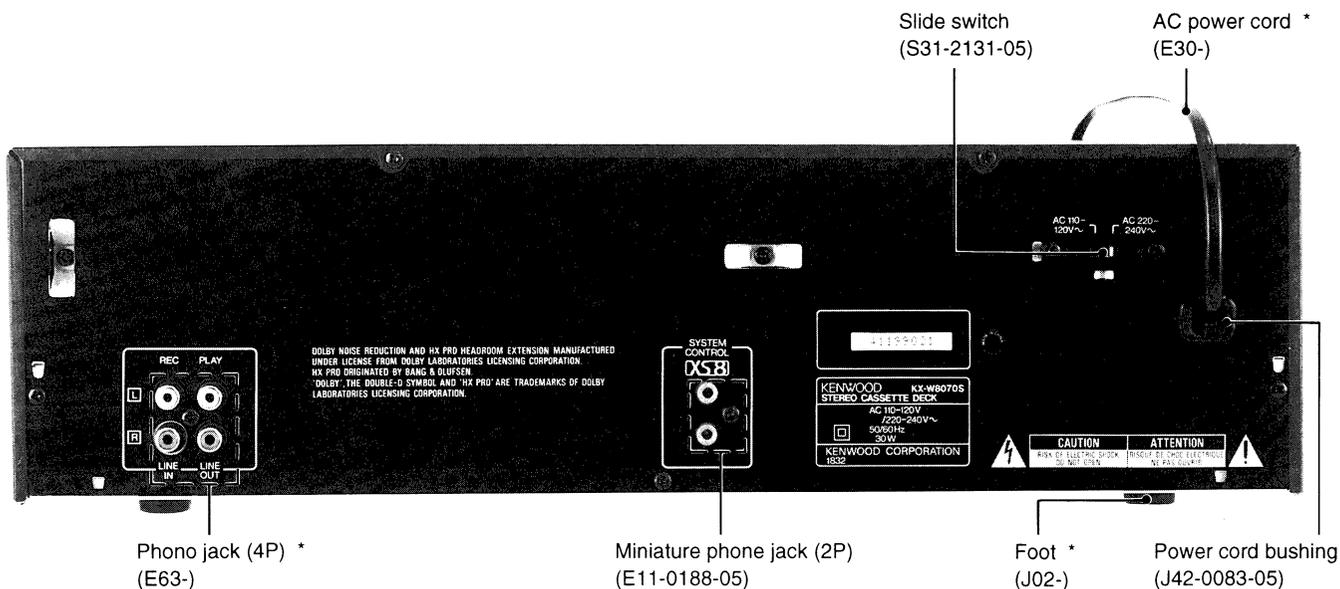
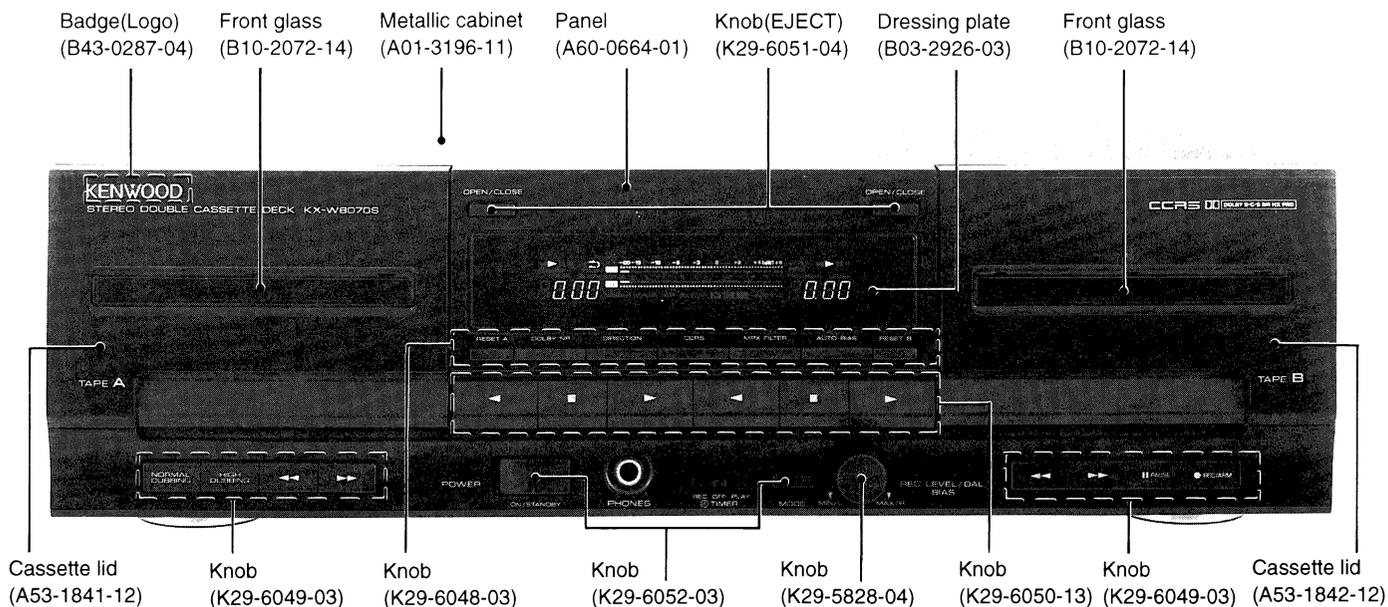


STEREO DOUBLE CASSETTE DECK  
**KX-W8070S**  
 SERVICE MANUAL

**KENWOOD**



\* Refer to parts list on page 35.

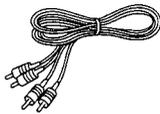
# KX-W8070S

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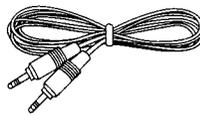
|                            |    |                        |            |
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### ACCESSORIES

Audio cord.....2  
(E30-0505-05)

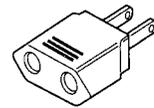


System control cord.....1  
(E30-2733-05)



Except for U.S.A., Mexico, Canada,  
U.K., Europe and Australia

AC plug adaptor.....1  
(E03-0115-05)



### INSTRUCTION MANUAL

|           | Parts No.   | Destination      |
|-----------|-------------|------------------|
| ENGLISH   | B60-1903-00 | K, P, Y, M, X, T |
| ENGLISH   | B60-1903-00 | E, R             |
| FRENCH    | B60-1904-00 | P, E             |
| CHINESE   | B60-1905-00 | M                |
| SPANISH   | B60-1906-00 | M, E, R          |
| DUT, ITA  | B60-1907-00 | E                |
| GERMANY   | B60-2128-00 | E, G             |
| TAIWANESE | B60-2130-00 | M                |

#### Beware of condensation

When water vapor comes into contact with the surface of cold material, water drops are produced.

If condensation occurs, correct operation may not be possible, or the unit may not function correctly.

This is not a malfunction, however, the unit should be dried. (To do this, turn the POWER switch ON and leave the unit as it is for several hours.)

Be especially careful in the following conditions:

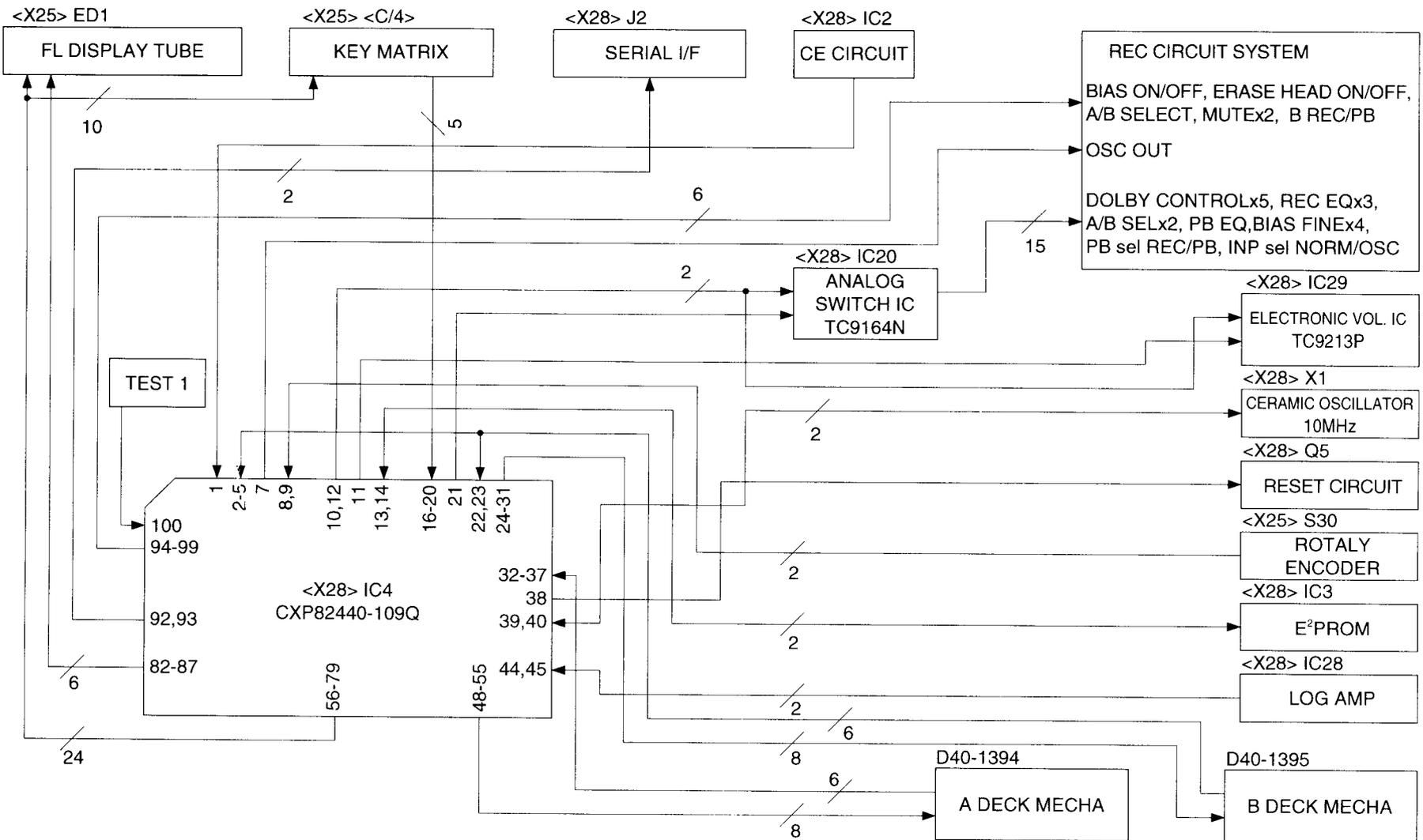
- When the unit is brought from a cold place to a warm place, and there is a large temperature difference.
- When a heater starts operating.
- When the unit is brought from an air-conditioned place to a place of high temperature with high humidity.
- When there is a large difference between the internal temperature of the unit and the ambient temperature, or in conditions where condensation occurs easily.



# KX-W8070S

## CIRCUIT DESCRIPTION

1. Microprocessor: periphery block diagram

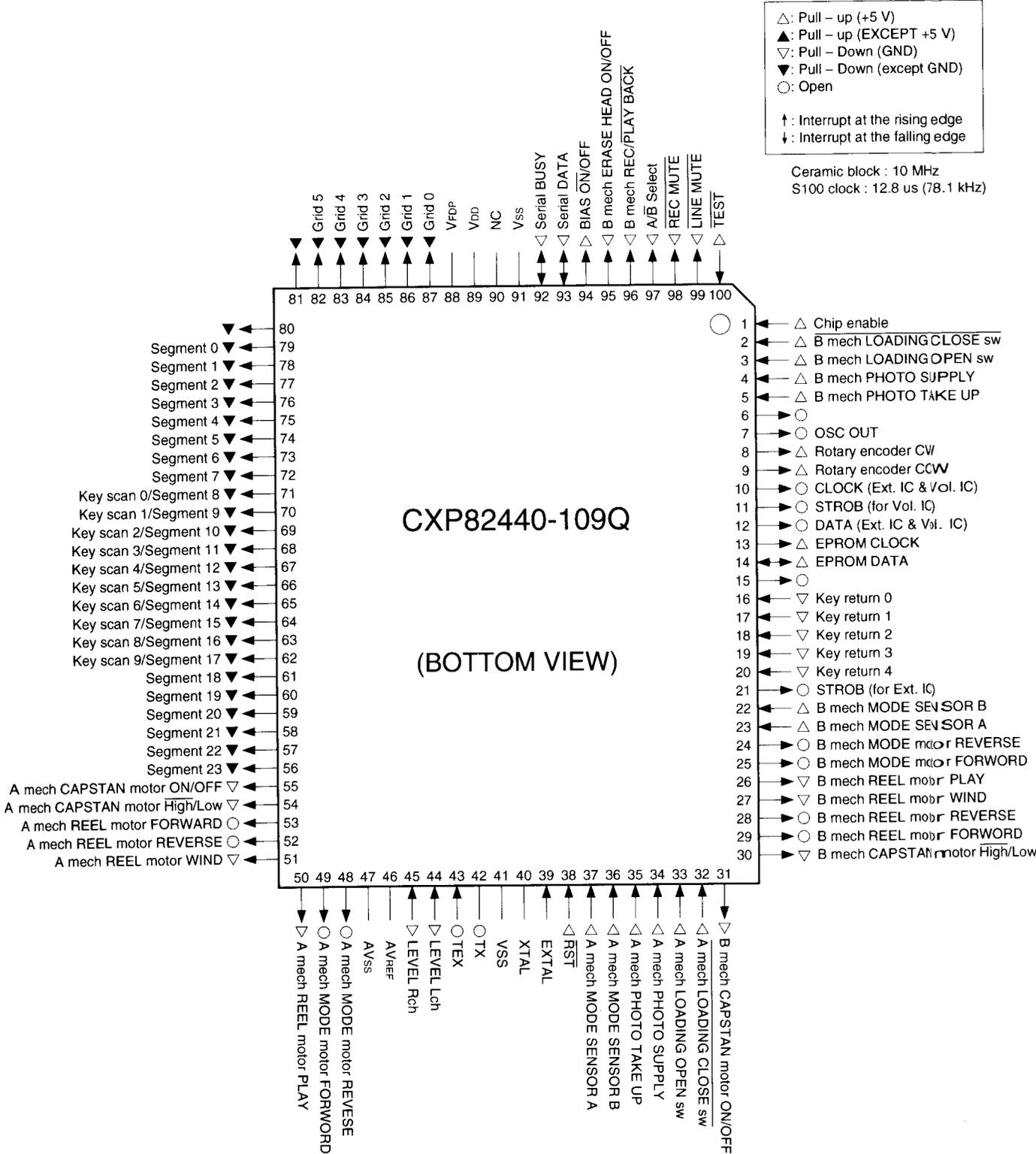


# KX-W8070S

## CIRCUIT DESCRIPTION

Microprocessor: CXP82440-109Q (x28:IC4)

