 2.0) is recommended

Starting up VC-50HD RCS

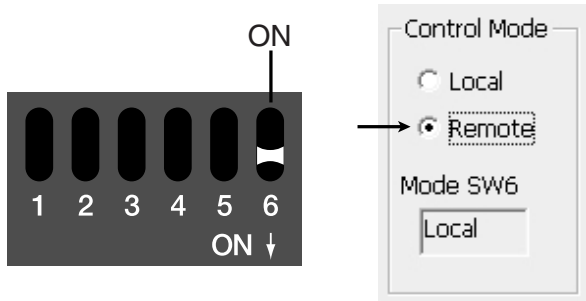
Decompress the file you downloaded from Roland Website and then double-click the VC-50HD RCS icon. The software will start up.

- * For details on computer operations, refer to the owner's manual for your computer.

Connecting the VC-50HD to your computer

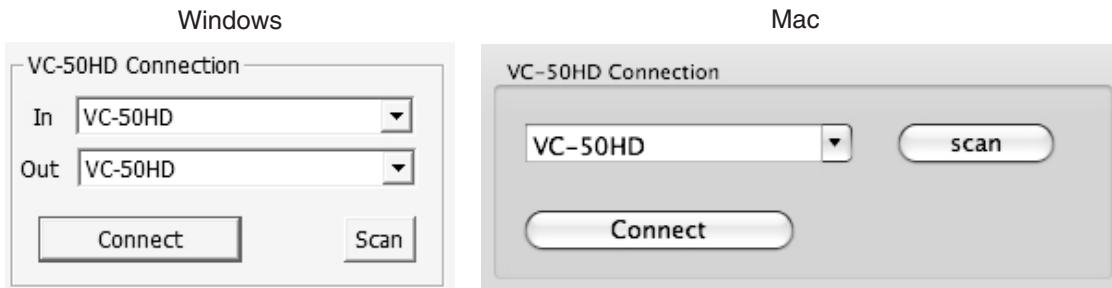
When connecting the VC-50HD to your computer, set the VC-50HD's own mode select switch 6 to the ON position.

- * If you make the connection with the switch OFF, set this software's [Control Mode] setting to [Remote]. With this setting, you'll be able to switch to a mode in which remote control can be received without having to operate the mode select switch of the VC-50HD itself.



Using the “VC-50HD Connection” section of this software, proceed as follows to establish a connection between the VC-50HD and your computer.

Before you perform this connection procedure, use a USB cable to connect the VC-50HD to your computer, and turn on the power.



1. Click the [Scan] button

2. Choose “VC-50HD” or “USB audio device”

- * In Windows, choose “VC-50HD” or “USB audio device” for both In and Out. There are no separate In/Out settings for Mac.
- * In Windows Vista and in Mac OS X, the item is shown as “VC-50HD.” In Windows XP, it is shown as “USB audio device.”

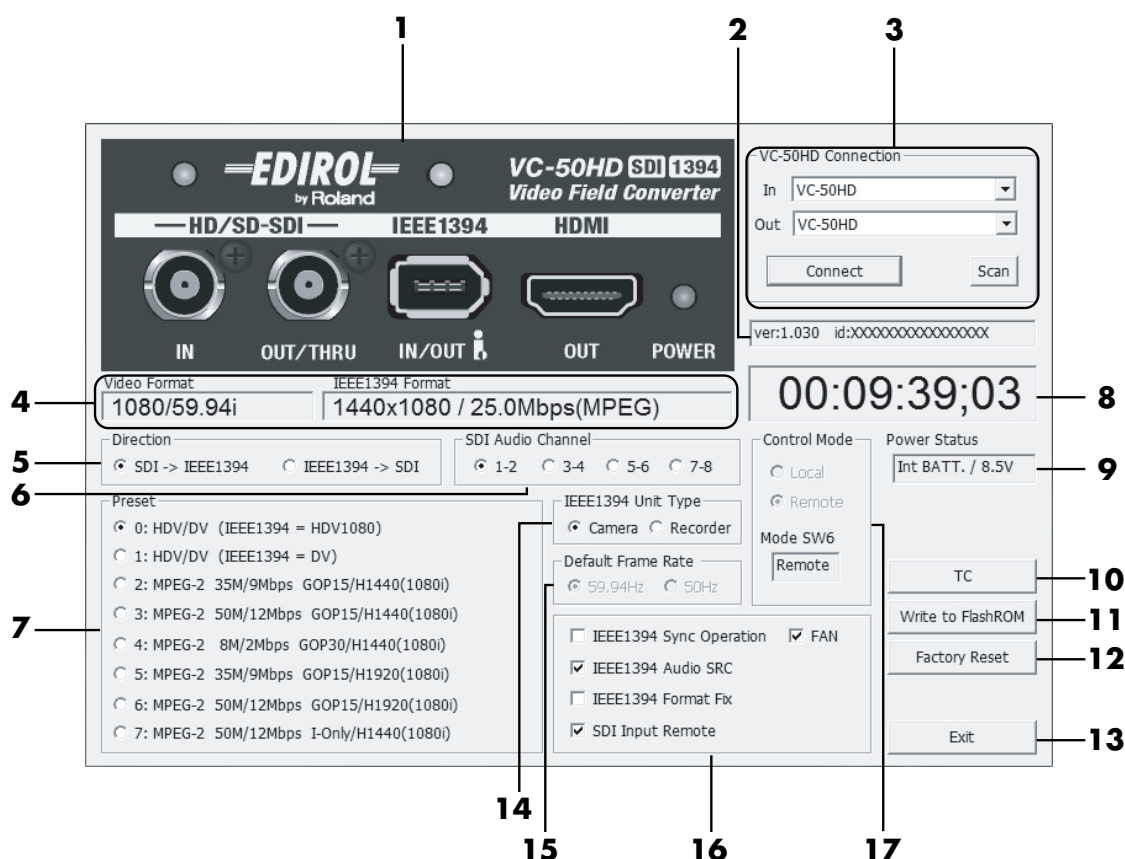
3. Click the [Connect] button.

