QUARTZ SYNTHESIZER AM-FM STEREO TUNER

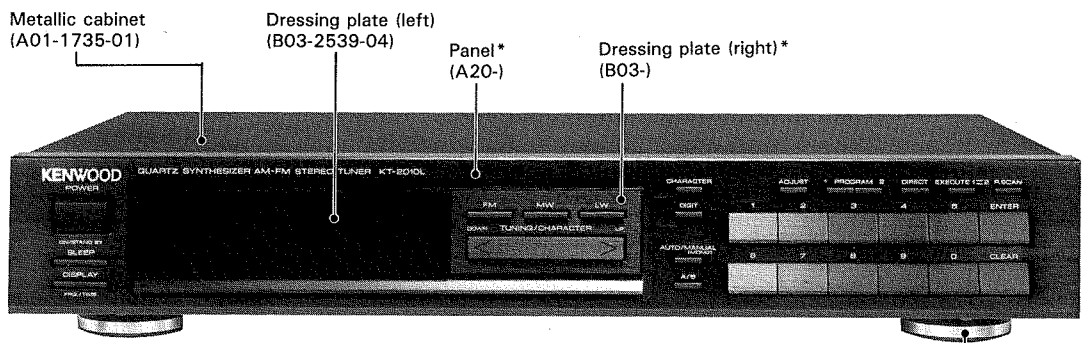
KT-2010/L

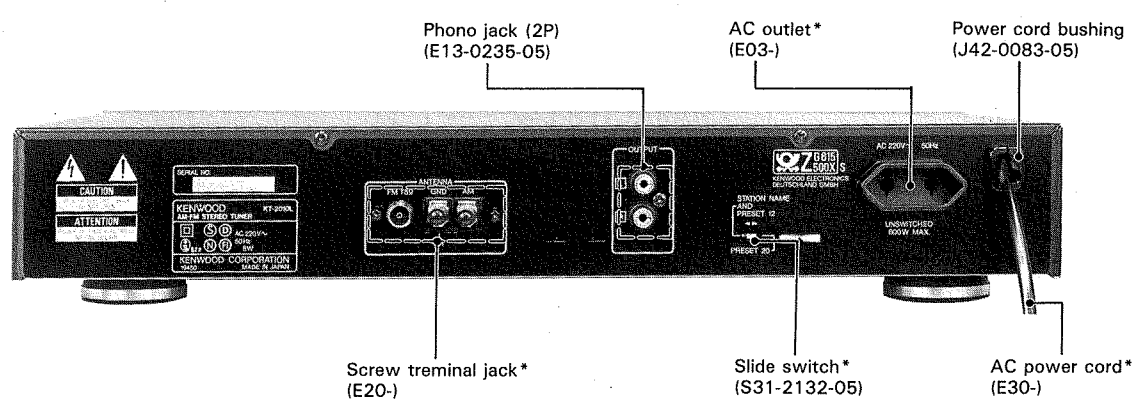
SERVICE MANUAL

007452
91432 26K9

KENWOOD

B51-3872-00(T)1649





*Refer to parts list on page 22.

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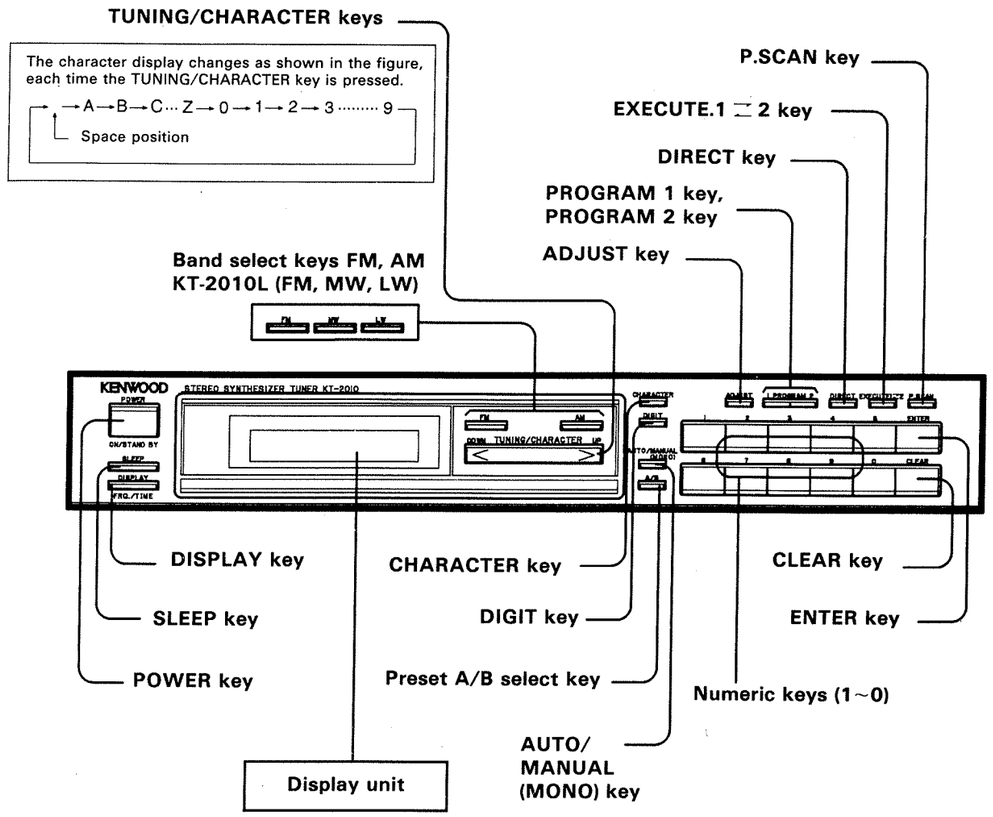
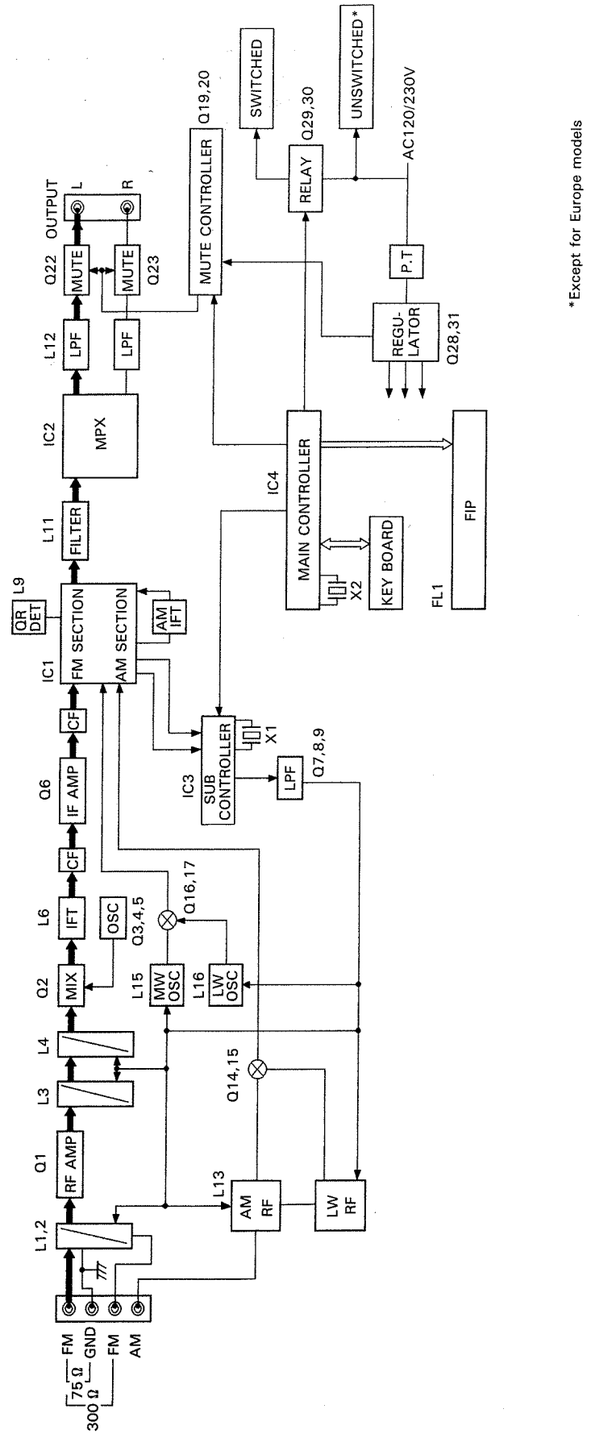
CONTROLS AND INDICATORS



BLOCK DIAGRAM



*Except for Europe models

CIRCUIT DESCRIPTION

Function of components

Tuner unit (X05-369X-XX)

Components	Use/Function	Operation/Condition/Interchangeability
IC1 (LA1265)	FM/AM system IC	FM IF amp. detection and control: AM mixing. IF amp and detection.
IC2 (AN7470)	MPX IC	MPX demodulator
IC3 (LM7001)	PLL IC for frequency synthesizer	PLL for electronic tuning.
IC4 (CXP5016-210S)	4-bit microcomputer	Controller for PLL and display, etc.
Q1	RF AMP	High-frequency amp
Q2	MIX	Frequency converter
Q3	OSC	Local oscillator
Q4	OSC Buffer	OSC OUT (oscillator output) for synthesizer
Q5	OSC Buffer	For local oscillator input to MIX
Q6	FM IF AMP	10.7 MHz amp
Q7, 8	L.P.F	Low pass filter for PLL
Q9	Low pass filter select	Time constant select in LW mode
Q10	Low pass filter select	Q9 control: LW position with this switch ON
Q11	AM-FM select	TC1 mode select: AM position with this switch ON
Q12	Inverter amp	Auto Stop control
Q13	Buffer	Impedance converter
Q14, 15	AM RF select	Electronic RF selection between LW and MW
Q16, 17	AM OSC (oscillator) select	Electronic OSC (oscillator) selection between LW and MW
Q18	FIP Driver	FIP indication
Q19	Mute control	Activated when Function is changed over
Q20	MUTE Driver	Activated when Function is changed over
Q21	TR.SW	Station name select
Q22, 23	MUTE Switch	Muting when Function is changed over
Q25	Band select	LW/MW mode control
Q26, 27	Band select	AM/FM mode control
Q28	Constant voltage	For stabilizing +12V
Q29	POWER Driver	ON/OFF of +12V power supply
Q30	Power control	Power ON/OFF control
Q31	Constant voltage	For stabilizing +5V
Q32	Constant voltage	CE control
Q33	POWER ON SW	Reset control
Q34	FIP control	Controls Q38 when power is ON
Q35	FIP Driver	TUNED indication
Q36	FIP Driver	STEREO indication

