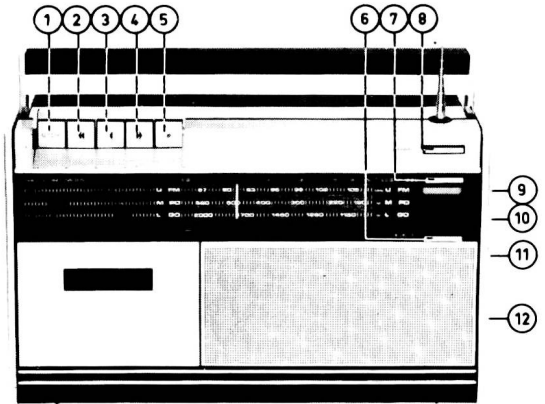


# Service manual

## RADIO RA500/00



TRA 4312

Dimensions 337 x 205 x 96 mm

① Stop push-button Stoptoets Bouton-poussoir d'arrêt Stoptaste Tasto di arresto	② Wind Opspoelen Bobinage Aufspulen Avvolgimento rapido	③ Playback Weergave Reproduction Wiedergabe Riproduzione
④ Rewind Terugspoelen Rebobinage Rücklauf Riavvolgimento	③ Recording Opname Enregistrement Aufnahme Registrazione	⑥ Cassette ejector Cassette-uitwerper Ejecteur de cassette Cassettenauswerfer Espulsore della cassetta
⑦ Frequency switch erase oscillator Frequentieschakelaar wisoscillator Commutateur de fréquence oscillateur d'effacement Frequenzschalter Lösoszillator Commutatore della frequenza dell'oscillatore di cancellazione	⑧ Aerial ejector Antenne-uitwerper Ejecteur d'antenne Antennenauswerfer Espulsore d'antenna	⑨ Tuning Afstemming Syntonisation Abstimmung Sintonia
⑩ Wave range switch Golfgebiedschakelaar Sélecteur des gammes d'ondes Wellenbereichschalter Cambio gamma	⑪ Tone control Toonregeling Tonalité Toneinsteller Controllo di tono	⑫ On/off + volume control Aan/uit + volumeregelaar Marche/arrêt + comm.de volume Ein/Aus + Lautstärkeeinsteller In marcia/fermo + controllo di volume

Supply voltages	110-220 V ~ 9 V ~ (6x1.5 V)	Voedings- spanningen	Tensions d'alim- mentation	Speisespannungen	110-220 V ~ 9 V ~ (6x1.5 V)	Tensioni d'alimen- tazione
Consumption (without signal)		Verbruik (zonder signaal)	Consommation (sans signal)	Verbrauch (ohne Signal)		Consumo (senza segnale)
Radio	60 mA	Radio	Radio	Radio	60 mA	Radio
Recording	160 mA	Opname	Enregistrement	Aufnahme	160 mA	Registrazione
Playback	135 mA	Weergave	Reproduction	Wiedergabe	135 mA	Riproduzione
Fast winding	190 mA	Snelspoelen	Bobinage rapide	Schnellauf	190 mA	Avvolgimento rapido
Output power	1000 mW	Uitgangsvermogen	Puissance de sortie	Ausgangsleistung	1000 mW	Potenza uscita
Loudspeaker	8 Ω	Luidspreker	Haut-parleur	Lautsprecher	8 Ω	Altoparlante
IF AM	452 kHz	MF AM	FI AM	ZF AM	452 kHz	IF AM
IF FM	10.7 MHz	MF FM	FI FM	ZF UKW	10.7 MHz	IF FM
Tape speed	4.76 cm/sec.	Bandsnelheid	Vitesse de défilement	Band- geschwindigkeit	4.76 cm/sec	Velocità del nastro
Number of tracks	2	Aantal sporen	Nombre de pistes	Spurzahl	2	Numero piste
Frequency erase osc.	31.4-50 kHz	Wisosc. frequentie	Fréquence d'osc. d'effacement	Frequenz Lös- oszillator	31.4-50 kHz	Frequenza osc. di cancellazione
Δf erase osc.MW	0.7-1.5 kHz	Δf wisosc. MG	Δf d'osc. d'effa- cement PO	Δf-Lösosz. MW	0.7-1.5 kHz	Δf dell'osc. di can- cellazione OM
Δf erase osc. LW	≥ 3 kHz	Δf wisosc. LG	Δf d'osc. d'effa- cement GO	Δf-Lösosz. LW	≥ 3 kHz	Δf dell'osc. di can- cellazione OL
Microphone	500 Ω	Microfoon	Microphone	Mikrofon	500 Ω	Microfono

Wave ranges - Golfgebieden - Gammes d'ondes - Wellenbereiche - Gamme d'onde









LW - LG - GO - LW - OL	: 150 - 260 kHz (2000 - 1154 m)
MW - MG - PO - MW - OM	: 525 - 1605 kHz ( 571.4 - 187 m)
FM - FM - FM - UKW - FM	: 87.5 - 104 MHz

