

This device is combined a DVD Recorder with a Video cassette recorder and operates with an AC commercial power supply.(AC120V, 60Hz)

This device includes TV interface Device, Television Broadcast receiver, and Digital device of product category defined by FCC.

The external connectors are equipped with DV Input, Front Audio (L/R)/Video/S-Video Input, RF input/Output, Rear Audio(L/R)/Video/S-Video Input, HDMI Output, Rear Audio(L/R) /Video/S-Video Output, Component Output, Coaxial Digital Audio Output, Optical Digital Audio Output, and DVD Audio Output L/R.

The circuit is composed by Power Supply Block, VCR Block, and DVD Recorder Block, if divided roughly. The explanation is as follows and the details are referred to Block Diagram.

Power Supply Block:

Use the switching regulator circuit and provide the power supply to each circuit.

VCR Block:

The circuit of this block is composed by Y/C/Audio/CCD/Head Amp, Syscon, Tuner/Jack, Display, Hi-Fi Demodulator, AV SW, Operation /LED and so on.

RF Modulator output is output in US 3ch or 4ch and Emission frequency is as Follows:

Emission Frequency; US 3ch Video carrier: 61.25MHz

Audio carrier: 65.75MHz

US 4ch Video carrier: 67.25MHz

Audio carrier: 71.75MHz

The oscillating frequencies that is used this block are the follows:

10MHz, 32.768KHz---- Syscon/TIMER/SERVO IC Clock

3.579545MHz--- Y/C/Audio/CCD/Head Amp IC Clock

DVD Block:

The circuit of this block is composed by AV Encoder, MPEG, Memory, Audio, PHY, HDMI and so on.

The oscillating frequencies that is used this block are the follows:

135MHz--- SD-RAM Clock (RAMCLK)

27MHz--- MPEG Master Clock (GCLK)

18.4327MHz--- Audio Master Clock (AMCLK)
3.072MHz---Audio bit Clock (ABCLK)
48kHz---Audio L/R Clock (LRCLK)
27MHz---Video Clock(VIDCLK)
27MHz---Serial Bit Clock(SBCLK)
27MHz/74.25MHz---HDMI DATA Clock(HDCLK.PCLK)
24.576MHz---DV Master Clock (DVGCLK)
33.75MHz---DV DATA Clock (ISOCLK)