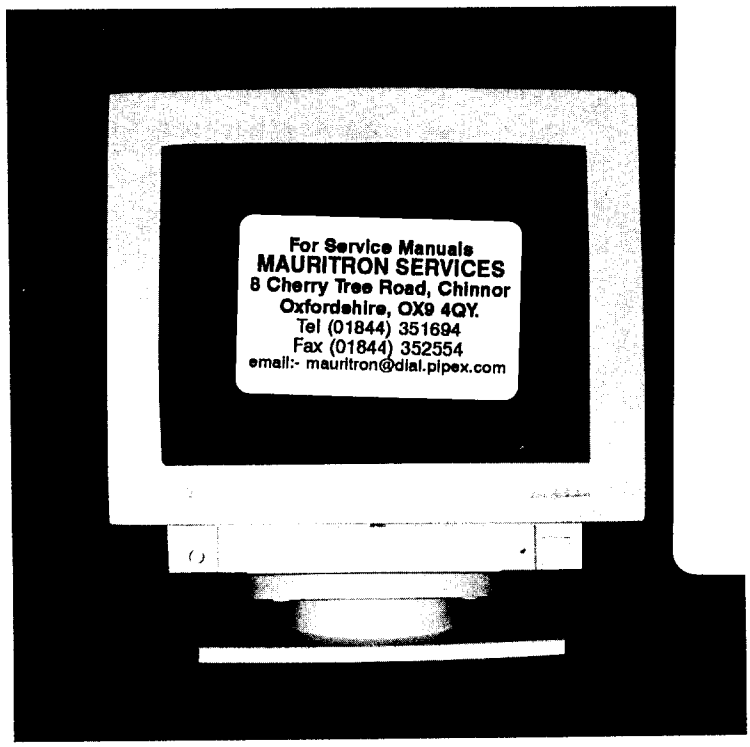
SAMTRON

15" ERGO ULTRA VGA COLOR MONITOR

SERVICE MANUAL

SC-528MX/L



SERVICE MANUAL REVISION RECORDS

REV. NO.	REVISED PAGE	DESCRIPTION OF REVISION	DATE	REMARK
A	–	MAKING OUT SERVICE MANUAL	'93. 9. 10	

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SPECIFICATION

Picture tube	M36KUK35×03(E) (SC-528MXL) M36KUN35×03(S) (SC-528MX) 15 Inches diagonal 90 degree deflection, 0.28mm dot pitch, black matrix
Input signal	Video : 0.7Vp-p Analog level positive Sync : TTL level
Display Colors	Any Colors
Synchro-nization	Horizontal : 30~64KHz Vertical : 50~90Hz
Resolution	640 dots(H) ×350 Lines 640 dots(H) ×400 Lines 640 dots(H) ×480 Lines 800 dots(H) ×600 Lines 1024 dots(H) ×768 Lines 1280 dots(H) ×1024 Lines
Video band width	75MHz(-3dB)
Display area	Horizontal : 260±4mm Vertical : 195±4mm
Ac Input voltage	AC90V ~ 264V(47~63Hz)
Power consumption	80W(MAX.) ±10%
Dimension	354(W) ×369(H) ×400(D) mm
Weight	13.5kg net, 17kg gross

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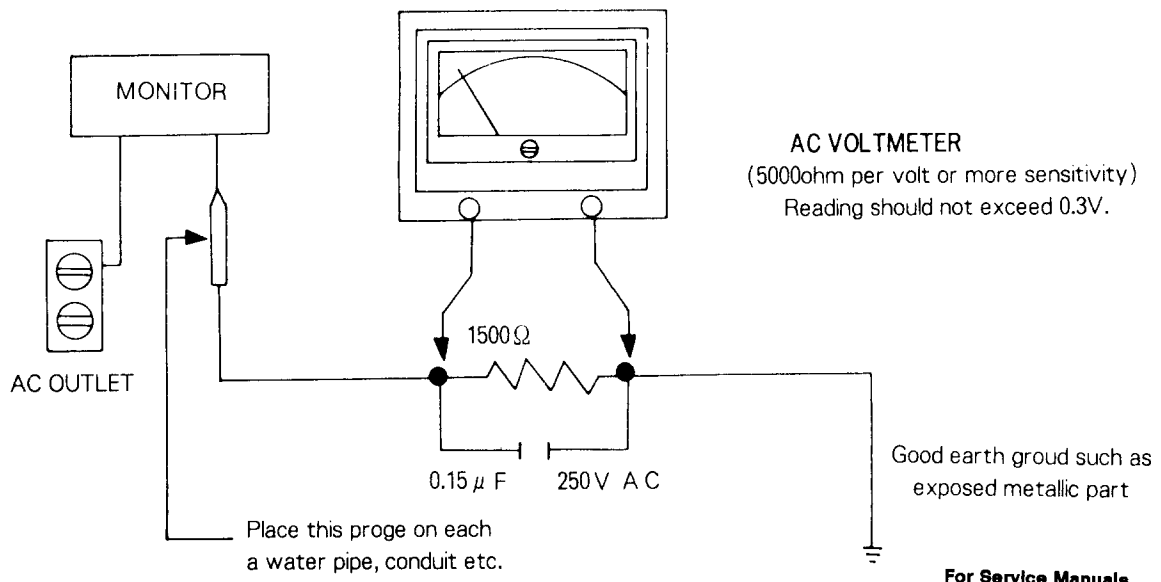
1. GENERAL INFORMATION

(1) SAFETY PRECAUTION

WARNING : Service should not be attempted anyone untamiliar with the necessary precautions on this unit.
The following precautions are necessary during servicing.

1. Some parts such as a picture tube in this unit have special safety-relate charateistics for X-RAY RADIATION protection.
   For continued safeth, the parts replacement should be undertaken referring to item 2 below.
2. Many electrical mechanical parts in this unit have special safety-related characteristics for protection against shock hazard and others.
   These characterstics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage wattage, etc.
   Replacement parts which have these special characteristics are identifide in the manual and supplements by shading on the schematic diagram and the parts list.
   Before replacing of these components read the parts list in this manual carefully
3. When replacing chassis in the cabinet, always be certain that all the protective devices are installed properly, such as insulating covers, strain relief, etc.
4. Before replacing the back cover of the set, thoroughly inspect inside the cabinet to see that no stray parts or tools have been left inside.
5. Before returning the set to the customer always perform an Ac leakage current check on the exposed metallic parts of the cabinet, such as terminal, screwheads, metal overlays, control shafts, etc. To be sure the set in safe to operate without danger of electrical shock, Plug the AC line cord directly into a 115V AC oulet (do not use a line isolation transformer during this check). Use an AC voltmenter having 5000 ohms per volt or more sensitivity in the following manner.
   Connect a 1500 ohm, 10watt resistor, paralleled by a 0.15mfd (μF), 250VAC capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time.
   Measure the AC voltage across the combination of 1500 ohm resistor and 0.15mfd(μF) capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metailic part.
   Votage measured must not exceed 0.3V RMS. This corresponds to 0.2mA AC any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.



Voltmeter Hook-up for leakage Current check

[2] DOCUMENT DESCRIPTION

This is technical specification for a SC-528MX/L Color display monitor.
This document contrains information on all technical details of the monitor.

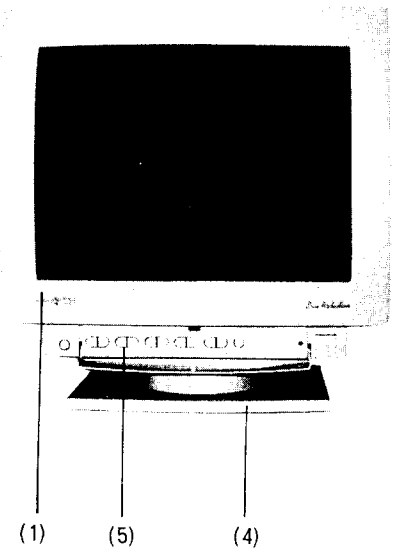
[3] PRODUCT DESCRIPTION

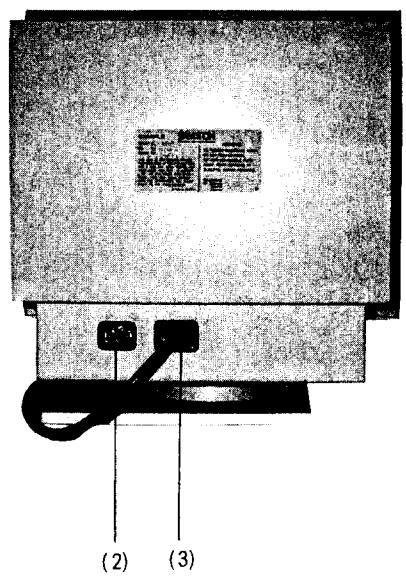
This SC-528MX/L Color display monitor to be operated in Analog Drive mode in put a highlight of these are provided below.

- Resolution : 640 Dots × 350 Lines
  640 Dots × 400 Lines
  640 Dots × 480 Lines
  800 Dots × 600 Lines
  1024 Dots × 768 Lines
  1280 Dots × 1024 Lines
- Display capability : up to 2400 Characters
- Active display area : Honizontal : 260 ± 4
  Vertical : 195 ± 4
- Horizontal frequency : 30KH$_z$~64KH$_z$
- Vertical frequency : 50~90H$_z$

USING COLOR DISPLAY MONITOR

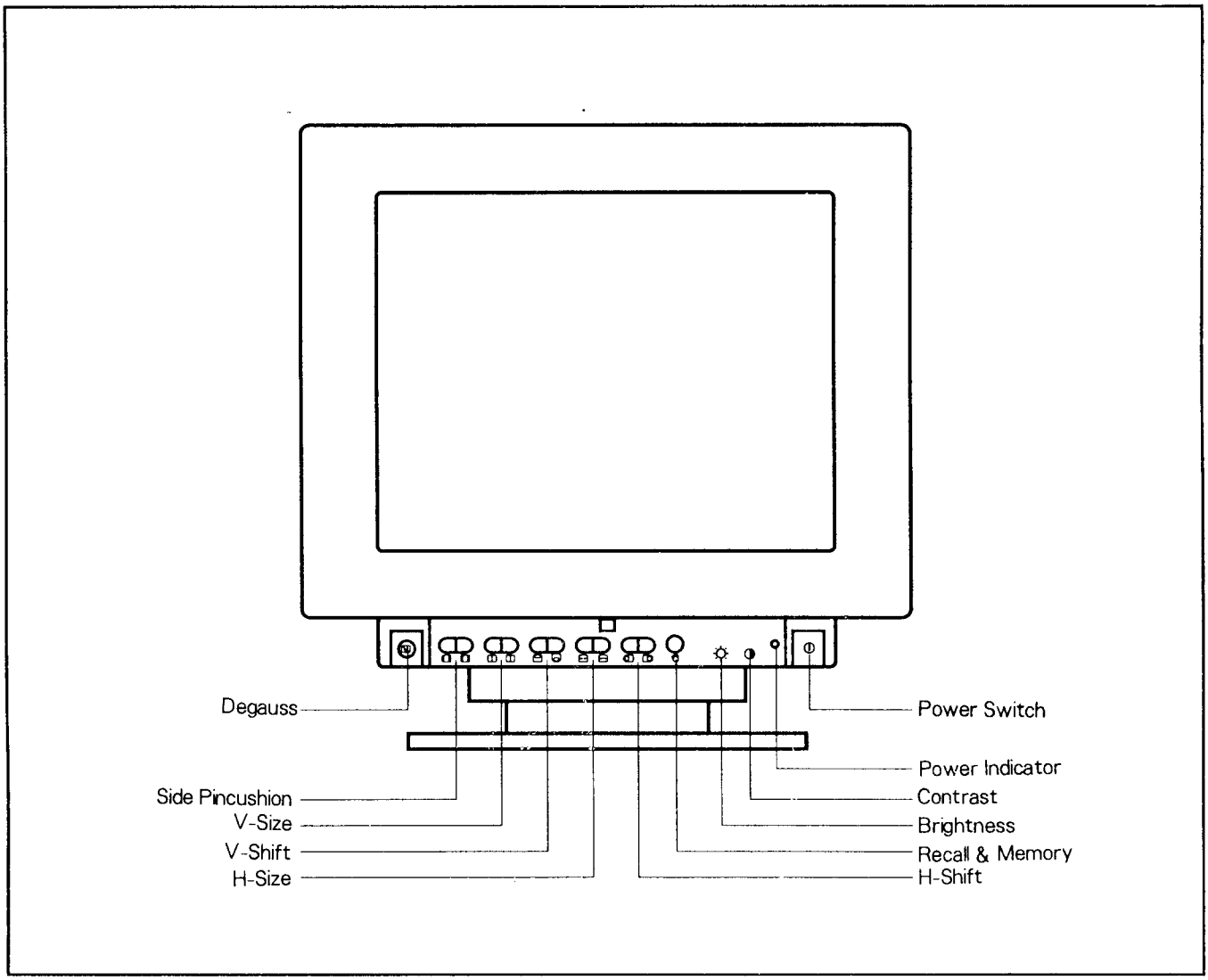
Meting SC-528MX/L Color display monitor.
Refor to the diagram below to be sure that your SC-528MX/L package includes all the items in this picture.
Save the orginal box and packing materials in case you have to ship or transport.





(1) Color display monitor
(2) Power Input
(3) Signal cable
(4) Swivel/Tilt stand
(5) Control a terminal

[4] User ADJUSTMENTS



Power switch	Turn the display on and off with this switch. O : Turn off, I : Turn on
Power Indicator	Green light.
Contrast	Turn this control to adjust the contrast between the light and dark portions of the image.
Brightness	Turn this control to adjust the overall pocture brightness
Recall & Memory	
Recall	Press this button to display factroy pre-set size, shift and side-pincusion on screen. This function is only for standard modes.
Memory	Press this button to store the image your Adjust. This function is only for non-standard modes.
H-shift	Adjusts the horizontal posithon of the image. The image should be centered on the screen.
H-size	Adjusts the horizontal width of the image. The horinontal image size should be approximately 260mm.
V-shift	Adjusts the vertical position of the image. The image should be centered on the screen.
V-size	Adjusts the vertical height of the image. The vertical image size should be approximately 195mm.
Side-Pincushion	Adjusts the left and right sides of the image. The image should be a rectangle.
Degauss	Removes the color impurities which can appear on the screen after longtime use. It is automatically activated when you tum on the display.

2. CHARACTERI

(1) GENERAL CHARACTERISTICS

NO	Description	Nominal	Remark
1	CDT(Color Display Tube)	M36KUK35×03(E) : SC-528MXL M36KUN35×03(S) : SC-528MX	SDD
2	CDT Phosphor	P 22 Dark Phosphor	WITHASN
3	D.Y Deflection Angle	90°	WITHVLF
4	Resolution	800×600/1024×768/1280×1024 Lines	Graphic Mode
5	Sybc. Freqyebcy	H : 30KH$_Z$~64KH$_Z$ V : 50~90H$_Z$	
6	Input Signal	R. G. B Analog	
7	AC Input	90V~264V	Free Voltage
8	Display Color	Unlimited	
9	Display Zone	H : 260mm, V : 195mm	
10	Display Character	Up To 2400 Characters	

(2) Electrical Characteristics

2-1. Input Power

The display device shall maintain the specified performances in the range described below.

NO	Description	Nominal	Remark
1	Power Source	AC 90V~264V	Universal Power
2	Frequency	47~63H$_Z$	
3	Power Consumption	MAX. 80W±10%	

2-2. Input Signal

The input signals shall be applied to the display devices through a signal cable which must be intemeded as part of well as the monitor. (Rof. Fig 1 Timing chart)

Section	Description	Nominal	Remark
Video Signal Red Green Blue	Video input	0.0 to 0.7V_{PP} Analog	
	Polarity	Positive	
	Pixel Rate	Up to 75MH_Z	
	Rise/Fall Time	Less than 8 nsec	
	Input impedance	75 ohms	
Horizontal -Sync.	Sync input	2.4 * Level * 5V	
	Pulse Width	1.2~3.92usec	
	Frequency	30KH_Z~64KH_Z(Autonatically)	
	Front Porch	0.18~2.22usec	
	Back Porch	1.25~4.6usec	
Vertical -Sync	Sync Input	2.4 * Level * 5	
	Pulse Width	0.05~0.2msec	
	Frequency	50~90H_Z(Automatically)	
	Front Porch	0.01~1.2msec	
	Back Porch	0.47~1.88msec	

2-3. CRT Electrode voltage

NO	Description	Nominal	Remark
1	Heater	6.3V ± 0.5V, 300mA ± 30mA	
2	Cathode(R. G. B)	80V ± 20V	
3	Gride # 1	0V ~ −70V	
4	Gride # 2	600V ± 100V	Screen
5	Gride # 3	6.5KV ± 0.5KV	Focus
6	Anode Voltage	24KV ± 1kV@0uA	

2-4. Timing Charactristic

The monitor shall be capable of displaying 5 different vertical resolution within the scan frequencies as well as the scanning mode. (REF. FIG 1 TIMING CHART)

[3] MECHANICAL CHARACTERISTICS

3-1. Weight

The total weight shall be less approximate 13.5kg.

3-2. External Dimensions(mm)

	Without Stand	With Stand
Width	354	354
Height	335	369
Length	400	400

3-3. Tilt/Swivel

The inclination of the surface of the screen shall be adjustable at least −5deg. With a min. 1deg. from the wertical. The swivel must be min. 180deg.

3-4. Tool Resin

Tool	Resin	Color
Front	KJU	PARCHMENT WHITE
Rear	KJU	PARCHMENT WHITE
Stand	KJU	PARCHMENT WHITE

3. SERVICE ADJUSTMENT

1. +B VOLTAGE ADJUSTMENT

* Receive a cross-hatch pattern signal of 640×480 mode.
* Adjust contrast and brightneiss controls to maximum.
* Adjust G2 control to optimum video luminace.
* Make sure the Ac power supply voltage is at the specified value.
* Adjust VR101 for 24.5 voltage equal to 24.5±0.3V.

2. HIGH VOLTAGE ADJUSTMENT

* Receive a cross-hatch pattem signal of 640×480 mode.
* Adjust VR803(H/V adjust) for the voltage of pin No.2 of FBT equal to 54±0.3V.

3. HORIZONTAL DEFLECTION CIRCUIT ADJUSTMENT

3-1. Horizontal oscillation Frequency adjustment(H-HOLD)
* Disconnect the signal cable from signal source.
* Adjust VR301(horizontal frequency control) for the horizontal frequency equal to 31.5±0.2KH$_{z}$
* The horizontal frequency for the other modes are automatically set by interface circuit.

