

TOSHIBA

FILE NO. 050-200513

SERVICE MANUAL

LCD Color Television



15DL15
15DL75
20DL75

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SERVICE SAFETY PRECAUTIONS

- The caution items shown here describe major safety issues and should always be observed.
- The meanings of the various indications are as follows.

 WARNING	Indicates a hypothetical situation in which service personnel and nearby third parties, or even end users due to a product defect after the service operation is completed, could possibly be in danger of injury or even death in the event of operational error.
 CAUTION	Indicates a hypothetical situation in which service personnel and nearby third parties, or even end users after the service operation is completed, could possibly be in danger of injury, or where there could be physical damage in the event of operational error.

* Physical damage means major damage to a home, furnishings and other possessions.

Examples of marks

 SHOCK HAZARD	The Δ indicates caution (including danger and warning). The actual meaning of this caution is indicated inside the Δ or nearby illustrations or text. The example shown to the left indicates the danger of "electrical shock".
 PROHIBIT DISASSEMBLING	The \ominus indicates a forbidden action. The actual meaning of this caution is indicated inside the \ominus or nearby illustrations or text. The example shown to the left indicates that disassembly is forbidden.
 UNPLUG	The \bullet indicates a forced action (an action that must be performed). The actual meaning of this forced action is indicated by \bullet or nearby illustrations or text. The example shown to the left indicates that the power plug must be disconnected.

	 WARNING
 KEEP CHILDREN AWAY	<ul style="list-style-type: none"> • Always advise users to keep children away. There is danger of injury to children from tools, disassembled products, etc.
 UNPLUG	<ul style="list-style-type: none"> • Always disconnect the power plug before starting work whenever power is not required. Failure to disconnect the power plug before starting work can result in electrical shock.
 SHOCK HAZARD	<ul style="list-style-type: none"> • Depending on the model, use an insulation transformer or wear gloves when servicing with the power on, and disconnect the power plug to avoid electrical shock when replacing parts. In some cases, alternating current is also impressed in the chassis, so electrical shock is possible if the chassis is contacted with the power on.
 USE SPECIFIED PARTS	<ul style="list-style-type: none"> • Always use the replacement parts specified for the particular model when making repairs. The parts used in products have the necessary safety characteristics such as inflammability, voltage resistance, etc.; therefore, use only replacement parts that have these same characteristics. Use only the specified parts when the ⚠ mark is included in a circuit diagram or parts list.
 CAUTION FOR WIRING	<ul style="list-style-type: none"> • Parts mounting and routing of the wiring should be the same as that used originally. For safety purposes, insulating materials such as tubing or tape is sometimes used and printed circuit boards are sometimes mounted floating. Also make sure that wiring is routed and clamped to avoid parts that generate heat and which use high voltage. Always follow the original scheme.
 CAUTION FOR ASSEMBLING / WIRING	<ul style="list-style-type: none"> • After a repair has been completed, reassemble all disassembled parts, and route and reconnect the wiring, in accordance with the original scheme. Do not allow internal wiring to be pinched by cabinets, panels, etc. Any error in reassembly or wiring can result in electrical leakage, flame, etc., and may be hazardous.
 CHECK INSULATION RESISTANCE	<ul style="list-style-type: none"> • After completing the work, disconnect the power plug from the outlet, remove the antenna, turn on the power switch. Then, use a 500V insulation resistance meter to check the insulation resistance of the antenna terminal, other metallic parts and between the prongs of the power plug to make sure that the insulation resistance is 1M Ω or more. The set will require inspection and repair if the insulation resistance is below this value.
 PROHIBIT REMODELING	<ul style="list-style-type: none"> • Never remodel the product in any way. Remodeling can result in improper operation, malfunction, or electrical leakage and flame, which may be hazardous

HANDLING THE LCD MODULE

Safety Precautions

In the event that the screen is damaged or the liquid crystal (fluid) leaks, do not breathe in or drink this fluid. Also, never touch this fluid.

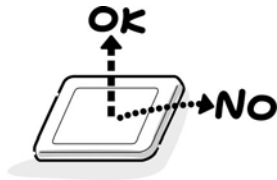
Such actions could cause toxicity or skin irritation. If this fluid should enter the mouth, rinse the mouth thoroughly with water. If the fluid should contact the skin or clothing, wipe off with alcohol, etc., and rinse thoroughly with water. If the fluid should enter the eyes, immediately rinse the eyes thoroughly with running water.

Precautions for Handling the LCD Module

CAUTION The metal edges of the LCD module are sharp, handle it with care.

The LCD module can easily be damaged during disassembly or reassembly; therefore, always observe the following precautions when handling the module.

1. When attaching the LCD module to the LCD cover, position it appropriately and fasten at the position where the display can be viewed most conveniently.



2. Carefully align the holes at all four corners of the LCD module with the corresponding holes in the LCD cover and fasten with screws. Do not strongly push on the module because any impact can adversely affect the performance. Also use caution when handling the polarized screen because it can easily be damaged.



3. If the panel surface becomes soiled, wipe with cotton or a soft cloth. If this does not remove the soiling, breathe on the surface and then wipe again.

If the panel surface is extremely soiled, use a CRT cleaner as a cleaner. Wipe off the panel surface by drop the cleaner on the cloth. Do not drop the cleaner on the panel. Pay attention not to scratch the panel surface.



4. Leaving water or other fluids on the panel screen for an extended period of time can result in discoloration or stripes. Immediately remove any type of fluid from the screen.



5. Glass is used in the panel, so do not drop or strike with hard objects. Such actions can damage the panel.



6. CMOS-LSI circuitry is used in the LCD module, so avoid damage due to static electricity. When handling the module, use a wrist ground or anchor ground.



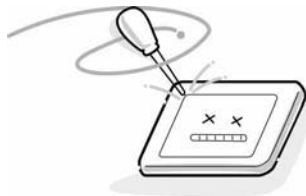
7. Do not expose the LCD module to direct sunlight or strong ultraviolet rays for an extended period of time.



8. Do not store the LCD module below the temperature conditions described in the specifications. Failure to do so could result in freezing of the liquid crystal due to cold air or loss of resilience or other damage.



9. Do not disassemble the LCD module. Such actions could result in improper operation.



10. When transporting the LCD module, do not use packing containing epoxy resin (amine) or silicon resin (alcohol or oxim). The gas generated by these materials can cause loss of polarity.



1. Service Mode

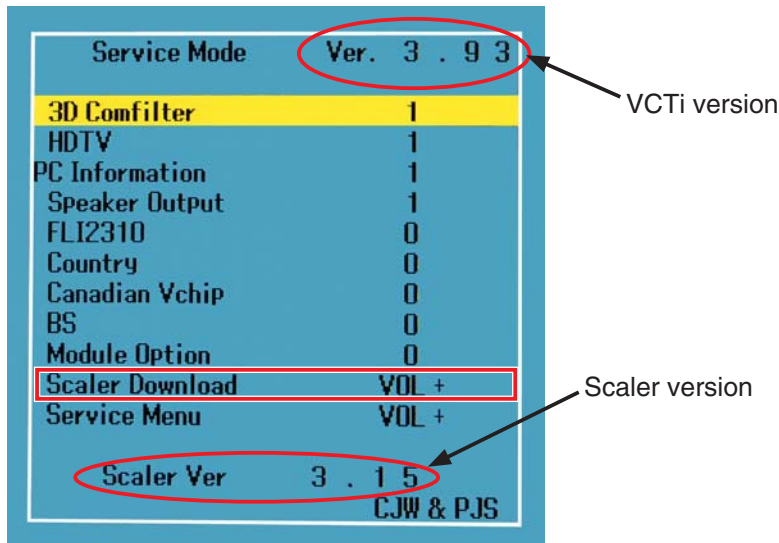
1-1. Starting Service Mode

*Set LCD TV to the normal TV signal receive mode.

Note: In this "Service Mode" section, [] shows a button.

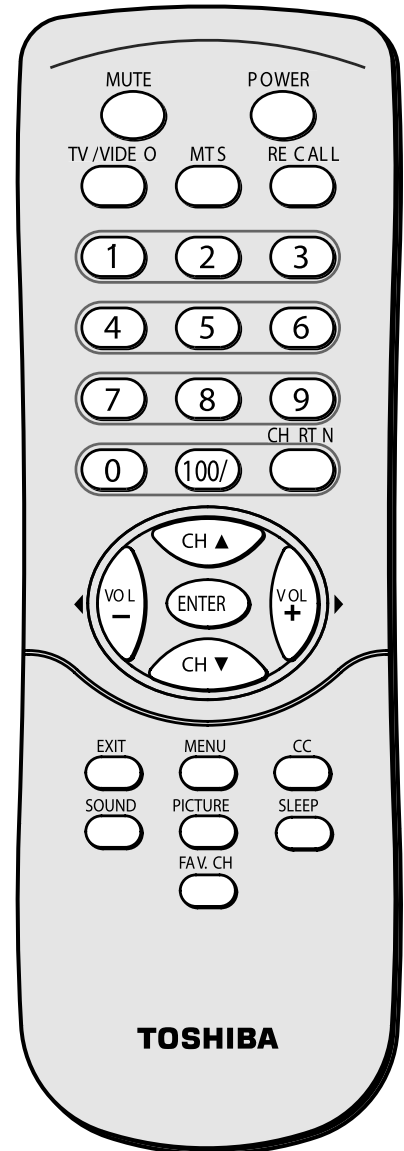
1-1-1. Press [MUTE] on the remote control once.

1-1-2. Press [MUTE] again, and press [↻] on LCD TV.



Service mode displayed on TV screen

Items other than those enclosed by are default settings.



15-inch TV

Item	Default setting
3D Comb Filter	0
HDTV	1
PC Information	1
Speaker Outout	0
FLI2310	0
Country	2
Canadian Vchip	0
BS	0
Module Option	4

20-inch TV

Item	Default setting
3D Comb Filter	1
HDTV	1
PC Information	1
Speaker Outout	1
FLI2310	0
Country	2
Canadian Vchip	0
BS	0
Module Option	0

2. Adjustment

Note: In this "Adjustment" section, [] shows a button.

2-1. Adjustment Tools and Conditions

Tools: Pattern Generator (801GF, MSPG925F)
 DDC Adjustment Tool
 PC
 Remote Control

Conditions: Heat Run 30 minutes or more

2-2. Auto Gain/Offset Adjustment

2-2-1. RF Mode Adjustment (normal TV receive mode)

No required

2-2-2. Component Mode Adjustment

Preparation

Carry out Heat Run for 30 minutes or more before adjustment (with no RF signal).

- 1) Connect Y, Pb, and Pr output signals of Pattern Generator to the component jack (Y, Pb, Pr) of LCD TV.
- 2) Connect Y, Pb, and Pr output signals of Pattern Generator to the component jack (D Jack) of LCD TV.
- 3) Change the TV input mode to component mode.
- 4) Select 480p Mode (Y:100% Pb/Pr:75%) in Pattern Generator. Select Pattern 33 (Color Bar Pattern signal) in Pattern Generator (MSPG925F).
- 5) Go into service mode, and Auto Gain menu appears, and then press VOL [+].
- 6) Press [OK] to store the adjustment data.



(Adjustment in component mode or PC mode)

2-2-3. PC Mode Adjustment

Preparation

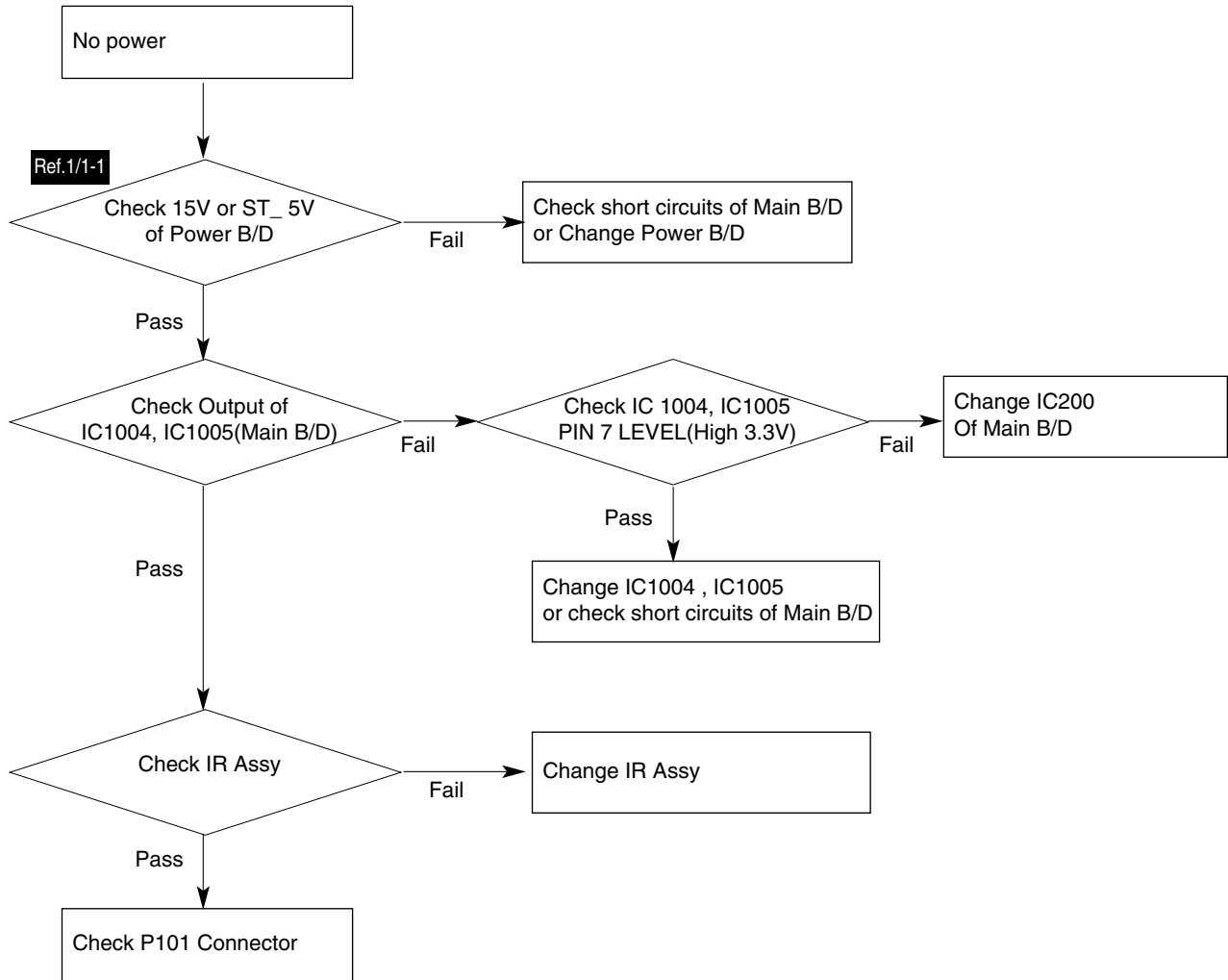
Carry out Heat Run for 30 minutes or more before adjustment (with no RF signal).

Connect Pattern Generator to the 15-pin D-Sub Jack of LCD TV.

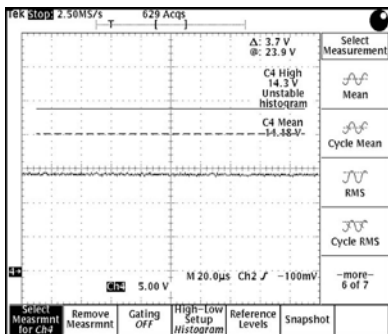
- 1) Change the TV input mode to PC mode.
- 2) Set Pattern Generator to the following:
15DL15,15DL75: XGA (1024x768) 16-step or 11-step grayscale
20DL75 : VGA (640x480) 16-step grayscale
- 3) Go into service mode, and Auto Gain menu appears, and then press VOL [+].
- 4) Press [OK] to store the adjustment data.

