

model racing s. r. l. s. c. BRANDI & C.

COSTRUZIONI GIOCHI PER LUNA PARK E SALE ATTRAZIONI



60018 MONTEMARCIANO (ANCONA) ITALY - VIA BRECCIATA, 27 - TEL. (071) 915.163 / 915.286

C. C. I. A. 53609 - M 030797 - MINISTERO DEL COMMERCIO ESTERO: POSIZIONE N. 6137/M - PARTITA IVA N° 9604-042-2

- SUPER ROAD CHAMPIONS - La macchina esce dal collaudo di produzione con le seguenti regolazioni:
- Machine gets out from production testing with the following adjustments:

Gettoniera regolata a
Coin chute adjusted to

- ☒ 1 coin 1 player
- ☒ 2 coin 2 player
- ☐ 2 coin 1 player
- ☐ 4 coin 2 player

Curve della strada
Road curve

- ☐ meno curve
less of curves
- ☒ più curve
more curves

Larghezza strada
Width of road

- ☐ stretta
narrow
- ☒ larga
width

Durata del gioco senza
vincita
Length of game without
wins

- ☐ 30 sec.
- ☒ 60 sec.
- ☐ 95 sec.

Note: per effettuare variazioni alle regolazioni attenersi alle istruzioni accluse.

Note: in order to make variations on adjustments, please conform to enclosed instructions.

ADJUSTMENTS SUPER ROAD CHAMPIONS

YOU ARE SUGGESTED TO NOT AFFECT POSITION
BECAUSE THAT MAY CAUSE MALFUNCTION WITH
TO ANY COMPONENT BAD FUNCTION.

