

Package Contents:

- One CitiDISK HD unit
- One 1.5 meter in length 6-pin to 4-pin iLink cable for camcorder
- One CD containing programs, drivers, manual and user guide
- One universal 100 to 240 volt AC input, +12 volt DC output Wall-mount power adapter with reverse polarity plug
- One belt-clip configured carrying pouch
- One Quick Usage Guide (this document)



Limited Warranty

The manufacturer guarantees that every CitiDISK HD including the kit but not the batteries embedded inside the enclosure (hard disk drive warranty policy is exclusive and is warranted by its manufacturers) will be free from physical defects in material and workmanship under normal use for one (1) year from the date of purchase. If the product proves defective during this warranty period, contact your manufacturer's customer support in order to obtain a Return Authorization Number.

Technical Specifications	
Interface	One IEEE1394A port SBP-2 and Isochronous DV type video streams
Cable	One 6pin-4pin IEEE1394A standard included
Sustained Transfer Rate	16 MBytes/second
Internal Battery	Rechargeable, Lithium based battery good for up to 90 minutes of non-stop recording
External Power	+6V to +18V DC in
Operating Temperature	0 to 55 Centigrade
Relative Humidity	95% Maximum
Storage Temperature	-22 to 65 Centigrade
Dimension	Width: 77mm Length: 135mm Height: 24mm
Weight	10 ounces
HD Recording Capacity	FW1256HD-80(DVCPPro HD) ~90 minutes FW1256H-100(DVCPPro HD) ~110 minutes FW1256H-120(DVCPPro HD) ~135 minutes

CitiDISK HD Quick Usage Guide



FW1256HD

It is highly recommended that you read the complete CitiDISK Installation/Usage Manual and Utility Suite Manual before using this product to help ensure that you get the most out of your CitiDISK HD

Disclaimer

All of the companies and product names mentioned in this user guide are the registered trademarks of their owners. All of the information in this user guide is subject to change without notice.



Do not drop, jar, bump, shock the unit, or expose to sources of excessive vibration. Keep in mind that CitiDISK HD uses a 2.5" hard drive, which is similar to those used in laptops. Gently handle and carry your CitiDISK HD, especially during video recording. If the battery is not fully charged, user must charge it for at least 4 hours before any self-powered usage.

Buttons, Connectors, Switch & Status Lights

Note: The following illustration describes each of the buttons of the CitiDISK HD (FW1256HD). These three buttons serve as status indicator lights as well.

POWER Button and Status Light:

Solid **GREEN**: unit is on
Blinking **GREEN**: 5 minutes left in the internal battery

External Power In Connector:

Accepts +6V to +18V DC power input. Automatically switches off and charges internal battery when plugged in

QPlay Button and Status Light:

Solid **ORANGE**: Playing last captured clip

PlayAll Button and Status Light:

Blinking **ORANGE**: Playing all captured clips from last scene forward or backward

RECORD Button & Status Light:

Solid **RED**: Recording
Blinking **RED**: 5 minutes left in recording capacity or not connected

Internal Battery Status Light:
G: between 50% and 100%
O: between 50% and 20%
R: below 20%

FireWire Connector:

Connects to camera or computer

Quick Erase Button:

Quickly erases all files in the "Media" folder



HDD Low:

Solid **RED** when hard disk recording capacity is below 50%

Battery and Main switch:

On: PWR button is enabled
Off: PWR button is disabled

Internal Battery Charging Light:

Bright **BLUE**: Charging
Dim **BLUE**: Charging almost complete
Off: Charge complete or disk accessing

Technical Tips

Q: Does CitiDISK HD support HDV? What are the differences?

A: No. CitiDISK HD supports DVCPPro, DVCPPro50 and DVCPPro HD.

	Encoder	Data Rate	Hi-Def's
DV, DVCPPro	DV	25 Mbps	NO
DVCPPro50	DV	50 Mbps	NO
DVCPPro HD	DV	100 Mbps	YES
HDV	MPEG2	~20 Mbps	YES

Q: What is the recording mode supported by CitiDISK HD for HVX200? Any file size advantage by setting to 24p /24pA over 30p mode?