μ Com port layout



# KX-W8070S

## CIRCUIT DESCRIPTION

### Pin Description

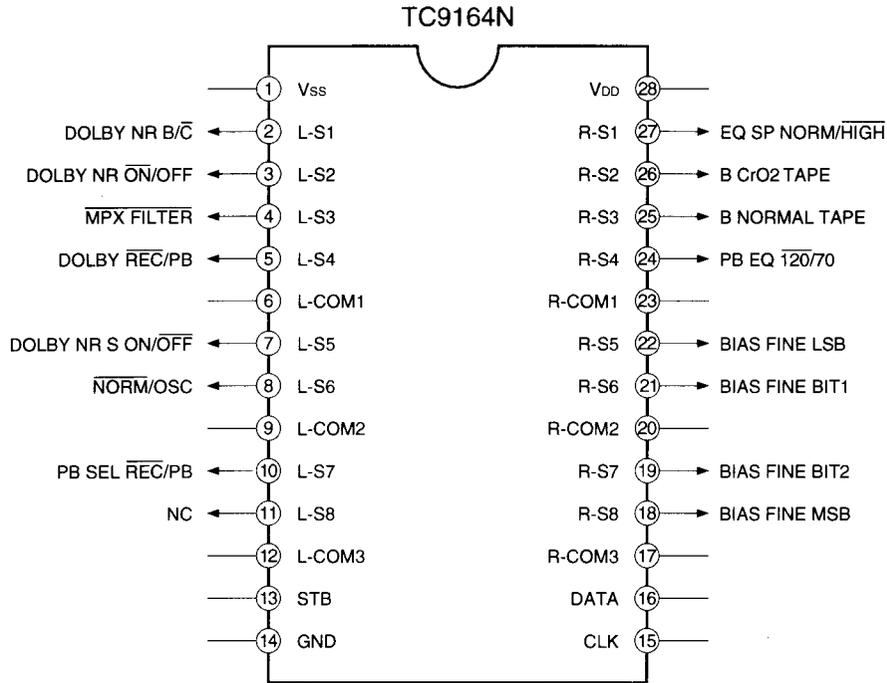
| NO. | Name                     | I/O | Description   |
|-----|--------------------------|-----|---|
| 1   | CHIP ENABLE              | I   | AC OFF detection  |
| 2   | B MECH LODING CLOSE SW   | I   | Loading closed switch of B mechanism. Low when this switch is ON  |
| 3   | B MECH LOADING OPEN SW   | I   | Loading open switch of B mechanism. High when this switch is ON   |
| 4   | B MECH PHOTO SUPPLY      | I   | Reel rotation pulse input on the supply side of B mechanism       |
| 5   | B MACH PHOTO TAKE UP     | I   | Reel rotation pulse input on the take-up side of B mechanism      |
| 6   | NC                       | O   | (Open)  |
| 7   | OSC OUT                  | O   | Rectangular wave output (400 Hz/12.5 kHz)                         |
| 8   | ROTARY ENCODER CW        | I   | Pulse input of rotary encoder                                     |
| 9   | ROTARY ENCODER CCW       | I   | Pulse input of rotary encoder                                     |
| 10  | SERIAL CLOCK             | O   | Clock for communication with volume IC and expansion IC           |
| 11  | SERIAL STB no.0          | O   | Strobe for communication with volume IC                           |
| 12  | SERIAL DATA              | O   | Data for communication with volume IC and expansion IC            |
| 13  | E2PROM CLOCK             | O   | Clock for communication with E2PROM                               |
| 14  | E2PROM DATA              | I/O | Data for communication with E2PROM                                |
| 15  | NC                       | O   | (Open)  |
| 16  | KEY RETURN 0             | I   | Key return input  |
| 17  | KEY RETURN 1             | I   | Key return input  |
| 18  | KEY RETURN 2             | I   | Key return input  |
| 19  | KEY RETURN 3             | I   | Key return input  |
| 20  | KEY RETURN 4             | I   | Key return input  |
| 21  | SERIAL STB no.1          | O   | Strobe for communication with expansion IC                        |
| 22  | B MECH MODE SENSOR B     | I   | Head position detection input for B mechanism                     |
| 23  | B MECH MODE SENSOR A     | I   | Head position detection input for B mechanism                     |
| 24  | B MODE MOTOR REVERSE     | O   | Head position movement motor's reverse rotation for B mechanism   |
| 25  | B MODE MOTOR FORWARD     | O   | Head position movement motor's forward rotation for B mechanism   |
| 26  | B REEL MOTOR PLAY        | O   | Reel play speed for B mechanism                                   |
| 27  | B REEL MOTOR WIND        | O   | Reel speed and rewind speed for B mechanism                       |
| 28  | B REEL MOTOR REVERSE     | O   | Reel's reverse rotation for B mechanism                           |
| 29  | B REEL MOTOR FORWARD     | O   | Reel's forward rotation for B mechanism                           |
| 30  | B MECH CAPSTAN SPEED     | O   | Capstan speed selection of B mechanism. Low when at high speed.   |
| 31  | B MECH CAPSTAN MOTOR     | O   | Capstan motor control for B mechanism. High when ON.              |
| 32  | A MECH LOADING CLOSE SW  | I   | Loading closed switch of A mechanism. Low when this switch is ON. |
| 33  | A MECH LOADING OPEN SW   | I   | Loading open switch of A mechanism. High when this switch is ON.  |
| 34  | A MECH PHOTO SUPPLY      | I   | Reel rotation pulse input on the supply side of A mechanism       |
| 35  | A MECH PHOTO TAKE UP     | I   | Reel rotation pulse input on the take-up side of A mechanism      |
| 36  | A MECH MODE SENSOR B     | I   | Head position detection input for B mechanism                     |
| 37  | A MECH MODE SENSOR A     | I   | Head position detection input for B mechanism                     |
| 38  | RESET                    | I   | Microcomputer reset pin   |
| 39  | EXTAL                    | I   | CERALOCK OSCILLATOR INPUT (Microcomputer operation clock)         |
| 40  | XTAL                     |     | CERALOCK OSCILLATOR INPUT (Microcomputer operation clock)         |
| 41  | V <sub>SS</sub>          |     | Microcomputer GND   |
| 42  | CRYSTAL OSCILLATOR INPUT |     | (Open)  |
| 43  | CRYSTAL OSCILLATOR INPUT | I   | (Open)  |

## CIRCUIT DESCRIPTION

| NO.   | Name                 | I/O | Description   |
|-------|----------------------|-----|---|
| 44    | LEVEL L CHANNEL      | I   | Sound signal. L-channel input.                                  |
| 45    | LEVEL R CHANNEL      | I   | Sound signal. R-channel input.                                  |
| 46    | AV <sub>REF</sub>    |     | Reference voltage for A/D converter                             |
| 47    | AV <sub>SS</sub>     |     | Reference ground for A/D converter                              |
| 48    | A MODE MOTOR REVERSE | O   | Head position movement motor's reverse rotation for A mechanism |
| 49    | A MODE MOTOR FORWARD | O   | Head position movement motor's forward rotation for A mechanism |
| 50    | A REEL MOTOR PLAY    | O   | Reel play speed for A mechanism                                 |
| 51    | A REEL MOTOR WIND    | O   | Reel speed and rewind speed for A mechanism                     |
| 52    | A REEL MOTOR REVERSE | O   | Reel's reverse rotation for A mechanism                         |
| 53    | A REEL MOTOR FORWARD | O   | Reel's forward rotation for A mechanism                         |
| 54    | A MECH CAPSTAN SPEED | O   | Capstan speed selection of A mechanism. Low when at High speed  |
| 55    | A MECH CAPSTAN MOTOR | O   | Capstan motor control for A mechanism. High when ON             |
| 56~63 | FDP SEGMENT 23~16    | O   | FDP segment: 23~16  |
| 64    | FDP SEGMENT 15       | O   | FDP segment: 15. Hardware key scan 7                            |
| 65    | FDP SEGMENT 14       | O   | FDP segment: 14. Hardware key scan 6                            |
| 66    | FDP SEGMENT 13       | O   | FDP segment: 13. Hardware key scan 5                            |
| 67    | FDP SEGMENT 12       | O   | FDP segment: 12. Hardware key scan 4                            |
| 68    | FDP SEGMENT 11       | O   | FDP segment: 11. Hardware key scan 3                            |
| 69    | FDP SEGMENT 10       | O   | FDP segment: 10. Hardware key scan 2                            |
| 70    | FDP SEGMENT 9        | O   | FDP segment: 9. Hardware key scan 1                             |
| 71    | FDP SEGMENT 8        | O   | FDP segment: 8. Hardware key scan 0                             |
| 72~79 | FDP SEGMENT 7~0      | O   | FDP segment: 7~0  |
| 80    | NC                   | O   | (Open)  |
| 81    | NC                   | O   | (Open)  |
| 82    | FDP GRID 5           | O   | FDP grid: 5   |
| 83    | FDP GRID 4           | O   | FDP grid: 4   |
| 84    | FDP GRID 3           | O   | FDP grid: 3   |
| 85    | FDP GRID 2           | O   | FDP grid: 2   |
| 86    | FDP GRID 1           | O   | FDP grid: 1   |
| 87    | FDP GRID 0           | O   | FDP grid: 0   |
| 88    | V <sub>FDP</sub>     |     | FDP display power (-30 V)                                       |
| 89    | V <sub>DD</sub>      |     | Microcomputer power   |
| 90    | NC                   |     | (V <sub>DD</sub> )  |
| 91    | V <sub>SS</sub>      |     | Microcomputer GND   |
| 92    | SYNCRO BUSY          | I/O | Communication busy between serial equipment                     |
| 93    | SUNCRO DATA          | I/O | Communication busy between serial equipment                     |
| 94    | BIAS                 | O   | Recording bias control of REC/PB head. Low when ON.             |
| 95    | B MECH ERASE HEAD    | O   | Erase head control of B mechanism. High when ON.                |
| 96    | B MECH REC/PB        | O   | REC/PB selection control of B mechanism. Low when in REC.       |
| 97    | A/B DECK SELECT      | O   | PB output selection of A/B deck. High for A deck.               |
| 98    | REC MUTE             | O   | REC mute control. Low when ON.                                  |
| 99    | LINE MUTE            | O   | Line mute control. Low when ON.                                 |
| 100   | TEST                 | I   | Test pin. Enters TEST when Low.                                 |

