

TX-21AD3F Service Manual

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Service Support

Service and repair of this product is supported by Panasonic's LUCI interface.

This interface provides a link between the TV and a standard PC to allow a number of diagnostic and control functions to be performed.

For more details contact your local Panasonic company.


BACK

EXIT

Video / Audio

Control



BACK

B - PCB

E - PCB

Y - PCB



BACK

B - Schematic

E - Schematic

P - Schematic

Y - Schematic



BACK

Service Manual



Colour Television TX-21AD3F EURO-2M Chassis

Specifications

Power Source :	220 - 240 V AC, 50Hz
Power Consumption :	75W
Aerial Impedance :	75Ω unbalanced, Coaxial Type
Receiving System :	PAL B/G, H PAL - 60 SECAM B/G L.L' MNTSC, NTSC (AV Only)
Receiving Channels :	VHF E2 - E12 VHF H1 - H2 (ITALY) VHF R1 - R2 VHF R3 - R5 VHF R6 - R12 UHF E21 - E69 CATV S1 - S10 (M1 - M10) CATV S11 - S20 (U1 - U10)
Intermediate Frequency :	Video 38.9MHz, 34MHz Sound 33.16MHz, 33.4MHz, 32.4MHz, 33.05MHz 40.4MHz, 32.9MHz
Colour	34.47MHz, 34.5MH, 34.65MHz
Video / Audio Terminals :	
AV1 IN	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 10kΩ RGB (21 pin)
AV1 OUT	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 1kΩ
AV2 IN	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 10 kΩ S-Video IN Y : 1V p-p 75Ω (21 pin) C : 0.3V p-p 75Ω
AV2 OUT	Video (21 pin) 1V p-p 75Ω Audio (21 pin) 500mV rms 1kΩ
AV3 IN	Audio (RCA x 2) 500mV rms 10kΩ Video (RCA x 1) 1V p-p 75Ω
High Voltage :	27kV ± 1kV at zero beam current
Picture Tube :	A51ECQ51X01 51 cm
Visible screen size:	90° deflection
Audio Output :	2 x 20W (Music Power) 8Ω Impedance
Headphones	8Ω Impedance
Accessories supplied :	Remote Control 2 x R6 (UM3) Batteries
Dimensions :	Height : 465mm Width : 558mm Depth : 495mm
Net Weight	23kg

Specifications are subject to change without notice.
Weight and dimensions shown are approximate.

Caractéristiques

Alimentation :	220 - 240 V AC, 50Hz
Consommation :	75W
Impédance d'antenne :	75Ω asymétrique sur prise coaxiale
Système de réception :	PAL B/G, H PAL - 60 SECAM B/G L.L' MNTSC, NTSC (Entrée AV seulement)
Canaux de réception :	VHF E2 - E2 VHF H1 - H2 (ITALY) VHF R1 - R2 VHF R3 - R5 VHF R6 - R12 UHF E21 - E69 CATV S1 - S10 (M1 - M10) CATV S11 - S20 (U1 - U10)
Fréquence Intermédiaire :	Video 38.9MHz, 34MHz Sound 33.16MHz, 33.4MHz, 32.4MHz, 33.05MHz 40.4MHz, 32.9MHz
Colour	34.47MHz, 34.5MH, 34.65MHz
Les bornes vidéo/audio :	
Entrée AV1 (21 broches)	Vidéo 1V p-p 75Ω Audio 500mV rms 10kΩ RVB
Sortie AV1 (21 broches)	Vidéo 1V p-p 75Ω Audio 500mV rms 1kΩ
Entrée AV2 (21 broches)	Vidéo 1V p-p 75Ω Audio 500mV rms 10 kΩ S-Vidéo IN Y : 1V p-p 75Ω (21 broches) C : 0.3V p-p 75Ω
Sortie AV2 (21 broches)	Vidéo 1V p-p 75Ω Audio 500mV rms 1kΩ
Entrée AV3 (21 broches)	Audio (RCA x 2) 500mV rms 10kΩ Vidéo (RCA x 1) 1V p-p 75Ω
Tension d'anode :	27kV ± 1kV
Tube image :	A51ECQ51X01 51 cm 90°
Sortie Audio :	2 x 20W (Music Power) 8 Ω Impédance
Casque d'écoute	8 Ω Impédance
Accessoires fournis :	Télécommande R6 (UM3) Piles x 2
Dimensions :	Hauteur : 465mm Largeur : 558mm Profondeur : 495mm
Poids (NET) :	23kg

Les caractéristiques techniques sont susceptibles de modification sans Préavis.
Le poids et les dimensions indiqués sont approximatifs.

Panasonic

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SAFETY PRECAUTIONS

GENERAL GUIDE LINES

1. It is advisable to insert an isolation transformer in the AC supply before servicing a hot chassis.
2. When servicing, observe the original lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see that all the protective devices such as insulation barriers, insulation papers, shields and isolation R—C combinations are correctly installed.
4. When the receiver is not being used for a long period of time, unplug the power cord from the AC outlet.
5. Potentials as high as 28kV are present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the picture to the chassis before handling the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts etc. When the exposed metallic part has a return path to the chassis the reading should be between 4M ohm and 20M ohm. When the exposed metal does not have a return path to the chassis the reading must be infinite.

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PRECAUTIONS DE SECURITE

CONSEILS GENERAUX

1. Avant d'effectuer toute révision d'un châssis sous tension il est recommandé d'installer un transformateur d'isolation.
2. Il est important, lors des réparations, de conserver la position initial de tous les fils et faisceaux, surtout dans le circuit de la haute tension. Remplacer toutes les pièces affectées par la chaleur dégagée lors d'un court-circuit.
3. Après les réparations, s'assurer que toutes les pièces protectrices telles que barrières ou papiers isolants, blindages et réseaux d'isolation R—C soient convenablement placées.
4. Il est préférable de débrancher le fil d'alimentation si la télé —couleur ne doit pas être utilisée pendant un certain temps.
5. Une tension élevée, de l'ordre de 28kV, est présente en plusieurs endroits lorsque l'appareil est en circuit. Il y a danger de chocs électriques lorsque le contact est établi en absence du panneau arrière. Toute personne qui tente de réparer cet appareil doit d'abord être consciente des précautions à observer avant de travailler sur un circuit à haute tension. Toujours décharger l'anode du tube cathodique au châssis avant de manipuler.
6. Après tout réparation, on doit effectuer les tests de courant de fuite dans le but d'éviter tout choc.

VERIFICATION DES COURANTS DE FUITE SANS ALIMENTATION

1. Débrancher le fil d'alimentation et installer un fil STRAP entre les deux broches de la fiche.
2. Placer l'interrupteur comme pour établir le contact sur l'appareil.
3. Mesurer la résistance entre les branches de la fiche d'alimentation et les pièces métalliques visibles telles que têtes de vis, antennes, arbre des commandes, support des poignées, etc. Certaines de ces pièces sont en contact avec le châssis et la résistance mesurée devrait se situer entre 4M Ω , et 20M Ω . La résistance des pièces qui ne sont pas en contact avec le châssis doit être infinie ∞ .

LEAKAGE CURRENT HOT CHECK

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 2kΩ 10W resistor in series with an exposed metallic part on the receiver and an earth such as a water pipe.
3. Use an AC voltmeter with high impedance to measure the potential across the resistor.
4. Check each exposed Metallic part and check the voltage at each point.
5. Reverse the AC plug at the outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 1.4 Vrms. In case a measurement is outside the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

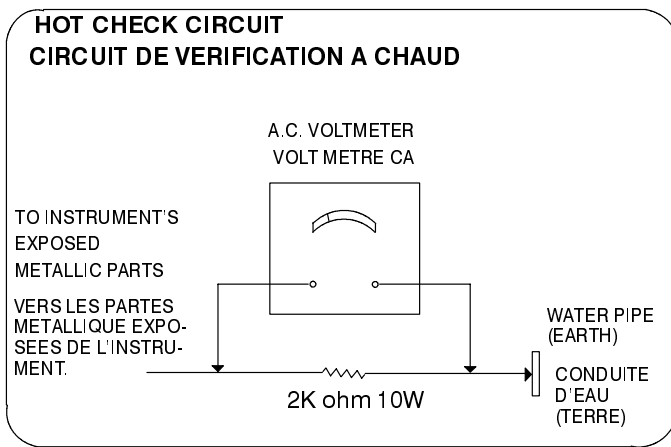


Fig.1

X-RADIATION WARNING

1. The potential sources of X-Radiation in TV sets are the high voltage section and the picture tube.
2. When using a picture tube test jig for service ensure that the jig is capable of handling 28kV without causing X-Radiation.

NOTE : It is important to use an accurate periodically calibrated high voltage meter

1. Set the brightness to minimum.
2. Measure the high voltage. The meter should indicate 27kV \pm 1kV if the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent any X-Radiation possibility, it is essential to use the specified tube.

VERIFICATION A CHAUD DU COURANT DE FUITE

1. Brancher le cordon secteur directement à une prise secteur. Ne pas utiliser de transformateur d'isolation pour cette vérification.
2. Raccorder une résistance de 2kΩ, 10W, en série avec une partie métallique exposée du récepteur et une terre comme une conduite d'eau.
3. Utiliser un voltmètre CA, de type à impédance élevée, pour mesurer le potentiel à travers la résistance.
4. Vérifier toutes les parties métalliques exposées et mesurer la tension à chaque point.
5. Retourner la fiche CA dans la prise secteur et répéter toutes les mesures ci-dessus.
6. Le potentiel à tous les points ne doit pas dépasser 1.4 volt RMS. AU cas où une mesure est supérieure à cette limite spécifiée, il y a un risque de décharge électrique et le récepteur doit être réparé et revérifié avant d'être rendu au client.

IRRADIATION AUX RAYONS X ATTENTION:

1. Les parties de la haute tension et du tube-cathodique d'une télé-couleur sont des sources possible d'émissions de rayons X.
2. Si un tube cathodique témoin est utilisé pour la réparation, s'assurer que son assemblage pourra supporter 28kV sans émettre de radiations.

REMARQUE : Il est important que le multimètre à haute tension utilisé soit étalonné périodiquement.

1. Tourner entièrement vers la gauche la commande de lumière.
2. Mesurer la haute tension à l'aide du multimètre approprié. La valeur nominale est de 27kV \pm 1kV. Si la lecture est hors des tolérances, une réparation immédiate s'impose afin de prévenir toute panne prématurée.
3. Il est essentiel d'utiliser le tube cathodique d'origine pour prévenir toute émission de rayons X.

LOCATION OF CONTROLS

EMPLACEMENT DES COMMANDES

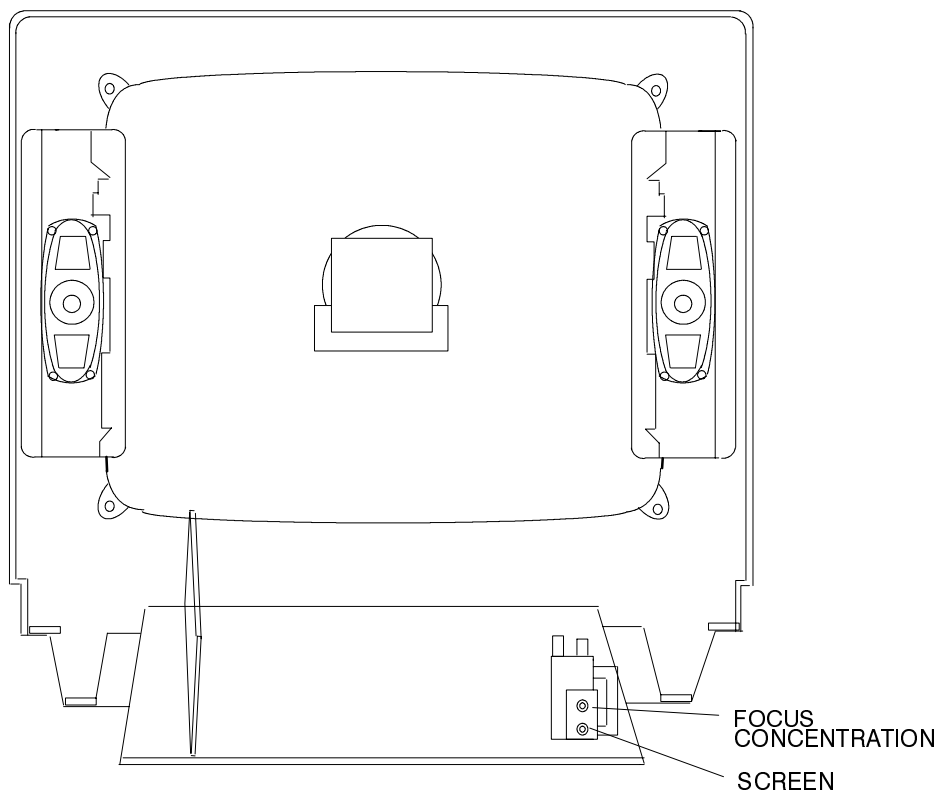


Fig.2

SERVICE HINTS

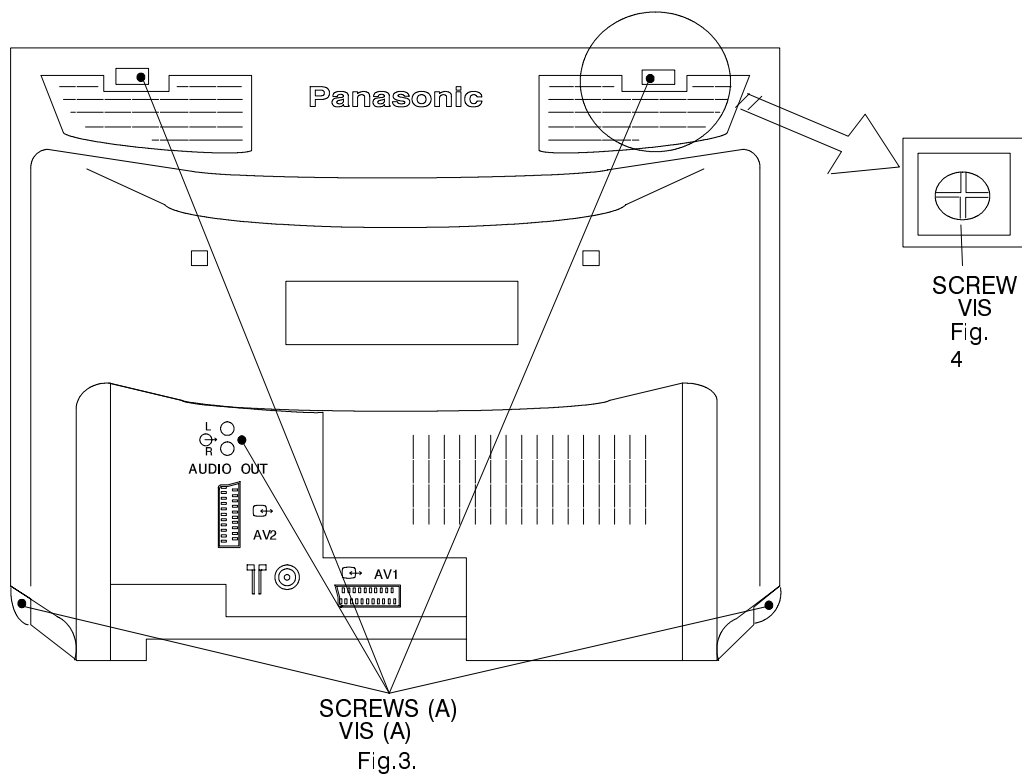
HOW TO REMOVE THE REAR COVER

1. Remove the 5 screws (A) as shown in Fig.3/ Fig.4.

SUGGESTIONS DE DEPANNAGE

COMMENT RETIRER LE PENNEAU ARRIERE

1. Retirer les 5 vis (A) comme sur la Fig.3. / Fig.4.



SCREWS (A)
VIS (A)

Fig.3.