A: The CitiDISK HD supports all of the recording modes from HVX200 except 24pN due to such signal is not outputted to FireWire. "24p" – 2:3 pull down & "24pA" – 2:3:3:2 pull down are considered as 30p recording, user can select "Tool", "Remove Advanced Pull Down" in Final Cut Pro to remove the excess frames. No. All of the 1080/60i/30/24p/24pA and 720/30p/24p/24pA recordings generate the same file size for the same recording period.

Q: Does CitiDISK HD support P2-MXF format? What is the native video file format supported by CitiDISK HD? What is the advantage not setting to P2-MXF?

A: No, as the time of this usage guide release. However, user can update the firmware once such function is released. The CitiDISK HD supports native MOV(Final Cut Pro Quicktime) & native AVI2(Adobe Premier 2.0 & Canopus Edius 4.0). By choosing the MOV or AVI2 file format saves the "MXF→MOV or MXF→AVI2" conversion time.

Q: What to prevent rendering clips in Final Cut Pro?

A: Set CitiDISK HD as "MOV" file format. Choose "DVCPPro HD 1080i60"(NTSC) or 1080i50(PAL) for 1080 modes and "DVCPPro HD 720p30" for all of the 720 modes in "Easy Setup". Also set "Video Play" setting in "Audio/Video" to "Digital Cinema Desktop Preview".

Q: Is "DV Control" recording function enabled?

A: Yes in DV25 and DV50 if P2 card is inserted, but not in DV100(1080 or 720). User must manually start/stop the DV100 recording by pressing the "REC" button on the CitiDISK HD.

Q: Is this an error when all three lights blinking? Does stopping the recording needed while swapping in & out the external battery?

A: No. This means the CitiDISK HD is waiting to be connected to computer or HVX200. No. The external battery is hot swappable, also the internal battery automatically kicks in when the external battery runs low.

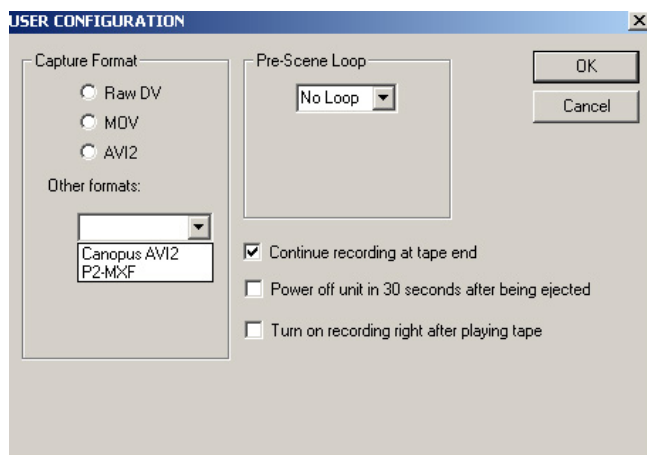
The **“Capture format”** column displays the current captured format. For example, “QuickTime” MOV is the format selected. User is able to change it by clicking on one of them.

There are two user-definable formats available, which are “Canopus AVI2” and “P2-MXF”. “P2-MXF” is temporarily not selectable.

The **“Pre-Scene Loop”** function will display how many seconds user wants to choose. If it’s blanked out, such function is not supported by this hardware. Up to 6 seconds is allowed for FW1256C & H model.

The **“Continue record at tape end”** is “checked” as a default setting. Un-checking this item will force the CitiDISK HD unit to stop recording at tape end or P2 Card is full.

The **“Power off”** is not checked as default setting. Checking this item will automatically turn off the unit 30 seconds after being ejected from the computer or after being left un-connected to the camera or computer.