# KX-W8070S

## CIRCUIT DESCRIPTION



### Pin Description of Expansion IC

| NO. | Pin name        | I/O | Name                             | Description                         |
|-----|-----------------|-----|----------------------------------|-------------------------------------|
| 1   | V <sub>ss</sub> |     |                                  |                                     |
| 2   | L-S1            | O   | DOLBY NR B/ $\overline{C}$       | Low for DOLBY NR C type only.       |
| 3   | L-S2            | O   | DOLBY NR $\overline{ON/OFF}$     | DOLBY selection. OFF for S type.    |
| 4   | L-S3            | O   | $\overline{MPX ON/OFF}$          | MPX filter selection                |
| 5   | L-S4            | O   | DOLBY $\overline{REC/PB}$        | REC/PB selection                    |
| 6   | L-COM1          |     |                                  |                                     |
| 7   | L-S5            | O   | DOLBY NR S/ $\overline{OTHERS}$  | DOLBY S selection                   |
| 8   | L-S6            | O   | $\overline{NORMAL/OSC OUT}$      | Source selection                    |
| 9   | L-COM2          |     |                                  |                                     |
| 10  | L-S7            | O   | PB SELECTOR $\overline{REC/PB}$  | Selection of PB selector circuit    |
| 11  | L-S8            | O   |                                  |                                     |
| 12  | L-COM3          |     |                                  |                                     |
| 13  | STB             |     |                                  |                                     |
| 14  | GND             |     |                                  |                                     |
| 15  | CLK             |     |                                  |                                     |
| 16  | DATA            |     |                                  |                                     |
| 17  | R-COM3          |     |                                  |                                     |
| 18  | R-S8            | O   | BIAS FINE MSB                    | Bias variable. bit 3                |
| 19  | R-S7            | O   | BIAS FINE                        | bit 2                               |
| 20  | R-COM2          |     |                                  |                                     |
| 21  | R-S6            | O   | BIAS FINE                        | bit 1                               |
| 22  | R-S5            | O   | BIAS FINE LSB                    | bit 0                               |
| 23  | R-COM1          |     |                                  |                                     |
| 24  | R-S4            | O   | $\overline{120u/70u}$            | PB equalizer selection              |
| 25  | R-S3            | O   | $\overline{NORMAL/METAL}$        | Tape type selection                 |
| 26  | R-S2            | O   | $\overline{CrO2/METAL}$          | Tape type selection                 |
| 27  | R-S1            | O   | $\overline{EQUALIZER HIGH/NORM}$ | Selection of equalizer's tape speed |
| 28  | V <sub>dd</sub> |     |                                  |                                     |



## CIRCUIT DESCRIPTION

### 3. OPERATION SPECIFICATION MANUAL

#### 3-1. Function Description

Control microcomputer of two-head dual cassette deck (KX-W8070S)

##### 3-1-1. Features

- 1) Three-motor, two-head single capstan mechanism
- 2) AUTO BIAS (Deck B only)
- 3) DPSS
- 4) CCRS
- 5) DOLBY noise reduction B/C/S (HX-PRO) is installed.
- 6) XS8

##### 3-1-2. Controlled Equipment

- 1) Cassette mechanism GKS-7100 x 2
- 2) Display FL display tube FIP6AMW6
- 3) Volume IC TC9213P
- 4) Analog switch IC TC9164N
- 5) REC/PB circuit unit (X28-2710-XX)

##### 3-1-3. Microcomputer Used

CXP82440-109Q

#### 3.2 Initial State

The data to be backed up and the initial state of the main unit are as shown below.

| Item                  | State                |
|-----------------------|----------------------|
| POWER                 | STANDBY              |
| DOLBY                 | OFF                  |
| MPX FILTER            | OFF                  |
| AUTO BIAS             | OFF                  |
| Counter block display | Tape counter         |
| Bias value            | Center (Display 0)   |
| REC level             | -15 dB (Display -15) |
| REC balance           | Center               |
| Serial mode           | No setting *1        |

\*1 For no setting, the serial mode is set by the diode shorting between the KS5 KR2 pins in a key matrix. (The factory setting is based on an 8-bit format.)

※The initial state is entered when the AC power is turned ON while pressing the stop key of deck B.

#### 3-3. Test Mode

##### • Setting

The test mode is entered when the two pins above are shorted using a diode (TP⑤ → TP④) and when the power is turned on.

##### • Cancellation

The test mode is canceled when the PAUSE key is set to ON or the AC power is turned OFF. The contents of data that was changed in the test mode are not backed up.

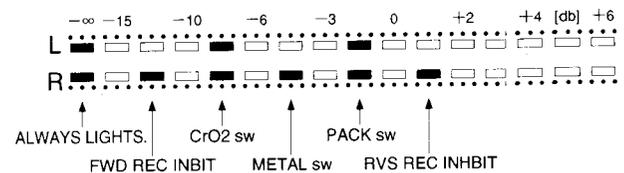
#### 3-3-1. TEST Specification

##### 1) All-light indicators

All the indicators are turned ON 500 ms after the power is turned on and light for about 1.5 seconds.

##### 2) Mechanical switch indicator\*

For each mechanical switch setting, deck A of a level meter is displayed in channel R and deck B is displayed in channel L when line muting is ON.

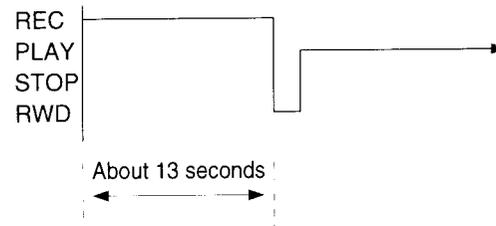


##### 3) Direct change

The REC state is directly entered even in the PLAY state.

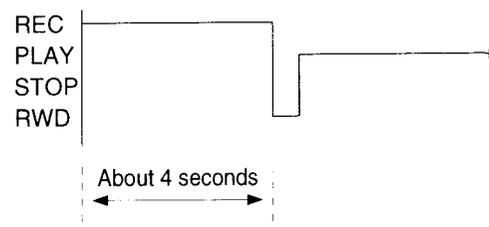
##### 4) 13-second REC

The REC state is entered for 13 seconds when the timer switch is set to REC during TEST1 activation and when there is a cassette half. The tape is automatically rewound and played back in this case. The DOLBY mode in the REC and PB state can be changed.



##### 5) 4-second REC

The REC state is entered for four seconds when the REC key is pressed. The tape is automatically rewound and played back in this case. The REC state is entered for four seconds again when the REC key is pressed in the REC state again. The DOLBY mode in the REC and PB state can be changed.



##### 6) AUTO BIAS

The auto bias shortens the setup time. It shortens the first arm time from 10 seconds to 3 seconds. Line muting is turned OFF during auto bias setting.

# KX-W8070S

## CIRCUIT DESCRIPTION

7) PB at 1.5 times normal speed/constant speed  
The tape is played back in the forward direction at 1.5 times the normal speed from the STOP or PLAY mode when the FF key is pressed. The change between the constant speed and two times normal speed in the PLAY state is performed at only the tape speed. The head does not go down in this case.

8) REC electronic volume  
The volume changes in the range of  $-\infty$ , -15, and 0 when the rotary encoder is turned upward.  
The volume changes in the range of 0, -15, and  $-\infty$  when the rotary encoder is turned downward.

9) CCRS  
The REC PAUSE state is entered when the CCRS key is pressed. The REC level is set in this case. The CCRS key blinks during REC level setting.

### 3-3-3 Synchro Test of Deck Block (16-Bit Format)

- Deck synchro test code (E0xxH)

- Synchro test ON  
The synchro test is turned ON using a synchro test ON code (40H) when the deck power is turned ON.

- Synchro test OFF  
The synchro test is turned OFF using a synchro test OFF code (41H). As a result, the state before synchro test is returned. Since the backup state is canceled, the initial value is set in a backup area when the power is turned OFF next.

\*All the keys of the main unit are disabled when the synchro test mode is entered.

- DOLBY control (Low-order code)

DOLBY OFF: 37H  
DOLBY B ON: 38H  
DOLBY C ON: 39H  
DOLBY S ON: 3DH

- Enable/ignore of tape selector (mechanical tape discrimination leaf switch)

Tape selector ON code (42H)  
Enables the leaf switch of the mechanism.  
Tape selector OFF code (43H)  
Ignores the leaf switch of the mechanism.

- The selector is changed by the codes below after the above OFF code (43H) was input when the tape selector is changed by a serial code.

NORMAL (29H)  
CrO2 (2AH)  
METAL (2BH)

- Synchronous mode selection

The synchronous mode is changed from 8 bits to 16 bits and from 16 bits to 8 bits. For 16 bits, the mode is selected by inputting E04EH. For 8 bits, the mode is selected by inputting FFH. However, the synchro test mode is not canceled even if the mode is changed.

- Code exclusively used for 4-second REC and 13-second REC

Reel pulse counter reset (47H)

The reel pulse counter is reset (0000) when deck B is in the REC state.

Reverse rewinding (48H)

The tape is rewound in the direction opposite to the current tape transport direction. The reel pulse counter is put into the count-down operation state.

Reverse play in reel pulse reset position (49H)

The tape is reversed and played back in the reel pulse counter reset position (where 47H is inserted).

- Procedure of 4-second REC and 13-second REC operations

1) B REC (25H) input

Deck B is put into the REC state.

2) Reel pulse counter reset (47H) input

The reel pulse counter is reset (0000) to determine the rewind position. In this case, an external timer is started to measure the REC time.

3) Rewind (48H) input after REC operation for the desired time period

The tape is reversed, and the deck is put into the rewind operation state at two times the normal speed. The reel pulse counter is put into the count-down operation state. After that, perform step (4).

