

SERVICE MANUAL

Quadro

Colour Television PAL/SECAM/BG

Models

14" CTV-37V10, 37V20, 37X10
(chasis 3011)

21" CTV-55V10, 55S10, 55X10, 55Z10

www.rtv-horvat-dj.hr

CAUTION

Before servicing the chassis, read the "X-Ray Radiation Precautions
"Safety Precautions" and "Product Safety Notice" in 2 of this manual

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Safety Notice

SAFETY PRECAUTIONS

- 1:An isolation transformer should be connected in the power line between the receiver and the AC line when a service is performed on the primary of the converter transformer of the set.
- 2:Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.
- 3:When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as, control knobs, adjustment covers or shields, barriers, isolation resistor-capacitor networks etc.. Before returning any television to the customer, the service technician must be sure that it is completely safe to operate without danger of electrical shock.

X-RADIATION PRECAUTION

The primary source of X-RADIATION in television receiver is the picture tube. The picture tube is specially constructed to limit X-RADIATION emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specified limit. Refer to this service manual, high voltage adjustment for specific high voltage limit. If high voltage exceeds specified limits, take necessary corrective action. Carefully follow the instructions for +B1 volt power supply adjustment, and high voltage check to maintain the high voltage within the specified limits.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver. Components indicated by mark \triangle in the parts list and the schematic diagram designate components in which safety can be of special significance. It is particularly recommended that only parts designated on the parts list in this manual be used for component replacement designated by mark \triangle . No deviations from resistance wattage or voltage ratings may be made for replacement items designated by mark \triangle .

Technical specification

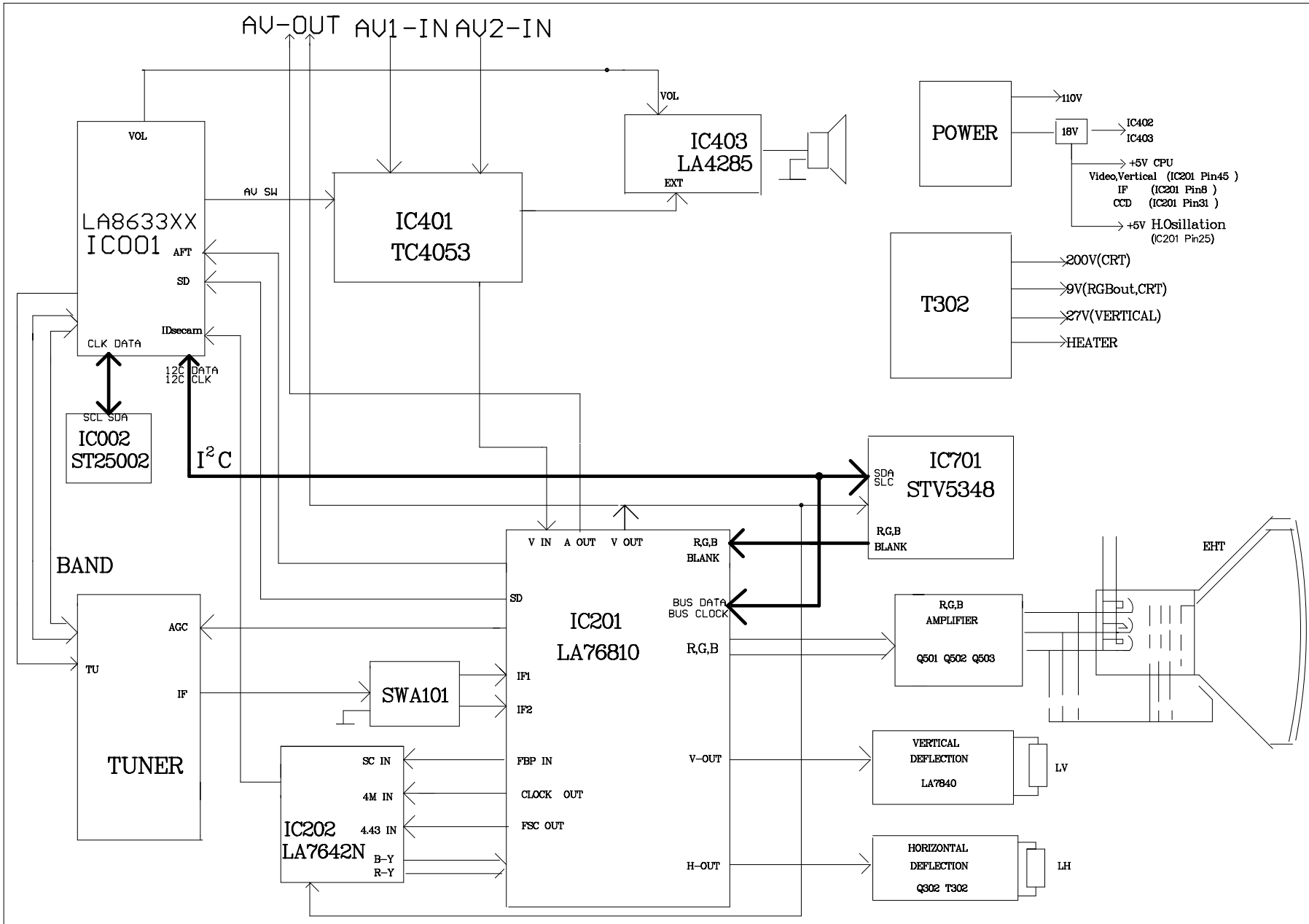
FEATURES:

AC 90V - 260V 50/60Hz
MULTI SYSTEM: PAL B/G/DK/I, SECAM B/G/DK(OPTION), NTSC M(OPTION)
VOLTAGE SYNTHESISED TUNING SYSTEM
100/256 PROGRAMS MEMORY (OPTION)
BLUE BACK FUNCTION
120 MINUTES SLEEP TIMER
FULL AUTO PROGRAM
TIME ON
CLOCK ; CHILD LOCK
2 AV INPUT
GAME (OPTION)
8 PAGES TELETEXT (OPTION)
BLACK LEVEL STRETCH
PROGRAM VIEW FUNCTION
FOUR PICTURE MODE: MILD; COLOR TUL; STANDARD ; CUSTOM; DYNAMIC

GENERAL SPECIFICATION:

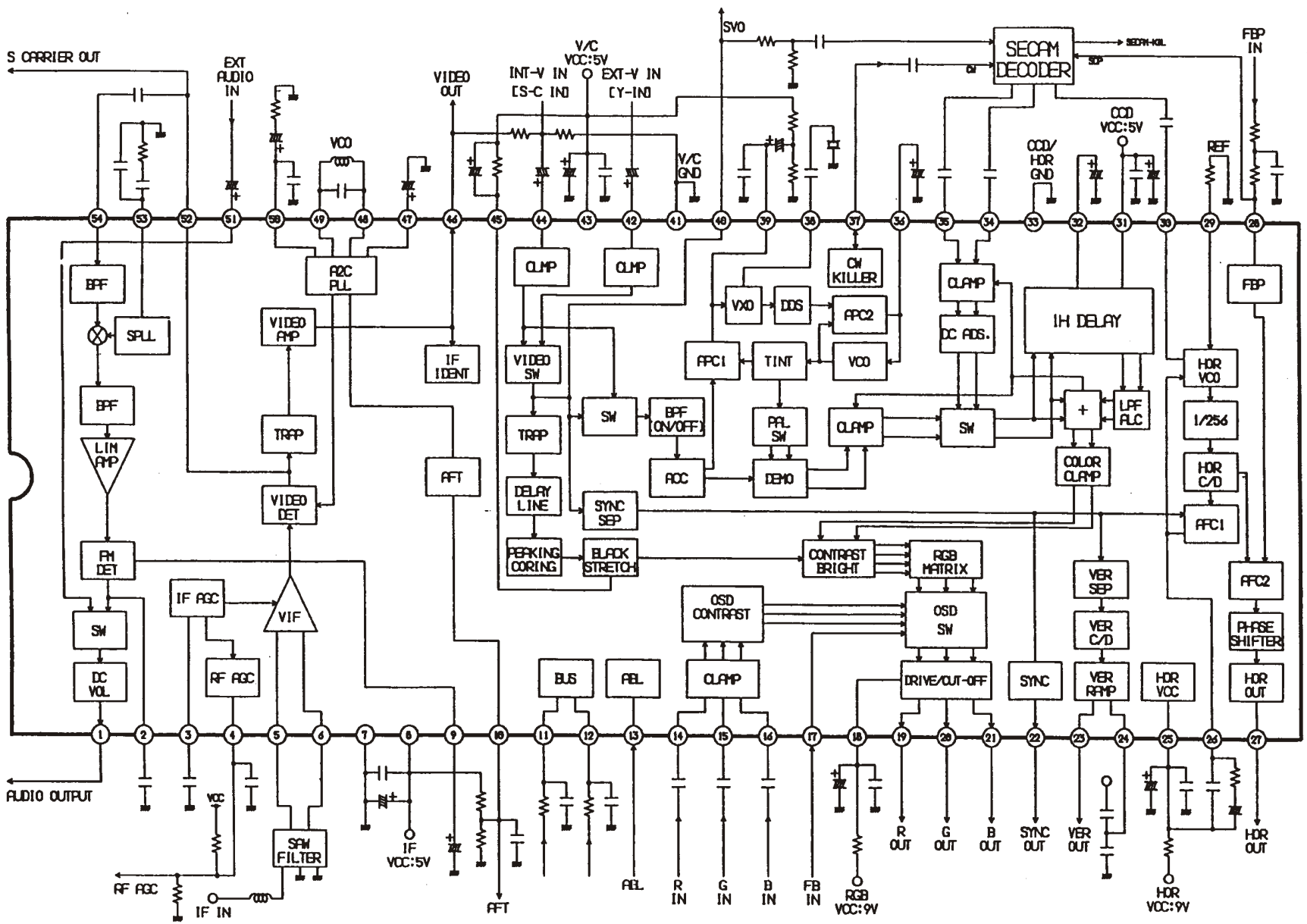
1. POWER CONSUMPTION: 14 W MAX. @ 21 W MAX. @
2. RECEIVE SYSTEM: D/K ; I ; B/G ; M
3. COLOUR SYSTEM: PAL/ SECAM/ NTSC
4. VISION INTERMEDIATE FREQUENCY: 38.9MHz
5. INTER-CARRIER FREQUENCY: 4.5 MHz (M)
5.5 MHz (B/G)
6.0 MHz (I)
6.5 MHz (D/K)
6. CHROMA IF FREQUENCY PAL/NTSC: 34.47/35.32 MHz
7. ANTENNA TYPE: DIN TYPE 75 OHM
8. CHANNELS RECEIVING: VHF-1 A0; E2-E4; S1-S9 CH 46.25-161.25MHz
VHF-3 S10-S41; E5-E12 CH 168.25-463.25MHz
UHF E21-E69 CH 471.25-855.25MHz
9. TUNING SYSTEM: VS TUNING
10. AV IN/OUT: 2 AV IN + 1 AV STEREO OUT
11. AV IN/OUT SPECIFICATION: VIDEO IN---1.0 V_{P-P} 75 OHM
AUDIO IN---0-2V (r.m.s)
VIDEO OUT---1.0 V_{P-P} 75 OHM
AUDIO OUT---0-2V (r.m.s)
12. OSD LANGUAGE: ENGLISH
13. AUDIO OUTPUT POWER: > 3W (1KHz, 0.5V INPUT, 10% THD)
14. SAFETY AUTHENTICATION STANDARD: CB
15. LED INDICATORS: POWER ON
16. HAND SET TYPE: HS08
17. HAND SET POWER SUPPLY: BATTERY 3V UM-3/R6/AA x2
18. COLOUR PICTURE TUBE: 14" -21" 90 DEGREE TUBE
19. REMOTE CONTROL DISTANCE: 15 m