Manufacturer Suggested Operating Steps

Shooting Video to the CitiDISK HD Simultaneously with or without P2 Card

1. Fully charge the unit’s internal battery
2. Choose the favorable native file format for your editing system and turn on the internal battery switch
3. Securely connect the CitiDISK HD to the camcorder or mount the external battery/unit together with camcorder
4. Power on the camera first, select the “Recording” mode of the camera; next, power on the CitiDISK HD unit
5. Insert the P2 Card and control the HD recording from the camcorder’s “REC” button or manually record the video by pressing “REC” of CitiDISK HD unit if no P2 Card is inserted
6. Play the last captured scene or play all scenes after you have completed shooting
7. Connect to computer and copy all of the clips to the internal hard disk for editing
8. Re-connect the CitiDISK HD to the camcorder and quick erase all of the captured clips to re-claim the free disk space for next usage

Shooting Video to P2 Card First Then Archiving to the CitiDISK HD Later

1. Insert the P2 Card and record the video
 2. Plug in the wall-mount power adapter to the CitiDISK HD.
 3. Connect the camcorder & the CitiDISK HD, power on the camera first, and the CitiDISK HD second
 4. Set camera’s 1394(FireWire) to “Host” mode and start the “Copy P2 Card to Hard Disk” function. Camera may require formatting the CitiDISK HD before copying process
 5. Power off the CitiDISK HD first and camera second
- Note: Need to re-format the CitiDISK HD by using Shining Utility Program if shooting to the CitiDISK HD wanted next time when the CitiDISK HD was formatted by camera.

Mounting on the Hot-shoe

- Insert the CitiDISK HD to Hot-shoe adapter(sold separately) and secure the unit it on hot-shoe
- Plug in the 4-pin FireWire connector into the camcorder iLink port.
- Tighten the FireWire cable with handle by cable-tie.



Attaching the Unit Across Belt



- Close both unit and external battery compartment, and connect the FireWire cable.
- Run the flap across belt and tighten it up.



Mounting Between Shoulder-mount Camera and G-/V-Mount Battery with Optional Pocket Adapter

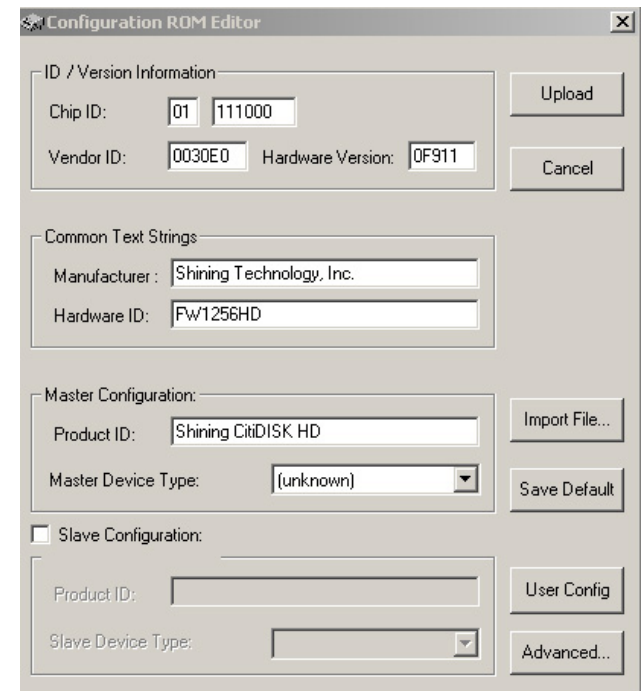
- Slide the CitiDISK HD into the PCKT1256 pocket adapter (item not included and sold separately).
- Sandwich the pocket adapter with the unit in between the camera's back and the battery.
- Connect the D-Tap power cord between unit's external power input and one of the D-Tap receptacles.



Modifying Device Configuration Setting

8). Click on the **"Modify device configuration setting"** button. Make sure the Hardware ID shown is "Fw1256HD" and Product ID is "Shining CitiDISK HD".