3-2. Horizontal position adjustment. (H-SHIFT)
* Receive a cross hatch pattern signal of all specified standard modes.
* The picture is to be placed at the center position of the CDT screen using control box button(H-SHIFT)

3-3. Horizontal width adjustment(H-WIDTH)
* Adjust contrast and brightness controls to maximum.
* Receive a cross-hatch pattern signal (800×600 mode 37.9KH$_{z}$ 60H$_{z}$)
* Adjust VR703(H-WIDTH control) and make the video to full screen. (Initial DAC'S Value is maximum)
* Receive cross-hatch pattern for all modes and make H-SIZE to 260mm using control box button(H-SIZE)

4. VERTICAL DEFLECTION CIRCUIT

4-1. Vertical linearity adjustment(V-LIN)
* Receive a cross hatch pattern signal (640×480 mode)
* Adjust the size button so that the height becomes 195mm. (Use control box button)
* Adjust for optimum linearity using control box button. (V-LIN)

4-2. Vertical size adjustment
* Receive a cross hatch pattern signal of all secified standard modes.
* Make the height to 195mm using control box buttom. (V-SIZE)

4-3. Vertical position adjustment(V-SHIFT)
* Receive a cross hatch pattern signal of specified standard modes.
* The picture is to be placed at the center position of the CDT screen using control box buttom. (V-SHIFT)

5. VIDEO CIRCUIT ADJUSTMENT

5-1. Controls function

* Brightness volume (VR906)
  This knob controls the black level of the image.
* R. G. B gain volumes (VR401, VR402, VR403)
  These volumes control the gain of RED, GREEN, BLUE video pre-amplifier.
* R. G. B bias volume (VR405R, VR405G, VR405B)
  These volumes control the bias voltage of RED, GREEN, BLUE cathode of CDT.
* Screen volume (On the FBT)
  This volume controls the screen voltage of the CDT.
* Cpntrast volume (VR404)
  This knob controls the contrast of the image. It establishes the gain of the video amplifier but does not affect the raster Luminance.
* Focus volume. (On the FBT)
  This volume controls the focus fo the picture.

6. WHITE BALANCE ADJUSTMENT

* Adjust R. G. B gain and bias volumes to mechanical center.
* Operate the set for 15 minutes to warm up.
* Degauss the CDT face fully with degaussing tool.
* Adjust screen volume for the luminace of the raster equal to 1~3 F/L.
* Adjust bias volume of R. G. B so that the color of the raster may becomes white.
* Now adjust the sub-bright volumes for the luminance of the raster equal to 0.1~1.0 F/L. (without video signal)
* Receive a full white pattern sinal. (640 × 480)
* Adjust R. G. B gain volume for the specified white color.
  Use the color analyzer equipment.

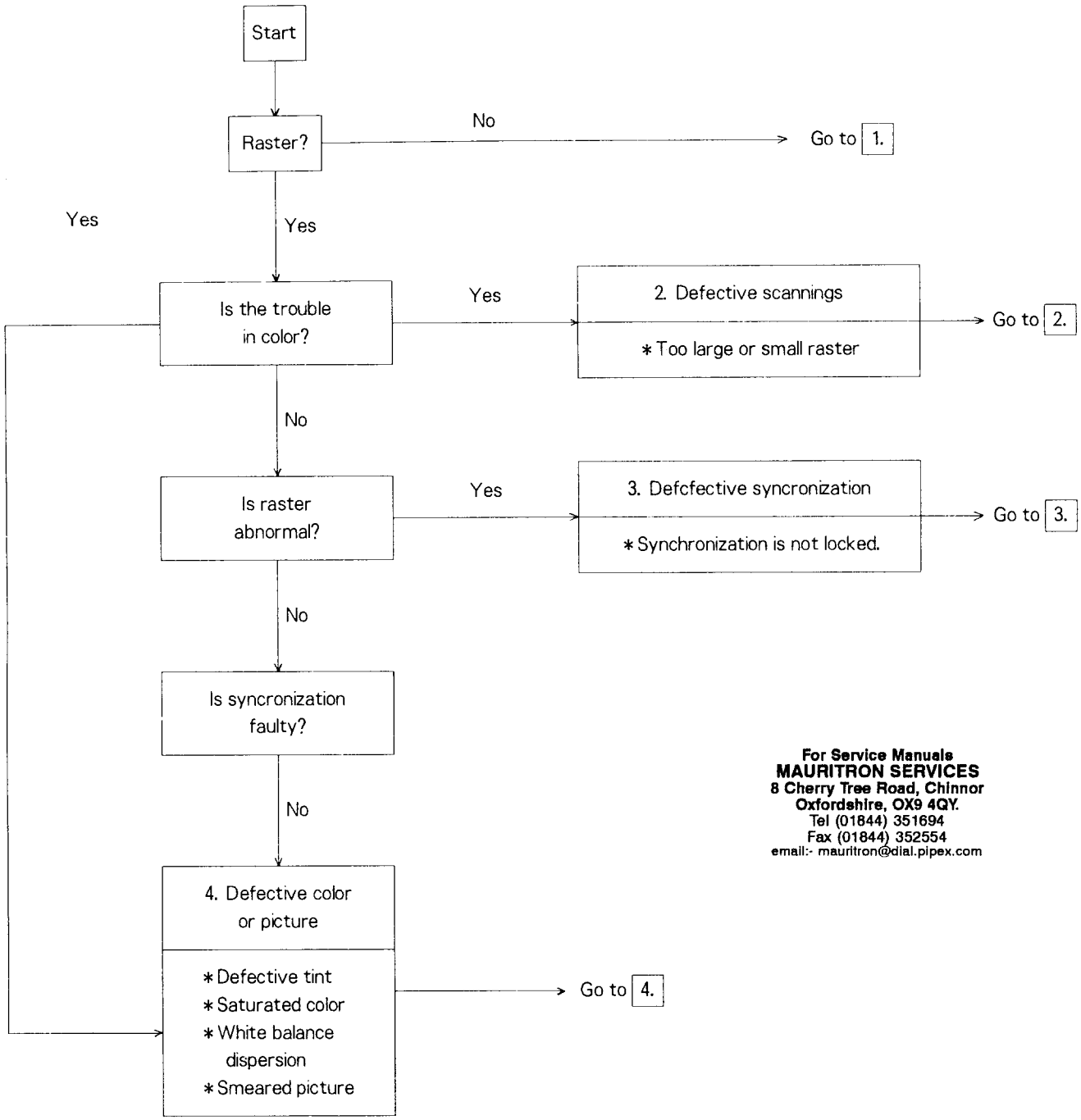
※Standard Color coordinate. (@10 F/L, 25 F/L)
$X = 0.281 \pm 0.02$, $Y = 0.311 \pm 0.02$

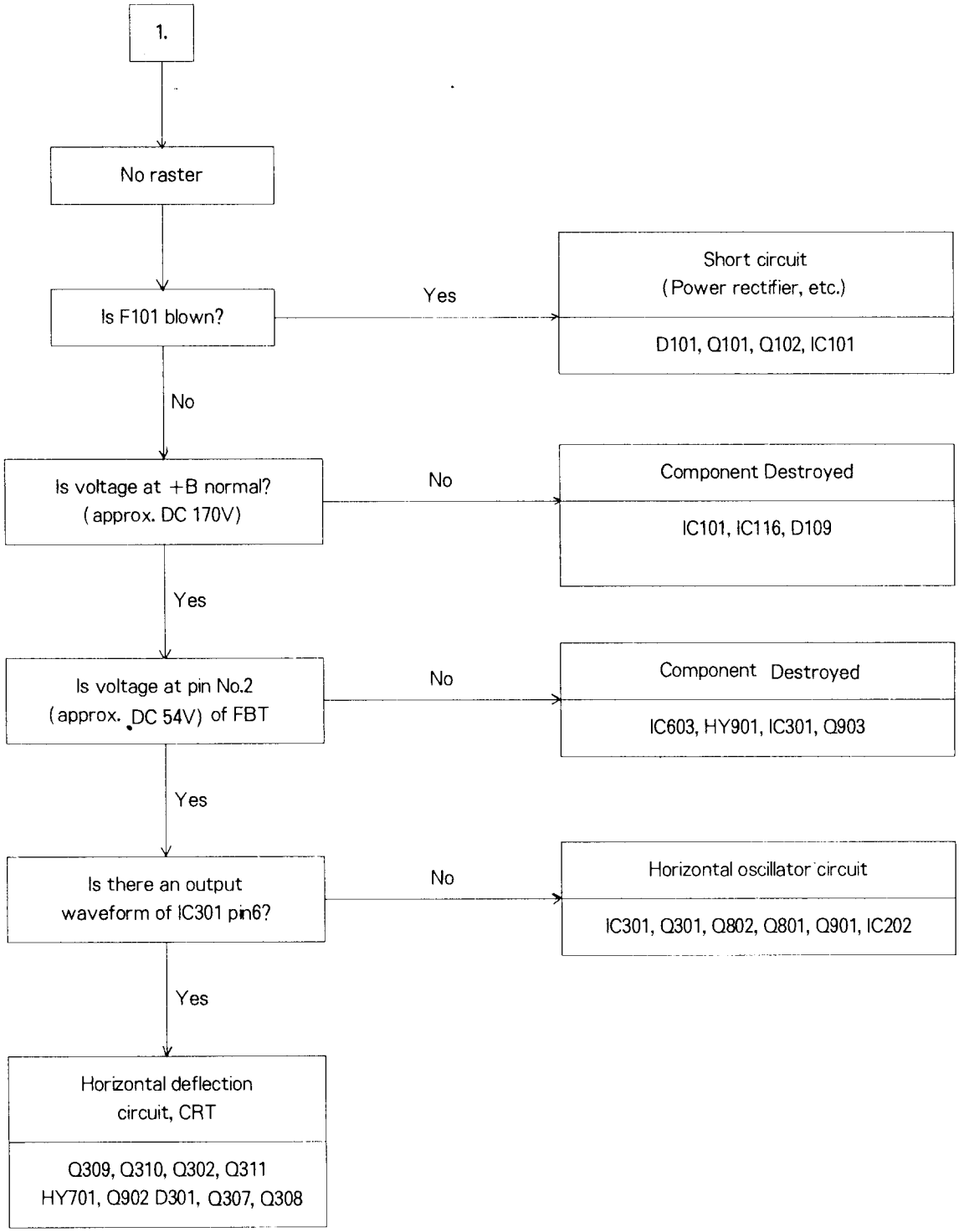
※Maximum brightness : More than 25 F/L.
- With full white pattern. (640 × 480 mode)
- Brightness V/R : Set to raster cut off.
- Checking area : Center of display.
- Contrast V/R : Set to maximum.

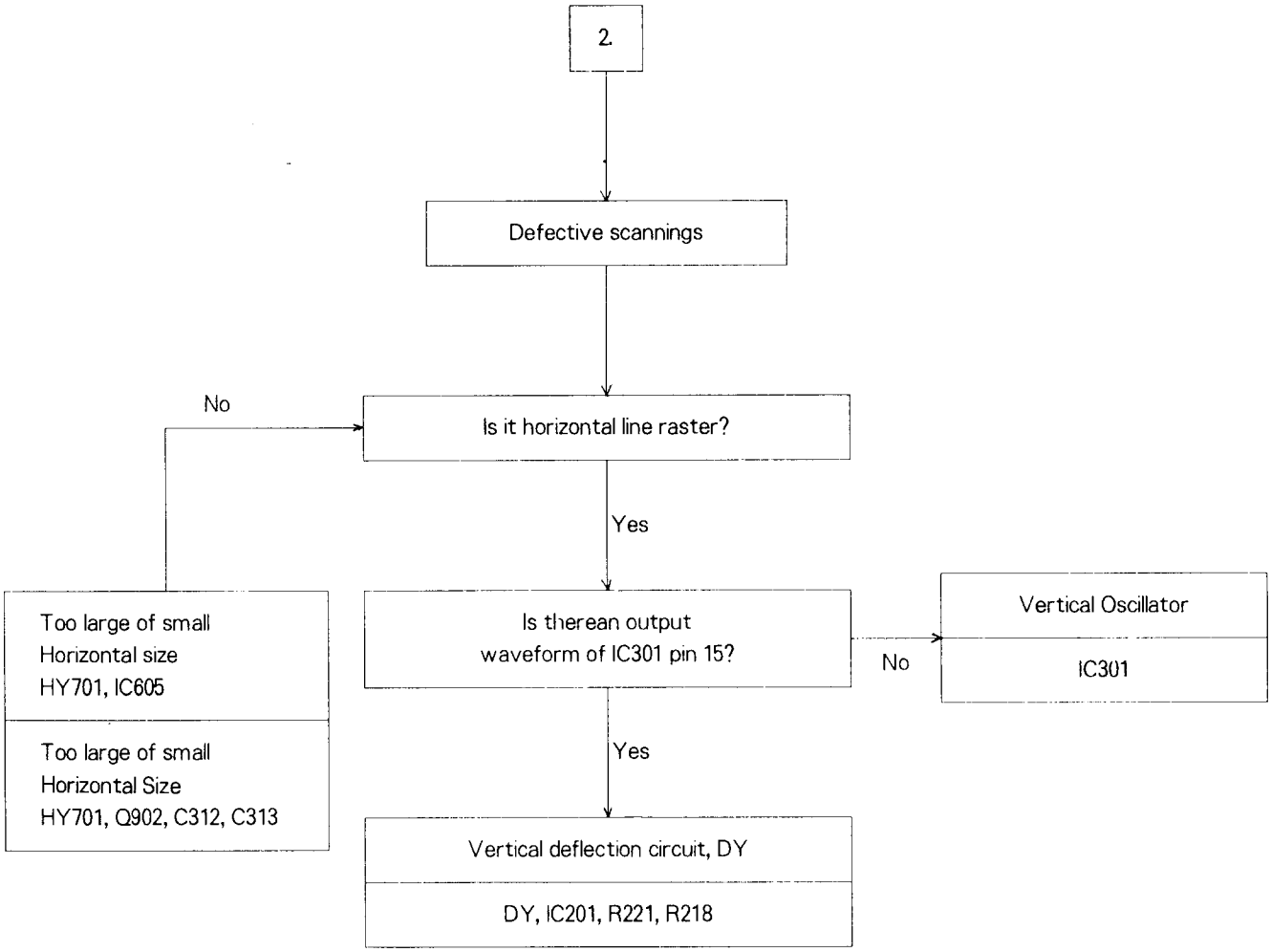
7. FLASHOVER PROTECTION

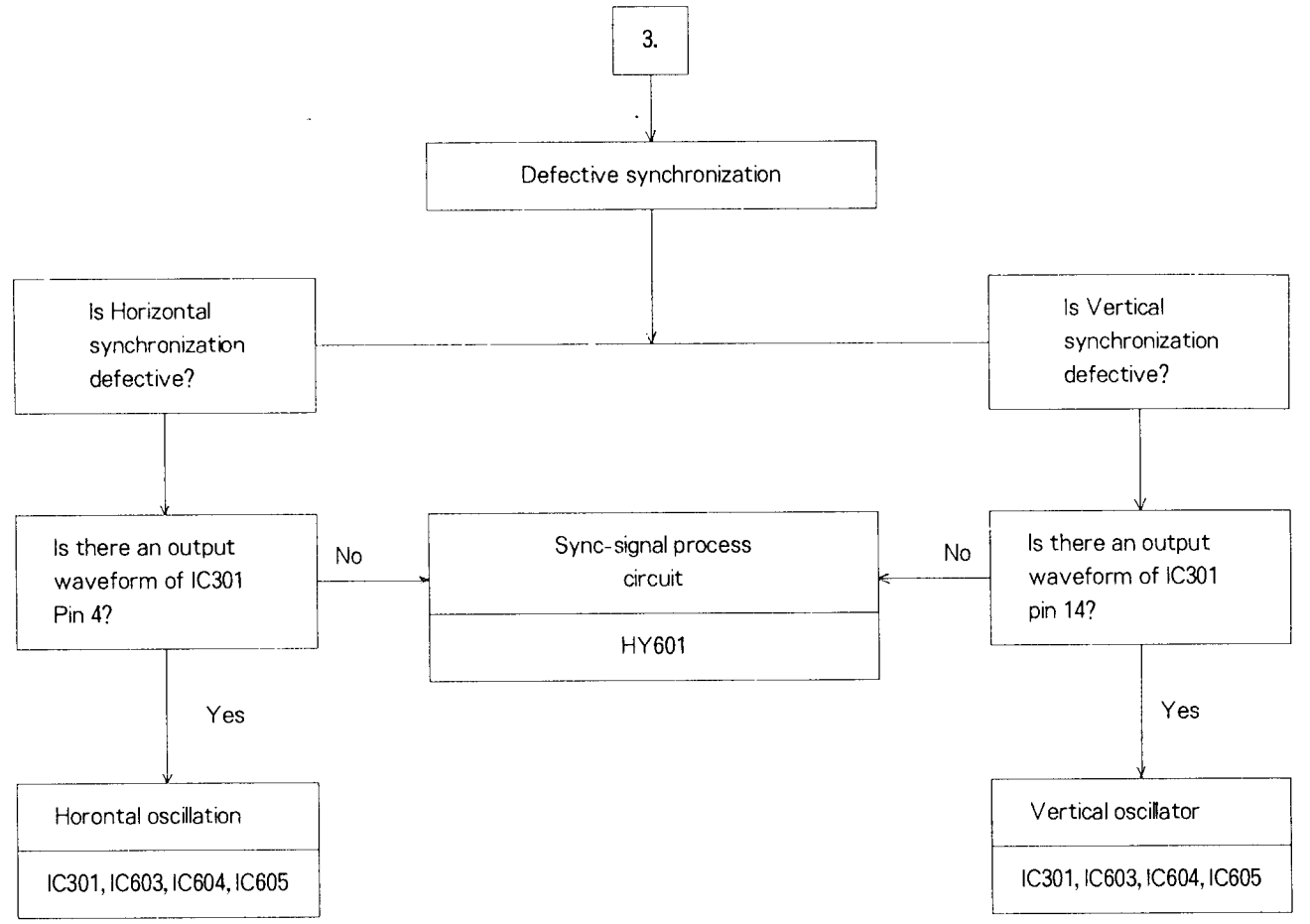
Due to the high voltage in this tube(CRT), internal flashover occurrs, Protection must be proveded using spark gap to prevent flashover from destroying the cathode or other internal circuits.
These spark gaps shall be connected with each electrode in socket PCB assembly.

