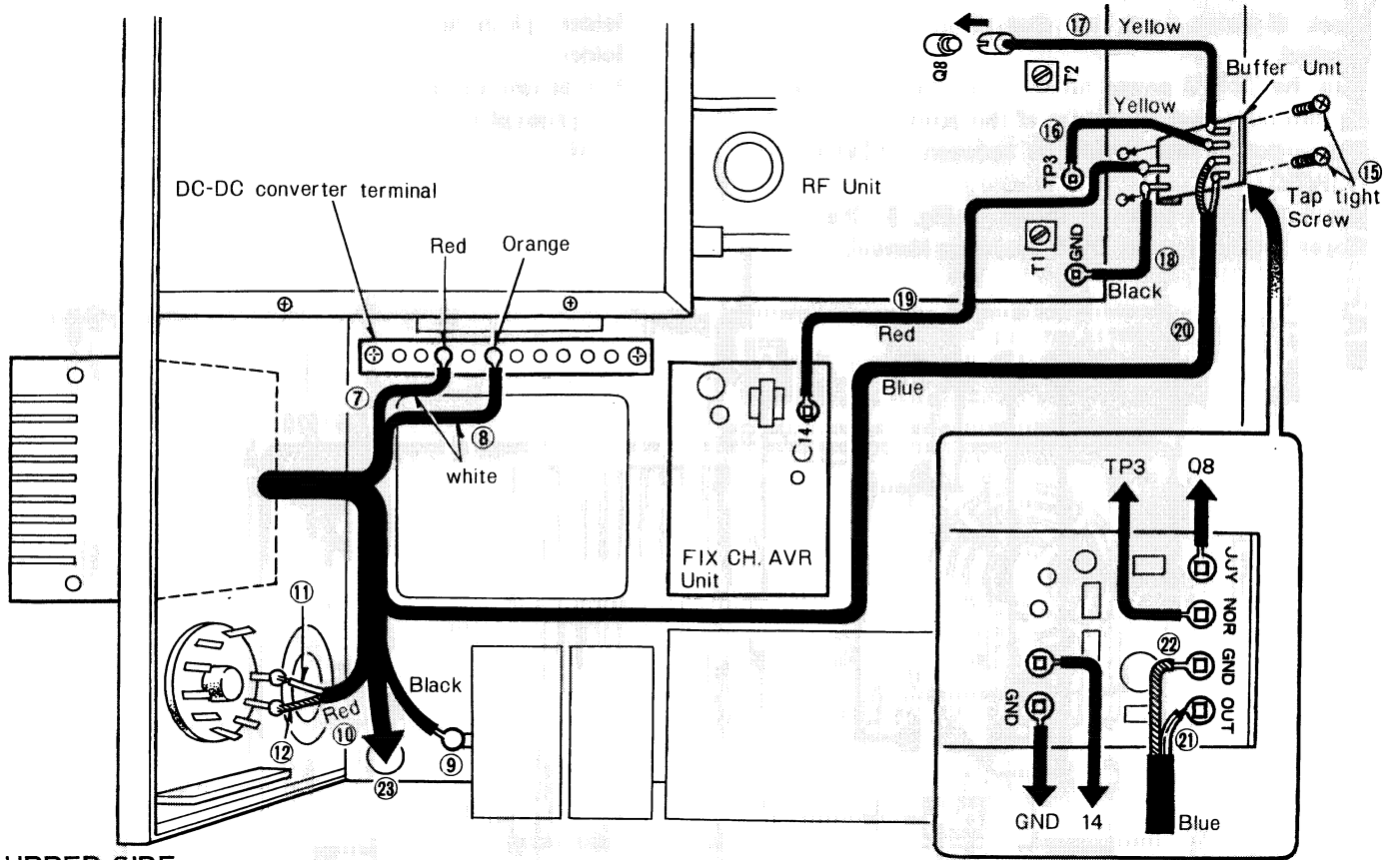




⑥ ⑬ ⑭



UPPER SIDE

Fig. 2

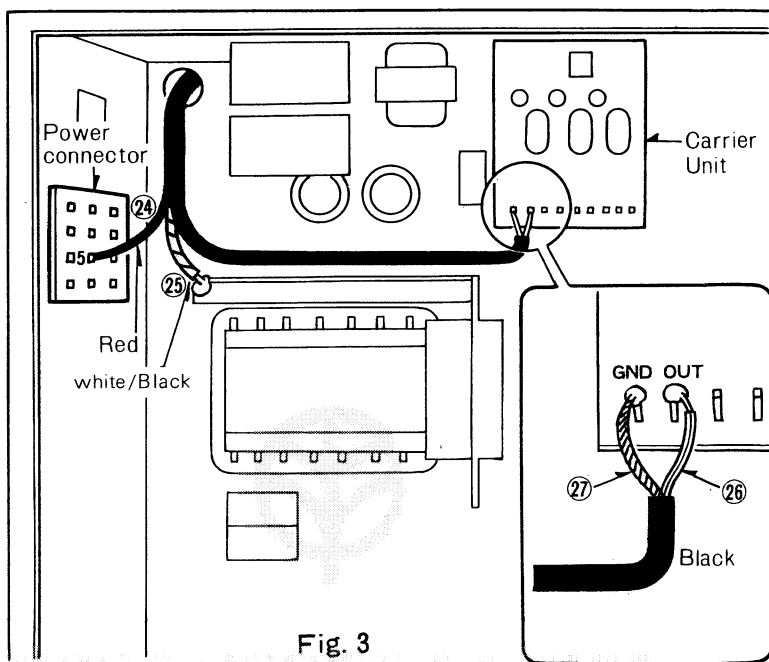


Fig. 3

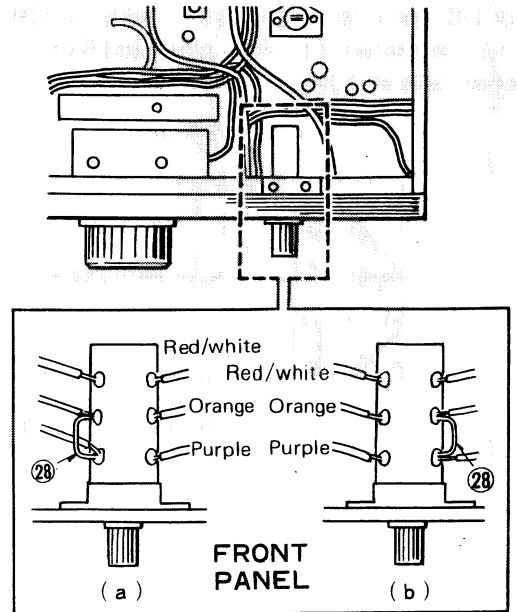
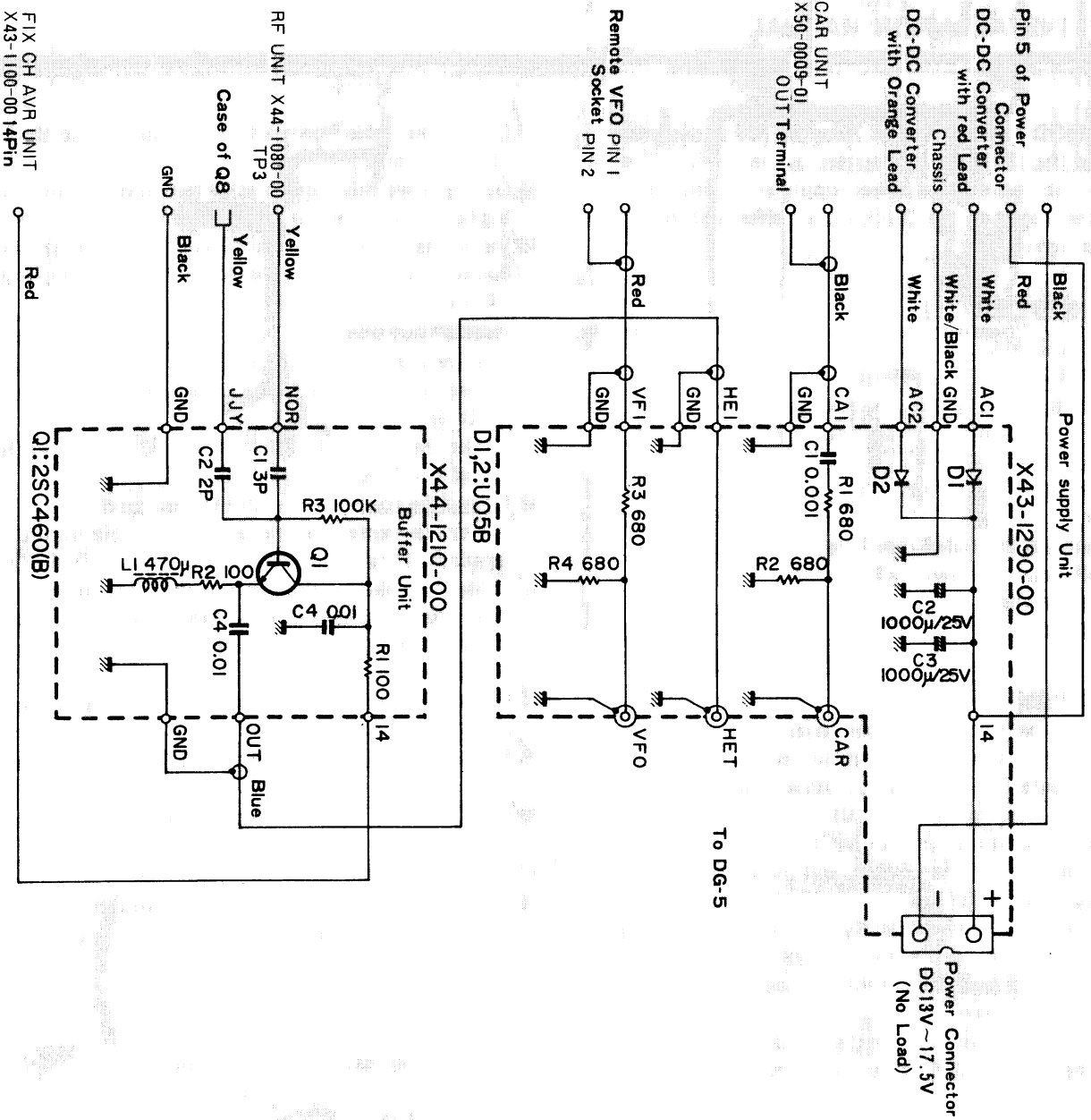


Fig 4 WWV Switch

SCHEMATIC DIAGRAM

To TS-520

Circuits and specifications are subject to change for improvement.



FIX CH AVR UNIT
X43-1100-00 14Pin

DK-520

HOW TO CHECK DK-520 OPERATION

1. Check all wiring to be sure that all leads are correctly installed.
2. Turn the TS-520 power on and measure the voltage at the two pin power connector of the power supply unit. The output voltage should be between 13.0VDC and 17.5VDC.
3. Install the DG-5 cables as shown in Fig. 5. Check for proper frequency as per DG-5 Operating Manual.

TOOLS REQUIRED

1. Soldering iron (not to exceed 45 watts).
2. Solder
3. Phillips screwdriver
4. Long nose pliers
5. VOM

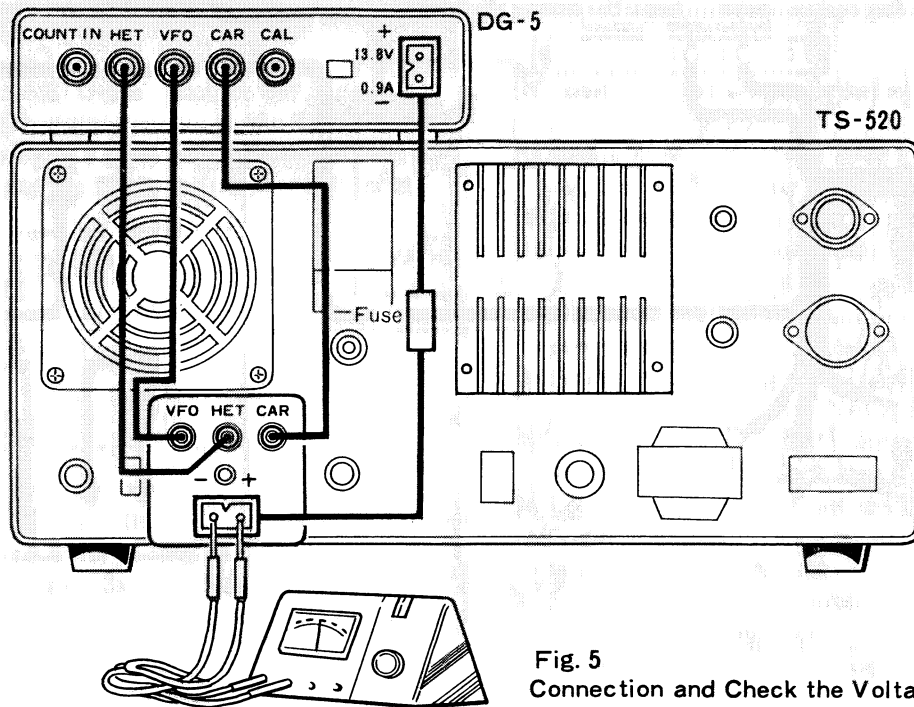
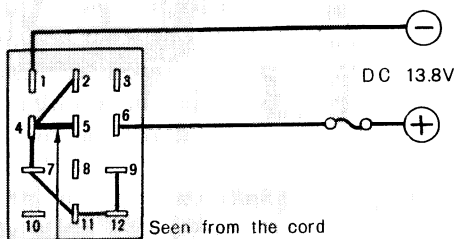


Fig. 5
Connection and Check the Voltage

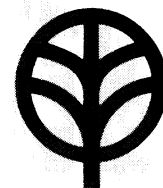
DC OPERATION

For DC operation of the TS-520 (with DK-520) and DG-5, it will be necessary to short pins 4 and 5 of the TS-520 DC power cable as shown in fig. 6.



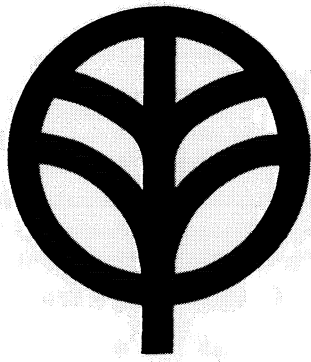
Short the No.4pin and No.5pin

Fig. 6



A product of
TRIO-KENWOOD CORP.

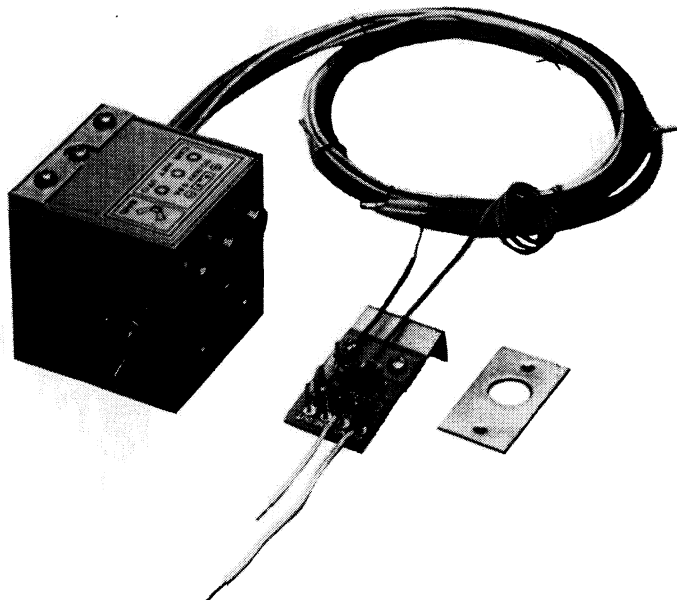
6-17, 3-chome, Aobadai, Meguro-ku, Tokyo 153, Japan



KENWOOD

SERVICE MANUAL

DK-520



DIGITAL ADAPTOR KIT

FEATURES

FEATURES

The KENWOOD DK-520 Digital Adaptor Kit is designed for adapting the DG-5 digital counter to the TS-520. The DK-520 consists mainly of a power supply with connectors to supply the signals to the DG-5, and a buffer unit for the HET output signals.

CHECKING METHOD

Confirm that the whole wiring is free from misconnections. Turn on the power switch of the TS-520 D, X and check whether the power source output voltage is between DC 13V and 17.5V at no load. Connect the DG-5 and confirm that output is counted normally at the counter. Since then, make the DG-5 display each output.