ADJUSTMENT PROCEDURE

The remote control is used for entering and storing adjustments, with the exception of cut-off adjustments which must always be done prior to service adjustment. Perform adjustments in accordance with screen display. The display on the screen also specifies the CCU variants as well as the approx. setting values. The adjustment sequence for the service mode is indicated below.

1. Set the Bass to maximum position, set the Treble to minimum position, press the F button followed by the volume down button on the customer controls at the front of the TV and at the same time press the Reveal button on the remote control, this will place the TV into the Service Mode.
2. Press the RED / GREEN buttons to step up / down through the functions.
3. Press the YELLOW / BLUE buttons to alter the function values.
4. Press the STORE button after each adjustment has been made to store the required values.
5. To exit the Service Mode press the Normalisation button.

NOTE: This TV also has the option of using a Memory Pack which enables you to copy the preset TV channels into the Memory Pack and then download them onto this or any other EURO-2 TV set.

TV to Memory Pack process

1. Plug the memory pack into the lower of the two 21 pin terminals at the back of the TV and switch the TV on. If the TV has only one 21 pin connector then this will be able to accept the memory pack.
2. Go into the Service Mode as explained above. The screen will show:—

Program
External>>TV

3. Press the blue button on the remote control. The screen will show:—

Program
TV>>External

4. Press the STORE button on the TV. The screen will show:—

Storing

5. All the tuning information stored inside the TV will now be transferred to the Memory Pack. This process will take 2–3 minutes to complete and when finished the screen will show:—

OK!

Memory Pack to TV Process

1. Plug the memory pack into the lower of the two 21 pin terminals at the back of the TV and switch the TV on. If the TV has only one 21 pin connector then this will be able to accept the memory pack.
2. Go into the Service Mode as explained above. The screen will show:—

Program
External>>TV

3. Press the STORE button on the TV. The screen will show:—

Loading

4. All the tuning information stored inside the Memory Pack will now be transferred to the TV. This process will take 2–3 minutes to complete and when finished the screen will show:—

OK!

5. The tuning information from the Memory Pack has now been copied into the TV.
6. To exit from the Service Mode press the Normalisation button.
7. The process has now been completed and the Memory Pack can now be removed.

Errors

If an error occurs while using the Memory Pack the TV will detect this and the screen will show:—

Program
Error!

If this happens then press the Normalisation button and repeat the process that was being used. If the errors continue to occur then check the connectors between the TV and the memory pack and check the 9V battery inside the memory pack.

RÉGLAGES

La télécommande sert à entrer et stocker les données des réglages. Sauf pour le cut-off qui doit être réalisé en priorité. Les réglages s'affichent sur l'écran, ainsi que les spécificités nominales du CCU.

1. Régler par la télécommande le niveau de **grave** au **maximum, aigu** au **minimum**. Simultanément appuyer sur: **Volume-** du tiroir en face avant et le bouton **Reveal** de la télécommande.
2. Appuyer sur la touche **ROUGE** ou **VERTE** pour sélectionner la fonction désirée.
3. Appuyer sur la touche **JAUNE** ou **BLEUE** pour modifier les valeurs des réglages.
4. Mettre en mémoire après chaque réglage, en appuyant sur la touche **STORE**.
5. Pour sortir de la position SERVICE MODE arrêter le TV

REMARQUE : Le Memory Pack permet de copier la configuration du TV, (Chaines, Niveaux analogiques) et de la transférer, via le bloc-Mémoire vers un autre TV EURO-2.

Processus de transfert "téléviseur vers bloc-mémoire"

1. La partie arrière du téléviseur comporte deux connecteurs à 21 broches : brancher le bloc-mémoire dans le connecteur inférieur (AV2), puis mettre le téléviseur en marche ("ON"). Si le téléviseur ne comporte qu'un seul connecteur à 21 broches, celui-ci pourra alors servir à reccorder le bloc-mémoire.
2. Passer en Mode Service (voir ci-dessus). L'écran affichera:

Program
External > > TV

3. Appuyer sur la bouton BLEU de la télécommande. L'écran du téléviseur présente le message suivant:

Program
TV > > External

4. Appuyer sur la bouton de mémorisation (STORE) du téléviseur et l'écran présentera la message suivant:

Storing

5. Toutes les informations de syntonisation enregistrées par le téléviseur seront maintenant transférées vers le bloc-mémoire. Cette opération ne prend que 2 à 3 minutes. Lorsqu'elle est terminée, l'écran du téléviseur présentera message suivant:

OK!

Processus de transfert "bloc-mémoire vers téléviseur"

1. La partie arrière du téléviseur comporte deux connecteurs à 21 broches : brancher le bloc-mémoire dans le connecteur inférieur (AV2), puis mettre le téléviseur en marche ("ON"). Si le téléviseur ne comporte qu'un seul connecteur à 21 broches, celui-ci pourra alors servir à reccorder le bloc-mémoire.
2. Passer en Mode Service (voir ci-dessus). L'écran affichera:

Program
External > > TV

3. Appuyer sur la bouton de mémorisation (STORE) du téléviseur et l'écran présentera la message suivant:

Loading

4. Toutes les informations de syntonisation enregistrées par le téléviseur seront maintenant transférées vers le bloc-mémoire. Cette opération ne prend que 2 à 3 minutes. Lorsqu'elle est terminée, l'écran du téléviseur présentera message suivant:

OK!

5. Les informations de syntonisation du téléviseur du bloc-mémoire ont maintenant été copiées dans le téléviseur.
6. Pour sortir du mode d'exploitation SERVICE, mettre le téléviseur hors circuit ("OFF").
7. Une fois l'opération terminée, enlever le bloc-mémoire.

Erreurs

Le téléviseur détectera toutes les erreurs susceptibles de se produire éventuellement pendant l'utilisation du bloc-mémoire. L'écran présentera alors le message suivant:

Program
Error!

Dans ce cas, mettre le téléviseur hors circuit ("OFF") puis répéter l'opération qui était en cours. En cas d'erreurs répétées, vérifier les connexions entre le téléviseur et le bloc-mémoire, puis contrôler l'état de la pile 9V à l'intérieur du bloc-mémoire.

ADJUSTMENT PROCEDURE

Item/Preparation	Adjustments
+B SET-UP 1. Receive a Greyscale pattern 2. Set the controls: Brightness minimum Contrast minimum Volume minimum	1. Set the +B voltage up as follows: Adjust R811 so that B2 shows $130V \pm 1V$ 2. Confirm the following voltages. B1 $200 \pm 10V$ B6 $12 \pm 0.5V$ B3 $27 \pm 1V$ B7 $5 \pm 0.1/-0.25V$ B4 $35.5 \pm 1V$ B8 $5 \pm 0.25V$ B5 $15.5 \pm 1V$ U33 $31 \pm 1V$
RF AGC 1. Receive a test pattern. 2. Connect an oscilloscope between the tuner RF AGC and ground. 3. Set the oscilloscope gain range to 1V/div.	1. Check that the noise becomes large when the RF AGC VR R126 is turned counterclockwise. After the check adjust to previous setting (clockwise). 2. Gradually turn the RF AGC VR anti-clockwise, and set the RF AGC VR to the point where the RF AGC voltage is just falling to a point where this voltage drops by 0.2V from the maximum value.
CUT OFF 1. Receive a Greyscale pattern. 2. Degauss the tube externally. 3. Set the TV into Service Mode 1. 4. Select Cutoff DC mode.	1. Confirm the value is 128 and select Ug2 mode noting colour with largest value 2. Turn the screen VR until a colour reaches 20~30. 3. Connect an oscilloscope to the cathode with the biggest value colour. 4. Select Cutoff DC mode and adjust Cutoff pulse to $159V \pm 5V$. 5. Disconnect the oscilloscope and adjust the screen to whichever colour reaches 70 ± 30 first.

RÉGLAGES

Préparation	Réglages
+B 1. Appliquer une mire à carreaux N/B 2. Régler les contrôles suivants Lumière Minimum Contraste Minimum Volume Minimum	1. Régler les tensions +B comme suit : Régler R811 tel que la tension B2 soit de $130V \pm 1V$ 2. Confirmer le réglage : B1 $200 \pm 10V$ B6 $12 \pm 0.5V$ B3 $27 \pm 1V$ B7 $5 \pm 0.1/-0.25V$ B4 $35.5 \pm 1V$ B8 $5 \pm 0.25V$ B5 $15.5 \pm 1V$ U33 $31 \pm 1V$
CAG RF 1. Appliquer une mire test 2. Relier l'oscilloscope entre l'AGC RF du tuner et la masse 3. Calibrer l'oscilloscope sur 1V/div	1. Vérifier que le bruit augmente en tournant le VR R126 CAG RF vers la gauche. Puis le tourner vers la droite. 2. Tourner graduellement VR R126 vers la gauche jusqu'à obtenir 0.2V de moins que la tension maximum
CUT OFF 1. Appliquer une mire à carreaux N/B 2. Démagnétiser le tube extérieurement 3. Mettre le TV en Mode Service 1 4. Sélectionner le Mode Cutoff DC	1. Confirmer que la valeur soit 128 et sélectionner le mode Ug2 et noter la valeur de la couleur la plus élevée 2. Tourner le potentiomètre d'Ecran jusqu'à ce que la valeur d'une couleur se situe entre 20 et 30 3. Relier l'oscilloscope sur la cathode de la couleur dont la valeur est la plus élevée 4. Sélectionner le mode CUTOFF DC et régler l'impulsion de CUTOFF à $159V \pm 5V$ 5. Retirer l'oscilloscope et régler la tension d'écran à 70 ± 30 sur la première couleur atteignant cette valeur

ALIGNMENT SETTINGS (The figures used below are nominal and used for representative purposes only)

Alignment Function	TX-21AD3F	Settings / Special features
1. Vertical amplitude	V-AMP 051	Optimum setting
2. Vertical symmetry	V-SYM 013	
3. Vertical linearity	V-LIN 012	
4. Vert. DC.	Vert. D.C.. 000	Not to be adjusted.
5. V-Pos.	V. Pos. 003	Optimum setting
6. Horizontal amplitude	H-AMP -033	Optimum setting
7. Horizontal position	H-POS 049	
8. Text Position	TEXT POSITION 045	Optimum setting
9. EW-amplitude	E-W-AMP 1 -058	Optimum setting
10. EW-amplitude	E-W-AMP 2 023	Optimum setting
11. Trapezium-comp	TRAPEZ-1 -014	Optimum setting
12. Trapezium- comp	TRAPEZ-2 012	Optimum setting
13. Colour VCO	Colour VCO 015	Press either Blue or Yellow buttons to effect automatic adjustment
14. Cut-off DC	Cut-off DC 050	Not to be adjusted.
15. Ug2 Test	Ug 2 Test 107 021 023	Select Cutoff DC in Service Mode mode and confirm the value is 128. Select Ug 2 Test noting colour with largest value, adjust on FBT until a colour reaches 20 ~ 30. Connect an oscilloscope to the cathode of the biggest value colour, select Cutoff DC mode and adjust get Cutoff pulse voltage to 159 ± 5V. Disconnect the oscilloscope and adjust the screen to whichever colour reaches 70 ± 30 first.
16. Cutoff	Cutoff 045 055 050	Press the GREEN button to step through the settings. Adjust for optimum.
17. White	White 224 255 237	Press the GREEN button to step through the settings. Adjust for optimum.

RÉGLAGES (Les figures ci-dessous sont fictives et utilisées uniquement à des fins représentatives)

Fonctions	TX-21AD3F	Réglages/Points particuliers
1. Amplitude verticale	V-AMP 051	Optimiser les réglages
2. Symétric verticale	V-SYM 013	
3. Linèarité verticale	V-LIN 012	
4. Vert. DC.	Vert. D.C.. 000	Ne pas régler
5. V-Pos.	V. Pos. 003	Optimiser les réglages
6. Amplitude horizontal	H-AMP -033	Optimiser les réglages
7. Centrage horizontal	H-POS 049	
8. Text Position	TEXT POSITION 045	Optimiser les réglages
9. Amplitude E.O.	E-W-AMP 1 -058	Optimiser les réglages
10. Amplitude E.O.	E-W-AMP 2 023	Optimiser les réglages
11. Correction trapèze	TRAPEZ-1 -014	Optimiser les réglages
12. Correction trapèze	TRAPEZ-2 012	Optimiser les réglages
13. Réglage oscillateur sous porteuse	Colour VCO 015	Régler la fréquence
14. Cut-off DC	Cut-off DC 050	Ne pas régler
15. Ug2 Test	Ug 2 Test 107 021 023	Sélectionner le Mode Cutoff DC. Confirmer que la valeur soit 128 puis sélectionner le Mode Test Ug2 et noter la valeur de la couleur la plus élevée. Ajuster le réglage situé sur le FBT jusqu'à ce que la valeur d'une des couleurs se situe entre 20 et 30. Relier l'oscilloscope sur la cathode dont la valeur de la couleur est la plus élevée. Sélectionner le mode CUTOFF DC et régler l'impulsion de CUTOFF à $159V \pm 5V$. Retirer l'oscilloscope et régler la tension d'écran à 70 ± 30 sur la première couleur atteignant cette valeur.
16. Cutoff	Cutoff 045 055 050	Appuyer sur la touche VERTE pour accéder aux réglages. Régler pour optimiser.
17. White	White 224 255 237	Appuyer sur la touche VERTE pour accéder aux réglages. Régler pour optimiser.

SELF CHECK

Self check is used to automatically check the Bus Lines and Hexadecimal code of the TV set.

To get into the Self Check mode press the F button followed by the volume down button on the customer controls at the front of the TV at the same time pressing the Status button, on the Remote Control, and the screen will show: –

1	— ok	Tuner	11	— --	Dolby IC for C/R
2	— ok	VIF	12	— ok	P S MODE
3	— ok	EEPROM	13	— ok	P TA0
4	— --	Sound AV switch1	14	— ok	P TA1
5	— ok	Video AV switch1	15	— ok	P TA2
6	— ok	VDP	16	— ok	P TA3
7	— ok	TPU	17	— ok	P SDA
8	— ok	MSP	18	— ok	P SCL1
9	— --	Dolby Sub	19	— ok	P SCL3
10	— --	Dolby IC for L/R	20	— ok	P SCL4

AUTO TEST

L'auto test est utilisé pour vérifier le BUS et les codes Hexadécimaux du TV.

Pour passer en mode test, il faut appuyé simultanément sur : VOLUME MOINS sur le tiroir en face avant et: OFF TIMER sur la télécommande Infra-rouge: –

1	— ok	Tuner	11	— --	Dolby IC for C/R
2	— ok	VIF	12	— ok	P S MODE
3	— ok	EEPROM	13	— ok	P TA0
4	— --	Sound AV switch1	14	— ok	P TA1
5	— ok	Video AV switch1	15	— ok	P TA2
6	— ok	VDP	16	— ok	P TA3
7	— ok	TPU	17	— ok	P SDA
8	— ok	MSP	18	— ok	P SCL1
9	— --	Dolby Sub	19	— ok	P SCL3
10	— --	Dolby IC for L/R	20	— ok	P SCL4

If the CCU ports have been checked and found to be incorrect then "--" will appear in place of "OK".