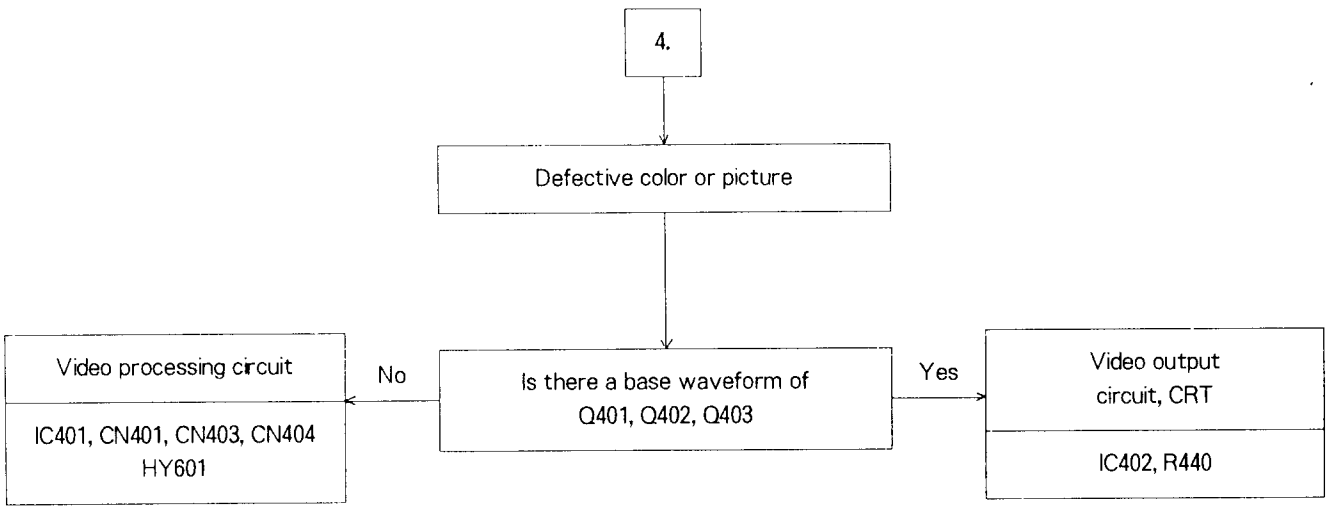
4. TROUBLE SHOOTING




1.
No raster
Is F101 blown?
Yes
Short circuit
(Power rectifier, etc.)
D101, Q101, Q102, IC101
No
Is voltage at +B normal?
(approx. DC 170V)
No
Component Destroyed
IC101, IC116, D109
Yes
Is voltage at pin No.2
(approx. DC 54V) of FBT
No
Component Destroyed
IC603, HY901, IC301, Q903
Yes
Is there an output
waveform of IC301 pin6?
No
Horizontal oscillator circuit
IC301, Q301, Q802, Q801, Q901, IC202
Yes
Horizontal deflection
circuit, CRT
Q309, Q310, Q302, Q311
HY701, Q902 D301, Q307, Q308


2.
Defective scannings
No
Is it horizontal line raster?
Yes
Too large of small
Horizontal size
HY701, IC605
Too large of small
Horizontal Size
HY701, Q902, C312, C313
Is therean output
waveform of IC301 pin 15?
No
Vertical Oscillator
IC301
Yes
Vertical deflection circuit, DY
DY, IC201, R221, R218


3.
Defective synchronization
Is Horizontal synchronization defective?
Is Vertical synchronization defective?
Is there an output waveform of IC301 Pin 4?
No
Sync-signal process circuit
HY601
No
Is there an output waveform of IC301 pin 14?
Yes
Yes
Horontal oscillation
IC301, IC603, IC604, IC605
Vertical oscillator
IC301, IC603, IC604, IC605


4.
Defective color or picture
Video processing circuit
IC401, CN401, CN403, CN404
HY601
No
Is there a base waveform of Q401, Q402, Q403
Yes
Video output circuit, CRT
IC402, R440

5. THEORY OF OPERATION

1. GENERAL

The circuit of this monitor could be devided into four sections.
One of them is power supply section, and the others are the interface, sweep video, and CDT drive section.

2. POWER CIRCUIT

This switching mode power supply is adopted for this circuit.
The chassis (secondary side) is insulated from the power source (primary side) by the transformer T101.
By the winding of the transformer T101 connected to the collector of IC101 and the other winding connected to the control circuit, tne IC101 is submitted to negative feed back and it operates as a blocking oscillator.
When the voltage of power source or load curren is varied, it is detected by the winding and the voltage is applied to pin2 of IC101.
When the voltage applied to pin2 is varied, the conducting time of IC101 is varied to compensate output voltage for the change.
Which makes output voltage of T101 stabilized.
The range of operating frequency is 22KHz~70KHz

3. INTERFACE CIRCUIT

This is composed of two block.
One is detector of input polarity and MAC II.
The other is MCU circuit which detects frequency and polarity, control image state.
It uses Micro controller unit, which has four functions as follows.

* MCU identifies each mode by processing the received frequency and polarity of the sync. from computer.
* MCU controls EEPROM and DAC IC to output proper signal for picture size, frequency, picture position, etc.
* When monitor is turned on or mode is changed, mute function is operated.
* The data about image state can be memorized in EEPROM by MCU.

4. VIDEO DIRVE CIRCUIT

The R. G. B input signal with analog level are applied to the pre-amplifier LM1203.
This section amplifies the output signal of a generator enough to dirve a video output circuit.
Video gain is controlled by the DC voltage of pin 12 and DC bias is controlled by the DC voltage of the pin 15, 19 and 24.
Clamping pulse is applied to pin 1 through HY601.

5. VIDEO OUTPUT CIRCUIT

The LM2416T IC has 3 channels of R. G. B in one chip.
The LM2416T, the CRT video dirver, is a large signal amplifier with wide bandwidth.
It is designed to swing large voltage in a short duration.
The dirven signals are applied tp CDT cathodes.

6. DEFLECTION CIRCUIT

This circuit has two ICs. IC301 is a monolithic IC for horizontal and vertical sync processing. And IC201 is a monolithic IC for vertical power amplifier.

6-1. Vertical Deflection Circuit.

The vertical sync. signal with negative polarity is applied to pin 14 of IC 301, The vertical frequency of the oscillator can be controlled by the voltage at pin 12 of IC301.

The vertical height is controlled by the voltage at pin 16 of IC301.

The vertical linearity is controlled by the voltage at pin 17 of IC301.

The ramp signal from pin 15 of IC301 is applied to pin 1 of IC201.

The IC201 is a power amplifier.

Vertical position is determined by the DC cuttent flowing through vertical DY.

6-2. Horizontal Deflection Circuit.

The horzontal sync. signal with negative polarity is applied to pin4 of IC301.

The horizontal frequency of the oscillator can be controlleed by the voltage at pin 1 of IC301.

VR301 adjusts the freearunnig frequency and MCU traces the horizontal syncronization according to input signal.

($30KH_Z$~$65KH_Z$)

The phase of horizontal saw-tooth wave is compared with that of fly back pulse and horizontal sync. signal at AFC circuit of the IC301.

By adjusting the voltage of pin NO. 10, the horizontal position of picture is varied.

The horizontal frequency oscillation is obtained from pin3 of IC302.

The output of IC301 comes out of pin 6 and is fed to the horizontal drive circuit.

The horizontal output circuit uses a resonant flyback system to drive the deflection yoke.

6-3. EHT Generator Circuit.

The output of horizontal drive circuit is fed to the resonant flyback system which generates EHT voltages to drive CDT.

7. SIDE PINCUSHION CORRECTOR

This circuit compensates the east/west pincushion distortion.

The signal processing of east/west correction is done in IC701.

The vertical ramp signal from the IC301 and the ramp singal from integrator are mixed and mixed output signal is coupled through C703.

The east/west correction is adjusted by DC voltage of Integrator input.

VR701 controls the key stone correction.

8. PROTECTION CIRCUIT

If a failure, which causes high voltage increased, occurrs(such as opened sweep capacitor or failed power regulator), the cathode voltage of D801 will be increased by the FBT(T303).

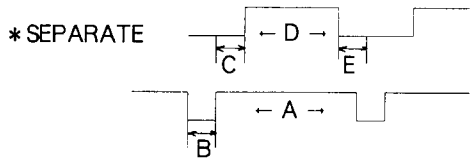
Then the protection occurrs by turning on Q802 as a result of the breakdown of D801.

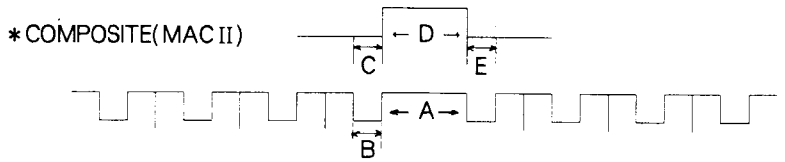
When thes happens, the oscillator signal coming from IC301 can no longer drive Q302. then the set is turned off.

Therefore in order to restart operation, the monitor must be turned off and on again.

