

INSTRUCTION MANUAL

Orion StarShoot HD Video Capture Device

#53084



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Figure 1. Included items.

Congratulations on your purchase of the Orion Starshoot HD Capture Device (HDCD). The HDCD is portable standalone HD capture device that requires no computer.

The HDCD can capture video from devices with HDMI or Component (YPbPr) video output such as the Orion HD Broadcasting Camera, Blu-Ray Player, Set-Top Box and modern computer game consoles (Nintendo Wii/WiiU, Sony PS3/PS4, Xbox 360/One).

The HDCD stores movie clips on external USB flash drives or USB hard drives which can then be easily transferred to Windows or Macintosh computers.

A 16 GB Flash drive is included with the HDCD that can store up to ~2 hours @ 1080p 30fps.

The HDCD records in MPEG4 format (H.264 hardware encoder) in resolutions up to 1920 x 1080p (30Hz).

WARNING: *Never look directly at the Sun with the naked eye or with a telescope – unless you have a proper solar filter installed over the front of the telescope! Otherwise, permanent, irreversible eye damage may result.*

Parts List

- Orion HD Capture Device (HDCD)
- 16 GB Flash drive
- HDMI Cable
- Component Cable
- Power supply
- Manual

Ports and Buttons

1. **USB HOST** — Connect to external USB flash drive or USB HDD.
2. **LINE IN** — Input from external audio source such as from music player or from computer audio output if using DVI to HDMI adapter to record video from a computer.
3. **MIC** — Connect an external microphone to record voice comments when recording.
4. **LINE OUT** — Audio output. Connect to external speakers if desired
5. **LED Indicator** —
Green: Standby mode
Red: Recording
Flashing Red: Recording ending.
6. **REC** — Press to record/stop.

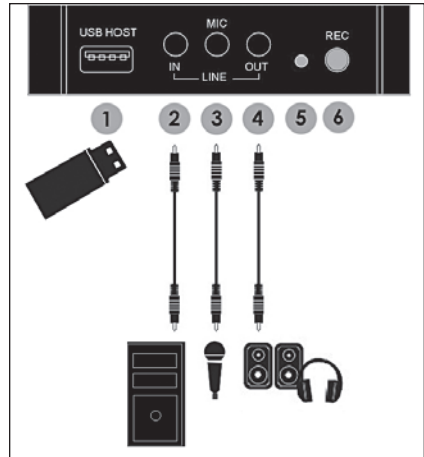


Figure 2.

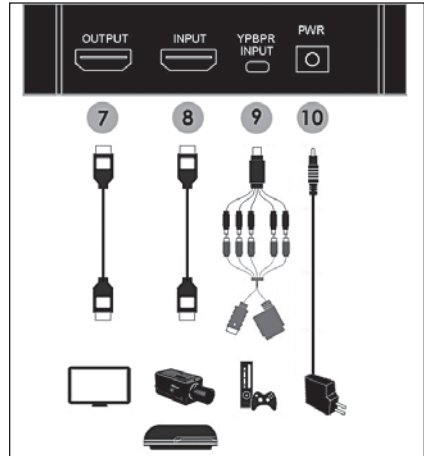


Figure 3.

7. **OUTPUT**—HDMI output, pass through video to display on TV / Monitor
8. **INPUT**—HDMI input.
9. **YPBPR INPUT**—Connect to the included Ypbpr component cable.
10. **PWR** — Connect to the included DC 5V power supply.

Recording

1. Connect power with DC adaptor. Green LED will indicate device is receiving power and that it is also in standby mode.
2. Connect camera, Blu-Ray player or game console using either the HDMI input and included HDMI cable or Composite (Ypbpr) Input and included composite cable. To record from PC use a DVI to HDMI adapter (not included)
3. In order to view input to be recorded, connect output HDMI to TV (Pass through).
4. Use line-Out to connect to external speakers or headphones.
5. Connect microphone or music player to record commentary or music with video file.
6. Plug USB flash drive or USB external hard drive into USB HOST port on device. Wait a few moments for the card or drive to be read and initialized. If external drive has LED indicator wait until LED stops flashing before trying to record.
7. To begin recording simply press the REC button, you will see the LED indicator turn from green to red. Press REC button again to stop capturing, will see LED indicator flash few seconds then turn green. If LED indicator does not turn from green to red after pressing REC button please check connection of USB storage device and also check amount of available space on USB storage device to make sure enough space is available to save your recordings.