4) Reverse play (49H) input in reel pulse counter reset position

The tape is reversed to the reset position (counter 0000) after the count-down operation is completed, and the deck is put into the play operation state.

This operation mode is canceled when mechanical operation codes other than described above are input during a series of operation. Normal operation may not be performed in this case.

## CIRCUIT DESCRIPTION

### SYNCHRO CORD LIST (16-bit)

|                    | Low-order code |
|--------------------|----------------|
| A FWD PLAY         | 10H            |
| A RVS PLAY         | 11H            |
| A FF               | 12H            |
| A RWD              | 13H            |
| A STOP             | 14H            |
|                    | 15H            |
|                    | 16H            |
| A NORMAL SPEED     | 17H            |
| A HIGH SPEED       | 18H            |
| A NORMAL TAPE POS. | 19H            |
| A CrO2 TAPE POS.   | 1AH            |
| A METAL TAPE POS.  | 1BH            |
|                    | 1CH            |
|                    | 1DH            |
|                    | 1EH            |
|                    | 1FH            |

|                    | Low-order code |
|--------------------|----------------|
| B FWD PLAY         | 20H            |
| B RVS PLAY         | 21H            |
| B FF               | 22H            |
| B RWD              | 23H            |
| B STOP             | 24H            |
| B REC              | 25H            |
| B PAUSE            | 26H            |
| B NORMAL SPEED     | 27H            |
| B HIGH SPEED       | 28H            |
| B NORMAL TAPE POS. | 29H            |
| B CrO2 TAPE POS.   | 2AH            |
| B METAL TAPE POS.  | 2BH            |
| B FWD REC          | 2CH            |
| B RVS REC          | 2DH            |
|                    | 2EH            |
|                    | 2FH            |

|                    | Low-order code |
|--------------------|----------------|
| CCRS               | 30H            |
|                    | 31H            |
|                    | 32H            |
| AUTO BIAS          | 33H            |
|                    | 34H            |
| NORM SPEED DUBBING | 35H            |
| HIGH SPEED DUBBING | 36H            |
| DOLBY NR OFF       | 37H            |
| DOLBY NR B ON      | 38H            |
| DOLBY NR C ON      | 39H            |
| ONE WAY MODE       | 3AH            |
| REVERSE MODE       | 3BH            |
| ENDLESS MODE       | 3CH            |
| DOLBY NR S ON      | 3DH            |
|                    | 3EH            |
|                    | 3FH            |

|                    | Low-order code |
|--------------------|----------------|
| SYNCHRO TEST ON    | 40H            |
| SYNCHRO TEST OFF   | 41H            |
| TAPE SELECTOR ON   | 42H            |
| TAPE SELECTOR OFF  | 43H            |
| REC VOLUME MAXIMUM | 44H            |
| REC VOLUME CENTER  | 45H            |
| REC VOLUME MINIMUM | 46H            |
| *1                 | 47H            |
| *2                 | 48H            |
| *3                 | 49H            |
| MPX ON             | 4AH            |
| MPX OFF            | 4BH            |
|                    | 4CH            |
|                    | 4DH            |
| SYNCHRO 8bit MODE  | 4EH            |
|                    | 4FH            |

\*1: Sets the internal tape counter to "0000". (Memorizes the start position.)

\*2: Rewinds in the PLAY state of 1.5 times the normal speed.

\*3: Performs the PLAY operation when the internal tape counter is set to "0000".

# KX-W8070S

## CIRCUIT DESCRIPTION

### 3-3-4 Synchro Test of Deck Block (8-Bit Format)

The operation description is the same as in a 16-bit format. However, since the number of codes is small, the code that does not correspond exists in an 8-bit format.

#### SYNCHRO CORD LIST (8bit)

|                  | CORD |
|------------------|------|
| SYNCHRO TEST ON  | 70H  |
| SYNCHRO TEST OFF | 71H  |
|                  | 72H  |
|                  | 73H  |
|                  | 74H  |
|                  | 75H  |
|                  | 76H  |
|                  | 77H  |
|                  | 78H  |
|                  | 79H  |
|                  | 7AH  |
|                  | 7BH  |
|                  | 7CH  |
|                  | 7DH  |
|                  | 7EH  |
|                  | 7FH  |

|                    | CODE |
|--------------------|------|
| A FWD PLAY         | E0H  |
| A RVS PLAY         | E1H  |
| A FF               | E2H  |
| A RWD              | E3H  |
| A STOP             | E4H  |
| DOLBY NR OFF       | E5H  |
| DOLBY NR C ON      | E6H  |
| ONE WAY MODE       | E7H  |
| ENDLESS MODE       | E8H  |
|                    | E9H  |
| A NORMAL SPEED     | EAH  |
| A HIGH SPEED       | EBH  |
| REC VOLUME MAXIMUM | ECH  |
| REC VOLUME CENTER  | EDH  |
| REC VOLUME MINIMUM | EEH  |
|                    | EFH  |

|                    | CODE |
|--------------------|------|
| B FWD PLAY         | F0H  |
| B RVS PLAY         | F1H  |
| B FF               | F2H  |
| B RWD              | F3H  |
| B STOP             | F4H  |
| B REC              | F5H  |
| CCRS               | F6H  |
|                    | F7H  |
| NORM SPEED DUBBING | F8H  |
| HIGH SPEED DUBBING | F9H  |
| B NORMAL SPEED     | FAH  |
| B HIGH SPEED       | FBH  |
| *1                 | FCH  |
| *2                 | FDH  |
| *3                 | FEH  |
| SYNCHRO 16bit MODE | FFH  |

\*1: Sets the internal tape counter to "0000". (Memorizes the start position.)

\*2: Rewinds in the PLAY state of 1.5 times the normal speed.

\*3: Performs the PLAY operation when the internal tape counter is set to "0000".