6. FIGURES

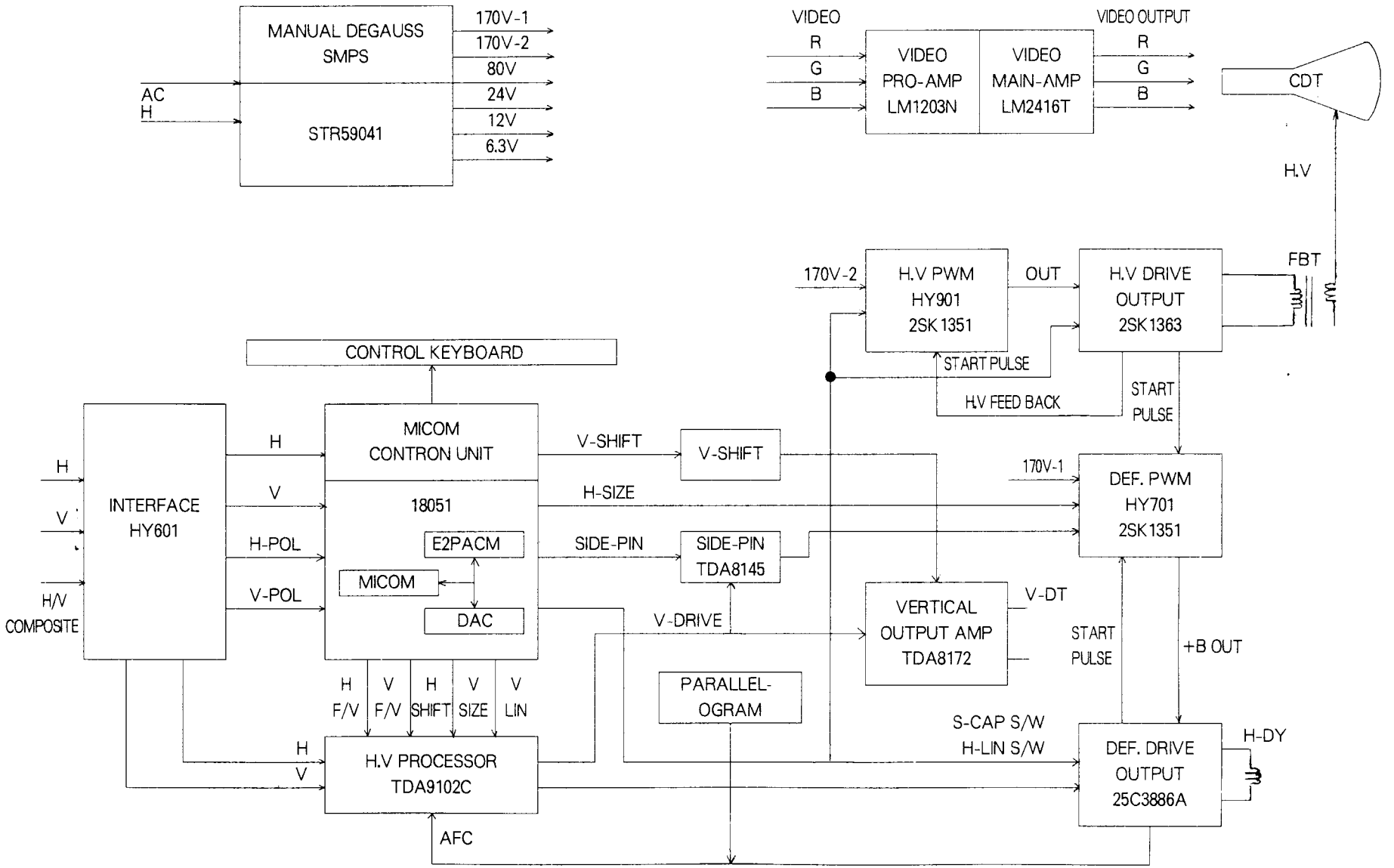
(1) TIMING CHART

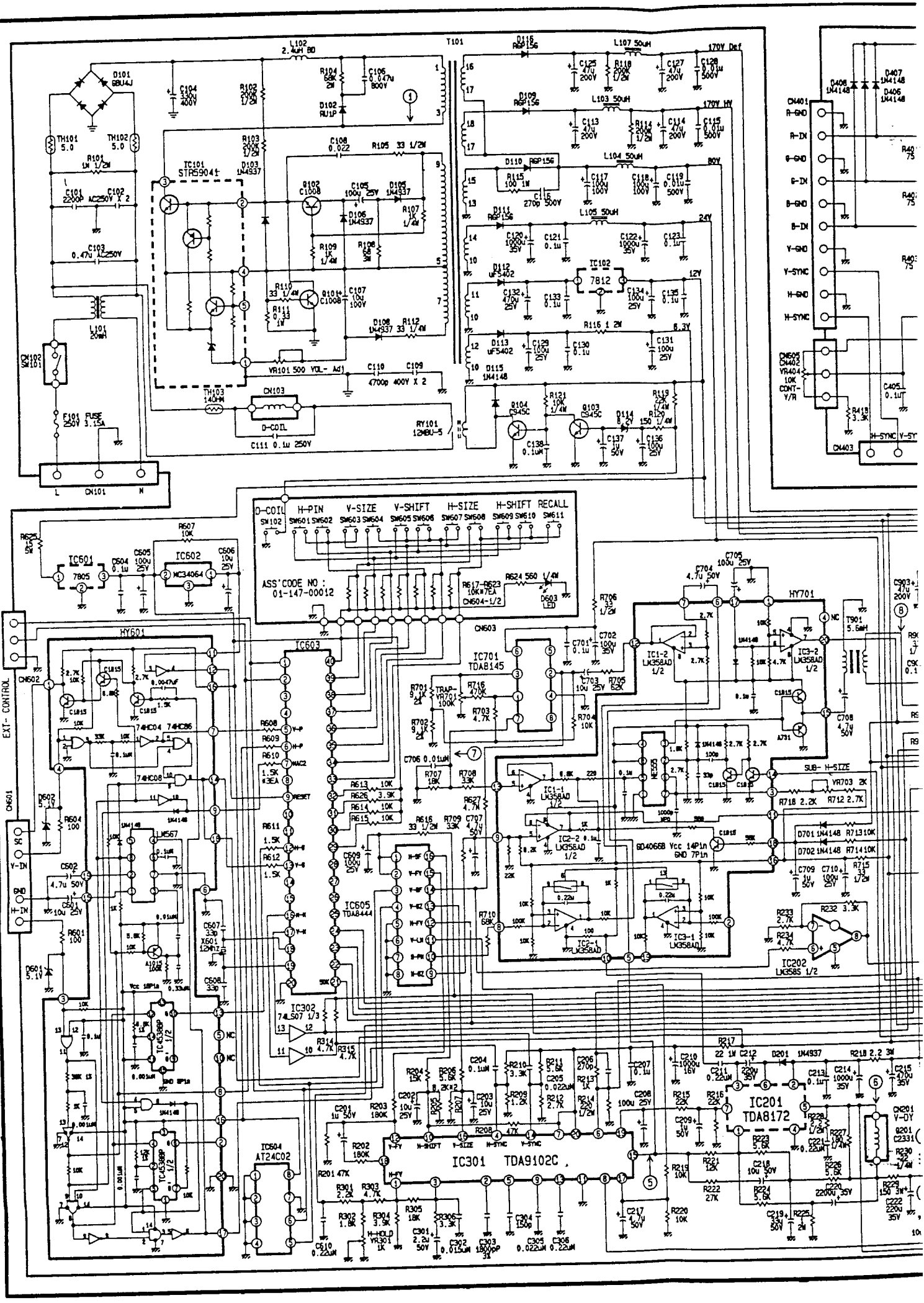


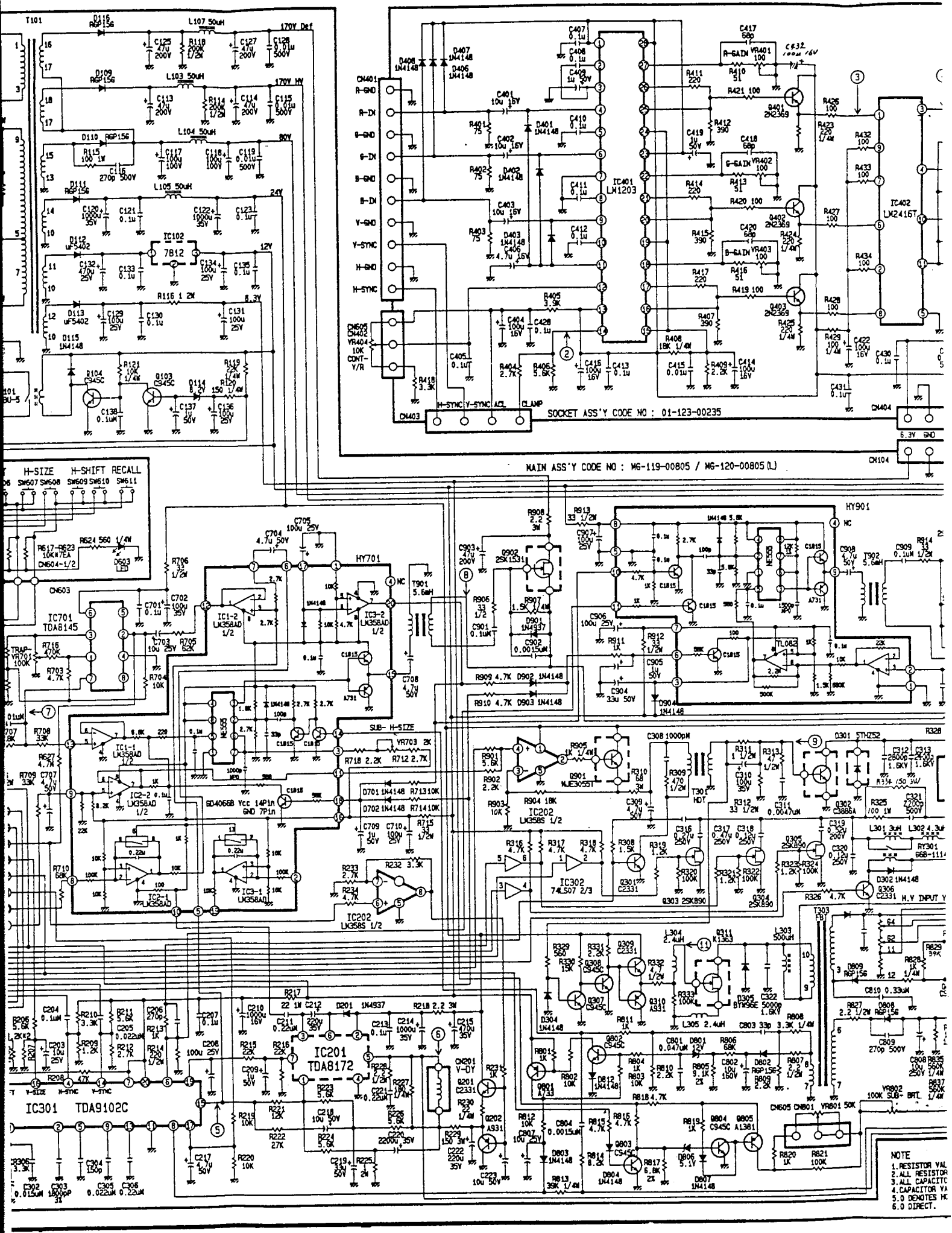


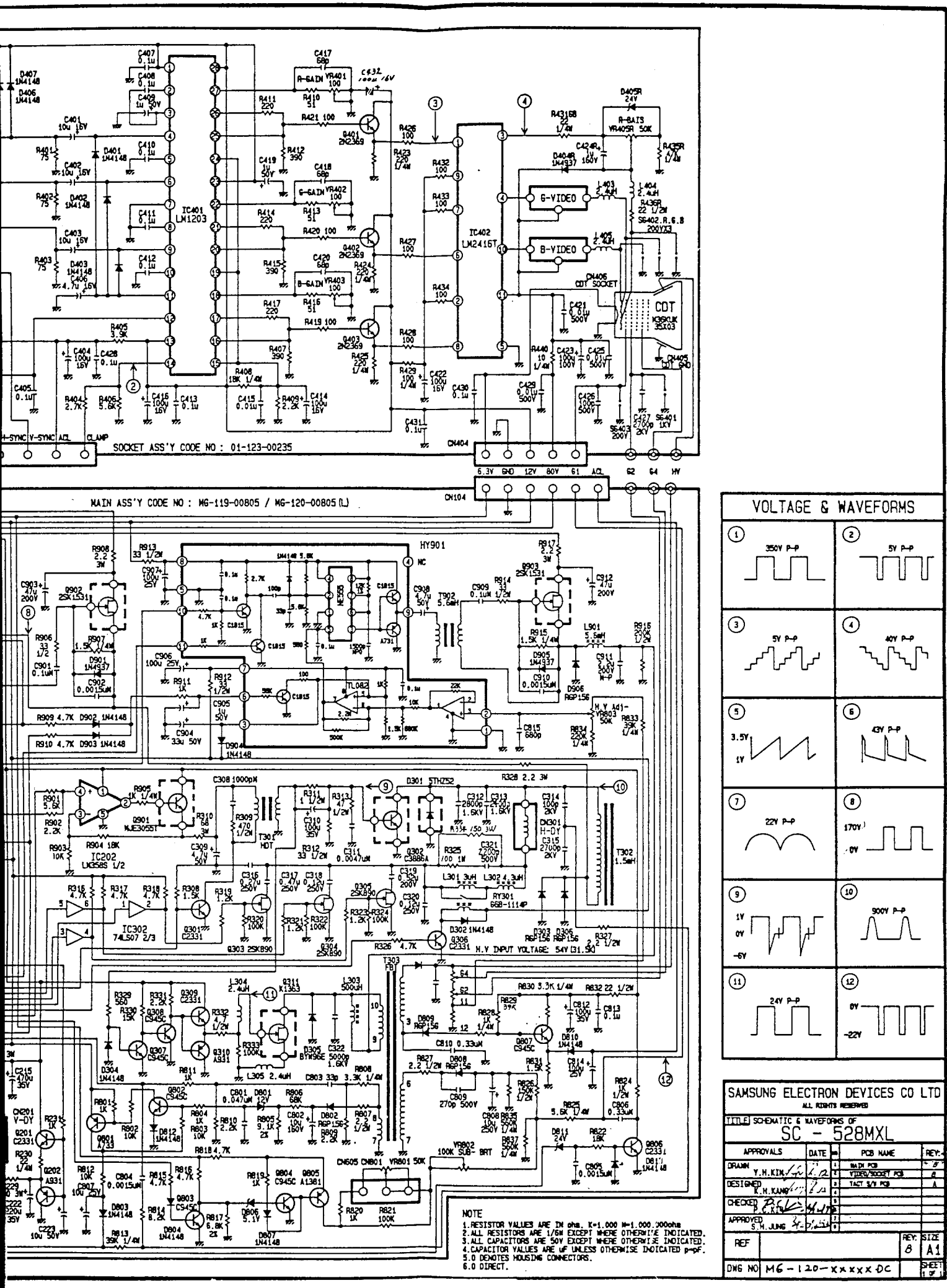
TYPE	VGA		SUPER VGA	8514/A	VESA						ULTRA VGA	MAC II
HORIZONTAL FREQUENCY	31.47KHz		35.16KHz	35.53KHz	37.50KHz	37.88KHz	46.9KHz	48.08KHz	56.48KHz	60.02KHz	63.70KHz	35.00KHz
HORIZONTAL DOTS	640	640	800	1024	640	800	800	800	1024	1024	1280	640
VERTICAL SCAN LINES	400	480	600	768(INT)	480	600	600	600	768	768	1024	480
SYNC. POLARITY	NEG.	NEG.	POS/NEG.	POS.	NEG.	POS.	POS.	POS.	NEG.	POS.	NEG.	NEG.
Aus	31.77	31.77	28.44	28.15	26.07	26.40	21.3	20.80	17.71	16.70	15.70	28.57
Bus	3.77	3.77	2.0	3.92	2.03	3.20	1.61	2.40	1.81	1.22	1.36	2.12
Cus	1.89	1.89	3.56	1.25	3.81	2.2	3.23	1.28	1.92	2.23	1.81	3.18
Dus	25.17	25.17	22.22	22.8	20.32	20.0	16.16	16.00	13.65	13.00	12.08	21.16
Eus	0.94	0.94	0.67	0.18	0.51	1.0	0.32	1.12	0.32	0.20	0.45	2.12
VERTICAL FREQUENCY	70Hz	60Hz	56Hz	86.906Hz	75Hz	60.317Hz	75Hz	72.187Hz	70.069Hz	75Hz	60.096Hz	66.667Hz
SYNC. POLARITY	POS.	NEG.	POS/NEG.	POS.	NEG.	POS.	POS.	POS.	NEG.	POS.	NEG.	NEG.
Ams	14.27	16.68	17.78	11.50	13.3	16.58	13.3	13.85	14.27	13.3	16.64	15.00
Bms	0.06	0.06	0.06	0.11	0.08	0.11	0.06	0.13	0.11	0.05	0.05	0.09
Cms	1.08	1.02	0.63	0.56	0.43	0.61	0.45	0.48	0.51	0.47	0.47	1.11
Dms	12.72	15.25	17.07	10.81	12.8	15.84	12.8	12.48	13.60	12.80	16.08	13.71
Ems	0.41	0.35	0.03	0.01	0.027	0.03	0.02	0.77	0.05	0.02	0.05	0.09
SYNC. TYPE	SEPARATE	SEPARATE	SEPARATE	SEPARATE	SEPARATE	SEPARATE	SEPARATE	SEPARATE	SEPARATE	SEPARATE	SEPARATE	COMPOSITE

(2) BLOCK DIAGRAM



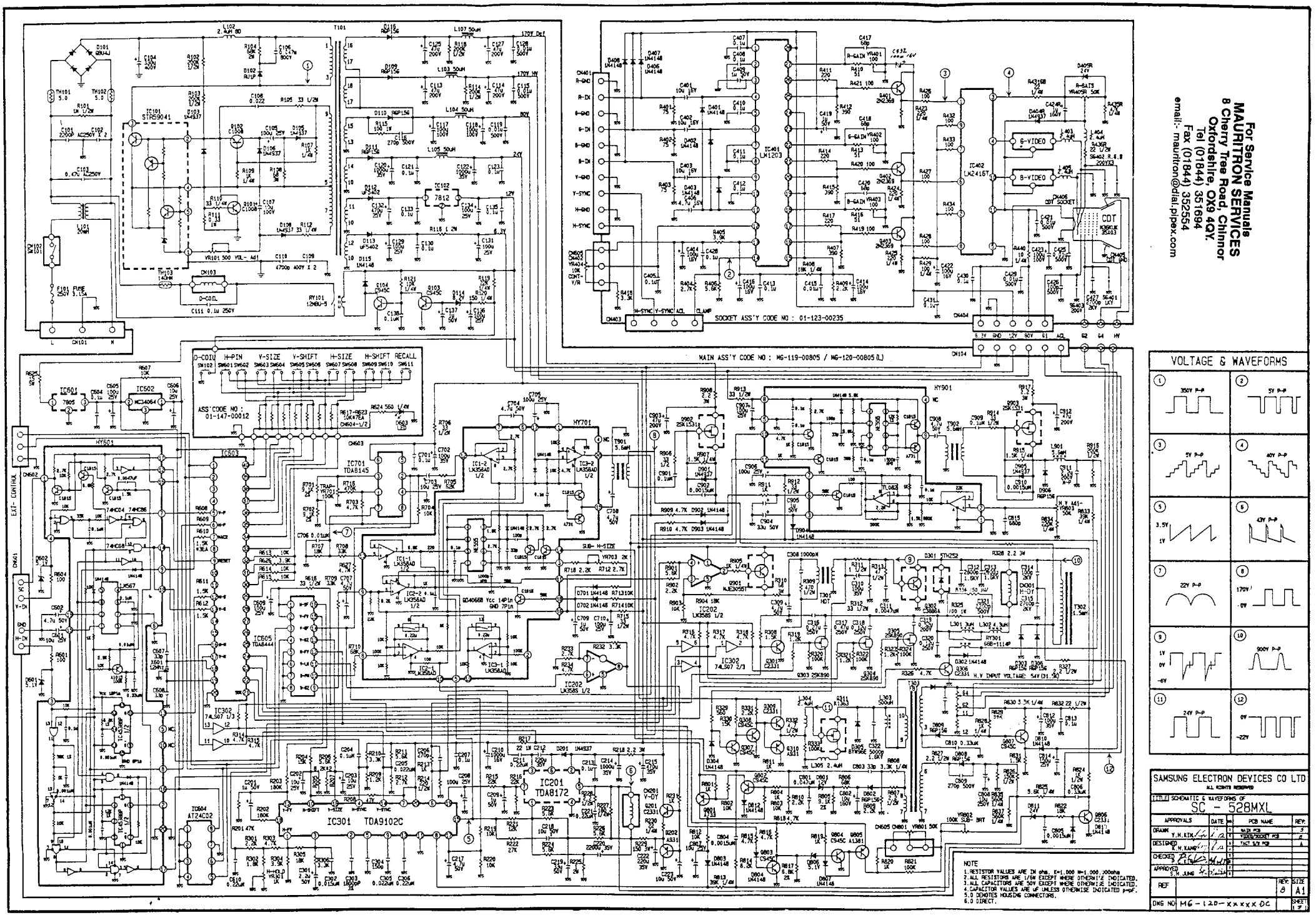

IC101 STR59041
IC601 7805
IC602 MC34064
IC603
IC701 TDA8145
IC605 TDA8444
IC302 74LS07 1/3
IC504 AT24C02
IC301 TDA9102C
IC201 TDA8172
IC202 LM358S 1/2
IC1-1 LM358AD 1/2
IC1-2 LM358AD 1/2
IC2-1 LM358AD
IC2-2 LM358AD 1/2
IC3-1 LM358AD
IC3-2 LM358AD 1/2
IC4538BP 1/2
IC4538BP 1/2
IC102 7812
HY601
HY701
CN101
CN102 SW101
CN103
CN401
CN402
CN403
CN404
CN405
CN406
CN407
CN408
CN501
CN502
CN503
CN504
CN505
CN506
CN601
CN602
CN603
CN604
CN605
CN606
D-COIL
H-PIN
V-SIZE
V-SHIFT
H-SIZE
H-SHIFT
RECALL
ASS'CODE NO : 01-147-00012
EXT- CONTROL
SUB- H-SIZE
L101 20mH
L102 2.4uH 8Ω
L103 50uH
L104 50uH
L105 50uH
L107 50uH
T101
T901 5.6mH
RY101 12MBU-5
F101 FUSE 250V 3.15A
VR101 500 VOL- Adj
VR301 1K H-HOLD
VR703 2K
TH101 5.0
TH102 5.0
TH103 140HM
X601 12MHz
170V Def
170V HV
80V
24V
12V
8.3V
5V
D-GND
R-IN
G-GND
G-IN
B-GND
B-IN
V-GND
V-SYNC
H-GND
H-SYNC
CONT- V/R
V-IN
GND
H-IN
SCL
SDA
R-OUT
G-OUT
B-OUT
V-OUT
H-OUT
V-DY
H-SYNC V-SY


SOCKET ASS'Y CODE NO : 01-123-00235
MAIN ASS'Y CODE NO : MG-119-00805 / MG-120-00805 (L)
H-SIZE H-SHIFT RECALL
IC701 TDA8145
IC201 TDA8172
IC301 TDA9102C
IC202 LM358S 1/2
IC302 74LS07 2/3
HY701
HY901
HDT
NOTE
1.RESISTOR VAL
2.ALL RESISTOR
3.ALL CAPACITO
4.CAPACITOR VA
5.0 DENOTES HO
6.0 DIRECT.



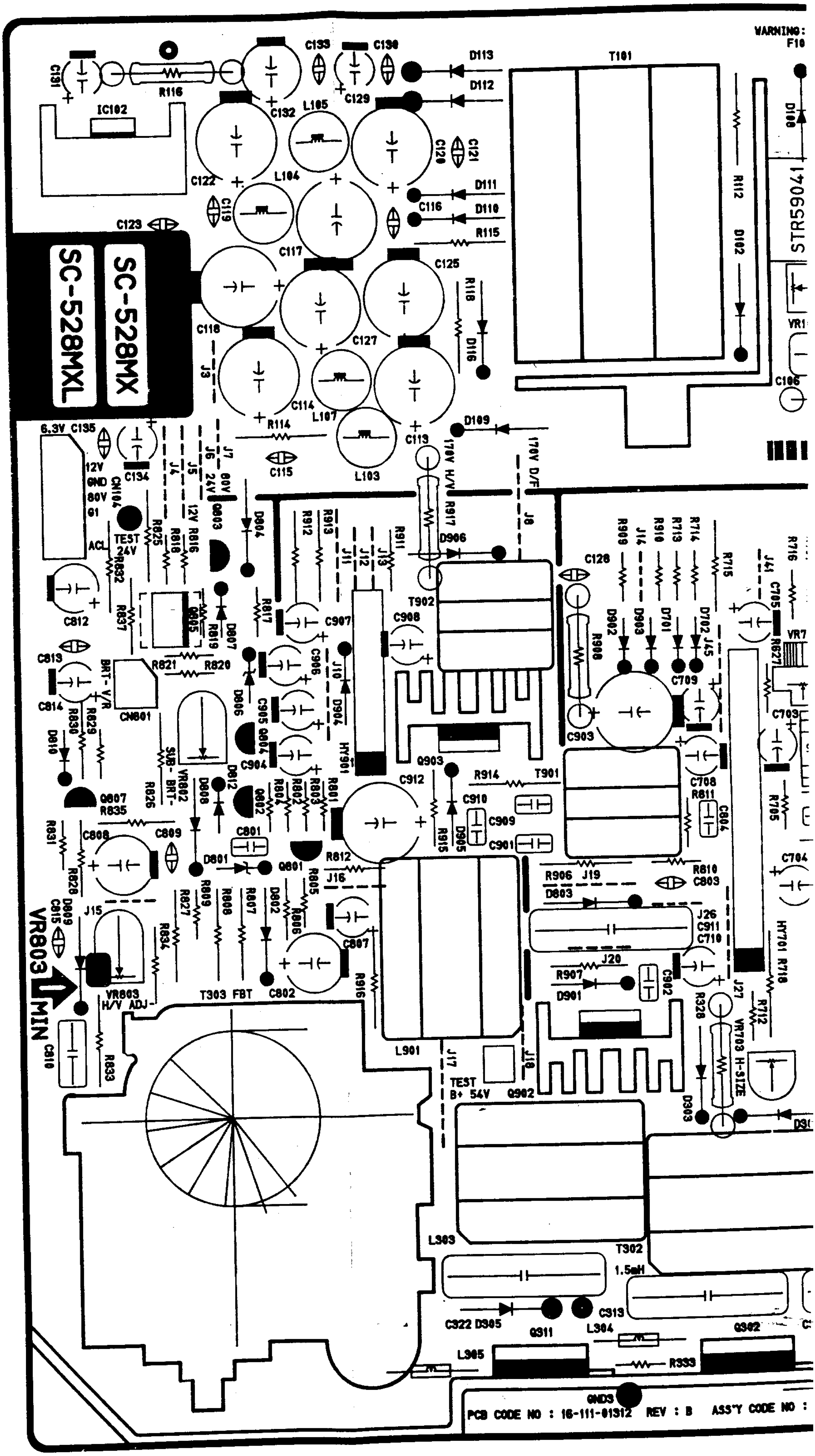
VOLTAGE & WAVEFORMS

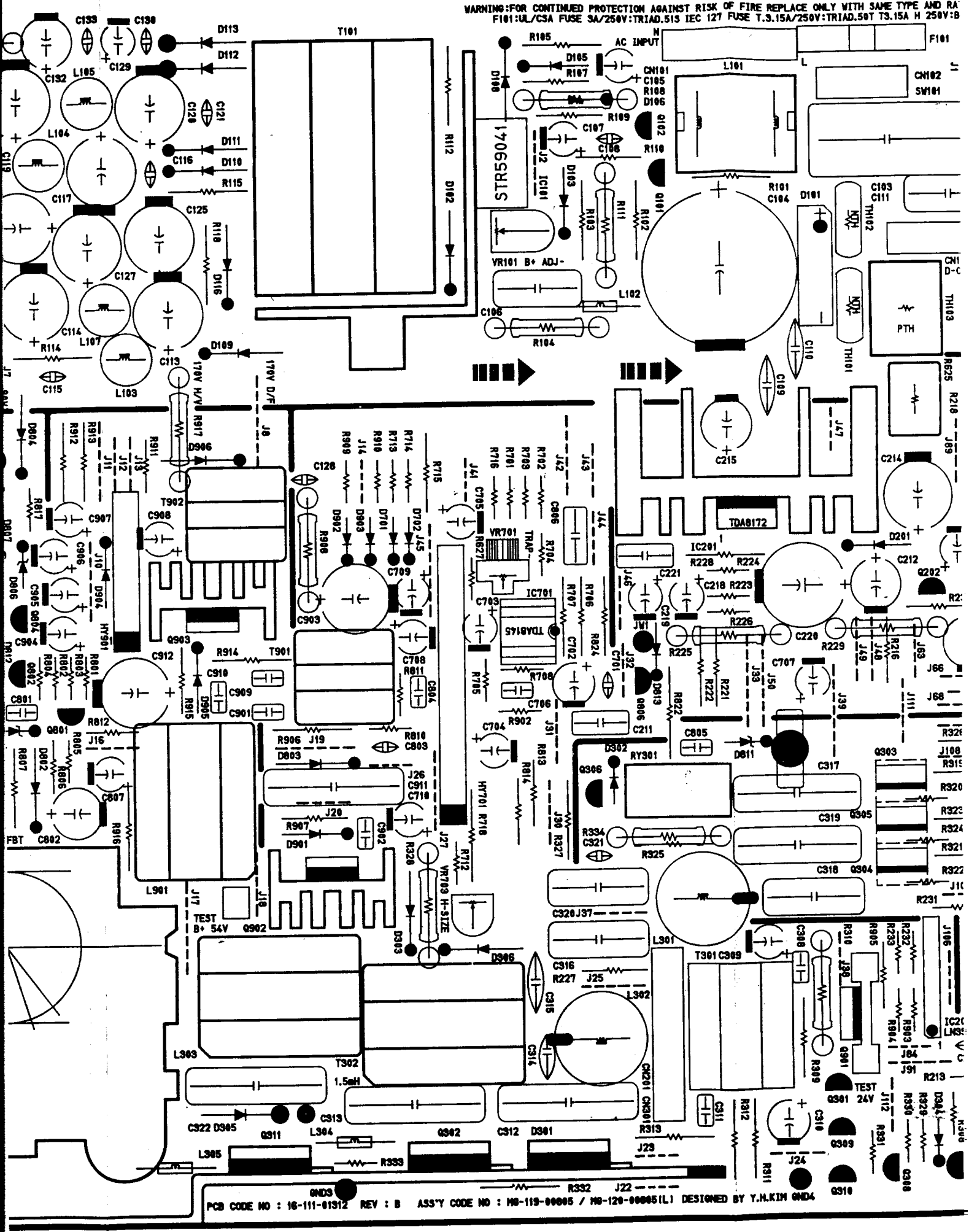
SAMSUNG ELECTRON DEVICES CO LTD				
ALL RIGHTS RESERVED				
TITLE SCHEMATIC & WAVEFORMS OF SC - 528MXL				
APPROVALS	DATE	NO	PCB NAME	REV.
DRAWN Y.H.KIM	1.12	1	MAIN PCB	B
DESIGNED K.H.KANG	1.31	2	VIDEO/SOCKET PCB	A
CHECKED S.C.KIM	1.31	3	TACT S/W PCB	A
APPROVED S.H.JUNG	1.31	4		
		5		
		6		
		7		
		8		
REF			REV. B	SIZE A1
DWG NO MG-120-XXXXX-DC				SHEET 1 OF 1