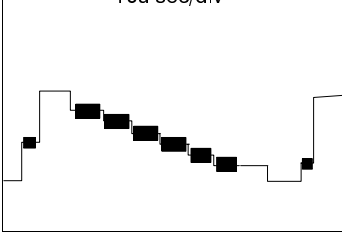
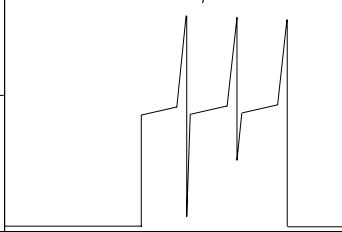
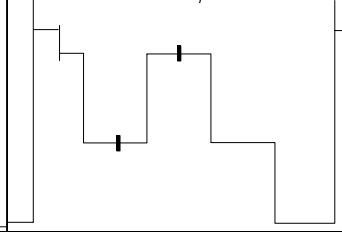
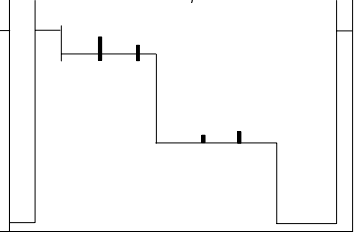
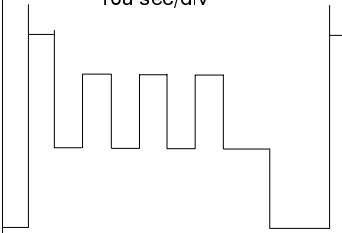
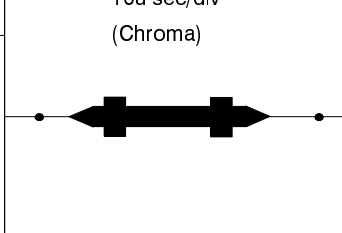
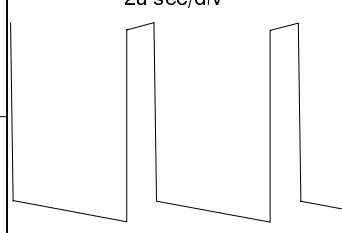
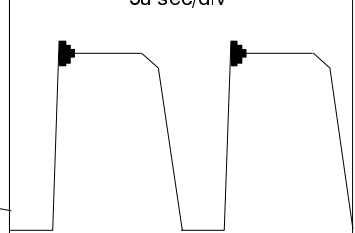
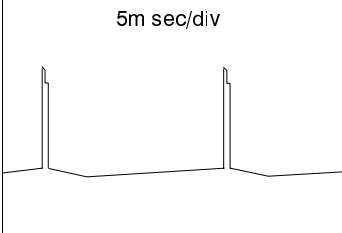
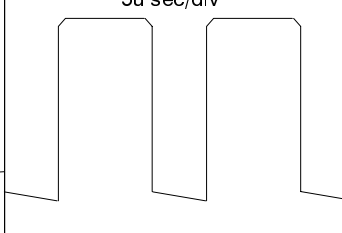
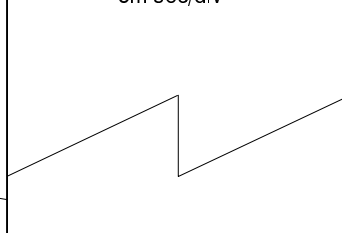
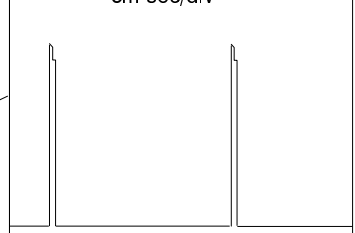
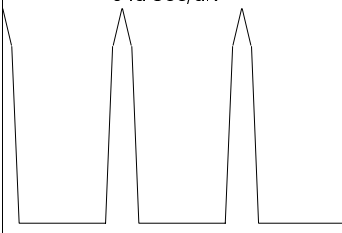
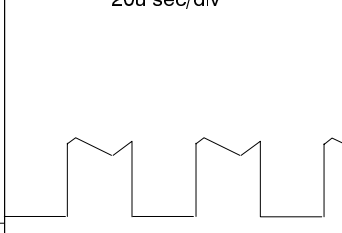
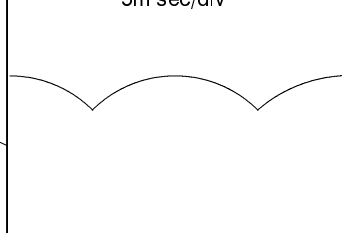
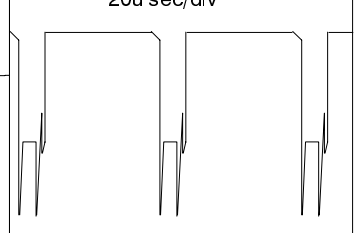
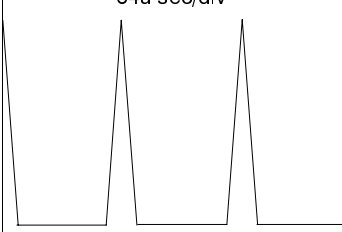
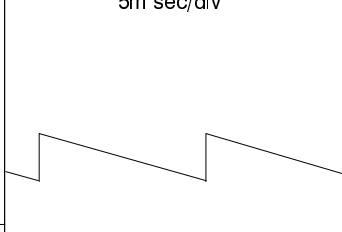
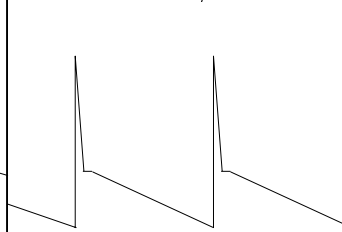
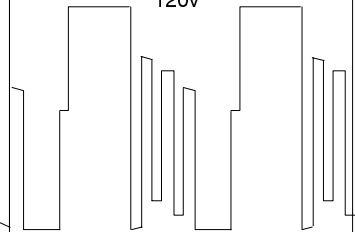
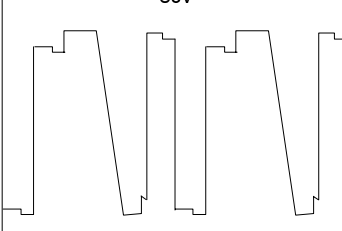
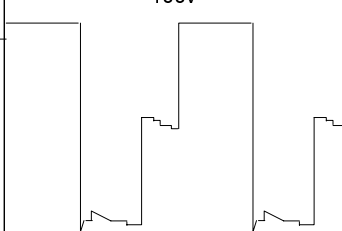
Si lors du test une fonction du ccu est incorrecte l'afficheur indiquera "--" au lieu de "OK".

21	— ok	P SBLED	Hex codes	6A
22	— ok	P OFF	22	
23	— ok	P DEFL	21	
24	— ok	P RAM	94	
			95	

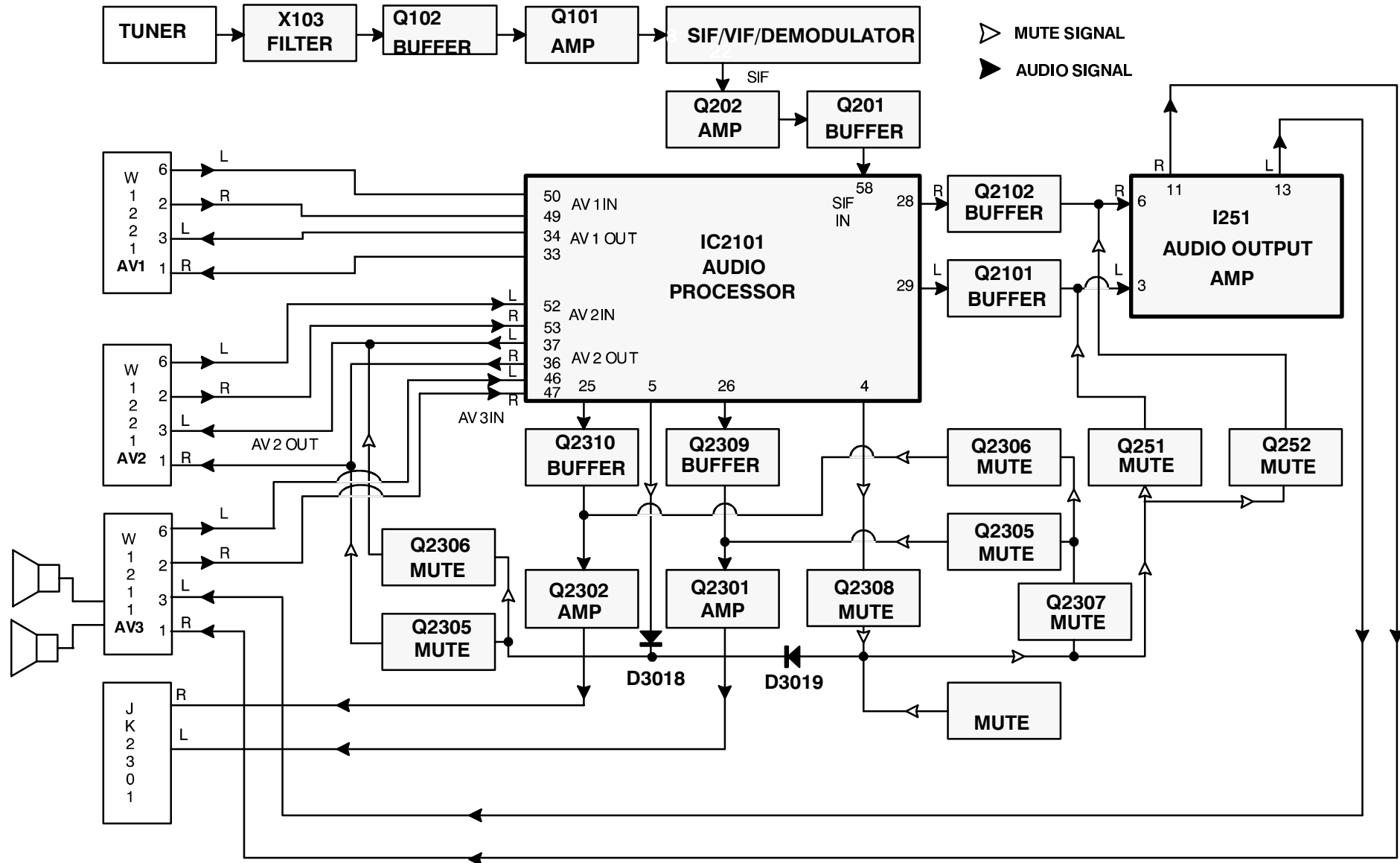
21	— ok	P SBLED	Hex codes	6A
22	— ok	P OFF	22	
23	— ok	P DEFL	21	
24	— ok	P RAM	94	
			95	

WAVEFORM PATTERN TABLE

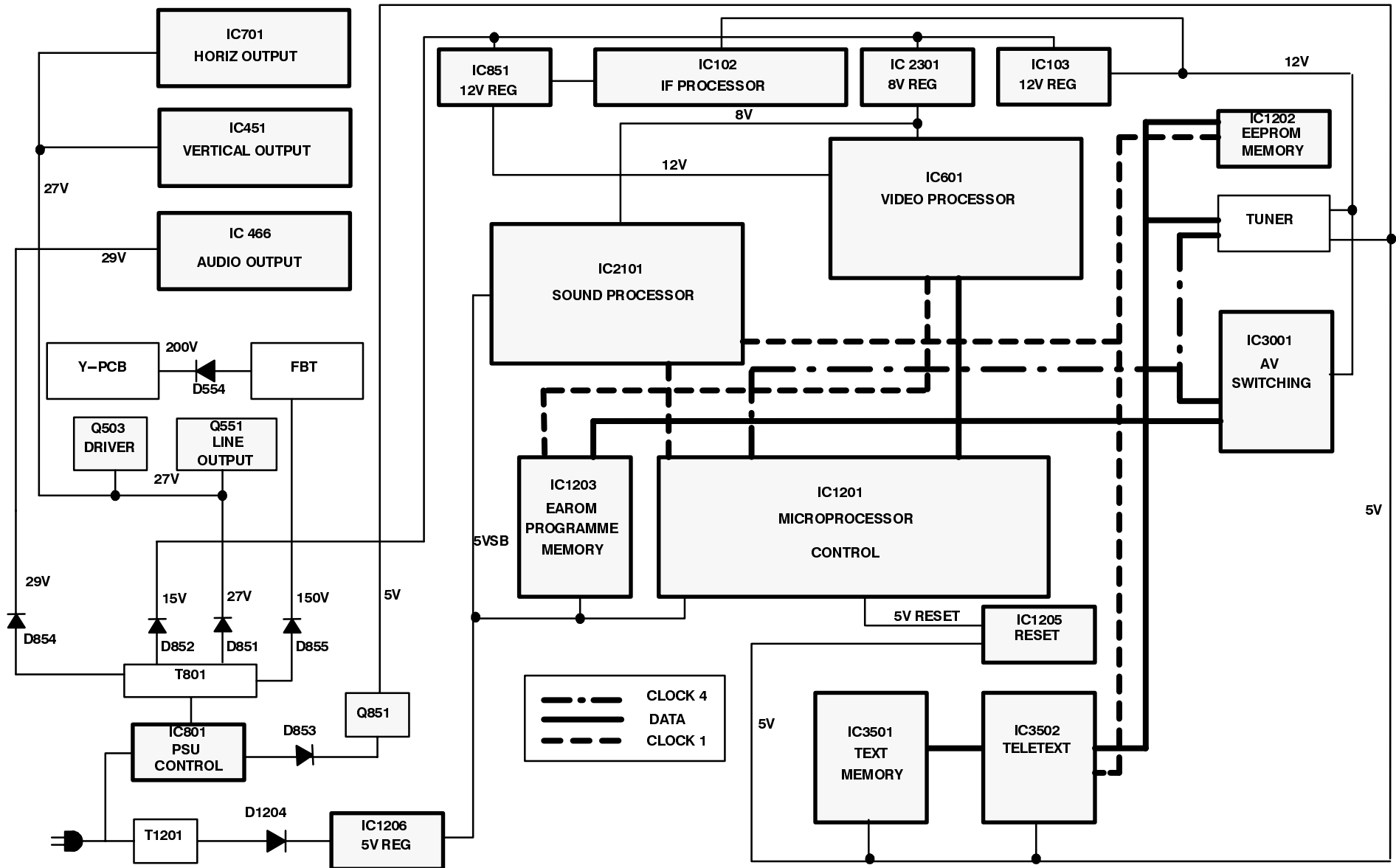
TABLEAU DE MIRES DE FORMA D'ONDES

<p>PIN 42 I601 10u sec/div</p> 	<p>PIN 6 E8 50u sec/div</p> 	<p>PIN 5 E8 10u sec/div</p> 	<p>PIN 3 E8 10u sec/div</p> 
<p>PIN 4 E8 10u sec/div</p> 	<p>PIN 44 IC601 10u sec/div (Chroma)</p> 	<p>PIN 7 IC801 2u sec/div</p> 	<p>PIN 18 T801 5u sec/div</p> 
<p>PIN 6 IC451 5m sec/div</p> 	<p>PIN 3 IC801 5u sec/div</p> 	<p>PIN 6 IC601 5m sec/div</p> 	<p>PIN 34 IC601 5m sec/div</p> 
<p>COLLECTOR Q551 64u sec/div</p> 	<p>BASE Q503 20u sec/div</p> 	<p>PIN 7 IC701 5m sec/div</p> 	<p>BASE Q551 20u sec/div</p> 
<p>PIN 8 IC701 64u sec/div</p> 	<p>PIN 1 IC451 5m sec/div</p> 	<p>PIN 5 IC451 5m sec/div</p> 	<p>BLUE DRIVE EMITTER Q353 120v</p> 
<p>RED DRIVE EMITTER Q351 80v</p> 	<p>GREEN DRIVE EMITTER Q352 100v</p> 		