CS 221

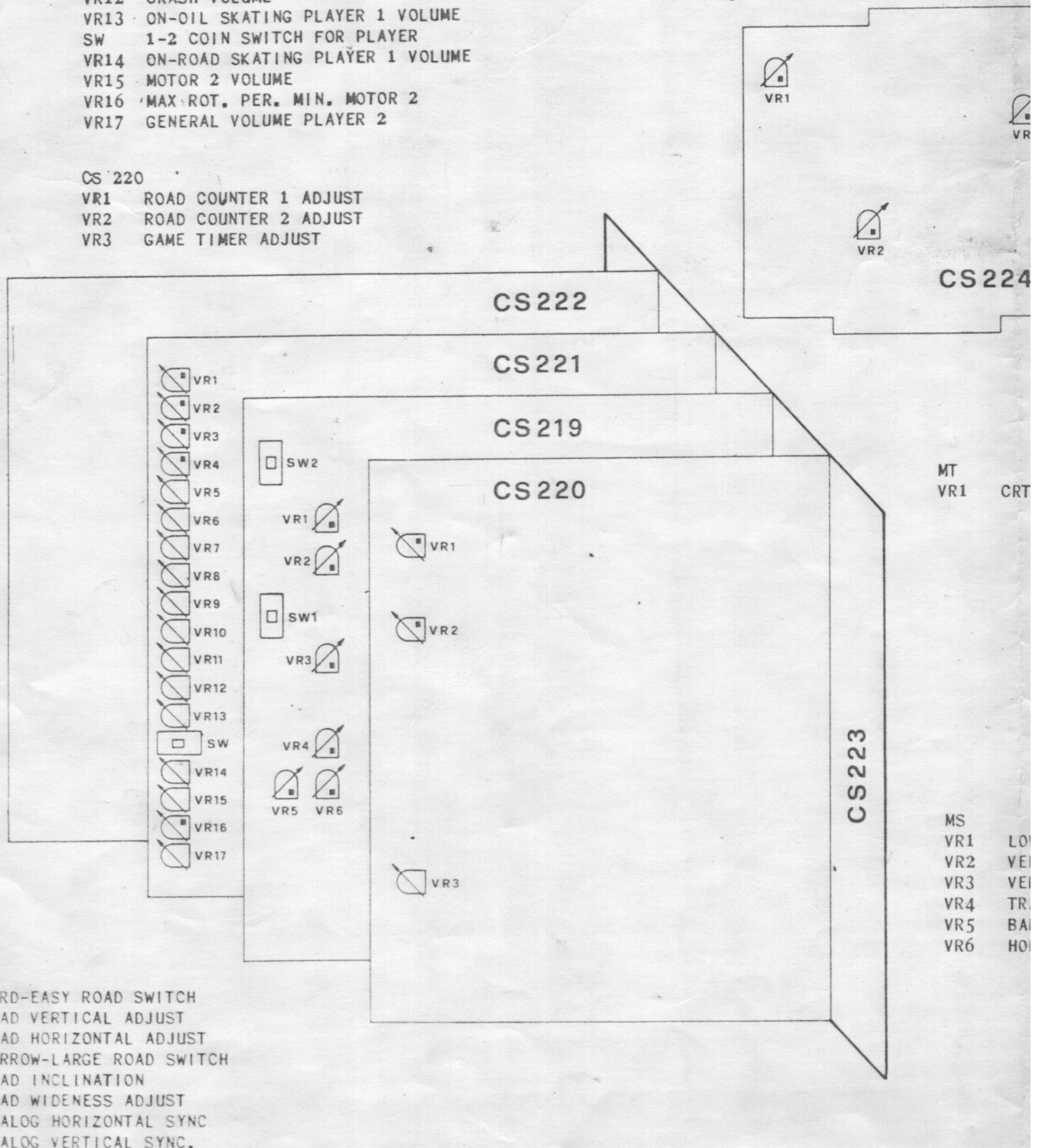
- VR1 ATTACKING POINT PEDAL 1
- VR2 ATTACKING POINT PEDAL 2
- VR3 MODULATION OF MOTORS LEVEL ADJUST
- VR4 MAX ROT. PER. MIN. MOTOR 1
- VR5 PLAYER 1 GENERAL VOLUME
- VR6 START BUZZER VOLUME
- VR7 ON-OIL SKATING PLAYER 2 VOLUME
- VR8 ON-ROAD SKATING PLAYER 2 VOLUME
- VR9 MOTOR 2 VOLUME
- VR10 EXTENDED PLAY BUZZER VOLUME
- VR11 MUSIC VOLUME
- VR12 CRASH VOLUME
- VR13 ON-OIL SKATING PLAYER 1 VOLUME
- SW 1-2 COIN SWITCH FOR PLAYER
- VR14 ON-ROAD SKATING PLAYER 1 VOLUME
- VR15 MOTOR 2 VOLUME
- VR16 MAX ROT. PER. MIN. MOTOR 2
- VR17 GENERAL VOLUME PLAYER 2