4. TROUBLESHOOTING

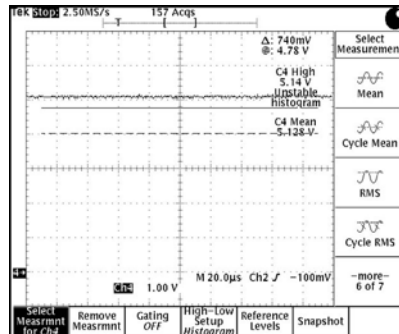
Process A



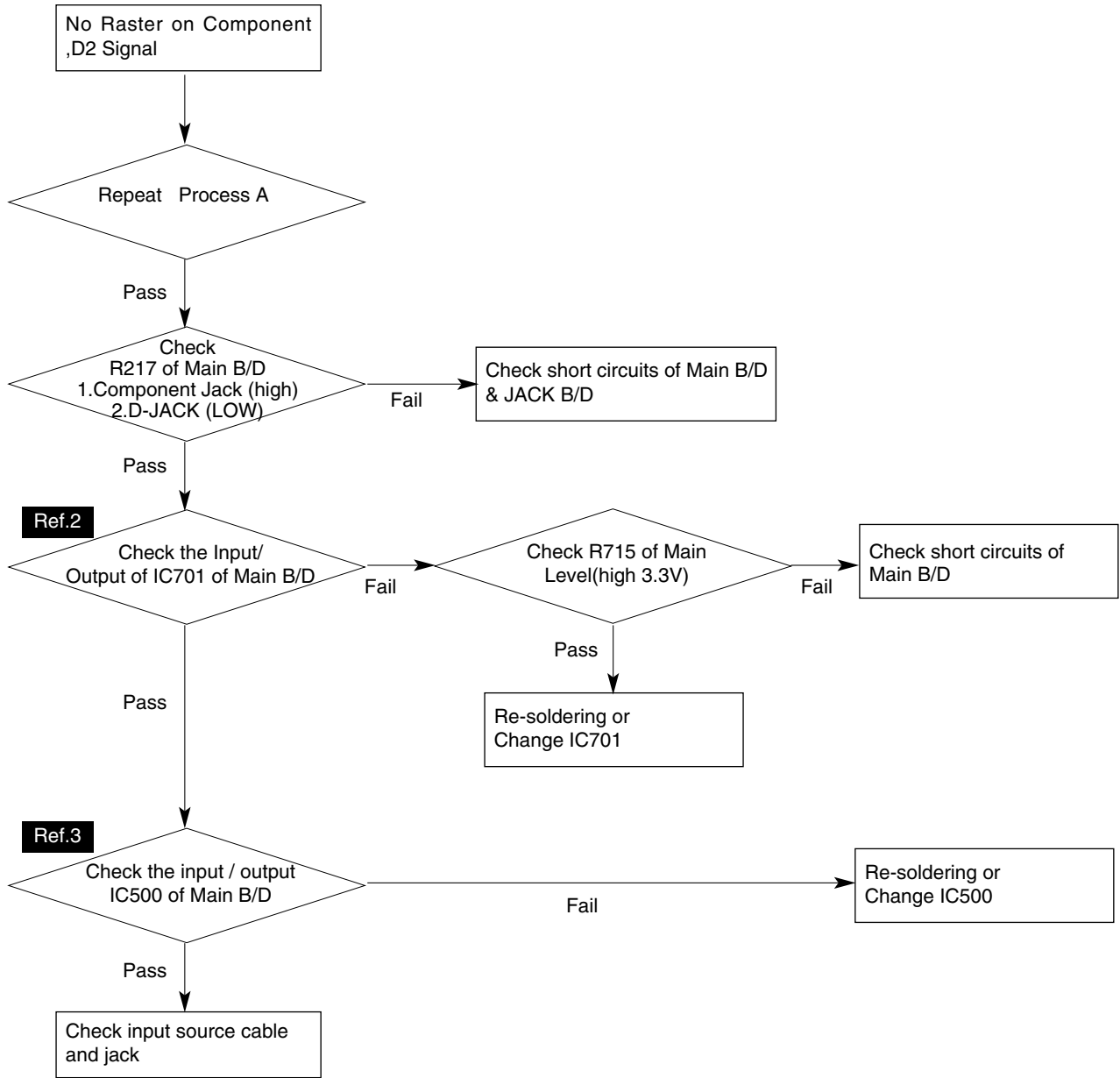
Ref.1 15V : P1100, #1, 2



Ref.1-1 ST_5V : P1100, #6, 7

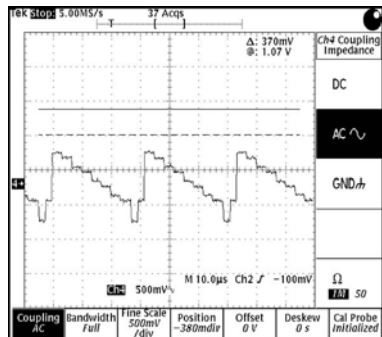


Process B



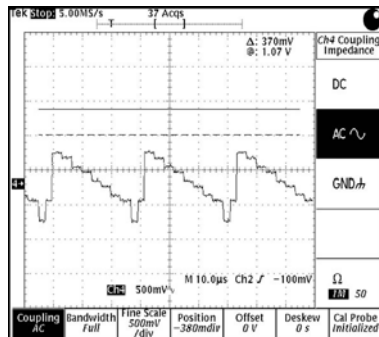
Ref.2

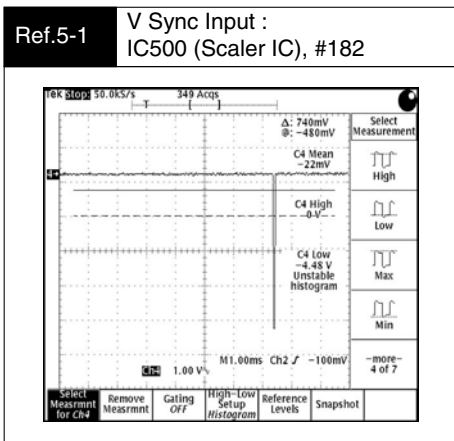
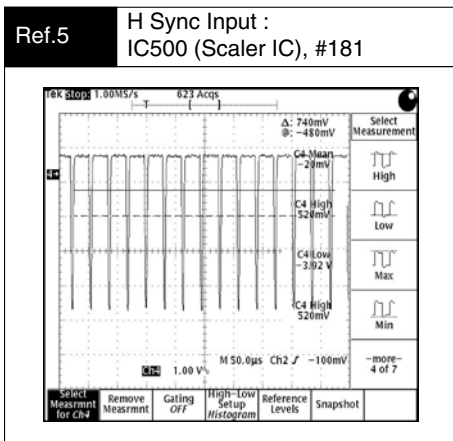
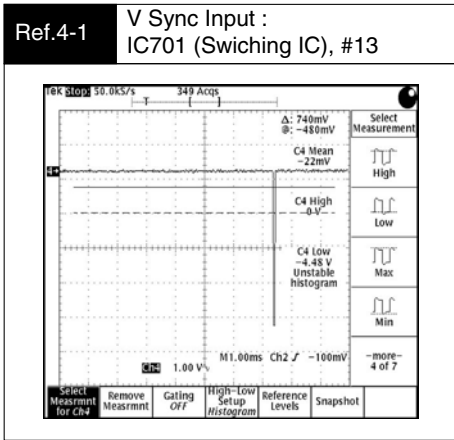
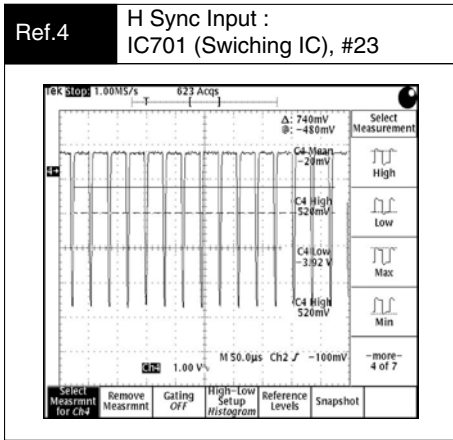
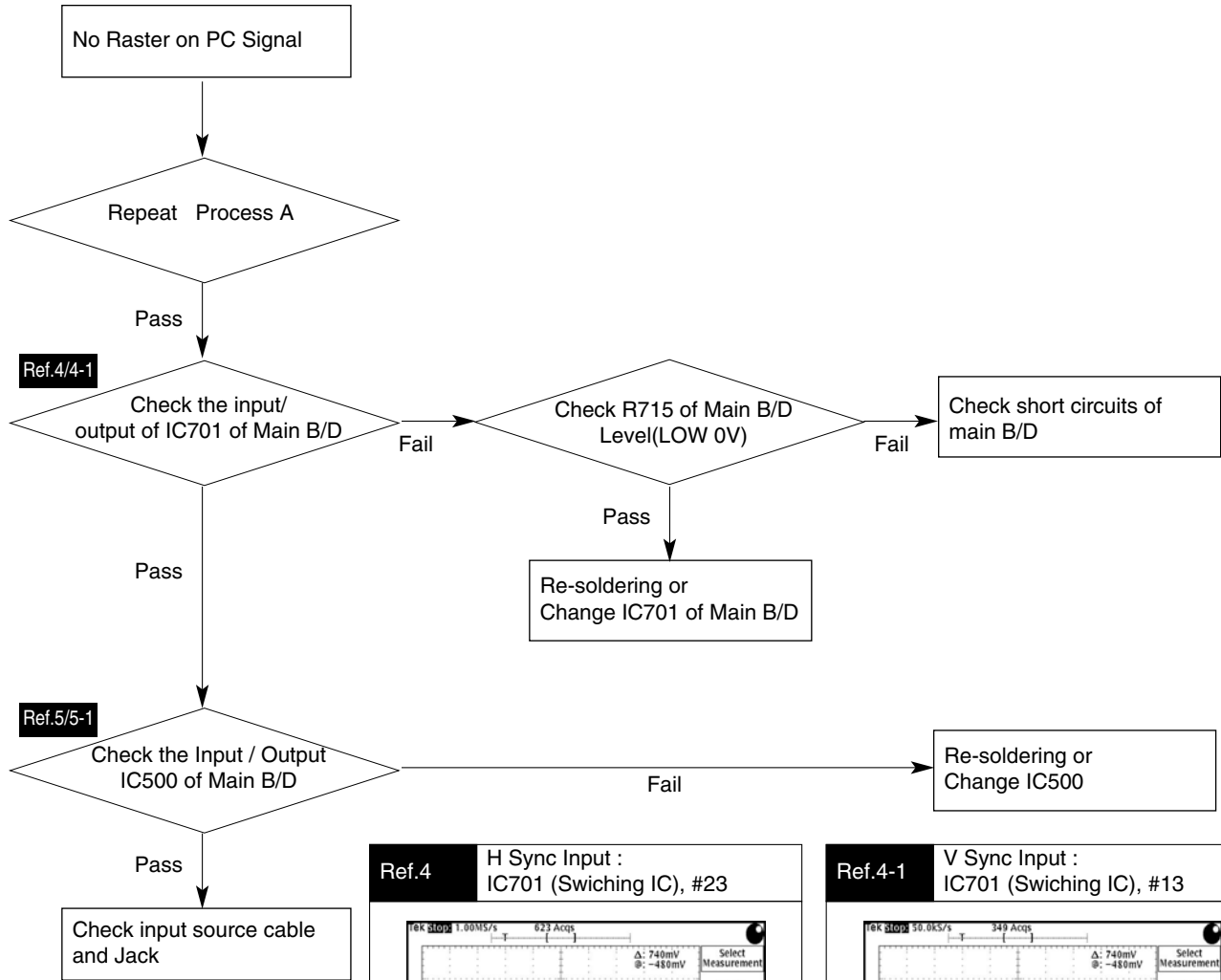
Component Y signal Input :
IC701(Switching IC), #3

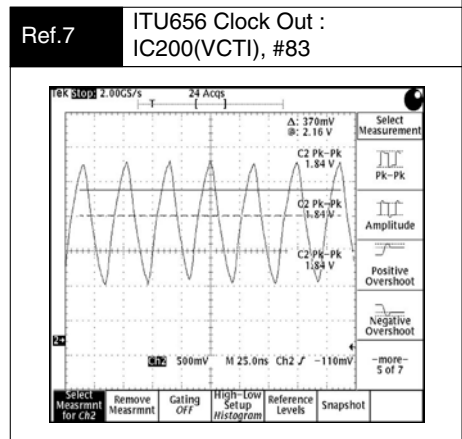
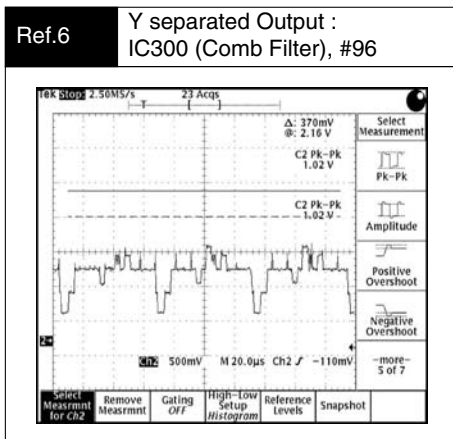
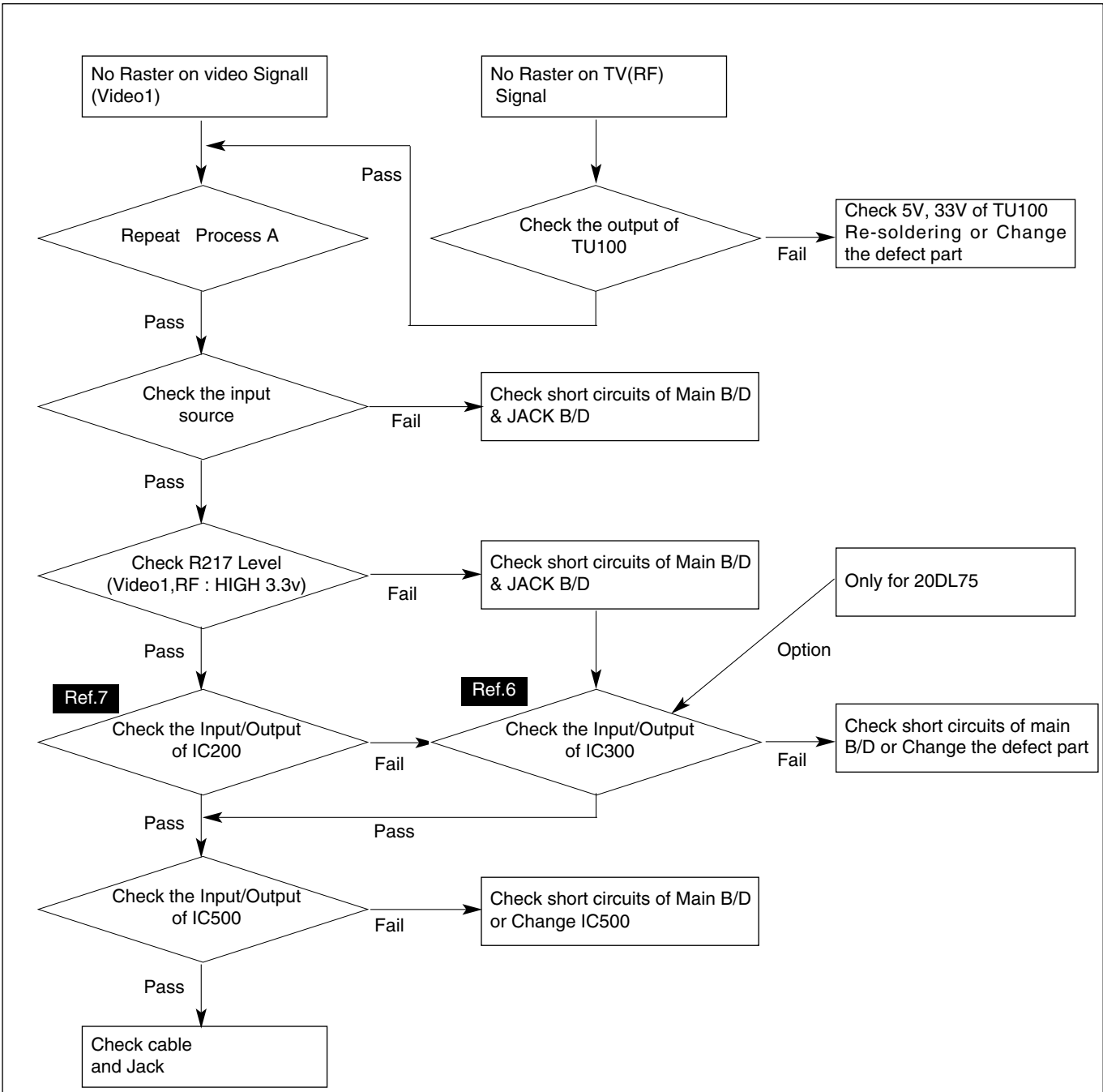


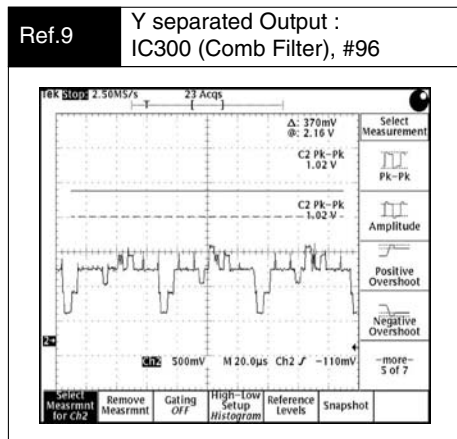
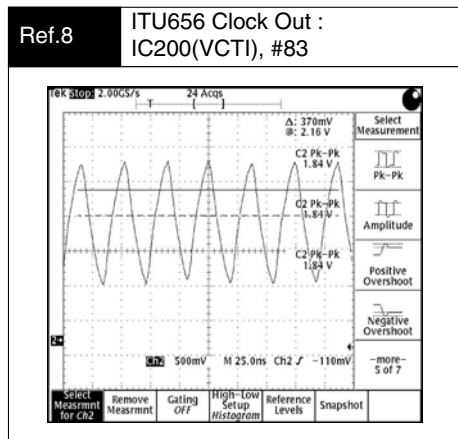
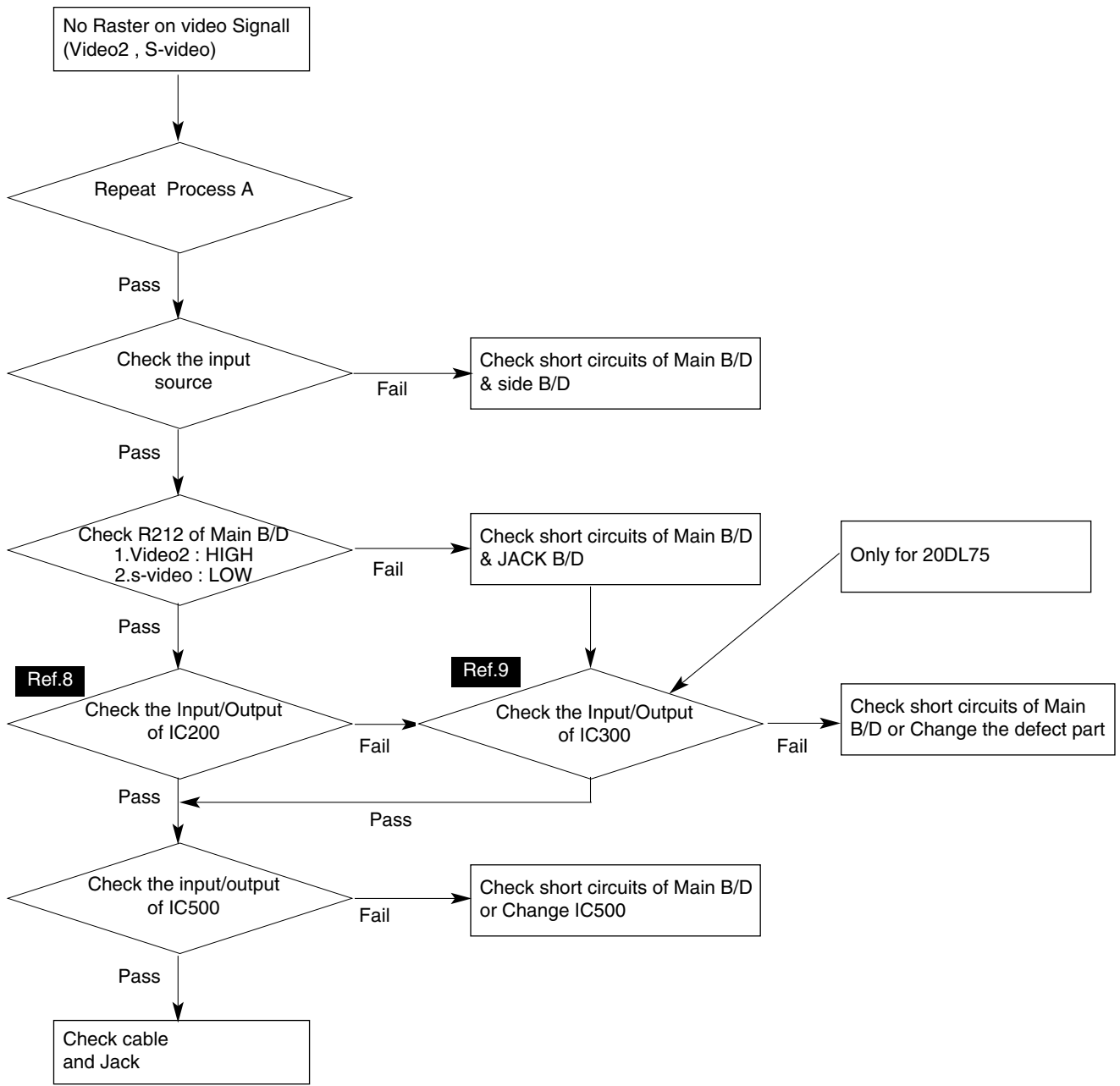
Ref.3