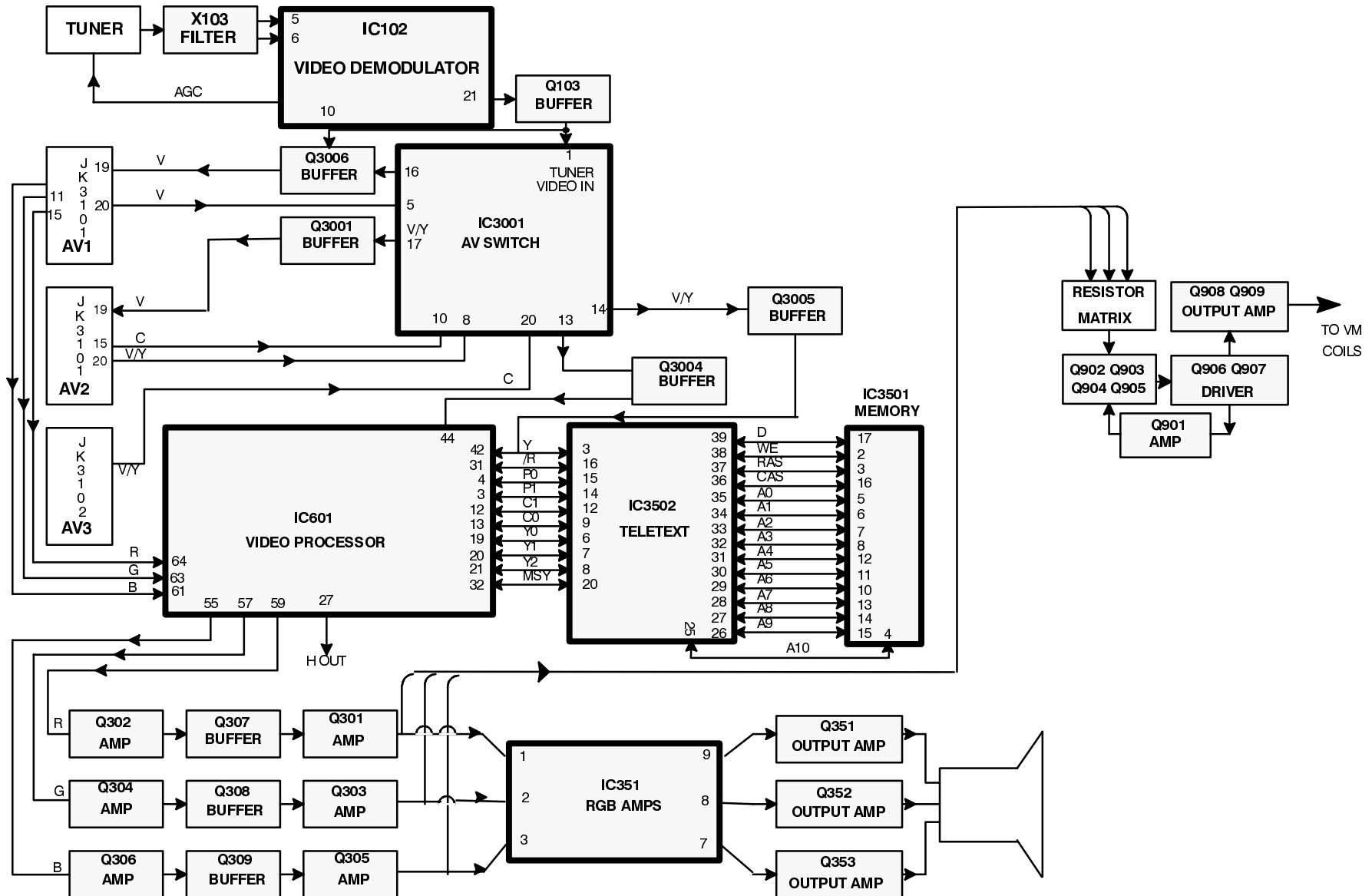
AUDIO BLOCK DIAGRAM SYNOPTIQUE AUDIO



POWER SUPPLY AND CONTROL BLOCK DIAGRAM ALIMENTATION ET SYNOPTIQUE DE COMMANDE

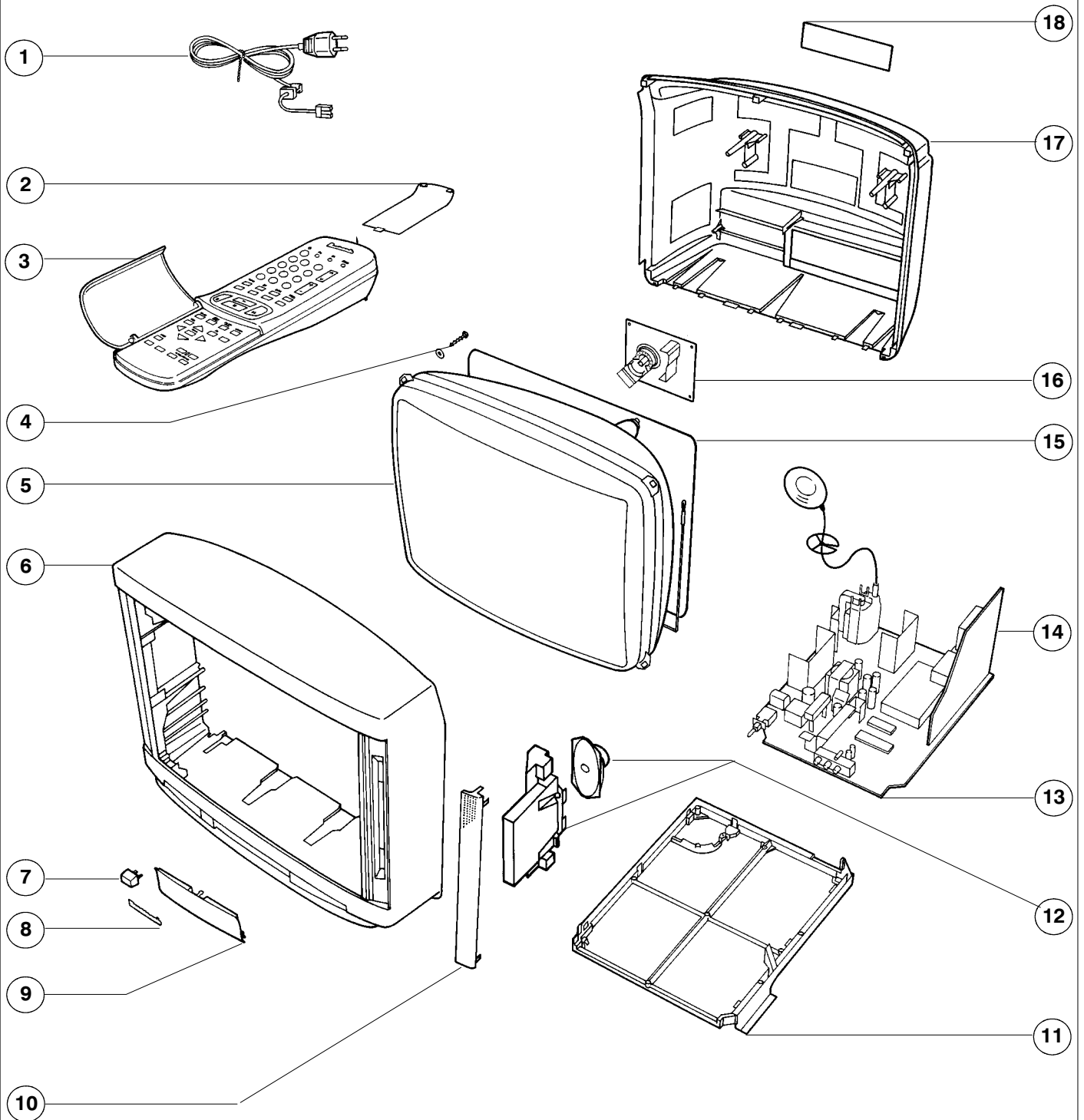


VIDEO BLOCK DIAGRAM SYNOPTIQUE VIDEO



NOTE :

The numbers on the exploded view below refer to the miscellaneous section of the Replacement Parts List.



REPLACEMENT PARTS LIST

Important Safety Notice

Components identified by Δ mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.

Ref No.	Part No.	Description	
MISCELLANEOUS COMPONENTS			
1)	TSX8E0020	POWER CORD	Δ
2)	UR51EC780	BATTERY COVER (REMOTE)	
3)	EUR51920	REMOTE CONTROL	
4)	VP15005-35	SCREW	
5)	A51ECQ51X01	CRT	Δ
6)	TKY8E092	CABINET	Δ
7)	TBX8E030	POWER BUTTON	
8)	TBM8E1726	PANASONIC BADGE	
9)	TKP8E1138AD2	DOOR LID	
10)	TKP8E1139	SPEAKER NET	
11)	TMX8E010	CHASSIS BRACKET	
12)	EAGG1218D2	SPEAKER	
13)	TNP8EE008BJ	E P.C.B.	Δ
14)	TNP8EB007AB	B PCB	Δ
15)	TLK8E05117	DEGAUSS COIL	
16)	TNP117069AD	Y P.C.B.	Δ
17)	TKU8E00240	BACK COVER	Δ
18)	TBM8E1717	MODEL LABEL	
	TNP8EP013AB	P .P.C.B.	Δ
	TBM8E1605	PRESET LABEL	
	31221212478	FIX CLIP	
	TES4537	SPRING	
	TEK6935	LID SWITCH	
	TKP8E1140	LED TUBE	
TNR1	ENG29501G	TUNER	
	TMW8E022	LED HOLDER	
S.351	0330550049	CRT SOCKET	
	TBM8E1535	A.V.LABEL	
	F9-4-220	RELAY	
	TPC8E4639	OUTER CARTON	
	TPD8E615	CUSHION-TOP	
	TPD8E616	CUSHION-BOTTOM	
	TQB8E2344A	GERMAN INST BOOK	Δ
	TQB8E2344B	DUTCH INST BOOK	Δ
	TQB8E2344C	ITALIAN INST BOOK	Δ
	TQB8E2344D	FRENCH INST BOOK	Δ
	TQB8E2344E	SPANISH INST BOOK	Δ
	TQB8E2344J	PORTUGUESE INST BOOK	Δ
	ERC12GK825	SOLID 0.5W 10% 8M2 Ω	
	UM-3DJ-2P	BATTERY-SET	
CAPACITORS			
C100	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C101	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C102	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C103	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C104	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C107	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C124	ECEA1CKA470	ELECT 16V 47 μ F	
C130	ECEA1CKA470	ELECT 16V 47 μ F	
C135	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C136	ECA1CM100GB	ELECT 16V 10pF	
C137	ECA1EM101GB	ELECT 25V 1 μ F	
C138	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C139	ECUV1H390JCX	S.M.CAP 50V 39pF	
C140	ECUV1H390JCX	S.M.CAP 50V 39pF	
C141	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C144	ECA1HMR33GB	ELECT 50V 0.33 μ F	

Ref No.	Part No.	Description	
C145	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C146	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C147	ECUV1H102KBX	S.M.CAP 50V 1nF	
C148	ECEA1HKAR22	ELECT 50V 0.22 μ F	
C149	ECA1EM470GB	ELECT 25V 47pF	
C150	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C151	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C154	ECA1CM221GB	ELECT 16V 220pF	
C170	ECUV1H331KBX	S.M.CAP 50V 330pF	
C201	ECUV1H070DCX	S.M.CAP 50V 7pF	
C202	ECUV1H070DCX	S.M.CAP 50V 7pF	
C203	ECUV1H470JX	S.M.CAP 50V 47pF	
C204	ECUV1H560JCX	S.M.CAP 50V 56pF	
C205	ECUV1H560JCX	S.M.CAP 50V 56pF	
C207	ECUV1H560JCX	S.M.CAP 50V 56pF	
C209	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C210	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C211	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C251	ECA1EM100GB	ELECT 25V 0.1 μ F	
C252	ECUY1H563KBX	S.M.CAP 50V 56nF	
C253	ECA1HM4R7GB	ELECT 50V 4.7 μ F	
C254	ECQM1H104J	FILM 50V 100nF	
C255	ECEA1EGE101	ELECT 25V 100 μ F	
C256	ECUY1H563KBX	S.M.CAP 50V 56nF	
C257	ECA1HM4R7GB	ELECT 50V 4.7 μ F	
C258	ECA1EM100GB	ELECT 25V 0.1 μ F	
C259	ECQM1H104J	FILM 50V 100nF	
C260	ECA1VM102GE	ELECT 35V 1nF	
C261	ECA1VM102GE	ELECT 35V 1nF	
C262	ECQM1H474J	FILM 50V 470nF	
C263	ECA1HM010GB	ELECT 50V 1pF	
C264	ECEA1HGE222	ELECT 50V 2200 μ F	
C265	ECQM1H474J	FILM 50V 470nF	
C266	ECA1HM010GB	ELECT 50V 1pF	
C267	ECUV1H104KBX	S.M.CAP 50V 100nF	
C268	ECUV1H104KBX	S.M.CAP 50V 100nF	
C271	ECUV1H561KBX	S.M.CAP 50V 560pF	
C301	ECA1CM470GB	ELECT 16V 47 μ F	
C302	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C303	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C310	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C354	ECQM2104KZ	FILM 250V 100nF	
C355	ECUV1H222JCX	S.M.CAP 50V 2.2nF	
C356	ECUV1H222JCX	S.M.CAP 50V 2.2nF	
C357	ECUV1H222JCX	S.M.CAP 50V 2.2nF	
C358	222236516224	FILM 160V 220nF	
C360	ECKC3D152J	CERAMIC 2KV 1.5nF	Δ
C361	ECA1HMR47GB	ELECT 50V 0.47 μ F	
C451	ECUV1H102JX	S.M.CAP 50V 1nF	
C452	ECUV1H102ZFX	S.M.CAP 50V 1nF	
C453	ECUV1H472KBX	S.M.CAP 50V 4.7nF	
C454	ECUV1H104ZFX	S.M.CAP 50V 100nF	
C455	ECA1VM222GE	ELECT 35V 2.2nF	
C456	ECEA1HGE221	ELECT 50V 220 μ F	
C457	ECUV1H103KBX	S.M.CAP 50V 10nF	
C458	ECQM1H273J	FILM 50V 27nF	
C459	222236516154	FILM 160V 150nF	
C460	222236516105	FILM 160V 1 μ F	
C462	ECEA1VGE332	ELECT 35V 3300 μ F	
C463	ECQB1H222J	FILM 50V 2200pF	
C501	ECA1AM330GB	ELECT 10V 33pF	
C506	ECUV1H103ZFX	S.M.CAP 50V 10nF	
C508	222236516105	FILM 160V 1 μ F	

