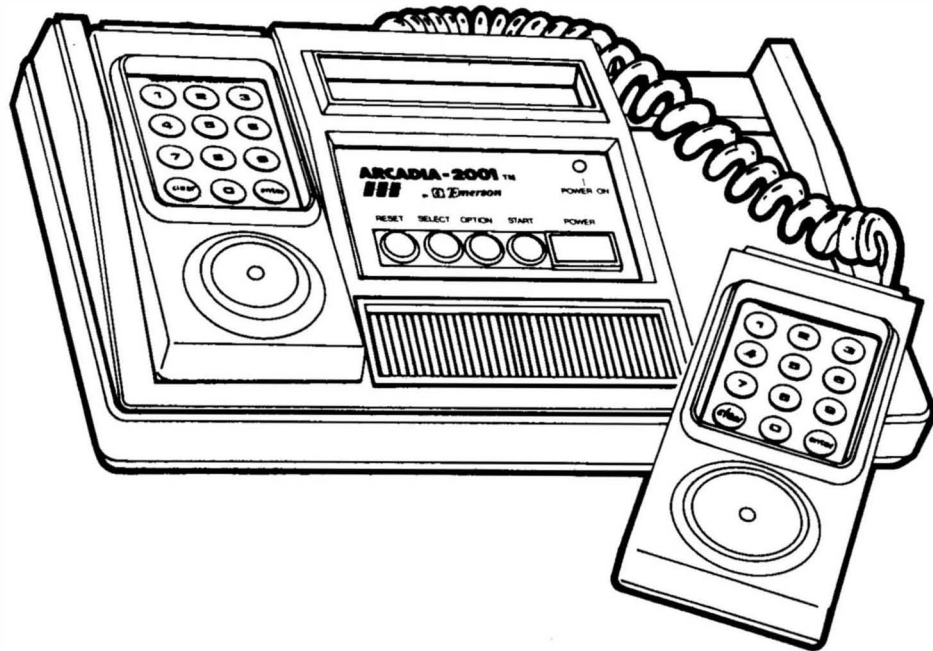




# SERVICE MANUAL

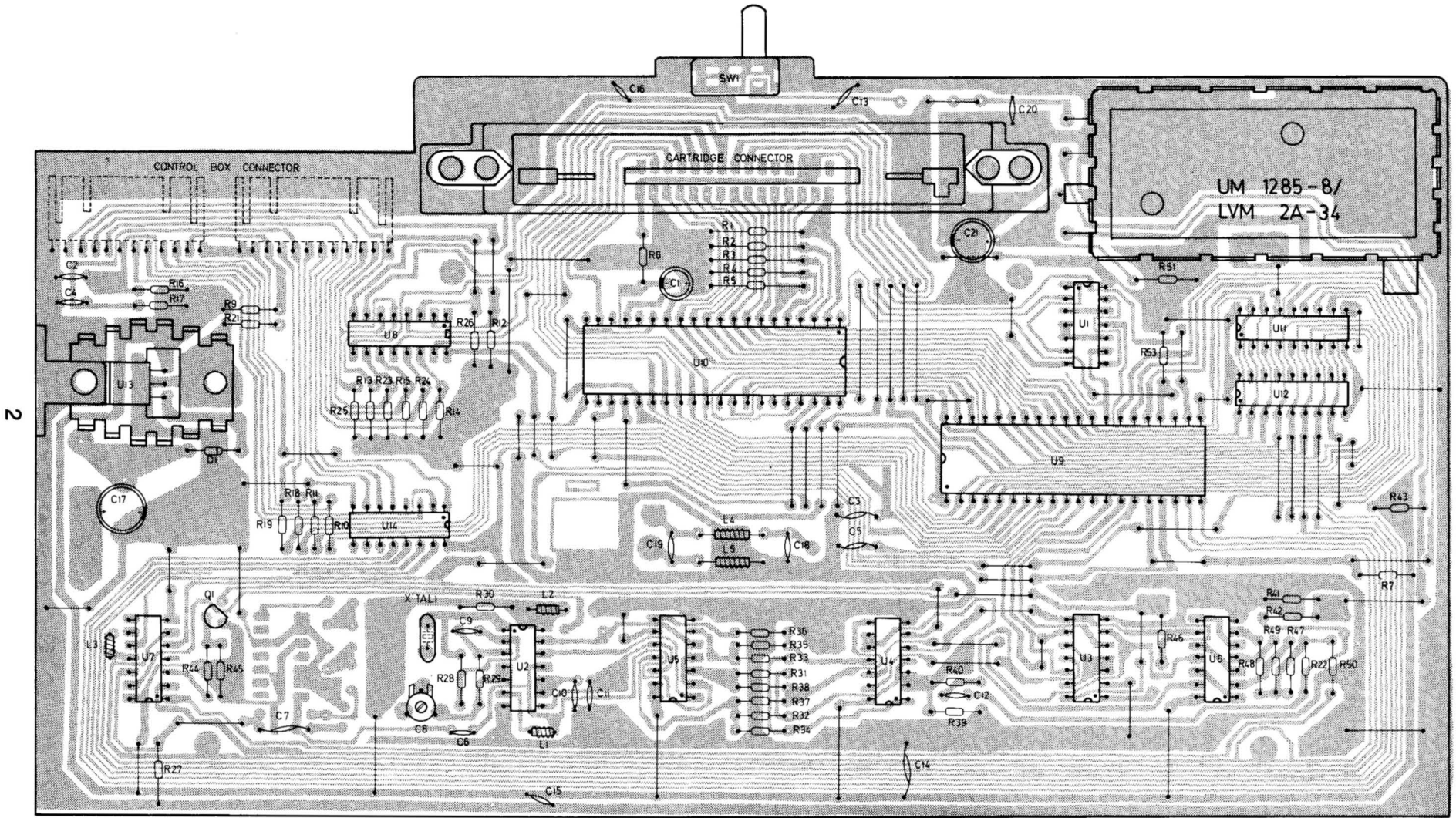
**MICRO  
COMPUTER SYSTEM  
VIDEO GAME  
MODEL NO. ADV-1**