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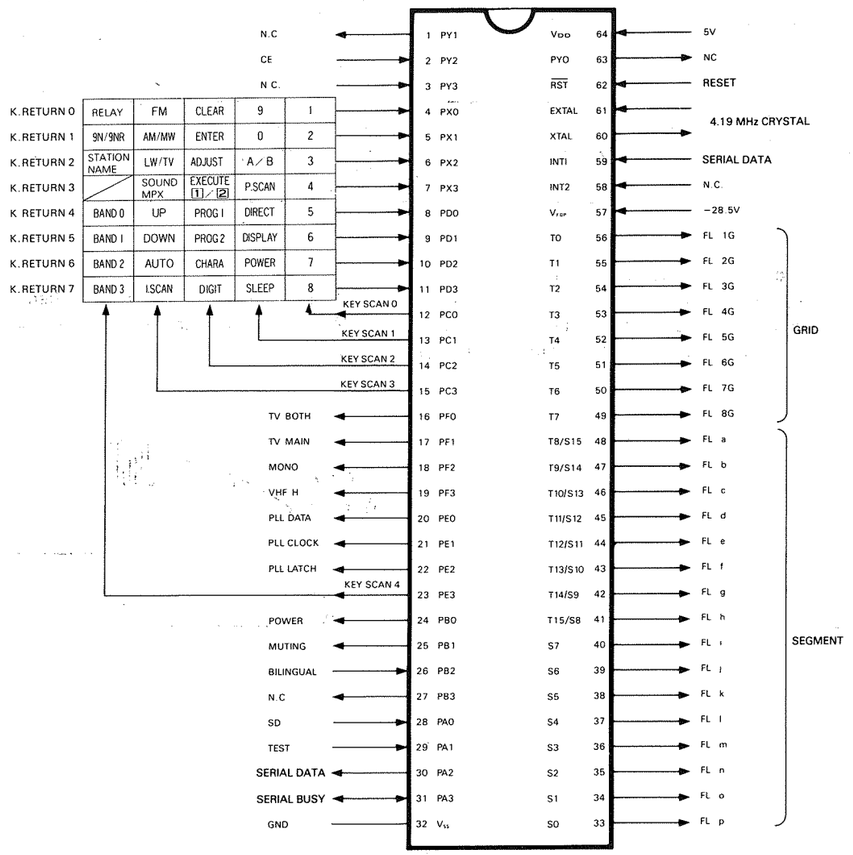
CIRCUIT DESCRIPTION

IC4: CXP5016-210S

Key matrix connection



Functions of diodes and switches

(0: Without diode, 1: With diode)

Destination Type	Set Switches B3	B2	B1	B0	Band	Receiving Frequency Range	Inter-Channel Space	Intermediate Frequency	PLL Reference Frequency	PLL Input Terminal	Auto Tuning
K	1	0	0	0	FM	87.5 MHz ~ 108.0 MHz	100 kHz	+10.7 MHz	50 kHz	FMI	O
					AM	530 kHz ~ 1610 kHz	10 kHz	+450 kHz	10 kHz	AMI	O
E	1	*1	0	0	FM	87.5 MHz ~ 108.0 MHz	50 kHz	+10.7 MHz	50 kHz	FMI	O
					AM	531 kHz ~ 1602 kHz	9 kHz	+450 kHz	9 kHz	AMI	O

* The KT-2010/2010L Types M, U and UE are modified into Types E or K by switching the inter-channel space with the inter-channel space withe the CHANNEL SPACE SW (S31) on the rear panel and by adding a diode (ISS133) for BAND2.
Before switching, turn the AC off (by pulling out the power plug), switch, and turn AC on again.
If the AC power is left ON, switching the switch does not change the destination.

CIRCUIT DESCRIPTION

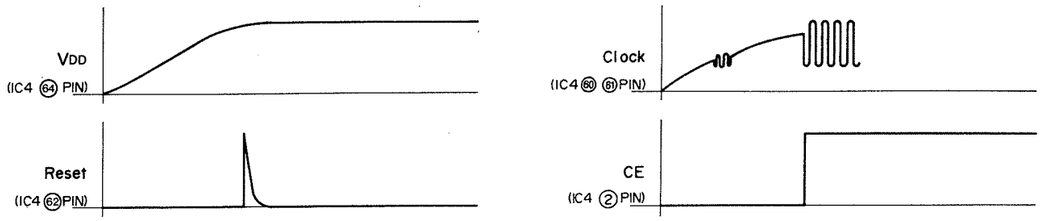
Station name/Time display switch

This switch allows to select if the display shows station names or the present time. Bofere switchng this switch, turn AC power off. Switching this switch with AC power on will not change the setup. When this switch is switched, all memory contents (preset channels timer, clock, etc.) are cleared.

Station Name On/Off SW	Station Name Display	Number of Preset Channels
0	ON	6 in each of A/B, total 12
1	OFF	10 in each of A and B, total 20

Operation of microprocessor IC4 at power ON

When voltage VDD at pin pin ⑭ (power supply) of IC4 is rises at power ON and the reset signal at pin ⑫ differentiated by CE signal (Chip Enable signal) at pin ② rises to half of VDD, the clock starts. When the reset signal lowers to half of the VDD, the microprocessor starts operating and the unit is set to normal operation mode.



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CIRCUIT DESCRIPTION

Terminal description

Terminal No.	Symbol	Name	I/O	Function
1	PY1	N.C.	O	Not used. On the PC board, make it capable of being pulled up using a resistor.
2	PY2	C.E.	I	Backup (AC OFF) detection terminal. When L level is detected, the backup condition is set and the clock is stopped. Note: The rise from L to H shall be faster than the rise of reset. H: AC ON L: AC OFF
3	PY3	N.C.	I	Not used. Pull down with the GND or a resistor.
4-11	PX0 ~ PD3	KEY RETURN 0 ~ 7	I	Key return input. All pulled down (10k to 100k). H: AC ON L: AC OFF
12 ~ 15	PC0 ~ PC3	KEY SCAN 0 ~ 3	O	Key scanning signals.
16 17	PF0 PF1	TV BOTH TV MAIN	O O	TV bilingual multiplexed audio mode control terminals.

Mode \ Port	PF0	PF1
MAIN	L	H
SUB	L	L
BOTH	H	L

18	PF2	MONO	O	Mono/Auto stereo control terminal. Permanently L during TV bilingual reception. H: MONO L: AUTO STEREO
19	PF3	VHF H	O	Band selection control terminal. Selects the band by the combination with A0 and B0 of PLL IC.

Band \ Port	AO	BO	PF3
FM	H	L	L
AM	L	H	L
LW	H	H	L
VHF L	H	H	L
VHF H	H	H	H
UHF	L	L	L

20	PE0	PLL DATA	O	PLL IC data output. Connected to LM7001 DIN terminal.
21	PE1	PLL CLOCK	O	PLL IC clock output. Connected to LM7001 CLK terminal.
22	PE2	PLL LATCH	O	PLL IC latch output. Connected to LM7001 LAT terminal.
23	PE3	KEY SCAN 4	O	Key scanning signal.
24	PB0	POWER	O	Relay control terminal. H: POWER ON L: POWER OFF
25	PB1	MUTING	O	Muting control during band switching, frequency scanning, etc. H: MUTE ON L: MUTE OFF
26	PB2	BIL	I	Bilingual signal input during multiplexed audio reception. H: BILINGUAL L: NORMAL
27	PB3	N.C.	O	Not used. Open or pulled down.
28	PA0	SD	I	Stop signal input for auto tuning. H: TUNE L: POWER OFF
29	PA1	TEST	I	Test mode setting input. H: NORMAL L: TEST
30	PA2	SDATA	O	System control DATA output.
31	PA3	SBUSY	I/O	System control BUSY input/output.
32	VSS			GND terminal.
33 ~ 48	S0 ~ S15		O	FL segment drive terminals. Pull-down resistors are incorporated with masked devices.
49 ~ 56	T7 ~ T0		O	FL grid drive terminals. Pull-down resistors are incorporated with masked devices.
57	VFDP			FL -ve power supply (–28.5V).
58	INT2		I	Not used. Connected to VDD.
59	INT1	DATAI	I	System control DATA input.
60 ~ 61	ETAL EXTAL			Clock oscillator terminals. X'tal 4.194304 MHz.
62	$\overline{RST}$	RESET	I	Reset signal input. H: NORMAL L: RESET
63	PY0		O	Not used. Open. (On the PC board, make it capable of being pulled up).
64	VDD			+B terminal (5V).

CIRCUIT DESCRIPTION

Test mode

1. Setting Test Mode
   To enter the test mode, reconnect AC power cord while the microprocessor's TEST port (pin 29) is connected to GND.
2. Contents of Test Mode
   (1) Display
   When AC power is turned ON in step 1, all FL segments go on except "STEREO", "TUNED" and "BILINGUAL".
   These three indicators are lit by the tuner circuitry, and has no relationship with the test mode operated at preset. To return the display to the normal display, press the POWER switch.