Ref No.	Part No.	Description			
C509	ECEA1HGE101	ELECT	50V	100µF	
C510	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C511	ECQM2683JZ	FILM	250V	68nF	
C551	ECWH12H272J	CERAMIC	1250V	2.7nF	△
C552	ECWH12H102J	FILM	1250V	1nF	△
C555	ECWH12H103J	FILM	1250V	10nF	△
C556	ECQF4273JZH	FILM	400V	0.027µF	
C559	ECWF2H474J	FILM	500V	470nF	△
C562	ECKC2H101J	CERAMIC	500V	100pF	△
C563	ECEA2EU220	ELECT	250V	22µF	
C564	ECEA2AU2R2	ELECT	100V	2.2µF	
C565	ECQP1H273J	FILM	100V	2700µF	
C601	ECUV1H271JCX	S.M.CAP	50V	270pF	
C602	ECUV1H121JCX	S.M.CAP	50V	120pF	
C603	ECUV1H471JCX	S.M.CAP	50V	470pF	
C604	ECA0JM102GB	ELECT	6.3V	1nF	
C605	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C608	ECUV1H683ZFX	S.M.CAP	50V	68nF	
C609	ECA1CM470GB	ELECT	16V	47µF	
C610	ECUV1H683ZFX	S.M.CAP	50V	68nF	
C611	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C612	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C613	ECUV1H102JCX	S.M.CAP	50V	1nF	
C614	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C615	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C616	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C618	ECUV1H473ZFX	S.M.CAP	50V	47nF	
C619	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C620	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C621	ECA1CM100GB	ELECT	16V	10pF	
C622	ECA1CM100GB	ELECT	16V	10pF	
C623	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C624	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C625	ECEA1HNR22	ELECT	50V	0.22µF	
C626	ECA0JM102GB	ELECT	6.3V	1nF	
C627	ECUV1H100DCX	S.M.CAP	50V	10pF	
C628	ECUV1H470JCX	S.M.CAP	50V	47pF	
C629	ECUV1H101JCX	S.M.CAP	50V	100pF	
C630	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C631	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C632	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C633	ECUV1H102JCX	S.M.CAP	50V	1nF	
C636	ECUV1H101JCX	S.M.CAP	50V	100pF	
C637	ECUV1H102KBX	S.M.CAP	50V	1nF	
C638	ECUV1H181JCX	S.M.CAP	50V	180pF	
C639	ECUV1H561KBX	S.M.CAP	50V	560pF	
C701	ECEA1HU101	ELECT	50V	100µF	
C702	ECUV1H103KBX	S.M.CAP	50V	10nF	
C703	ECA1HM100GB	ELECT	50V	10pF	
C704	ECQB1H223K	FILM	50V	22nF	
C705	ECQB1H152K	FILM	50V	1.5nF	
C801	ECUV1H101JCX	S.M.CAP	50V	100pF	
C802	ECQE6104K	FILM	600V	100nF	△
C803	ECUV1H560JX	S.M.CAP	50V	56pF	
C804	ECA1HM101GB	ELECT	50V	100pF	
C805	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C806	ECEA1HU101	ELECT	50V	100µF	
C807	ECEA1EGE101	ELECT	25V	100µF	
C808	ECQB1H103J	FILM	50V	10nF	
C809	ECQB1H103J	FILM	50V	10nF	
C811	ECEA1HN010	ELECT	50V	1µF	
C815	ECKC2H472J	CERAMIC	500V	4.7nF	△
C816	ECKC3D222JB	CERAMIC	2KV	2200pF	△
C817	ECQB1H223K	FILM	50V	22nF	
C818	ECKC2H472J	CERAMIC	500V	4.7nF	△
C820	ECOS2GA151CB	ELECT	400V	150pF	
C821	ECKWNA332MECC	CERAMIC	250V	3.3nF	
C841	222233510224	CAPACITOR		0.22µF	
C851	ECKC2H681J	CERAMIC	500V	680pF	△
C852	ECEA1HU102	ELECT	50V	1000µF	
C853	ECEA1EGE222	ELECT	25V	2200µF	
C854	ECEA1HGE102	ELECT	50V	1000µF	

Ref No.	Part No.	Description			
C855	ECKC3D471JB	CERAMIC	2KV	470pF	△
C856	ECEA1EGE222	ELECT	25V	2200µF	
C857	ECA2CM101E	ELECT	160V	100µF	
C858	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C859	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C860	ECA1CM471GB	ELECT	16V	470pF	
C861	ECA2CGE221	ELECT	160V	220µF	
C862	ECA1CM471GB	ELECT	16V	470pF	
C1051	ECA0JM101G	ELECT	6.3V	100pF	
C1052	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1201	ECUV1H332KBX	S.M.CAP	50V	3.3nF	
C1202	ECUV1H332KBX	S.M.CAP	50V	3.3nF	
C1203	ECUV1H332KBX	S.M.CAP	50V	3.3nF	
C1204	ECUV1H332KBX	S.M.CAP	50V	3.3nF	
C1205	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C1206	ECA1HM4R7GB	ELECT	50V	4.7µF	
C1207	ECUV1H472KBX	S.M.CAP	50V	4.7nF	
C1208	ECUV1H390JCX	S.M.CAP	50V	39pF	
C1209	ECUV1H390JCX	S.M.CAP	50V	39pF	
C1210	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C1211	ECUV1H470JCX	S.M.CAP	50V	47pF	
C1212	ECA1CM470GB	ELECT	16V	47µF	
C1213	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C1214	ECA1CM470GB	ELECT	16V	47µF	
C1215	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C1217	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1219	ECA1CM471GB	ELECT	16V	470pF	
C1220	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C1221	ECA0JM102GB	ELECT	6.3V	1nF	
C1222	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1223	ECA1HM101GB	ELECT	50V	100pF	
C1224	ECA0JM222GB	ELECT	6.3V	2.2nF	
C1225	ECA0JM472GE	ELECT	6.3V	4.7nF	
C1226	ECA1HM101GB	ELECT	50V	100pF	
C1227	ECA1VM221B	ELECT	35V	220pF	
C1228	ECA1EM101GB	ELECT	25V	1µF	
C2101	ECUV1H223KBX	S.M.CAP	50V	22nF	
C2102	ECUV1H391KBX	S.M.CAP	50V	390pF	
C2103	ECUV1H102KBX	S.M.CAP	50V	1nF	
C2104	ECUV1H102KBX	S.M.CAP	50V	1nF	
C2107	ECUV1H391KBX	S.M.CAP	50V	390pF	
C2108	ECA1HM101GB	ELECT	50V	100pF	
C2109	ECUV1H223KBX	S.M.CAP	50V	22nF	
C2110	ECA1CM100GB	ELECT	16V	10pF	
C2111	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C2112	ECA1CM100GB	ELECT	16V	10pF	
C2113	ECUV1H102KBX	S.M.CAP	50V	1nF	
C2114	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C2115	ECUV1H471KBX	S.M.CAP	50V	470pF	
C2116	ECA1HM3R3GB	ELECT	50V	3.3µF	
C2117	ECUV1H471KBX	S.M.CAP	50V	470pF	
C2118	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C2119	ECA1CM100GB	ELECT	16V	10pF	
C2120	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C2121	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C2123	ECA1CM100GB	ELECT	16V	10pF	
C2124	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C2125	ECUV1H010CCX	S.M.CAP	50V	1pF	
C2126	ECUV1H010CCX	S.M.CAP	50V	1pF	
C2127	ECA1CM100GB	ELECT	16V	10pF	
C2128	ECUV1H683ZFX	S.M.CAP	50V	68nF	
C2129	ECQM1H334J	FILM	50V	330nF	
C2307	ECA1CM470GB	ELECT	16V	47µF	
C2308	ECA1CM470GB	ELECT	16V	47µF	
C2310	ECA1CM470GB	ELECT	16V	47µF	
C2312	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C2313	ECUV1H103KBX	S.M.CAP	50V	10nF	
C2314	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C2315	ECUV1H103KBX	S.M.CAP	50V	10nF	
C2316	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C2317	ECA1CM470GB	ELECT	16V	47µF	
C2318	ECUV1H222KBX	S.M.CAP	50V	2.2nF	

Ref No.	Part No.	Description
C2319	ECUV1H222KBX	S.M.CAP 50V 2.2nF
C2651	ECUV1H103KBX	S.M.CAP 50V 10nF
C2652	ECUV1H103KBX	S.M.CAP 50V 10nF
C3001	ECA1HMR47GB	ELECT 50V 0.47µF
C3002	ECA1HMR47GB	ELECT 50V 0.47µF
C3003	ECA1EM4R7GB	ELECT 25V 4.7µF
C3004	ECA1HM4R7GB	ELECT 50V 4.7µF
C3005	ECA1HM4R7GB	ELECT 50V 4.7µF
C3006	ECUV1H473ZFX	S.M.CAP 50V 47nF
C3007	ECA1HM470GB	ELECT 50V 47µF
C3011	ECUV1H473ZFX	S.M.CAP 50V 47nF
C3012	ECA1CM470GB	ELECT 16V 47µF
C3013	ECUV1H104ZFX	S.M.CAP 50V 100nF
C3014	ECUV1H104ZFX	S.M.CAP 50V 100nF
C3017	ECEA1CN470	ELECT 16V 47µF
C3018	ECUV1H102KBX	S.M.CAP 50V 1nF
C3019	ECUV1H102KBX	S.M.CAP 50V 1nF
C3020	ECCR1H120J	CERAMIC 50V 12pF
C3021	ECUV1H102KBX	S.M.CAP 50V 1nF
C3023	ECA1CM470GB	ELECT 16V 47µF
C3024	ECUV1H473ZFX	S.M.CAP 50V 47nF
C3025	ECUV1H102KBX	S.M.CAP 50V 1nF
C3026	ECA1CM470GB	ELECT 16V 47µF
C3027	ECA1CM470GB	ELECT 16V 47µF
C3028	ECUV1H221JX	S.M.CAP 50V 220pF
C3029	ECUV1H221JX	S.M.CAP 50V 220pF
C3030	ECUV1H221JX	S.M.CAP 50V 220pF
C3031	ECUV1H221JX	S.M.CAP 50V 220pF
C3032	ECA1HMR47GB	ELECT 50V 0.47µF
C3033	ECA1HMR47GB	ELECT 50V 0.47µF
C3034	ECUV1H221JX	S.M.CAP 50V 220pF
C3035	ECUV1H221JX	S.M.CAP 50V 220pF
C3036	ECUV1H222KBX	S.M.CAP 50V 2.2nF
C3037	ECUV1H561JCX	S.M.CAP 50V 560pF
C3038	ECA1CM470GB	ELECT 16V 47µF
C3039	ECA1CM470GB	ELECT 16V 47µF
C3040	ECA1HMR47GB	ELECT 50V 0.47µF
C3041	ECA1HMR47GB	ELECT 50V 0.47µF
C3043	ECA1HM4R7GB	ELECT 50V 4.7µF
C3045	ECUV1H104ZFX	S.M.CAP 50V 100nF
C3049	ECUV1H222KBX	S.M.CAP 50V 2.2nF
C3050	ECUV1H222KBX	S.M.CAP 50V 2.2nF
C3051	ECUV1H222KBX	S.M.CAP 50V 2.2nF
C3052	ECUV1H222KBX	S.M.CAP 50V 2.2nF
C3053	ECUV1H222KBX	S.M.CAP 50V 2.2nF
C3054	ECUV1H222KBX	S.M.CAP 50V 2.2nF
C3055	ECUV1H222KBX	S.M.CAP 50V 2.2nF
C3056	ECUV1H101JCX	S.M.CAP 50V 100pF
C3062	ECUV1H104ZFX	S.M.CAP 50V 100nF
C3071	ECUV1H104ZFX	S.M.CAP 50V 100nF
C3151	ECUV1H561JCX	S.M.CAP 50V 560pF
C3152	ECUV1H561JCX	S.M.CAP 50V 560pF
C3501	ECUV1H104ZFX	S.M.CAP 50V 100nF
C3502	ECA1HM101GB	ELECT 50V 100pF
C3503	ECUV1H103ZFX	S.M.CAP 50V 10nF
C3504	ECUV1H102JCX	S.M.CAP 50V 1nF
C3505	ECUV1H104ZFX	S.M.CAP 50V 100nF
C3506	ECA1CM470GB	ELECT 16V 47µF
C3507	ECA1CM470GB	ELECT 16V 47µF
C3508	ECUV1H473ZFX	S.M.CAP 50V 47nF
C3509	ECUV1H103ZFX	S.M.CAP 50V 10nF
C3510	ECAOJM102GB	ELECT 6.3V 1nF
C3511	ECUV1H103ZFX	S.M.CAP 50V 10nF

DIODES

D140	MA3020TX	DIODE
D141	MA3020TX	DIODE
D251	MA2180TP	DIODE
D253	RB721Q40T77	DIODE
D254	RB721Q40T77	DIODE
D310	MA165TA5	DIODE 1SS133T-77

Ref No.	Part No.	Description
D311	MA29TA5	DIODE
D312	MA29TA5	DIODE
D354	ERA22-04V1	DIODE
D355	ERA22-04V1	DIODE
D356	ERA22-04V1	DIODE
D357	MA165TA5	DIODE 1SS133T-77
D358	MA165TA5	DIODE 1SS133T-77
D359	MA165TA5	DIODE 1SS133T-77
D360	MA4150	DIODE
D451	MA165TA5	DIODE 1SS133T-77
D452	MA165TA5	DIODE 1SS133T-77
D454	ERA15-02V3	DIODE
D456	MA2160BLFS	DIODE
D470	MA4020	DIODE
D501	MA165TA5	DIODE 1SS133T-77
D502	EU02	DIODE
D551	ERD07-15L7	DIODE
D552	TVSRU2AM	DIODE
D554	AU02V0	DIODE
D556	MA165TA5	DIODE 1SS133T-77
D601	MA165TA5	DIODE 1SS133T-77
D602	MA165TA5	DIODE 1SS133T-77
D604	MA165TA5	DIODE 1SS133T-77
D605	MA165TA5	DIODE 1SS133T-77
D606	MA165TA5	DIODE 1SS133T-77
D609	MA165TA5	DIODE 1SS133T-77
D701	MA165TA5	DIODE 1SS133T-77
D702	MTZJT-775.6C	DIODE
D804	ERA15-02V3	DIODE
D805	EU02	DIODE
D806	RBV4-08	DIODE
D807	EU02	DIODE
D809	MA165TA5	DIODE 1SS133T-77
D814	MA165TA5	DIODE 1SS133T-77
D851	EU02	DIODE
D852	ERD32-02L7	DIODE
D853	FML22SLF610	DIODE
D854	RU4AMLF-M1	DIODE
D855	RU4BLF-L1	DIODE
D856	MTZJT-775.1A	DIODE
D857	MTZJ33B	DIODE
D858	MA29TA5	DIODE
D1201	SLR56UR3FLF	LED
D1203	MA170	DIODE
D1205	MA165TA5	DIODE 1SS133T-77
D1207	MA165TA5	DIODE 1SS133T-77
D1208	MA165TA5	DIODE 1SS133T-77
D1209	MA165TA5	DIODE 1SS133T-77
D1211	MTZJT-775.1C	DIODE
D1212	MA170	DIODE
D1213	MA165TA5	DIODE 1SS133T-77
D1214	MA170	DIODE
D1216	MTZJT-778.2C	DIODE
D2303	MA165TA5	DIODE 1SS133T-77
D2304	MTZJT-779.1C	DIODE
D3001	MTZJT-7712C	DIODE
D3003	MTZJT-778.2C	DIODE
D3004	MA4100	DIODE
D3005	MTZJT-7712C	DIODE
D3006	MTZJT-7712C	DIODE
D3007	MTZJT-7712C	DIODE
D3008	MTZJT-778.2C	DIODE
D3009	MTZJT-778.2C	DIODE
D3010	MTZJT-778.2C	DIODE
D3011	MTZJT-778.2C	DIODE
D3012	MTZJT-7712C	DIODE
D3013	MTZJT-7712C	DIODE
D3014	MTZJT-7712C	DIODE
D3015	MTZJT-7712C	DIODE
D3016	MTZJT-7712C	DIODE
D3018	MA165TA5	DIODE 1SS133T-77

Ref No.	Part No.	Description			
D3019	MA165TA5	DIODE 1SS133T-77			
D3501	MA165TA5	DIODE 1SS133T-77			
FUSES					
F840	2153.15H	FUSE		△	
F851	TR5-T1250	FUSE		△	
F852	TR5-T2000	FUSE		△	
F853	TR5-T2000	FUSE		△	
F8401	EYF52BC	FUSE HOLDER			
F8402	EYF52BC	FUSE HOLDER			
SOCKETS					
H1202	832AG11D-ESL	I.C.SOCKET			
INTEGRATED CIRCUITS					
IC100	TSA5514AT/C2	A.F.C.CONTROL			
IC103	L78M09MRB	9V REGULATOR			
IC1051	RPM-637CBRL	LED RECEIVER			
IC1201	CCU3000I-07	MICRO-PROCESSOR			
IC1202	27C010-006AE	EPROM			
IC1203	X24LM0401EY	EAROM			
IC1205	MN1280R	RESET			
IC2101	MSP3410BPPF7	AUDIO PROCESSOR			
IC2301	AN78L08TA	8V REGULATOR			
IC251	LA4280-TV	AUDIO OUTPUT			
IC3001	TEA6415C	VIDEO SWITCH			
IC3501	UD61256DC-08	DYNAMIC RAM			
IC3502	TPU3040-20	TEXT PROCESSOR			
IC351	TDA6103Q-N3	R.G.B.AMPLIFIER			
IC451	LA7845N	VERTICAL OUTPUT			
IC601	VDP3108APPA1	VIDEO PROCESSOR			
IC701	TEA2031A	HORIZONTAL OUTPUT			
IC801	TDA4601	POWER SUPPLY			
IC851	L78M12MRB	12V REGULATOR			
TERMINALS AND LINKS					
JA.1	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.10	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.11	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.12	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.13	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.14	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.15	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.16	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.17	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.18	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.19	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.2	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.20	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.21	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.22	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.24	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.25	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.26	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.27	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.28	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.29	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.3	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.30	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.4	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.5	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.6	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.7	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA.8	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA.9	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JA33	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA34	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	