## SPECIFICATION

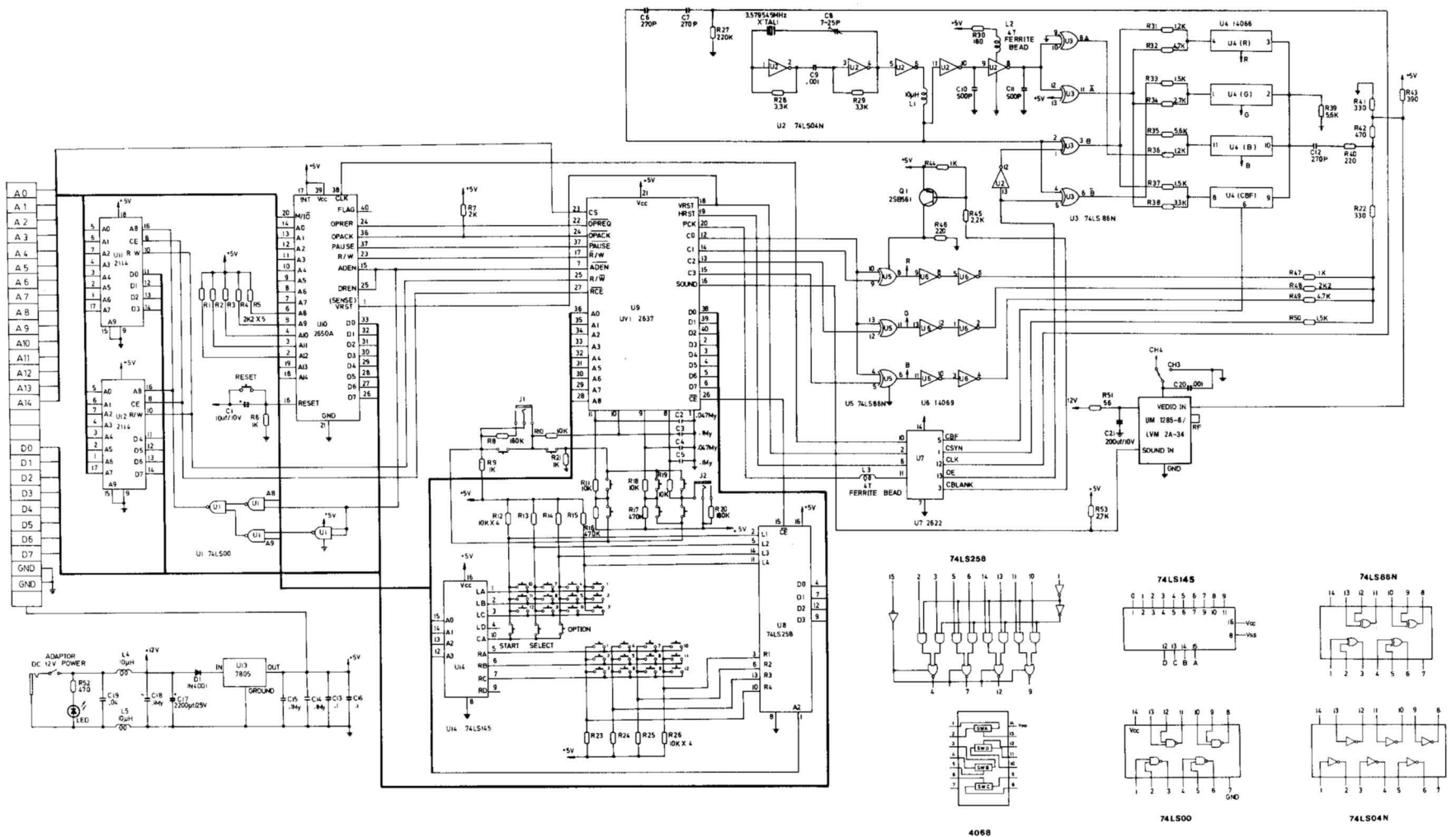
R. F. FREQUENCY	: CHANNEL SWITCH SELECTED TO CH. 3 — 61.25 MHz CH. 4 — 67.25 MHz
VIDEO CARRIER OUTPUT	: 1.5 mV r m s
SOUND CARRIER FREQUENCY	: 4.5 MHz
CURRENT DRAIN	: 580 mA MAX.
POWER SUPPLY	: USE EXT. AC ADAPTOR WITH INPUT : AC 117V/60 Hz OUTPUT: DC 12V— 0.5 A
POWER CONSUMPTION	: 10 W MAX.