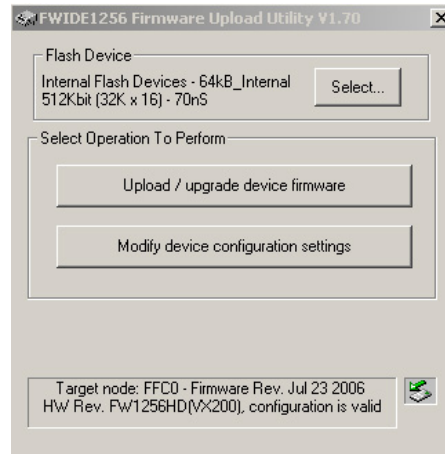
The configuration setting comes preset and there is usually no need to change it except the "User Config" sub-menu.



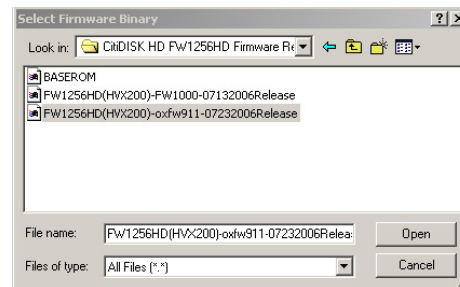
The screenshot shows the Configuration ROM Editor window with the following fields and buttons:

- ID / Version Information:**
 - Chip ID: 01 111000
 - Vendor ID: 0030E0 Hardware Version: 0F911
 - Buttons: Upload, Cancel
- Common Text Strings:**
 - Manufacturer: Shining Technology, Inc.
 - Hardware ID: Fw1256HD
- Master Configuration:**
 - Product ID: Shining CitiDISK HD
 - Master Device Type: (unknown)
 - Buttons: Import File..., Save Default
- Slave Configuration:**
 - Product ID: [Empty]
 - Slave Device Type: [Dropdown]
 - Buttons: User Config, Advanced...

Click on **"User Config"** will display the next screen.



7). Click on the **“Upload / Upgrade Device Firmware”** button. Follow the instructions and the system will ask for the firmware target. Select the one you just download (must be in a binary form).



Select the file named like **“FW1256HD(HVX200)-oxfw911-07232006Release”** as the example shown above with the **“Binary”** or **“bin”** file extension. Click on **“Open”** and then **“OK”** to continue. Once the upload process is completed, the CitiDISK HD will re-synchronize itself to the system and both **RED** & **GREEN** lights will blink alternately.

Charging the Internal Rechargeable Battery

Charging power is drawn from the FireWire bus power or external power adapter. A minimum of 4 to 6 hours of charging time is required before use.

The **BLUE** LED indicates battery charging is in progress. Once the battery is fully charged, the **BLUE** LED will turn off.



Turning On Internal Battery Before Usage

Turning on the battery:

Slide the main switch to ON position. Without doing so the CitiDISK HD will not operate.

Turning off the battery:

Slide the main switch to OFF position while in storage or in transit so as not to drain the battery when it's not in use.



Powering On/Off the CitiDISK HD



Power on:

Toggle the **“PWR”** button (closest to the external power adapter input) once. When the internal battery has less than 5 minutes of power remaining, this power status light will start to blink and will stop recording before shutting off the unit completely.

Power off:

Toggle the **GREEN “PWR”** button again.

Camcorder Controlled HD Recording

- Set HVX200 camera 1394 "Command" to "BOTH" mode. Connect the FireWire cable (4-pin end) to the camcorder. Insert a P2 card.
- Connect the FireWire cable (6-pin end) to CitiDISK HD. Power on the camera first, the CitiDISK HD second.
- Press "REC" button on the camcorder to start recording. The **RED** button of the CitiDISK HD will start blinking to solid **RED**.
- Press the "REC" button off the camcorder again to stop recording. The **RED** light will go off.



