

JC Labs, Inc.

HSR-180/HSR-200/HSR-240/HSR-250

High speed video recorder

HSR-180S/HSR-200S

The HSR-180/HSR-200, HSR-180S/HSR-200S, and HSR-240/HSR-250 video cassette recorders from JC Labs are designed to record high frame rate video signals in an office or laboratory environment. Applications include the analysis of packaging machinery, vehicle dynamics, impact testing, and mechanical designs. Bio-metric uses include motion studies, sports medicine, and the evaluation of rehabilitation and therapy.



Based on an industrial VCR, the HSR recorders retain all of the original features found on the Panasonic AG-5210. At 60 fields per second video rate, both monochrome and color recording are available with 2 channel Hi-Fi sound. The super 4 head system gives clear and noiseless still pictures. The optional jog and shuttle controls allow easy step by step viewing in playback, or quick review as the tape is fast wound.

The special electronics installed by JC Labs will detect the presence of high speed sync signals during record and will automatically pass control to a set of high speed servos. During high speed record, the HSR-250 is sped up 417% (400% on the HSR-240, 333% on the HSR-200, 300% on the HSR-180) while the special high frequency signal system drives the record heads*. The format of the recorded signal is the same as standard VHS, allowing the cassette to be played on any VHS deck (SVHS recordings must be played on an SVHS VCR.) The image resolution is limited only by the playback, and supplies a minimum of 230 TV lines in VHS mode or 380 lines in SVHS** mode and a typical signal to noise of 43 dB.

Capable of recording from a variety of cameras, the HSR-180 records 40 minutes on a low cost T-120 cassette (the HSR-240 records 30 minutes) and requires a run up time of only 10 seconds to reach high speed. The recording is available for immediate review and may be recorded over if desired. The simple analog input (RS-170 format) allows the use of a single coaxial cable hookup, or telemetry link to receive the signal from long distances.

* The high speed is selected at the time of order and is not field adjustable. ** The recorder is configured at the factory for SVHS or VHS high speed recording.

FEATURES:

Records at 60 or 180/200/240/250* fields per second.

Automatic speed selection in record.

Full field playback at all speeds, in all modes.

Color record and playback at 60 fields per second.

Super 4 head system.

Clear still and step playback.

Digital servo and tracking system

SPECIFICATIONS:

Recording Format: VHS/SVHS.**

Recording Time: 40 minutes at 180 fields per second, T-120 tape.
30 minutes at 240 fields per second, T-120 tape.

Video Input Level: 1 Volt p-p into 75 Ohms.

Video System: EIA RS-170 standard (composite sync.).

Horizontal Resolution: 230 TV lines minimum, VHS mode.
380 TV lines minimum, SVHS mode.

Signal to Noise: 43 dB typical, SP mode.

Audio Track: 1 normal at all speeds, 2 channels Hi-Fi (60 fps only).

Power: 120 Volts AC, 50-60 Hz, 30 Watts approximately.

Operating Temperature: 5 C to 40 C.

Humidity: 35% to 80%.

Size: 27.0 cm. X 12.0 cm. X 34.0 cm.

Weight: 6 kg.

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