   (2) Test Point Setting
   At the same time as the display in (1), the frequencies listed on the attached sheet are stored automatically in the tuner's preset memory.
   In the test mode, 20 stations are preset without station name display, regardless of the STATION NAME switch setup.

ADJUSTMENT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION	Unless otherwise specified, the individual switches should be set as following: SELECTOR: FM MODE: FM MODE/AUTO						
1	BAND EDGE (1)	–	Connect a DC voltmeter between TP1(VT) and TP2(GND).	87.5MHz	L7	2.5V	(a)
2	BAND EDGE (2)	–	Connect a DC voltmeter between TP1(VT) and TP2(GND).	108.0MHz	TC1	8.0V	(a)
Repeat alignments 1 and 2 several times.							
3	RF ALIGNMENT	(A) 98.0MHz 1kHz,±75kHz dev	(B)	MONO 98.0MHz	Front end L1~L5	Maximum amplitude and symmetry of the oscilloscope display.	
4	DISCRIMINATOR	(A) 98.0MHz 1kHz,±75kHz dev 60dBμ(ANT input)	Connect a DC voltmeter between TP3 and TP4.	MONO 98.0MHz	L9	0V	(b)
5	VCO	(A) 98.0MHz 0 dev 60dBμ(ANT input)	Connect a 330kΩ resistor to TP8. Connect a frequency counter to the resistor via an AC voltmeter.	98.0MHz	VR3	19.00kHz	(c)
6	SEPARATION (STEREO)	(C) 98.0MHz 1kHz,±68.25kHz dev Selector:L or R 60dBμ(ANT input)	(B)	98.0MHz	L8	Minimum crosstalk.	
7	TUNING LEVEL	(A) 98.0MHz 0 dev 18dBμ(ANT input)300Ω 14dBμ(ANT input) 75Ω	(B)	AUTO or MONO 98.0MHz	VR2	Adjust VR2 and stop at the point where FL1(TUNED) goes on.	
AM-MW SECTION	Keep the AM loop antenna installed. SELECTOR: AM(KT-2010) or MW(KT-2010L)						
(1)	BAND EDGE (1)	–	Connect a DC voltmeter between TP1(VT) and TP2(GND).	530kHz (531kHz)	L16	1.5V	(a)
(2)	BAND EDGE (2)	–	Connect a DC voltmeter between TP1(VT) and TP2(GND).	1610kHz (1602kHz)	TC5	8.0V	(a)
Repeat alignments (1) and (2) several times.							
(3)	RF ALIGNMENT (1)	(D) 630kHz 400Hz,30% mod	(B)	630kHz	L14	Maximum amplitude and symmetry of the oscilloscope display.	
(4)	RF ALIGNMENT (2)	(D) 1440kHz 400Hz,30% mod	(B)	1440kHz	TC3	Maximum amplitude and symmetry of the oscilloscope display.	
(5)	TUNING LEVEL	(D) 1000kHz 36dBμ(ANT input)	(B)	–	VR1	Adjust VR1 and stop at the point where FL1(TUNED) goes on.	
Repeat alignments (3) and (4) several times.							
AM-LW SECTION(KT-2010L only)		Keep the AM loop antenna installed.		SELECTOR: LW			
(6)	BAND EDGE (1)	–	Connect a DC voltmeter between TP1(VT) and TP2(GND).	153kHz	L15	1.5V	(a)
(7)	BAND EDGE (2)	–	Connect a DC voltmeter between TP1(VT) and TP2(GND).	281kHz	TC4	8.0V	(a)
Repeat alignments (6) and (7) several times.							
(8)	RF ALIGNMENT (1)	(D) 162kHz 400Hz,30% mod	(B)	162kHz	L13	Maximum amplitude and symmetry of the oscilloscope display.	
(9)	RF ALIGNMENT (2)	(D) 270kHz 400Hz,30% mod	(B)	270kHz	TC2	Maximum amplitude and symmetry of the oscilloscope display.	
Repeat alignments (8) and (9) several times.							

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REGLAGES

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
SECTION MF	Sauf en cas d'indications spéciales, régler chaque commutateur comme suit: SELECTEUR: FM MODE: FM MODE/AUTO						
1	BORD DE BANDE (1)	–	Relier un voltmètre CC entre les TP1(VT) et TP2(GND).	87.5MHz	L7	2.5V	(a)
2	BORD DE BANDE (2)	–	Relier un voltmètre CC entre les TP1(VT) et TP2(GND).	108.0MHz	TC1	8.0V	(a)
Répéter les points 1 et 2 plusieurs fois.							
3	ALIGNEMENT HT	(A) 98.0MHz 1kHz.±75kHz dév	(B)	MONO 98.0MHz	Contrôle L1~L5	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
4	DISCRIMINATEUR	(A) 98.0MHz 1kHz.±75kHz dév 60dBμ(Entrée ANT)	Relier un voltmètre CC entre les TP3 et TP4.	MONO 98.0MHz	L9	0V	(b)
5	VCO	(A) 98.0MHz 0 dév 60dBμ(Entrée ANT)	Relier une résistance de 330kΩ à TP8. Raccorder un compteur de fréquence à une résistance par l'intermédiaire d'un voltmètre CA.	98.0MHz	VR3	19.00kHz	(c)
6	SEPARATION (STEREO)	(C) 98.0MHz 1kHz.±68.25kHz dév Selection:L ou R 60dBμ(Entrée ANT)	(B)	98.0MHz	L8	Diaphonie minimale.	
7	NIVEAU D'ACCORDER	(A) 98.0MHz 0 dév 18dBμ(Entrée ANT) 300Ω 14dBμ(Entrée ANT) 75Ω	–	AUTO ou MONO 98.0MHz	VR2	Ajuster VR2 et arrêter le mouvement de VR2 au moment où le FL1(TUNED)s'allume.	
SECTION MA	Laisser l'antenne bouche MA installée. SELECTEUR: AM(KT-2010) ou MW(KT-2010L)						
(1)	BORD DE BANDE (1)	–	Relier un voltmètre CC entre les TP1(VT) et TP2(GND).	530kHz (531kHz)	L16	1.5V	(a)
(2)	BORD DE BANDE (2)	–	Relier un voltmètre CC entre les TP1(VT) et TP2(GND).	1610kHz (1602kHz)	TC5	8.0V	(a)
Répéter les points (1) et (2) plusieurs fois.							
(3)	ALIGNEMENT HT (1)	(D) 630kHz 400Hz.30% mod	(B)	630kHz	L14	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
(4)	ALIGNEMENT HT (2)	(D) 1440kHz 400Hz.30% mod	(B)	1440kHz	TC3	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
(5)	NIVEAU D'ACCORDER	(A) 1000kHz 36dBμ(Entrée ANT)	–	–	VR1	Ajuster VR1 et arrêter le mouvement de VR1 au moment où le FL1(TUNED)s'allume.	
Répéter les points (3) et (4) plusieurs fois.							
SECTION GO(KT-2010L seulement)		Laisser l'antenne bouche MA installée.		SELECTEUR: LW			
(6)	BORD DE BANDE (1)	–	Relier un voltmètre CC entre les TP1(VT) et TP2(GND).	153kHz	L15	1.5V	(a)
(7)	BORD DE BANDE (2)	–	Relier un voltmètre CC entre les TP1(VT) et TP2(GND).	281kHz	TC4	8.0V	(a)
Répéter les points (6) et (7) plusieurs fois.							
(8)	ALIGNEMENT HT (1)	(D) 162kHz 400Hz.30% mod	(B)	162kHz	L13	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
(9)	ALIGNEMENT HT (2)	(D) 270kHz 400Hz.30% mod	(B)	270kHz	TC2	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
Répéter les points (8) et (9) plusieurs fois.							