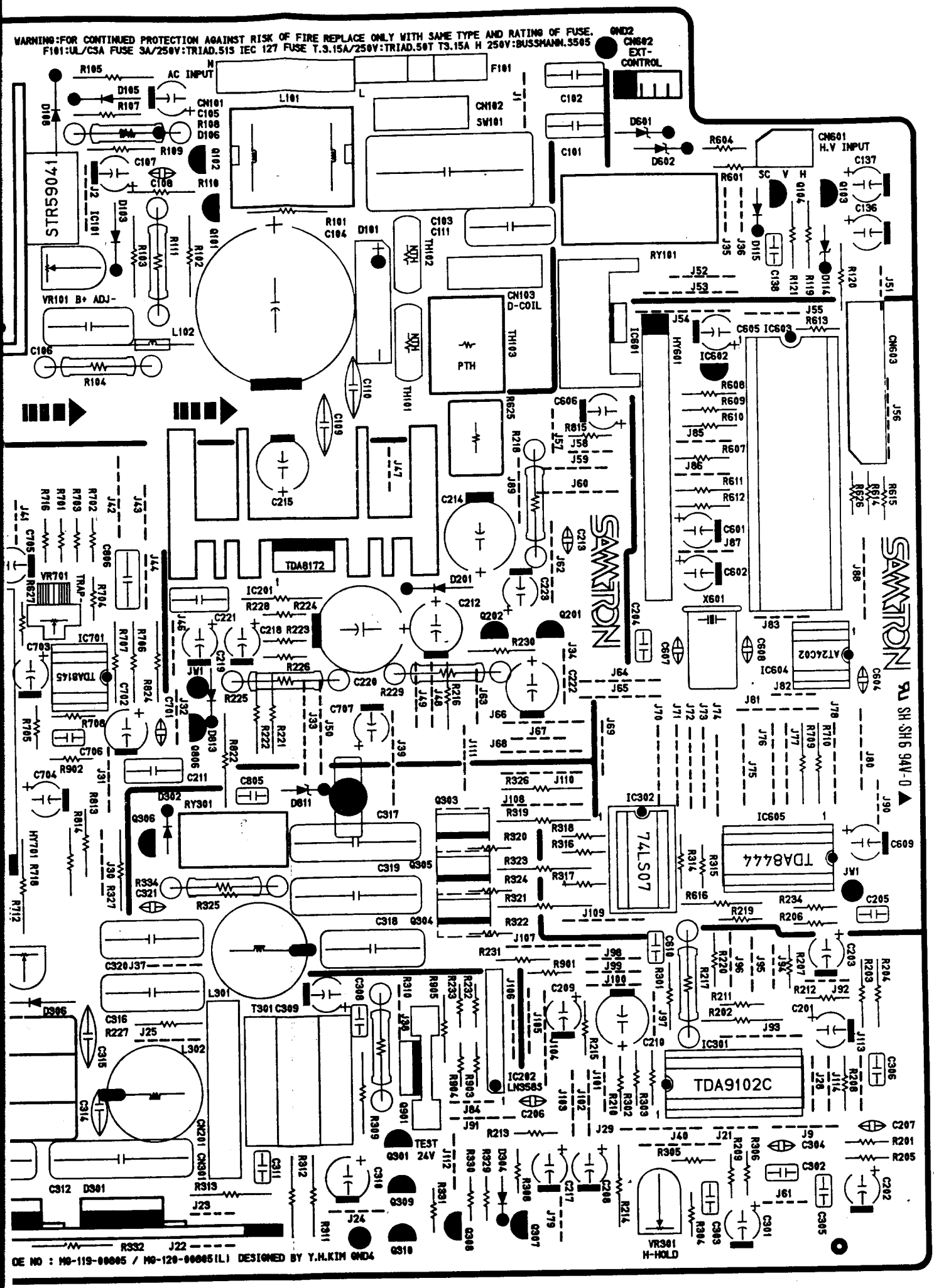

For Service Manuals
MAURITRON SERVICES
8 Cherry Tree Road, Chinnor
Oxfordshire, OX9 4QY.
Tel (01844) 351694
Fax (01844) 352554
email:- mauritron@dial.pipex.com
MAIN ASS'Y CODE NO : MG-119-00805 / MG-120-00805 (L)
SOCKET ASS'Y CODE NO : 01-123-00235
ASS'CODE NO : 01-147-00012
VOLTAGE & WAVEFORMS
SAMSUNG ELECTRON DEVICES CO LTD
ALL RIGHTS RESERVED
TITLE SCHEMATIC & WAVEFORMS OF
SC - 528MXL
APPROVALS
DRAWN Y.M.KIM
DESIGNED K.H.KANG
CHECKED
APPROVED S.H.JUNG
PCB NAME
MAIN PCB
VIDEO/SOCKET PCB
TACT S/W PCB
REF
REV: B
SIZE A1
DWG NO. MG-120-XXXXX DC
SHEET 1 of 1
NOTE
1.RESISTOR VALUES ARE IN ohm. K=1,000 M=1,000,000ohm
2.ALL RESISTORS ARE 1/6W EXCEPT WHERE OTHERWISE INDICATED.
3.ALL CAPACITORS ARE 50V EXCEPT WHERE OTHERWISE INDICATED.
4.CAPACITOR VALUES ARE uF UNLESS OTHERWISE INDICATED p=pF.
5.0 DENOTES HOUSING CONNECTORS.
6.0 DIRECT.

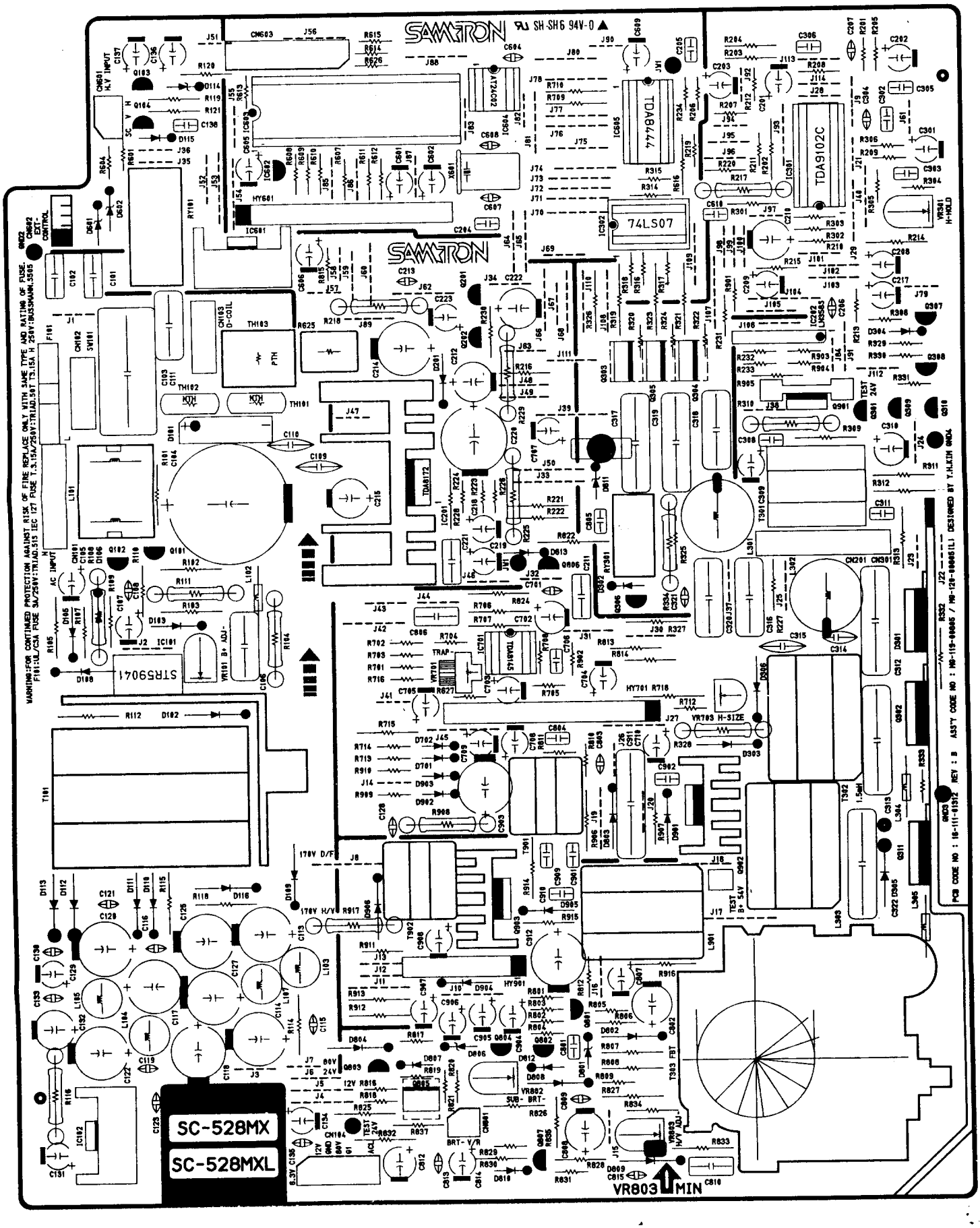
〔2〕 PCB artwork drawings

2-1. main PCB front marking and Pattern




WARNING:FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE AND RA
F101:UL/CSA FUSE 3A/250V:TRIAD.515 IEC 127 FUSE T.3.15A/250V:TRIAD.50T T3.15A H 250V:B
STR59041
TDA8172
TDA8145
PTH
AC INPUT
VR101 B+ ADJ-
TEST B+ 54V
TEST 24V
1.5mH
PCB CODE NO : 16-111-01312 REV : B ASS'Y CODE NO : MG-119-00005 / MG-120-00005(L) DESIGNED BY Y.H.KIM

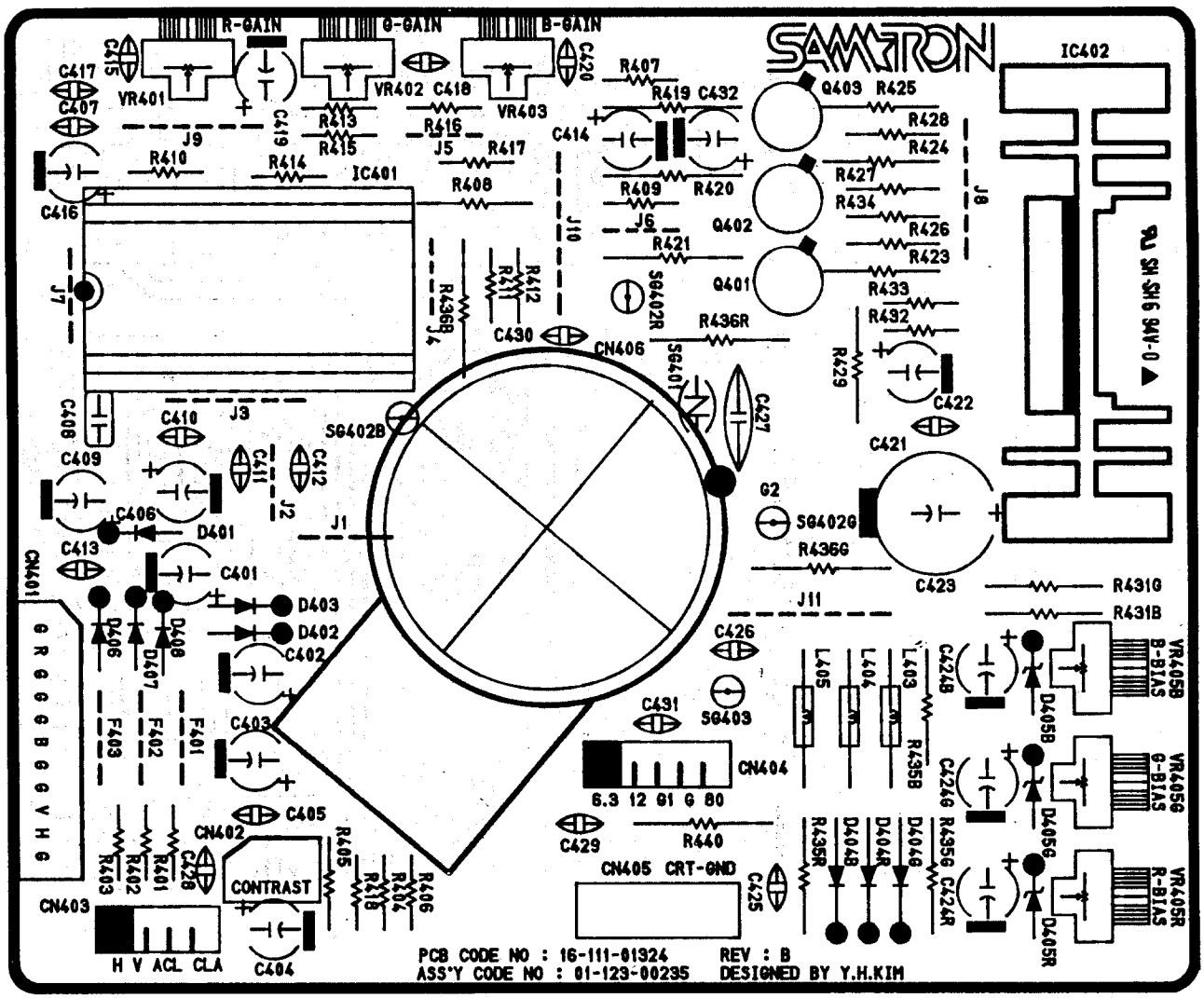

WARNING:FOR CONTINUED PROTECTION AGAINST RISK OF FIRE REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE.
F101:UL/CSA FUSE 3A/250V:TRIAD.5IS IEC 127 FUSE T.3.15A/250V:TRIAD.50T T3.15A H 250V:BUSSMANN.3505
AC INPUT
CN602 EXT-CONTROL
CN601 H.V INPUT
CN103 D-COIL
STR59041
TDA8172
TDA8145
TDA8444
74LS07
TDA9102C
LN3583
AT24C02
SAMTRON
VR101 B+ ADJ-
VR301 H-HOLD
TEST 24V
SH-SH6 94V-0
DE NO : MG-119-00005 / MG-129-00005(L) DESIGNED BY Y.H.KIM GND4



2-1. main PCB front marking and Pattern

(2) PCB artwork drawings

2-2. Socket PCB front marking and Pattern



8. APPENDIX

(1) Part List

MECHANICAL ASS'Y

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	01-123-00235	SUB ASS'Y, CPT SOCKET	SC-528MX/MXL		
	01-141-00303	SUB ASS'Y, PUSH S/W	SC-528MX/MXL, 4/32A, 2, 190MM		
	01-147-00012	SUB ASS'Y, TACT S/W	SC-528MX/MXL		
	01-162-00048	SUB ASS'Y, SHIELD COVER	TIN, WH, RING TER, 133 * 111 * 43		
	01-174-00143	SUB ASS'Y, BACK CHASSIS	SC-528MX, AC SOCKET, 240'1M		
	01-211-00502	ASS'Y, CDT, SC-528MXL	15", 0.28D, M36KUK36 * 03		
	01-211-90752	ASS'Y, CDT, SC-528MX	M36KUT26XX01(FC1), 0.28D, 15", WITH		
	MG-119-00805	PCB ASS'Y, SC-528MX	FREE, ANALG, M.V.S		
	MG-120-00805	PCB ASS'Y, SC-528MXL	FREE, ANALG, M.V.S		

SUB ASS'Y AND CDT

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	02-111-00577	ASS'Y, BACK CHASSIS	SC-528MX(L)		
	02-111-00589	ASS'Y, MAIN CHASSIS	SC-528MX(L)		
	02-121-01312	ASS'Y, CONTROL COVER, SC-528MX(L)	OEM-3357		
	02-121-01324	ASS'Y, FRONT BEZEL, SC-528MX	OEM-3357		
	02-121-01336	ASS'Y, FRONT BEZEL, SC-528MXL	OEM-3357		
	02-121-01348	ASS'Y, REAR COVER, SC-528MX(L)	OEM-3357		
	02-121-01351	ASS'Y, STAND, SC-528MX(L)	OEM-3357		
	02-121-01363	ASS'Y, BOTTOM, SC-528MX(L)	OEM-3357		
	02-141-01494	ASS'Y MANUAL, USER'S, SC-528MX(L)	SDI		
	02-141-01508	ASS'Y, MANUAL, USER'S, SC-528MX(L)	SMC-FFT		
	02-141-01511	ASS'Y, MANUAL, USER'S, SC-528MS(L)	SMC-UK		