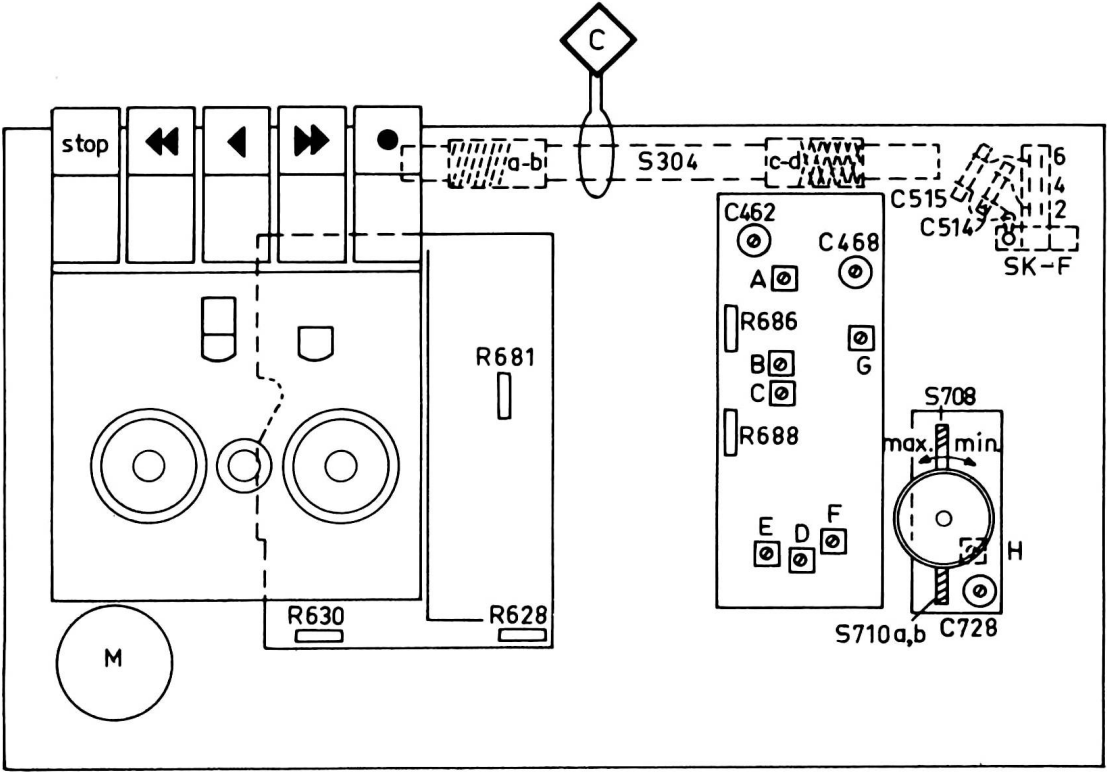
Index: CS30202, CS29861, CS29347, CS29862, CS29863, CS29350-CS29353, CS30203