The current state of the VC-50HD will be read in, and displayed on the screen.

MEMO

If “VC-50HD” or “USB audio device” are not shown in step 2, the computer might not have detected the VC-50HD. Check your computer's device manager etc.

Items and their functions



1. Display

This shows the status of three indicators.

- HD/SD-SDI indicator
- IEEE1394 indicator
- POWER indicator

2. Version / serial number

This shows the firmware version and serial number of the VC-50HD unit itself.

3. VC-50HD Connection section

Here you can perform operations for connecting the VC-50HD and computer. Refer to “Connecting the VC-50HD to your computer” (p. 3).

4. Video Format/IEEE1394 Format

This indicates the input/output format for the video signal and for IEEE 1394.

- * If a signal format that cannot be converted is being input, it is shown in parentheses ().
- * HDV is shown as MPEG.

5. Direction

Here you can select the direction of conversion.

- From HD/SD-SDI to IEEE1394
- From IEEE1394 to HD/SD-SDI

* This is the same function as the VC-50HD’s mode select switch 1.

6. SDI Audio Channel

This specifies the SDI audio input/output channels.

* This is the same function as the VC-50HD’s mode select switches 2/3.

7. Preset

This selects the IEEE 1394 signal format, resolution, and bit rate. Refer to “Selecting a preset” (p. 6).

8. Timecode display

This shows the timecode that is being output from the VC-50HD.

9. Power Status

This indicates the type of power on which the VC-50HD is currently operating.

- Int BAT Operating on the internal battery
- EXT DC IN Operating on an external battery or AC adaptor

A voltage is displayed in either case, but this is only an approximate value.

10. TC button

This opens a screen in which you can set various timecode-related parameters. Refer to “Changing the timecode parameters” (p. 8).

11. Write to FlashROM button

This saves your settings into the VC-50HD’s internal memory. The saved settings will not be lost even if the power is turned off.

- * Parameters of Direction, SDI Audio Channel, Preset and Control Mode will not be saved.
The setup (positions) of mode select switches on VC-50HD’s side panel will take priority.

12. Factory Reset button

This returns the VC-50HD’s settings to their factory-set state.

13. EXIT button

This exits the VC-50HD RCS application.

14. IEEE1394 Unit Type

This specifies how the VC-50HD will appear to the connected IEEE 1394 device.

- Camera
The IEEE1394 device will see the VC-50HD as a camera.
Choose [Camera] if you want to connect an F-1 and perform synchro recording.
- Recorder
The IEEE1394 device will see the VC-50HD as a recorder.
Choose [Recorder] for typical use, in which you’re not performing synchro recording.

15. Default Frame Rate

This specifies the VC-50HD’s frame rate detected by the connected IEEE 1394 device.

16. Setting check boxes

Here you can make various settings such as for synchronization with the recorder. Refer to “Changing the check box settings” (p. 7).