**SERVICE PUBLICATION # 66-82**

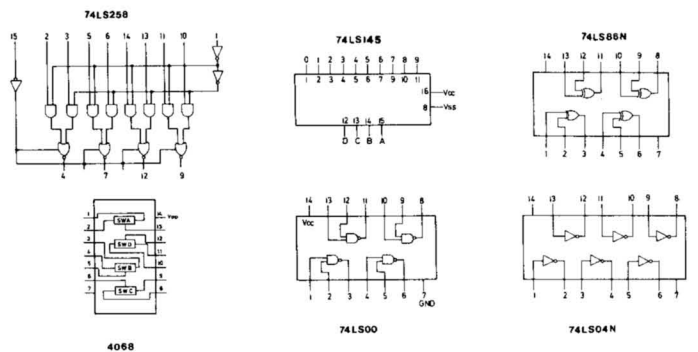


MAIN CHASSIS COMPONENT LAYOUT ( COMPONENT SIDE )



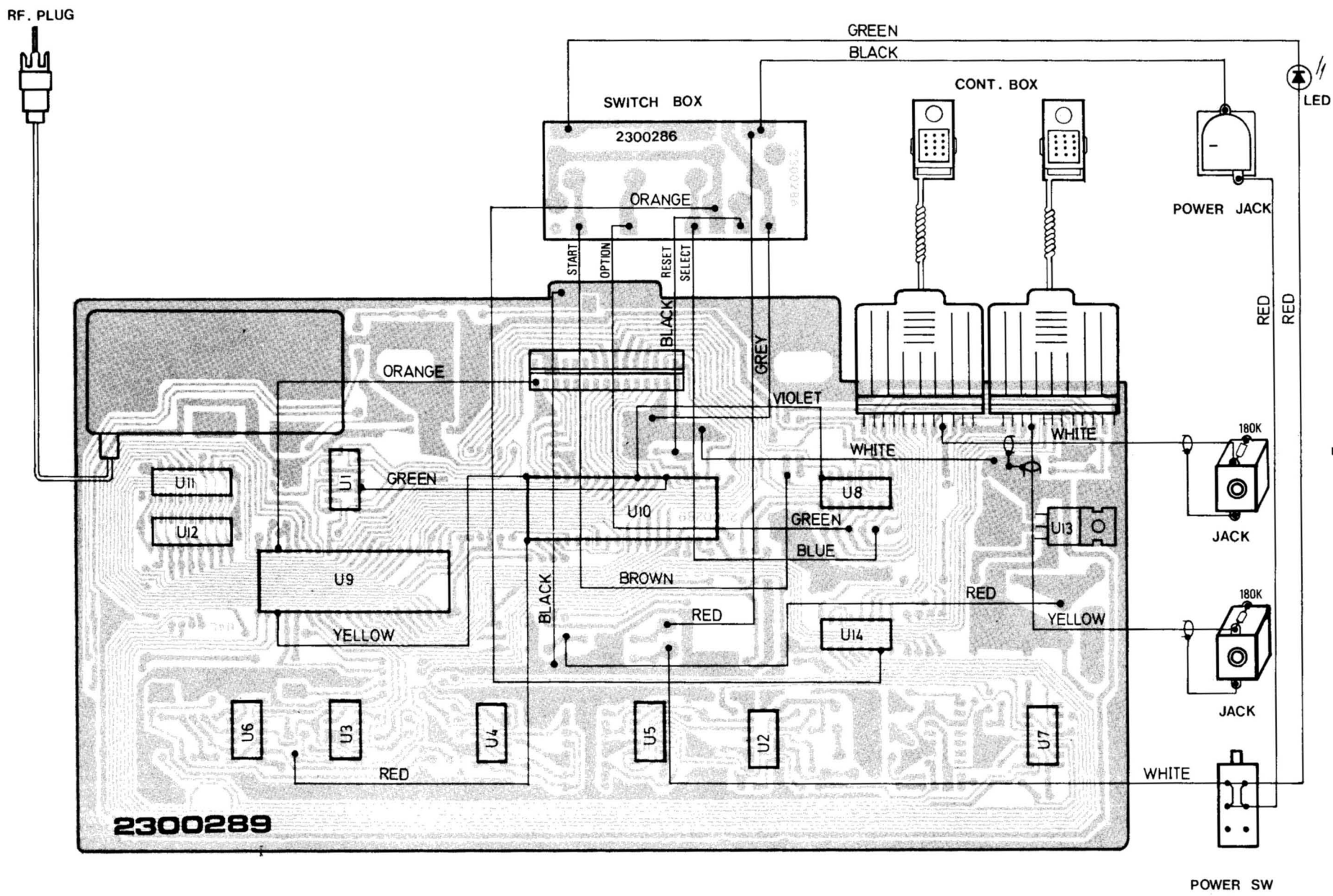


4

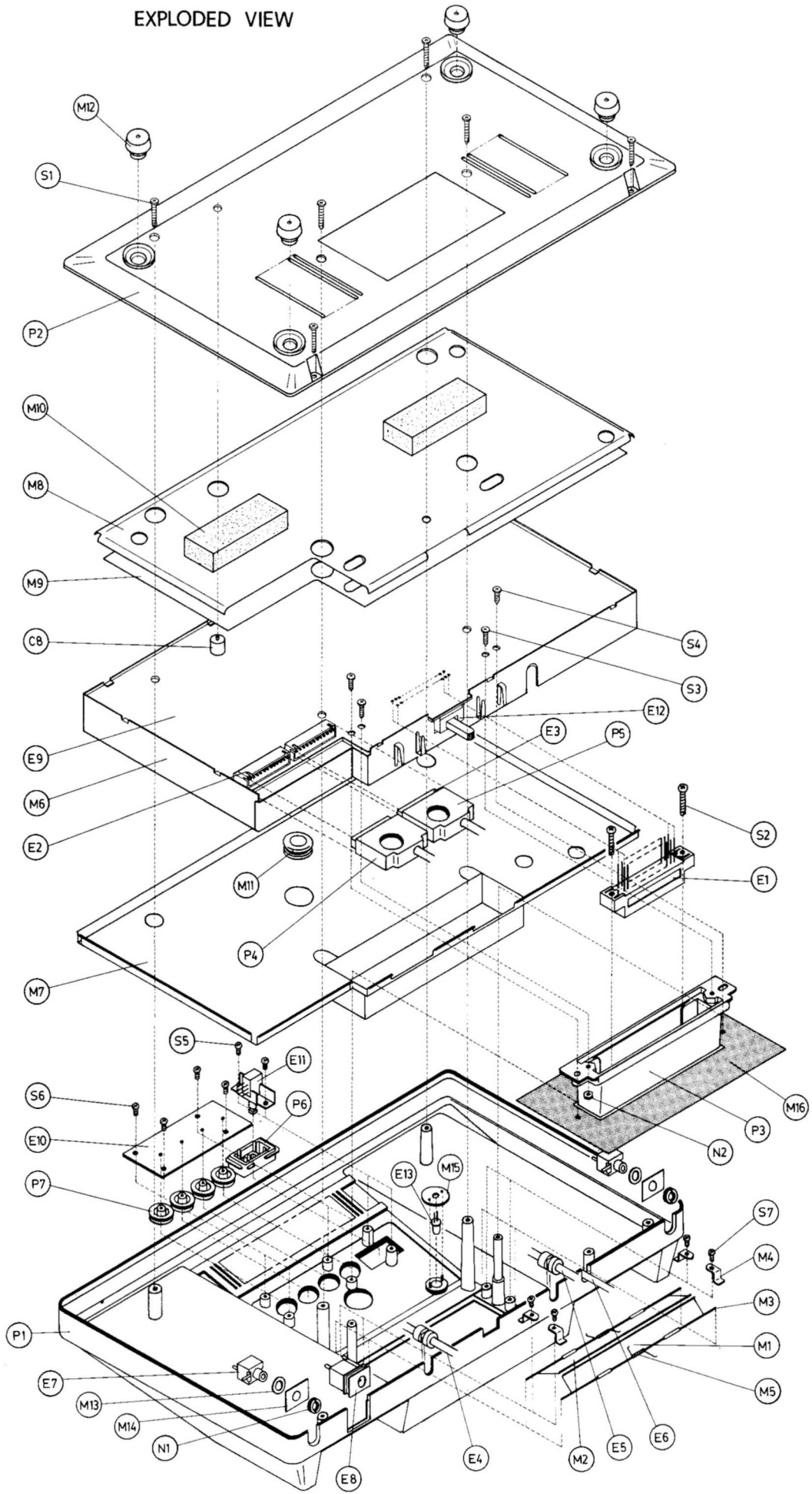




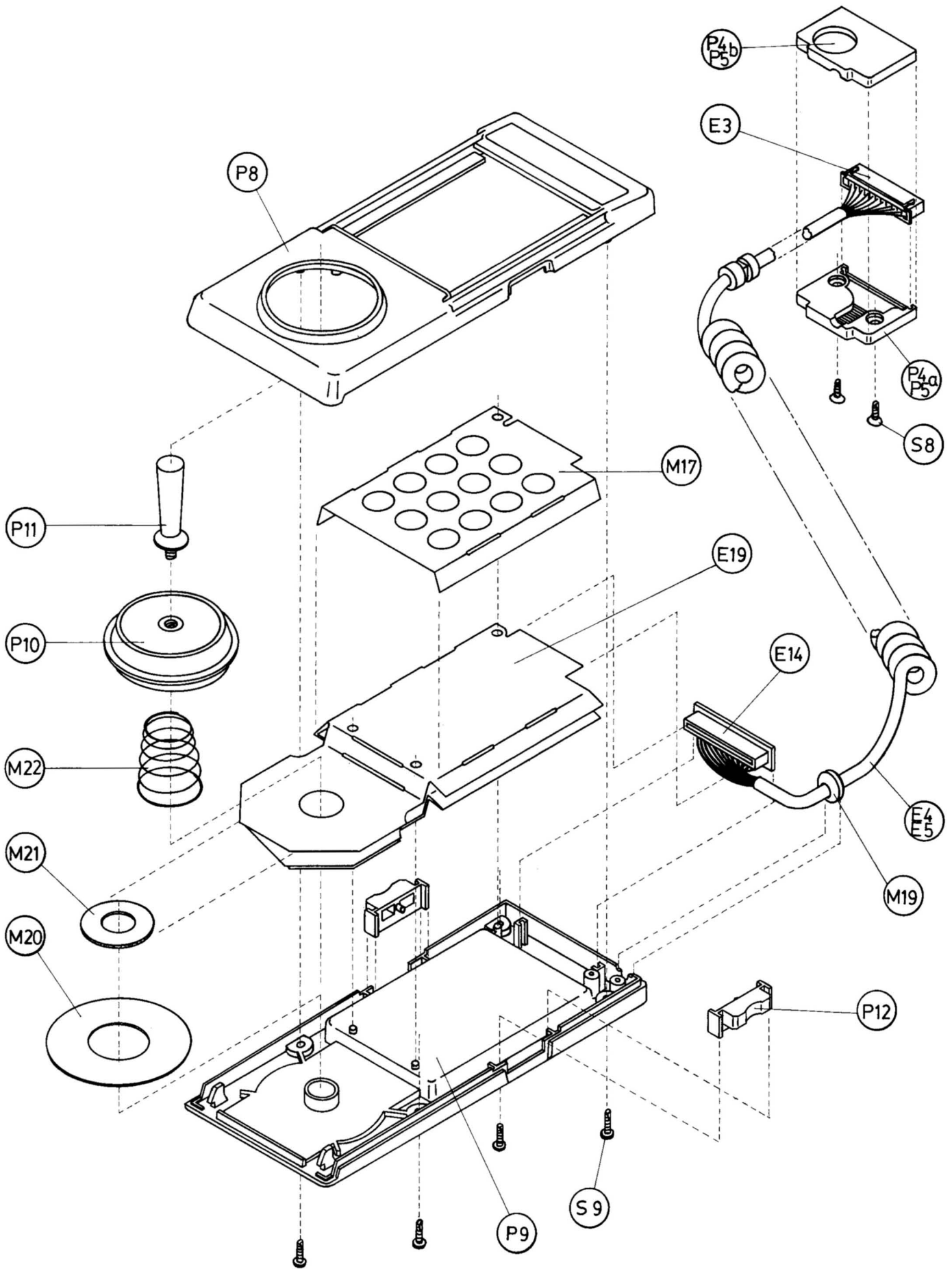
WIRING DIAGRAM



EXPLODED VIEW



# EXPLODED VIEW 2



REPLACEMENT PARTS LIST ELECTRICAL PARTS

CAPACITOR

SYMBOL NO.	PART NO.	DESCRIPTION
C 1	2703102	Electrolytic Cap. $\begin{matrix} + 80 \\ - 20\% \end{matrix}$ 10 uF/10V
C 2	2732475-3	Mylar Cap. $\pm 10\%$ 0.047 uF/50V
C 3	2732106-3	" " 0.1 uF/50V
C 4	2732475-3	" " 0.47 uF/50V
C 5	2732106-3	" " 0.1 uF/50V
C 6	2722273-3	Ceramic Cap. $\begin{matrix} + \\ - 10\% \end{matrix}$ 270 pF/25V
C 7	2722273-3	" " 270 pF/25V
C 8	2610007	Trimmer Cap. 7-25 pF
