



The Self Contained, Color, High Speed Digital Camcorder



FRONT LENS VIEW

IN AUTOMOTIVE TESTING

IN FLIGHT TEST

IN MANUFACTURING

The Digital Memrecam: The Edge in High Speed Color Video

- Compact all self contained at 11 lbs
- Beautiful, brilliant color, high resolution pictures up to 2000 pps
- Easy-to-set-up, record or playback all from the camera
- Instant color replay
- Computer controllable, analog and SCSI output
- Multiple camera operation
- Very robust and high-G versions

NAC's amazing new Memrecam lets you analyze high speed events, even in rugged environments, using a technology never before available. It is the very edge in high speed digital video technology. Memrecam is a fully self contained, color, high speed, high resolution video camera with an internal digital, solid state memory.

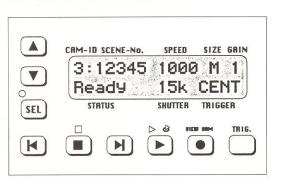
Memrecam uses a newly developed CMD one image sensor for high speed imaging, jointly

developed by NAC, Inc. and Olympus Optical Co. Ltd. The single high resolution CMD sensor and amplifier circuit produce very clear pictures at high frame rates. The proprietary CMD sensor matrix of 580 X 434 pixels provides the highest resolution of any high speed color video camera today.

The standard Memrecam is ideal for debugging those hard to see, high speed design and production problems. In addition to being small and portable, Memrecam simultaneously records in high speed while providing a standard video output signal to a monitor for viewing a test in real time. Several trigger signals allows Memrecam to save pictures from the beginning, middle or end of an event. This means the camera can record continuously saving only the pictures in memory upon trigger. While the standard Memrecam is very robust, a 50G version, designed specifically for on-board auto crash and aircraft flight testing, is also available.

Within Memrecam's compact and rugged housing is everything necessary for a user to program the camera's non-volatile control memory and digitally record a high speed event. Recording speed can be set incrementally from 100 — 2000 pps. An optional viewfinder attaches directly to the camera for ease in set up or viewing.

MEMRECAM



MEMRECAM CONTROLS

CAMERA (LOCAL) OPERATOR CONTROLS: SETTINGS:

SETTINGS:

Camera ID:

0 through 9 0 through 99999

Scene No.: Frame Rate Speed:

100, 250, 500, 1000, 2000

Frame Size:

Full Half Qtr

Status:

Ten Settings

Gain:

0, 6, 12 db

White Bal:

Auto, Set, Reg, 3100, 5100, 9000

Black Bal:

Set, Reg

Enhance:

Off, Low, Mid, High

Gamma:

Off, Low, Normal

Trigger:

Start, Center, End

Memrecam Model Designations

Memrecam CI

Standard Model

Memrecam CI/RX-1

High-G, Ruggedized Model (50 G's)

Memrecam Options

- Data Magazine, 2 1/2 inch hard disk, for downloading, directly from the camera. The Data Magazine has a SCSI connector for direct P.C. compatible interface.
- External memory for lengthening recording time.
- External Viewfinder.
- High "G" caged lens mount adaptor.

SPECIFICATIONS

Recording System:

IC Memory

Recording Time:

Varies depending on frame rate, picture size and memory options. 1.1 to 66.2 seconds. Longer with optional external memory.

Video Output Recording Mode: NTSC and Y/C (PAL available) Manual, External, Pre and Post

Trigger

Playback Mode:

Normal, Still, Forward, Reverse

Replay Speeds:

1, 2, 4, 8, 15, 30, 60, 120, 240, 480

and 960 pps

SYNC System:

Recording: HD, VD (Multi

Digital Interface:

Camera Feature) SCSI, RS-422

Power:

Shutter*:

Imager:

20-32 VDC, 50 W operating,

W/O shutter

Operating Temperature: Recording Speeds: 0-40° C

100, 250, 500, 1000, 2000 pps

Electronic

Electronic: 1/picture rate

Mechanical: 100 to 500 pps:

1/1500, 1/3000, 1/6000,

1000 pps:

1/3000, 1/6000, 1/12000

2000 pps:

1/6000, 1/12000, 1/24000 1/2 inch CMD, Single Chip,

Color

Sensing Areas:

Lens Mount:

Full 580×434 pixels, Half $408 \times$

300 pixels, Qtr 260 x 234 pixels. "C" Mount standard. Optional

high-G mount adaptor for caged

lenses.

Horizontal Resolution:

Greater than 350 HTVL up to

500 fps

Size:

Height: 5.5" (140 mm) Width: 5.8" (149 mm)

Length: 9.6" (245 mm)

Weight:

11.00 lbs. (5 kg.) W/O lens or

options

MAXIMUM RECORDING TIMES

COLOR Full Frame up to 500 pps*

PICTURES PER SECOND	PIXEL FORMAT/RECORDING TIMES		
	580 x 434*	408 x 300	260 x 234
100	16.0	32.9	66.2
250	6.4	13.2	26.5
500	3.2	6.2	13.2
1000	N/A	3.3	6.6
2000	N/A	N/A	3.3