CS 220

- VR1 ROAD COUNTER 1 ADJUST
- VR2 ROAD COUNTER 2 ADJUST
- VR3 GAME TIMER ADJUST

CS 224

- VR1 ADJUST -12 Vcc
- VR2 ADJUST + 5 Vcc
- VR3 ADJUST +12 Vcc



ADJUST POSITION TRIMMERS MARKED WITH NO REFERENCE

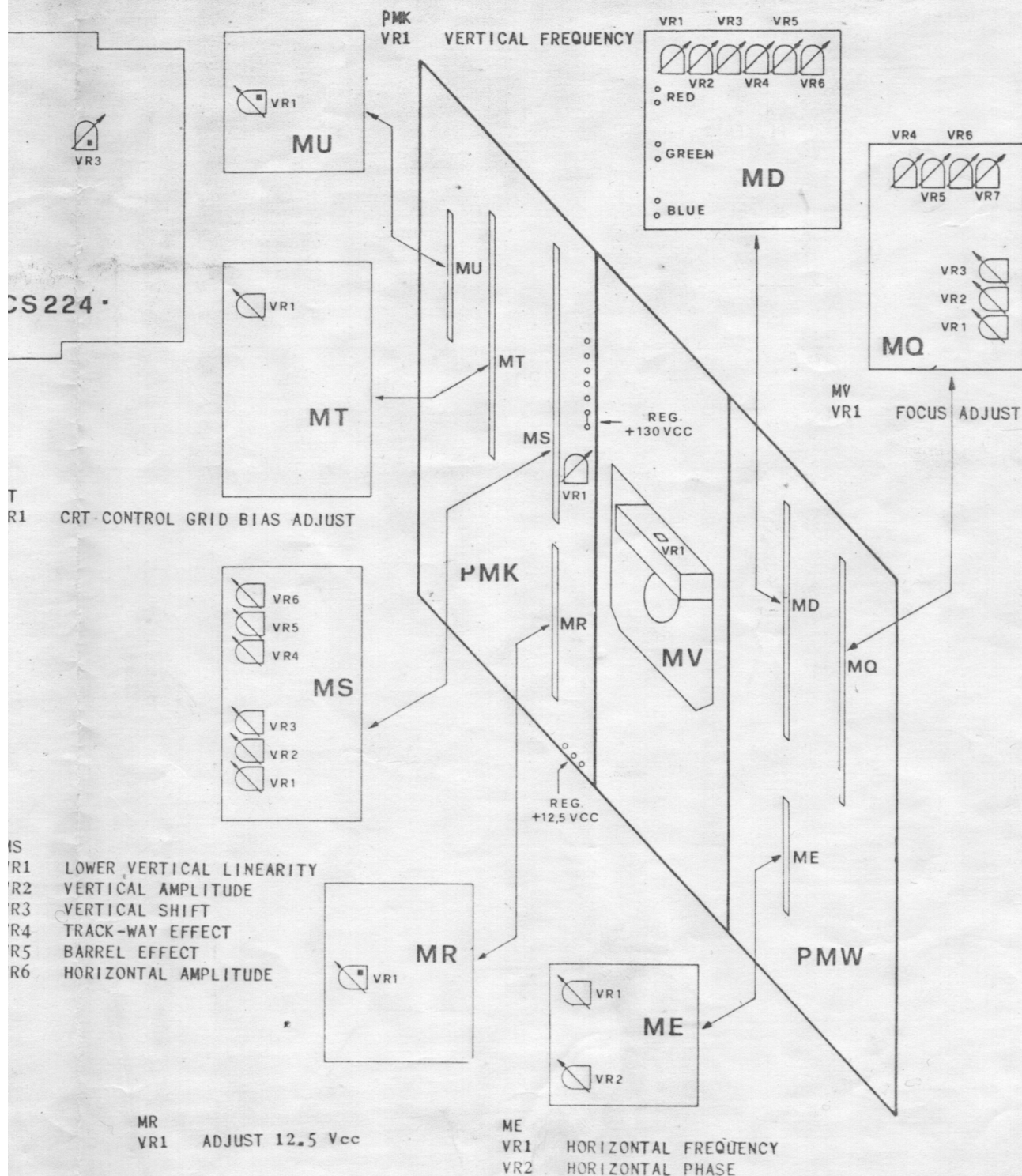


ADJUSTMENTS MONITOR 20" - 90°

MD
VR1 GREEN GAIN
VR2 GREEN LEVEL
VR3 RED GAIN
VR4 RED LEVEL
VR5 BLUE GAIN
VR6 BLUE LEVEL

MQ
VR1 RED INPUT LEVEL
VR2 GREEN INPUT LEVEL
VR3 BLUE INPUT LEVEL
VR4 VERTICAL ERASE
VR5 BRIGHTNESS
VR6 HORIZONTAL ERASE
VR7 SYNC. INPUT LEVEL

MU
VR1 ADJUST 130 Vcc



T
R1 CRT CONTROL GRID BIAS ADJUST

IS
VR1 LOWER VERTICAL LINEARITY
VR2 VERTICAL AMPLITUDE
VR3 VERTICAL SHIFT
VR4 TRACK-WAY EFFECT
VR5 BARREL EFFECT
VR6 HORIZONTAL AMPLITUDE