NOTE: The recording will be stopped automatically if the USB memory is full, or the input video signal is lost during recording.

NOTE: If you use an external USB HDD, and there is more than 1 partition, then the video will only be recorded on first partition. When the first partition memory becomes full, the recording will stop.

Filenames

The recorded files are automatically given a name and recording number.

For 1080P format the recorded file will be named ***Encode_1080P_1.mp4***.

For 720p/480p format the recorded the file will be named ***Encode_1.mp4***

Every record/stop operation will increment the recording number in the filename:

Encode_1080P_1.mp4,
Encode_1080P_2.mp4,
Encode_1080P_3.mp4...

The max size per file is approximately 1.95GB (around 15 minutes for 1080p video).

Recordings longer than 1.95GB (15 minutes) will be automatically split into multiple files.

For example: if you record a 45 minutes 1080p video, you will see 3 files:

Encode_1080P_1.mp4,
Encode_1080P_1_1.mp4,
Encode_1080P_1_2.mp4

After many recordings user may wish to reset the recording number. To reset the recording number remove the power from the device, press and hold the REC button then plug in power back in and after 3 seconds of continuously holding REC button the recording number will reset to 0.

Playback

After recording has completed, connect the USB flash drive or external USB Hard drive to a Windows or Macintosh computer.

Simply double click file to playback using standard Windows or Macintosh video players.

Copy file/s to your local hard drive for best playback and to edit files.

Files are recorded in MP4 format (MPEG4 – H.264 hardware encoder). This is one of the most commonly used formats for video recording and compatible with the majority of video editing software available in the market.

NOTE: The media player used to playback the recorded video must support MPEG4 video and AAC audio decode.

Specifications

Video Input	Digital: HDMI Analog: Component Video
Audio Input	Digital HDMI Analog: RCA L/R, 3.5mm Line In, 3.5mm Micro Phone In Note: 3.5mm Line In and 3.5mm Micro Phone In is only for Component Video
Video Output	Digital: HDMI (Pass-through from HDMI or Component Input)
Audio Output	Digital: HDMI (Pass-through from HDMI or Audio RCA L/R Input) Analog: 3.5mm Stereo (Pass-through from HDMI or Audio RCA L/R Input)
Storage Media	USB Flash Disk, Portable Hard Disk Note: The exFAT format is not supported.
Resolution	Input / Pass-through: 720 x 480 (60p), 720 x 576 (50p), 1280 x 720p (50p), 1280 x 720p(60p), 1920 x 1080 (50i), 1920 x 1080 (60i), 1920 x 1080 (24p), 1920 x 1080 (25p), 1920 x 1080 (30p), 1920 x 1080 (50p), 1920 x 1080 (60p) Capture: 720 x 480 (60p), 720 x 576 (50p), 1280 x 720p (50p), 1280 x 720p(60p), 1920 x 1080 (50i), 1920 x 1080 (60i), 1920 x 1080 (24p), 1920 x 1080 (25p), 1920 x 1080 (30p), 1920 x 1080 (25p), 1920 x 1080 (30p) Note: Upscaling is not supported.
Capture Format	Video: AVI MPEG4, Audio: AAC Stereo
Capture Quality	Max: 18Mbps@1080P 30fps
File size	Max: 2GB / Per File
Capacity	Max: 140MB / Minute, 8.4GB / Hour
Power Supply	DC 5V / 2A
Dimensions	110(L) × 75(W) × 27(H) mm
Weight	135g

One-Year Limited Warranty

This Orion product is warranted against defects in materials or workmanship for a period of one year from the date of purchase. This warranty is for the benefit of the original retail purchaser only. During this warranty period Orion Telescopes & Binoculars will repair or replace, at Orion's option, any warranted instrument that proves to be defective, provided it is returned postage paid. Proof of purchase (such as a copy of the original receipt) is required. This warranty is only valid in the country of purchase.

This warranty does not apply if, in Orion's judgment, the instrument has been abused, mishandled, or modified, nor does it apply to normal wear and tear. This warranty gives you specific legal rights. It is not intended to remove or restrict your other legal rights under applicable local consumer law; your state or national statutory consumer rights governing the sale of consumer goods remain fully applicable.

For further warranty information, please visit www.OrionTelescopes.com/warranty.

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