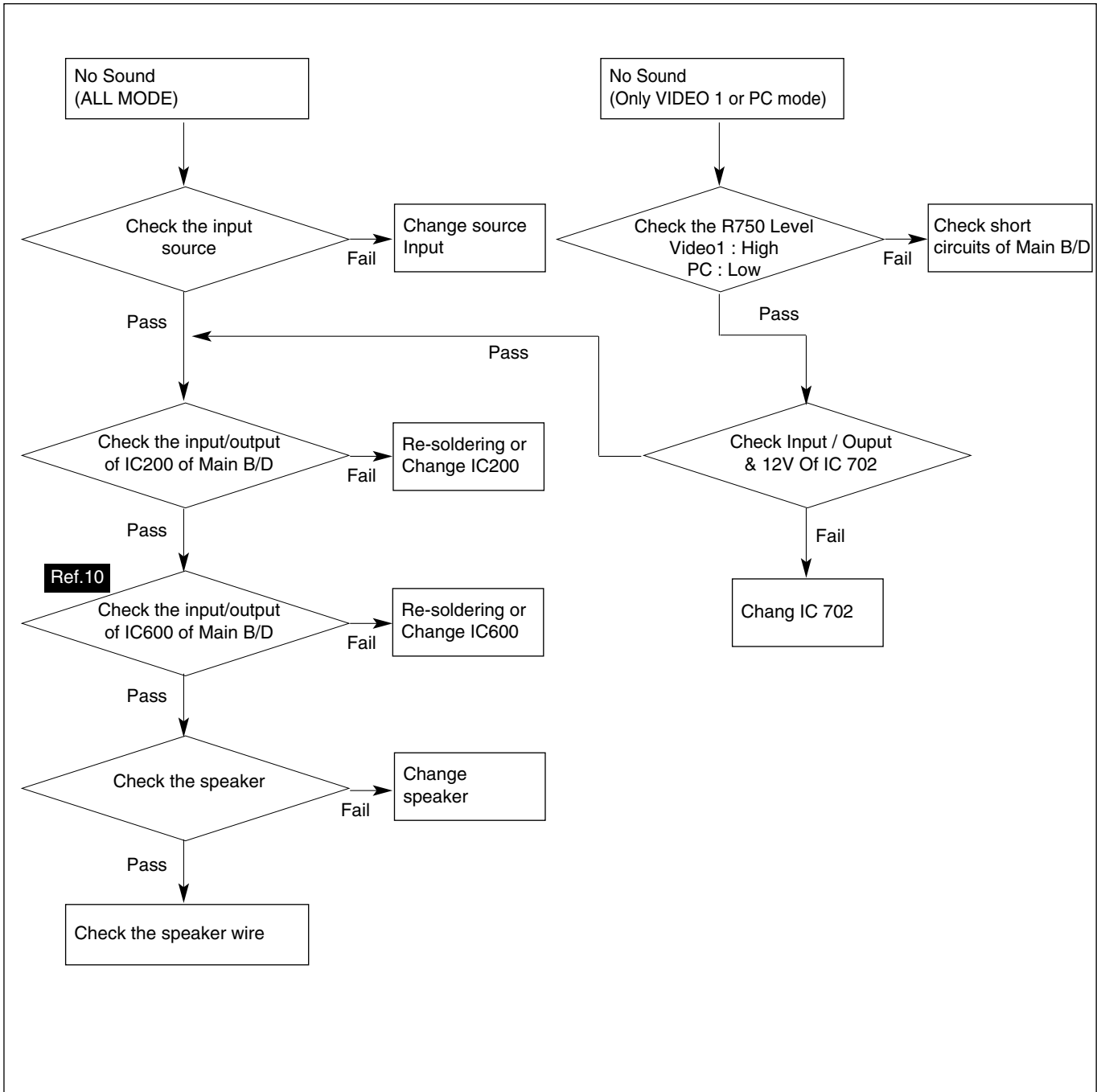
Component Y signal Input :
IC500(Scaler IC), #147



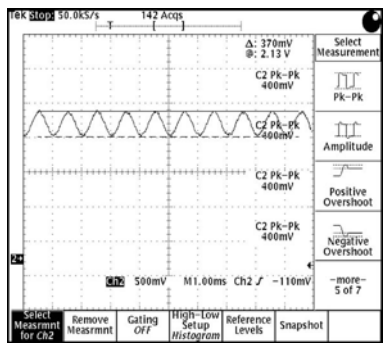






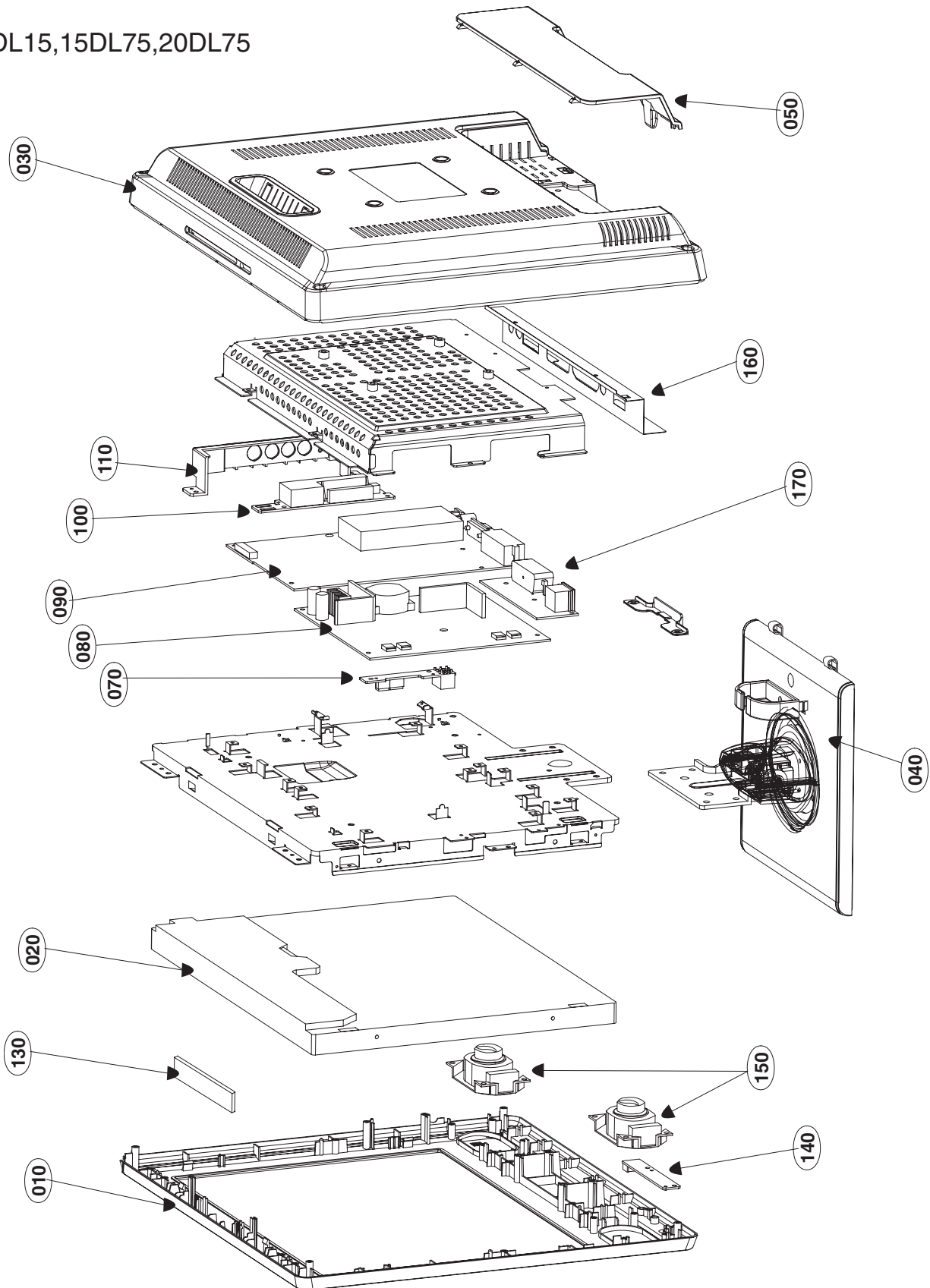


Ref.10 Sound Input : IC600 (Audio AMP), #3, 5



5. EXPLODED VIEWS

15DL15,15DL75,20DL75



6. CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "SERVICE SAFETY PRECAUTIONS" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the SERVICE SAFETY PRECAUTIONS. Do not degrade the safety of the receiver through improper servicing.

NOTICE:

- The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.
- The PC board assembly with * mark is no longer available after the end of the production.

Model : 15DL15/15DL75/20DL75

Capacitors	CD : Ceramic Disk	PF : Plastic Film	EL : Electrolytic
Resistors	CF : Carbon Film	CC : Carbon Composition	MF : Metal Film
	OMF : Oxide Metal Film	VR : Variable Resistor	FR : Fusible Resistor

(All CD and PF capacitors are $\pm 5\%$, 50V and all resistors, $\pm 5\%$, 1/6W unless otherwise noted.)

Location No.	Parts No.	Reference	Description
#1:[15DL15]			
#2:[15DL75]			
#3:[20DL75]			
CAPACITORS			
C1	72795154	OCH6101K416	CERAMIC, 100PF 50V 5% NP0 201
C2	72795154	OCH6101K416	CERAMIC, 100PF 50V 5% NP0 201
C3	72795154	OCH6101K416	CERAMIC, 100PF 50V 5% NP0 201
C4	#1,#2	OCE107WF6DC	ELECTROLYTIC, 100UF MVK 16V 20% R/
C6	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C7	72795170	OCC471CK41A	CERAMIC, 470PF 1608 50V 5% R/
C8	72795157	OCH6471K416	CERAMIC CHIP, 470F 50V J NP0 2012
C9	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C10	72795161	OCH6331K416	CERAMIC CHIP, 330PF 50V J NP0 2012
C11	72795194	OCE226WJ6DC	ELECTROLYTIC, 22UF MVK 35V 20% R/T
C12	72795194	OCE226WJ6DC	ELECTROLYTIC, 22UF MVK 35V 20% R/T
C20	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C24	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C53	72795163	OCC101CK41A	CERAMIC, 100PF 1608 50V 5% R/
C66	72795163	OCC101CK41A	CERAMIC, 100PF 1608 50V 5% R/
C100	72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C101	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C102	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C103	72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C104	72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C105	72795185	OCK273DK51A	CERAMIC, 27000PF 2012 50V 10%
C106	72795169	OCC390DK41A	CERAMIC, 39PF 2012 50V 5% NP0
C108	72795146	OCE108EF618	ELECTROLYTIC, 1000UF KMG 16V 20% F
C109	72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C110	72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C111	72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C112	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C113	72795151	OCH3332K516	CERAMIC CHIP, 3300PF 50V K B 2012
C114	72795183	OCK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C115	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C116	72795166	OCC271CK41A	CERAMIC, 270PF 1608 50V 5% R/
C117	72795188	OCK475DD57A	CERAMIC, 4.7UF 2012 10V 10% X
C118	72795193	OCE225WK6DC	ELECTROLYTIC, 2.2UF MVK, RC 50V 20%
C119	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C120	72795193	OCE225WK6DC	ELECTROLYTIC, 2.2UF MVK, RC 50V 20%
C121	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C150	72795148	OCH8106F691	ELECTROLYTIC, 10UF 16V 20% 105STD
C151	72795148	OCH8106F691	ELECTROLYTIC, 10UF 16V 20% 105STD
C152	72795148	OCH8106F691	ELECTROLYTIC, 10UF 16V 20% 105STD

Location No.	Parts No.	Reference	Description
C200	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C201	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C202	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C205	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C207	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C208	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C209	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C212	72795196	OCE475WJ6DC	ELECTROLYTIC, 4.7UF MVK 35V 20% R/
C214	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C216	72795169	OCC390DK41A	CERAMIC, 39PF 2012 50V 5% NP0
C218	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C222	72795199	OCH8106J691	ELECTROLYTIC, 10UF 35V 20% 105STD
C223	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C224	72795173	OCH3822K516	CERAMIC, 8200PF 2012 50V 10%
C226	72795186	OCK334CF94A	CERAMIC, 0.33UF 1608 16V 80%,
C228	72795152	OCH3334K946	CERAMIC, 0.33UF 50V 80%, -20%
C229	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C230	72795175	OCK102CK56A	CERAMIC, 1000PF 1608 50V 0.1
C231	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C232	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C233	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C234	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C235	72795175	OCK102CK56A	CERAMIC, 1000PF 1608 50V 0.1
C236	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C239	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C240	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C242	72795152	OCH3334K946	CERAMIC, 0.33UF 50V 80%, -20%
C243	72795186	OCK334CF94A	CERAMIC, 0.33UF 1608 16V 80%,
C245	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C246	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C248	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C250	72795191	OCE107WF6DC	ELECTROLYTIC, 100UF MVK 16V 20% R/
C251	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C252	72795175	OCK102CK56A	CERAMIC, 1000PF 1608 50V 0.1
C253	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C254	#3 72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C255	#3 72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C256	72795175	OCK102CK56A	CERAMIC, 1000PF 1608 50V 0.1
C257	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C258	72795175	OCK102CK56A	CERAMIC, 1000PF 1608 50V 0.1
C259	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C260	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C261	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C262	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C263	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C264	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C265	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C266	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C268	72795160	OCH6220K416	CERAMIC, 22PF 2012 50V 5% NP0
C270	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C271	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C272	72795191	OCE107WF6DC	ELECTROLYTIC, 100UF MVK 16V 20% R/
C273	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C275	72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C276	72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C300	#3 72795148	OCH8106F691	ELECTROLYTIC, 10UF 16V 20% 105STD
C302	#3 72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C303	#3 72795188	OCK475DD57A	CERAMIC, 4.7UF 2012 10V 10% X
C305	#3 72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C306	#3 72795199	OCH8106J691	ELECTROLYTIC, 10UF 35V 20% 105STD
C307	#3 72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C308	#3 72795188	OCK475DD57A	CERAMIC, 4.7UF 2012 10V 10% X
C309	#3 72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C311	#3 72795188	OCK475DD57A	CERAMIC, 4.7UF 2012 10V 10% X
C312	#3 72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C313	#3 72795188	OCK475DD57A	CERAMIC, 4.7UF 2012 10V 10% X
C315	#3 72795199	OCH8106J691	ELECTROLYTIC, 10UF 35V 20% 105STD
C316	#3 72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C317	#3 72795172	OCH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C318	#3 72795188	OCK475DD57A	CERAMIC, 4.7UF 2012 10V 10% X
C319	#3 72795171	OCH3103K516	CERAMIC, 10000PF 50V 10% B(Y5
C320	#3 72795155	OCH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012

Location No.	Parts No.	Reference	Description
C321	#3	72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C322	#3	72795156	0CH6152K406 CERAMIC CHIP, 1500PF 50V J SL 2012
C323	#3	72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C324	#3	72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C325	#3	72795165	0CC270DK41A CERAMIC, 27PF 2012 50V 5% NP0
C326	#3	72795158	0CH6820K416 CERAMIC, 82PF 2012 50V 5% C0G
C328	#3	72795180	0CK106EF56A CERAMIC, 10UF 3216 16V 10% X7
C329	#3	72795177	0CK104CK56A CERAMIC, 0.1UF 1608 50V 10% R
C332	#3	72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C333	#3	72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C334	#3	72795187	0CK474CH94A CERAMIC, 0.47UF 1608 25V 80%,
C335	#3	72795188	0CK475DD57A CERAMIC, 4.7UF 2012 10V 10% X
C336	#3	72795167	0CC330CK41A CERAMIC, 33PF 1608 50V 5% R/T
C337	#3	72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C338	#3	72795177	0CK104CK56A CERAMIC, 0.1UF 1608 50V 10% R
C340	#3	72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C341	#3	72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C342	#3	72795187	0CK474CH94A CERAMIC, 0.47UF 1608 25V 80%,
C343	#3	72795188	0CK475DD57A CERAMIC, 4.7UF 2012 10V 10% X
C344	#3	72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C346	#3	72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C347	#3	72795176	0CK103CK51A CERAMIC, 0.01UF 1608 50V 10%
C348	#3	72795149	0CH8226F691 ELECTROLYTIC, 22UF 16V 20% 105STD
C349	#3	72795180	0CK106EF56A CERAMIC, 10UF 3216 16V 10% X7
C350	#3	72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C351	#3	72795149	0CH8226F691 ELECTROLYTIC, 22UF 16V 20% 105STD
C352	#3	72795199	0CH8106J691 ELECTROLYTIC, 10UF 35V 20% 105STD
C353	#3	72795188	0CK475DD57A CERAMIC, 4.7UF 2012 10V 10% X
C354	#3	72795168	0CC331CK41A CERAMIC, 330PF 1608 50V 5% R/
C355	#3	72795191	0CE107WF6DC ELECTROLYTIC, 100UF MVK 16V 20% R/
C504		72795177	0CK104CK56A CERAMIC, 0.1UF 1608 50V 10% R
C505		72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C506		72795177	0CK104CK56A CERAMIC, 0.1UF 1608 50V 10% R
C507		72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C508		72795176	0CK103CK51A CERAMIC, 0.01UF 1608 50V 10%
C509		72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C510		72795176	0CK103CK51A CERAMIC, 0.01UF 1608 50V 10%
C511		72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C512		72795176	0CK103CK51A CERAMIC, 0.01UF 1608 50V 10%
C514		72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C515		72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C530		72795153	0CH6080K116 CERAMIC, 8PF 2012 50V 0.5 PF
C532		72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C544		72795162	0CC080CK11A CERAMIC, 8PF 1608 50V 0.5 PF
C545		72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C553		72795192	0CE107WH6DC ELECTROLYTIC, 100UF MVK 25V 20% R/
C554		72795177	0CK104CK56A CERAMIC, 0.1UF 1608 50V 10% R
C555		72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C712		72795199	0CH8106J691 ELECTROLYTIC, 10UF 35V 20% 105STD
C713		72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C714		72795199	0CH8106J691 ELECTROLYTIC, 10UF 35V 20% 105STD
C715		72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C716		72795199	0CH8106J691 ELECTROLYTIC, 10UF 35V 20% 105STD
C717		72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C718		72795199	0CH8106J691 ELECTROLYTIC, 10UF 35V 20% 105STD
C719		72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C720	#1,#2	72795150	0CH8476F691 ELECTROLYTIC, 47UF 16V 20% 105STD
	#3	72795197	0CE476WF6DC ELECTROLYTIC, 47UF MVK 16V 20% R/T
C721		72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C722		72795199	0CH8106J691 ELECTROLYTIC, 10UF 35V 20% 105STD
C723		72795171	0CH3103K516 CERAMIC, 10000PF 50V 10% B(Y5
C725		72795157	0CH6471K416 CERAMIC CHIP, 470F 50V J NP0 2012
C727		72795178	0CK105CF94A CERAMIC, 1UF 1608 16V 80%, -20
C729		72795155	0CH6102K406 CERAMIC CHIP, 1000PF 50V J SL 2012
C731		72795183	0CK225DH94A CERAMIC, 2.2UF 2012 25V 80%, -
C733		72795191	0CE107WF6DC ELECTROLYTIC, 100UF MVK 16V 20% R/
C750		72795196	0CE475WJ6DC ELECTROLYTIC, 4.7UF MVK 35V 20% R/
C758		72795199	0CH8106J691 ELECTROLYTIC, 10UF 35V 20% 105STD
C759		72795172	0CH3104K566 CERAMIC, 0.1UF 50V 10% X7R 20
C900		72795179	0CK105DK94A CERAMIC, 1UF 2012 50V 80%, -20
C905		72795182	0CK224CF56A CERAMIC, 0.22UF 1608 16V 10%
C906		72795183	0CK225DH94A CERAMIC, 2.2UF 2012 25V 80%, -