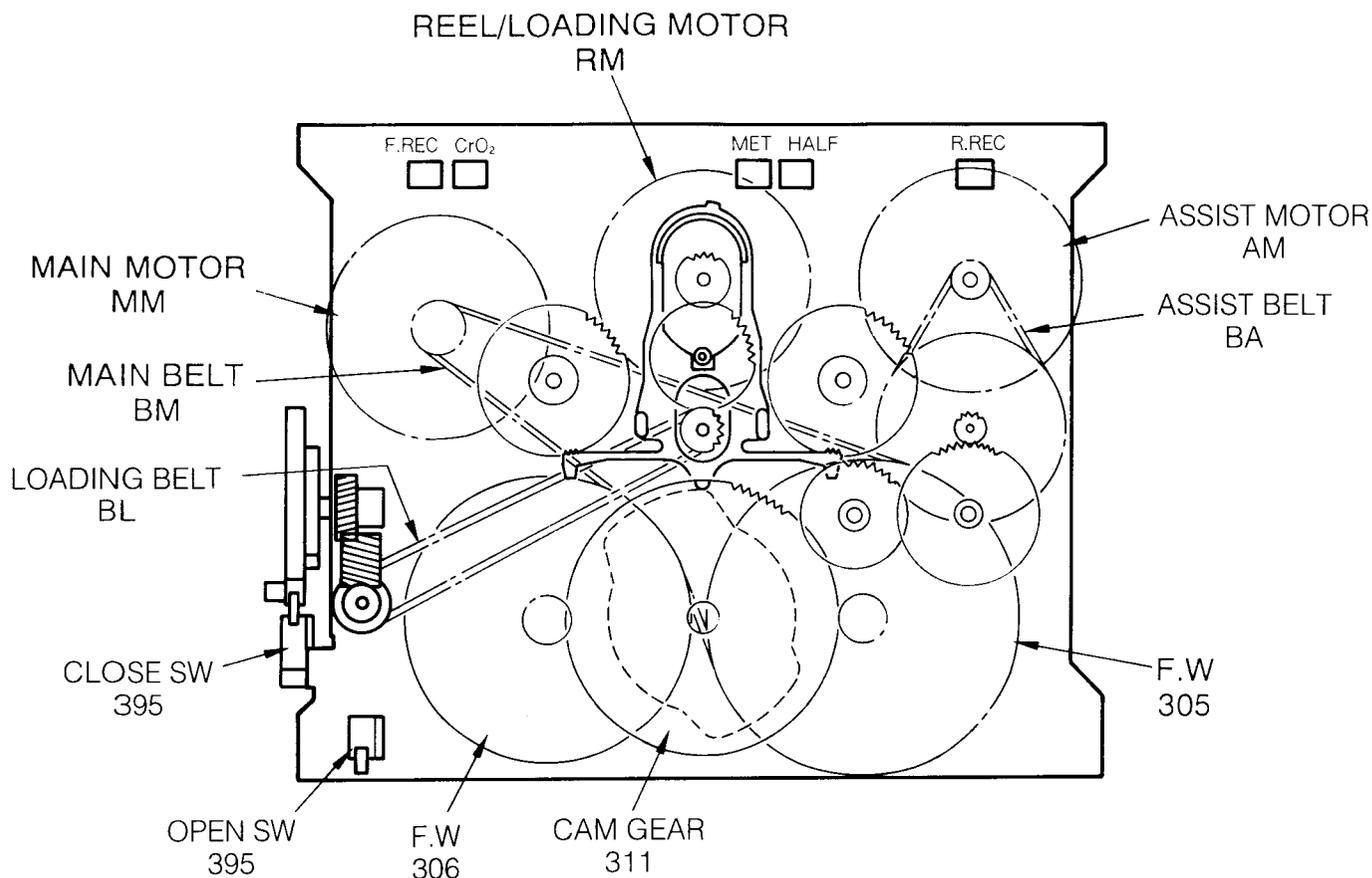
## CIRCUIT DESCRIPTION

### 4. KEY MATRIX

|     | KS0                | KS1  | KS2                | KS3                | KS4        | KS5                  | KS6               | KS7                   | KS8               | KS9                  |
|-----|--------------------|------|--------------------|--------------------|------------|----------------------|-------------------|-----------------------|-------------------|----------------------|
| KR7 |                    |      |                    |                    |            |                      |                   |                       |                   |                      |
| KR6 |                    |      |                    |                    |            |                      |                   |                       |                   |                      |
| KR5 |                    |      |                    |                    |            |                      |                   |                       |                   |                      |
| KR4 |                    |      |                    |                    |            |                      |                   |                       |                   | B MECH<br>METAL SW   |
| KR3 |                    | MPX  | A DECK<br>STOP     | B DECK<br>FWD PLAY | MODE       |                      | B DECK<br>FF      | B DECK<br>PAUSE       | A MECH<br>PACK SW | B MECH<br>PACK SW    |
| KR2 | DIRECTION          | CCRS | A DECK<br>RVS PLAY | B DECK<br>STOP     | TIMER REC  | SYNCRO<br>16bit      | B DECK<br>RWD     | B DECK<br>REC         |                   | B MECH<br>RVS REC SW |
| KR1 | DOLBY NR           |      | B COUNTER<br>RESET | B DECK<br>RVS PLAY | TIMER PLAY | B DECK<br>OPEN/CLOSE | NORMAL<br>DUBBING | HIGH SPEED<br>DUBBING |                   | B MECH<br>FWD REC SW |
| KR0 | A COUNTER<br>RESET |      | AUTO BIAS          | A DECK<br>FWD PLAY | POWER      | A DECK<br>OPEN/CLOSE | A DECK<br>RWD     | A DECK<br>FF          | A MECH<br>Cr02 SW | B MECH<br>Cr02 SW    |

# KX-W8070S

## MECHANISM OPERATION DESCRIPTION

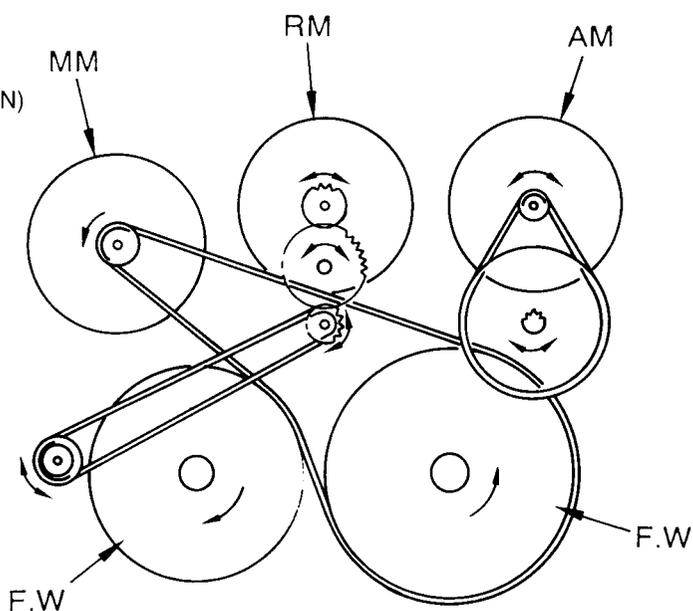


### Mechanism specification

#### Use of parts

|    |             |                         |
|----|-------------|-------------------------|
| MM | T42-0635-08 | DC MOTOR ASSY (CAPSTAN) |
| RM | T42-0629-08 | DC MOTOR ASSY           |
| AM | T42-0630-08 | DC MOTOR ASSY           |
| BM | D16-0346-08 | MAIN BELT               |
| BA | D16-0389-08 | ASSIST BELT             |
| BL | D16-0340-08 | LOADING BELT            |

PLAY Torque: 35 ~ 55 g·cm  
 FF/RWD Torque: 70 ~ 160 g·cm  
 Back Tension Torque: 2 ~ 5 g·cm



# KX-W8070S

## MECHANISM OPERATION DESCRIPTION

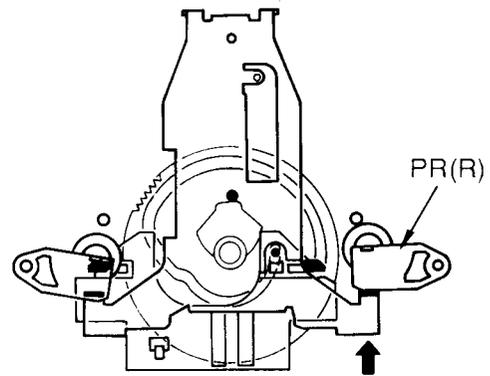
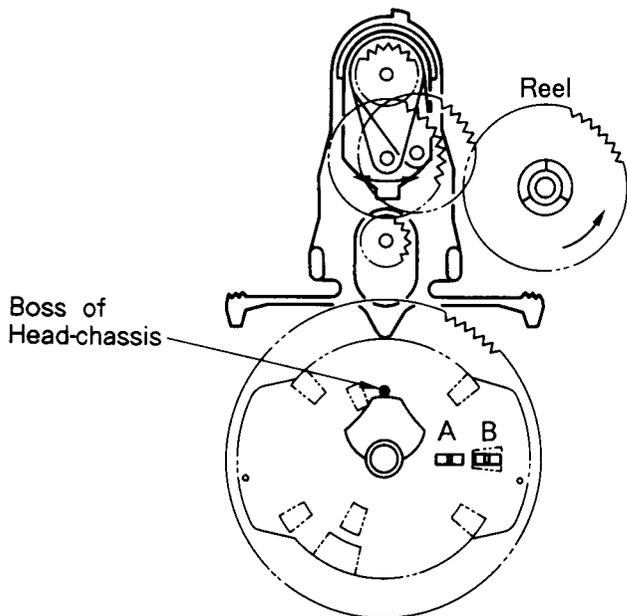
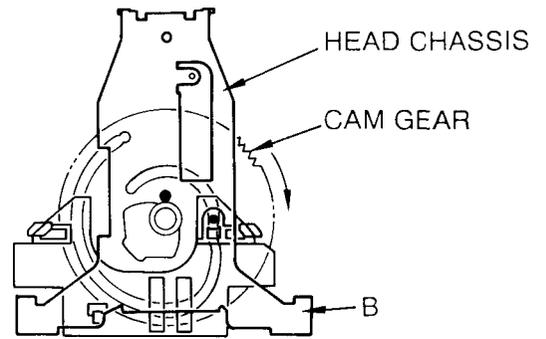
### PLAY/REC

- ① Rotate the assist motor, and adjust the cam gear by watching the state of the mechanism position detection SW.

A OFF H B ON L corresponds to the PLAY/REC position.

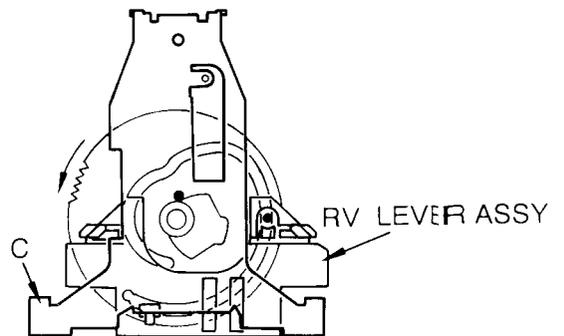
At this position the pulley is engaged with the reel, and the tape is wound by the rotation of the reel motor.

The head is raised by the cam of the cam gear, and the deck is in the PLAY/REC mode.

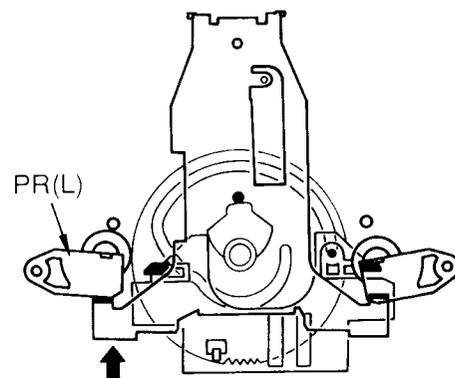


(FWD PLAY/REC)

- ② The head chassis is raised up to the PLAY/REC position due to the rotation of the CAM GEAR, but the bent portion B pushes the spring of the pinch roller ASSY (R) up, and the pinch roller (R) is pushed against the capstan of the FWD side.