Ref No.	Part No.	Description			
JA35	ERJ8GEY0R00	S.M.CAR .125W	5%	0Ω	
JA36	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB1	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB10	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB11	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB12	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB13	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB14	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB15	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB16	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB17	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB18	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB19	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB2	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB20	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB21	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB22	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB23	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB24	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB25	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB26	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB27	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB28	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB29	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB3	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB30	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB31	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB32	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB33	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB34	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB35	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB36	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB37	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB38	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB39	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB40	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB41	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB42	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB43	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB44	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB45	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB46	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB47	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB48	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB49	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB50	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB51	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB52	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB53	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB54	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB55	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB56	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB57	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB58	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB59	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB6	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB61	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB62	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB63	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB64	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB65	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB66	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB67	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB68	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB69	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB7	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB70	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB71	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB72	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB73	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB74	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	
JB75	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω	

Ref No.	Part No.	Description			
JB77	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JB79	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JB8	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JB80	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JB81	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JB9	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JK2301	TJB18644	AV TERMINAL			
JK3001	TJS8E007	21 PIN TERMINAL			
JK3101	TJS8E007	21 PIN TERMINAL			
JK3102	TJB16673	AV TERMINAL			
JSB1	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSB12	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSB13	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSB14	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSB2	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSB4	EXCELSA35T	COIL			
JSE011	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSE012	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSE013	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSE014	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSE015	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSE016	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSE031	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSE032	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSE035	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
JSE037	ERJ6GEY0R00	S.M.CARB 0.1W	5%	Ω	
J104	EXCELSA35T	COIL			
J106	EXCELSA35T	COIL			
J107	EXCELSA35T	COIL			
J169	EXCELSA35T	COIL			

COILS

L001	TLT100K991R	COIL
L003	EXCELSA35T	COIL
L100	TLT181K991R	COIL
L111	TLT101K991R	COIL
L112	EXCELSA35T	COIL
L113	EXCELSA35T	COIL
L130	ELESN8R2KA	COIL
L132	ELESN8R2KA	COIL
L202	TLT068K991R	COIL
L251	EXCELSA35T	COIL
L301	TLT047K991R	COIL
L302	EXCEMT101BT	COIL
L303	EXCEMT101BT	COIL
L304	EXCEMT101BT	COIL
L552	ELH5L429	COIL
L601	TLT047K991R	COIL
L602	EXCELDR35V	COIL
L603	TLT047K991R	COIL
L604	EXCELDR35V	COIL
L606	TLT015K991R	COIL
L607	EXCELSA35T	COIL
L701	ELC10D006	COIL
L801	EXCELSA24T	COIL
L802	TLT022K991R	COIL
L804	ELESN4R7KA	COIL
L805	298-82858002	COIL
L841	ELF18D490F	COIL
L851	EXCELDR35V	COIL
L852	EXCELSA35T	COIL
L853	ELEIE470KA	COIL
L854	ELEIN470KA	COIL
L855	ELEIN470KA	COIL
L856	ELEIN470KA	COIL
L1051	TLT331K991R	COIL
L1201	TLT047K991R	COIL
L1202	TLT047K991R	COIL
L1203	TLT047K991R	COIL
L1204	EXCELDR35V	COIL
L2101	TLT100K991R	COIL

Ref No.	Part No.	Description
L2102	TLT039K991R	COIL
L2103	EXCELSA35T	COIL
L2104	EXCELSA35T	COIL
L3151	EXCEMT101BT	COIL
L3152	EXCEMT101BT	COIL
L3153	EXCEMT101BT	COIL
L3154	EXCEMT101BT	COIL
L3155	ELEBT6R8KA	COIL
L3156	ELEBT6R8KA	COIL
L3158	EXCELSA39V	COIL
L3501	EXCELDR35V	COIL
L3502	EXCELDR35V	COIL
L3503	ELESN4R7KA	COIL
L3504	EXCELSA35T	COIL

TRANSISTORS

Q201	BC847B	TRANSISTOR OR 2SD601ATX
Q202	BC847B	TRANSISTOR OR 2SD601ATX
Q251	2SD1328STX	TRANSISTOR
Q252	2SD1328STX	TRANSISTOR
Q301	BC857B	TRANSISTOR OR 2SB709ATX
Q302	BC847B	TRANSISTOR OR 2SD601ATX
Q303	BC857B	TRANSISTOR OR 2SB709ATX
Q304	BC847B	TRANSISTOR OR 2SD601ATX
Q305	BC857B	TRANSISTOR OR 2SB709ATX
Q306	BC847B	TRANSISTOR OR 2SD601ATX
Q307	BC847B	TRANSISTOR OR 2SD601ATX
Q308	BC847B	TRANSISTOR OR 2SD601ATX
Q309	BC847B	TRANSISTOR OR 2SD601ATX
Q310	BC847B	TRANSISTOR OR 2SD601ATX
Q311	BC847B	TRANSISTOR OR 2SD601ATX
Q351	2SA1767	TRANSISTOR
Q352	2SA1767	TRANSISTOR
Q353	2SA1767	TRANSISTOR
Q451	BC847B	TRANSISTOR OR 2SD601ATX
Q501	BC847B	TRANSISTOR OR 2SD601ATX
Q502	BC847B	TRANSISTOR OR 2SD601ATX
Q503	2SD836-AL	TRANSISTOR
Q504	BC847B	TRANSISTOR OR 2SD601ATX
Q551	BU2506DXLB	TRANSISTOR
Q552	2SC1473-RN	TRANSISTOR
Q701	BC857B	TRANSISTOR OR 2SB709ATX
Q802	S2000NLBMA	TRANSISTOR
Q851	2SD1273PLB	TRANSISTORALT 2SD2396/JM3
Q852	TFD312SOF632	DIODE
Q1202	BC847B	TRANSISTOR OR 2SD601ATX
Q1205	BC847B	TRANSISTOR OR 2SD601ATX
Q1206	BC847B	TRANSISTOR OR 2SD601ATX
Q1207	BC847B	TRANSISTOR OR 2SD601ATX
Q1208	BC857B	TRANSISTOR OR 2SB709ATX
Q1211	BC547B	TRANSISTOR
Q1212	BC847B	TRANSISTOR OR 2SD601ATX
Q1213	BC847B	TRANSISTOR OR 2SD601ATX
Q2101	BC860B	TRANSISTOR
Q2102	BC860B	TRANSISTOR
Q2301	BC857B	TRANSISTOR OR 2SB709ATX
Q2302	BC857B	TRANSISTOR OR 2SB709ATX
Q2305	2SD1328STX	TRANSISTOR
Q2306	2SD1328STX	TRANSISTOR
Q2307	BC860B	TRANSISTOR
Q2308	BC857B	TRANSISTOR OR 2SB709ATX
Q2309	BC860B	TRANSISTOR
Q2310	BC860B	TRANSISTOR
Q3001	2SC1318-S	TRANSISTOR
Q3004	BC847B	TRANSISTOR OR 2SD601ATX
Q3005	BC847B	TRANSISTOR OR 2SD601ATX
Q3006	2SC1318-S	TRANSISTOR
Q3011	BC857B	TRANSISTOR OR 2SB709ATX
Q3012	2SD1328STX	TRANSISTOR
Q3013	2SD1328STX	TRANSISTOR

Ref No.	Part No.	Description			
R710	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ
R711	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω
R712	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R713	ERG1SJ101	METAL	1W	5%	100Ω
R801	ERG3FJ682H	METAL	3W	5%	6K8Ω Δ
R802	ERG2FJ472	METAL	2W	5%	4K7Ω Δ
R803	ERX12SJWR47	METAL	12W	5%	R47
R804	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω
R805	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R807	ERO25CKF1201	METAL	0.25W	1%	1K2Ω Δ
R808	232266296319	THERMISTOR			
R809	ERO25CKF1302	METAL	0.25W	1%	13KΩ Δ
R810	ERD25TJ103	CARBON	0.25W	5%	10KΩ
R811	EVMEASA00B33	CONTROL	3KΩ		
R812	ERDS1TJ220	CARBON	0.5W	5%	22Ω
R813	ERD50FJ274	CARBON	0.5W	5%	270KΩ
R814	ERF7ZK2R7	WOUND	7W	20%	2R7Ω Δ
R815	ERDS1TJ563	CARBON	0.5W	5%	56KΩ
R817	ERG3FJ470	METAL	3W	5%	47Ω Δ
R818	ERD50FJ104	CARBON	0.5W	5%	100KΩ
R819	ERD50FJ184	CARBON	0.5W	5%	180KΩ
R820	ERD75TAJ825	CARBON	0.75W	5%	8M2Ω Δ
R841	ERC12ZGK335D	SOLID	0.5W	10%	3M3Ω
R852	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω
R853	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R854	ERDS1TJ474	CARBON	0.5W	5%	470KΩ
R855	ERG2FJ223	METAL	2W	5%	22KΩ Δ
R856	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1201	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω
R1202	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1203	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1204	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1205	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1206	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1208	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R1209	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1210	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1212	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1213	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1214	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1215	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1216	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1217	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1218	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1219	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1220	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1221	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1222	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1224	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1225	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1226	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1227	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1229	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1230	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1231	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1232	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1233	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1235	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1236	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1237	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1238	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ
R1239	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9Ω
R1240	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9Ω
R1241	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1242	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1244	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1245	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1246	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1247	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1249	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1250	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1251	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ

Ref No.	Part No.	Description			
R1252	ERX1SJ3R3	METAL	1W	5%	3R3Ω
R1253	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1254	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1255	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1256	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1257	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1258	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1260	ERDS1FJ121	CARBON	0.5W	5%	120Ω Δ
R1261	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9Ω
R1262	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω
R1263	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R1264	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R1265	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω
R1266	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R1277	ERDS1TJ151	CARBON	0.5W	5%	150Ω
R2101	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2102	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R2103	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2104	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2105	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R2106	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18KΩ
R2107	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2108	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R2109	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R2110	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R2111	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R2301	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R2302	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R2303	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2304	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2313	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R2314	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R2315	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R2316	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R2318	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R2321	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R2322	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2323	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R2324	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2325	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ
R2326	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2327	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2328	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R2329	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R2330	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω
R2331	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R2332	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2333	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R2334	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R2335	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R2651	ERG2FJ221	METAL	2W	5%	220Ω Δ
R2652	ERG2FJ221	METAL	2W	5%	220Ω Δ
R2653	ERDS1TJ151	CARBON	0.5W	5%	150Ω
R2654	ERDS1TJ151	CARBON	0.5W	5%	150Ω
R3001	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ
R3002	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3003	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3004	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ
R3005	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R3006	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R3007	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3008	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R3009	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R3010	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω
R3011	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3012	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3013	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω
R3014	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R3015	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R3016	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3017	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R3019	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω

Ref No.	Part No.	Description			
R3002	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3003	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3004	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ
R3005	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R3006	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R3007	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3008	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R3009	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R3010	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω
R3011	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3012	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3013	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω
R3014	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R3015	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R3016	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3017	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R3019	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R3020	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3022	ERD2FCG560	CARBON	2W	2%	56Ω
R3024	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R3025	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3026	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R3027	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω
R3029	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω
R3030	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3032	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω
R3034	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3036	ERJ6GEYJ220	S.M.CARB	0.1W	5%	22Ω
R3037	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3038	ERD2FCG100	CARB	2W	2%	10Ω
R3039	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3040	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3041	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ
R3042	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω
R3043	ERD2FCG100	CARB	2W	2%	10Ω
R3044	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3045	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω
R3046	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3047	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω
R3048	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R3049	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω
R3050	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3051	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3052	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3053	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3054	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3055	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3056	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3057	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3058	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ
R3059	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ
R3060	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R3062	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3063	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3064	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3065	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R3066	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R3067	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ
R3068	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3069	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3070	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3071	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω
R3150	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3151	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3152	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3153	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3154	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18KΩ
R3155	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3156	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3157	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18KΩ
R3158	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω
R3502	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω

Ref No.	Part No.	Description			
R3504	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R3505	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R3508	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18KΩ
R3511	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R3512	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω

SWITCHES

S801	ESB91232A	SWITCH	
S1201	EVQ23405R	SWITCH	
S1202	EVQ23405R	SWITCH	
S1203	EVQ23405R	SWITCH	
S1204	EVQ23405R	SWITCH	
S1205	EVQ23405R	SWITCH	

△

TRANSFORMERS


T501	5270103200	TRANSFORMER	
T551	ZTFH44010A	F.B.T.	
T801	TLP8E1003	CHOPPER TRANSFORMER	
T1201	ETP35KAN61ZU	TRANSFORMER	

FILTERS







X100	EFGA6R5MB3	FILTER	
X601	TSS2169-B	CRYSTAL	
X1201	TSS120M2	CRYSTAL	
X2101	4730007158	CRYSTAL	

SCHEMATIC DIAGRAM FOR MODEL TX-21AD3F (Euro-2 Chassis)

IMPORTANT SAFETY NOTICE

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specific parts.

Notes

1. **RESISTOR**
All resistors are carbon 1/4W resistor, unless marked as follows:
Unit of resistance is OHM (Ω) (K=1,000, M=1,000,000).
2. **CAPACITORS**
All capacitors are ceramic 50V, unless marked as follows:
Unit of capacitance is μ F, unless otherwise stated.
3. **COIL**
Unit of inductance is μ H, unless otherwise stated.
4. Components marked 'L' on the schematic diagram shows leadless parts.
5. **TEST POINT**
 Test Point Position
6. **EARTH SYMBOL**
 Chassis Earth Cold  Line Earth Hot
7. **VOLTAGE MEASUREMENT**
Voltage is measured by a DC voltmeter.
Measurement conditions are as follows:
Power source AC 220V-240V, 50Hz
Receiving Signal Colour Bar signal (RF)
All customer controls Maximum position
8.  Indicates the video signal path
 Indicates the Audio signal path
 Indicates the Vertical/Horizontal path
9. This schematic diagram is the latest at the time of printing and is subject to change without notice.

Remarks


1. The Power Circuit contains a circuit area which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits, except the Power Circuit, are COLD. Take the following precautions:

Precautions





- a. Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
- b. Do not short-circuit the hot and cold circuits as electrical components may be damaged.
- c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously, as this may cause fuse failure. Connect the earth of the instruments to the earth connection of the circuit being measured.
- d. Make sure to disconnect the power plug before removing the chassis.

SCHEMA TECHNIQUE POUR MODELE TX-21AD3F (Euro-2 Chassis)

REMARQUE IMPORTANTE POUR LA SÉCURITÉ

Les éléments portant la marque  possèdent des caractéristiques de sécurité spéciales. Lors du remplacement de l'une quelconque de ces pièces n'utiliser que celles spécifiées par le fabricant.