MR
VR1 ADJUST 12.5 Vcc

ME
VR1 HORIZONTAL FREQUENCY
VR2 HORIZONTAL PHASE

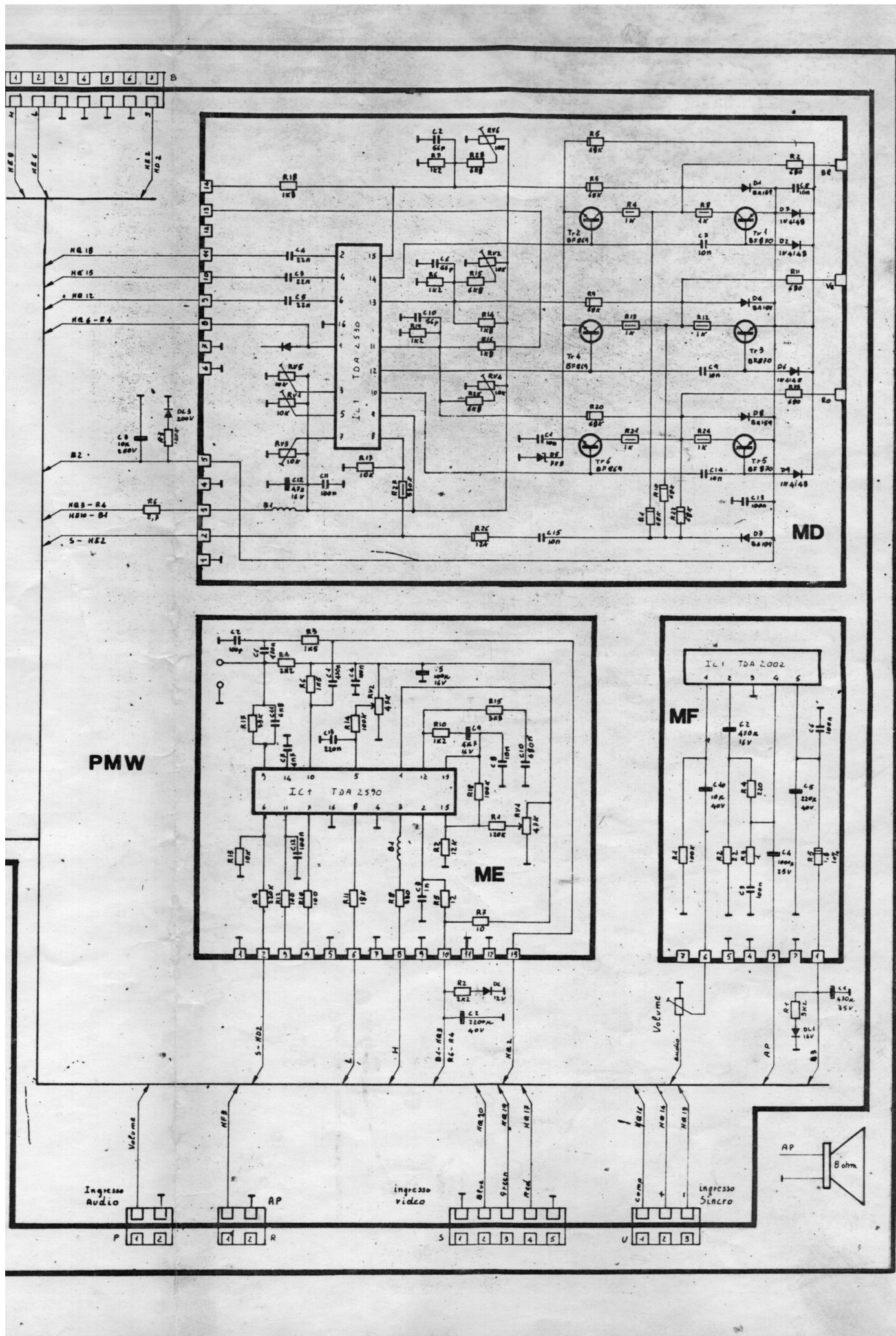


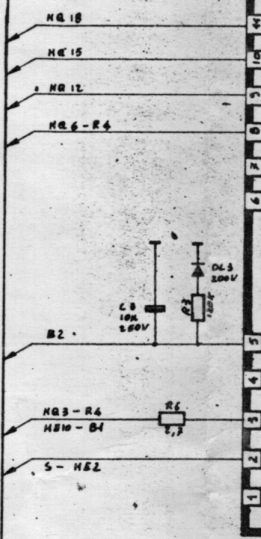
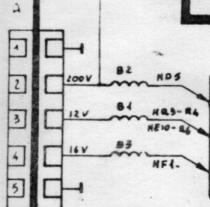