C 9	2722104-1	Ceramic Cap. $\begin{matrix} + 80 \\ - 20\% \end{matrix}$ .001 uF/25V
C 10	2722503-3	" $\begin{matrix} + \\ - 10\% \end{matrix}$ 500 pF/25V
C 11	2722503-3	" " 500 pF/25V
C 12	2722273-3	" " 270 pF/25V
C 13	2722106-1	" $\begin{matrix} + 80 \\ - 20\% \end{matrix}$ 0.1 uF/25V
C 14	2732106-3	Mylar Cap. $\begin{matrix} + \\ - 10\% \end{matrix}$ 0.1 uF/50V
C 15	2732106-3	" " 0.1 uF/50V
C 16	2722106-1	Ceramic Cap. $\begin{matrix} + 80 \\ - 20\% \end{matrix}$ 0.1 uF/25V
C 17	2703224	Electrolytic Cap. " 2200 uF/16V
C 18	2732106-3	Mylar Cap. $\begin{matrix} + \\ - 10\% \end{matrix}$ 0.1 uF/50V
C 19	2722405-1	Ceramic Cap. $\begin{matrix} + 80 \\ - 20\% \end{matrix}$ .04 uF/25V
C 20	2722104-1	" " 0.001 uF/25V
C 21	2703102	Electrolytic Cap. " 200 uF/10V

RESISTOR

SYMBOL NO.	PART NO.	DESCRIPTION
R 1	3200224	Resistor 1/4 W $\begin{matrix} + \\ - 5\% \end{matrix}$ 2.2 K Ohm
R 2	3200224	" " 2.2 K "
R 3	3200224	" " 2.2 K "
R 4	3200224	" " 2.2 K "
R 5	3200224	" " 2.2 K "
R 6	3200104	" " 1 K "
R 7	3200204	" " 2 K "
R 8	3200186	" " 180 K "
R 9	3200104	" " 1 K "
R 10	3200105	" " 10 K "
R 11	3200105	" " 10 K "
R 12	3200105	" " 10 K "
R 13	3200105	" " 10 K "
R 14	3200105	" " 10 K "
R 15	3200105	" " 10 K "



REPLACEMENT PARTS LIST ELECTRICAL PARTS

RESISTOR

SYMBOL NO.	PART NO.	DESCRIPTION
R 16	3200476	Resistor 1/4 W $\pm$ 5% 470 K Ohm
R 17	3200476	" " 470 K "
R 18	3200105	" " 10 K "
R 19	3200105	" " 10 K "
R 20	3200186	" " 180 K "
R 21	3200104	" " 1 K "
R 22	3200333	" " 330 K "