Location No.	Parts No.	Reference	Description	
C907	72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20	
C908	72795182	0CK224CF56A	CERAMIC, 0.22UF 1608 16V 10%	
C909	72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20	
C910	72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -	
C911	72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20	
C912	72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -	
C914	72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20	
C915	72795182	0CK224CF56A	CERAMIC, 0.22UF 1608 16V 10%	
C916	72795192	0CE107WH6DC	ELECTROLYTIC, 100UF MVK 25V 20% R/	
C917	72795171	0CH3103K516	CERAMIC, 10000PF 50V 10% B(Y5	
C918	72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20	
C919	72795179	0CK105DK94A	CERAMIC, 1UF 2012 50V 80%, -20	
C920	72795182	0CK224CF56A	CERAMIC, 0.22UF 1608 16V 10%	
C921	72795179	0CK105DK94A	CERAMIC, 1UF 2012 50V 80%, -20	
C922	72795164	0CC221CK41A	CERAMIC, 220PF 1608 50V 5% R/	
C923	72795179	0CK105DK94A	CERAMIC, 1UF 2012 50V 80%, -20	
C924	#1,#2	72795189	0CH3474H946	CERAMIC, 0.47UF 25V 80%, -20%
	#3	72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C925	#3	72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C927	#3	72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C929	#3	72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C930		72795177	0CK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C931		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C933		72795197	0CE476WF6DC	ELECTROLYTIC, 47UF MVK 16V 20% R/T
C934		72795192	0CE107WH6DC	ELECTROLYTIC, 100UF MVK 25V 20% R/
C1001		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1002		72795191	0CE107WF6DC	ELECTROLYTIC, 100UF MVK 16V 20% R/
C1003		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1004		72795192	0CE107WH6DC	ELECTROLYTIC, 100UF MVK 25V 20% R/
C1006		72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C1008		72795197	0CE476WF6DC	ELECTROLYTIC, 47UF MVK 16V 20% R/T
C1009		72795198	0CE477EJ618	ELECTROLYTIC, 470UF KMG 35V 20% FL
C1010		72795155	0CH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C1011		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1013		72795180	0CK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C1014		72795191	0CE107WF6DC	ELECTROLYTIC, 100UF MVK 16V 20% R/
C1015		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1016		72795192	0CE107WH6DC	ELECTROLYTIC, 100UF MVK 25V 20% R/
C1017		72795191	0CE107WF6DC	ELECTROLYTIC, 100UF MVK 16V 20% R/
C1018		72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C1019		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1021		72795189	0CH3474H946	CERAMIC, 0.47UF 25V 80%, -20%
C1022		72795176	0CK103CK51A	CERAMIC, 0.01UF 1608 50V 10%
C1024		72795189	0CH3474H946	CERAMIC, 0.47UF 25V 80%, -20%
C1025		72795176	0CK103CK51A	CERAMIC, 0.01UF 1608 50V 10%
C1027		72795181	0CK222CK51A	CERAMIC, 2200PF 1608 50V 10%
C1030		72795184	0CK226FF67A	CERAMIC, 22UF 3225 16V 20% X5
C1032		72795151	0CH3332K516	CERAMIC CHIP, 3300PF 50V K B 2012
C1034		72795184	0CK226FF67A	CERAMIC, 22UF 3225 16V 20% X5
C1035		72795198	0CE477EJ618	ELECTROLYTIC, 470UF KMG 35V 20% FL
C1037		72795155	0CH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C1038		72795146	0CE108EF618	ELECTROLYTIC, 1000UF KMG 16V 20% F
C1039		72795155	0CH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C1040		72795155	0CH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C1042		72795146	0CE108EF618	ELECTROLYTIC, 1000UF KMG 16V 20% F
C1043		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1044		72795155	0CH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C1045		72795180	0CK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C1046		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1050		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1051		72795191	0CE107WF6DC	ELECTROLYTIC, 100UF MVK 16V 20% R/
C1052		72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1053	#3	72795192	0CE107WH6DC	ELECTROLYTIC, 100UF MVK 25V 20% R/
C1054		72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C1056	#3	72781846	0CE107BH618	ELECTROLYTIC, 100UF KME TYPE 25V 20% FL TP 5
C1057		72795177	0CK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C1059		72795172	0CH3104K566	CERAMIC, 0.1UF 50V 10% X7R 20
C1101		72795198	0CE477EJ618	ELECTROLYTIC, 470UF KMG 35V 20% FL
C1110	#3	72795155	0CH6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C1112	#3	72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -
C1118	#3	72795191	0CE107WF6DC	ELECTROLYTIC, 100UF MVK 16V 20% R/
C1120	#3	72795183	0CK225DH94A	CERAMIC, 2.2UF 2012 25V 80%, -

Location No.	Parts No.	Reference	Description
C1300	72795188	OCK475DD57A	CERAMIC, 4.7UF 2012 10V 10% X
C1301	72795174	OCK6470K416	CERAMIC, 47PF 50V 5% NP0 2012
C1502	72795157	OCK6471K416	CERAMIC CHIP, 470F 50V J NP0 2012
C1505	72795161	OCK6331K416	CERAMIC CHIP, 330PF 50V J NP0 2012
C1515	72795145	OCE106BF618	ELECTROLYTIC, 10UF KME TYPE 16V 20% FL TP 5
C1700	72795180	OCK106EF56A	CERAMIC, 10UF 3216 16V 10% X7
C2000	72795177	OCK104CK56A	CERAMIC, 0.1UF 1608 50V 10% R
C2002	72795147	OCE226BH638	ELECTROLYTIC, 22U KME 25V M FM5 T
C2003	72795155	OCK6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C2004	72795147	OCE226BH638	ELECTROLYTIC, 22U KME 25V M FM5 T
C2005	72795155	OCK6102K406	CERAMIC CHIP, 1000PF 50V J SL 2012
C2009	72795200	OCE476BH638	ELECTROLYTIC, 47UF KME 25V M FM5 T
C2010	72795200	OCE476BH638	ELECTROLYTIC, 47UF KME 25V M FM5 T
C2011	72795159	OCK6151K416	CERAMIC, 150PF 2012 50V 5% NP
C3012	72795190	OCE107BF618	ELECTROLYTIC, 100UF KME TYPE 16V 2
RESISTORS			
R1	72795361	ORH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R2	72795361	ORH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R4	72795361	ORH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R5	72795377	ORJ0682D677	METAL GLAZE, 68 OHM 1/10 W 5% 160
R6	72795360	ORH0222D622	METAL GLAZE, 22 OHM 1 / 10 W 2012
R7	72795361	ORH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R8	72795360	ORH0222D622	METAL GLAZE, 22 OHM 1 / 10 W 2012
R10	72795372	ORH5602D622	METAL GLAZE, 56K OHM 1 / 10 W 201
R11	72795375	ORJ0222D677	METAL GLAZE, 22 OHM 1/10 W 5% 160
R12	72795378	ORJ0752D677	METAL GLAZE, 75 OHM 1/10 W 5% 160
R13	72795395	ORJ4703D677	METAL GLAZE, 470K OHM 1/10 W 5% 1
R14	72795347	ORH4703D622	METAL GLAZE, 470K OHM 1 / 10 W 20
R15	72795371	ORH2402D622	METAL GLAZE, 24K OHM 1 / 10 W 201
R20	72795362	ORH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R21	72795361	ORH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R22	72795361	ORH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R23	72795361	ORH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R24	72795380	ORJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R26	72795363	ORH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R27	72795363	ORH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R28	72795360	ORH0222D622	METAL GLAZE, 22 OHM 1 / 10 W 2012
R33	72795347	ORH4703D622	METAL GLAZE, 470K OHM 1 / 10 W 20
R34	#3 72795347	ORH4703D622	METAL GLAZE, 470K OHM 1 / 10 W 20
R35	72795370	ORH1802D622	METAL GLAZE, 18K OHM 1 / 10 W 201
R37	72795360	ORH0222D622	METAL GLAZE, 22 OHM 1 / 10 W 2012
R38	72795341	ORH3301D622	METAL GLAZE, 3.3K OHM 1 / 10 W 20
R39	72795337	ORH2001D622	CHIP, 2.0K 1/10W 5 D.R/TP
R42	72795396	ORJ5101D677	METAL GLAZE, 5.1K OHM 1/10 W 5% 1
R43	72795348	ORH5101D622	METAL GLAZE, 5.1K OHM 1 / 10 W 20
R54	72795373	ORJ0000D677	METAL GLAZE, 0 OHM 1/10 W 5% 1608
R58	72795364	ORH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R60	72795364	ORH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R64	72795363	ORH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R67	72795360	ORH0222D622	METAL GLAZE, 22 OHM 1 / 10 W 2012
R70	72795359	ORH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R71	72795373	ORJ0000D677	METAL GLAZE, 0 OHM 1/10 W 5% 1608
R72	72795359	ORH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R73	72795373	ORJ0000D677	METAL GLAZE, 0 OHM 1/10 W 5% 1608
R74	72795359	ORH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R75	72795373	ORJ0000D677	METAL GLAZE, 0 OHM 1/10 W 5% 1608
R76	72795373	ORJ0000D677	METAL GLAZE, 0 OHM 1/10 W 5% 1608
R77	72795373	ORJ0000D677	METAL GLAZE, 0 OHM 1/10 W 5% 1608
R78	72795359	ORH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R100	72795401	ORH0562D622	CHIP, 56 1/10W 5 D.R/TP
R101	72795354	ORH8200D622	METAL GLAZE, 820 OHM 1 / 10 W 201
R102	72795368	ORH1501D622	METAL GLAZE, 1.5K OHM 1 / 10 W 20
R103	72795380	ORJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R104	72795359	ORH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R105	72795340	ORH3000D622	METAL GLAZE, 300 OHM 1 / 10 W 201
R106	72795335	ORH0682D622	METAL GLAZE, 68 OHM 1 / 10 W 2012
R109	72795352	ORH7501D622	METAL GLAZE, 7.5K OHM 1 / 10 W 20
R110	72795353	ORH7502D622	METAL GLAZE, 75K OHM 1 / 10 W 201
R111	72795395	ORJ4703D677	METAL GLAZE, 470K OHM 1/10 W 5% 1
R112	72795399	ORJ7501D677	METAL GLAZE, 7.5K OHM 1/10 W 5% 1
R113	72795392	ORJ3301D677	METAL GLAZE, 3.3K OHM 1/10 W 5% 1

Location No.	Parts No.	Reference	Description
R114	72795396	0RJ5101D677	METAL GLAZE, 5.1K OHM 1/10 W 5% 1
R115	72795374	0RJ0102D677	METAL GLAZE, 10 OHM 1/10 W 5% 160
R116	72795345	0RH4701D622	METAL GLAZE, 4.7K OHM 1 / 10 W 20
R117	72795359	0RH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R150	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R151	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R152	72795384	0RJ1002D677	METAL GLAZE, 10K OHM 1/10 W 5% 16
R153	#3 72795384	0RJ1002D677	METAL GLAZE, 10K OHM 1/10 W 5% 16
R154	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R156	72795363	0RH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R159	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R163	72795382	0RJ1001D677	METAL GLAZE, 1K OHM 1/10 W 5% 160
R165	72795375	0RJ0222D677	METAL GLAZE, 22 OHM 1/10 W 5% 160
R167	72795368	0RH1501D622	METAL GLAZE, 1.5K OHM 1 / 10 W 20
R200	72795363	0RH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R202	72795341	0RH3301D622	METAL GLAZE, 3.3K OHM 1 / 10 W 20
R203	72795341	0RH3301D622	METAL GLAZE, 3.3K OHM 1 / 10 W 20
R204	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R205	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R207	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R209	72795392	0RJ3301D677	METAL GLAZE, 3.3K OHM 1/10 W 5% 1
R210	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R211	72795403	0RH1201D622	METAL GLAZE, 1.2K OHM 1 / 10 W 20
R212	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R214	72795382	0RJ1001D677	METAL GLAZE, 1K OHM 1/10 W 5% 160
R215	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R217	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R218	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R220	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R222	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R225	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R227	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R229	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R230	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R233	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R234	72795344	0RH4700D622	METAL GLAZE, 470 OHM 1 / 10 W 201
R235	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R236	72795336	0RH1500D622	METAL GLAZE, 150 OHM 1 / 10 W 201
R237	72795390	0RJ2202D677	METAL GLAZE, 22K OHM 1/10 W 5% 16
R238	72795386	0RJ1500D677	METAL GLAZE, 150 OHM 1/10 W 5% 16
R239	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R240	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R241	72795344	0RH4700D622	METAL GLAZE, 470 OHM 1 / 10 W 201
R242	72795336	0RH1500D622	METAL GLAZE, 150 OHM 1 / 10 W 201
R244	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R257	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R260	72795373	0RJ0000D677	METAL GLAZE, 0 OHM 1/10 W 5% 1608
R266	72795375	0RJ0222D677	METAL GLAZE, 22 OHM 1/10 W 5% 160
R270	72795375	0RJ0222D677	METAL GLAZE, 22 OHM 1/10 W 5% 160
R301	#3 72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R302	#3 72795363	0RH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R305	#3 72795359	0RH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R307	#3 72795344	0RH4700D622	METAL GLAZE, 470 OHM 1 / 10 W 201
R309	#3 72795359	0RH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R311	#3 72795344	0RH4700D622	METAL GLAZE, 470 OHM 1 / 10 W 201
R312	#3 72795352	0RH7501D622	METAL GLAZE, 7.5K OHM 1 / 10 W 20
R313	#3 72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R314	#3 72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R315	#3 72795399	0RJ7501D677	METAL GLAZE, 7.5K OHM 1/10 W 5% 1
R316	#3 72795384	0RJ1002D677	METAL GLAZE, 10K OHM 1/10 W 5% 16
R317	#3 72795352	0RH7501D622	METAL GLAZE, 7.5K OHM 1 / 10 W 20
R318	#3 72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R319	#3 72795373	0RJ0000D677	METAL GLAZE, 0 OHM 1/10 W 5% 1608
R320	#3 72795379	0RJ0822D677	METAL GLAZE, 82 OHM 1/10 W 5% 160
R322	#3 72795345	0RH4701D622	METAL GLAZE, 4.7K OHM 1 / 10 W 20
R323	#3 72795363	0RH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R324	#3 72795343	0RH3602D622	METAL GLAZE, 36K OHM 1 / 10 W 201
R325	#3 72795393	0RJ3900D677	METAL GLAZE, 390 OHM 1/10 W 5% 16
R326	#3 72795366	0RH1004D622	METAL GLAZE, 1M OHM 1 / 10 W 2012
R327	#3 72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R328	#3 72795365	0RH1003D622	METAL GLAZE, 100K OHM 1 / 10 W 20
R329	#3 72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16

Location No.	Parts No.	Reference	Description
R330	#3	72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R331	#3	72795352	0RH7501D622 METAL GLAZE, 7.5K OHM 1 / 10 W 20
R332	#3	72795364	0RH1002D622 METAL GLAZE, 10K OHM 1 / 10 W 201
R333	#3	72795373	0RJ0000D677 METAL GLAZE, 0 OHM 1/10 W 5% 1608
R334	#3	72795382	0RJ1001D677 METAL GLAZE, 1K OHM 1/10 W 5% 160
R335	#3	72795379	0RJ0822D677 METAL GLAZE, 82 OHM 1/10 W 5% 160
R336	#3	72795170	OCC471CK41A CERAMIC, 470PF 1608 50V 5% R/
R337	#3	72795378	0RJ0752D677 METAL GLAZE, 75 OHM 1/10 W 5% 160
R500		72795349	0RH5600D622 METAL GLAZE, 560 OHM 1 / 10 W 201
R502		72795402	0RH0822D622 METAL GLAZE, 82 OHM 1 / 10 W 2012
R503		72795376	0RJ0472D677 METAL GLAZE, 47 OHM 1/10 W 5% 160
R504		72795402	0RH0822D622 METAL GLAZE, 82 OHM 1 / 10 W 2012
R505		72795376	0RJ0472D677 METAL GLAZE, 47 OHM 1/10 W 5% 160
R506		72795402	0RH0822D622 METAL GLAZE, 82 OHM 1 / 10 W 2012
R507		72795376	0RJ0472D677 METAL GLAZE, 47 OHM 1/10 W 5% 160
R508		72795363	0RH1001D622 METAL GLAZE, 1K OHM 1 / 10 W 2012
R509		72795359	0RH0000D622 METAL GLAZE, 0 OHM 1 / 10 W 2012
R514		72795342	0RH3600D622 METAL GLAZE, CHIP 360-J 1/10 W
R515		72795354	0RH8200D622 METAL GLAZE, 820 OHM 1 / 10 W 201
R516		72795362	0RH1000D622 METAL GLAZE, 100 OHM 1 / 10 W 201
R519		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R520		72795362	0RH1000D622 METAL GLAZE, 100 OHM 1 / 10 W 201
R521		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R523		72795341	0RH3301D622 METAL GLAZE, 3.3K OHM 1 / 10 W 20
R525		72795362	0RH1000D622 METAL GLAZE, 100 OHM 1 / 10 W 201
R529		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R531		72795345	0RH4701D622 METAL GLAZE, 4.7K OHM 1 / 10 W 20
R532		72795359	0RH0000D622 METAL GLAZE, 0 OHM 1 / 10 W 2012
R533		72795345	0RH4701D622 METAL GLAZE, 4.7K OHM 1 / 10 W 20
R534		72795359	0RH0000D622 METAL GLAZE, 0 OHM 1 / 10 W 2012
R535		72795345	0RH4701D622 METAL GLAZE, 4.7K OHM 1 / 10 W 20
R536	#3	72795359	0RH0000D622 METAL GLAZE, 0 OHM 1 / 10 W 2012
R537		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R539		72795362	0RH1000D622 METAL GLAZE, 100 OHM 1 / 10 W 201
R540		72795362	0RH1000D622 METAL GLAZE, 100 OHM 1 / 10 W 201
R544		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R546		72795364	0RH1002D622 METAL GLAZE, 10K OHM 1 / 10 W 201
R548		72795362	0RH1000D622 METAL GLAZE, 100 OHM 1 / 10 W 201
R557		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R559		72795375	0RJ0222D677 METAL GLAZE, 22 OHM 1/10 W 5% 160
R595		72795384	0RJ1002D677 METAL GLAZE, 10K OHM 1/10 W 5% 16
R704		72795347	0RH4703D622 METAL GLAZE, 470K OHM 1 / 10 W 20
R705		72795345	0RH4701D622 METAL GLAZE, 4.7K OHM 1 / 10 W 20
R713		72795345	0RH4701D622 METAL GLAZE, 4.7K OHM 1 / 10 W 20
R715		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R721		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R723		72795373	0RJ0000D677 METAL GLAZE, 0 OHM 1/10 W 5% 1608
R725		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R728		72795350	0RH6202D622 METAL GLAZE, 62K OHM 1 / 10 W 201
R730		72795388	0RJ2001D677 METAL GLAZE, 2K OHM 1/10 W 5% 160
R732		72795396	0RJ5101D677 METAL GLAZE, 5.1K OHM 1/10 W 5% 1
R750		72795345	0RH4701D622 METAL GLAZE, 4.7K OHM 1 / 10 W 20
R751		72795346	0RH4702D622 METAL GLAZE, 47K OHM 1 / 10 W 201
R752		72795345	0RH4701D622 METAL GLAZE, 4.7K OHM 1 / 10 W 20
R758		72795363	0RH1001D622 METAL GLAZE, 1K OHM 1 / 10 W 2012
R762		72795360	0RH0222D622 METAL GLAZE, 22 OHM 1 / 10 W 2012
R764		72795387	0RJ1501D677 METAL GLAZE, 1.5K OHM 1/10 W 5% 1
R903		72795380	0RJ1000D677 METAL GLAZE, 100 OHM 1/10 W 5% 16
R904		72795469	0RJ1203D677 METAL GLAZE, 120K OHM 1/10 W 5% 1
R905	#1,#2	72795359	0RH0000D622 METAL GLAZE, 0 OHM 1 / 10 W 2012
R906	#1,#2	72795469	0RJ1203D677 METAL GLAZE, 120K OHM 1/10 W 5% 1
R907		72795359	0RH0000D622 METAL GLAZE, 0 OHM 1 / 10 W 2012
R908		72795469	0RJ1203D677 METAL GLAZE, 120K OHM 1/10 W 5% 1
R910		72795365	0RH1003D622 METAL GLAZE, 100K OHM 1 / 10 W 20
R912		72795394	0RJ4701D677 METAL GLAZE, 4.7K OHM 1/10 W 5% 1
R913		72795345	0RH4701D622 METAL GLAZE, 4.7K OHM 1 / 10 W 20
R914		72795386	0RJ1500D677 METAL GLAZE, 150 OHM 1/10 W 5% 16
R915		72795394	0RJ4701D677 METAL GLAZE, 4.7K OHM 1/10 W 5% 1
R916		72795373	0RJ0000D677 METAL GLAZE, 0 OHM 1/10 W 5% 1608
R917		72795394	0RJ4701D677 METAL GLAZE, 4.7K OHM 1/10 W 5% 1
R919		72795346	0RH4702D622 METAL GLAZE, 47K OHM 1 / 10 W 201
R920		72795364	0RH1002D622 METAL GLAZE, 10K OHM 1 / 10 W 201