17. Control Mode

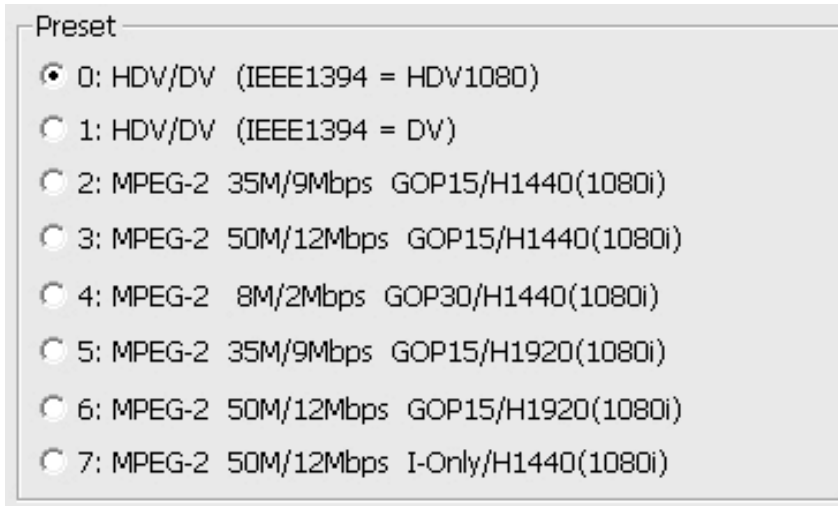
If [Local] is selected, remote control from the computer will not be possible. Choose [Remote] if you want to use remote control.

- * The setting of the VC-50HD unit itself is shown in the [Mode SW6] field. This will indicate [Remote] if mode select switch 6 is ON, or [Local] if that switch is OFF.
- * Even if mode select switch 6 is OFF and [Local] is displayed, you can set the Control Mode to [Remote] and remotely control the VC-50HD from the computer.

Selecting a preset

In the [Preset] area you can select the signal format, resolution, and bit rate of the IEEE 1394 output. The output format will depend on the computer's settings.

* Of the presets 0–7 below, 0–3 can also be specified by operating the mode select switches of the VC-50HD unit itself. Presets 4–7 can be specified only by using this software.



Preset

- ☒ 0: HDV/DV (IEEE1394 = HDV1080)
- ☐ 1: HDV/DV (IEEE1394 = DV)
- ☐ 2: MPEG-2 35M/9Mbps GOP15/H1440(1080i)
- ☐ 3: MPEG-2 50M/12Mbps GOP15/H1440(1080i)
- ☐ 4: MPEG-2 8M/2Mbps GOP30/H1440(1080i)
- ☐ 5: MPEG-2 35M/9Mbps GOP15/H1920(1080i)
- ☐ 6: MPEG-2 50M/12Mbps GOP15/H1920(1080i)
- ☐ 7: MPEG-2 50M/12Mbps I-Only/H1440(1080i)

The values for 0–7 are as follows.

0: HDV/DV (IEEE1394 = HDV1080) Corresponds to the VC-50HD's mode select switches 4:OFF and 5:OFF.

- HDV will be output if HD-SDI is input, and DV will be output if SD-SDI is input.
- If IEEE 1394 input is received, a query from the connected device will receive a reply that HDV1080 is the supported format.

1: HDV/DV (IEEE1394 = DV) Corresponds to the VC-50HD's mode select switches 4:OFF and 5:ON.

- HDV will be output if HD-SDI is being input, and DV will be output if SD-SDI is input.
- If IEEE 1394 input is received, a query from the connected device will receive a reply that DV is the supported format.

2: MPEG-2 35M/9Mbps GOP15/H1440 (1080i) Corresponds to the VC-50HD's mode select switches 4:ON and 5:OFF.

- Long GOP MPEG-2 TS will be output at 35 Mbps for HD or at 9 Mbps for SD.
- The 1080i resolution will be 1440 x 1080i.

3: MPEG-2 50M/12Mbps GOP15/H1440 (1080i) Corresponds to the VC-50HD's mode select switches 4:ON and 5:ON.

- Long GOP MPEG-2 TS will be output at 50 Mbps for HD or at 12 Mbps for SD.
- The 1080i resolution will be 1440 x 1080i.

4: MPEG-2 8M/2Mbps GOP30/H1440 (1080i)

- Long GOP MPEG-2 TS will be output at 8 Mbps for HD or at 2 Mbps for SD.
- The 1080i resolution will be 1440 x 1080i.

5: MPEG-2 35M/9Mbps GOP15/H1920 (1080i)

- Long GOP MPEG-2 TS will be output at 35 Mbps for HD or at 9 Mbps for SD.
- The 1080i resolution will be 1920 x 1080i.

6: MPEG-2 50M/12Mbps GOP15/H1920 (1080i)

- Long GOP MPEG-2 TS will be output at 50 Mbps for HD or at 12 Mbps for SD.
- The 1080i resolution will be 1920 x 1080i.

7: MPEG-2 50M/12Mbps I-Only/H1440 (1080i)

- Intra only MPEG-2 TS will be output at 50 Mbps for HD or at 12 Mbps for SD.
- The 1080i resolution will be 1440 x 1080i.

Making various settings

Changing the check box settings



1. IEEE1394 Sync Operation

If this check box is selected, the unit will operate in synchronization with the connected IEEE 1394 device. Operation will depend on the [IEEE1394 Unit Type] setting.