R 23	3200105	" " 10 K "
R 24	3200105	" " 10 K "
R 25	3200105	" " 10 K "
R 26	3200105	" " 10 K "
R 27	3200226	" " 220 K "
R 28	3200334	" " 3.3 K "
R 29	3200334	" " 3.3 K "
R 30	3200183	" " 180 "
R 31	3200124	" " 1.2 K "
R 32	3200474	" " 4.7 K "
R 33	3200154	" " 1.5 K "
R 34	3200274	" " 2.7 K "
R 35	3200564	" " 5.6 K "
R 36	3200124	" " 1.2 K "
R 37	3200154	" " 1.5 K "
R 38	3200334	" " 3.3 K "
R 39	3200564	" " 5.6 K "
R 40	3200223	" " 220 "
R 41	3200333	" " 330 "
R 42	3200473	" " 470 "
R 43	3200393	" " 390 "
R 44	3200104	" " 1 K "
R 45	3200224	" " 2.2 K "
R 46	3200223	" " 220 "
R 47	3200104	" " 1 K "
R 48	3200224	" " 2.2 K "
R 49	3200474	" " 4.7 K "
R 50	3200154	" " 1.5 K "
R 51	3200562	" " 56 "
R 52	3200473	" " 470 "
R 53	3200274	" " 2.7 K "