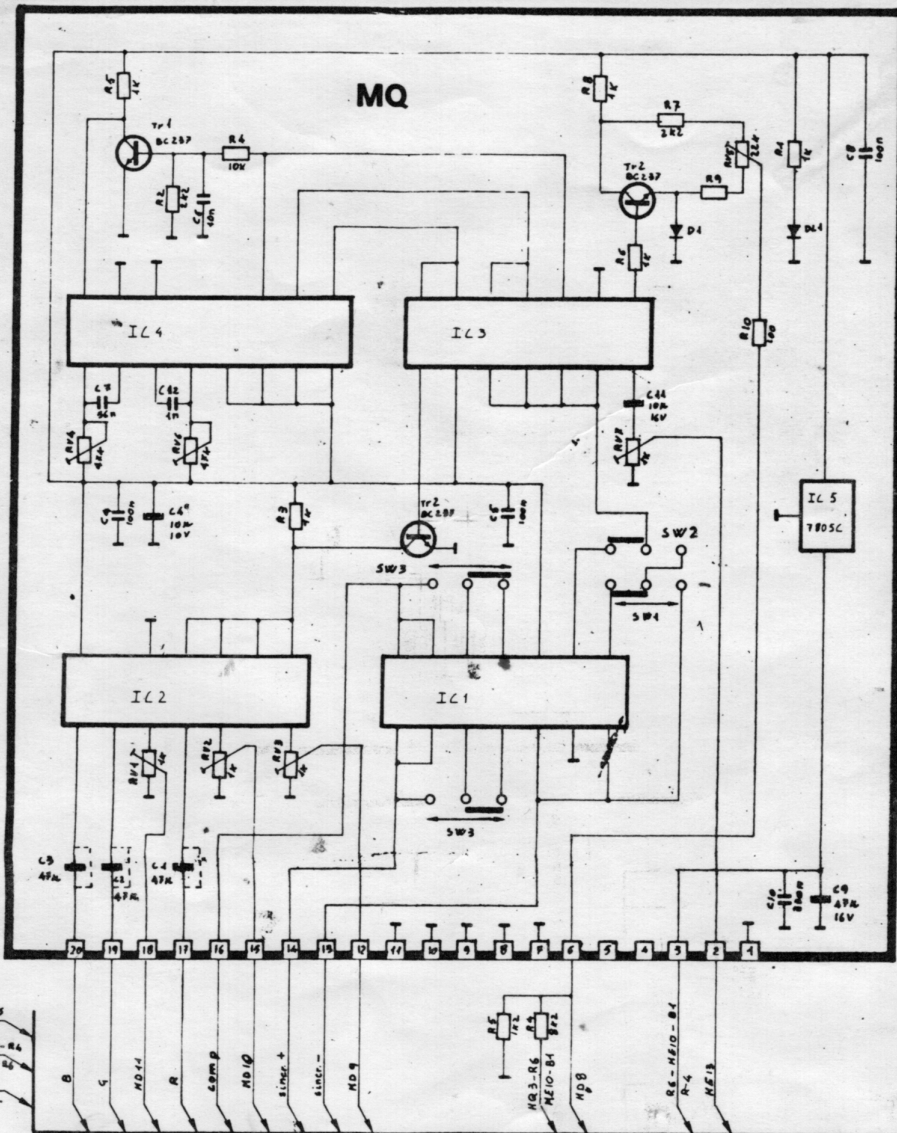
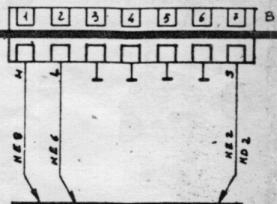
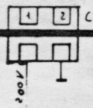
COLOR MTC 20" - 90° MONITOR ADJUSTING RULES