[Camera]

The conversion direction (Direction) will switch automatically depending on whether the recorder/player connected to the VC-50HD's IEEE 1394 connector starts or stops playback. During playback, conversion will occur from IEEE 1394 to HD/SD-SDI.

If a camera is connected to the IEEE 1394 connector, the camera's record start/stop operations will be embedded in the VC-50HD's HD/SD-SDI output as Recording Marks.

[Recorder]

The conversion direction (Direction) will switch automatically according to AV/C commands from the device connected to the VC-50HD's IEEE 1394 connector.

2. IEEE1394 Audio SRC

If this check box is selected, the audio sampling rate conversion function will be turned on. You should leave this box selected if the input signal is other than 48 kHz.

3. IEEE1394 Format Fix

If this check box is selected, the input/output of the IEEE 1394 connector can be fixed. The format at which it is fixed will depend on the following two conditions.

- Default Frame Rate

Choose 59.94fps or 50fps.

- Preset

0 : Fixed at HDV1080 format.

1 : Fixed at DV format.

2 - 7 : Fixed at MPEG-2/HDV720 format.

4. SDI Input Remote

If this check box is selected, REC START/STOP commands received from the SDI input will be issued to the IEEE 1394 device as AV/C commands. At the same time, the VC-50HD's status will also be switched.

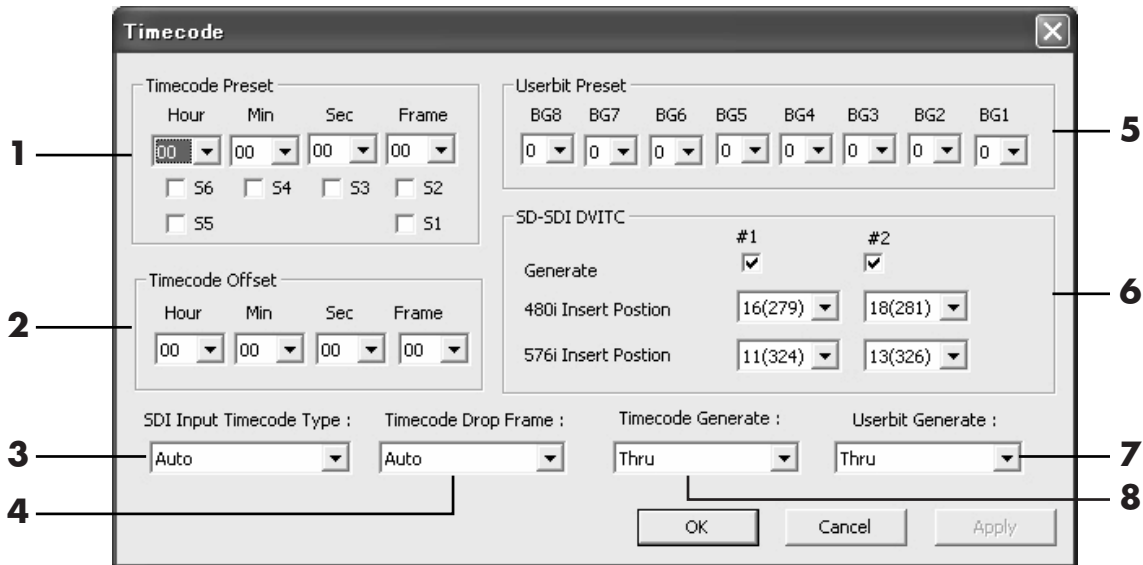
5. FAN

If this check box is cleared, the VC-50HD's cooling fan will be stopped. You should stop the fan only if you must record in conditions extremely close to silence. Do not stop the fan during normal use.

* If you stop the fan, do not place the VC-50HD on top of other devices, or place other devices on the VC-50HD.

Changing the timecode parameters

The following screen will appear when you click the [TC] button. In this screen you can change various timecode-related settings. When you click the [OK] button, the specified values will be applied to the [Preset] and the screen will close. If you click the [Apply] button, the specified values will only be applied to the [Preset], and the screen will remain open.



1. Timecode Preset

Changes the preset value when the timecode generator is in free run. You can also specify bits S1–S6.

2. Timecode Offset

Specifies the offset value when the timecode generator is offset.

3. SDI Input Timecode Type

Selects the type of timecode that is input from HD/SD-SDI.

4. Timecode Drop Frame

Allows you to specify drop frame / non-drop frame when receiving signals other than PAL/50fps.

5. Userbit Preset

Specifies the preset values when the userbit is Preset.

6. SD-SDI DVITC

Allows you to make settings for Digital VITC (SMPTE 266M) output when outputting an SD-SDI signal. Digital VITC allows insertion of up to two lines per field.

7. Userbit Generate

Selects the user bit to be output.

8. Timecode Generate

Selects the timecode to be output.