Nota :

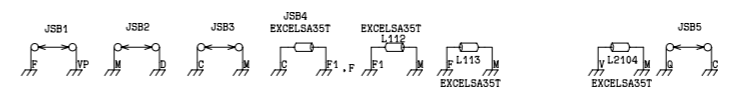
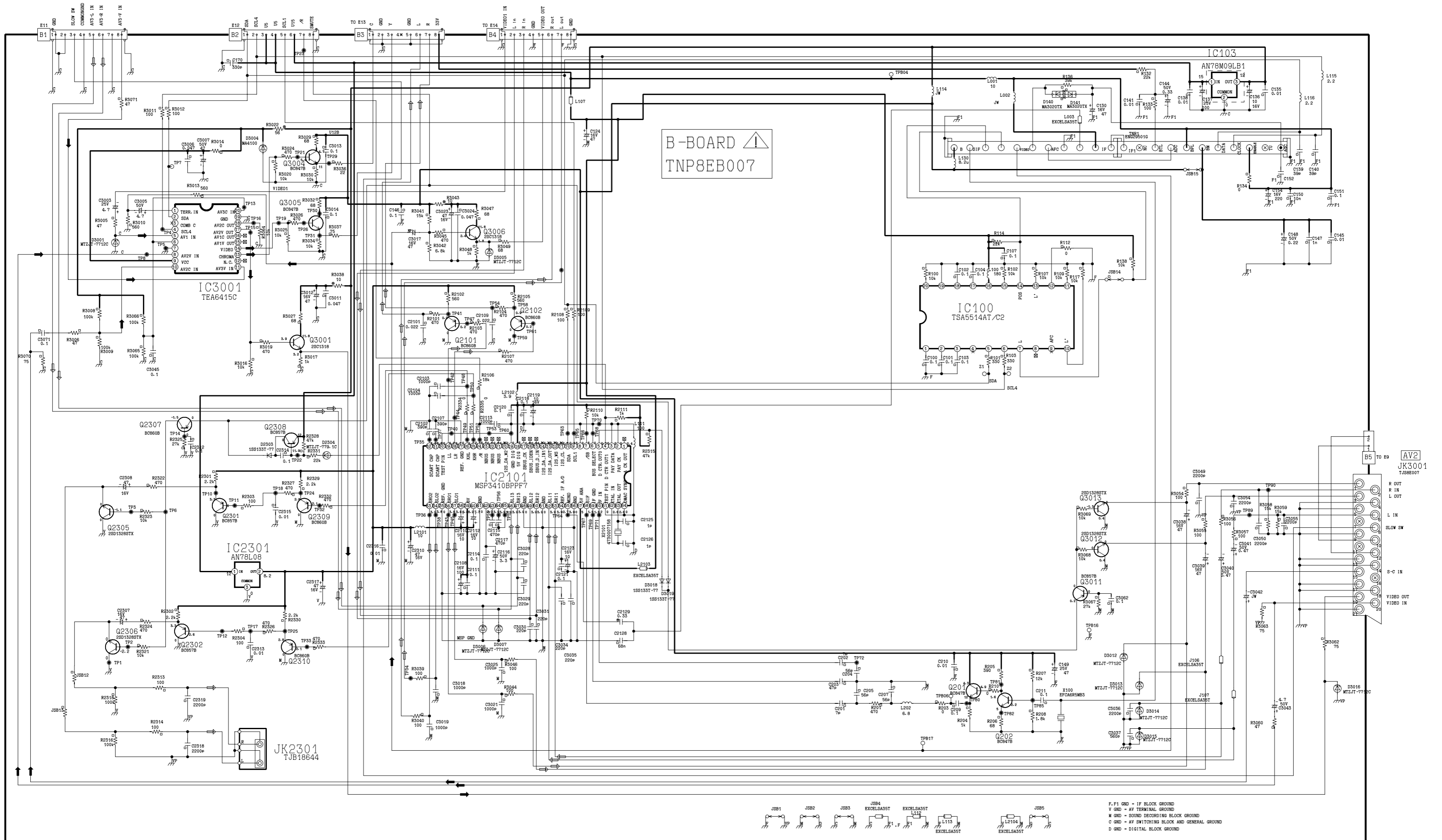
1. **RESISTOR**
Toutes les résistances sont des résistances au carbone 1/4W, sauf indication contraire par les indications suivantes :
L'unité de résistance est l' OHM (Ω) (K=1,000, M=1,000,000).
2. **CONDENSATEUR**
Tous les condensateurs sont des condensateurs céramique 50V, sauf indication contraire par les indications suivantes :
L'unité de capacité est le μ F, sauf indication contraire.
3. **BOBINE**
L'unité d'inductance est le μ H, sauf indication contraire.
4. Les composants entourés de pointillés, sur le schéma, représentent des éléments non câblés.
5. **POINT D'ESSAI**
 Position du point d'essai
6. **SYMBOL DE TERRE**
:Terre du châssis (froid) :Terre de ligne (chaud)
7. **MESURE DE TENSION**
La tension est mesurée avec un voltmètre c.c.
Les conditions de mesure sont les suivantes:
Source d'alimentation CA 220V-240V, 50Hz
Signal de réception Signal barre couleur (RF)
Toutes les commandes utilisateur Position maximum
8.  :Vidéo
 :Audio
 : Vertical / Horizontal
9. Ce schéma est à jour moment de l'impression et modifiable sans préavis.

Remarque

1. Le circuit d'alimentation contient une zone qui utilise une alimentation séparée pour isoler la connexion à la terre. Le circuit est défini par les indications chaud (HOT) et froid (COLD) dans le diagramme schématisé. Prendre les précautions suivantes. Tous les circuits, sauf le circuit d'alimentation, sont froids.

Précautions

- a. Ne pas toucher la partie chaude ou en même temps les parties chaud et froide. Cela présente un risque de décharge électrique.
- b. Ne pas court-circuiter les circuits chaud et froid car un fusible peut sauter et des pièces se casser.
- c. Ne pas raccorder un instrument, comme un oscilloscope, simultanément aux circuits chaud et froid car un fusible peut sauter. Raccorder la terre des instruments à la connexion de terre du circuit mesuré.
- d. Toujours débrancher la fiche d'alimentation avant de déposer le châssis.



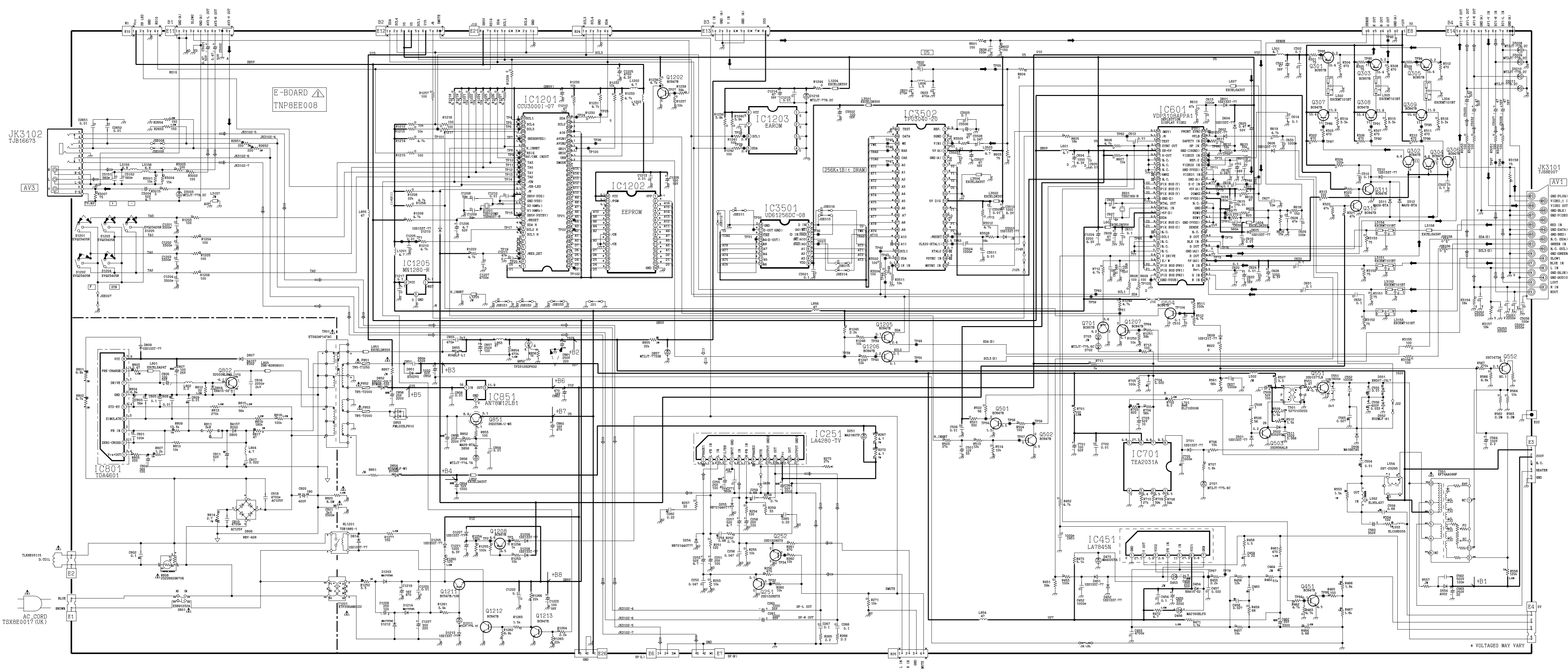
F, F1 GND - IF BLOCK GROUND
V GND - AY TERMINAL GROUND
M GND - SOUND DECODING BLOCK GROUND
C GND - AV SWITCHING BLOCK AND GENERAL GROUND
D GND - DIGITAL BLOCK GROUND

JK3102
TUB16673

AV3


AC CORD
TSXB0017 (UK)

E-BOARD
TMP8EE008



* VOLTAGES MAY VARY

P-BOARD 
TNP8EP013

 F840
2153.15H

1/2W
R841
3.3M

C841
0.22u

L.F
L841
ELF18D490F

JS1

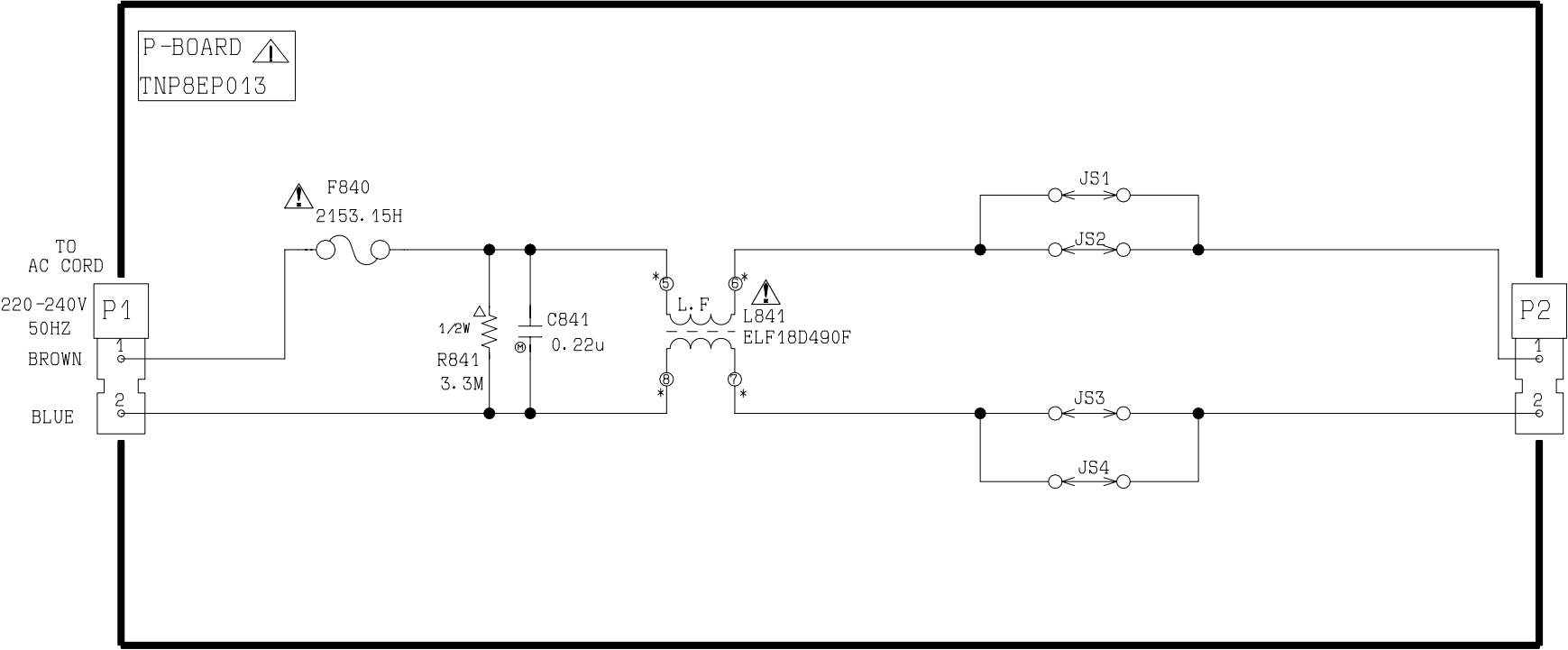
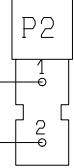
JS2

