If you need long record times of up to 43 minutes, you need HSV-500C³

The NAC HSV-500C³ System uses a 3-chip CCD Camera with excellent color fidelity and extreme light sensitivity making it perfect for analyzing long record time events in low light conditions. It is the perfect choice for troubleshooting, quality control and maintenance of production and packaging lines. With record times of up to 43 minutes, the HSV-500C³ is an ideal choice for a number of defense/military applications involving engine testing, projectile tracking, flight monitoring and stores separation. The HSV-500C³ is especially suited for biomechanical applications where a high number of image samples are required to be able to chart movement. The HSV-500C³'s sync system also allows for multiple camera views for 3D image analysis making it even more useful in these research applications.

Whatever the application the HSV-500C³ delivers the crisp, high resolution, brilliant color pictures that are required to understand what is truly occurring during a high speed event. And, because the HSV-500C³ records on inexpensive, readily available S-VHS and VHS tape cassettes, the original tapes can be played back anywhere on a standard VCR. The HSV-500C³ system consists of a video cassette recorder (VCR) and color digital camera.

An easy-to-use hand held keypad controls all record and playback functions. Playback speeds can be incrementally increased or decreased from the still position through a unique rotary control.

The separate, compact HSV-500C³ digital color video camera adds to the system's flexibility. Weighing only 2 lbs. and measuring only 3" X 3" X 6", the camera coupled with an optional 50 meter cable, gives the HSV-500C³ system the ability to acquire images in virtually any confined environment at virtually any angle.

HSV-500C³ Features

- Long record times up to 43 minutes
- Records on low-cost, readily available S-VHS or VHS tape
- High resolution color images
- Recording speeds of 125, 250 and 500 pps
- Portable, compact, lightweight and easy to use
- Up to 200 meters between camera and VCR
- Optional HSV Control and Capture Software for downloading images from HSV-500C³ digital frame buffer to the control PC’s hard drive in standard Windows format
### C³ High Speed Color Video Camera

- **Sensor:** 3 x 1/3 inch solid state image sensor
- **Sensitivity:** 2,500 lux @ 250 fps, F4
- **Shutter:** Electronic: 1/500 - 1/10,000
- **Dimensions:** 76w x 77h x 142d mm
- **Weight:** Less than 2 lbs
- **Cable Length:** 5, 10, 25 and 50 meters to DRP or VCR processors
- **Power Requirements:** Derived from processor

### C³ Lens

- **Focal Length:** 5.5 to 55 mm zoom
- **Aperture Size:** f/1.6
- **Lens Mount:** Bayonet mount (1/2 inch BTS)
- **View Angle:** (HxV); 47.1 x 36.2 degree - 5 x 3.7 degree
- **Work Distance:** Minimum 1 m

### HSV-500 C³ High Speed Video Cassette Recorder (VCR)

- **Recording Method:** Tape (S-VHS, VHS)
- **Recording Time:** 43 minutes (ST-180 tape)
- **Video Output:** NTSC and PAL Composite, Y/C Signal
  - *Display size is reduced in case of PAL video output
- **Dimensions:** 246aw x 137h x 343d mm
- **Replay:** FF/REW less than 6 min (ST-180 Tape)
  - forward, reverse, step, variable speed
- **Display Indicators:** Counter, Replay, Speed
- **Communications:** Optional IRIG, wave inserter, and multi-VCR sync unit for 2 VCR systems available
- **Keypad:** (Standard Operation Unit) Control functions include:
  - record, play, rewind, fast forward, search, still/pause, cue, stop, enter, edit, menu, reset, memory, menu

### Power Requirements

- **Input Voltage:** 12-32 VDCQ
- **Power Consumption:** 70 Watts (includes camera)

### Resolution of the C³ Camera is 3 x 510 (H) x 485 (V) CCD

<table>
<thead>
<tr>
<th>Frame Rate</th>
<th>Display Size</th>
<th>Sensing Area w/HSV-500C³ VCR</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 pps</td>
<td>Full</td>
<td>4.896 x 3.645 mm</td>
</tr>
<tr>
<td>500 pps</td>
<td>Segment</td>
<td>4.896 x 1.680 mm</td>
</tr>
<tr>
<td>500 pps</td>
<td>Full</td>
<td>4.896 x 3.360 mm</td>
</tr>
</tbody>
</table>

*Note: Horizontal resolution > 300 TV lines (S-VHS)*