ABGLEICH

NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	TUNER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
UKW-EMPFANGSABTEILUNG Außer wenn anders angegeben, die verschiedenen Schalter wie folgt einstellen: SELECTOR: FM MODE:FM MODE/AUTO							
1	BANDKANTE (1)	–	Einen Gleichspannungs-messer zwischen TP1(VT) und TP2(GND) anschließen.	87.5MHz	L7	2.5V	(a)
2	BANDKANTE (2)	–	Einen Gleichspannungs-messer zwischen TP1(VT) und TP2(GND) anschließen.	108.0MHz	TC1	8.0V	(a)
Abstimmungen 1 und 2 mehrere Male wiederholen.							
3	EMPFANGS-BEREICH-ABSTIMMUNGEN	(A) 98.0MHz 1kHz.±75kHz Hub	(B)	MONO 98.0MHz	Eingangs-stufe L1~L5	Maximal Amplitude und Symmetrie des Oszilloskopbildes.	
4	DISKRIMINATOR	(A) 98.0MHz 1kHz.±75kHz Hub 60dBμ(ANT Eingang)	Einen Gleichspannungs-messer zwischen TP3 und TP4 anschließen.	MONO 98.0MHz	L9	0V	(b)
5	SPANNUNGS-GEREGELTER OSZILLATOR	(A) 98.0MHz 0 Hub 60dBμ(ANT Eingang)	Einen 330kΩ Wider-standen zu TP8 anschließen. Einen Frequenzzähler über einen Wechselspannungs messer an den Wider-stand anschließen.	98.0MHz	VR3	19.00kHz	(c)
6	STEREO KANAL TRENNUNG	(C) 98.0MHz 1kHz.±68.25kHz Hub Wähler: L oder R 60dBμ(ANT-Eingang)	(B)	98.0MHz	L8	Minimal Übersprechen.	
7	ABSTIMM	(A) 98.0MHz 0 Hub 18dBμ(ANT-Eingang) 300Ω 14dBμ(ANT-Eingang) 75Ω	–	AUTO oder MONO 98.0MHz	VR2	Den Pegel wiederstand aufdrehen, und dem VR2 Halt geben wobei den FL1(TUNED) anzeiger leuchtet wird.	
MW-EMPFANGSABTEILUNG Die MW-Rahmenantenne angebracht lassen. SELECTOR: AM(KT-2010) oder MW(KT-2010L)							
(1)	BANDKANTE (1)	–	Einen Gleichspannungs-messer zwischen TP1(VT) und TP2(GND) anschließen.	530kHz (531kHz)	L16	1.5V	(a)
(2)	BANDKANTE (2)	–	Einen Gleichspannungs-messer zwischen TP1(VT) und TP2(GND) anschließen.	1610kHz (1602kHz)	TC5	8.0V	(a)
Abstimmungen (1) und (2) mehrere Male wiederholen.							
(3)	HF-ABGLEICH (1)	(D) 630kHz 400Hz.30% mod	(B)	630kHz	L14	Maximal Amplitude und Symmetrie des Oszilloskopbildes.	
(4)	HF-ABGLEICH (2)	(D) 1440kHz 400Hz.30% mod	(B)	1440kHz	TC3	Maximal Amplitude und Symmetrie des Oszilloskopbildes.	
(5)	ABSTIMM PEGEL	(A) 1000kHz 36dBμ(ANT-Eingang)	–	–	VR1	Den Pegel wiederstand aufdrehen, und dem VR1 Halt geben wobei den FL1(TUNED) anzeiger leuchtet wird.	
Abstimmungen (3) und (4) mehrere Male wiederholen.							
LW-EMPFANGSABTEILUNG(nur KT-2010L) / Die MW-Rahmenantenne angebracht lassen. SELECTOR: LW							
(6)	BANDKANTE (1)	–	Einen Gleichspannungs-messer zwischen TP1(VT) und TP2(GND) anschließen.	153kHz	L15	1.5V	(a)
(7)	BANDKANTE (2)	–	Einen Gleichspannungs-messer zwischen TP1(VT) und TP2(GND) anschließen.	281kHz	TC4	8.0V	(a)
Abstimmungen (6) und (7) mehrere Male wiederholen.							
(8)	HF-ABGLEICH (1)	(D) 162kHz 400Hz.30% mod	(B)	162kHz	L13	Maximal Amplitude und Symmetrie des Oszilloskopbildes.	
(9)	HF-ABGLEICH (2)	(D) 270kHz 400Hz.30% mod	(B)	270kHz	TC2	Maximal Amplitude und Symmetrie des Oszilloskopbildes.	
Abstimmungen (8) und (9) mehrere Male wiederholen.							

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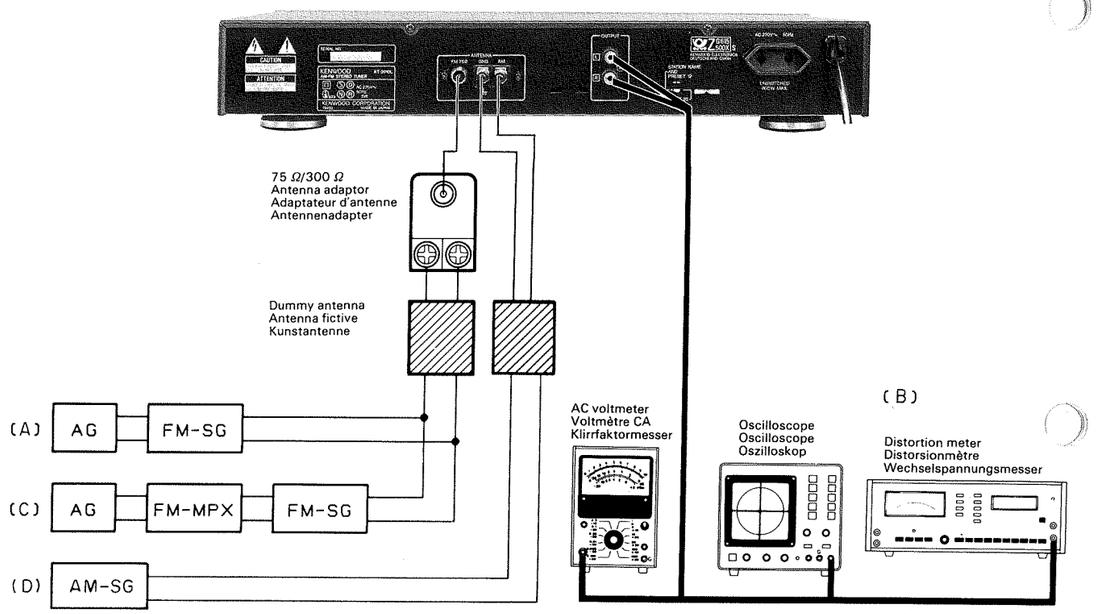
ADJUSTMENT/REGLAGES/ABGLEICH



VOLTAGE TABLES

TUNER UNIT (X05-369X-XX)

IC1

1	2.2V
2,3	2.3V
4	10.4V
5	–
6	10.5V
7,8	0V
9	3.7V
10	2.8V
11	1.5V
12	1.4V
13,14	1.7V
15	2.2V
16	1.4V
17	10.2V
18,19	0V
20	3.6V
21,22	2.6V

IC2

1	12V
2	2.6V
3	6.1V
4,5	9.6V
6,7	4.9V
8	–
9	0.7V
10	2.6V
11	2.5V
12~14	2.6V
15	3.3V
16	0V

IC3

1	0.9V
2	1.6V
3~5	0V
6,7	–
8	WM:0V LW:5V
9	FM:0V AM:5V
10	2.8V
11	–
12,13	5.0V
14	1.2V
15,16	–

IC4

1	–
2	5V
3~56	–
57	-28.5V
58	5V
59~63	–
64	5V

Q1

G1	0V
G2	0V
D	–
S	–

Q2

E	–
C	11.5V
B	0.6V

Q3

E	4.7V
C	10V
B	5.3V

Q4

E	–
C	5.8V
B	0.6V

Q5

E	2.1V
C	–
B	10V

Q6

E	1.4V
C	11V
B	2.4V

Q7

E	0.6V
C	2.6V
B	1.2V

Q8

E	–
C	2.6V
B	0.6V

Q9

G	–
D	2.6V
S	–

Q10,12,18,19, 21~23,25,30,33~36

E	–
C	–
B	–

Q11

E	–
C	0V
B	–

Q13

E	2.4V
C	11.5V
B	3V

Q14

E	1.4V
C	11V
B	LW:2V

Q15

E	1.4V
C	11V
B	MW:2V

Q16,17

G	–
D	–
S	2.6V

Q20

E	11.5V
C	–
B	–

Q26,27

E	12.5V
C	–
B	–

Q28

E	2.5V
C	22V
B	–

Q29

E	22V
C	13V
B	–

Q31

E	5.6V
C	–
B	6.2V

Q32

E	6.2V
C	–
B	–

PC BOARD (Component side view)

TUNER UNIT (X05-3732-71)

TUNER UNIT (X05-369X-XX)

Ref. No. IC	Ref. No. Q	Address
	1	2C
	2	2D
	3	2D
	4	2D
	5	2D
	6	3D
	7	1E
	8	1E
	9	2E
	10	2F
	11	2E
	12	3F
	13	3F
	14	3C
	15	3C
	16	3D
	17	3D
	18	4G
	19	5D
	20	5D
	21	4F
	22	5C
	23	5C
	24	4F
	25	3F
	26	2F
	27	2F
	28	5E
	29	5E
	30	5D
	31	6E
	32	5E
	33	4G
	34	3G
	35	3G
	36	2G
1		4E
2		5D
3		1F
4		5G