- 1) Using a digital voltmeter chek the two master voltages 130V - 12,5V and adjust them if necessary trimming controls located on (MU) and (MR) modules respectively.
- 2) Put probe of a scope set for AC. 0,5V/DIV. - 5mS/DIV. sequentially on points 9-10-11 of (MD) card setting amplitude of the three colour signals (R-G-B) to 0,8Vpp, this is obtained acting on (VR1-VR2-VR3) controls on (MQ) card.
- 3) Set the scope for DC. 20V/DIV. - 5mS/DIV. and chek (R-G-B) points on (MD) card, set brightness controls (VR5) on (MQ) card to zero, then adjust (VR4-VR2-VR6) trimmers on (MD) until the three levels (R-G-B) are exactly 140V DC., corresponding with erasing signal of each colour.
- 4) Without modifyng setting of the scope, testing in the same points as in step 3, preselect brightness (VR5) on (MQ) making blanking signals correspond to each colour signal, then use (VR3-VR1-VR5) on (MD) to adjust colour signals to 60Vpp.
- 5) Reset brightness trimmers to zero (VR5) on (MQ) and trim (VR1) on (MT) to allow minimum light on the screen, retouch now (VR5) on (MQ) until desired brightness is obtained.
- 6) Correct vertical and horizontal setting using (VR1-VR2-VR3-VR4-VR5-VR6) on (MS).
- 7) Adjust (VR1) control on base-board under (MS) module to correct shifting of vertical frequency.
- 8) Adjust horizontal oscillator by connecting a jumper to the two pins in (ME) module, picture must become stable, without vibrating or shifting as you turn the (VR1) control on (ME) module, then take jumper off and retouch horizontal phase (VR2) on (ME) to keep picture in center of screen perimeter.
- 9) If necessary adjust focus control (VR1) located on CRT socket module (MV).

TECNICAL SPECIFICATION

CATHODIC RAY-TUBE	20" 90° Type A51-211X
SUPPLY	220 V $\pm$ 10% 50 Hz Transformer and power supply are buffered from mains Total consumption 80 W
SIGNAL INPUTS	TTL or analog 0,6 $\frac{V}{V_{cc}}$ 5 Vcc compatible
SYNC. INPUTS	Horizontal positive Vertical positive Horizontal negative Vertical negative Composite negative
GEOMETRY	Are adjustable: Horizontal and vertical wideness Upper and lower linearity Trapezium effect Pincushion effect Horizontal and vertical frequency Horizontal and vertical phase point
HI-VOLTAGE	25 KV In this rate, CRT is assured against spurious X-ray radiations
X-RAY	With Hi-voltage = 27 KV and kathode current = 1 mA radiations do not exceed 0,5 mR/h at 5 mm (2 inch) distance from tube
HORIZONTAL BLANKING	Automatic
VERTICAL BLANKING	Automatic
SCANNING FREQUENCY	Horizontal 15,65 KHz Vertical 50 Hz
ADJUST POINTS	Brightness Input level for each base colour Sync. level Horizontal and vertical restart beam blanking signals
DIMENSIONS	480 x 370 x 420 (Within CRT)
WEIGHT	Assembled circuit Kg. 3 CRT Kg. 12,3
TEMPERATURE	Operation 0°C $\frac{V}{V_{cc}}$ 55°C ambient Storage - 40°C $\frac{V}{V_{cc}}$ + 65°C