Recording Video Manually

- Connect the FireWire cable (4-pin end) to the camcorder's iLink port.
- Connect the FireWire cable (6-pin end) to the CitiDISK HD. Set the camcorder to "Camera" mode.
- Press the "REC" button on the CitiDISK HD to start recording. The "REC" light will start to flash to solid **RED** indicating video recording is in progress.
- Press the "REC" button of the CitiDISK HD again to stop recording. The **RED** light will go off.



Archiving HD P2 Card Content

- Connect the FireWire cable (4-pin end) to the camcorder's iLink port.
- Connect the FireWire cable (6-pin end) to the CitiDISK HD.
- Set the camcorder to "MCR" mode. Insert a P2 Card.
- Press the "REC" button on the CitiDISK HD. "REC" light blinks and waits to be fed.
- Select the P2 Card scene on the camcorder to start archiving. **RED** light will change to solid **RED** indicating recording is in progress.
- Stop DV recording by pressing the "REC" button of the CitiDISK HD and then stop P2 card playing. **RED** light will go off automatically.



*** Avid DV Xpress use proprietary OMF video file format, user need to import video files prior to editing. Either AVI2 or MOV is importable.
*** P2-MXF & Canopus AVI2 share the same light indications, user must use firmware uploader v1.7 or newer to exclusively select them.

Updating the CitiDISK HD Firmware

Proceed by following these steps with caution and do not un-plug the CitiDISK DV's power while in operation; otherwise the firmware could be damaged.

- 1). Uninstall the previous version of Uploader and install the latest "Firmware Uploader". The firmware uploader can be found in the CD included or downloaded from <http://www.shining.com>, "Download & Support" page.
- 2). Connect the CitiDISK HD to your computer (Windows System only) with the FireWire cable.
- 3). Turn on the CitiDISK HD. Wait for about 20 seconds.
- 4). Click on the "Plug-n-Play" icon at the bottom right corner of the tool bar. Select the disk drive that you wish to eject.









The message illustrated below will appear; click on "OK" to continue.



- 5). Do NOT disconnect the FireWire cable from the system. Leave the CitiDISK HD power on. Wait for another 20 seconds until the CitiDISK HD re-synchronizes itself to the system.
- 6). Double-click the "CitiDISK HD firmware uploader" icon on the desktop to launch the program. You'll see the following window. On the top is the uploader version number, i.e. "v1.7". Current installed firmware date code will be shown at the very bottom. Make sure the HW Rev. is "Fw1256HD(HVX200)".

DV Streams vs. Editing Software

The following is a table of various editing software's native video file formats for all of DV signal including DVCPro, DVCPro 50 & DVCPro HD. Editing software with "***" supports DVCPro 50 & DVCPro HD.

Editing Software	Native File Format	Suggested Key Combination
Adobe Premiere Pro 2.0 **	Standard AVI2	
Apple Final Cut Pro 5.0.4 in Mac OS X **	QuickTime MOV	
Apple iMovie3 on Mac OS X	RawDV	
Apple Quick Time in Win2000, XP and Mac OS X	QuickTime MOV or RawDV	
Avid Xpress Pro 5.x	QuickTime MOV	
Canopus Edius Pro 4.0 **	Canopus AVI2	
Edirol Standalone Editing Station	RawDV	
MacroSystem / Casablanca Standalone Editing Station	RawDV	
MainConcept EVE	RawDV	
Matrox Axio HD **	Standard AVI2	
MGI(Roxio) VideoWave	Standard AVI2	
Media100 Cinestream in MacOS	Standard AVI2	
Pinnacle Studio	Standard AVI2	
Sony Vega 6.x	Standard AVI2	
Ulead Media Studio and Video Studio	Standard AVI2	

HD Editing and External FireWire Hard Disk

- Disconnect the FireWire cable from the camcorder and re-connect it to a FireWire port (4-pin or 6-pin type) equipped computer, PC or Mac.
- Use the CitiDISK HD as an external FireWire hard disk for file archiving, backing-up and/or other video editing functions.
- CitiDISK HD is PLUG-and-PLAY specification compliant; no driver is needed.
- It is recommended by the manufacturer to backup all the captured clips to an internal or second hard disk before editing. Although dragging unwanted video clips into "Recycle Bin" and emptying the Recycle Bin will re-claim your hard disk space, the directory holding the clip names will not.