DC voltmeter

(a) BAND EDGE (1)
FM section
2.5 V

AM-MW section
AM-LW section
1.5 V

(a) BAND EDGE (2)
8.0 V

(b) DISCRIMINATOR
DC voltmeter **0 V**

ANTENNA FM75Ω
GND
AM ANT.
OUTPUT
SYSTEM CONTROL
STATION NAME

AC OUTLET
YEL
RED
AC220V 50Hz

X05 D/5
PTI
GRY
WHT
W12

YEL
RED
BLU
BRN
WHT
GRY
MUTE
POWER SUPPLY

(c) VCO **19.00 kHz**
330K
AC voltmeter
Frequency counter

FRONT

X05-3732-71
J25-6105-01

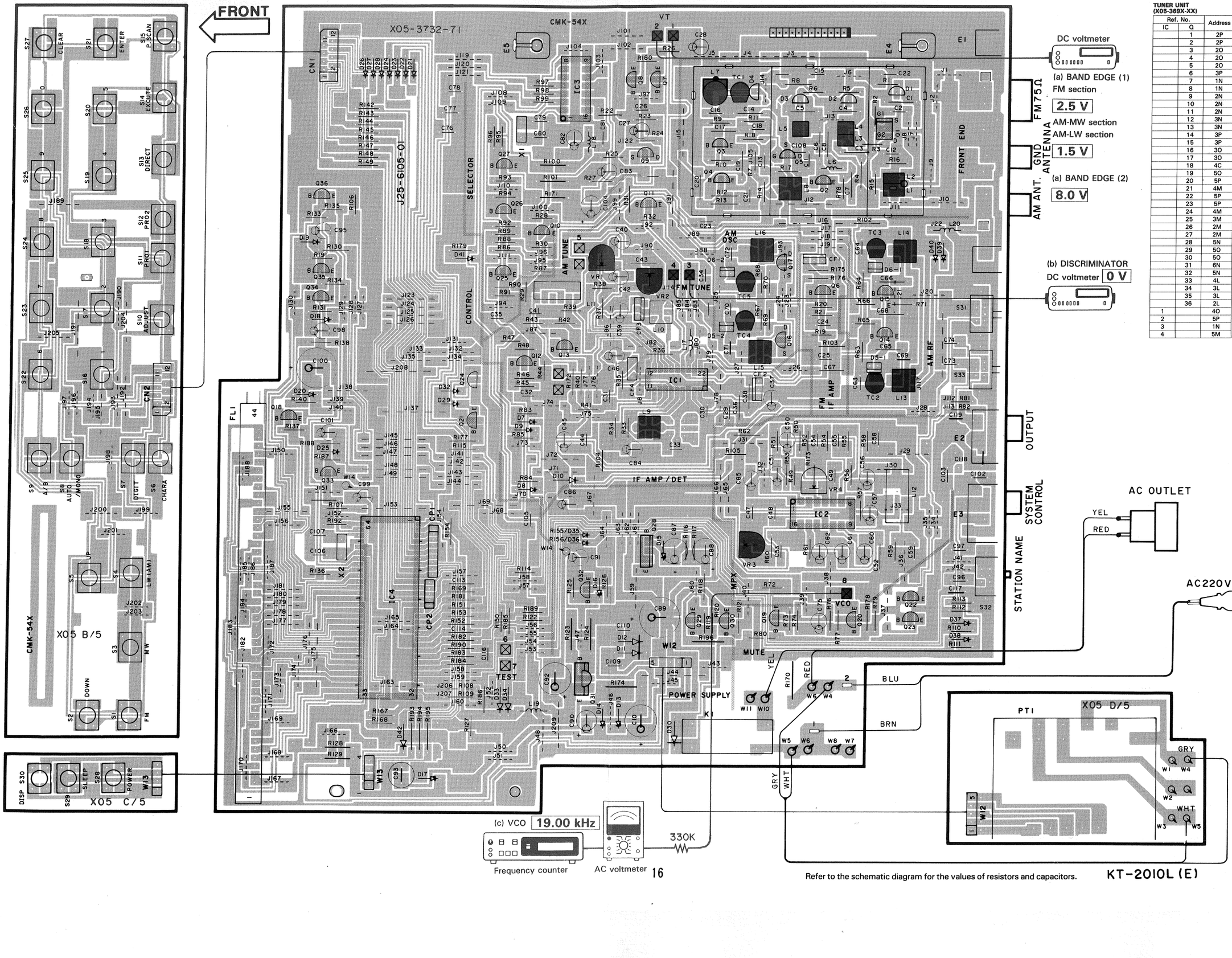
X05 B/5
X05 C/5

KT-2010L(E)

Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD (Foil side view)

TUNER UNIT (X05-3732-71)



TUNER UNIT (X05-389X-XX)

Ref. No. IC	Ref. No. Q	Address
	1	2P
	2	2P
	3	2O
	4	2O
	5	2O
	6	3P
	7	1N
	8	1N
	9	2N
	10	2N
	11	2N
	12	3N
	13	3N
	14	3P
	15	3P
	16	3O
	17	3O
	18	4C
	19	5O
	20	5P
	21	4M
	22	5P
	23	5P
	24	4M
	25	3M
	26	2M
	27	2M
	28	5N
	29	5O
	30	5O
	31	6N
	32	5N
	33	4L
	34	3L
	35	3L
	36	2L
1		4O
2		5P
3		1N
4		5M

Refer to the schematic diagram for the values of resistors and capacitors.

(X05-373X-XX)(A/5) JAPAN MADE
(X05-3692-71)(A/5) SINGAPORE MADE

(X05-373X-XX)
E,T	2-71
EF	2-73

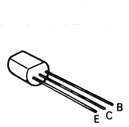
SIGNAL LINE
+B LINE
-B LINE

FM RF
FM 1F
FM OSC
MW.LW RF
MW.LW OSC
AM IF
AH SW
LW.SW
LPF
SYSTEM CONTROL
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
PROGRAMABLE DIVIDER
SHIFT REGISTER LATCH
PLL
FL DRIVE
FL DISPLY
FM SW
LW SW
AM/FM IF
MW/LW SW
SD
STATION NAME

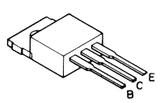
IC1 BUF OSC REG RF MIX AGC AM-IF SD ADJ DET
IC3
IC4

FL1 ON TIME STATION PROGRAM NAME OFF TIME TV AM MW LW MAIN SUB AUTO STEREO TUNED BILINGUAL SLEEP MEMORY MHz kHz ch

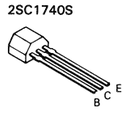
2SA733(A)
2SC1845
2SC1923
2SC2003
2SC945(A)
2SD1302



