



megacine

Portable Field Recorder
for Digital Cinema

SSD Version available



Mobile Field Recorder System

At Fraunhofer Institute for Integrated Circuits IIS a new mobile storage concept for DC (Digital Cinema), HD (High Definition) or SD (Standard Definition) sequences is developed for use on film sets or outdoor locations.

New Features - New Versions

The portable field recorder megacine also supports the ARRI-D20 Data Mode with a resolution of 2880 x 2160 pixels.

megacine is available in a mini-raid array version and a SSD version.

megacine offers small size, comfortable handling and one to eight hours of recording time for uncompressed image data. The data are stored at a modularly designed mini-raid array of up to 16 notebook hard disk drives with a current storage capacity of about one terabyte.

Store Any Format You Need!

The great advantages of **megacine** are the available recording time and the functionality as a recorder. Nearly any data format from DC-SDI Dual Link down to SD can be stored.

Storage and Playback in One

The field recorder stores image data in uncompressed, lossless HDTV resolution (10 bits RGB 4:4:4) 1080/25 psf or DC resolution (12 bits 4:4:4 XYZ) 2048 x 1080/24p.

The recorded sequences can be played back in the same quality as they are captured or they can also output in other frame rates.

For the recorder a display with 640 x 480 pixels is integrated. A preview in a smaller format is possible. In the on-screen display frame name, number of frames and takes, selected file format, remaining recording time, fill level can be shown.

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The on-screen display and the integrated keypad allow the input of the configuration set-up.

Fast Data Access

Serving as an external hard disk, **megacine** stores each video frame separately as an independent file, so that direct access for non-linear editing is immediately possible. The data transmission to the host computer is realized via FireWire (IEEE 1394a) with approximately 400 Mbit/s or Fibrechannel with 2 Gbit/s.

Immediate access to image data without additional steps is guaranteed: no longer waiting for film processing, no need for additional video equipment. Audio and ancillary data, like time code and other meta data that are transmitted in the HD-SDI stream can be stored together with the image data.

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Technical Details

megacine

Storage Capacity:
Dimensions:
Size
Weight

16 notebook hard disk drives
RAID 6 with 2 harddisk drives redundancy
1 Terabyte

11.5 x 8 x 8 inches
8 kilograms

megacine COMPACT

Storage Capacity
Dimensions
Size
Weight

8 SSDs
256 MByte
7.8 x 6 x 5.6 inches
4.3 kilograms

Data Connections

HD-SDI Single Link/Dual Link in
HD-SDI Single Link/Dual Link out
FireWire (IEEE 1394a) 400 Mbit/s
Fibrechannel 2 Gbit/s

BNC x2
BNC x2
x1
x1

Power

DC Power (10 V – 36 V)

Audio

8 channel embedded audio recording/play-back

Control

megacine can be remote controlled via RS422VTR-protocol

Display

Integrated TFT-display with 640 x 480 pixels: on-screen display of metadata and operating features additionally to the preview

Formats

Resolution\Framerate	23,97	24	25	29,97	30	48	50	59,94	60
1920x1080 YUV 4:2:2	p, i, psF	p, i, psF	p, i, psF	p, i, psF	p, i, psF				
1920x1080 RGBA 4:4:4:4	p, i, psF	p, i, psF	p, i, psF	p, i, psF	p, i, psF				
1280x720 YUV 4:2:2	p	p	p	p	p		p	p	p
ARRI D20 DataMode		x	x		x				
ARRI D20 HighSpeed						psF	psF	psF	psF
2048x1080 XYZ 4:4:4		p, psF							
720x576 SD (PAL)			i						
720x540 SD (NTSC)					i				