Chassis Block Diagram



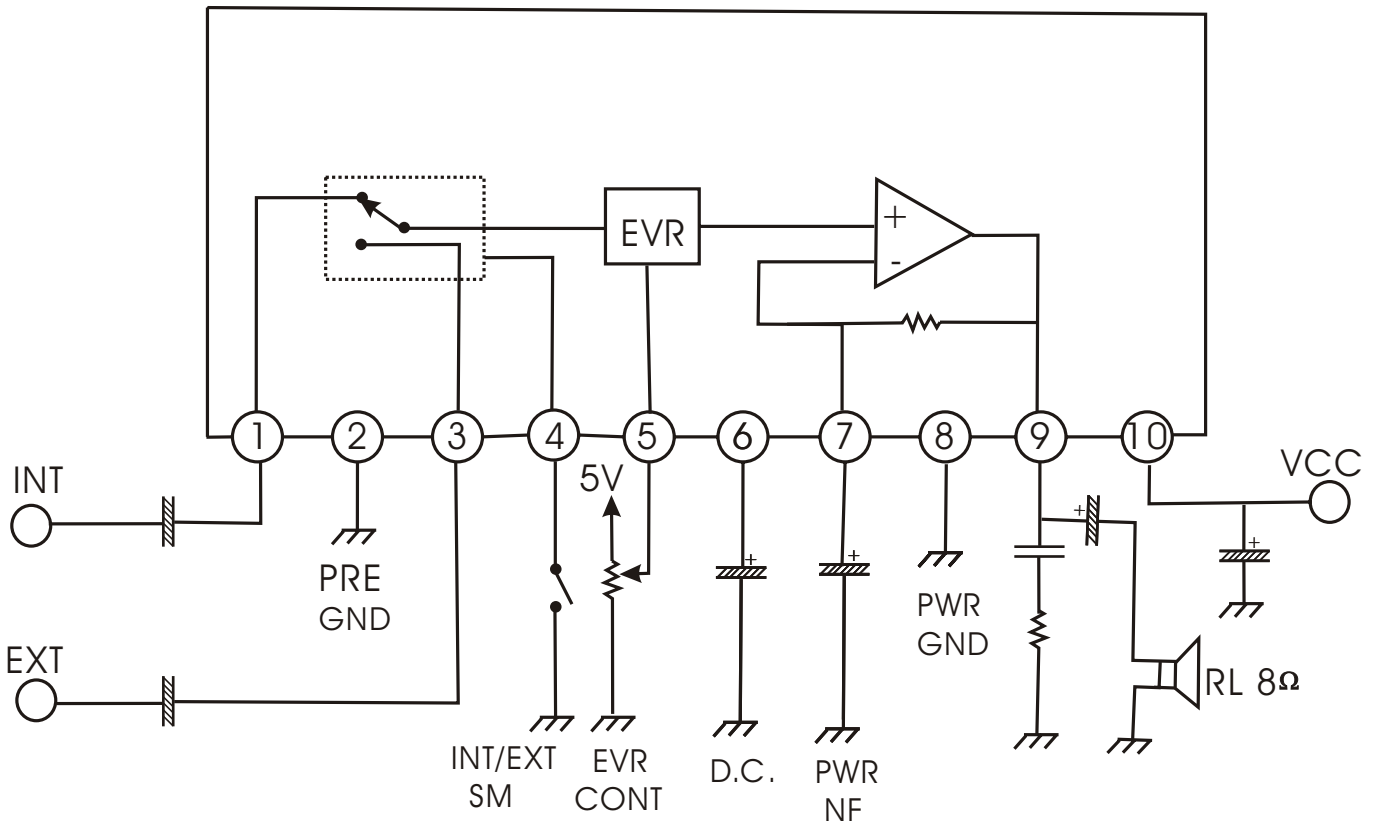
IC Block Diagram

IC 201 (IIC BUS SINGLE CHIP VIF,SIF,VIDEO CHROMA) LA76810A/HA

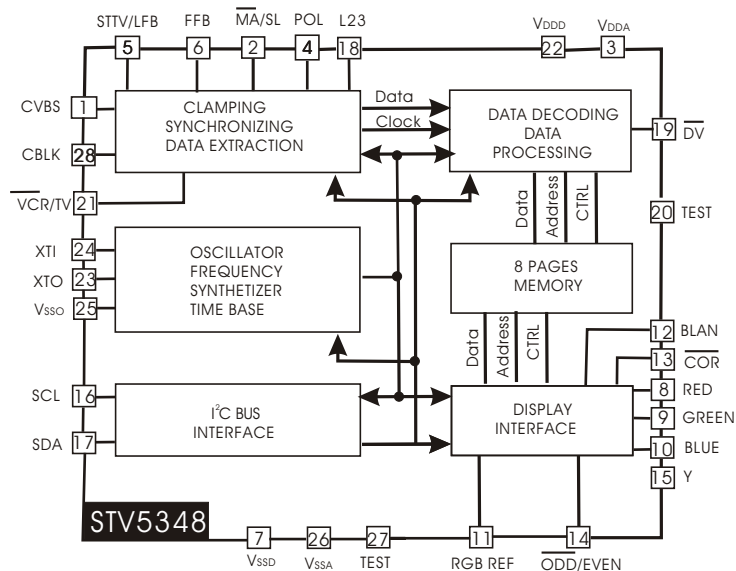


