



FRONT LENS VIEW



BACK PANEL 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.

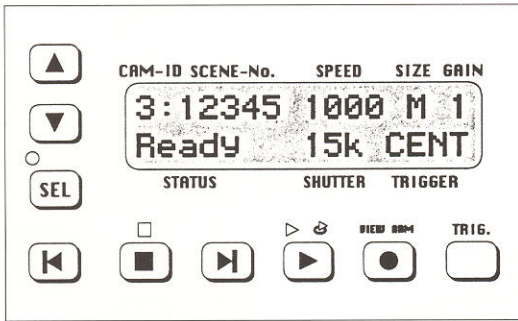
Memrecam uses a newly developed CMD one image sensor for high speed imaging, jointly

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) CONTROLS:

Camera ID: 0 through 9
Scene No.: 0 through 99999
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

OPERATOR SETTINGS:

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 NTSC and Y/C (PAL available)
Recording Mode: 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 Camera Feature)
Digital Interface: SCSI, RS-422
Power: 20-32 VDC, 50 W operating, W/O shutter
Operating Temperature: 0-40° C
Recording Speeds: 100, 250, 500, 1000, 2000 pps
Shutter*: 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
Imager: 1/2 inch CMD, Single Chip, Color
Sensing Areas: Full 580 x 434 pixels, Half 408 x 300 pixels, Qtr 260 x 234 pixels.
Lens Mount: "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