Location No.	Parts No.	Reference	Description
R922	72795365	0RH1003D622	METAL GLAZE, 100K OHM 1 / 10 W 20
R1000	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 20
R1001	72795345	0RH4701D622	METAL GLAZE, 4.7K OHM 1 / 10 W 20
R1002	#3 72795359	0RH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R1003	72795384	0RJ1002D677	METAL GLAZE, 10K OHM 1/10 W 5% 16
R1004	72795382	0RJ1001D677	METAL GLAZE, 1K OHM 1/10 W 5% 160
R1005	#1,#2 72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R1006	72795363	0RH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R1007	72795365	0RH1003D622	METAL GLAZE, 100K OHM 1 / 10 W 20
R1009	72795398	0RJ6801D477	METAL GLAZE, 6.8K OHM 1/10 W 1% 1
R1010	72795399	0RJ7501D677	METAL GLAZE, 7.5K OHM 1/10 W 5% 1
R1011	72795389	0RJ2202D477	METAL GLAZE, 22K OHM 1/10 W 1% 16
R1012	72795397	0RJ5601D477	METAL GLAZE, 5.6K OHM 1/10 W 1% 1
R1013	72795345	0RH4701D622	METAL GLAZE, 4.7K OHM 1 / 10 W 20
R1014	72795400	0RJ9311D477	METAL GLAZE, 9.31K OHM 1/10 W 1%
R1017	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R1018	72795385	0RJ1211D477	METAL GLAZE, 1.21K OHM 1/10 W 1%
R1019	72795369	0RH1502D622	METAL GLAZE, 15K OHM 1 / 10 W 201
R1020	72795363	0RH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R1021	72795365	0RH1003D622	METAL GLAZE, 100K OHM 1 / 10 W 20
R1022	72795383	0RJ1002D477	METAL GLAZE, 10K OHM 1/10 W 1% 16
R1024	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R1201	72795358	0RD6200Q609	CARBON FILM, 620 1/4W(3 5% TA52
R1202	72795356	0RD2401Q609	CARBON FILM, 2.40K 1/4W(3 5% TA52
R1204	72795355	0RD1801Q609	CARBON FILM, 1.80K 1/4W(3 5% TA52
R1205	72795357	0RD3301Q509	CARBON FILM, 3.3K OHM 1/4 W (3.4)
R1207	72795355	0RD1801Q609	CARBON FILM, 1.80K 1/4W(3 5% TA52
R1208	72795356	0RD2401Q609	CARBON FILM, 2.40K 1/4W(3 5% TA52
R1209	72795358	0RD6200Q609	CARBON FILM, 620 1/4W(3 5% TA52
R1300	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R1303	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R1304	72795345	0RH4701D622	METAL GLAZE, 4.7K OHM 1 / 10 W 20
R1305	72795363	0RH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R1306	72795345	0RH4701D622	METAL GLAZE, 4.7K OHM 1 / 10 W 20
R1309	72795359	0RH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R1502	72795361	0RH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R1505	72795347	0RH4703D622	METAL GLAZE, 470K OHM 1 / 10 W 20
R1507	72795361	0RH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R1508	72795370	0RH1802D622	METAL GLAZE, 18K OHM 1 / 10 W 201
R1510	72795361	0RH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R1523	#3 72795359	0RH0000D622	METAL GLAZE, 0 OHM 1 / 10 W 2012
R1700	72795381	0RJ1000H680	METAL GLAZE, 100 OHM 1/2 W 5% 502
R2000	72795380	0RJ1000D677	METAL GLAZE, 100 OHM 1/10 W 5% 16
R2002	72795361	0RH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R2004	72795360	0RH0222D622	METAL GLAZE, 22 OHM 1 / 10 W 2012
R2005	72795361	0RH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R2006	72795384	0RJ1002D677	METAL GLAZE, 10K OHM 1/10 W 5% 16
R2007	72795360	0RH0222D622	METAL GLAZE, 22 OHM 1 / 10 W 2012
R2008	72795361	0RH0752D622	METAL GLAZE, 75 OHM 1 / 10 W 2012
R2009	72795362	0RH1000D622	METAL GLAZE, 100 OHM 1 / 10 W 201
R2010	72795337	0RH2001D622	CHIP, 2.0K 1/10W 5 D.R/TP
R2011	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R2012	72795351	0RH6801D622	METAL GLAZE, 6.8K OHM 1 / 10 W 20
R2013	72795363	0RH1001D622	METAL GLAZE, 1K OHM 1 / 10 W 2012
R2014	72795339	0RH2700D622	METAL GLAZE, 270 OHM 1 / 10 W 201
R2016	72795334	0RH0472D622	METAL GLAZE, 47 OHM 1 / 10 W 2012
R2017	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R2020	72795402	0RH0822D622	METAL GLAZE, 82 OHM 1 / 10 W 2012
R2021	72795364	0RH1002D622	METAL GLAZE, 10K OHM 1 / 10 W 201
R2022	72795339	0RH2700D622	METAL GLAZE, 270 OHM 1 / 10 W 201
R2023	72795402	0RH0822D622	METAL GLAZE, 82 OHM 1 / 10 W 2012
R2024	72795338	0RH2200D622	METAL GLAZE, 220 OHM 1 / 10 W 201
COIL & TRANSFORMERS			
L1	72795273	0LC0233002A	INDUCTOR, CHIP, 3.3UH CERATECH R/TP
L3	72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA
L4	#3 72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA
L51	72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA
L54	72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L59	72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA
L61	72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L62	72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA

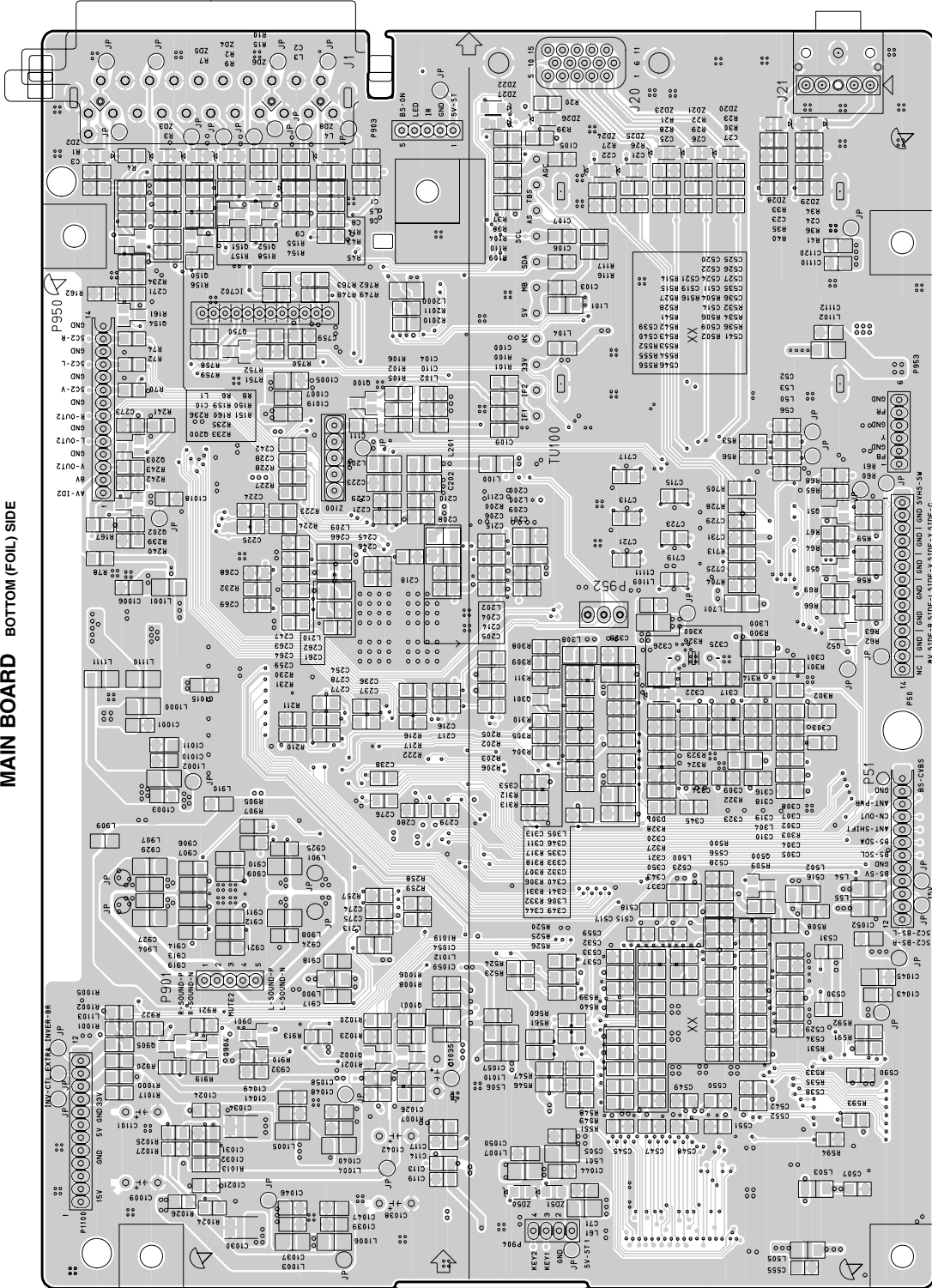
Location No.	Parts No.	Reference	Description
L100	72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L101	72795272	0LA1000K139	INDUCTOR, AXIAL, LEAD, 100UH 10% A 4.0 X 10.5 TA52 -
L102	72795274	0LC1020101A	INDUCTOR, CHIP, 1UH 10% 2012 R/TC FI
L103	72795279	0LCTO00018A	INDUCTOR, CHIP, 888FU-101M TOKO R/TP
L104	72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA
L200	72795275	0LC1032101A	INDUCTOR, CHIP, 10UH 10% 3216 R/TC F
L201	72795275	0LC1032101A	INDUCTOR, CHIP, 10UH 10% 3216 R/TC F
L213	72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L300	#3 72795275	0LC1032101A	INDUCTOR, CHIP, 10UH 10% 3216 R/TC F
L307	#3 72795273	0LC0233002A	INDUCTOR, CHIP, 3.3UH CERATECH R/TP
L308	#3 72795275	0LC1032101A	INDUCTOR, CHIP, 10UH 10% 3216 R/TC F
L500	72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L701	72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L902	72795201	6140VR0005B	COIL, ENERGY RECOVERY, SLF7045T-330MR82 TDK
L1008	72795202	6140VR0008B	COIL, ENERGY RECOVERY, SLF12575T-150M3R2 1
L1010	#3 72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L1012	#1,#2 72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L1102	#3 72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L1103	#3 72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA
L1109	#3 72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L1111	#1,#2 72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L1503	72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA
L1505	72795276	0LC2000005D	INDUCTOR, CHIP, F1-B2012-332KJT, 3.3
L1701	72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA
L2000	72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L2001	72795246	6210TCE001A	FERRITECORE, BEAD, HB-1S2012-080JT CERA
L2002	72795215	6210TCE001G	FILTER, EMI, HH-1M3216-501 CERATE
L2003	72795277	0LC2000005F	INDUCTOR, CHIP, F1-C2012-562KJT, 5.6U
SEMICONDUCTORS			
Q50	#1,#2 72795446	0TR387500AA	TRANSISTOR, CHIP 2SC3875S(ALY) B
Q100	72795447	0TR388109AA	TRANSISTOR, KTC3881 CHIP TP KEC
Q201	72795445	0TR150400BA	TRANSISTOR, CHIP 2SA1504S(ASY) B
Q202	72795446	0TR387500AA	TRANSISTOR, CHIP 2SC3875S(ALY) B
Q203	72795445	0TR150400BA	TRANSISTOR, CHIP 2SA1504S(ASY) B
Q300	#3 72795446	0TR387500AA	TRANSISTOR, CHIP 2SC3875S(ALY) B
Q902	72795445	0TR150400BA	TRANSISTOR, CHIP 2SA1504S(ASY) B
Q903	72795446	0TR387500AA	TRANSISTOR, CHIP 2SC3875S(ALY) B
Q905	72795448	0TFIR80017B	TRANSISTOR, FET, IRLML5203TRPBF, LF IN
Q1000	72795446	0TR387500AA	TRANSISTOR, CHIP 2SC3875S(ALY) B
Q2001	72795445	0TR150400BA	TRANSISTOR, CHIP 2SA1504S(ASY) B
Q2002	72795446	0TR387500AA	TRANSISTOR, CHIP 2SC3875S(ALY) B
D101	72795241	0DSRM00148A	DIODE, 1SS355 ROHM R/TP SOD
D301	#3 72795242	0DVTB00048A	DIODE, VARICAP1SV324E, LF TOSHIBA R
D1000	72795238	0DR340009AA	DIODE, MBRS340 TP FAIRCHILD
D1200	72795240	0DSGF00019A	DIODE, 1N4148 GULF TP DO35
LED1301	72795283	0DLBE0138AA	DIODE, LED, BRIGHT DIODE, LED, ELECTRONI
ZD1	72795243	0DZ510009EE	DIODE, ZENER, UDZ S 5.1B TP ROHM-K
ZD21	72795243	0DZ510009EE	DIODE, ZENER, UDZ S 5.1B TP ROHM-K
ZD2004	72795244	0DZ620009HB	DIODE, ZENER, UDZ S 6.2B TP ROHM S
IC20	72795256	0IMMRS0036A	IC, M24C02-WMN6T(P), LF S
IC100	72795271	0ITK118100B	IC, TK11840L 8P SOT23L R
IC200	#1 72795250	0IZZTSA079B	IC, ML-05TA TOSHIBA VCTI
	#2,#3 72796164	0IPRPMN003H	IC, VCT49X3F-F2-100, LF M
IC201	72795255	0IMCRAL006A	IC, AT24C16AN-10SU-2.7, L
IC202	72795253	0IKE702700D	IC, KIA7027AF 3, SOT-89
IC203	72795260	0IMI623200B	IC, M62320FP, I/O EXPANDE
IC300	#3 72795264	0IPRPTO022A	IC, TC90A65FG, LF TOSHIBA
IC500	72795262	0IPRPGN015C	IC, GM2221-BF-LC, PB FREE
IC501	72795255	0IMCRAL006A	IC, AT24C16AN-10SU-2.7, L
IC550	72795252	0IZZTSA080B	IC, ML-05TA TOSHIBA SCAL
IC600	72795261	0IPRP00522A	IC, TPA3008D2PHPRG4, LF T
IC701	72795269	0IRH765700B	IC, BA7657F 24P, SOP TP I
IC702	72795254	0ISA722200A	IC, LA7222 (1280 AUDIO) - - -
IC1000	72795259	0IMCRNS007E	IC, LMS1587CS-3.3 NATION
IC1001	72795265	0IMCRKE010A	IC, KIA7812AF KEC 2P DPA
IC1002	72795266	0IPMGKE044A	IC, KIA7808AF KEC 2P DPA
IC1003	72795268	0IPMGSG018D	IC, LD1086DT18TR-LF SGS-
IC1004	72795257	0IMCRMZ001A	IC, MP1583DN-Z, LF MONOLI
IC1006	72795245	0TF492509AA	TRANSISTOR, FET, SI4925DY TP TEMIC 30
IC1007	72795268	0IPMGSG018D	IC, LD1086DT18TR-LF SGS-
IC1012	#3 72795258	0IMCRNS007B	IC, LM2941S NATIONAL SEM

Location No.	Parts No.	Reference	Description
IC1102	#3	72795267	0IPMGNS001D IC, LM1117MPX-2.5, NOPB N
IC2000		72795270	0ISTL00026A IC, MC14066BDR2G, LF ON S
MISCELLANEOUS			
P1100		72795205	6631T20028G CONNECTOR ASSEMBLY, 11P-12P H-B 100MM UL
P1200		72795206	6631T20028Z CONNECTOR ASSEMBLY, 4P-5P H-B 220MM UL10
P2000		72781918	6620K00007E SOCKET, POWER, I-SHENG AC UL/CSA 2P
PA1300		72795333	6726TV0001A REMOCON RECEIVER, TSOP4838SO1 VISHAY 3
SW1200		72795435	140-313B SWITCH, TACT, TACT 2LEAD 160G(TA) LG C&D NON 5V 0.001A HORIZON
X200		72795406	6202VDT002E CRYSTAL, SX-1SMD SUNNY RADIAL
X300	#3	72795404	156-A01B CRYSTAL, HC49U SUNNY RADIAL 3
X500		72795405	6202VDT002B CRYSTAL, SX-1 SUNNY SC14.3MHZ
Y151		72796185	6410TUW009A POWER CORD, LP-11W LS-7CWA LONGW
Z100		72795248	6200QL3002F SAW FILTER, X6966M EPCOS ST SIP5
PC BOARD ASSEMBLIES			
* 070	#1,#2	72795330	6871TSTB53B PC BOARD ASSY, SUB, TOSHIBA 15 INCH(NT-C
*	#3	72795329	6871TSTB53A PC BOARD ASSY, SUB, TOSHIBA 20 INCH(NT-C
* 080	#1,#2	72795313	6871TPT281G PC BOARD ASSY, POWER, 15DL75(TSB) POWER TO
*	#3	72795312	6871TPT280Q PC BOARD ASSY, POWER, 20LS30(TOSHIBA) POWE
* 090	#1,#2	72781877	3313TN1039B MAIN TOTAL ASSEMBLY, TOSHIBA 15 USA (NT-C
*	#3	72795287	3313TN2045A MAIN TOTAL ASSEMBLY, T20LS30 (NT-CKD) MAI
* 100	#1,#2	72795327	6871TSTB52C PC BOARD ASSY, SUB, TOSHIBA 15(NT-CKD)SI
*	#3	72781906	6871TSTB52E PC BOARD ASSY, SUB, TOSHIBA 20 (NT-CKD)S
* 130		72795324	6871TSTB50A PC BOARD ASSY, SUB, TOSHIBA 20-15 (NT-CK
* 140	#1,#2	72781902	6871TSTB51J PC BOARD ASSY, SUB, TOSHIBA 15 USA (NT-C
*	#3	72781905	6871TSTB51C PC BOARD ASSY, SUB, TOSHIBA 20-15 USA (N
* 170		72781907	6871TSTB49D PC BOARD ASSY, SUB, TOSHIBA 20-15 USA C
TUNER			
TU100		72795449	6700VS0003D TUNER, TAEW-G052P LGIT MULT
ACCESSORIES			
A701	#1	72796117	3890TKD002R CORTON BOX, 17LZ50 BRAND SKD PCB
	#2	72781832	3890TSEA33C CORTON BOX, T15DL75-MA TOSHIBA S
	#3	72781833	3890TSEA18B CORTON BOX, T20DL75-MA TOSHIBA 2
A702	#1	72781894	3920TKP022C PACKING, RZ-17LZ20 PULP SKD P
	#2	72795303	3920TKE369A PACKING, TOSHIBA 15V EPS TOP/
	#3	72795304	3920TKE370A PACKING, TOSHIBA 20V EPS TOP/
K902		72781910	6710T00018A REMOCON HAND UNIT, 15/20DL75 USA TOSHIB
Y101	#1	72782033	3828TUO242D OWNERS MANUAL, T15DL15-MA T15DL15 U
	#2,#3	72781880	3828TUO242B MANUAL T15/20DL75-MA 15/20D
CABINET PARTS			
010	#1,#2	72781837	3091TKB053E CABINET ASSEMBLY, 15V TOSHIBA 3090TKB0
	#3	72781839	3091TKL164J CABINET ASSEMBLY, T20DL75 TOSHIBA 3090
020	#1,#2	72795282	6304FLP234A LCD, LC150X02-TL01 LG PHI
	#3	72795280	6304FLP188A LCD, LC201V02-A3KA LG PHI
030	#1,#2	72781823	3809TKB034E BACK COVER ASSEMBLY, TOSHIBA 15V 3808TKB0
	#3	72781825	3809TKL114F BACK COVER ASSEMBLY, TOSHIBA 3808TKL118A
040	#1	72795441	3043TKK247C TILT SWIVEL ASSEMBLY, TOSHIBA 15V (RM, RT, R
	#3	72781923	3043TKK244J TILT SWIVEL ASSEMBLY, TOSHIBA 20V , (C/SKD
050	#1,#2	72795220	3550TKK863B COVER, TOSHIBA 15V REAR COV
	#3	72795216	3550TKK856B COVER, TOSHIBA REAR DOOR(C/
110	#1,#2	72781859	3551TAK001E COVER ASSEMBLY, TOSHIBA REAR 3550TKK
	#3	72781864	3551TKK588J COVER ASSEMBLY, TOSHIBA 20V REAR 355
150	#1	72795434	6401TZZ064B SPEAKER ASSEMBLYML-05TA TOSHIBA 15 L
	#2	72781919	6400GTTT01A SPEAKER, N1527C-6603-1 TOPTON
	#3	72796232	6400GKTX01B SPEAKER, F1527C-6428-2 K-TONE
160	#1,#2	72795222	3550TKK864A COVER, TOSHIBA 15V SIDE AV
	#3	72795224	3550TKK924B COVER, TOSHIBA 20 PIECE EAR

