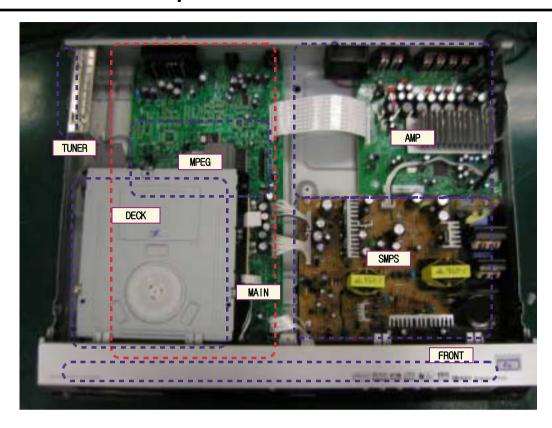
13. Circuit Board Description



BLOCK Div.	Main Roles	Remarks
SMPS	 AC Power Supply and MICOM Supply Power from AC-CORD is supplied to MAIN POWER TRANS through Protection circuit(FUSE, VARISTOR, etc.) of SMPS(STAND-BY status) Approve operating voltage to MAIN SET from SMPS for normal operation on power-on while AC-CORD is inserted in outlet(STAND-BY). ◇ CONNECTOR Specification ① M8V : IC power operating OPEN/CLOSE and ROULETTE +/- of MECHA TRAY ② P-SENSE: Power-sense and port for detecting whether AC-CORD is inserted in outlet. MICON can recognize and POWER-ON at set only when this SENSE port is set to "H". (about +5V) ③ P/ON : POWER-ON port. When turning on power at set after recognizing P/SENSE at MICOM, this power supplies all powers to MAIN-PCB through operation of SMPS Q7(about +5V) ④ MICOM 5.6V : approve LOGIC operating power of MAIN MICOM and VFD DRIVER IC at STAND-BY status. RED LED is turned on(about +5.6V) ⑤ VP : NEGATIVE DRIVE power of VFD DRIVER(about -34V) ⑥ VFD DC : FILAMENT operating power of VFD(about +4.4V at both end during power-on ② A5.6V : AD CONVERTER(WM8775) operating power ⑧ D5.6V : MECHA DIGITAL power 	* 120V - FUSE(F1):6.3A - VARISTOR(VR1):10D221 * 240V - FUSE(F1):4A - VARISTOR(VR1):10D471

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BLOCK Div.	Main Roles	Remarks
MAIN-PCB	<pre></pre>	
FRONT-PCB	 ➤ FRONT PCB Part Take charge of control of front panel such as REMOCON operating/ main unit KEY operating / HEADPHONE operating → HEAD PHONE MUTE Circuit - 2 stage mute of HEAD PHONE SIGNAL at MODULATOR → VOLUME Circuit - VOLUME BLUE LED during POWER-ON and DIMMER ON/OFF operation 	

BLOCK Div.	Main Roles	Remarks
AMP-PCB	Main Roles ◇ AMP Operating Part - I'S DATA from MPEG is entered to MODULATOR, and PWM OUT for each CHANNEL. Then, it is output in analog through AMP IC of FULL BRIDGE type and LPF. - TAS5111 : FR/RR,SW,FL/RL CHANNEL - TAS5112 : C CHANNEL ◇ PROTECTION Circuit - Each AMP IC detects abnormal operation, and delivers to TI-SD MICOM PORT (ACTIVE LOW) - PROTECTION operation type * SHORT CIRCUIT : short between SPK output +/- and short between SPK output and CHASSISS * OC(OVER CURRENT PROTECTION) : turning off big current at OUTPUT output * OT(OVER TEMPERATURE PROTECTION) : if IC JUNCTION temperature exceeds 155°C, it should not be over 125°C, but is not currently used. * UV(UNDER VOLTAGE PROTECTION) : should be maintained over UVP THRESHOLD ◇ FAN Operating Part - SIZE : 40x40x20mm - 1 stage operation: operate fan in one stage as 12V power is approved during power-on.	Remarks
	(FAN operating voltage: about 6.5V, FAN SPEED: about MAX 2392Rpm) ◇ ANYNET - 74HCO8(AND GATE) + MAX232(RECEIVER)	

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