Subject to modification

4822 725 10733

Printed in the Netherlands

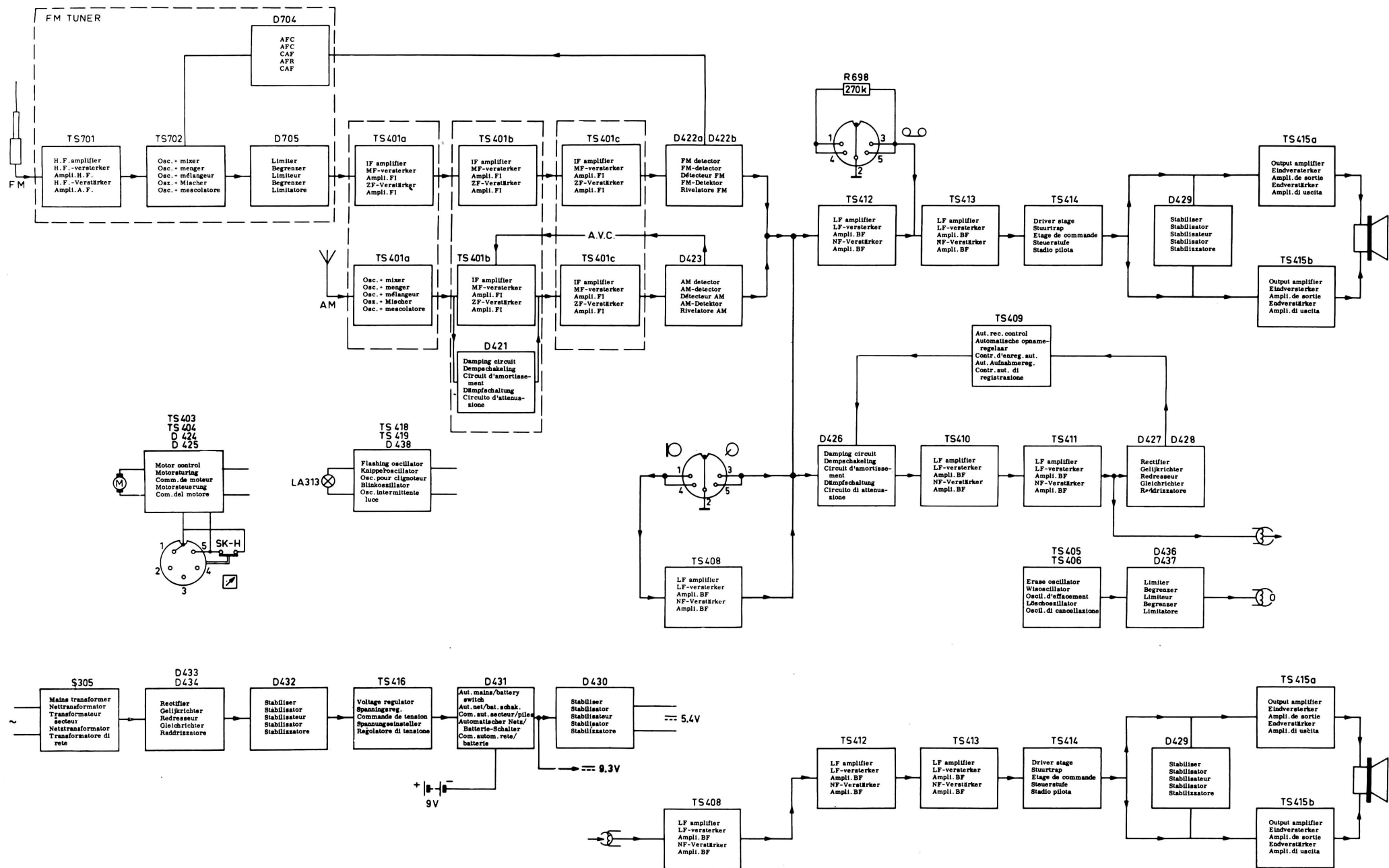
SK..... wave range	 Signal to 	Tuning	 Detune	 Adjust	 Indication
MW (525-1605 kHz)	<div><div>1</div> via 33 kpF</div>	<div><div>A</div><div>B</div></div>	Min. cap.	<div><div>F</div><div>C</div></div>	<div><div>F</div><div>C</div></div> <div>2</div>
MW (525-1605 kHz)	<div>1635 kHz</div> <div>550 kHz</div> <div>1500 kHz</div>	<div><div>C</div></div>	<div>Min. cap.</div> <div> Tune in</div>	<div>C468</div> <div>S304a,b</div> <div>C462</div>	<div><div>1</div></div> <div>Max.</div>
Repeat - Herhalen - Répéter - Wiederholen - Ripetere - Repetir - Repetera - Gentag - Gjenta - Toista					
LW (150-260 kHz)	<div>147 kHz</div> <div>150 kHz</div>	<div><div>C</div></div>	<div>Max. cap.</div> <div> Tune in</div>	<div><div>G</div></div> <div>S304c,d</div>	<div><div>1</div></div> <div>Max.</div>
Repeat - Herhalen - Répéter - Wiederholen - Ripetere - Repetir - Repetera - Gentag - Gjenta - Toista					
FM (87,5-104 MHz)	<div>10.7 MHz</div> <div><div>3</div> via 5 kpF</div>	<div><div>D</div><div>E</div><div>F</div></div>	Min. Ind.	<div><div>A</div><div>B</div><div>D</div><div>E</div><div>H</div></div> <div><div>B</div><div>A</div><div>H</div><div>E</div></div>	<div><div>4</div></div> <div><div>5</div></div>
FM (87,5-104 MHz)	<div>108 MHz</div> <div>86.5 MHz</div>	<div><div>F</div></div>	<div>Max. Ind.</div> <div>Min. Ind.</div>	<div>S710a,b</div> <div>S710a,b</div>	<div><div>1</div></div> <div>Max.</div>
Repeat - Herhalen - Répéter - Wiederholen - Ripetere - Repetir - Repetera - Gentag - Gjenta - Toista					
FM (87,5-104 MHz)	96 MHz	<div><div>F</div></div>	 Tune in	S708	<div><div>1</div></div> Max.



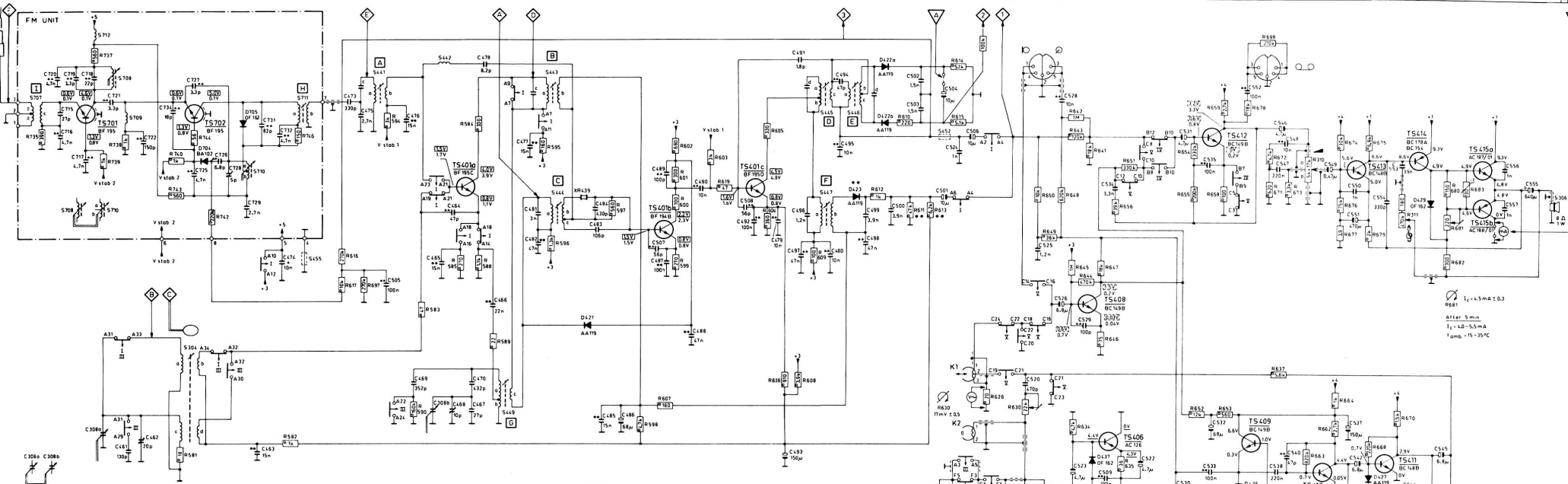
TRA 4075 A



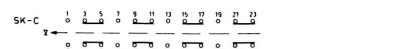
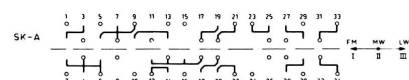




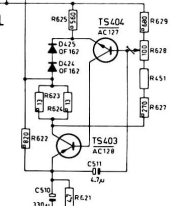
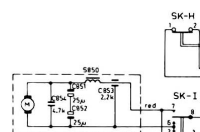
S	I	712	708	706	304	710	H. 455	A	442	G. 850	B.C	452	453	454	305	306	I
1	720	716	714	712	722	724	725	726	728	729	731	732	733	734	735	736	737
2	308	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476
3	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754
4	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771
5	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788
6	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805
7	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822
8	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839
9	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856
10	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873
11	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890
12	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907
13	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924
14	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941
15	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958
16	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975
17	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992
18	993	994	995	996	997	998	999	1000									



THE CIRCUIT DIAGRAM HAS BEEN DRAWN IN POSITION "HW"

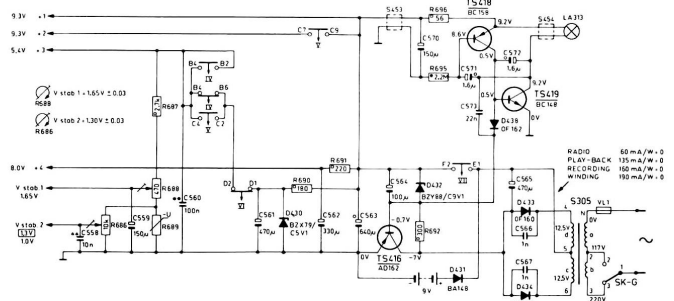
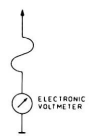


SK-A → I FM  
SK-A → II MW  
SK-A → III LW  
SK-B → IV PLAY-BACK  
SK-B → V RECORDING  
SK-C → VI PU/MIC  
SK-C → VII ON/OFF  
SK-D → VIII



In case of D123 becomes a 0F 162 then R611 becomes 20kΩ and R612 becomes 62kΩ

... V AR  
... F R  
... PLAY-BACK  
... RECORDING



- Carbon resistor E24 series 0.125 W 5%
- Carbon resistor E12 series 0.25 W < 1 MΩ 5% > 1 MΩ 10%
- Tubular ceramic capacitor 500 V
- Plate ceramic capacitor
- Flat-foil polyester capacitor
- Miniature electrolytic capacitor