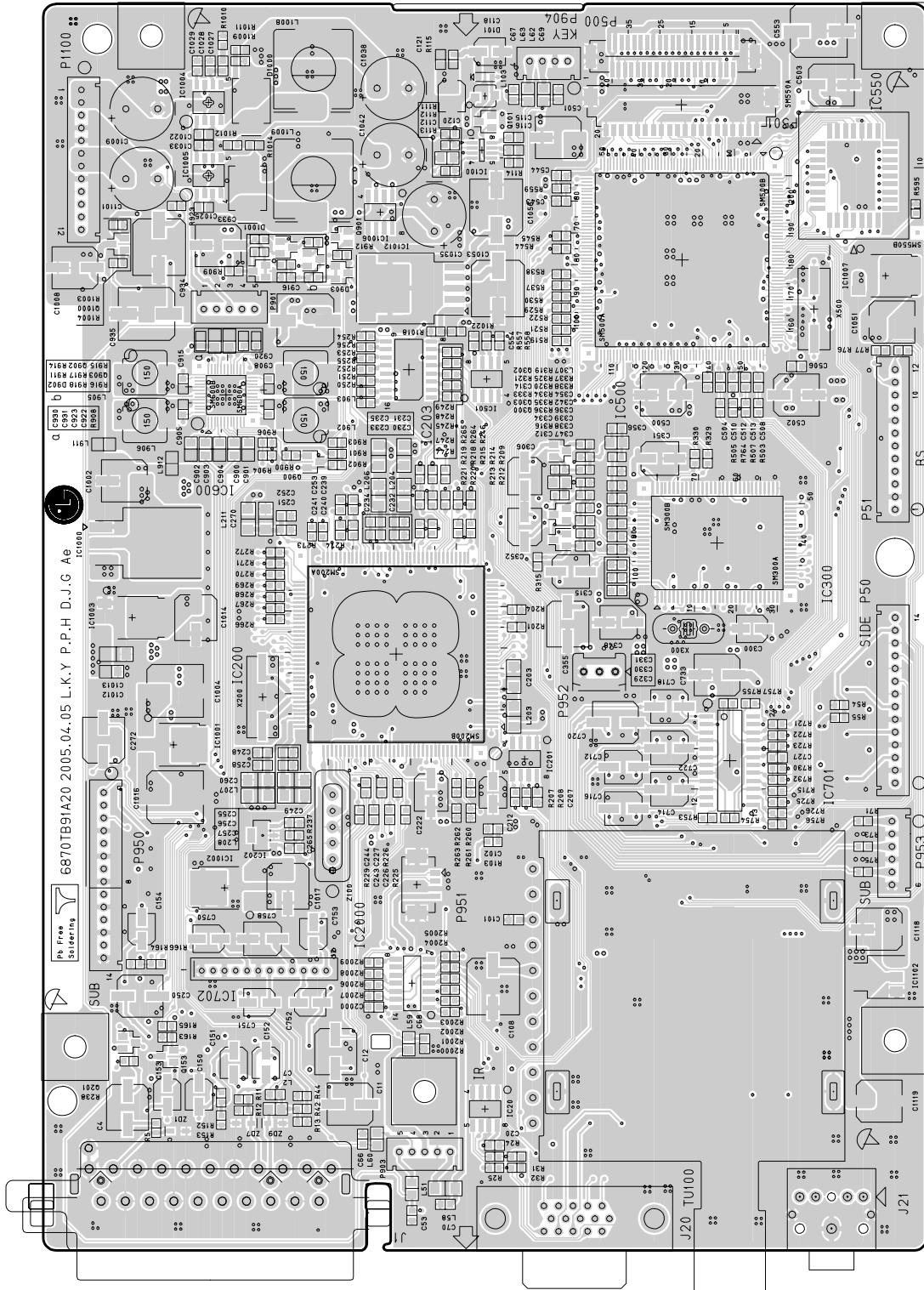
7. PC BOARDS TOP & BOTTOM VIEW

*The information contained in this section subjects to model.

MAIN BOARD BOTTOM (FOIL) SIDE

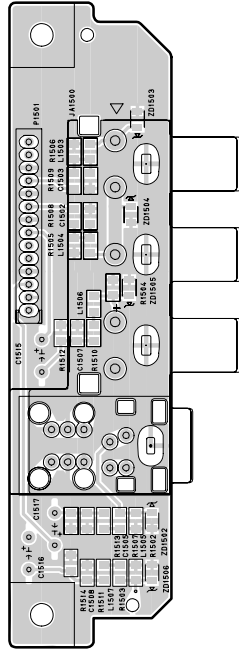


MAIN BOARD
TOP (COMPONENT SIDE)



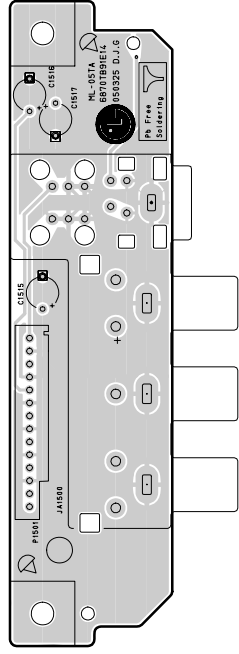
SIDE BOARD (15DL75)

BOTTOM (FOIL) SIDE



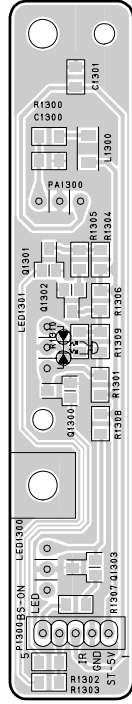
SIDE BOARD (15DL75)

TOP (COMPONENT) SIDE



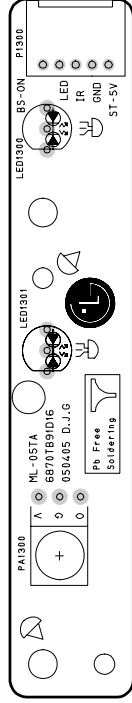
IR BOARD

BOTTOM (FOIL) SIDE



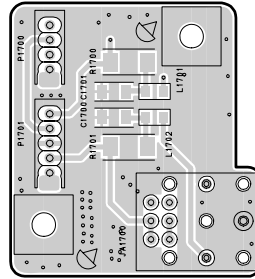
IR BOARD

TOP (COMPONENT) SIDE



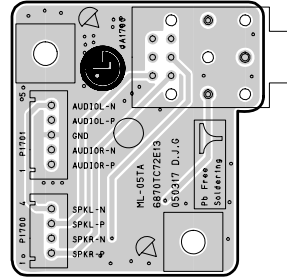
HEADPHONE BOARD (20DL75)

BOTTOM (FOIL) SIDE



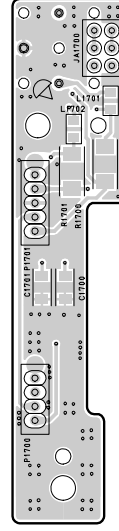
HEADPHONE BOARD (20DL75)

TOP (COMPONENT) SIDE



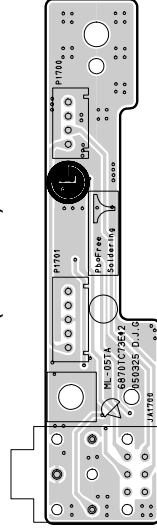
HEADPHONE BOARD (15DL75)

BOTTOM (FOIL) SIDE



HEADPHONE BOARD (15DL75)

TOP (COMPONENT) SIDE



8. SCHEMATIC DIAGRAM

MODEL : 15DL15 / 15DL75 / 20DL75

WARNING : BEFORE SERVICING THIS CHASSIS, READ THE "SERVICE SAFETY PRECAUTIONS" ON PAGE 3 OF THIS MANUAL.

CAUTION : The international hazard symbols " \triangle " in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the SERVICE SAFETY PRECAUTIONS on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

NOTE:

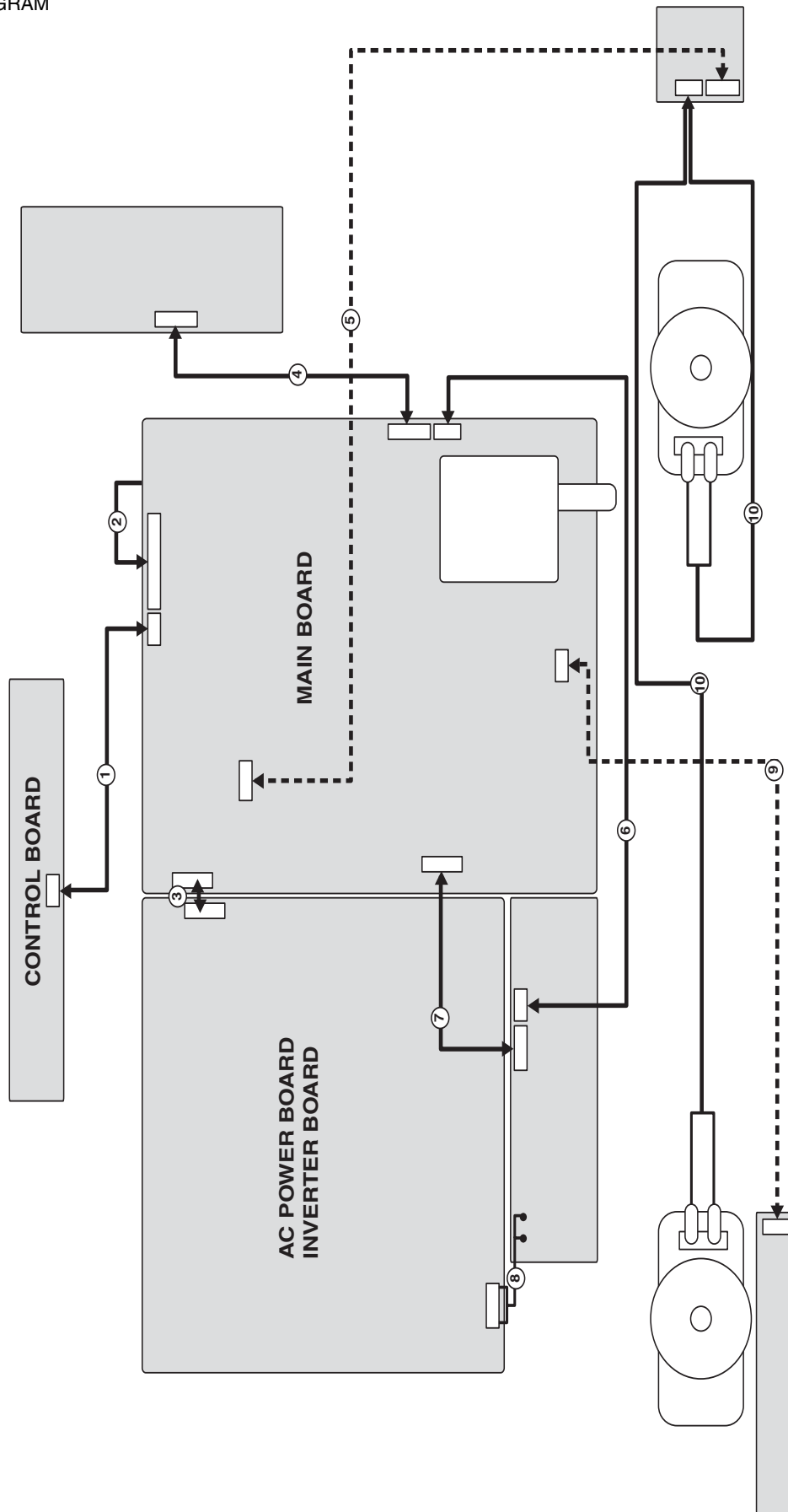
1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon composition of 1/2 watt
1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
K = $\pm 10\%$ G = $\pm 2\%$ F = $\pm 1\%$
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF , and the values more than 1 in pF.
All capacitors are ceramic 50V, unless otherwise noted as the following marks.
— $\overset{+}{|}$ — Electrolytic capacitor — $\overset{\circ}{|}$ — Mylar capacitor
3. The parts indicated with " \triangle " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary $\pm 20\%$ except H.V.

*** The information contained in this section subjects to model.**

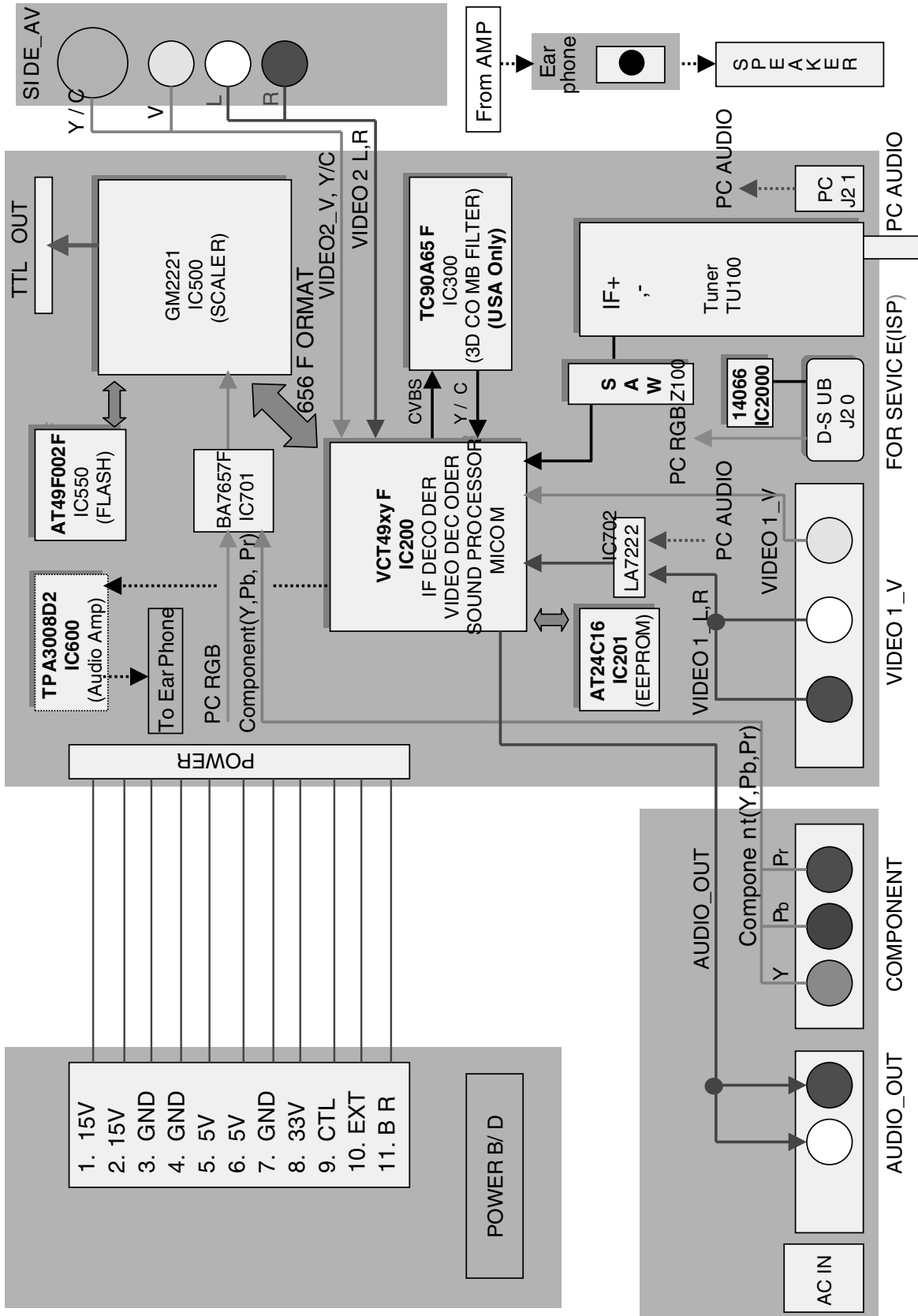
■ SCHEMATIC DIAGRAM STRUCTURE:

SCALER	1/17
3D COMB	2/17
POWER	3/17
AMP	4/17
INPUT	5/17
S/W & ROM	6/17
INTERFACE	7/17
TUNER	8/17
VCTI	9/17
D-JACK	10/17
COMPONENT JACK	11/17
EARPHONE	12/17
KEY	13/17
SCART JACK	14/17
LED & IR	15/17
SIDE AV (20DL75)	16/17
SIDE AV (15DL15/15DL75)	17/17