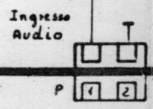
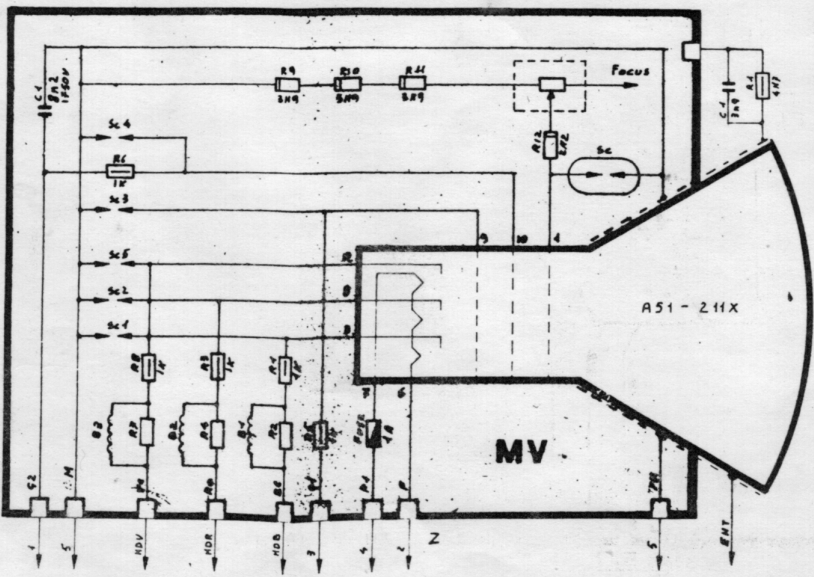
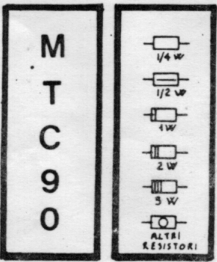