REPLACEMENT PARTS LIST MECHANICAL PARTS

SYMBOL NO.	PART NO.	DESCRIPTION
P 1	4500241-01	Cabinet Top
P 2	4600222-01	Cabinet Bottom
P 3	4910550-01	Connector Holder
P 4	4910651-01	Plug Left
	4910652-01	
P 5	4910651-01	Plug Right
	4910652-01	
P 6	4420279-12	Long Push Button
P 7	4420358-01	Round Push Button (4 pcs.)
M 1	5000292-01	Top Door 'A'
M 2	5000292-02	Top Door 'B'
M 3	1380236-01	Top Door Shaft (2 pcs.)
M 4	5000293-01	Top Door Shaft Mtg. Bracket (4 pcs.)
M 5	1390257-01	Top Door Spring (2 pcs.)
M 6	5010019-01	Shield Can - Frame
M 7	5010020-01	Shield Can - Cover
M 8	5010021-01	Shield Can - Bottom Cover
M 9	1410109-01	Insulating Paper (For Shield Can)
M 10	2280073-01	Sponge (For Shield Can Bottom Cover) (2pcs.)
M 11	1360066-01	Rubber Grommet (For Shield Can Cover)
M 12	1360019-01	Rubber Stand (4 pcs.)
M 13	1320021-01	Metal Washer (2pcs.)
M 14	1410114-01	PVC Jack Cover Plate (2 pcs.)
M 15	1322070-01	Fibre Washer
M 16	1400152-01	Felt For Masking
S 1	1301034-16	Ph.Rd.Hd. Screw: - M3 x 16 'BT' Type (6pcs.)
S 2	1301014-14	Ph.Rd.Hd. Screw: - M3 x 14 'BT' Type (2pcs.)
S 3	1300034-06	Ph.Rd.Hd. Screw: - M3x0.5Px6 'M/C' (2pcs.)
S 4	1300624-08	Ph.Truss.Hd. Screw: - M3x0.5Px8 'M/C' (2pcs.)
S 5	1301011-06	Ph.Rd.Hd. Screw: - M2.0 x 6 'BT' Type (2pcs.)
S 6	1301011-06	Ph.Rd.Hd. Screw: - M2.0 x 6 'BT' Type (4pcs.)
S 7	1301013-05	Ph.Rd.Hd. Screw: - M2.6 x 5 'BT' Type (4pcs.)
N 1	_____	Nut For Earphone Jack (2 pcs.)
N 2	1310004-02	Nut M3 x 0.5 P (2 pcs.)

CONNECTORS AND MISC.

SYMBOL NO.	PART NO.	DESCRIPTION
E 1	2550093	Edge Connector 15 Pcs. x 2 (2.54 Pitch) Gold Plating with Mounting Ear. (S 51542 D 6F)
E 2	2550107	Connection Pin Wafer 12 Pin Right Angle Type
E 3	2550106	Connection Housing W/12 Pin Terminal.
E 4	3300028-01	Coil Type Shield Cable W/11 pcs. Internal Wires, 130mm Long on Mold Bushing Side.
E 5	3300028-02	Coil Type Shield Cable with 11pcs. Internal Wires, 200mm Long on Bushing Side.
E 6	3300026	75 Ohm Antenna Cable, 12Ft., One End W/RCA Plug. Other End W/Molded RCA Plug.
E 7	2510004	Earphone Jack 3.5mm $\emptyset$ with Nut & Washer
E 8	2510010	D.C. Power Jack (EC 749)
E 9	2300289	Main P.C.B. 265 x 145 x 1.6 mm
E 10	2300286	Switch P.C.B. 65 x 30 x 1.6 mm
E 11	3500187	Push Button Switch 2P 2T with Mounting Bracket (PV 2P 2T)
E 12	3500186	Channel Select Switch Slide Switch 2P 2T (SK 10 RG 18)
E 13	3430004	Led Lamp 5mm $\emptyset$ Red
E 14	2550097	Flat Cable Connector Top Entry Type 11 pin 2.54 Pitch (HBLB 11 S-I J)
E 15	2830019	U.L. and CSA Approval AC Adaptor Model: DV - 1250 120V:12VDC 500mA with output cord. Plug - 12.5mm long O/D-5.5 mm and I/D-2.1mm
E 16	3450008	Switch Matching Box Ass'y with 300 Ohm 75 Ohm Terminals and W/RCA Jack
E 17	5130001	Cable Tie
E 18	2300287	Control Box P.C.Board 36.5 x 8.5 x 1.6mm
E 19	2550096	Flexible Mylar Circuit Board W/Silver Conduct Screening