ELECTROLYTIC CAPACITOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
C104	11-233-03378	CAP, AL-ELECT, GP	330UF, 20%, 400V, −40/85'C, RT		
C105	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C107	11-196-0106B	CAP, AL-ELECT, GP	10UF, 20%, 100V, −40/85'C, RT, SMALL		
C113	11-199-0476B	CAP, AL-ELECT, GP	47UF, 20%, 200V, −40/85'C, RT		
C114	11-199-0476B	CAP, AL-ELECT, GP	47UF, 20%, 200V, −40/85'C, RT		
C117	11-196-01072	CAP, AL-ELECT, GP	100UF, 20%, 100V, −40/85'C, RT		
C118	11-196-01072	CAP, AL-ELECT, GP	100UF, 20%, 100V, −40/85'C, RT		
C120	11-194-01084	CAP, AL-ELECT, GP	1000UF, 20%, 35V, −40/85'C, RT		
C122	11-194-01084	CAP, AL-ELECT, GP	1000UF, 20%, 35V, −40/85'C, RT		
C125	11-199-0476B	CAP, AL-ELECT, GP	47UF, 20%, 200V, −40/85'C, RT		
C127	11-199-0476B	CAP, AL-ELECT, GP	47UF, 20%, 200V, −40/85'C, RT		
C129	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C131	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C132	11-193-04773	CAP, AL-ELECT, GP	470UF, 20%, 25V, −40/85'C, RT		
C134	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C136	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C137	11-195-0105B	CAP, AL-ELECT, GP	1UF, 20%, 50V, −40/85'C, RT, SMALL		
C201	11-195-0105B	CAP, AL-ELECT, GP	1UF, 20%, 50V, −40/85'C, RT, SMALL		
C202	11-193-0106B	CAP, AL-ELECT, GP	10UF, 20%, 25V, −40/85'C, RT, SMALL		
C203	11-193-0106B	CAP, AL-ELECT, GP	10UF, 20%, 25V, −40/85'C, RT, SMALL		
C208	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C209	11-195-0105B	CAP, AL-ELECT, GP	1UF, 20%, 50V, −40/85'C, RT, SMALL		
C210	11-192-01084	CAP, AL-ELECT, GP	1000UF, 20%, 16V, −40/85'C, RT		
C212	11-194-02277	CAP, AL-ELECT, GP	220UF, 20%, 35V, −40/85'C, RT		
C214	11-194-01084	CAP, AL-ELECT, GP	1000UF, 20%, 35V, −40/85'C, RT		
C215	11-194-0477B	CAP, AL-ELECT, GP	470UF, 20%, 35V, −40/85'C, RT		
C217	11-195-0475B	CAP, AL-ELECT, GP	4.7UF, 20%, 50V, −40/85'C, RT, SMALL		
C218	11-195-0106B	CAP, AL-ELECT, GP	10UF, 20%, 50V, −40/85'C, RT, SMALL		
C219	11-195-0336B	CAP, AL-ELECT, GP	33UF, 20%, 50CV, −40/85'C, RT, SMALL		
C220	11-115-0228B	CAP, AL-ELECT, GP	2200UF, 20%, 35V, −40/85'C, RB, SMALL		
C222	11-194-02277	CAP, AL-ELECT, GP	220UF, 20%, 35V, −40/85'C, RT		
C223	11-195-0106B	CAP, AL-ELECT, GP	10UF, 20%, 50V, −40/85'C, RT, SMALL		
C301	11-195-0225B	CAP, AL-ELECT, GP	2.2UF, 20%, 50V, −40/85'C, RT, SMALL		

ELECTROLYTIC CAPACITOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
C301	11-195-0225B	CAP, AL-ELECT, GP	2.2UF, 20%, 50V, −40/85'C, RT		
C309	11-195-0475B	CAP, AL-ELECT, GP	4.7UF, 20%, 50V, −40/85'C, RT, SMALL		
C310	11-194-01072	CAP, AL-ELECT, GP	100UF, 20%, 35V, −40/85'C, RT		
C401	11-192-0106B	CAP, AL-ELECT, GP	10UF, 20%, 16V, −40/85'C, RT, SMALL		
C402	11-192-0106B	CAP, AL-ELECT, GP	10UF, 20%, 16V, −40/85'C, RT, SMALL		
C403	11-192-0106B	CAP, AL-ELECT, GP	10UF, 20%, 16V, −40/85'C, RT, SMALL		
C404	11-192-0107B	CAP, AL-ELECT, GP	100UF, 20%, 16V, −40/85'C, RT, SMALL		
C406	11-195-0475B	CAP, AL-ELECT, GP	4.7UF, 20%, 50V, −40/85'C, RT, SMALL		
C409	11-195-0105B	CAP, AL-ELECT, GP	1UF, 20%, 50V, −40/85'C, RT, SMALL		
C414	11-192-0107B	CAP, AL-ELECT, GP	100UF, 20%, 16V, −40/85'C, RT, SMALL		
C416	11-192-0107B	CAP, AL-ELECT, GP	100UF, 20%, 16V, −40/85'C, RT, SMALL		
C419	11-195-0105B	CAP, AL-ELECT, GP	1UF, 20%, 50V, −40/85'C, RT, SMALL		
C422	11-192-0107B	CAP, AL-ELECT, GP	100UF, 20%, 16V, −40/85'C, RT, SMALL		
C423	11-196-01072	CAP, AL-ELECT, GP	100UF, 20%, 100V, −40/85'C, RT		
C424R, G, B	11-197-01057	CAP, AL-ELECT, GP	1UF, 20%, 160V, −40/85'C, RT		
C601	11-193-0106B	CAP, AL-ELECT, GP	10UF, 20%, 25V, −40/85'C, RT, SMALL		
C602	11-195-0475B	CAP, AL-ELECT, GP	4.7UF, 20%, 50V, −40/85'C, RT, SMALL		
C605	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C606	11-193-0106B	CAP, AL-ELECT, GP	10UF, 20%, 25V, −40/85'C, RT, SMALL		
C609	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C702	11-194-01072	CAP, AL-ELECT, GP	100UF, 20%, 35V, −40/85'C, RT		
C703	11-193-0106B	CAP, AL-ELECT, GP	10UF, 20%, 25V, −40/85'C, RT, SMALL		
C704	11-195-0475B	CAP, AL-ELECT, GP	4.7UF, 20%, 50V, −40/85'C, RT, SMALL		
C705	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C707	11-195-0475B	CAP, AL-ELECT, GP	4.7UF, 20%, 50V, −40/85'C, RT, SMALL		
C708	11-195-0475B	CAP, AL-ELECT, GP	4.7UF, 20%, 50V, −40/85'C, RT, SMALL		
C709	11-195-0105B	CAP, AL-ELECT, GP	1UF, 20%, 50V, −40/85'C, RT, SMALL		
C710	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, −40/85'C, RT, SMALL		
C802	11-197-01069	CAP, AL-ELECT, GP	10UF, 20%, 160V, −40/85'C, RT		
C807	11-193-0106B	CAP, AL-ELECT, GP	10UF, 20%, 25V, −40/85'C, RT, SMALL		
C808	11-198-01069	CAP, AL-ELECT, GP	10UF, 20%, 250V, −40/85'C, RT		
C811	11-195-0475B	CAP, AL-ELECT, GP	4.7UF, 20%, 50V, −40/85'C, RT, SMALL		

ELECTROLYTIC CAPACITOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
C812	11-194-01072	CAP, AL-ELECT, GP	100UF, 20%, 35V, -40/85'C, RT		
C814	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, -40/85'C, RT, SMALL		
C903	11-199-0476B	CAP, AL-ELECT, GP	47UF, 20%, 200V, -40/85'C, RT		
C904	11-195-0336B	CAP, AL-ELECT, GP	33UF, 20%, 50V, -40/85'C, RT, SMALL		
C905	11-195-0105B	CAP, AL-ELECT, GP	1UF, 20%, 50V, -40/85'C, RT, SMALL		
C906	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, -40/85'C, RT, SMALL		
C907	11-193-0107B	CAP, AL-ELECT, GP	100UF, 20%, 25V, -40/85'C, RT, SMALL		
C908	11-195-0475B	CAP, AL-ELECT, GP	4.7UF, 20%, 50V, -40/85'C, RT, SMALL		
C912	11-199-0476B	CAP, AL-ELECT, GP	47UF, 20%, 200V, -40/85'C, RT		

CERAMIC CONDENSER

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
C108	12-371-02238	CAP, DISC CERAMIC, CK45	0.022UF, -20/80%, 50V, -25/85'C, RT, HDC		
C109	12-307-04722	CAP, DISC CERAMIC, CK	4700PF, 20%, 400VAC, -25/85'C, RT		
C110	12-307-04722	CAP, DISC CERAMIC, CK	4700PF, 20%, 400VAC, -25/85'C, RT		
C115	12-335-01033	CAP, DISC CERAMIC, CK	0.01UF, -20/80%, 500V, -25/85'C, RT		
C116	12-334-02716	CAP, DISC CERAMIC, CK-45	270PF, 10%, 500V, -25/85'C, RT		
C119	12-335-01033	CAP, DISC CERAMIC, CK	0.01UF, -20/80%, 500V, -25/85'C, RT		
C121	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, -20/80%, 50V, -25/85'C, RT		
C123	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, -20/80%, 50V, -25/85'C, RT		
C128	12-335-01033	CAP, DISC CERAMIC, CK	0.01UF, -20/80% 500V, -25/85'C, RT		
C130	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, -20/80%, 50V, -25/85'C, RT		
C133	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, -20/80%, 50V, -25/85'C, RT		
C135	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, -20/80%, 50V, -25/85'C, RT		
C206	12-182-02716	CAP, DISC CERAMIC, CC	270PF, 5%, 50V, -25/85'C, RT		
C207	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, -20/80%, 50V, -25/85'C, RT		
C213	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, -20/80%, 50V, -25/85'C, RT		
C304	12-182-01511	CAP, DISC CERAMIC, CC	150PF, 5%, 50V, -25/85'C, RT		
C314	12-246-01018	CAP, DISC CERAMIC, CK45	100PF, 10%, 2KV, -25/85'C, RB, HDC		
C315	12-246-02728	CAP, DISC CERAMIC, CK-45	2700PF, 10%, 2KV, -25/85'C, RB		
C321	12-334-01021	CAP, DISC CERAMIC, CK45	1000PF, 10%, 500V, -25/85'C, RT, HDC		
C405	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, -20/80%, 50V, -25/85'C, RT		

CERAMIC CONDENSER

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
C407	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, −20/80%, 50V, −25/85'C, RT		
C410	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, −20/80%, 50V, −25/85'C, RT		
C411	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, −20/80%, 50V, −25/85'C, RT		
C412	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, −20/80%, 50V, −25/85'C, RT		
C413	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, −20/80%, 50V, −25/85'C, RT		
C415	12-371-01033	CAP, DISC CERAMIC, CK	0.01UF, −20/80%, 50V, −25/85'C, RT		
C417	12-182-06805	CAP, DISC CERAMIC, CC	68PF, 5%, 50V, −25/85'C, RT		
C418	12-182-06805	CAP, DISC CERAMIC, CC	68PF, 5%, 50V, −25/85'C, RT		
C420	12-182-06805	CAP, DISC CERAMIC, CC	68PF, 5%, 50V, −25/85'C, RT		
C421	12-335-01033	CAP, DISC CERAMIC, CK	0.01UF, −20/80%, 500V, −25/85'C, RT		
C425	12-335-01033	CAP, DISC CERAMIC, CK	0.01UF, −20/80%, 500V, −25/85'C, RT		
C426	12-334-01018	CAP, DISC CERAMIC, CK45	100PF, 10%, 500V, −25/85'C, RT, HDC		
C427	12-246-02728	CAP, DISC CERAMIC, CK-45	2700PF, 10%, 2KV, −25/85'C, RB		
C428	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, −20/80%, 50V, −25/85'C, RT		
C429	12-335-01033	CAP, DISC CERAMIC, CK	0.01UF, −20/80%, 500V, −25/85'C, RT		
C430	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF −20/80%, 50V, −25/85'C, RT		
C431	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF −20/80%, 50V, −25/85'C, RT		
C604	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF −20/80%, 50V, −25/85'C, RT		
C607	12-182-03303	CAP, DISC CERAMIC, CC45	33PF, 5%, 50V, −25/85'C, RT, TC		
C608	12-182-03303	CAP, DISC CERAMIC, CC45	33PF, 5%, 50V, −25/85'C, RT, TC		
C701	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, −20/80%, 50V, −25/85'C, RT		
C803	12-182-03303	CAP, DISC CERAMIC, CC45	33PF, 5%, 50V, −25/85'C, RT, TC		
C809	12-334-02716	CAP, DISC CERAMIC, CK-45	270PF, 10%, 500V, −25/85'C, RT		
C813	12-371-01045	CAP, DISC CERAMIC, CK-45	0.1UF, −20/80%, 50V, −25/85'C, RT		
C815	12-331-06817	CAP, DISC CERAMIC, CK-45	680PF, 10%, 50V, −25/85'C, RT		

OTHER CAPACITOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
C101	13-154-92226	CAP, METALZ-POLYESTER	2200PF, 10%, 250VAC, RB		
C102	13-154-92226	CAP, METALZ-POLYESTER	2200PF, 10%, 250VAC, RB		
C103	13-154-94746	CAP, METALZ-POLYESTER	0.47UF, 10%, 250VAC, RB		
C106	13-355-04734	CAP, METALZ-PP, GP	0.047UF, 5%, 800V, RB, CF93MP, OEM		
C111	13-153-91045	CAP, METALZ-POLYESTER	0.1UF, 10%, 250VAC, RB		
C138	13-126-01045	CAP, IND-POLYESTER	0.1UF, 10%, 100V, RT, CQ92MT		
C204	13-126-01045	CAP, IND-POLYESTER	0.1UF, 10%, 100V, RT, CQ92MT		
C205	13-126-02238	CAP, IND-POLYESTER	0.022UF, 10%, 100V, −, RT		
C211	13-162-0224B	CAP, METALZ-POLYESTER	0.22UF, 10%, 100V, RT		
C221	13-162-0224B	CAP, METALZ-POLYESTER	0.22UF, 10%, 100V, RT		
C302	13-126-01535	CAP, IND-POLYESTER	0.015UF, 10%, 100V, RT		
C303	13-341-01826	CAP, PP	1800PF, 3%, 100V, RB		
C305	13-126-02238	CAP, IND-POLYSTER	0.022UF, 10%, 100V,−, RT		
C306	13-162-0224B	CAP, METALZ-POLYESTER	0.22UF, 10%, 100V, RT		
C308	13-126-01021	CAP, IND-POLYESTER	0.001UF, 10%, 100V, RT		
C311	13-126-04722	CAP, IND-POLYESTER	0.0047UF, 10%, 100V, RT		
C312	13-317-02823	CAP, PP, HIGH-VOL	2800PF, 5%, 1.6KV, RB		
C313	13-317-02823	CAP, PP, HIGH-VOL	2800PF, 5%, 1.6KV, RB		
C316	13-354-02743	CAP, METALZ-PP	0.27UF, 5%, 250V, RB		
C317	13-354-04746	CAP, METALZ-PP	0.47UF, 5%, 250V, RB		
C318	13-354-01244	CAP, METALZ-PP	0.12UF, 5%, 250V, RB		
C319	13-352-05241	CAP, METALZ-PP, GP	0.52UF, 5%, 200V, RB		
C320	13-354-01244	CAP, METALZ-PP	0.12UF, 5%, 250V, RB		
C322	13-317-05027	CAP, PP, HIGH-VOL	5000PF, 5%, 1.6KV, RB		
C408	13-126-01045	CAP, IND-POLYESTER	0.1UF, 10%, 100V, RT, CQ92MT		
C610	13-162-0224B	CAP, METALZ-POLYESTER	0.22UF, 10%, 100V, RT		
C706	13-126-01033	CAP, IND-POLYESTER	0.01UF, 10%, 100V, RT, CQ92MT		
C801	13-126-04734	CAP, IND-POLYESTER	0.047UF, 10%, 100V, −, RT		
C804	13-126-01553	CAP, IND-POLYESTER	0.0015UF, 10%, 100V, RT, CQ92MT		
C805	13-126-01553	CAP, IND-POLYESTER	0.0015UF, 10%, 100V, RT, CQ92MT		
C806	13-162-0334B	CAP, METALZ-POLYESTER	0.33UF, 10%, 100V, RT		
C810	13-162-0334B	CAP, METALZ-POLYESTER	0.33UF, 10%, 100V, RT		

OTHER CAPACITOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
C901	13-126-01045	CAP, IND-POLYESTER	0.1UF, 10%, 100V, RT, CQ92MT		
C902	13-126-01553	CAP, IND-POLYESTER	0.0015UF, 10%, 100V, RT, CQ92MT		
C909	13-126-01045	CAP, IND-POLYESTER	0.1UF, 10%, 100V, RT, CQ92MT		
C910	13-126-01553	CAP, IND-POLYESTER	0.0015UF, 10%, 100V, RT, CQ92MT		
C911	13-184-02253	CAP, METALZ-POLYESTER	2.2UF, 5%, 200V, RB		
SG401	13-911-00024	CAP, SPARK-GAP	1KV, S-23		

FIXED RESISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
R101	14-142-01057	RES, CARBON, AT	1M OHM 1/2W 5%		
R102	14-142-02042	RES, CARBON, AT	200K OHM 1/2W 5%		
R103	14-142-02042	RES, CARBON, AT	200K OHM 1/2W 5%		
R104	14-346-06832	RES, METAL OXIDE, AT	68K OHM, 2W, 5%, 63MM TAPING		
R105	14-142-03303	RES, CARBON, AT	33 OHM, 1/2W, 5%		
R107	14-134-01021	RES, CARBON, AT	1K OHM, 1/4W, 5%		
R108	14-352-06805	RES, METAL OXIDE, AB	68 OHM, 3W, 5%, FORMING		
R109	14-134-01021	RES, CARBON, AT	1K OHM, 1/4W, 5%		
R110	14-134-03303	RES, CARBON, AT	33 OHM, 1/4W, 5%		
R111	14-641-0R336	RES, WIRE WOUND, AB	0.33 OHM, 1W, 5%		
R112	14-134-03303	RES, CARBON, AT	33 OHM, 1/4W, 5%		
R114	14-142-02042	RES, CARBON, AT	200K OHM, 1/2W, 5%		
R115	14-336-01018	RES, METAL OXIDE, MINT, AT	100 OHM, 1W, 5%		
R116	14-346-01R01	RES, METAL OXIDE, AT	1 OHM, 2W, 5%, 63MM, TAPING		
R116	14-352-02R22	RES, METAL OXIDE, AB	2.2 OHM, 3W, 5%, FORMING		
R118	14-142-02042	RES, CARBON, AT	200K OHM, 1/2W, 5%		
R119	14-134-02238	RES, CARBON, AT	22K OH, 1/4W, 5%		
R120	14-134-01511	RES, CARBON, AT	150 OHM, 1/4W, 5%		
R121	14-134-01033	RES, CARBON, AT	10K OHM, 1/4W, 5%		
R201	14-121-04734	RES, CARBON, AT	47K OHM, 1/6W, 5%		
R202	14-121-01841	RES, CARBON, AT	180K OHM, 1/6W, 5%		

FIXED RESISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
R203	14-121-01841	RES, CARBON, AT	180K OHM, 1/6W, 5%		
R204	14-121-01535	RES, CARBON, AT	15K OHM, 1/6W, 5%		
R205	14-121-08226	RES, CARBON, AT	8.2K OHM, 1/6W, 5%		
R206	14-121-05624	RES, CARBON, AT	5.6K OHM, 1/6W, 5%		
R207	14-121-08226	RES, CARBON, AT	8.2K OHM, 1/6W, 5%		
R208	14-121-04734	RES, CARBON, AT	47K OHM, 1/6W, 5%		
R209	14-121-01229	RES, CARBON, AT	1.2K OHM, 1/6W, 5%		
R210	14-121-03327	RES, CARBON, AT	3.3K OHM, 1/6W, 5%		
R211	14-121-05624	RES, CARBON, AT	5.6K OHM, 1/6W, 5%		
R212	14-121-02728	RES, CARBON, AT	2.7K OHM, 1/6W, 5%		
R213	14-121-01021	RES, CARBON, AT	1K OHM, 1/6W, 5%		
R214	14-142-02214	RES, CARBON, AT	220 OHM, 1/2, 5%		
R215	14-121-02238	RES, CARBON, AT	22K OHM, 1/6W, 5%		
R216	14-121-02238	RES, CARBON, AT	22K OHM, 1/6W, 5%		
R217	14-336-0220B	RES, METAL, OXIDE, AT	22 OHM, 1W, 5%, 63MM, TAPING		
R218	14-352-02R22	RES, METAL, OXIDE, AB	2.2 OHM, 3W, 5%, FORMING		
R219	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R220	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R221	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R221	14-121-01232	RES, CARBON, AT	12K OHM, 1/6W, 5%		
R222	14-121-02731	RES, CARBON, AT	27K OHM, 1/6W, 5%		
R223	14-121-05624	RES, CARBON, AT	5.6K OHM, 1/6W, 5%		
R224	14-121-05624	RES, CARBON, AT	5.6K OHM, 1/6W, 5%		
R225	14-346-01R01	RES, METAL, OXIDE, AT	1 OHM, 2W, 5%, 63MM, TAPING		
R226	14-121-05624	RES, CARBON, AT	5.6K OHM, 1/6W, 5%		
R227	14-134-01814	RES, CARBON, AT	180 OHM, 1/4W, 5%		
R228	14-142-02R22	RES, CARBON, AT	2.2 OHM, 1/2W, 5%		
R229	14-352-01511	RES, METAL, OXIDE, AB	150 OHM, 3W, 5%, FORMING		
R230	14-134-02202	RES, CARBON, AT	22 OHM, 1/4W, 5%		
R231	14-121-01021	RES, CARBON, AT	1K OHM, 1/6W, 5%		
R232	14-121-03327	RES, CARBON, AT	3.3K OHM, 1/6W, 5%		
R233	14-121-02728	RES, CARBON, AT	2.7K OHM, 1/6W, 5%		
R234	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		