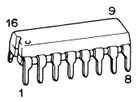
2SD1266



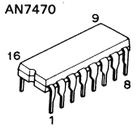
2SA933S
2SC1740S



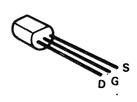
LM7001



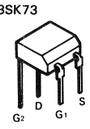
AN7470



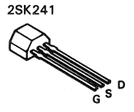
2SK163



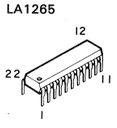
3SK73



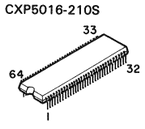
2SK161
2SK241

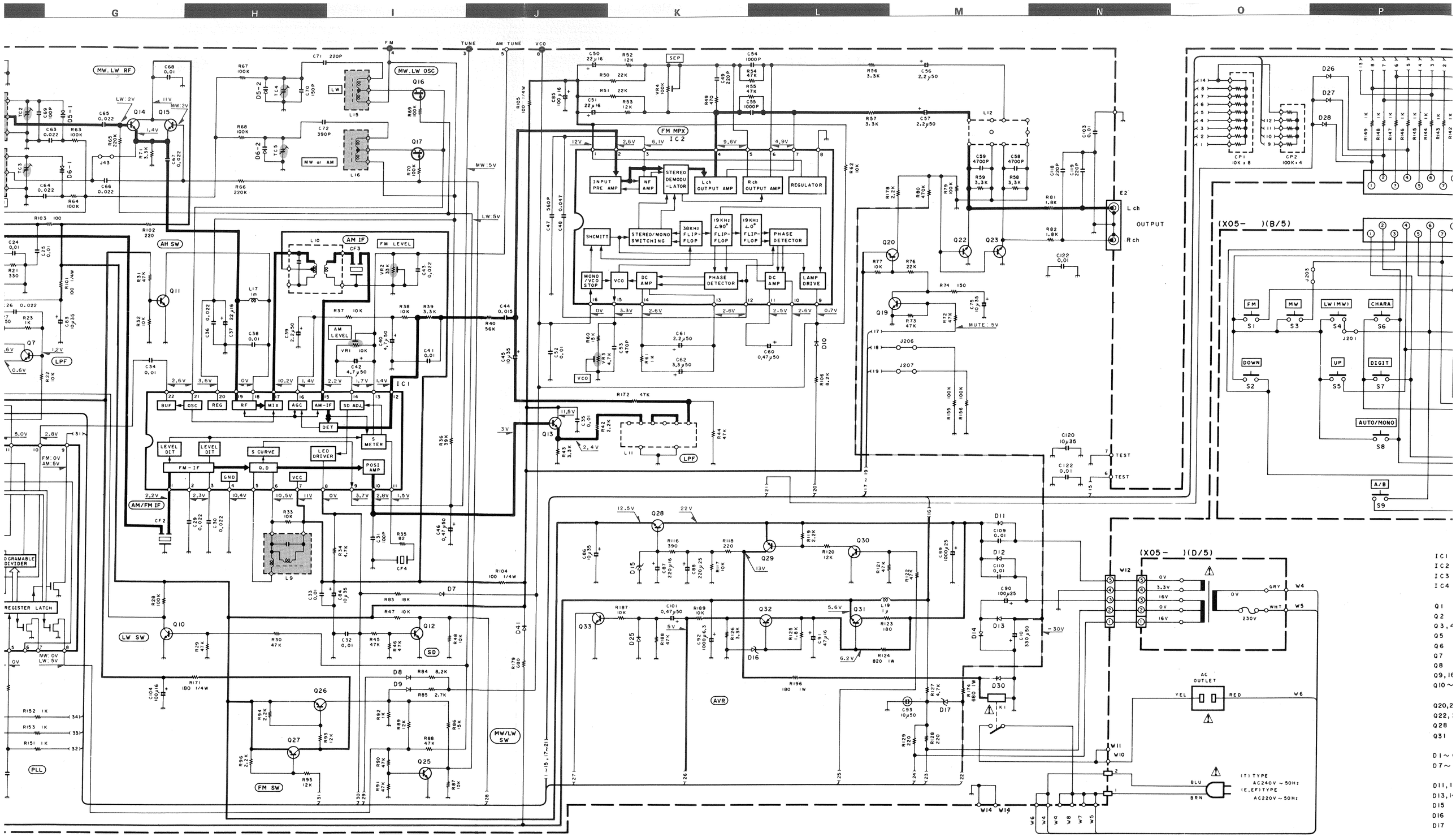


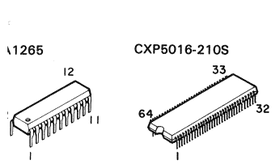
LA1265



CXP5016-210S



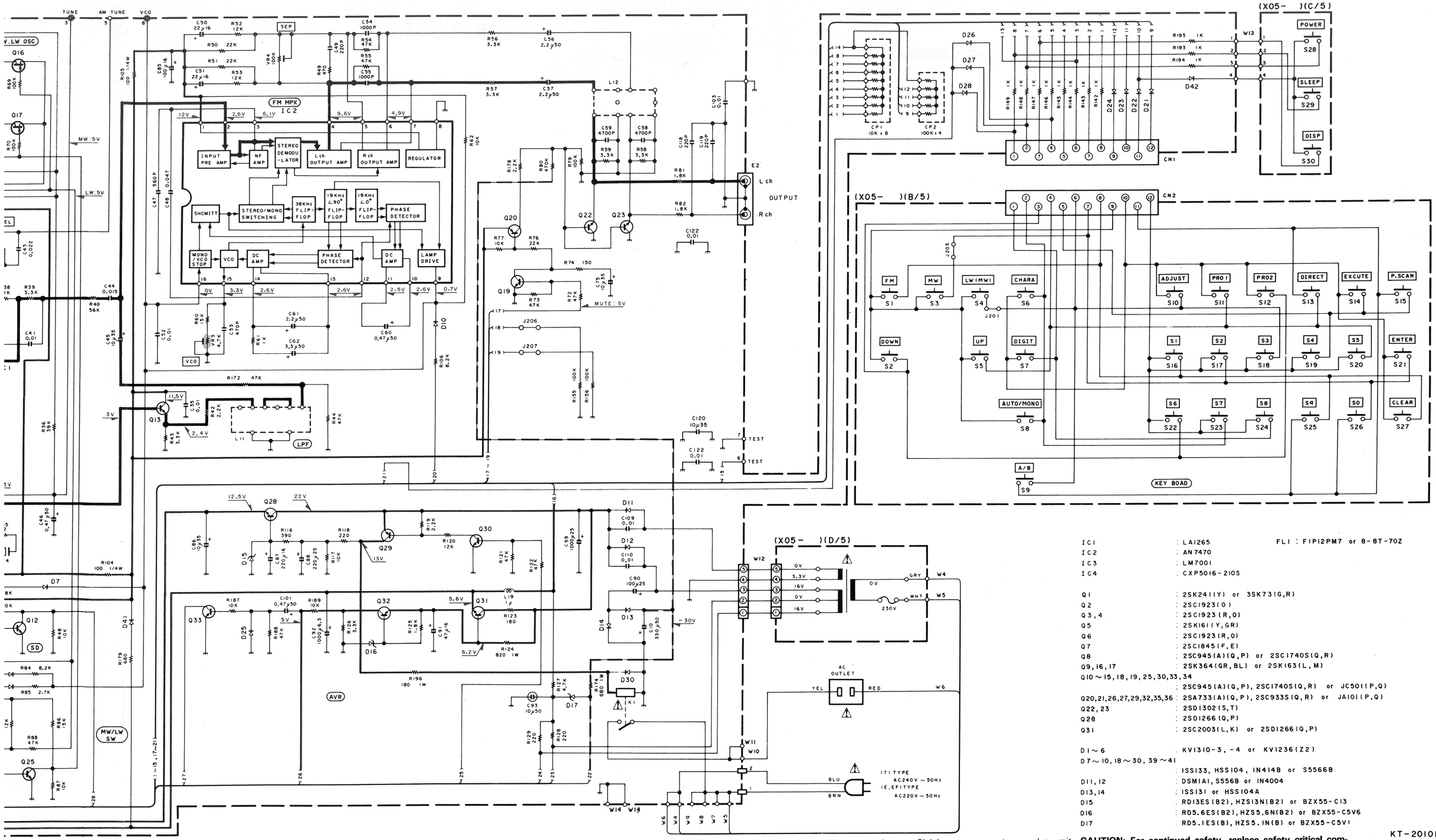




DC voltages are as measured with a high-impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance pendant la réception d'un signal de programme FM (avec une force de signal de 60 dB à la borne ANT). Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
Les valeurs entre parenthèses doivent être mesurées pendant la réception d'un signal de programme AM avec une force de signal de 60 dB à la borne ANT).

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser bei Empfang eines UKW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen. Dabei schwanken die Meßwerte, aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.
Die eingeklammerten Gleichspannungswerte wurden bei Empfang eines MW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen.



IC1	: LA1265	FL1 : F1P12PM7 or 8-8T-70Z
IC2	: AN7470	
IC3	: LM7001	
IC4	: CXP5016-210S	
Q1	: 2SK241(Y) or 3SK73(G,R)	
Q2	: 2SC1923(O)	
Q3,4	: 2SC1923(R,O)	
Q5	: 2SK161(Y,GR)	
Q6	: 2SC1923(R,O)	
Q7	: 2SC1845(F,E)	
Q8	: 2SC945(A)(Q,P) or 2SC1740S(Q,R)	
Q9,16,17	: 2SK364(GR,BL) or 2SK163(L,M)	
Q10~15,18,19,25,30,33,34	: 2SC945(A)(Q,P), 2SC1740S(Q,R) or JC501(P,Q)	
Q20,21,26,27,29,32,35,36	: 2SA733(A)(Q,P), 2SC933S(Q,R) or JA101(P,Q)	
Q22,23	: 2SD1302(S,T)	
Q28	: 2SD1266(Q,P)	
Q31	: 2SC2003(L,K) or 2SD1266(Q,P)	
D1~6	: KV1310-3,-4 or KV1236(Z2)	
D7~10,18~30,39~41	: 1SS133, HSS104, IN4148 or S5566B	
D11,12	: DSM1A1, S556B or IN4004	
D13,14	: 1SS131 or HSS104A	
D15	: RD13ES(B2), HZS13N(B2) or BZX55-C13	
D16	: RD5.6ES(B2), HZS5.6N(B2) or BZX55-C5V6	
D17	: RD5.1ES(B), HZS5.1N(B) or BZX55-C5V1	

KT-2010L(E)

DC voltages are as measured with a high-impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance pendant la réception d'un signal de programme FM (avec une force de signal de 60 dB à la borne ANT). Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
Les valeurs entre parenthèses doivent être mesurées pendant la réception d'un signal de programme AM avec une force de signal de 60 dB à la borne ANT).

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser bei Empfang eines UKW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig. Die eingeklammerten Gleichspannungswerte wurden bei Empfang eines MW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer. Y07-3182-71

KT-2010/L

KENWOOD

EXPLODED VIEW

* U,UE,TYPE ONLY

A	Ø3x8	(Bi-Tap) BLK	: N89-3008-45
B	Ø3x8	(Bi-Tap)	: N89-3008-46
C	Ø4x6	(Bi-Tap)	: N86-4006-46
D	3x19		: N09-0292-05

Parts with the exploded numbers larger than 700 are not supplied.

KT-2010/L

PARTS LIST

* New Parts

Parts without **Parts No.** are not supplied.

Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.

Telle ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕向	Remarks 備考
			KT-2010/2010L			
1	1B		A01-1735-01	METALLIC CABINET		
2	2A	*	A20-5741-02	PANEL	UUE	
2	2A	*	A20-5742-02	PANEL	TE	
3	2A		A22-1066-01	SUB PANEL	UUE	
3	2A	*	A22-1067-01	SUB PANEL	TE	
4	2A		B03-2539-04	DRESSING PLATE (LEFT)		
5	2A		B03-2541-04	DRESSING PLATE (RIGHT)	UUE	
5	2A	*	B03-2542-04	DRESSING PLATE (RIGHT)	TE	
-			B46-0094-03	WARRANTY CARD	UUE	
-			B46-0095-03	WARRANTY CARD	UUE	
-			B46-0122-13	WARRANTY CARD	E	
-			B46-0143-03	WARRANTY CARD	T	
-		*	B50-9593-00	INSTRUCTION MANUAL(ENGLISH)		
-		*	B50-9595-00	INSTRUCTION MANUAL(FRENCH)	E	
-		*	B50-9596-00	INSTRUCTION MANUAL(G,H,I)	E	
-			B58-0223-04	CAUTION CARD (PRESET 120V)	U	
-			B58-0513-04	CAUTION CARD (PRESET220-240)	UE	
-			B58-0803-13	CAUTION CARD	E	
⚠ 6	2B		E03-0055-05	AC OUTLET	E	
⚠ 6	2B		E03-0083-05	AC OUTLET	UUE	
⚠ 6	2B		E03-0085-05	AC OUTLET	T	
⚠ 7	2B		E30-0459-05	AC POWER CORD	E	
⚠ 7	2B		E30-0812-05	AC POWER CORD	UUE	
⚠ 7	2B		E30-1416-05	AC POWER CORD	T	
8	1A		E30-0505-05	AUDIO CORD		
-		*	H01-8498-04	ITEM CARTON CASE	UUE	
-		*	H01-8499-04	ITEM CARTON CASE	T	
-		*	H01-8573-04	ITEM CARTON CASE	E	
-		*	H10-3819-02	POLYSTYRENE FOAMED FIXTURE		
-			H25-0223-04	PROTECTION BAG (750X350X0.03)		
-			H25-0232-04	PROTECTION BAG (235X350X0.03)		
10	3A,3B		J02-1024-05	FOOT		
11	1A		J19-2815-04	ANTENNA HOLDER		
⚠ 12	3B		J42-0083-05	POWER CORD BUSHING		
-			J61-0307-05	WIRE BAND	TE	
A	1B,2A		N89-3008-45	BINDING HEAD TAPTITE SCREW		
B	2B		N89-3008-46	BINDING HEAD TAPTITE SCREW		
C	1B	*	N86-4006-46	BINDING HEAD TAPTITE SCREW		
D	3B		N09-0292-05	STEPPED SCREW (Ø3X19)	TE	
15	1A		T90-0121-05	T TYPE ANTENNA		
16	1A		T90-0136-05	ANTENNA ADAPTOR	TE	
17	1A		T90-0174-05	LOOP ANTENNA		
			TUNER UNIT (X05-369X-XX, 0-21: U,UE, 2-71: T,E)			
C1			C91-0713-05	CERAMIC 2.2PF K	TE	
C1			C91-0716-05	CERAMIC 3.9PF K	UUE	
C2			CC45FSL1H220J	CERAMIC 22PF J		
C3			C91-0757-05	CERAMIC 1000PF K		
C4			C91-0716-05	CERAMIC 3.9PF K	UUE	
C4			C91-0720-05	CERAMIC 8.2PF K	TE	
C5			C91-0718-05	CERAMIC 5.6PF K	TE	
C6			C91-0716-05	CERAMIC 3.9PF K		

E: Scandinavia & Europe **K**: USA **P**: Canada

U: PX(Far East, Hawaii) **T**: England **M**: Other Areas

UE: AAFES(Europe) **X**: Australia

⚠ indicates safety critical components.