IC Block Diagram

IC 402&IC 403(3W AUDIO OUTPUT)LA 4285

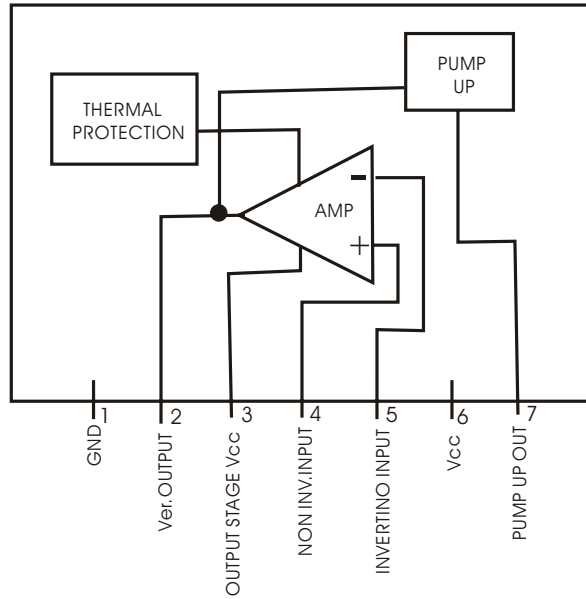


IC701 <TELETEXT> STV-5348

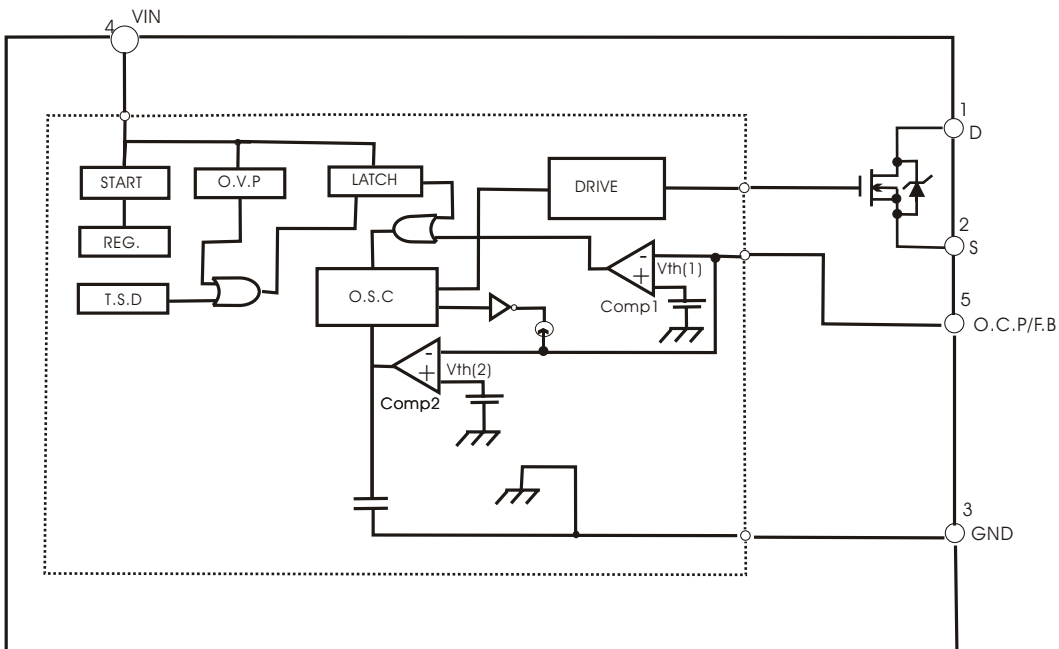


IC Block Diagram

IC301 <Vertical Output> LA7840

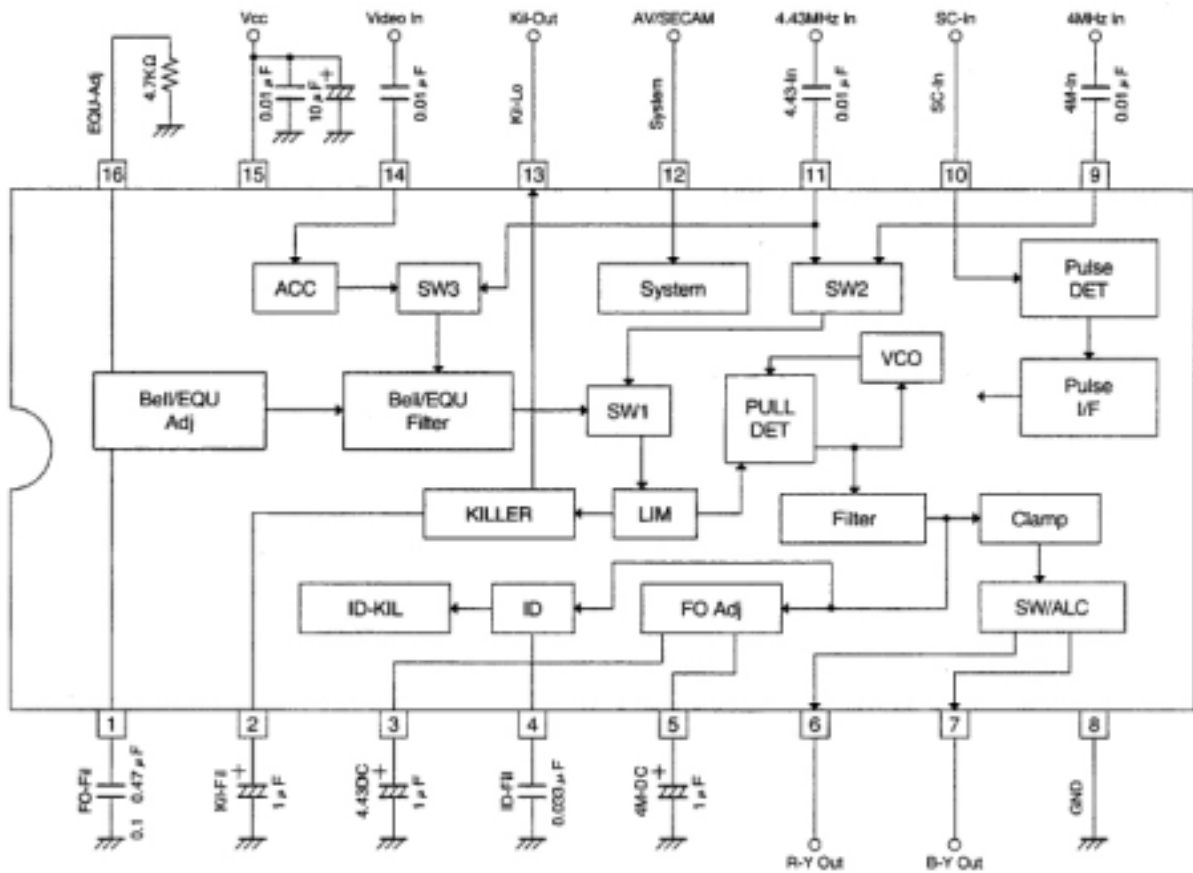


IC602 <POWER > STR-G6653

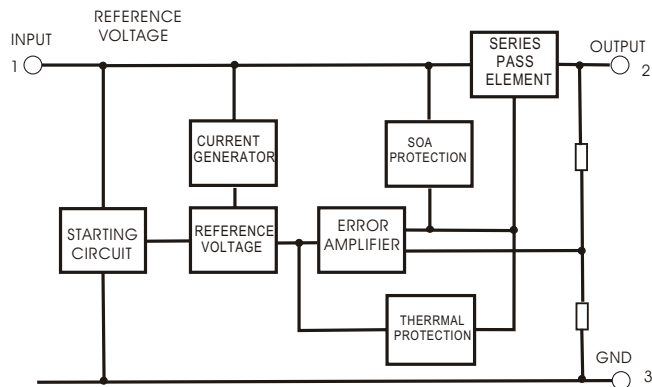


IC Block Diagram