FIXED RESISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
R301	14-121-02226	RES, CARBON, AT	2.2K OHM, 1/6W, 5%		
R302	14-121-01826	RES, CARBON, AT	1.8K OHM, 1/6W, 5%		
R303	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R304	14-121-03924	RES, CARBON, AT	3.9K OHM, 1/6W, 5%		
R305	14-121-01838	RES, CARBON, AT	18K OHM, 1/6W, 5%		
R306	14-121-03327	RES, CARBON, AT	3.3K OHM, 1/6W, 5%		
R308	14-121-01523	RES, CARBON, AT	1.5K OHM, 1/6W, 5%		
R309	14-142-04719	RES, CARBON, AT	470 OHM, 1/2W, 5%		
R310	14-352-06805	RES, METAL, OXIDE, AB	68 OHM, 3W, 5%, FORMING		
R311	14-142-01R01	RES, CARBON, AT	1 OHM, 1/2W, 5%		
R312	14-142-03303	RES, CARBON, AT	33 OHM, 1/2W, 5%		
R313	14-142-04707	RES, CARBON, AT	47 OHM, 1/2W, 5%		
R314	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R315	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R316	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R317	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R318	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R319	14-121-01229	RES, CARBON, AT	1.2K OHM, 1/6W, 5%		
R320	14-121-01045	RES, CARBON, AT	100K OHM, 1/6W, 5%		
R321	14-121-01229	RES, CARBON, AT	1.2K OHM, 1/6W, 5%		
R322	14-121-01045	RES, CARBON, AT	100K OHM, 1/6W, 5%		
R323	14-121-01229	RES, CARBON, AT	1.2K OHM, 1/6W, 5%		
R324	14-121-01045	RES, CARBON, AT	100K OHM, 1/6W, 5%		
R325	14-336-0271B	RES, METAL OXIDE, AT	270 OHM, 1W, 5%, 63MM, TAPING		
R326	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R327	14-142-02R22	RES, CARBON, AT	2.2 OHM, 1/2W, 5%		
R328	14-352-02R22	RES, METZL, OXIDE, AB	2.2 OHM, 3W, 5%, FORMING		
R329	14-121-05612	RES, CARBON, AT	560 OHM, 1/6W, 5%		
R330	14-121-01535	RES, CARBON, AT	15K OHM, 1/6W, 5%		
R331	14-121-02226	RES, CARBON, AT	2.2K OHM, 1/6W, 5%		
R332	14-142-04R76	RES, CARBON, AT	4.7 OHM, 1/2W, 5%		
R338	14-121-01045	RES, CARBON, AT	100K OHM, 1/6W, 5%		

FIXED RESISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
R401	14-121-07508	RES, CARBON, AT	75 OHM, 1/6W, 5%		
R402	14-121-07508	RES, CARBON, AT	75 OHM, 1/6W, 5%		
R403	14-121-07508	RES, CARBON, AT	75 OHM, 1/6W, 5%		
R404	14-121-02728	RES, CARBON, AT	2.7K OHM, 1/6W, 5%		
R405	14-121-03924	RES, CARBON, AT	3.9K OHM, 1/6W, 5%		
R406	14-121-05624	RES, CARBON, AT	5.6K OHM, 1/6W, 5%		
R407	14-121-03912	RES, CARBON, AT	390 OHM, 1/6W, 5%		
R408	14-134-01838	RES, CARBON, AT	18K OHM, 1/6W, 5%		
R409	14-121-02226	RES, CARBON, AT	2.2K OHM, 1/6W, 5%		
R410	14-121-05107	RES, CARBON, AT	51 OHM, 1/6W, 5%		
R412	14-121-03912	RES, CARBON, AT	390 OHM, 1/6W, 5%		
R413	14-121-05107	RES, CARBON, AT	51 OHM, 1/6W, 5%		
R414	14-121-02214	RES, CARBON, AT	220 OHM, 1/6W, 5%		
R415	14-121-03912	RES, CARBON, AT	390 OHM, 1/6W, 5%		
R416	14-121-05107	RES, CARBON, AT	51 OHM, 1/6W, 5%		
R417	14-121-02214	RES, CARBON, AT	220 OHM, 1/6W, 5%		
R418	14-121-03327	RES, CARBON, AT	3.3K OHM, 1/6W, 5%		
R419	14-121-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R420	14-121-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R421	14-121-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R422	14-121-02214	RES, CARBON, AT	220 OHM, 1/6W, 5%		
R423	14-134-02214	RES, CARBON, AT	220 OHM, 1/4W, 5%		
R424	14-134-02214	RES, CARBON, AT	220 OHM, 1/4W, 5%		
R425	14-134-02214	RES, CARBON, AT	220 OHM, 1/4W, 5%		
R426	14-121-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R427	14-121-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R428	14-134-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R429	14-134-01018	RES, CARBON, AT	100 OHM, 1/4W, 5%		
R431G, B	14-121-02202	RES, CARBON, AT	22 OHM, 1/4W, 5%		
R432	14-121-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R433	14-121-10118	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R434	14-121-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		

FIXED RESISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
R435R. G. B	14-134-04734	RES, CARBON, AT	47K OHM, 1/4W, 5%		
R436R. G. B	14-142-02202	RES, CARBON, AT	22 OHM, 1/2W, 5%		
R440	14-516-01006	RES, METAL FUSIBLE, AT	10 OHM, 1/4W, 5%		
R601	14-121-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R604	14-121-01018	RES, CARBON, AT	100 OHM, 1/6W, 5%		
R607	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R608	14-121-01523	RES, CARBON, AT	1.5K OHM, 1/6W, 5%		
R609	14-121-01523	RES, CARBON, AT	1.5K OHM, 1/6W, 5%		
R610	14-121-01523	RES, CARBON, AT	1.5K OHM, 1/6W, 5%		
R611	14-121-01523	RES, CARBON, AT	1.5K OHM, 1/6W, 5%		
R612	14-121-01523	RES, CARBON, AT	1.5K OHM, 1/6W, 5%		
R613	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R614	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R615	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R616	14-142-03303	RES, CARBON, AT	33 OHM, 1/2W, 5%		
R625	14-734-01508	RES, CEMENT, RB	15 OHM, 5W, 5%, ROR TYPE		
R626	14-121-03924	RES, CARBON, AT	3.9K OHM, 1/6W, 5%		
R627	14-121-04758	RES, CARBON, AT	4.7M OHM, 1/6W, 5%		
R701	14-122-09128	RES, CARBON, AT	9.1K OHM, 1/6W, 5%		
R702	14-122-09128	RES, CARBON, AT	9.1K OHM, 1/6W, 5%		
R703	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R704	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R705	14-121-05636	RES, CARBON, AT SC-528MX	56K OHM, 1/6W, 5%		
R705	14-121-06235	RES, CARBON, AT SC-528MXL	62K OHM, 1/6W, 5%		
R706	14-142-03303	RES, CARBON, AT	33 OHM, 1/2W, 5%		
R707	14-121-01838	RES, CARBON, AT	18K OHM, 1/6W, 5%		
R708	14-121-03339	RES, CARBON, AT	33K OHM, 1/6W, 5%		
R709	14-121-03339	RES, CARBON, AT	33K OHM, 1/6W, 5%		
R710	14-122-06832	RES, CARBON, AT	68K OHM, 1/6W, 5%		
R712	14-121-02728	RES, CARBON, AT	2.7K OHM, 1/6W, 5%		
R713	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R714	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		

FIXED RESISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
R715	14-142-03303	RES, CARBON, AT	33 OHM, 1/2W, 5%		
R716	14-121-04746	RES, CARBON, AT	470K OHM, 1/6W, 5%		
R718	14-121-02226	RES, CARBON, AT	2.2K OHM, 1/6W, 5%		
R801	14-121-01021	RES, CARBON, AT	1K OHM, 1/6W, 5%		
R802	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R803	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R804	14-121-01021	RES, CARBON, AT	1K OHM, 1/6W, 5%		
R805	14-122-09128	RES, CARBON, AT	9.1K OHM, 1/6W, 5%		
R806	14-122-06832	RES, CARBON, AT	68K OHM, 1/6W, 5%		
R807	14-142-02R22	RES, CARBON, AT	2.2 OHM, 1/2W, 5%		
R808	14-134-03327	RES, CARBON, AT	3.3K OHM, 1/4W, 5%		
R809	14-121-02226	RES, CARBON, AT	2.2K OHM, 1/6W, 5%		
R810	14-121-02226	RES, CARBON, AT	2.2K OHM, 1/6W, 5%		
R811	14-121-01021	RES, CARBON, AT	1K OHM, 1/6W, 5%		
R812	14-121-01033	RES, CARBON, AT	10K OHM, 1/6W, 5%		
R813	14-134-03936	RES, CARBON, AT	39K OHM, 1/4W, 5%		
R814	14-121-08226	RES, CARBON, AT	8.2K OHM, 1/6W, 5%		
R815	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R816	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R817	14-122-06829	RES, CARBON, AT	6.8K OHM, 1/6W, 5%		
R818	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R819	14-121-01021	RES, CARBON, AT	1K OHM, 1/6W, 5%		
R820	14-121-01021	RES, CARBON, AT	1K OHM, 1/6W, 5%		
R821	14-121-01045	RES, CARBON, AT	100K OHM, 1/6W, 5%		
R822	14-121-01838	RES, CARBON, AT	18K OHM, 1/6W, 5%		
R824	14-142-01021	RES, CARBON, AT	1K OHM, 1/2W, 5%		
R825	14-134-05624	RES, CARBON, AT	5.6K OHM, 1/4W, 5%		
R826	14-142-01547	RES, CARBON, AT	150K OHM, 1/2W, 5%		
R827	14-142-02R22	RES, CARBON, AT	2.2 OHM, 1/2W, 5%		
R828	14-134-01021	RES, CARBON, AT	1K OHM, 1/4W, 5%		
R829	14-121-04734	RES, CARBON, AT	47K OHM, 1/6W, 5%		
R830	14-134-01523	RES, CARBON, AT	1.5K OHM, 1/4W, 5%		

FIXED RESISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
R831	14-121-01523	RES, CARBON, AT	1.5K OHM, 1/6W, 5%		
R832	14-142-02202	RES, CARBON, AT	22 OHM, 1/2W, 5%		
R833	14-134-03936	RES, CARBON, AT	39K OHM, 1/4W, 5%		
R834	14-134-02241	RES, CARBON, AT	220K OHM, 1/4W, 5%		
R835	14-134-05648	RES, CARBON, AT	560K OHM, 1/4W, 5%		
R837	14-134-05648	RES, CARBON, AT	560K OHM, 1/4W, 5%		
R901	14-121-05624	RES, CARBON, AT	5.6K OHM, 1/6W, 5%		
R902	14-121-02226	RES, CARBON, AT	2.2K OHM, 1/6W, 5%		
R903	14-121-01232	RES, CARBON, AT	12K OHM, 1/6W, 5%		
R903	14-121-01232	RES, CARBON, AT	12K OHM, 1/6W, 5%		
R904	14-121-01838	RES, CARBON, AT	18K OHM, 1/6W, 5%		
R905	14-134-01021	RES, CARBON, AT	1K OHM, 1/4W, 5%		
R906	14-142-03303	RES, CARBON, AT	33 OHM, 1/2W, 5%		
R907	14-134-01523	RES, CARBON, AT	1.5K OHM, 1/4W, 5%		
R908	14-352-02R22	RES, METAL OXIDE, AB	2.2 OHM, 3W, 5%, FORMING		
R909	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R910	14-121-04722	RES, CARBON, AT	4.7K OHM, 1/6W, 5%		
R911	14-121-01021	RES, CARBON, AT	1K OHM, 1/6W, 5%		
R912	14-142-03303	RES, CARBON, AT	33 OHM, 1/2W, 5%		
R913	14-142-03303	RES, CARBON, AT	33 OHM, 1/2W, 5%		
R914	14-142-03303	RES, CARBON, AT	33 OHM, 1/2W, 5%		
R915	14-134-01523	RES, CARBON, AT	1.5K OHM, 1/4W, 5%		
R916	14-142-02042	RES, CARBON, AT	200K OHM, 1/2W, 5%		
R917	14-352-02R22	RES, METAL OXIDE, AB	2.2 OHM, 3W, 5%, FORMING		

VARIABLE RESISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
VR101	15-272-90036	VAR, NO-HANDLE, CAP, V-TYPE, RT	500 OHM B, 0.1W		
VR301	15-272-90048	VAR, NO-HANDLE, CAP, V-TYPE, RT	1K OHM, B, 0.1W		
VR401	14-271-90063	VAR, NO-HANDLE, CAP, V-TYPE, RT	100 OHM, B, 0.1W		
VR402	14-271-90063	VAR, NO-HANDLE, CAP, V-TYPE, RT	100 OHM, B, 0.1W		
VR403	14-271-90063	VAR, NO-HANDLE, CAP, V-TYPE, RT	100 OHM, B, 0.1W		

VARIABLE RESISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
VR404	15-352-00051	VAR, HANDLE, PCB-MOUNT, V-TYPE	10K OHM, B, 0.05W		
VR405R, G, B	15-271-90024	VAR, NO-HANDLE, CAP, H-TYPE, RT	50K OHM, B, 0.1W		
VR701	15-271-90036	VAR, NO-HANDLE, CAP, H-TYPE, RT	100K OHM, B, 0.1W		
VR703	15-272-90051	VAR, NO-HANDLE, CAP, V-TYPE, RT	2K OHM, B, 0.1W		
VR801	15-352-00063	VAR, HANDLE, PCB-MOUNT, V-TYPE	50K OHM, B, 0.05W		
VR802	15-272-90116	VAR, NO-HANDLE, CAP, V-TYPE, RT	100K OHM, B, 0.1W		
VR803	15-272-90104	VAR, NO-HANDLE, CAP, V-TYPE, TR	50K OHM, B, 0.1W		
TH101	15-622-90024	THERMISTOR, NTC	5 OHM, 3.4A, 2.4W		
TH102	15-622-90024	THERMISTOR, NTC	5 OHM, 3.4A, 2.04W		
TH103	15-621-90087	THERMISTOR, PTC	14 OHM, 20%, 220V, 2PIN		

PCB

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	16-111-01312	PCB, MAIN, SC-528MX/MXL	295 * 237, FR-1, 1.6T		
	16-111-01324	PCB, SOCKET, SC-528MX/MXL	108 * 130, FR-1, 1.6T		

COIL AND TRANSFORMER

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	17-224-00179	COIL, DEGAUSSING	90+-T, 0.4D, 12.4 OHM, 995MM, 6L		
	17-314-00063	FILTER, EMI SOCKET	250V/3A, 473PF(X1), 222PF, 1.2MH, SEV		
L101	17-311-00298	FILTER, LINE	20MH		
L102	17-313-00063	FILTER CORE	2.4UH, 5.5MM, BEAD, 0.032 OHM		
L103	17-222-00087	COIL CHOKE	50UH+-15%		
L104	17-222-00087	COIL CHOKE	50UH+-15%		
L105	17-222-00087	COIL CHOKE	50UH+-15%		
L107	17-222-00087	COIL CHOKE	50UH+-15%		
L301	17-226-00208	COIL, H-LIN, FIX · SC-528MX	3.0UH+-30%		
L301	17-226-00247	COIL, H-LIN, FIX, SC-528MXL	3.0UH, 30%, SUMI-TUBE		
L302	17-226-00298	COIL, H-LIN, FIX	4.0UH, 30%, TEFLIN-WIRE		
L303	17-222-00315	COIL, CHOKE	500UH, 20%, SC-528MX		

COIL AND TRANSFORMER

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
L304	17-313-00063	FILTER CORE	2.4UH, 5.5MM, BEAD, 0.032 OHM		
L305	17-313-00063	FILTER CORE	2.4UH, 5.5MM, BEAD, 0.032 OHM		
L401	17-313-00128	FILTER CORE	BEAD, 1300HM, 3.5 * 8.0		
L402	17-313-00063	FILTER CORE	2.4UH, 5.5MM, BEAD, 0.032 OHM		
L403	17-313-00063	FILTER CORE	2.4UH, 5.5MM, BEAD, 0.032 OHM		
L404	17-313-00063	FILTER CORE	2.4UH, 5.5MM, BEAD, 0.032 OHM		
L405	17-313-00063	FILTER CORE	2.4UH, 5.5MM, BEAD, 0.032 OHM		
L407	17-313-00128	FILTER CORE	BEAD, 1300HM, 3.5 * 8.0		
L901	17-222-00303	COIL, CHOKE	5.6MH, 20%		
T101	17-116-00366	TRANS, POWER SWITCHING	115/230V		
T301	17-132-00262	COIL, TRANS, H-DIRVE	10MH, 70UH, 2.2UH		
T302	17-222-00327	COIL, CHOKE	1.5MH, 20%		
T303	17-122-90223	FBT COLOR	Y262394.64KH$_z$		
T901	17-117-00036	COIL TRANS	3MH/3MH		
T902	17-117-00036	COIL TRANS	3MH/3MH		

OTHER ELECTRICITY

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
F101	19-104-90012	FUSE TIMEA-LAG WITHOUT LEAD	3.15A, 250V, 5 * 20MM, CERAMIC		
F101	19-113-90087	FUSE CLIP, TAPPING TYPE	250V, 7.5A, D5.2 * 2.8		
RY101	19-121-90036	RELAY	12VDC/250VAC, 10A		
RY301	19-121-90024	RELAY	12VDC, —, —, G6B1114P-FD-US		
SG402R, G, B	19-161-00036	NEON LAMP	200VDC		
SG403	19-161-00036	NEON LAMP	200VDC		
	19-131-90048	PUSH SWITCH	SPST, 4A/32A, 250V, 2P, J-U3065#01		

TRANSISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
Q101	21-114-00036	TR NPN TO-92	KSC1008Y, 0.7A, 80V, 800MA, LF AMP		
Q102	21-114-00036	TR NPN TO-92	KSC1008Y, 0.7A, 80V, 800MA, LF AMP		
Q103	21-114-00012	TR NPN TO-92	KSC945CY, 150MA, 60V, 250MV, AF AMP		
Q104	21-114-00012	TR NPN TO-92	KSC945CY, 150MA, 60V, 250MV, AF AMP		
Q201	21-114-00116	TR NPN TO-92	KSC2331, 700MA, 80V, 1.0W, LF AMP		
Q202	21-124-00155	TR PNP TO-92	KSA931, 0, 0.7A, 80V, 1W, LF AMP		
Q301	21-114-00116	TR NPN TO-92	KSC2331, 700MA, 80V, 1.0W, LF AMP		
Q302	21-117-90339	TR NPN TO-3P	C3886A, 8A, 1500V, 50W(TC), HOR DEF		
Q303	21-131-90179	FET N-CHANNEL	2SK890, 10A, 200V, 75W(TC), TO-220		
Q304	21-131-90179	FET N-CHANNEL	2SK890, 10A, 200V, 75W(TC), TO-220		
Q305	21-131-90179	FET N-CHANNEL	2SK890, 10A, 200V, 75W(TC), TO-220		
Q306	21-114-00116	TR NPN TO-92	KSC2331, 700MA, 80V, 1.0W, LF AMP		
Q307	21-114-00012	TR NPN TO-92	KSC945CY, 150MA, 60V, 250MV, AF AMP		
Q308	21-114-00012	TR NPN TO-92	KSC945CY, 150MA, 60V, 250MV, AF AMP		
Q309	21-114-00116	TR NPN TO-92	KSC2331, 700MA, 80V, 1.0W, LF AMP		
Q310	21-124-00155	TR PNP TO-92	KSA931, 0, 0.7A, 80V, 1W, LF AMP		
Q311	21-131-90194	FET N-CHANNEL	2SK1363, 8A, 900V, 90W(TC), TO-3P		
Q401	21-112-90024	TR NPN TO-18	2N2369, 200MA, 40V, 360MW, SW		
Q402	21-112-90024	TR NPN TO-18	2N2369, 200MA, 40V, 360MW, SW		
Q403	21-112-90024	TR NPN TO-18	2N2369, 200MA, 40V, 360MW, SW		
Q801	21-124-00024	TR PNP TO-92	KSA733CY, 0.15A, 60V, 0.25W, LF AMP		
Q802	21-114-00012	TR NPN TO-92	KSC945CY, 150MA, 60V, 250MV, AF AMP		
Q803	21-114-00012	TR NPN TO-92	KSC945CY, 150MA, 60V, 250MV, AF AMP		
Q804	21-114-00012	TR NPN TO-92	KSC945CY, 150MA, 60V, 250MV, AF AMP		
Q805	21-125-0001B	TR PNP TO-126	KSA1381E(S), STICK, 0.1A, 300V, 7W(TC)		
Q806	21-114-00116	TR NPN TO-92	KSC2331, 700MA, 80V, 1.0W, LF AMP		
Q807	21-114-00012	TR NPN TO-92	KSC945CY, 150MA, 60V, 250MV, AF AMP		
Q901	21-117-90116	TR NPN TO-220	MJE3055T, 10A, 70V, 75W(TC), PW, SW		
Q902	21-131-90182	FET N-CHANNEL	2SK1351, 5A, 500V, 40W(TC), TO-220		

TRANSISTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
D101	22-113-90051	RECTIFIER DIODE FR	A, 600V, GBU4J		
D102	22-111-90446	RECTIFIER DIODE FR	0.4A, 1KV, 100NS, RU1P		
D103	22-111-90087	RECTIFIER DIODE FR	1A, 600V, 1N4937		
D105	22-111-90087	RECTIFIER DIODE FR	1A, 600V, 1N4937		
D106	22-111-90087	RECTIFIER DIODE FR	1A, 600V, 1N4937		
D108	22-111-90087	RECTIFIER DIODE FR	1A, 600V, 1N4937		
D109	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		
D110	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		
D111	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		
D112	22-111-90434	RECTIFIER DIODE FR	3A, 200V, 50NS, UF5402		
D113	22-111-90434	RECTIFIER DIODE FR	3A, 200V, 50NS, UF5402		
D114	22-121-00087	ZENER DIODE	0.5W, 8.2V, UZ8.2B		
D115	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D116	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		
D201	22-111-90087	RECTIFIER DIODE FR	1A, 600V, 1N4937		
D301	22-111-90422	RECTIFIER DIODE FR	5A, 1500V, 1.5NS, 5THZ52		
D302	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D303	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		
D304	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D305	22-111-90048	RECTIFIER DIODE FR	3A, 1000V, BYW96E/BYT78		
D306	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		
D401	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D402	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D403	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D404R. G. B	22-111-90087	RECTIFIER DIODE FR	1A, 600V, 1N4937		
D405R. G. B	22-121-00167	ZENER DIODE	0.5W, 24V, UZ24B		
D406	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D601	22-121-00051	ZENER DIODE	0.5W, 5.1V, UZ5.1B		
D602	22-121-00051	ZENER DIODE	0.5W, 5.1V, UZ5.1B		
D603	22-152-00075	LEC GREEN	25MA, 75MW, SLR-34MG3, ROUND		
D701	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D702	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		

DIODE

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
D801	22-121-00116	ZENER DIODE	0.5W, 12V, UZ12B		
D802	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		
D803	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D804	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D806	22-121-00051	ZENER DIODE	0.5W, 5.1V, UZ5.1B		
D807	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D808	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		
D809	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		
D810	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D811	22-121-00167	ZENER DIODE	0.5W, 24V, UZ24B		
D812	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D813	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D901	22-111-90087	RECTIFIER DIODE FR	1A, 600V, 1N4937		
D902	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D903	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D904	22-132-00048	SWITCHING DIODE	100MA, 75V, 1N4148		
D905	22-111-90087	RECTIFIER DIODE FR	1A, 600V, 1N4937		
D906	22-111-90167	RECTIFIER DIODE FR	1.5A, 400V, RGP15G/FF1504		

IC

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
IC101	23-322-90167	IC, LINEAR, SIP-5	VOLTAGE REGULATOR, STR59041		
IC102	23-312-00048	IC, REGULATOR, TO-220	7812C, 1.5A, 12V		
IC201	23-329-90087	IC, LINEAR, SPECIAL	VERTICAL DEFLECTION DRIVER, TDA8172		
IC202	23-322-00131	IC, LINEAR, SIP	358, OP AMP.9P		
IC301	23-321-90259	IC, LINEAR, DIP-20	HV PROCESSOR, TDA9102C		
IC302	23-121-00075	IC, TTL, LS, DIP	74LS07		
IC401	23-321-90208	IC, LINEAR, DIP	1203, RGB VIDEO MAP, 28		
IC402	23-329-90099	IN, LINEAR, SPECIAL	COLOR CRT DIRVER, LM2416T		
IC601	23-312-00128	IC, REGULATOR, TO-220	7805C, 1.5A, 5V		
IC602	23-323-90036	IC, LINEAR, TO-92	VOLTAGE SENSING, MC34064		
IC603	23-401-00179	IC, CPU, DIP-40	875BH, 8BIT		
IC604	23-417-90036	IC, EEPROM, DIP-8	AT24C02-10PC, 2KBIT SERIAL		
IC605	23-321-90327	IC, LINEAR, DIP-16	6 BIT DAC, TDA8444		

IC

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
IC701	23-321-90303	IC, LINEAR, DIP-8	EW CORRECTION, TDA8145		
HY601	23-511-00051	IC, HYBRID	SCD009, HV SYNC INTERFACE		
HY701	23-511-00063	IC, HYBRID	SCD010, DEFLECTION PWM		
HY901	23-511-00075	IC, HYBRID	SCD011, HIGH VOLTAGE PWM		

METAL

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	31-114-00167	HEAT SINK-N, TERMINAL	22 * 5.7 * 32, CU, ZPW		
	31-114-00327	HEAT SINK-N	90 * 60 * 57, AL 2.0T		
	31-114-00434	HEAT SINK-N	24 * 14 * 50, A6063S, W/SOLDER PIN		
	31-114-00538	HEAT SINK-N	50 * 18 * 30, A6063S, W/SOLDER PIN		
	31-114-00577	HEAT SINK-N	50 * 28 * 40, A6063S, W/SOLDER PIN		
	31-114-00618	HEAT SINK-N	30 * 15 * 23.5, A6063S		
	31-114-00669	HEAT SINK-N	178 * 72.5 * 137.5, AL 2T		
	31-124-00048	GND-LUG, SHIELD	59.7 * 16 * 0.35T, PBSP		
CN101 CN102 CN103 CN201 CN301 TEST54	31-131-00012	BEAD PIN	D2.36 * 14.1, BRASS, SN		
	31-129-00434	SHIELD COVER, SOCKET	133 * 110 * 43, TIN 0.3T		
	31-129-00458	SHIELD COVER, SIDE	271.6 * 165.3 * 7, TIN 0.3T		

PLASTIC

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	32-311-00012	CABLE TIE	L101.6 * W25 * T1		
	32-317-00167	LOCKING SUPPORT, TWIST	DASTL-8NA		
	32-329-00012	PUSH LATCH	LA 701-3AA		
	32-611-04018	PLA, KNOB, SC-528MS(L)	D19 * D20 * 13.5, ABS, OEM-3357		

CONNECTION PARTS

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	33-142-00012	MS+, PAN, W/P.W, ZPW	M3 * 8, SWRCH1018AK		
	33-142-00036	MS+, PAN, W/P.W, ZPW	M3 * 12, SWRCH1018AK		
	33-162-00012	MS+, BND, ZPW	M3 * 6, SWRCH1018AK		
	33-168-00024	MS+, BND, W/T.L.W, ZPW	M4 * 8, SWRCH1018AK		
	33-425-00012	TS+, BND, W/P.W, B, ZPW	M3 * 8, SWRCH1018AK		
	33-485-00012	TS+, OVAL, 2, ZPW	M3 * 12, SWRCH1018AK		
	33-612-00051	PS, PAN, ZPW	M3.5 * 10, SWRCH1018AK		
	33-612-00259	PS+, PAN, ZPW	M4.5 * 14, SWRCH1018AK		
	33-642-00024	PS+, HEX, W/S.W, ZPW	M4.5 * 24, SWRCH1018AK, WD : 16		
	33-852-00012	NUT, HEX, W, ZPW	M3 * 0.5P, S10C		

PACKING

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	34-111-03339	BOX, SC-528MXL, SAMTRON	485 * 449 * 445, E200 * K200 * KA200 * K200 * K		
	34-111-03342	BOX, SC-528MX, SAMTRON	485 * 449 * 445, E200 * K200 * KA200 * K200 * K		
	34-211-00514	S/FOAM, SC-528MX(L)	470 * 420 * 120, EPS		
	34-311-00577	VINYL BAG, SET, SAMTRON	800 * 880, HDPE 0.015T, RECYCLING		
	34-311-00592	VINYL BAG, SIGNAL CABLE, SAMTRON	110 * 200, HDPE 0.05T, RECYCLING		

PRINT

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	35-111-05081	LABEL, WARNING	HIGH VOLTAGE		
	35-111-08544	LABEL, PRODUCT, SAMTRON, SC-528MX	99.8 * 49.8, UL/CSA/TUV, OEM-3357		
	35-111-08556	LABEL, PRODUCT, SAMTRON, SC-528MXL	99.8-49.8, UL/CSA/TUV, OEM-3357		
	35-311-03286	MANUAL, USER'S, SC-528MX(L)	SAMTRON		

WIRE, CONNECTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	36-412-00407	WIRE, CONN/HOUSING	190MM, 2P, GY, 10, R, R, 1672		
	36-431-00208	WIRE, RING TER, SINGLE	G/Y, D4.3, 150MM		
	36-437-00099	BRAID WIRE, RING TER	D5, 110MM		
	36-437-00194	BRAID WIRE, RING, W/TUBE	D5 * 120MM		
	36-437-00339	BRAID WIRE, CDT GND	685 * 260 * 2 * 115MM, 2P, 16 * 3 * 0.16		
	36-521-0021B	CORD, POWER, NORMAL, DETACH	SVT, 125V/7A, BK, 6FT, SHIELDED, T MARK		
	36-521-9004B	CORD, POWER, NORMAL, DETACH	H05VV-F, 250V, BK, 1830MM, T MARK		
	36-541-00657	CABLE, SIGNAL, NON-DET	15P, 1500MM, BK, HOOD		
	36-541-90621	CABLE, SIGNAL, NON-DET	15P, 1720MM, BK, MOLD		
CN104	36-615-0005B	CONNECTOR SHROUDED HEADER	2.5, ST, 7P, 35301-0750-7, STICK		
CN401	36-615-00075	CONNECTOR SHROUDED HEADER	2.5, ST, 11P, 5267-11A		
CN402	36-615-00024	CONNECTOR SHROUDED HEADER	2.5, ST, 3P, 5267-03A		
CN403	36-415-00378	WIRE, CONN/HOUSING	430/180MM, 5P, 4P, 7P, 3P, 1007#26		
CN404	36-415-00378	WIRE, CONN/HOUSING	430/180MM, 5P, 4P, 7P, 3P, 1007#26		
CN405	36-613-00208	CONNECTOR, OPEN HEADER	10, ST, 2P, BW-502L		
CN406	36-633-90116	CRT SOCKET	D29, 12P, HPS0199-01-020		
CN601	36-615-0002B	CONNECTOR SHROUDED HEADER	2.5, ST, 3P, 35301-0350-7, STICK		
CN602	36-414-00434	WIRE, CONN/HOUSING	350MM, 5395-04, 1007#26(BK, O, Y), 5240		
CN603	36-615-0007B	CONNECTOR SHROUDED HEADER	2.5, ST, 11P, 35301-1150-7		
CN604	36-412-00749	WIRE, CONN/HOUSING	170MM,11P, 7P, 5P, 1007#26		
CN605	36-415-00381	WIRE, CONN/HOUSING	450MM, 5395-06, 5264-02/03, 1007#26		
CN801	36-615-0001B	CONNECTOR SHROUDED HEADER	2.5, ST, 2P, 35301-0250-7, STICK		
D407	36-181-00012	WIRE, BARE	CU+SN+PB, 1ST, IX0.6, SAD		
D408	36-181-00012	WIRE, BARE	CU+SN+PB, 1ST, IX0.6, SAD		
F401	36-181-00012	WIRE, BARE	CU+SN+PB, 1ST, IX0.6, SAD		
F402	36-181-00012	WIRE, BARE	CU+SN+PB, 1ST, IX0.6, SAD		
F403	36-181-00012	WIRE, BARE	CU+SN+PB, 1ST, IX0.6, SAD		
GND2	36-431-00419	WIRE, RING TER, SINGLE	BK, D5, 60MM 1015#22, PIN		
GND3	36-431-00419	WIRE, RING TER, SINGLE	BK, D5, 60MM 1015#22, PIN		
GND4	36-431-00419	WIRE, RING TER, SINGLE	BK, D6, 60MM, 1015#22, PIN		
GND5	36-431-00434	WIRE, RING TER, SINGLE	BK, D4.3, 120MM, 1672#22, PCB TER		
GND6	36-431-00434	WIRE, RING TER, SINGLE	BK, D4.3, 120MM, 1672#22, PCB TER		

WIRE, CONNECTOR

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
J1-J114	36-181-00012	WIRE, BARE	CU+SN+PB, 1ST, 1X0.6, SAD		
JW1	36-211-00354	WIREFORM, UL1007-AWG22	TCST, 1ST, 17*0.16, PVC, R, 190MM, DT		
SHIELD	36-282-00024	WIRE, BARE TAPING	CU+SN+PB, 1ST, 1*0.6, 52MM		

PTHER METAL

CKT NO.	P/N	DESCRIPTION	SPEC	ECO NO	DATE
	39-422-00024	TUBE-SHRINK, WHT	D4, POLY-OLEFIN		

[2] Reliabilities

2-1. Environmental

The monitor unit must not be degradisted and damaged by operating over the specified range and will meet specifications when returned to the operating environment. SDD will perform these tests on the monitor prior to its release. The monitor is required to pass these tests before mass production. These tests are detailed in SDD environmment specification.

2-2. Temperature

* Operating : 6℃ To 40℃
* Storage : −40℃ To +70℃

2-3. Humidity

* Operting : 5% To 80% (Noncondensing)
* Storage : Maximum 90%

2-4. Drop : Refer to SDD'S ENVIRONMENTAL TESTSMANUAL.

2-5. Leakage current : Refer to SDD'S ENVIRONMENTAL TESTSMANUAL.

2-6. Vibration : Refer to SDD'S ENVIRONMENTAL TESTSMANUAL.

2-7. Long Life (MTBF)

The monitor shall have 20,000hrs MTBF when operated under any combination of conditions as detailed specification.

2-8. Altitude.

* Operting : 15000ft at +70℃
  0ft at 0℃
* Non operating : MAX. 50000FT

2-9. Spfety and approvals.

2-9-1. Safety regulatory

The system will be certified according to the following international safety standards.

* UL 1950 WITH D3
* CSA C22.2 No.950 WITH D3
* TUV EN60950
* I. A. A BY KOREAN SAFETY CONTROLLAW

2-9-2. Electromagnetic interference.

The system will be certified according to the following intemational radiation standards.

* FCC 47 CFR. Ch15, SUB. J
* DOC SOR/88-475
* BZT DIN VDE 0871/BMPT-Vfg. 243/1991
* D. O. T BY KOREANLAWS. 100

2-9-3. X-Radiation.

The X-radiation emitted from this picture tube will not exceed 0.5mR/h for anode current combination.
X-radiation at a constant anode voltage varies linearly with anode current.
The system will comply with the following intemational standards.

* DHHS 21 CFR SUB CH J
* SWEDAC MPR 1990 : 8, 10, SEC 2

2-9-4. Ergonomics.

The complete assembly shall be certified as complying with the following intemational standards.

* TUV/GS : ZH1/618/10.80
* TUV/ERGONOMIC : ISO 9241. PART 3

2-9-5. Low radiation.

* SEMCO MPR 1990 : 8. 10, SEC. 2
* TUV/ERGONOMIC MPR 1990 : 8, 10, SEC. 2

[3] Signal cable pin connection

* SIGNAL CABLE PIN CONNECTION(15PIN D-SUB SIGNAL CONNECTOR WITH CABLE)

NO	RGB/ANALOG SIGNAL	SIGNAL PIN NO	WIRE COLOR	REMARKS
1	RED	PIN #1	RED	
2	GREEN	PIN #2	GREEN	
3	BLUE	PIN #3	BLUE	
4	RESERVED	PIN #4	BLACK	
5	LOGIC GROUND	PIN #5	BLACK	
6	RED GROUND	PIN #6	SHIELD	
7	GREEN GROUND	PIN #7	SHIELD	
8	BLUE GROUND	PIN #8	SHIELD	
9	N.C	PIN #9		
10	SYNC GROUND	PIN #10	BLACK	
11	GROUND	PIN #11	BLACK	
12	N.C	PIN #12		
13	H-SYNC	PIN #13	WHITE	
14	V-SYNC	PIN #14	YELLOW	
15	N.C	PIN #15		