

Description of Digital Device

EXHIBIT # : 4-1
FCC ID : ACI927129K
OUR REF. : MKES99-F021
MODEL NO. : PV-DV600D
Page 1/2

Technical Specification

Power Source : DC 7.2 / 7.8 V
Power Consumption : 7 W
Video Recording System : EIA Standard (525 lines, 60 fields)
NTSC color signal
Frequency generated or used : 10 kHz - 49.152 MHz
Operating Temperature : 0 - 40
Operating Humidity : 10 % - 75 %

Performance Explanation of Digital Video Camera

- 1) Camera Mode(Camera->DV Output/Monitor Output/Tape Recording/DSC Recording)
The light on the CCD through the lens is converted to the electric analog signal and it is forwarded to the Camera Process. In the Camera Process, the analog signal is converted to the digital signal by the built-in A/D Converter and is processed as image. Then, it is converted to the digital component signal. The digital component signal is forwarded to Format Process via the Video I/O Interface of the VCR Block, and is compressed and converted to the DV Format signal. The DV format signal is processed by the Tape Format and it is converted to Tape Recording signal for recording on the tape. On the other hand, it is processed by the DIF Process to output the DV Signal conformed with the IEEE1394 to the PCs or the different DVCs through the DV Cable.

And, the D/A converted NTSC Video signal by Video I/O Interface is forwarded to the VIDEO AMP and the amplified VIDEO signal is output to TV monitors, etc. through Audio/Video I/O Terminals.
- 2) Playback Mode(Tape Signal->DV Output/Monitor Output)
The signal by way of Cylinder Head from the tape is converted to the DV Format signal by the Format Process. The DV Format signal is processed by the DIF Process to output the DV Signal conformed with the IEEE1394 to the PCs or the different DVCs. This compressed DV signal is extracted. Then the D/A converted NTSC Video signal by Video I/O Interface is forwarded to the VIDEO AMP and the amplified VIDEO signal is output to TV monitors, etc. through Audio/Video I/O Terminals.
- 3) DV Input Mode(DV Input Signal->Monitor Output/Tape Recording)
The DV signal conformed with the IEEE1394 via the DV Cable from the PCs or the different DVCs is converted to the DV Format signal by DIF Process. The DV format signal is processed by the Tape Format and it is converted to Tape Recording signal for recording on the tape. This compressed DV signal is extracted. Then the D/A converted NTSC Video signal by Video I/O Interface is forwarded to the VIDEO AMP and the amplified VIDEO signal is output to TV monitors, etc. through Audio/Video I/O Terminals.
- 4) ANALOG Mode(Analog Input Signal->DV Output/Tape Recording)
The Video signal which was input on the Audi/Video I/O terminals is forwarded to the Analog Interface through the IN/OUT Control Selector. The Video signal is forwarded to the Video I/O Interface for the A/D conversion, then it is forwarded from the Video I/O Interface to the Format Process. And it is compressed and converted to the DV Format signal. The DV format signal is processed by the Tape Format and it is converted to Tape Recording signal for recording on the tape. On the other hand, it is processed by the DIF Process to output the DV Signal conformed with the IEEE1394 to the PCs or the different DVCs through the DV Cable.
- 5) DSC Still Image Output Mode(DSC Memory->RS232C/Monitor Output)
The image stored on the memory of DSC is amplified by the RS-232C Driver and is output to the PCs, etc. through the RS-232C Cable.
- 6) Playback Still Image Output Mode(Tape Signal->Memory->RS-232C/Monitor)
The still image stored on the memory of playback tape signal is amplified by the RS-232C Driver and is output to the PCs, etc. through the RS-232C Cable.

List of Frequency

CLOCK of Digital Video Camera

CIRCUIT Name	CLOCK
Timing Generator	27.0 MHz
CCD	13.5 MHz
Camera Process	13.5 MHz
Camera I/F	4.5 MHz
	13.5 MHz
Format Process	18.0 MHz
	24.576 MHz
	41.85 MHz
Camera CPU	20.0 MHz
CYL Head	10 kHz ~ 20.925 MHz
DIF Process	18.0 MHz
	DC ~ 49.152 MHz
Power	700 kHz
Timer Clock	32.0 kHz
Character Generator OSC	7.2 MHz
VCR System CPU	27.0 MHz
LCD Process (PLL)	19.07 MHz
EVF Process (PLL)	10.38 MHz