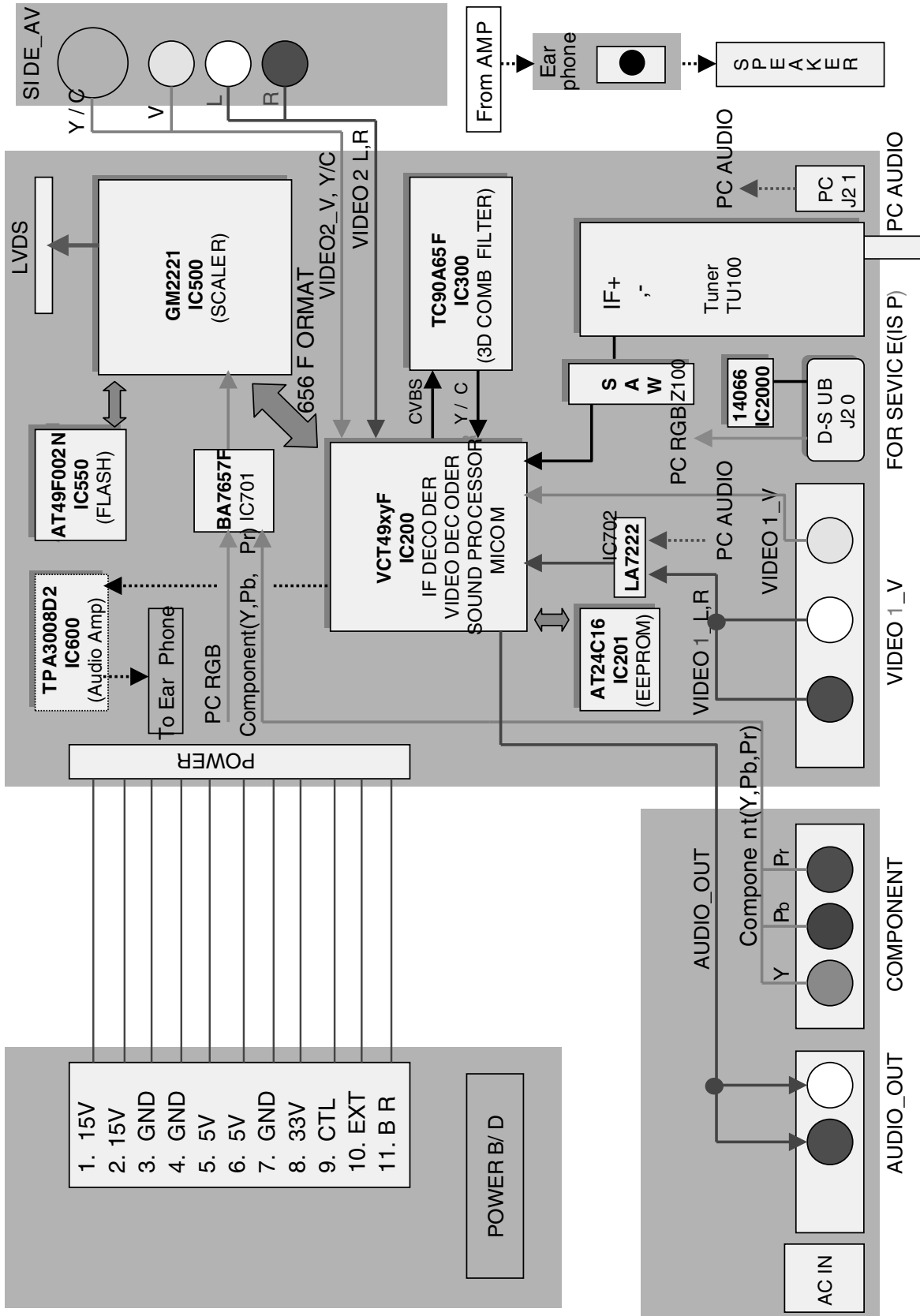
8-1. WIRING DIAGRAM



8-2. BLOCK DIAGRAM (20DL75)



8-3. BLOCK DIAGRAM (15DL15,15DL75)



1. Video Controller Unit & Display Data Conversion Unit

The video controller unit receives the video signals inputted through the tuner, AV port (VIDEO1, VIDEO2), and converts them into an ITU656 signal through the microcomputer (VCTI) combined with the video decoder that integrates various functions in one chip.

Either component YPbPr signal or PC RGB signal is selected by the switching IC and inputted to a scaler (GM2221), which is sent to the LCD module after being modified to an LVDS signal through the integrated LVDS IC.(only 15 inch Module)

Or, it is sent to the LCD module as a TTL output. (only 20 inch Module)

VCTi is the main microprocessor that handles video signal processing and sound signal processing. It also manages the RF signals received from the tuner.

The scaler can control timing to fit into the LCD panel, and can also control the size and position of the input signal.

2. Power Supply Unit

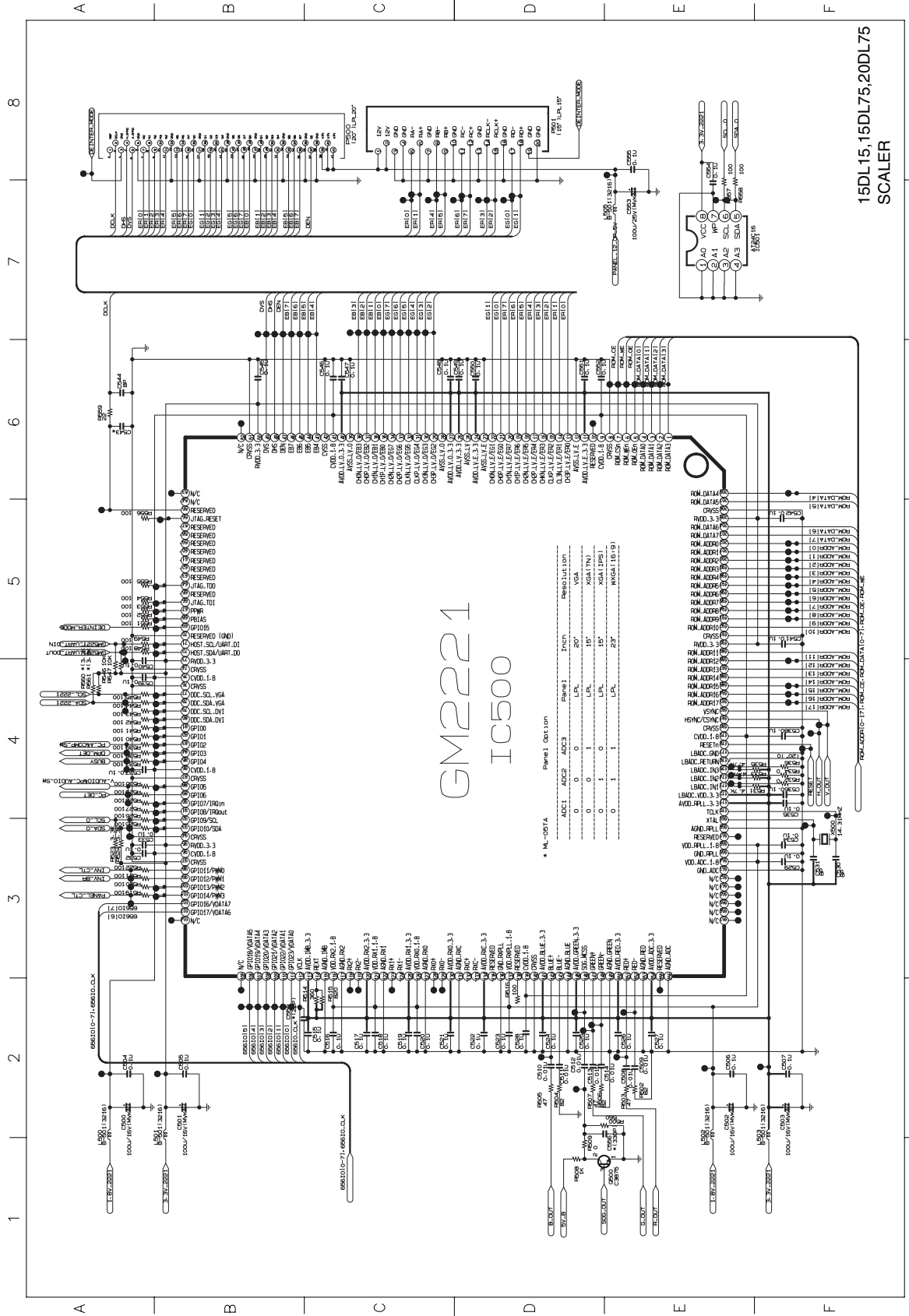
The power supply unit provides 15V and 5V DC power to the mainboard.

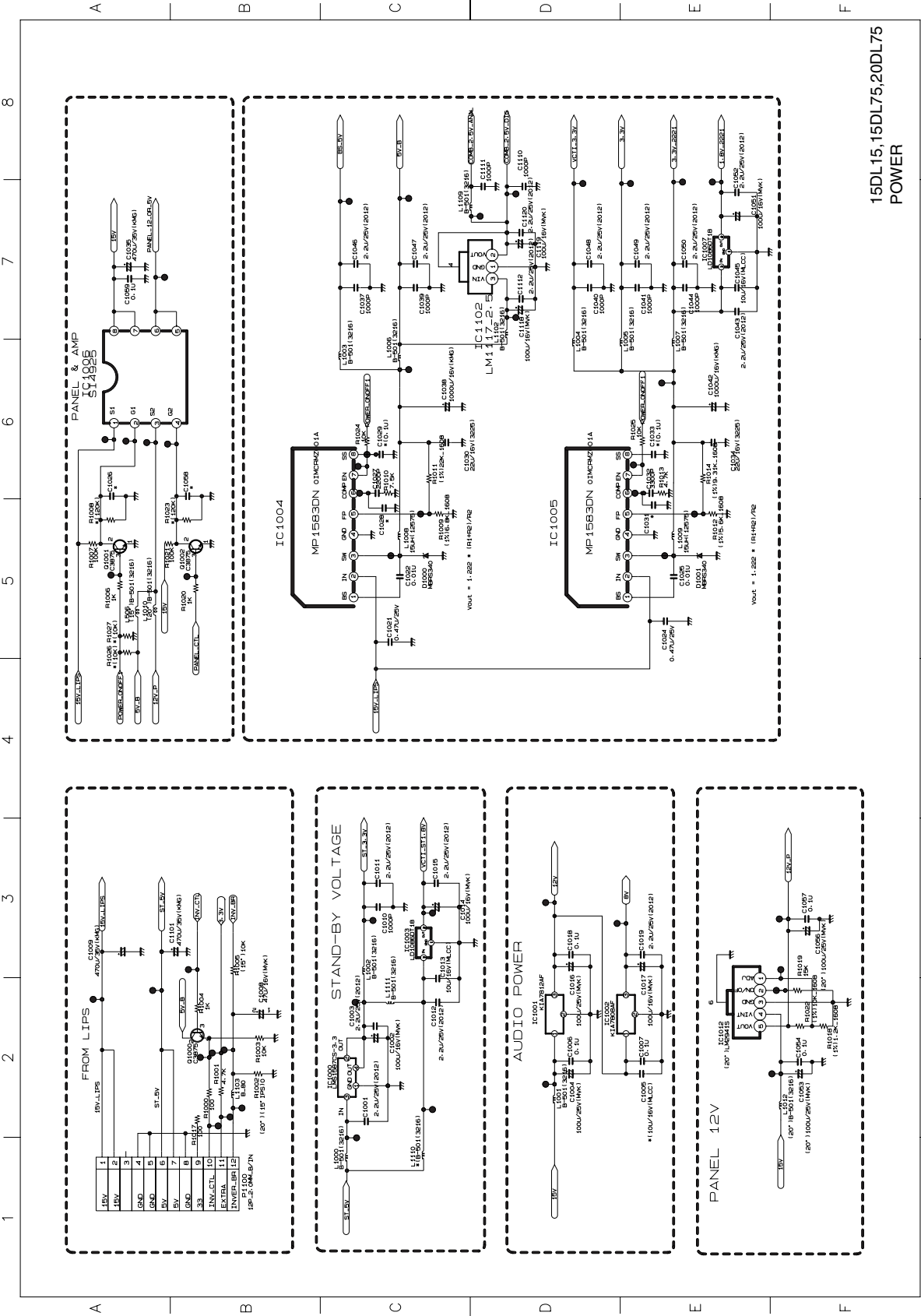
The PWM Step- Up DC/ DC Converter circuit is used to generate the 33V used for the tuner.

15V power is directly used by the sound amplifier IC and is also used to generate 5V and 3.3V power through the Step- Down DC/ DC Converter. 5V power is converted to 3.3V and 1.8V power through the regulator, which in turn supplies electrical power for ICs such as VCTI and scaler.

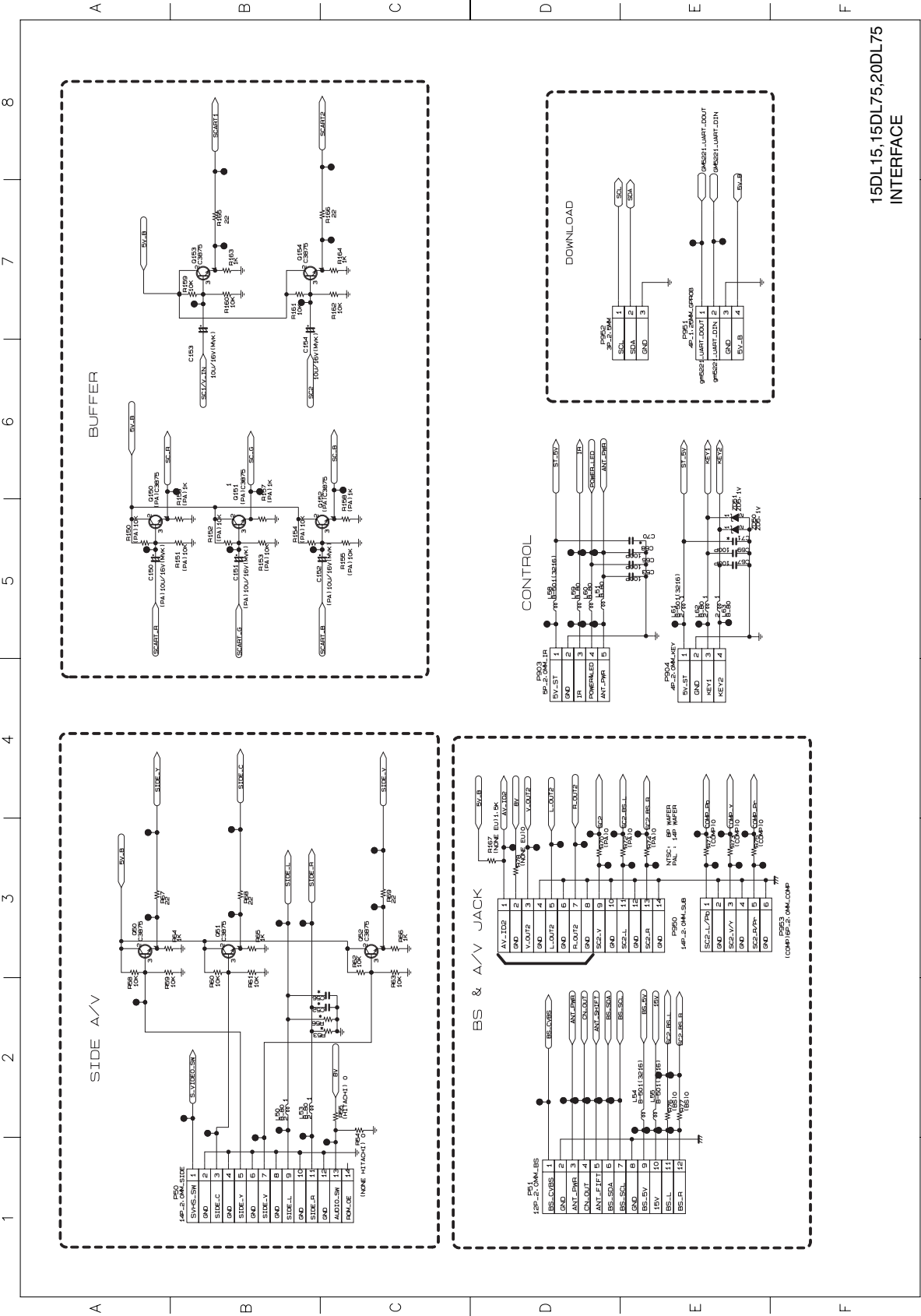
*** The information contained in this section subjects to model.**

* The information contained in this section subjects to model.