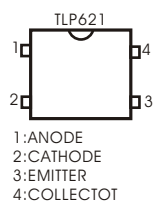
IC202 <SECAM> La7642



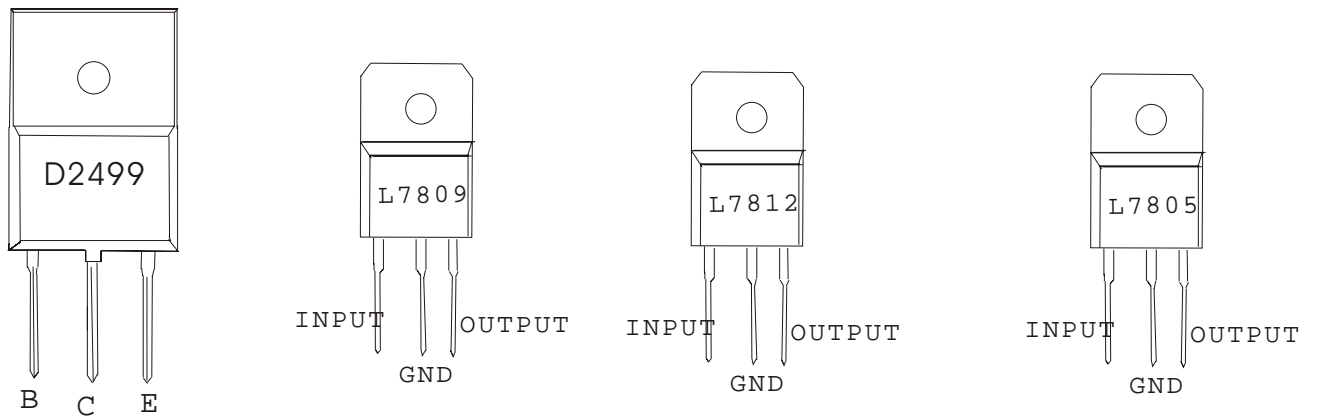
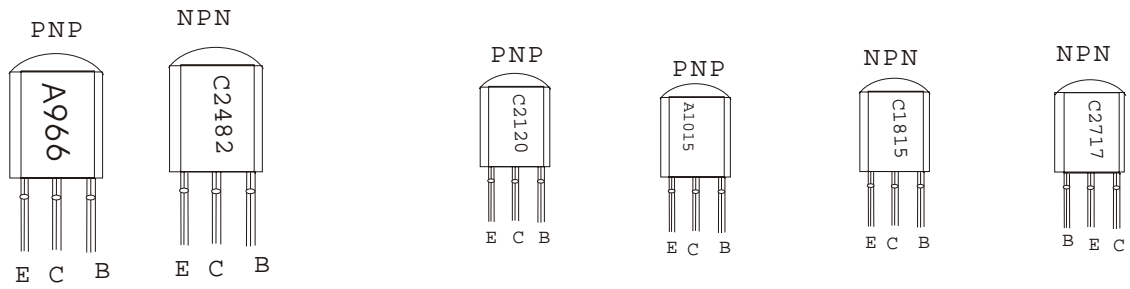
IC203, Q609, IC601 & IC302 <REGULATORS> L7800 SERIES