CONTROL UNIT REPLACEMENT PART LIST

SYMBOL NO.	PART NO.	DESCRIPTION
P 4 a	4910651-01	Plug For Cabinet Bottom
P 5 a	4910652-01	Plug For Cabinet Bottom
P 4 b	4910651-01	Plug For Cabinet Top
P 5 b	4910652-01	Plug For Cabinet Top
P 8	4500242-01	Control Box - Cabinet Top (2 pcs.)
P 9	4600223-01	Control Box - Cabinet Top (2 pcs.)
P 10	4420324-01	Round Push Button For Control Box (2 pcs.)
P 11	4910551-01	Joystick (2 pcs.)
P 12	4420325-01	Side Push Button (2 pcs.)
M 17	1710053-02	Keys Overlay Mylar Sheet with Bubble Keys Formed. (2 pcs.)
M 19	1360048-01	Rubber Grommet For Control Box (2 pcs.)
M 20	1410133-01	Speaker Ring Soft PVC Sheet (2 pcs.)
M 21	1420013-01	Card Paper Spacer For Control Box (2 pcs.)
M 22	1390245-01	Compression Spring For Control Box (2 pcs.)
E 3	2550106	Connection Housing W/12 Pin Terminal
E 4	3300028-01	Coil Type Shield Cable W/11 pcs. Internal Wires, 130mm Long on Mold Bushing Side.
E 5	3300028-02	Coil Type Shield Cable with 11 pcs. Internal Wires, 200mm Long on Bushing Side.
E 14	2550097	Flat Cable Connector Top Entry Type 11 Pin x 2.54 Pitch. (2 pcs.)
E 19	2550096	Flexible Mylar Circuit Board with Silver Conduct Screening. (2 pcs.)
S 8	1301113-06	Ph. Flat. Hd. Screw:- M2.6 x 6 'BT' Type (4 pcs.)
S 9	1301013-08	Ph. Rd. Hd. Screw:- M2.6 x 8 'BT' Type (8 pcs.)

I.C. AND TRANSISTOR AND DIODE

SYMBOL NO.	PART NO.	DESCRIPTION
Q 1	2800030-3	Transistor 2SB 561 C
D 1	2820002	Diode IN 4001
U 1	3400059	Intergrated Circuit (TTL) 74 LS 00 N
U 2	3400140	" " " 74 LS 04 N
U 3	3400064	" " " 74 LS 86 N
U 4	3400157	I.C. (CMOS) 14066 B
U 5	3400064	Intergrated Circuit (TTL) 74 LS 86 N
U 6	3400008	I.C. (CMOS) 14069 UB
U 7	3400137	Intergrated Circuit (TTL) 2622 N
U 8	3400142	" " " 74 LS 258 N
U 9	3400136	" " " 2637 N
U 10	3400135	" " " 2650 A
U 11	3400139	(250 nS) RAM Circuit (TTL) 2114
U 12	3400139	(250 nS) RAM Circuit (TTL) 2114
U 13	3400050	Regulator Transistor 7805
U 14	3400114	Intergrated Circuit (TTL) 74 LS 145 N

COILS AND MISC.

SYMBOL NO.	PART NO.	DESCRIPTION
L 1	2410077	Ferrite Choke Coil (Resistor Type) 10 uH
L 2	2410144	Ferrite Bead 4 T
L 3	2410144	Ferrite Bead 4 T
L 4	2410077	Ferrite Choke Coil (Resistor Type) 10 uH
L 5	2410077	Ferrite Choke Coil (Resistor Type) 10 uH
X'TAL 1	3410025	3.579545 MHz
	3450012	Modulator Unit (N.T.S.C.)
		LVM - 2 A - 34
		UM 1285 - 8