- ③ The RV LEVER ASSY is moved to the RVS position, and the head chassis is raised up to the PLAY/REC position, due to the rotation of the CAM GEAR. The bent portion C pushes the spring of the pinch roller ASSY (L) UP, the pinch roller is pushed against the capstan, and the mechanism gets in the RVS PLAY/REC operation mode.



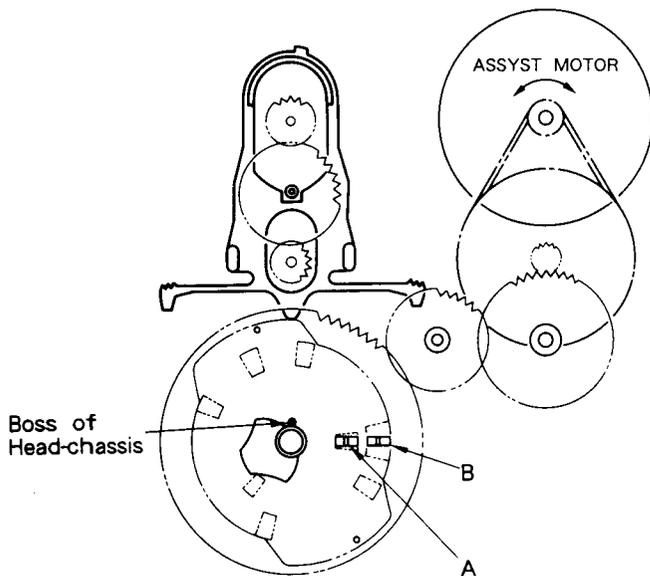
(RVS PLAY/REC)

# KX-W8070S

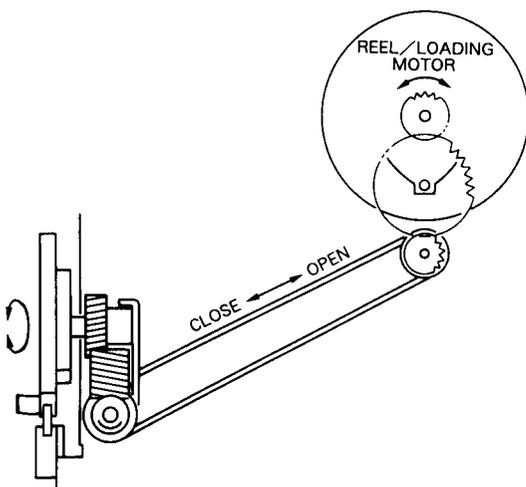
## MECHANISM DESCRIPTION

### STOP/OPEN/CLS

- The assist motor rotates, and sets the mechanism to the STOP position by watching the state of the mechanism position detection SW. Both mechanism position detection SW A and B stop at the ON position. The brake ASSY is pushed up, and the reel idler is fixed. The head is pushed down, because the cam of the cam gear is at the position shown in the figure.

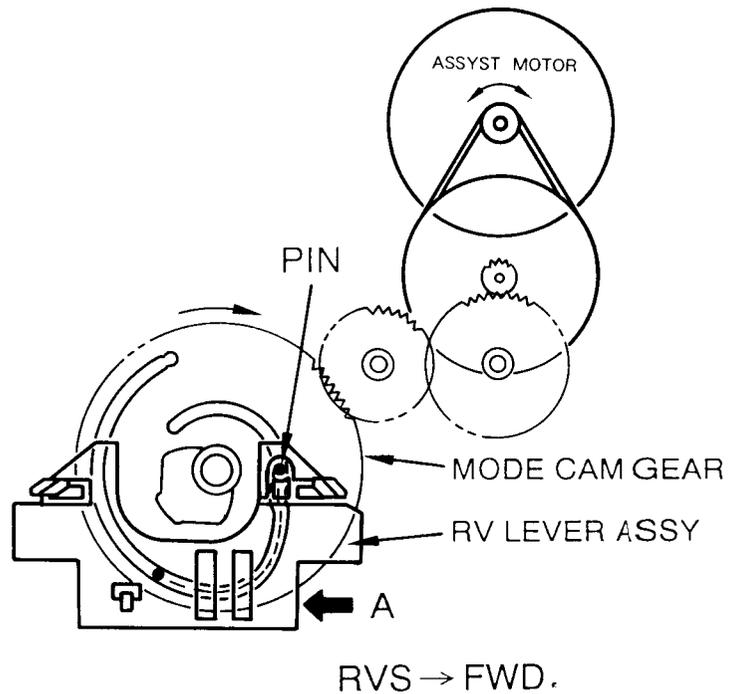


- The rotation of the reel motor rotates the OPEN/CLOSE pulley via reel idler.

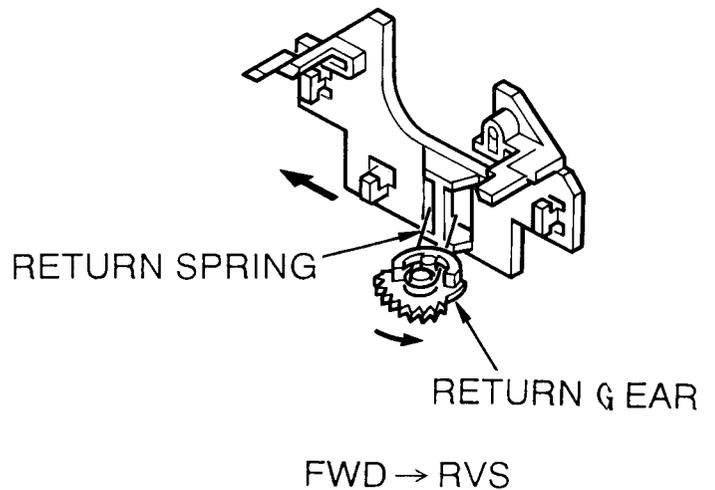


### DIRECTION SELECT

- Since the MODE CAM GEAR rotates and the RV LEVER PIN is pushed against the groove of the CAM GEAR as a result of the rotation of the ASSIST MOTOR, the RV LEVER ASSY moves in the direction of the arrow A.



- The return spring is pushed, and furthermore the return gear is rotated, due to the movement of the RV LEVER ASSY. As a result, the HEAD ASSY gets at the FWD position.



- The FWD → RVS switching operation is the opposite.



## MECHANISM DESCRIPTION

### FF/RWD

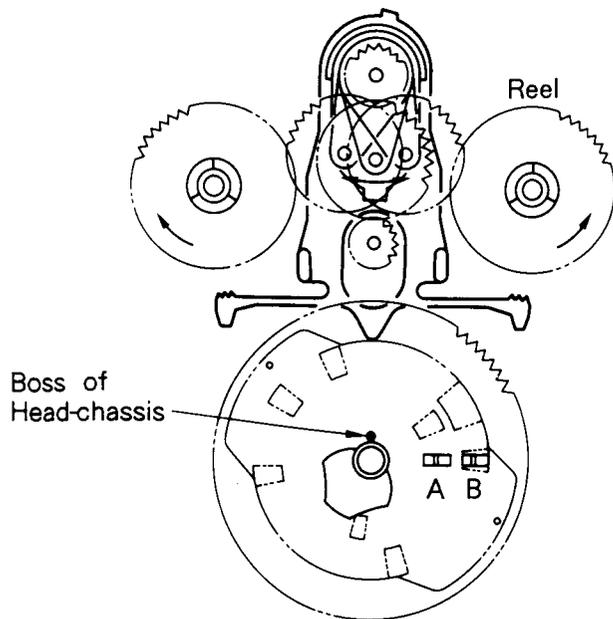
④ The cam gear is adjusted by the rotation of the assist motor.

A OFF B ON

The cam bear is at the position shown in the figure, and the head is lowered.

Moreover, the brake is also lowered.