FREQUENCIES AT RESPECTIVE TERMINALS

Carrier Frequencies

Mode	Reception	Transmission
LSB	3.3935 MHz	3.3935 MHz
USB	3.3965 MHz	3.3965 MHz
CW	3.3943 MHz	3.3950 MHz

Note: Since each frequency has been adjusted to the characteristics of the crystal filter, the frequency reading is acceptable if it does not widely deviate from the above standard.

VFO Frequencies

Dial graduation	0 300 600
Frequency	5.5 MHz ~ 5.2 MHz ~ 4.9 MHz

Heterodyne Frequencies

Band	Frequency
3.5 MHz	12.395 MHz
7.0 MHz	15.895 MHz
14.0 MHz	22.895 MHz
21.0 MHz	29.895 MHz
28.0 MHz	36.895 MHz
28.5 MHz	37.395 MHz
29.1 MHz	37.995 MHz

PARTS LIST

TOTAL

☆ : New parts

K: U.S.A.

W: Europe

Ref. No.	Parts No.	Description	Re- marks
-	B50-2555-00	Operating manual	☆
-	E08-0203-25	2P connector socket	
-	E09-0203-25	2P connector plug X 2	
-	E29-0403-04	Terminal cap	
-	F05-2023-05	Fuse (2A) X 2	
-	H01-2541-03	Carton case (inside)	☆
-	H12-0414-04	Packing material	☆
-	H12-0415-04	Packing material	☆
-	H25-0029-04	Polyethylene bag	
-	H25-0103-04	Protection cover	
-	J13-0029-05	Fuse holder	
-	J32-0218-04	Hex. boss	
-	J32-0713-04	Boss for mounting	☆
-	J61-0019-05	Vinyl tie X 5	
-	N09-0248-05	Bolt (butterfly type)	
-	N10-2030-46	Hex. nut X 3	
-	N15-1040-46	Washer X 3	
-	N16-0040-46	Spring washer X 2	
-	N30-3004-46	Round head screw X 3 (for PC board)	
-	N30-3008-46	Round head screw X 2 (for connector)	
-	N30-4006-46	Round head screw (4 mm)	
-	N87-3006-46	Tap-tight screw X 2	
-	N89-3006-46	Bind tap-tight screw X 3	
-	X43-1290-00	Power supply unit	☆
-	X44-1210-00	Buffer unit	☆

POWER SUPPLY UNIT (X43-1290-00)

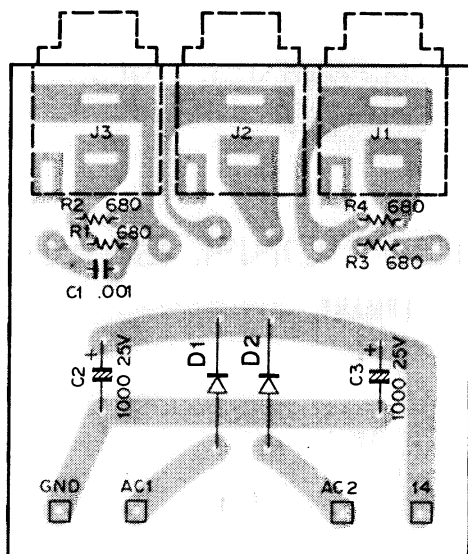
Ref. No.	Parts No.	Description	Re- marks
C1	C45B1H102K	Ceramic 1000pF ±10%	
C2, 3	CE04W1E102	Electrolytic 1000μF 25WV	
R1~4	RD14CB2E681J	Carbon 680Ω ±5% 1/4W	
D1, 2	V11-0270-05	Diode U05B	
J1, 3	E13-0163-05	Phono jack	
J2	E13-0162-05	Phono jack	
-	E23-0046-04	Terminal (square type) X 4	

BUFFER UNIT (X44-1210-00)

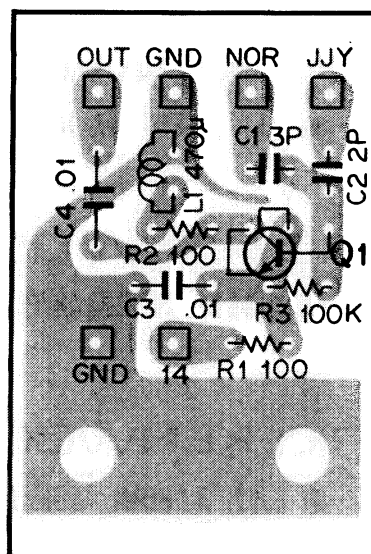
Ref. No.	Parts No.	Description	Re- marks
C1	CC45SL1H030C	Ceramic 3pF ±0.25pF	
C2	CC45SL1H020C	Ceramic 2pF ±0.25pF	
C3, 4	CK45F1H103Z	Ceramic 0.01μF +80%, -20%	
R1, 2	RD14CY2B101J	Carbon 100Ω ±5% 1/8W	
R3	RD14CY2B104J	Carbon 100kΩ ±5% 1/8W	
Q1	V03-0079-05	Transistor 2SC460(B)	
L1	L40-4711-03	Ferri-inductor 470μH	
-	E23-0046-04	Terminal (square type)	

PC BOARD

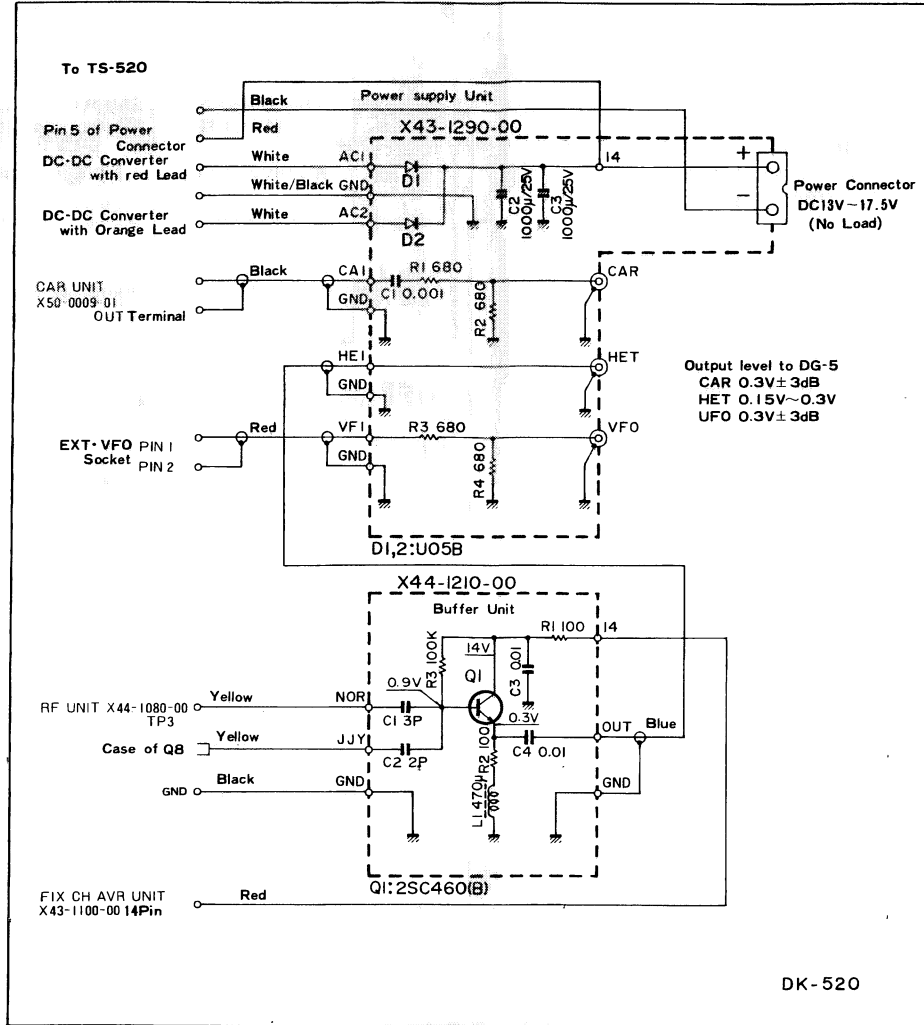
▼ POWER SUPPLY UNIT (X43-1290-00)



▼ BUFFER UNIT (X44-1210-00)



SCHEMATIC DIAGRAM



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TRIO-KENWOOD COMMUNICATIONS, GmbH

■ D-6374 STEINBACH-TS INDUSTRIESTRASSE, 8A WEST GERMANY.

TRIO-KENWOOD CORPORATION.

■ 6-17, 3-CHOME, AOBADAI, MEGURO-KU, TOKYO, JAPAN.