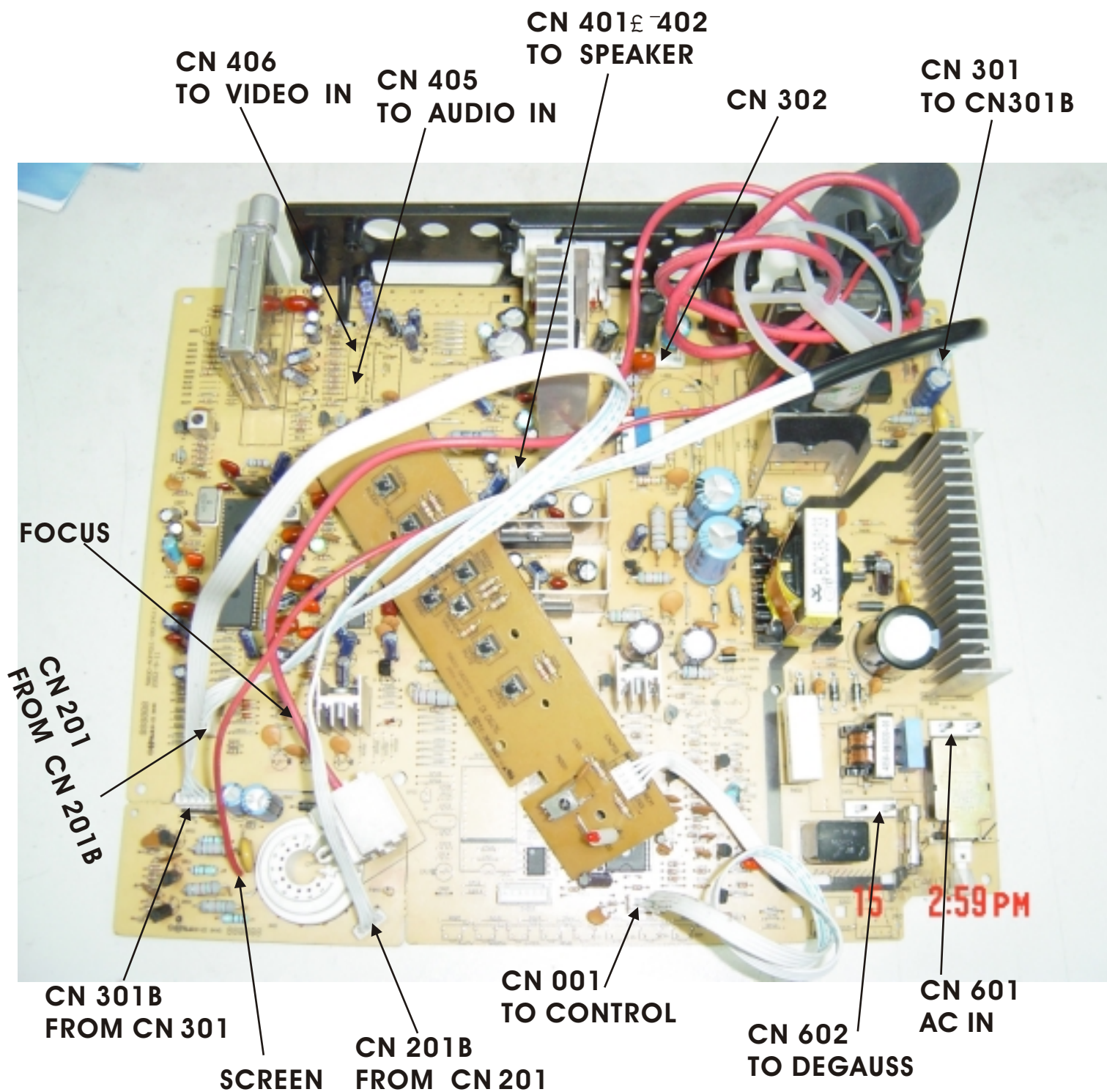
D613 <PHOTO TRANSISTOR> TLP621

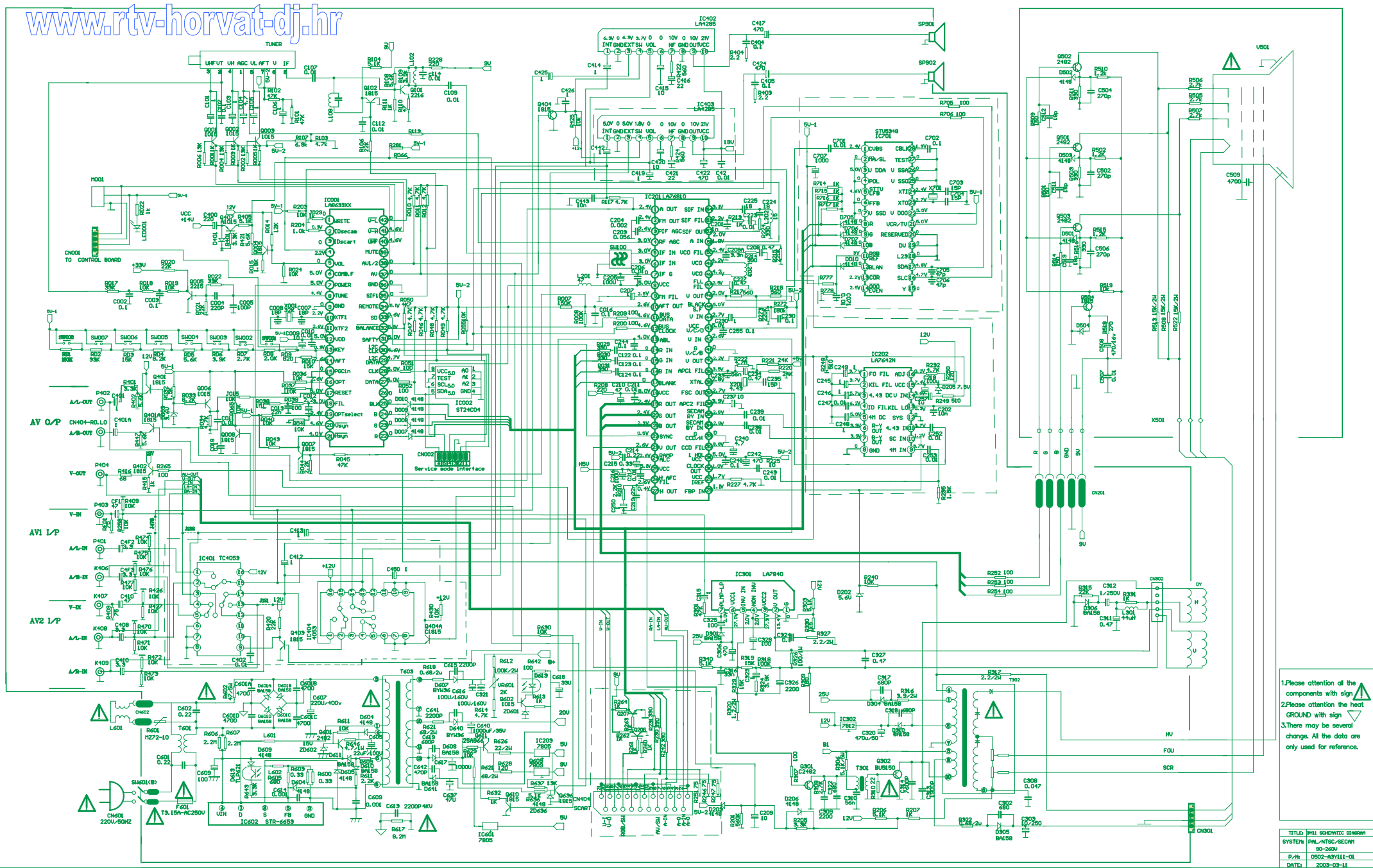


Transistor Mark



Chassis wiring diagram





1. Please attention of the components with sign
2. Please attention the heat GROUND with sign
3. There may be several change. All the data are only used for reference.