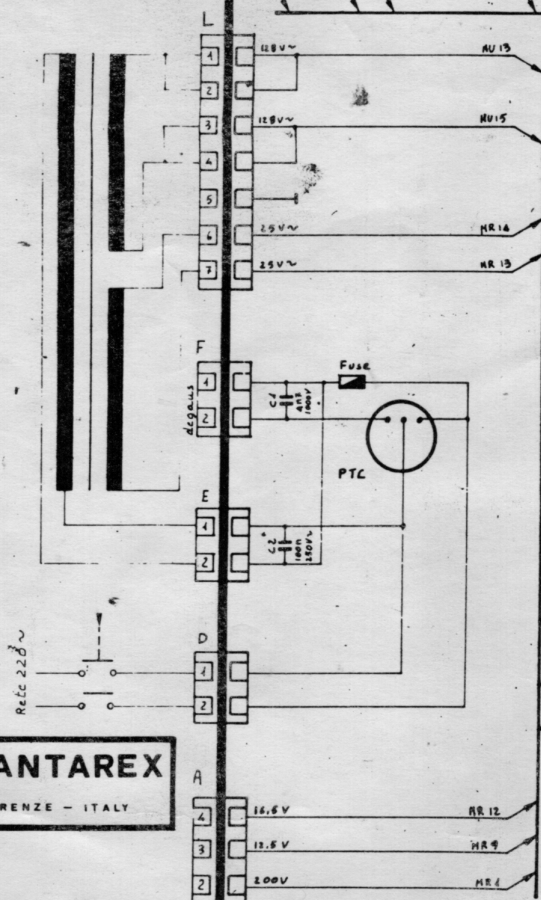
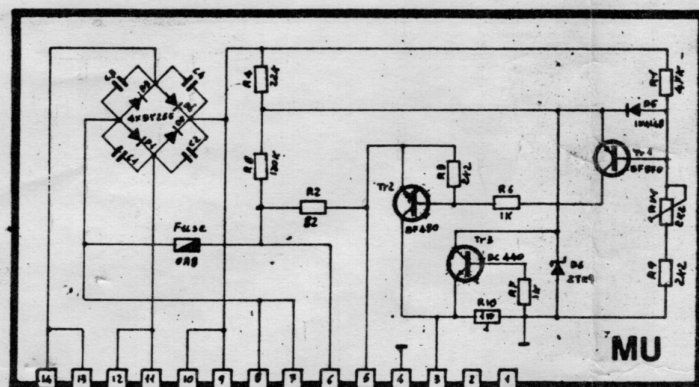
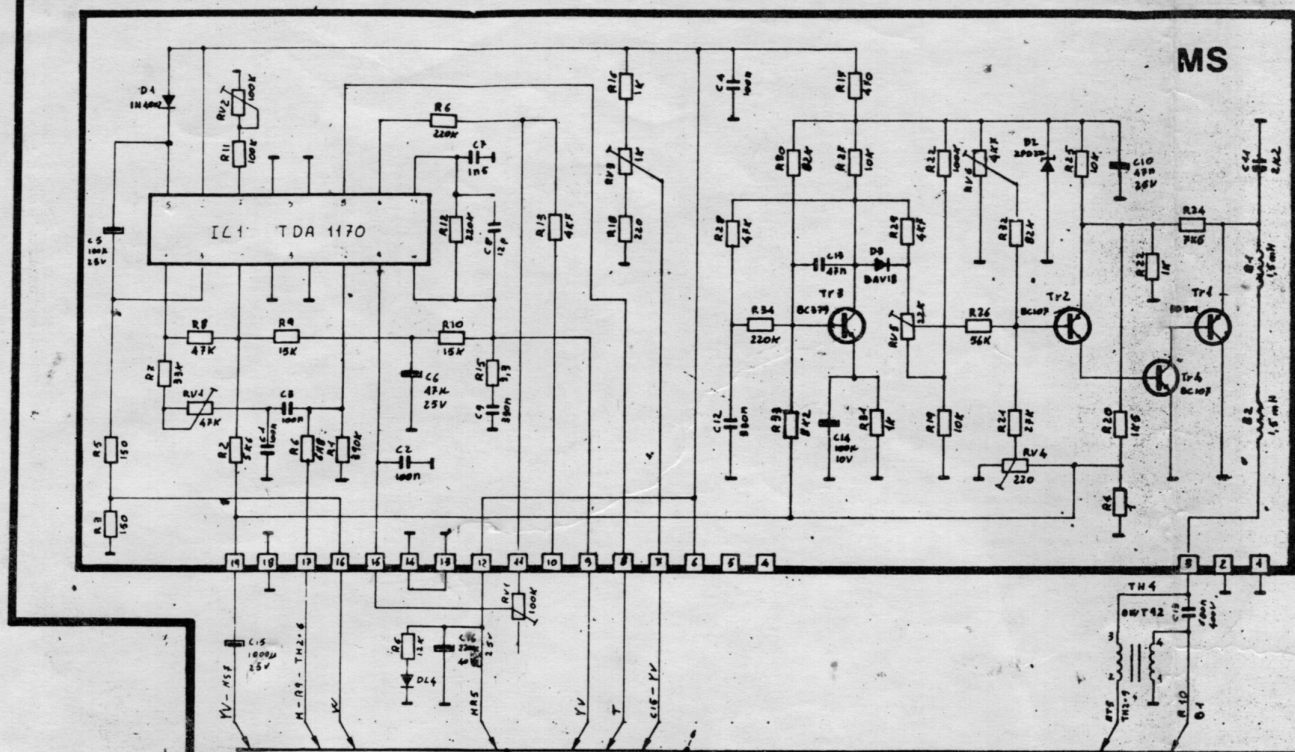


PMW



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MTC 90