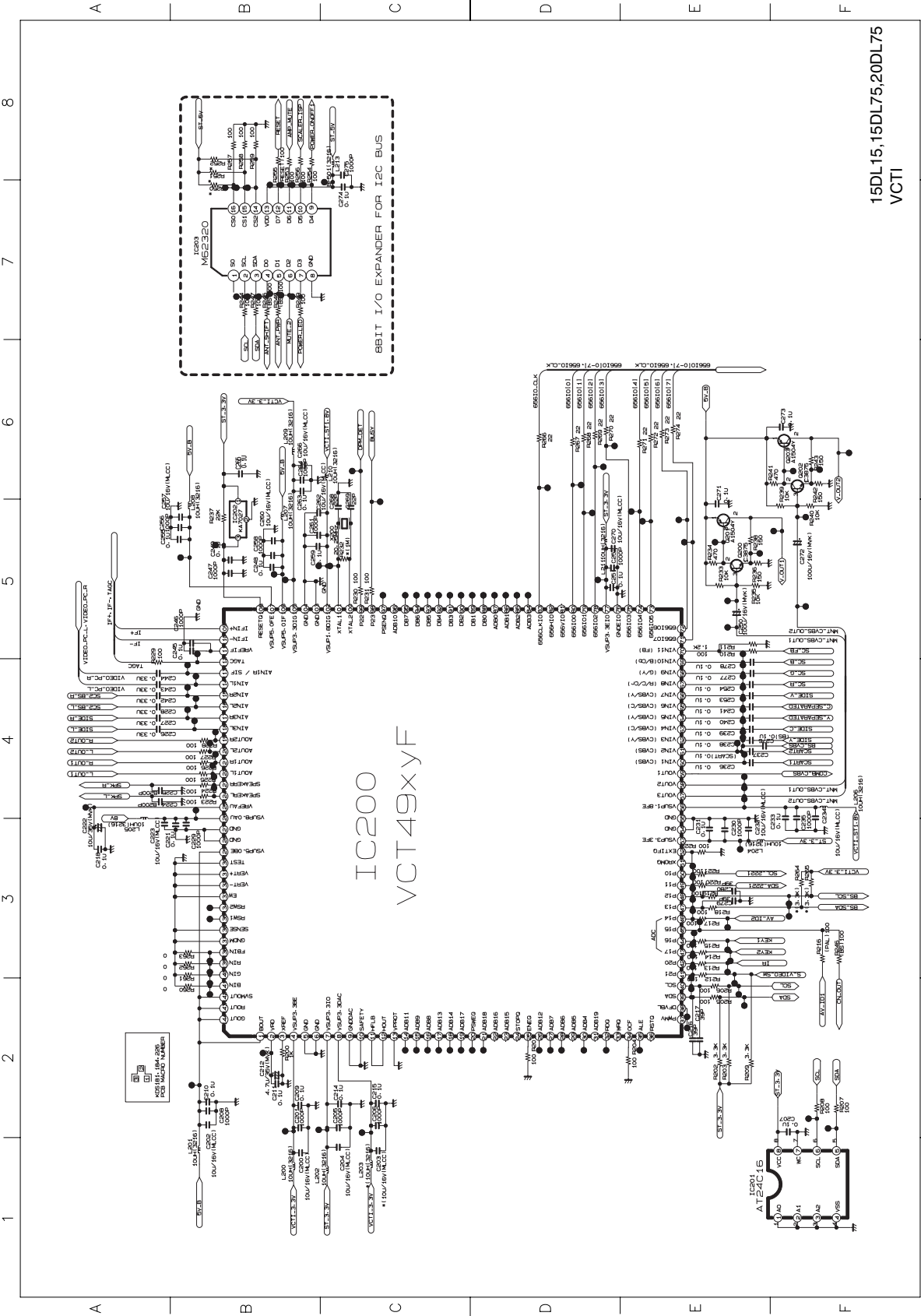




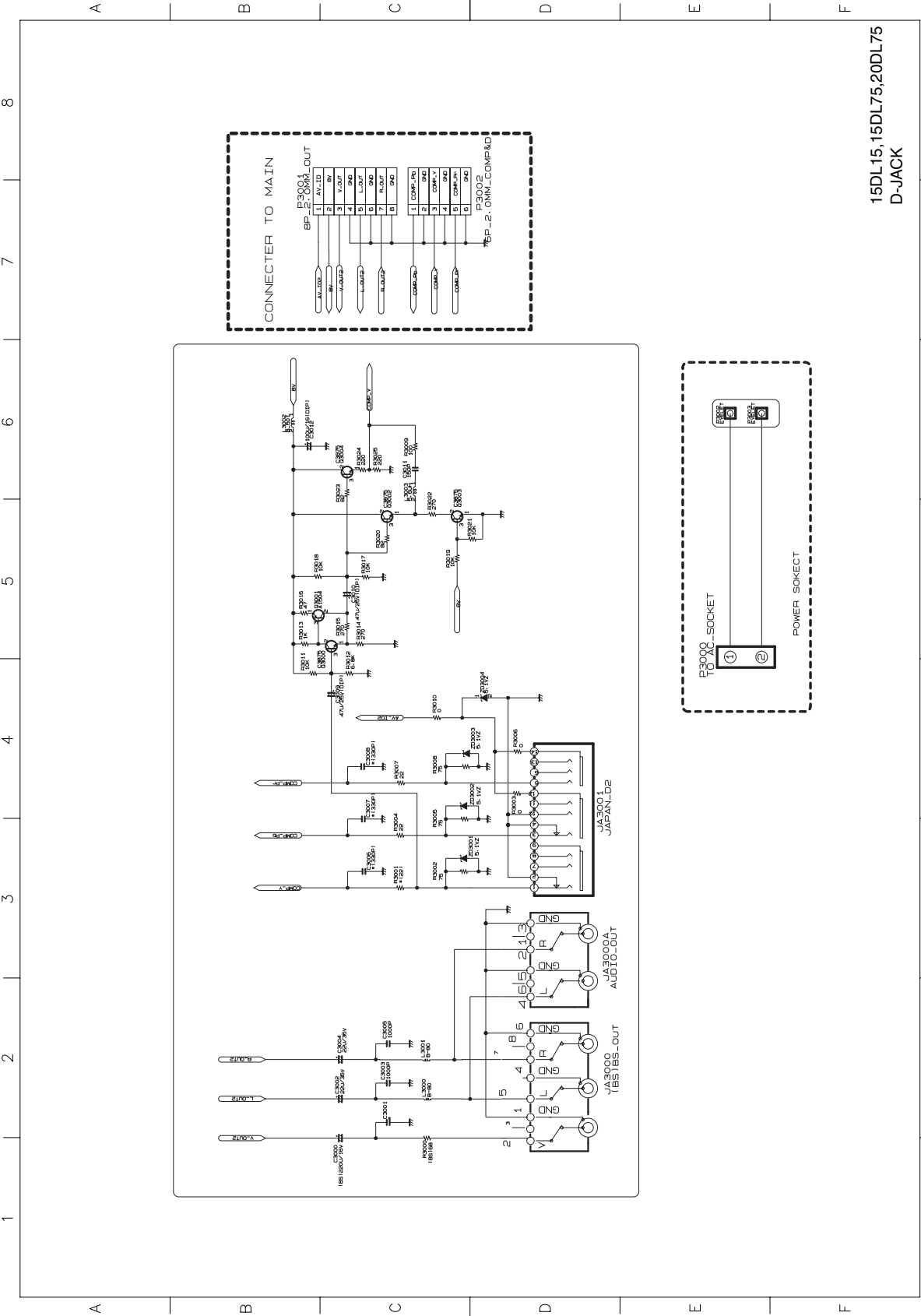
15DL15, 15DL75, 20DL75
POWER



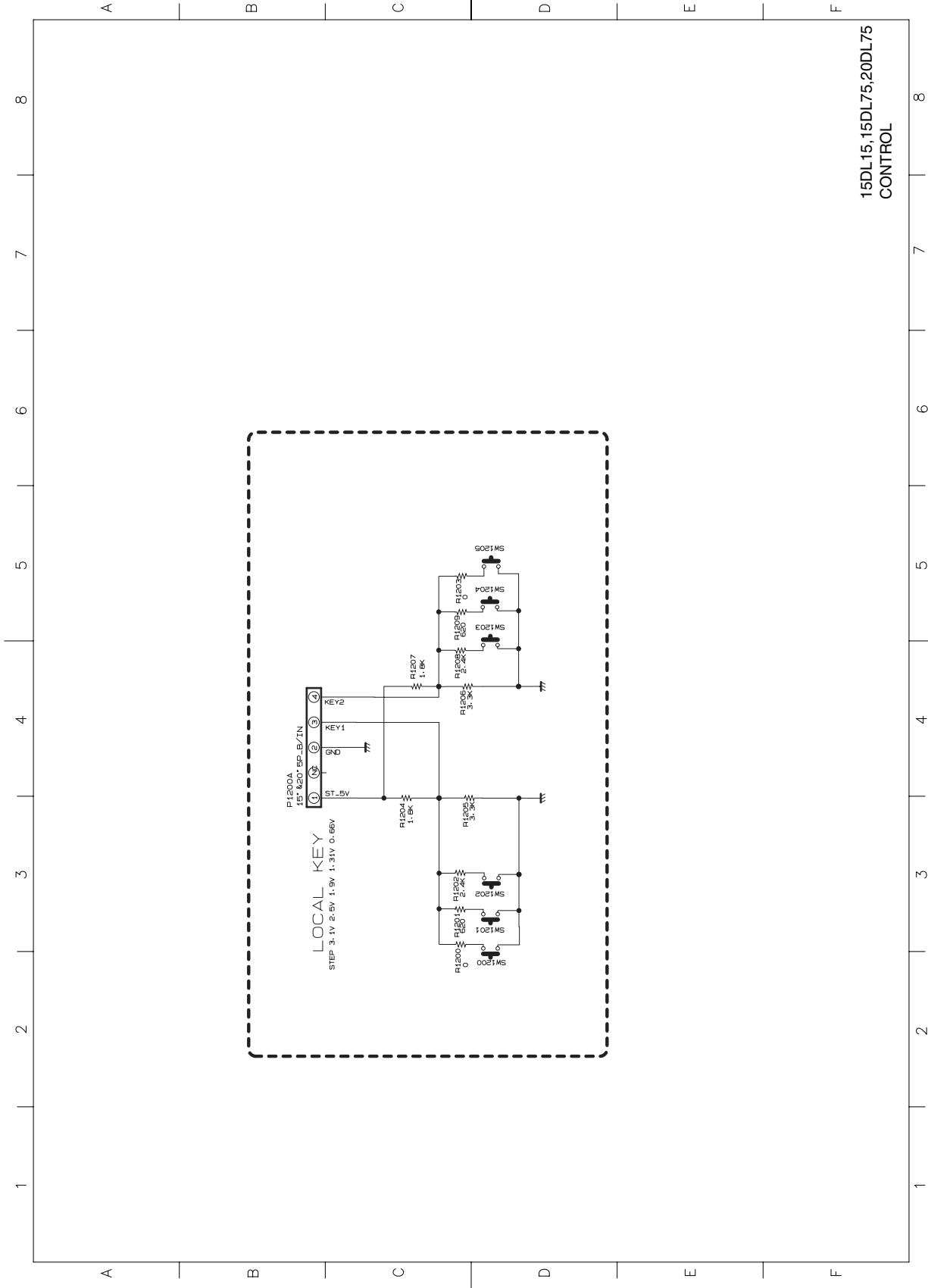
15DL15, 15DL75, 20DL75
INTERFACE



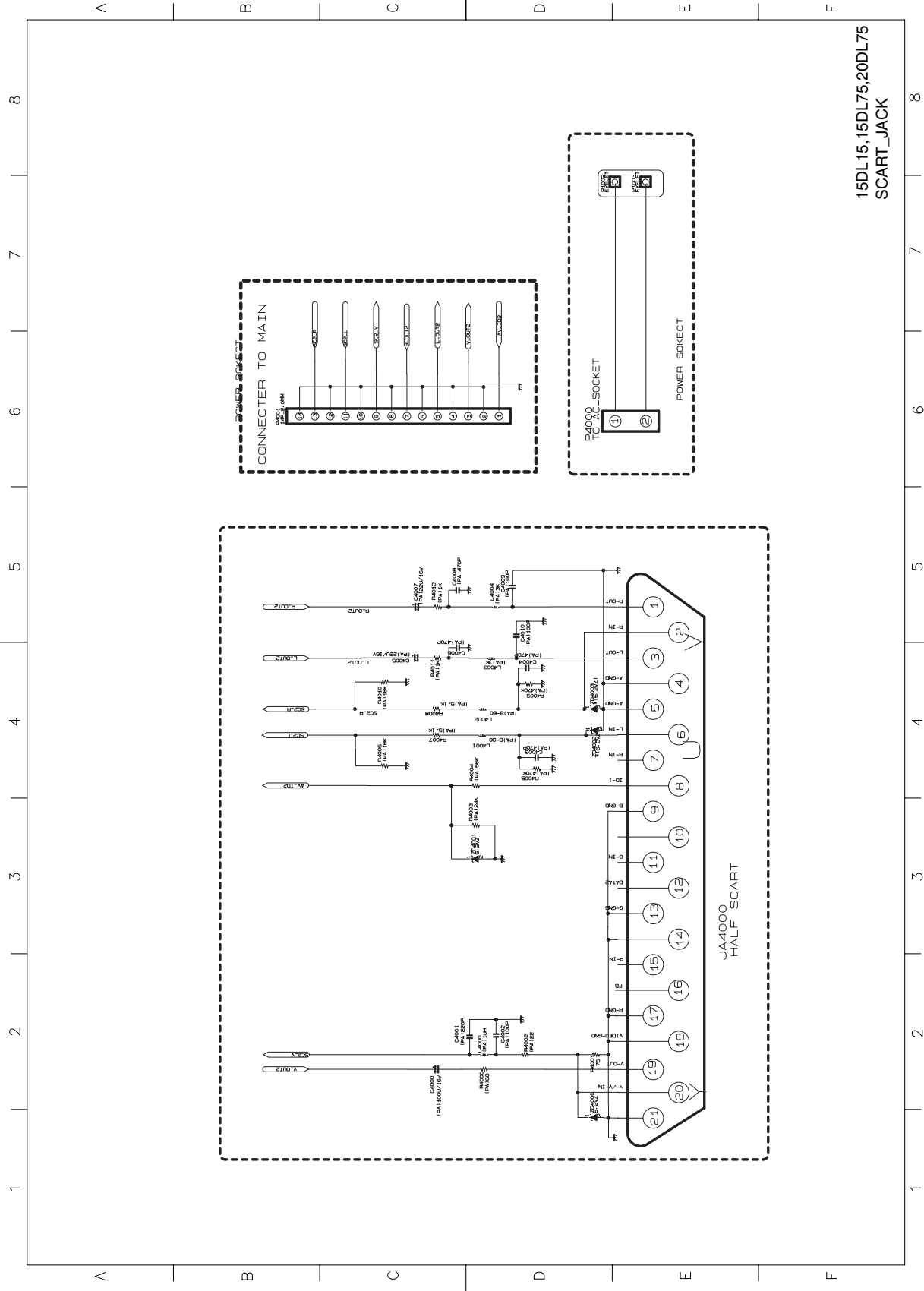
15DL15,15DL75,20DL75
VCTI



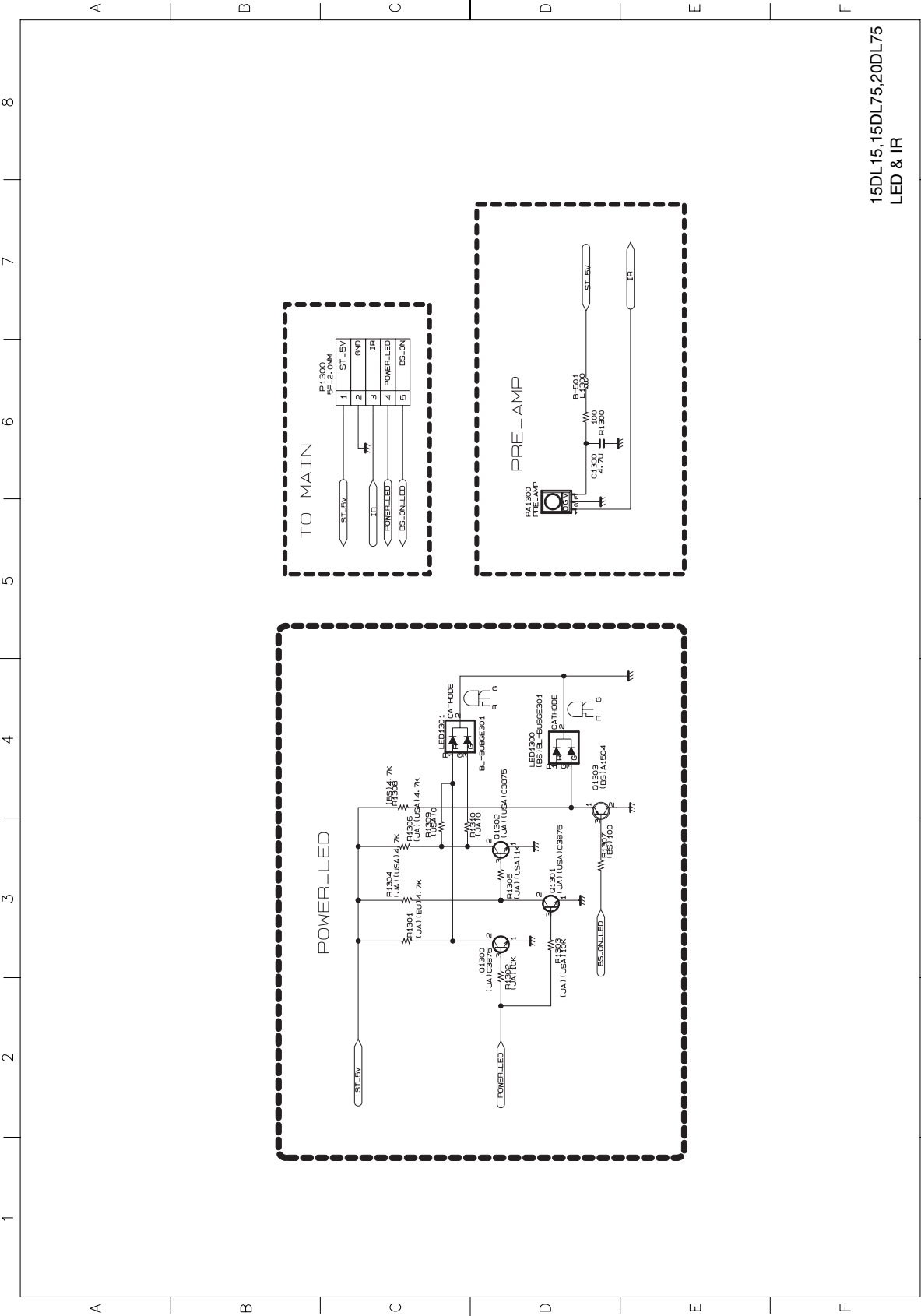
15DL15,15DL75,20DL75
D-JACK



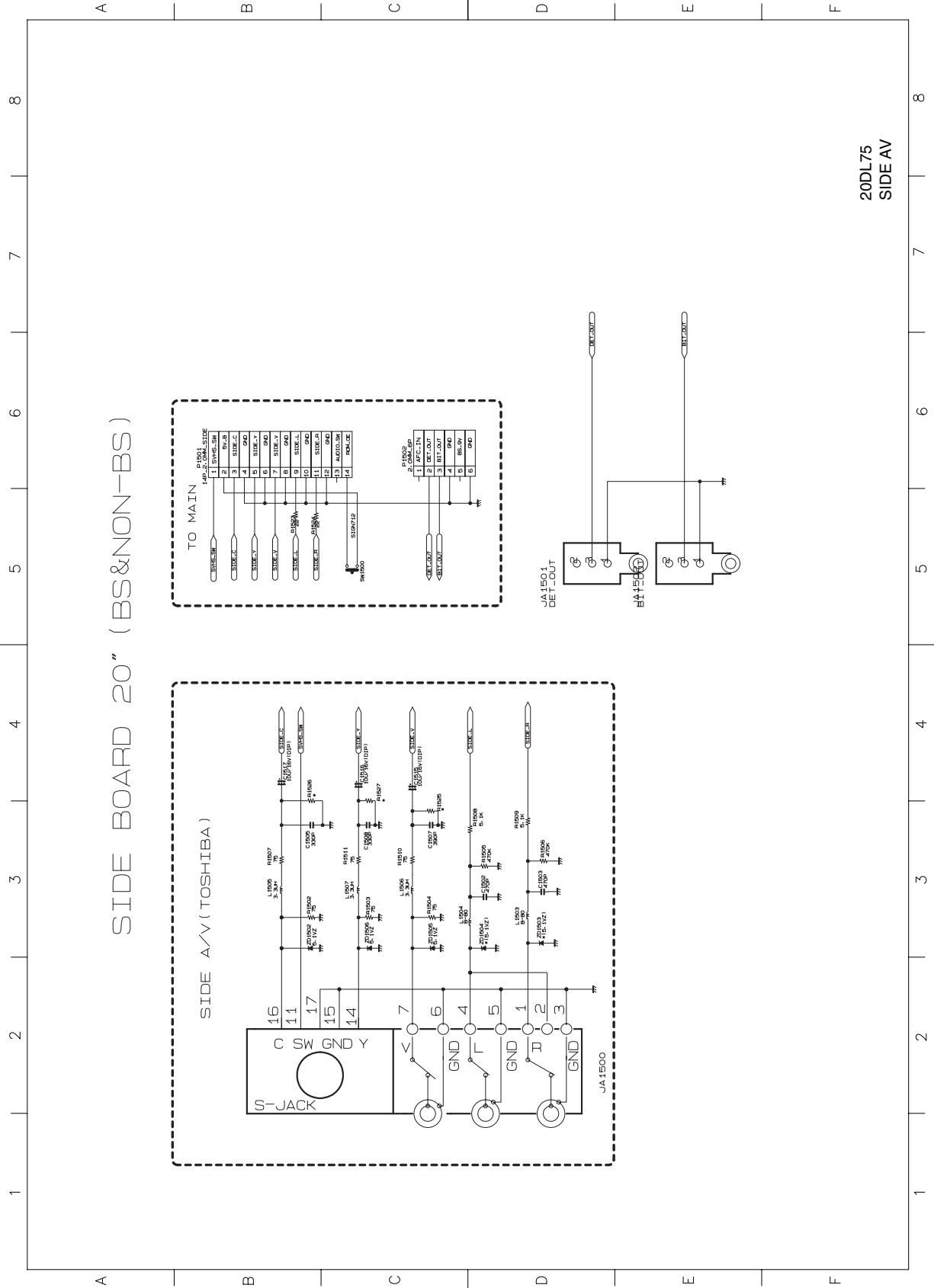
15DL15,15DL75,20DL75
CONTROL



15DL15,15DL75,20DL75
SCART_JACK



15DL15,15DL75,20DL75
LED & IR



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1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN