



Sailor

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**INSTRUKTIONSBOG FOR
SAILOR H1203**

**INSTRUCTION BOOK FOR
SAILOR H1203**



A/S S. P. RADIO · AALBORG · DENMARK

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POWER SUPPLY CHANGE OVER UNIT H1203

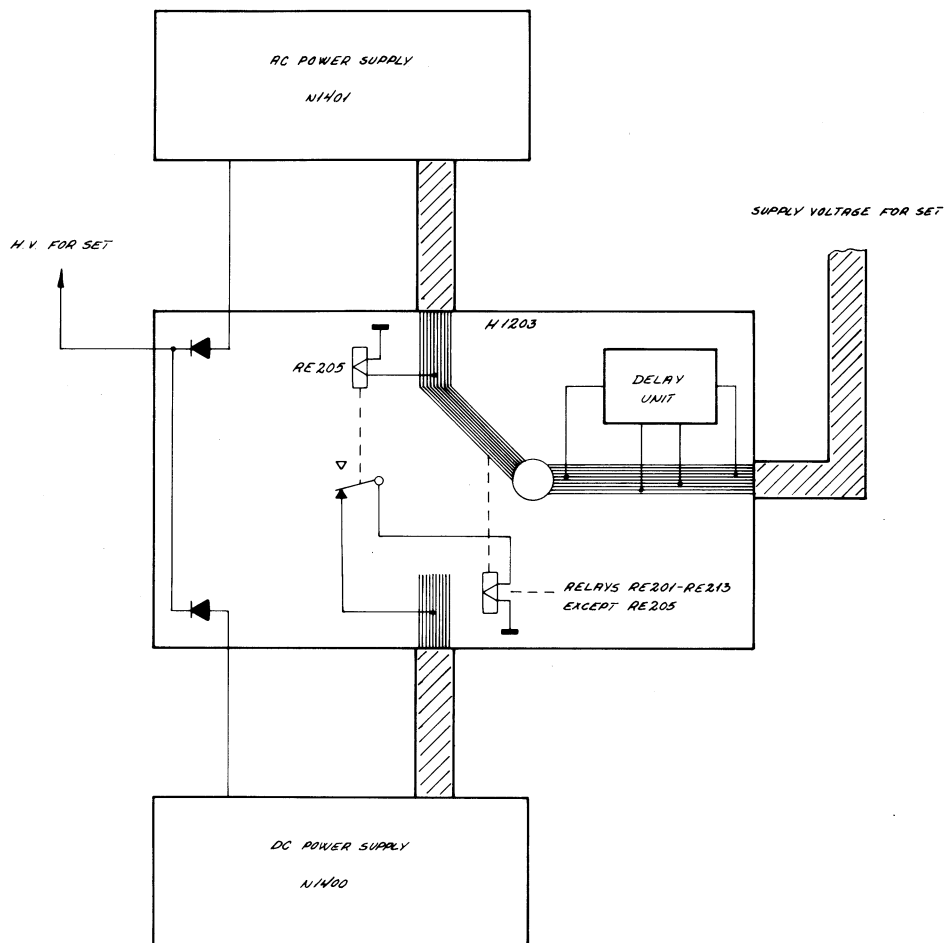
COMPONENT LAY OUT

SCHEMATIC DIAGRAM

PARTS LISTS

POWER SUPPLY CHANGE OVER UNIT H1203

The Power Supply Change Over Unit H1203 is placed between the power supplies N1400 and N1401. H1203 is automatic that will say it supplies the Short Wave Set from the supply which is ON.



The following description refers to the block diagram above and the schematic diagram at the end of this book.

The high voltage is automatically taken from the supply in action by means of a diode switch. The other voltages are shifted by means of the change-over relays RE201 - RE213 except RE205. If only the DC power supply N1400 is switched ON the 22V DC at P201 -p11 will cause those relays to draw and all voltages will be let through to J202 and so to the Short Wave Set. If the AC power supply is switched ON the 22V DC at P203-P11 will cause RE205 to draw and this will prevent the change-over relays from drawing.

This means that when the AC power supply is in action the set will be supplied from this regardless of how the DC power supply N1400 is running.

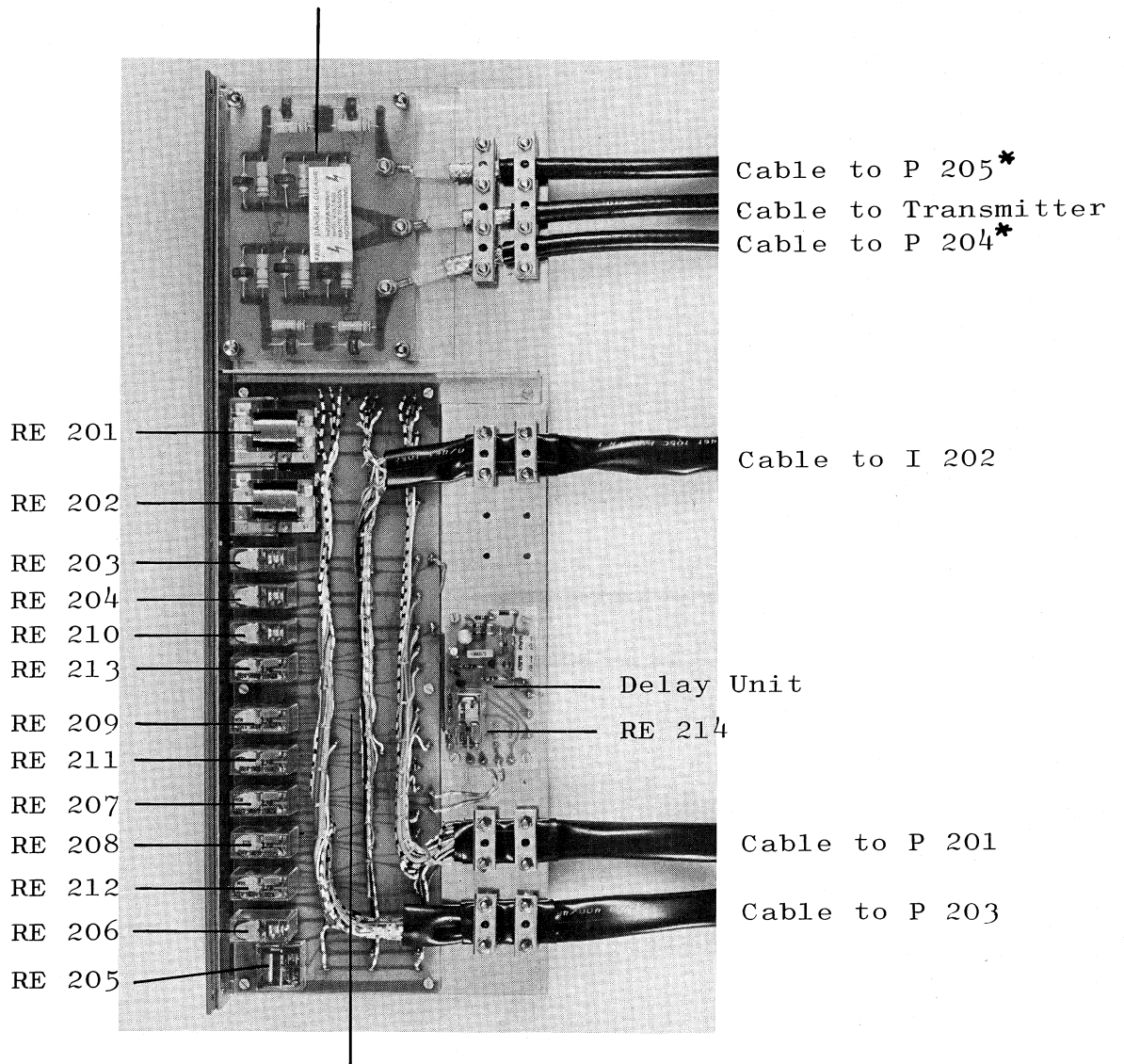
A delay unit is built in the two power supplies which prevent them from delivering high voltage to the PA-circuit until after filament voltage has been supplied to the tubes in the PA-circuit for at least 30 secs. This delay unit is in the same way placed at the output of H1203 so that the 26,5V DC for filament between J202-p6 and J202-p27 must be present for more than

30 secs. until RE214 draws and so gives connection through from J202-p14 to the power supply in use and so interrupts the blocking of the high voltage.

This is made in order to prevent damage caused by going from the AC power supply in the RECEIVER ONLY mode to the DC power supply in the ON mode when both has been running for more than 30 secs. This can occur when the AC mains disappears during this operation.

For simplicity and plain operation we advise that one of the power supplies should be in the OFF position. A possibility is to let both be in the ON position and so if the AC mains disappears the DC power supply will take over without delay. If the AC mains returns the AC power supply will take over again, but now with 30 secs. delay.

High Voltage Switch Circuit (5-0-21783)



Relay Switch Circuit (5-0-21784)

* Cables to P 204 and P 205 can be interchanged

b

POWER SUPPLY CHANGE OVER UNIT H1203

Symbol	Description			Manufact.	
C201	Capacitor electrolytic	470uF	10V	Siemens	B41283-A3477-T
C202	Capacitor tantal	4,7uF	35V	ERO	ETP2E 4,7/35
C203	Capacitor polyester	0,1uF	100V	ERO	MKT 1822-410/0
C204	Capacitor tantal	68uF \pm 10%	16V	ERO	ETQ 68/16 \pm 10%
C205	Capacitor electrolytic	100uF	40V	ROE	EB 00 FC 310 G
C206	Capacitor polyester	0,1uF	100V	ERO	MKT 1822-410/0
C207	Capacitor polyester	0,1uF	100V	ERO	MKT 1822-410/0
R201	Resistor	47Kohm	0,33W	Philips	2322 211 13473
R202	Resistor	33 ohm	0,33W	Philips	2322 211 13339
R203	Resistor	150 ohm	0,33W	Philips	2322 211 13151
R204	Resistor	10Kohm	0,33W	Philips	2322 211 13103
R205	Resistor	10Kohm	0,33W	Philips	2322 211 13103
R206	Resistor	33 ohm	0,33W	Philips	2322 211 13339
R207	Resistor	680Kohm	0,33W	Philips	2322 211 13684
R208	Resistor	1Kohm	0,33W	Philips	2322 211 13102
R209	Resistor	4,7Kohm	0,33W	Philips	2322 211 13472
R210	Resistor	2,7Kohm	0,33W	Philips	2322 211 13272
R211	to				
R220	Resistor	270Kohm	1,15W	Philips	2322 214 13274
R221	Resistor	100 ohm	0,5W	Philips	2322 212 13101
R222	Resistor	270 ohm	0,5W	Philips	2322 212 13271
R223	Resistor	270 ohm	0,5W	Philips	2322 212 13271
D201	Diode zener		7,5V	Motorola	1N4737A
D202	Diode			Texas	1N4148
D203	Diode SCR			Philips	BRY39
D204	Diode SCR			Motorola	2N5064
D205	to				
D214	Diode			Motorola	MR 756
D215	Diode			Motorola	1N4002
D216	Diode			Motorola	1N5817
D217	Diode			Motorola	1N5817
RE201	Relay			AEG	RHL 401 24V-2
RE202	Relay			AEG	RHL 401 24V-2
RE203	Relay			PASI	KH/U-3-C
RE204	Relay			PASI	KH/U-3-C

POWER SUPPLY CHANGE OVER UNIT H1203

<i>Symbol</i>	<i>Description</i>		<i>Manufact.</i>	
RE205	Relay		PASI	MS/K BV 863
RE206	Relay		PASI	KH/U-3-C
RE207	Relay		Siemens	V23037-A0005-A101
RE208	Relay		Siemens	V23037-A0005-A101
RE209	Relay		Siemens	V23037-A0005-A101
RE210	Relay		PASI	KH/U-3-C
RE211	Relay		Siemens	V23037-A0005-A101
RE212	Relay		Siemens	V23037-A0005-A101
RE213	Relay		Siemens	V23037-A0005-A101
RE214	Relay		Siemens	V23037-A0005-A101
P201	Plug - male	03-06-2364	Molex	1772-2
J202	Jack - female	03-06-1363	Molex	1772-2
P203	Plug - male	03-06-2364	Molex	1772-2
P204	Plug - male		Hirschmann	
P205	Plug - male		Hirschmann	