Quick Erase Button and Utility Programs

- Connect the FireWire cable (4-pin end) to the camcorder's iLink port.
- Connect the FireWire cable (6-pin end) to the CitiDISK HD. Set the camcorder to "Camera" or "MCR" mode.
- Use a pencil tip or hard sharp object to press and hold the button(right on the top of blue charging light) for more than 5 seconds. The power-access light will flash in different colors for maximum of 5 seconds.



Note: All of the files inside the "Media" folder are subject to be erased. It is suggested by the manufacturer that you back up the clips to an internal hard disk first and erase the clips with the "Quick Erase" function instead of dragging them into the Recycle Bin and emptying it later.

Quick Play Last Captured Clip



- Connect the FireWire cable (4-pin end) to the camcorder.
- Connect the FireWire cable (6-pin end) to the CitiDISK HD.
- Set the camera to accepting FireWire video mode by pressing the button beside the "MCR" text once to refresh the P2 card content first(P2 card must be present); and then, enter the video playback mode by ejecting the P2 card.
- Toggle the middle "QPLAY" button to play the last captured clip and subsequently the light will turn solid **ORANGE** when playing.
- Toggle "QPLAY" button any time during playing to stop playing immediately.

Play All Captured Clips



Jump Forward



Jump Backward

- Connect the FireWire cable (4-pin end) to the camcorder.
 - Connect the FireWire cable (6-pin end) to the CitiDISK HD.
 - Set the camera to accepting FireWire video mode.
 - Press and hold the middle "QPLAY" button for over 3 seconds and the **ORANGE** light will start to blink.
- The last captured clip will play from beginning to end first, then it will play from beginning to end of the first recorded clip of the "Media" folder. Additional clips will play in the sequence they were captured.
- You can reverse the order of the playback sequence by toggling the "REC" button. The "RED" light blinks if reverse direction is selected. Press the "REC" button again to reset to normal order.
- Toggle the middle **ORANGE** button once to abort playing the current clip and to jump forward to the next clip (Only if "RED" light is off). It jumps backward if "RED" light is blinking.
 - Press and hold the middle **ORANGE** button for over 3 seconds to stop the "PlayAll" function.

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Choosing Favorable DV Video File Format



Note: As the time of this Quick Usage Guide released, MXF file format in the combination of P2 file folder structure are not implemented. User is able to download the Firmware Uploader and firmware to update once it is released.

Operate the following steps only when the external power adapter is plugged into the unit and it is not connected to a computer or camcorder. DO NOT turn off the unit before the sequence is completed.

1. Look at the front panel of the CitiDISK HD.
2. Turn on the power of the CitiDISK HD. Wait until all three lights (PWR, QPLAY & REC) start to blink.



3. Press and hold the "RED" button for over 5 seconds. Currently stored file formats will display the light combinations illustrated below. "Raw DV" is set as the default from the factory.

Raw DV (Clipxxx.dv)		Windows AVI2 (Clipxxx.avi)	
QuickTime MOV (Clipxxx.mov)		User Defined **	

** Refer to the user manual's "How to customize User Defined file format" section.

4. Choose next file format by toggling the "RED" button.
5. Once the file format is determined, stop toggling and wait for 10 seconds. Both "GREEN" & "RED" lights will go off and stay off for 3 seconds.
6. The CitiDISK HD will start writing the new file format information into internal memory. Both lights will blink rapidly for approximate 10 seconds during the writing process.
7. Once the file format is completed, all three lights will blink normally to indicate the writing process is successful. The CitiDISK HD is now ready to capture video using the programmed file format. User MUST turn off the power before programming a new format again.

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