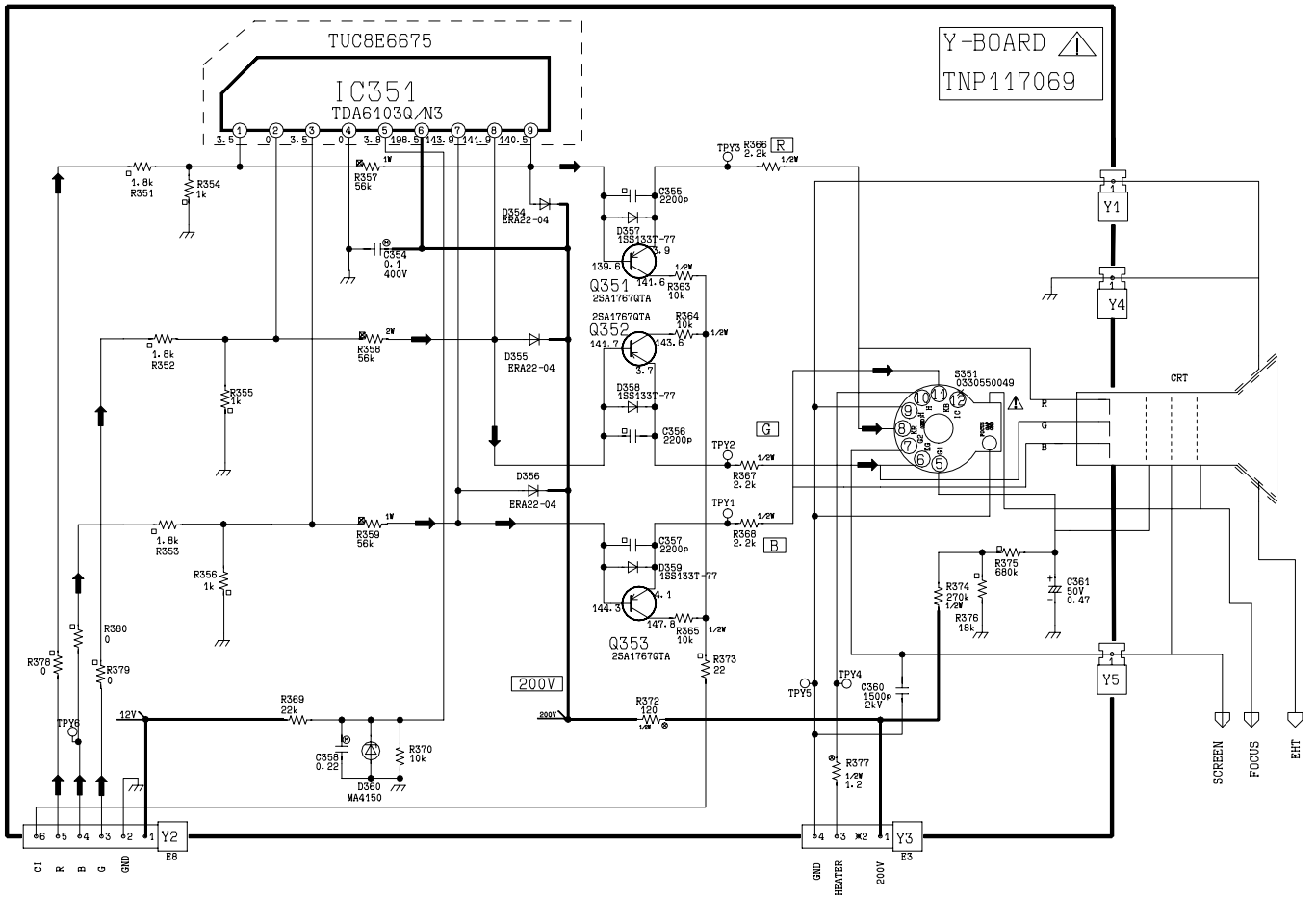
JS3

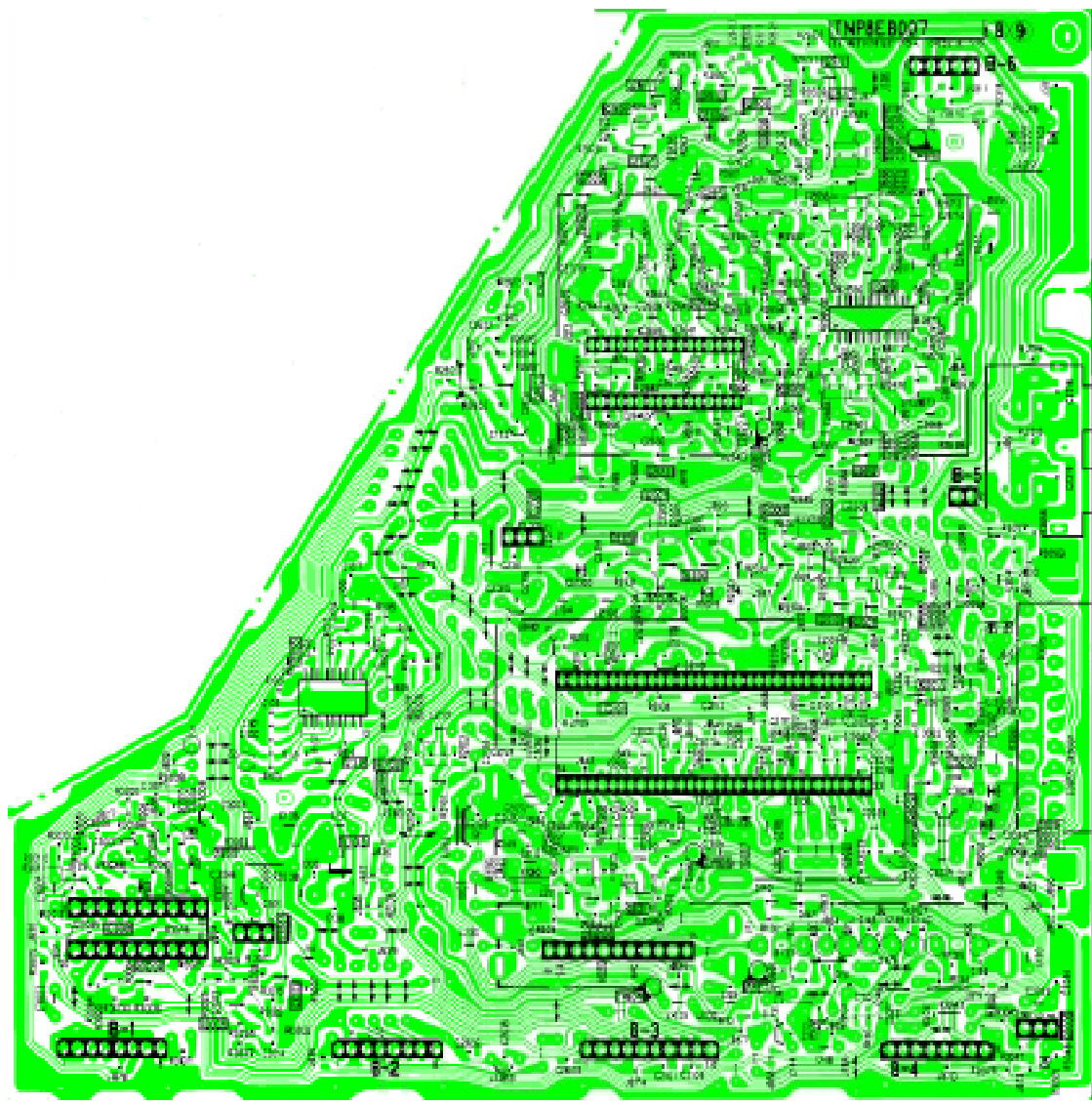
JS4

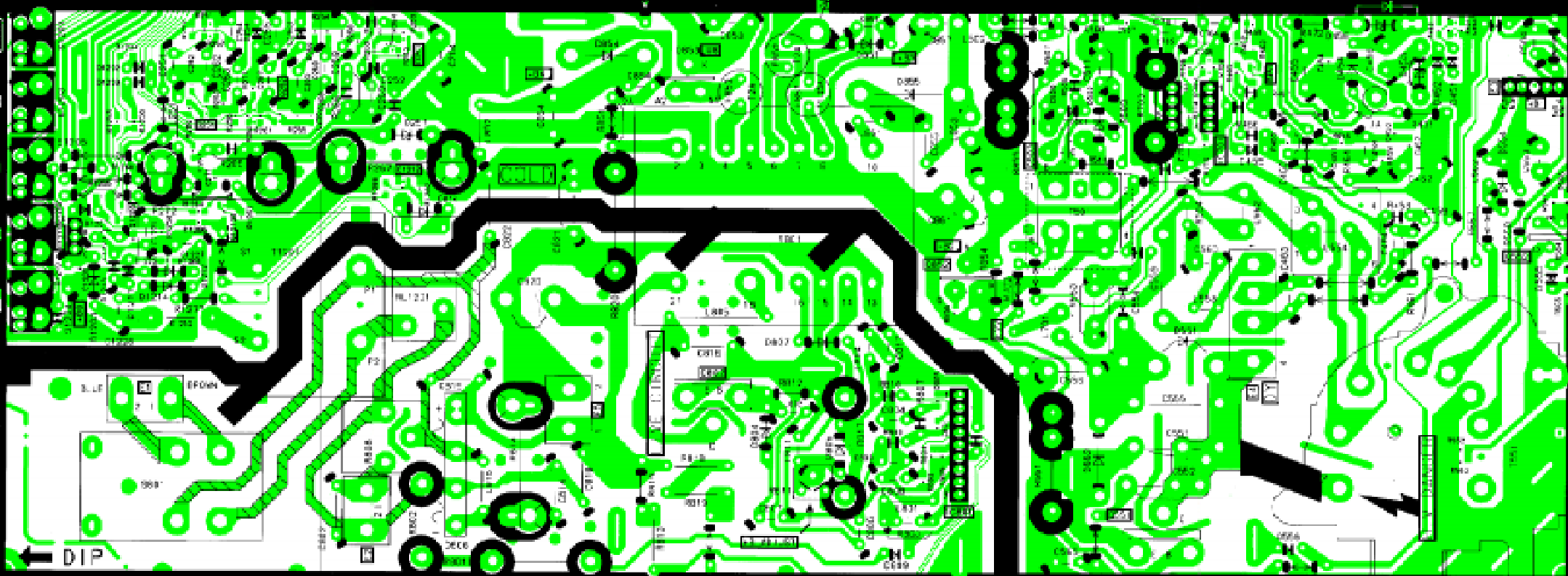
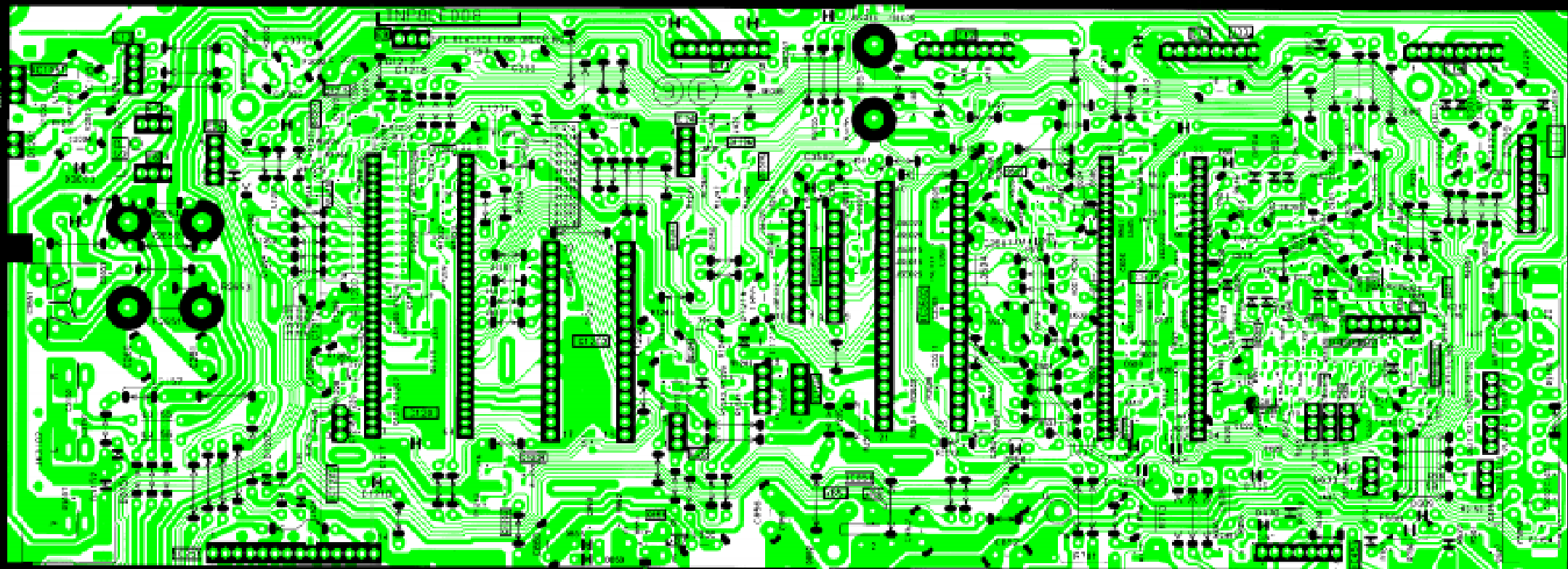
P2

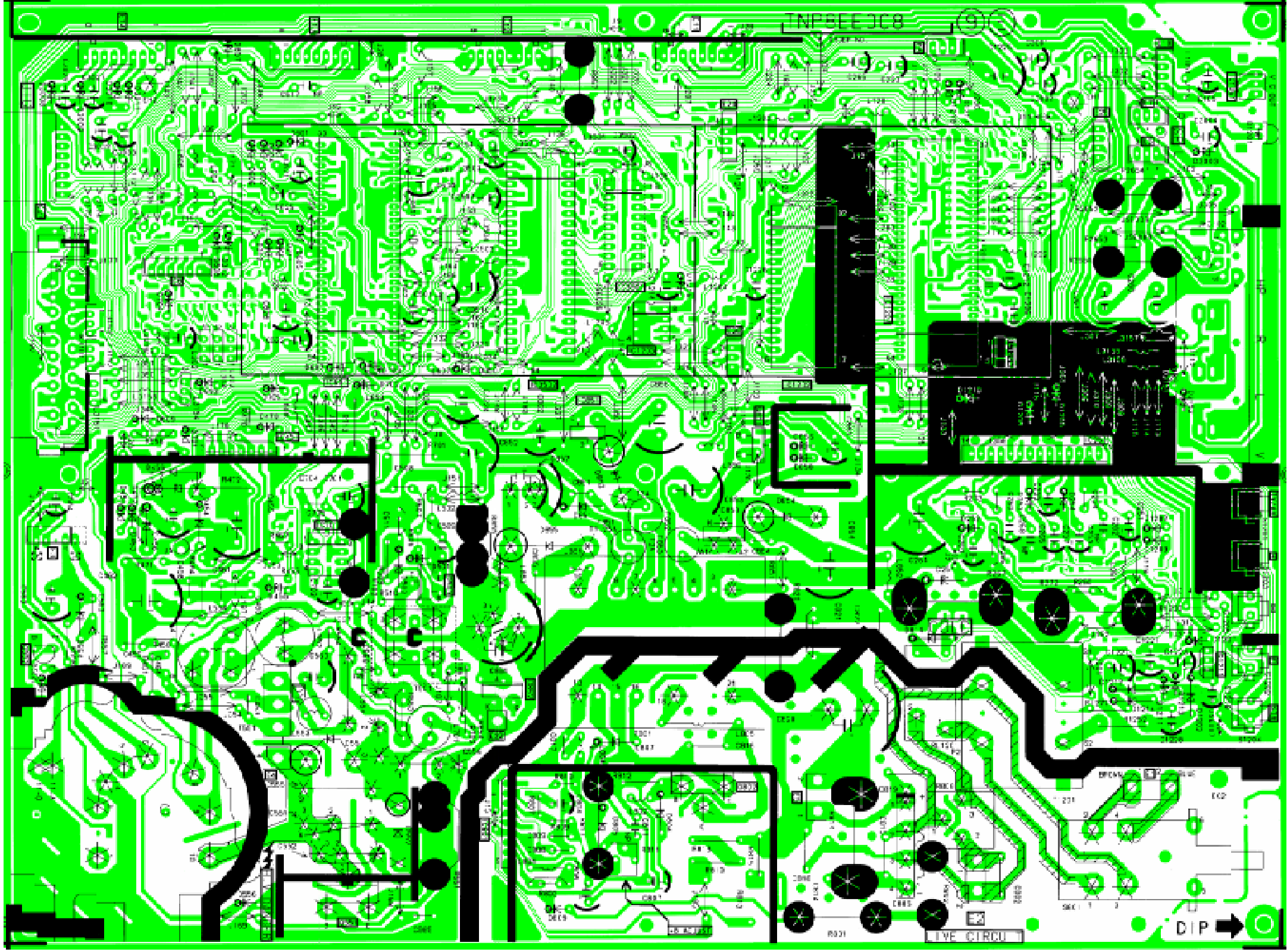
TO
AC CORD
220-240V
50HZ
BROWN
BLUE

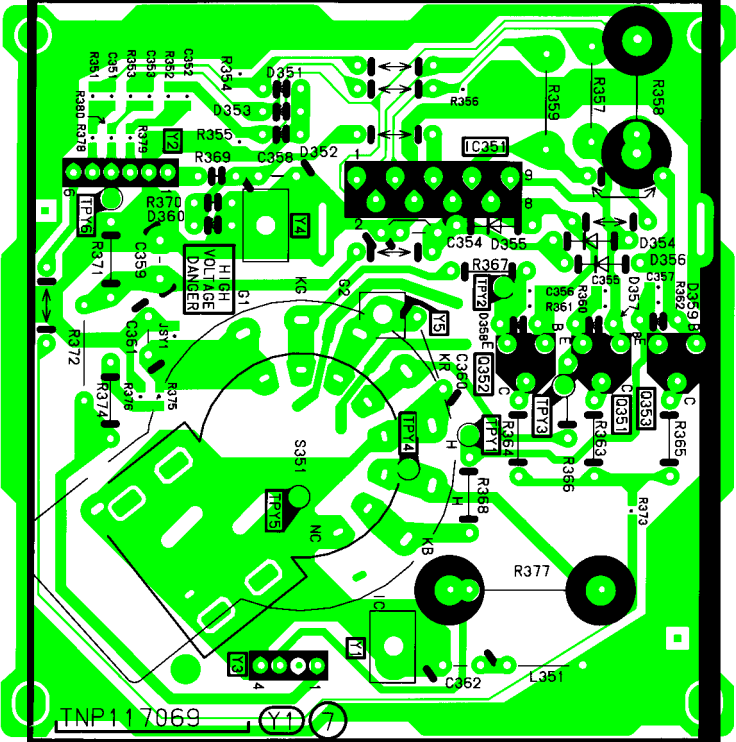












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