PARTS LIST

＊ New Parts
Parts without **Parts No.** are not supplied.
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Teile ohne **Parts No.** werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格			Destination 仕向	Remarks 備考
C7			C91-0720-05	CERAMIC	8.2PF	K		
C8			C91-0749-05	CERAMIC	220PF	K		
C10		*	CE04LW1H331M	ELECTRO	330UF	50WV		
C11			CC45FSL1H020C	CERAMIC	2.0PF	C	TE	
C12			CK45FB1H102K	CERAMIC	1000PF	K	TE	
C13			CK45FB1H102K	CERAMIC	1000PF	K	UUE	
C14			C91-0709-05	CERAMIC	1PF	M	UUE	
C14			C91-0713-05	CERAMIC	2.2PF	K	TE	
C15			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C16			CC45FUJ1H080D	CERAMIC	8.0PF	D		
C17			C91-0733-05	CERAMIC	33PF	J		
C18			CC45FSL1H150J	CERAMIC	15PF	J		
C19			C91-0713-05	CERAMIC	2.2PF	K		
C20			C91-0737-05	CERAMIC	47PF	J		
C21			CC45FSL1H101J	CERAMIC	100PF	J	TE	
C22			CK45FB1H102K	CERAMIC	1000PF	K		
C23 -25			CK45FF1H103Z	CERAMIC	0.010UF	Z	UUE	
C24 ,25			CK45FF1H103Z	CERAMIC	0.010UF	Z	TE	
C26			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C27 ,28			CE04LW1H010M	ELECTRO	1.0UF	50WV		
C29 ,30			CK45FF1H223Z	CERAMIC	0.022UF	Z		
C31			CC45FSL1H101J	CERAMIC	100PF	J		
C32 -34			CK45FF1H103Z	CERAMIC	0.010UF	Z	UUE	
C32 -35			CK45FF1H103Z	CERAMIC	0.010UF	Z	TE	
C36			C91-0085-05	CERAMIC	0.022UF	N		
C37			CE04LW1C220M	ELECTRO	22UF	16WV		
C38			C91-0769-05	CERAMIC	0.01UF	M		
C39			CE04LW1H2R2M	ELECTRO	2.2UF	50WV		
C40			CE04LW1H4R7M	ELECTRO	4.7UF	50WV		
C41			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C42			CE04LW1H4R7M	ELECTRO	4.7UF	50WV		
C43			C91-0085-05	CERAMIC	0.022UF	N		
C44			CF92FV1H153J	MF	0.015UF	J		
C45			CE04LW1V100M	ELECTRO	10UF	35WV		
C46			CE04LW1HR47M	ELECTRO	0.47UF	50WV		
C47			CK45FB1H561K	CERAMIC	560PF	K		
C48			CF92FV1H473J	MF	0.047UF	J		
C49			CC45FSL1H221J	CERAMIC	220PF	J	TE	
C50 ,51			CE04LW1C220M	ELECTRO	22UF	16WV	TE	
C52			C91-0769-05	CERAMIC	0.01UF	M		
C53			CC93FCH1H471J	CERAMIC	470PF	J		
C54 ,55			CC45FSL1H151J	CERAMIC	150PF	J	UUE	
C54 ,55			CK45FB1H102K	CERAMIC	1000PF	K	TE	
C56 ,57			CE04LW1HR33M	ELECTRO	0.33UF	50WV	UUE	
C56 ,57			CE04LW1H2R2M	ELECTRO	2.2UF	50WV	TE	
C58 ,59			CF92FV1H153J	MF	0.015UF	J	UUE	
C58 ,59			CF92FV1H472J	MF	4700PF	J	TE	
C60			CE04LW1HR47M	ELECTRO	0.47UF	50WV		
C61			CE04LW1H2R2M	ELECTRO	2.2UF	50WV		
C62			CE04LW1H3R3M	ELECTRO	3.3UF	50WV		
C63 ,64			CK45FF1H223Z	CERAMIC	0.022UF	Z	TE	
C64			CK45FF1H223Z	CERAMIC	0.022UF	Z	UUE	
C65 -67			C91-0085-05	CERAMIC	0.022UF	N	TE	
C67			C91-0085-05	CERAMIC	0.022UF	N	UUE	
C68			C91-0769-05	CERAMIC	0.01UF	M	TE	

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KT-2010/L

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C69			CC45FTH1H101J	CERAMIC	100PF	J	TE	
C70			CC45FCH1H151J	CERAMIC	150PF	J	TE	
C71			CC93FCH1H221J	CERAMIC	220PF	J	TE	
C72			CC93FCH1H391J	CERAMIC	390PF	J		
C73 ,74			CF92FV1H432J	MF	4300PF	J	UUE	
C75			CE04LW1V100M	ELECTRO	10UF	35WV		
C76 -78			CK45FB1H102K	CERAMIC	1000PF	K		
C79 ,80			CC45FCH1H220J	CERAMIC	22PF	J		
C81			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C82			CE04LW1A101M	ELECTRO	100UF	10WV		
C83 ,84			CE04LW1V100M	ELECTRO	10UF	35WV		
C85			CE04LW1C101M	ELECTRO	100UF	16WV		
C86			CE04LW1V100M	ELECTRO	10UF	35WV		
C87			CE04LW1C221M	ELECTRO	220UF	16WV		
C88			CE04LW1E221M	ELECTRO	220UF	25WV		
C89		*	CE04LW1E102M	ELECTRO	1000UF	25WV		
C90			CE04LW1E101M	ELECTRO	100UF	25WV		
C91			CE04LW1C470M	ELECTRO	47UF	16WV		
C92			CE04LW0J102M	ELECTRO	1000UF	6.3WV		
C93			C90-1400-05	NP-ELEC	10UF	50WV		
C95			CE04LW1H010M	ELECTRO	1.0UF	50WV		
C96 ,97			CC45FSL1H221J	CERAMIC	220PF	J	UUE	
C98			CE04LW1C220M	ELECTRO	22UF	16WV		
C99			CE04LW1V100M	ELECTRO	10UF	35WV		
C100			CE04LW0J222M	ELECTRO	2200UF	6.3WV		
C101			CE04LW1HR47M	ELECTRO	0.47UF	50WV		
C103			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C104			CE04LW1C101M	ELECTRO	100UF	16WV		
C106,107			CC45FCH1H330J	CERAMIC	33PF	J		
C108			C91-0709-05	CERAMIC	1PF	M	UUE	
C109,110			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C113,114			C91-0757-05	CERAMIC	1000PF	K		
C117			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C118,119			CC45FSL1H221J	CERAMIC	220PF	J	TE	
C120			CE04LW1V100M	ELECTRO	10UF	35WV		
C121			CK45FF1H473Z	CERAMIC	0.047UF	Z	UUE	
C122,123			C91-0769-05	CERAMIC	0.01UF	M	TE	
C123			C91-0769-05	CERAMIC	0.01UF	M	UUE	
C124			CK45FB1H471K	CERAMIC	470PF	K	UUE	
TC1			C05-0302-05	CERAMIC TRIMMER CAPACITOR(11PF				
TC2			C05-0097-05	CERAMIC TRIMMER CAPACITOR(30PF			TE	
TC3			C05-0303-05	CERAMIC TRIMMER CAPACITOR(20PF				
TC4			C05-0097-05	CERAMIC TRIMMER CAPACITOR(30PF			TE	
TC5			C05-0303-05	CERAMIC TRIMMER CAPACITOR(20PF				
CN1 ,2		*	E10-1206-05	FLAT CABLE CONNECTOR				
E1	2B		E20-0318-05	SCREW TERMINAL BOARD(2P)			TE	
E1	2B		E20-0449-05	SCREW TERMINAL BOARD(4P)			UUE	
E2	1B		E13-0235-05	PHONO JACK (2P)				
E3	1B		E11-0188-05	MINIATURE PHONE JACK			UUE	
		*	G11-1074-04	SOFT TAPE				
⚠ 25	1B	*	L01-5822-05	POWER TRANSFORMER			TE	
⚠ 25	1B	*	L01-5824-05	POWER TRANSFORMER			UUE	
⚠ 25	1B	*	L01-8692-05	POWER TRANSFORMER			TE	
⚠ 25	1B	*	L01-8694-05	POWER TRANSFORMER			UUE	

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CF1 ,2			L72-0531-05	CERAMIC FILTER	UUE	
CF1 ,2			L72-0536-05	CERAMIC FILTER	TE	
CF3			L72-0099-05	CERAMIC FILTER		
CF4			L72-0096-05	CERAMIC FILTER		
L1		*	L31-0594-05	FM-RF COIL		
L2			L31-0520-05	FM-RF COIL		
L3			L31-0580-05	FM-RF COIL		
L4			L31-0579-05	FM-RF COIL	UUE	
L4 ,5			L31-0579-05	FM-RF COIL	TE	
L6			L40-1092-17	SMALL FIXED INDUCTOR(1UH,M)		
L7			L32-0318-05	FM OSCILLATING COIL		
L8			L30-0427-15	FM IFT		
L9			L30-0439-15	FM IFT		
L10			L30-0362-05	AM IFT		
L11			L79-0125-05	LC FILTER	TE	
L12			L79-0750-05	LC FILTER	TE	
L13			L31-0499-05	LW-RF COIL	TE	
L14			L31-0509-05	MW-RF COIL		
L15			L32-0288-05	LW OSCILLATING COIL	TE	
L16			L32-0277-15	MW OSCILLATING COIL		
L17			L40-1021-14	SMALL FIXED INDUCTOR(1.0MH,K)		
L18 -20			L40-1092-17	SMALL FIXED INDUCTOR(1UH,M)	TE	
L18 ,19			L40-1092-17	SMALL FIXED INDUCTOR(1UH,M)	UUE	
X1			L77-1122-05	CRYSTAL RESONATOR		
X2			L77-1118-05	CRYSTAL RESONATOR		
CP2			R90-0482-05	MULTI-COMP 100KX4 J 1/6W		
CP1			R90-0805-05	MULTI-COMP 10KX8 J 1/4W		
R100			RD14GB2E220J	FL-PROOF RD 22 J 1/4W		
R101			RD14GB2E101J	FL-PROOF RD 100 J 1/4W		
R104,105			RD14GB2E101J	FL-PROOF RD 100 J 1/4W		
R123			RS14KB3A151J	FL-PROOF RS 150 J 1W	UUE	
R123			RS14KB3A181J	FL-PROOF RS 180 J 1W	TE	
R124			RS14KB3A821J	FL-PROOF RS 820 J 1W		
R171			RD14GB2E101J	FL-PROOF RD 100 J 1/4W		
R174			RS14KB3A681J	FL-PROOF RS 680 J 1W		
R196			RS14KB3A181J	FL-PROOF RS 180 J 1W		
VR1			R12-3126-05	TRIMMING POT. (10K)		
VR2			R12-3130-05	TRIMMING POT. (33K)		
VR3			R12-1089-05	TRIMMING POT. (4.7K)		
VR4			R12-5058-05	TRIMMING POT. (100K)	TE	
K1			S51-1052-05	MAGNETIC RELAY		
S1 -30	1A,2A		S40-1064-05	PUSH SWITCH	TE	
S1 ,2	1A		S40-1064-05	PUSH SWITCH	UUE	
S4 -30	1A,2A		S40-1064-05	PUSH SWITCH	UUE	
S31 -33	1B		S31-2132-05	SLIDE SWITCH	UUE	
S32	1B		S31-2132-05	SLIDE SWITCH	TE	
⚠ S34	1B		S31-2128-05	SLIDE SWITCH (POWER TYPE)	UUE	
D1 -4			KV1310-4	VARIABLE CAPACITANCE DIODE	TE	
D1 ,2			KV1310-3	VARIABLE CAPACITANCE DIODE	UUE	
D4			KV1310-3	VARIABLE CAPACITANCE DIODE	UUE	
D5 ,6			KV1236(Z2)	VARIABLE CAPACITANCE DIODE	TE	
D6			KV1236(Z2)	VARIABLE CAPACITANCE DIODE	UUE	
D7 -10			HSS104	DIODE		
D7 -10			1SS133	DIODE		

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D11 ,12			S5566B	DIODE		
D13 ,14			HSS104A	DIODE		
D13 ,14			1SS131	DIODE		
D15			HZS13N(B2)	ZENER DIODE		
D15			RD13ES(B2)	ZENER DIODE		
D16			HZS5.6N(B2)	ZENER DIODE		
D16			RD5.6ES(B2)	ZENER DIODE		
D17			HZS5.1N(B)	ZENER DIODE		
D17			RD5.1ES(B)	ZENER DIODE		
D18 -25			HSS104	DIODE	UUE	
D18 -25			1SS133	DIODE	UUE	
D18 -29			1SS133	DIODE	TE	
D18 -30			HSS104	DIODE	TE	
D28 ,29			HSS104	DIODE	UUE	
D28 ,29			1SS133	DIODE	UUE	
D30			S5566B	DIODE		
D32 -42			HSS104	DIODE	UUE	
D32 -42			1SS133	DIODE	UE	
D39 -41			HSS104	DIODE	TE	
D39 -42			1SS133	DIODE	TE	
FL1	2B		FIP12PM7	FLUORESCENT INDICATOR TUBE		
FL1			8-BT-70Z	FLUORESCENT INDICATOR TUBE		
IC1			LA1265	IC(FM/AM TUNER)		
IC2			AN7470	IC(FM MPX)		
IC3			LM7001	IC(PLL FREQUENCY SYNTHESIZER)		
IC4			CXP5016-210S	IC(MICROPROCESSOR)		
Q1			2SK241(Y)	FET	UUE	
Q1			3SK73(GR)	FET	TE	
Q2			2SC1923(Q)	TRANSISTOR		
Q3 ,4			2SC1923(R,Q)	TRANSISTOR		
Q5			2SK161(Y,GR)	FET	TE	
Q6			2SC1923(R,Q)	TRANSISTOR		
Q7			2SC1845(F,E)	TRANSISTOR	UUE	
Q7 ,8			2SC1845(F,E)	TRANSISTOR	TE	
Q8			2SC1740S(Q,R)	TRANSISTOR	UUE	
Q8			2SC945(A)(Q,P)	TRANSISTOR	UUE	
Q9			2SK163(L,M)	FET	TE	
Q10 -15			2SC1740S(Q,R)	TRANSISTOR	TE	
Q10 -15			2SC945(A)(Q,P)	TRANSISTOR	TE	
Q11 ,12			2SC1740S(Q,R)	TRANSISTOR	UUE	
Q11 ,12			2SC945(A)(Q,P)	TRANSISTOR	UUE	
Q16 ,17			2SK163(L,M)	FET	TE	
Q18 ,19			2SC1740S(Q,R)	TRANSISTOR		
Q18 ,19			2SC945(A)(Q,P)	TRANSISTOR		
Q20 ,21			2SA733(A)(Q,P)	TRANSISTOR		
Q20 ,21			2SA933S(Q,R)	TRANSISTOR		
Q22 ,23			2SD1302(S,T)	TRANSISTOR		
Q24			2SA733(A)(Q,P)	TRANSISTOR	UUE	
Q24			2SA933S(Q,R)	TRANSISTOR	UUE	
Q25			2SC1740S(Q,R)	TRANSISTOR	TE	
Q25			2SC945(A)(Q,P)	TRANSISTOR	TE	
Q26 ,27			2SA733(A)(Q,P)	TRANSISTOR		
Q26 ,27			2SA933S(Q,R)	TRANSISTOR		
Q28			2SD1266(Q,P)	TRANSISTOR		
Q29			2SA733(A)(Q,P)	TRANSISTOR		

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Q29			2SA933S(Q,R)	TRANSISTOR		
Q30			2SC1740S(Q,R)	TRANSISTOR		
Q30			2SC945(A)(Q,P)	TRANSISTOR		
Q31			2SC2003(L,K)	TRANSISTOR	TE	
Q31			2SD1266(Q,P)	TRANSISTOR	UUE	
Q32			2SA733(A)(Q,P)	TRANSISTOR		
Q32			2SA933S(Q,R)	TRANSISTOR		
Q33 ,34			2SC1740S(Q,R)	TRANSISTOR		
Q33 ,34			2SC945(A)(Q,P)	TRANSISTOR		
Q35 ,36			2SA733(A)(Q,P)	TRANSISTOR		
Q35 ,36			2SA933S(Q,R)	TRANSISTOR		

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SPECIFICATIONS

FM tuner section (IHF)

Tuning frequency range ..... 87.5 MHz – 108 MHz
Usable sensitivity (MONO) ..... 0.95 μV, 10.8 dBf
Total harmonic distortion (at 1 kHz)
MONO: ..... 0.3 %
STEREO: ..... 0.3 %
Signal-to-Noise ratio (at 1kHz, 65 dBf input)
MONO: ..... 76 dB
STEREO: ..... 73 dB
Alternate channel selectivity (±400 kHz) ..... 50 dB
Stereo separation (at 1 kHz) ..... 40 dB
Frequency response 30 Hz – 15 kHz ..... +0.5 dB, −2 dB
Output level/impedance (75 kHz dev.) ..... 0.6 V/3.3 kohms

MW tuner section (KT-2010L)

Tuning frequency range ..... 531 kHz – 1602 kHz
Usable sensitivity ..... 14 μV, 400 μV/m
Signal-to-Noise ratio (30% mod. 1mV input) ..... 50 dB
Total harmonic distortion ..... 0.6 %
Selectivity ..... 25 dB

LW tuner section (KT-2010L)

Tuning frequency range ..... 153 kHz – 281 kHz
Usable sensitivity ..... 17 μV, 800 μV/m
Signal-to-Noise ratio (30% mod. 1mV input) ..... 50 dB
Total harmonic distortion ..... 0.5 %
Selectivity ..... 30 dB

AM Tuner Section (KT-2010)

Tuning frequency range
531 kHz – 1,602 kHz ..... 9 kHz step
530 kHz – 1,610 kHz ..... 10 kHz step
Usable sensitivity ..... 14 μV, 400 μV/m
Signal-to-Noise ratio (30% mod. 1mV input) ..... 50 dB
Total harmonic distortion 0.5%
Image rejection ratio ..... 40 dB
Selectivity ..... 25 dB
Output level/impedance
(30% mod. 1mV input) ..... 0.18 V/3.3 kohms

General

Power consumption ..... 8 W
Dimensions ..... W: 440 mm (17-5/16")
H : 78 mm (3-1/16")
D : 267 mm (10-1/2")
Weight (Net) ..... 3.1 kg (6.8 lb)

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui doncerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige, Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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