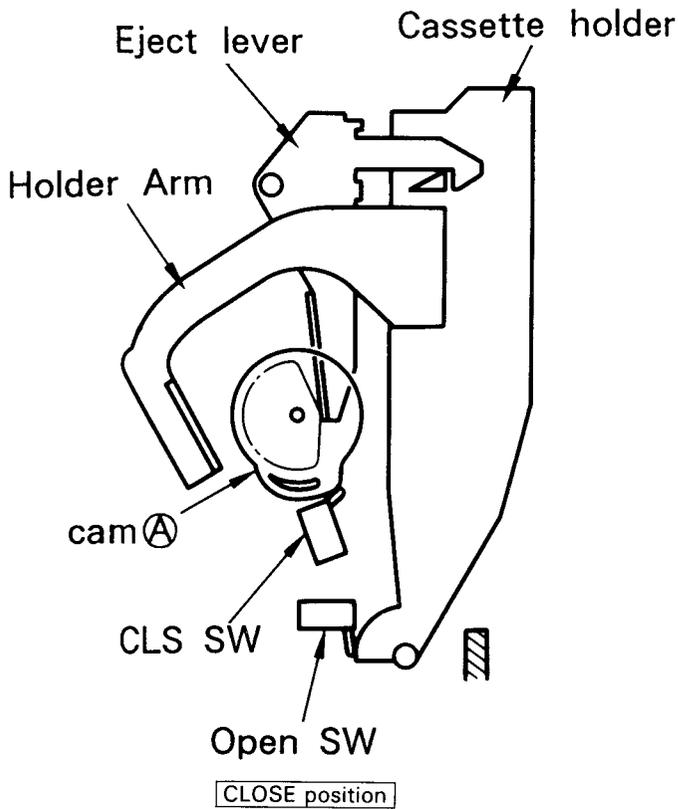
FF/RWD is controlled by the rotation of the reel motor.



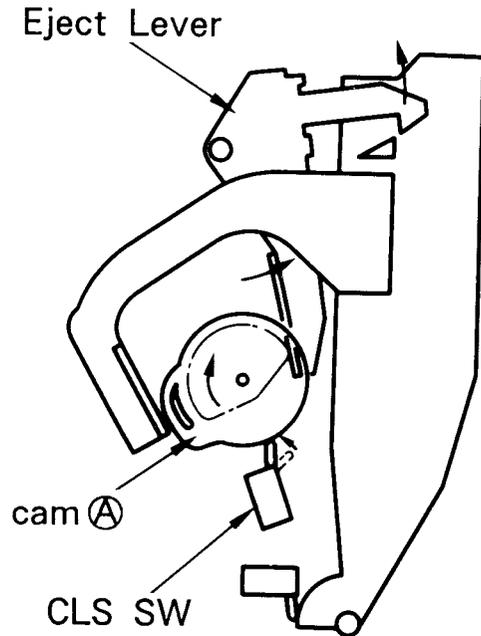
# KX-W8070S

## MECHANISM DESCRIPTION

### Cassette CLOSE/OPEN

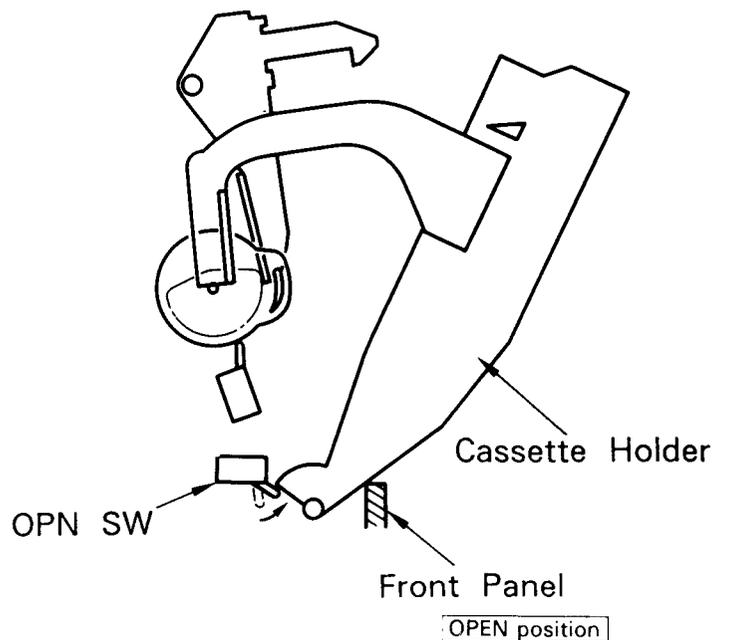
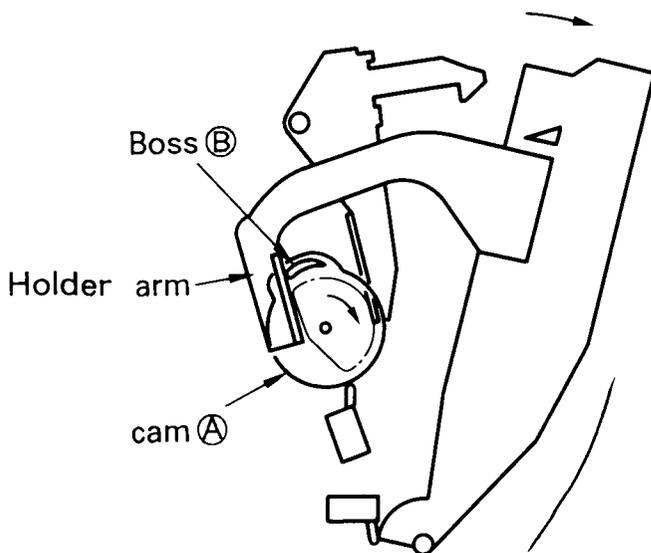


4) When the cam A further rotates, the boss B begins to open while holding the tongue of the holder arm.



- 1) The cam A starts rotating
- 2) CLS SW turns OFF
- 3) The eject lever moves to the arrow direction, and the holder come off the stopper.

- 5) The cam stops rotating when the cassette holder comes off the OPN SW.
- 6) The cassette holder touches the front panel, and the holder gets at the open position.



## ADJUSTMENT

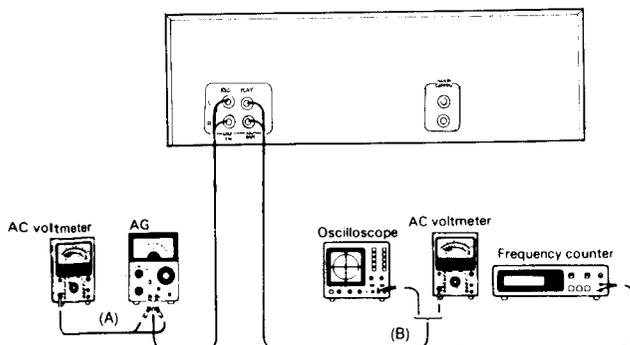
### Cassette Deck section

| No.   | ITEM                        | INPUT SETTING                                     | OUTPUT SETTING | DECK SETTING   | ALIGNMENT POINTS   | ALIGN FOR  | FIG. |
|---|-----------------------------|---|----------------|--|--|--|------|
| Unless otherwise specified, set the respective switches as follows:<br>TAPE : NORMAL DOLBY : OFF INPUT : LINE |                             |   |                |  |  |  |      |
| <b>I. Cassette mechanism section (Recording/play head adjustment)</b>   |                             |   |                |  |  |  |      |
| 1   | Degaussing and cleaning     | —   | —              | Power : off,<br>Degaussing,<br>cleaning, PLAY  | Recording heads,<br>Erase heads,<br>Capstans, Pinch<br>rollers | Degauss the recording/play heads by a deads eraser. Clean the recording/play heads,erase heads capstans and pinch rollers by a cotton swab soaked with alcohol.                                |      |
| 2   | Recording/play head azimuth | SCC-1727<br>TCC-153<br>MTT-114<br>10kHz<br>-10dBs | (B)            | PLAY   | Azimuth adjust-<br>ment screw<br><br>(A, B DECK)               | Maximize the output and adjust so that the Lissajous figure nears a line slanted 45°   |      |
| <b>II. Printed circuit board adjustment Note : First perform the double-speed adjustment.</b>                 |                             |   |                |  |  |  |      |
| 1   | Tape speed (1.5 times)      | SCC-1727,<br>TCC-110,<br>MTT-111,<br>3kHz,        | (B)            | ※TEST MODE   | A DECK : VR2<br>B DECK : VR4                                   | Adjust so that the frequency is 4.5 kHz at the tape center.  |      |
| 2   | Tape speed (normal)         | SCC-1727,<br>TCC-110,<br>MTT-111,<br>3kHz,        | (B)            |  | A DECK : VR1<br>B DECK : VR3                                   | Adjust so that the frequency is 3 kHz at the tape center.  |      |
| <b>III. Printed circuit board adjustment (X28-5620-XX)</b>  |                             |   |                |  |  |  |      |
| 1   | PLAYBACK LEVEL              | MTT-150<br>400Hz(200nWb)                          | (B)            | PLAY   | A DECK :<br>VR9(L)<br>VR10(R)                                  | Output level : -1.0dBs   |      |
|   |                             | MTT-256,SCC-1727<br>315Hz(160nWb)                 |                |  | B DECK :<br>VR11(L)<br>VR12(R)                                 | Output level : -4.0dBs   |      |
|   |                             | MTT-256U,TCC-160<br>315Hz(250nWb)                 |                |  |  | Output level : 0dBs  |      |
| 2   | BIAS CURRENT                | (A)<br>1kHz, -10dB<br>10kHz, -30dBs               | (B)            | Adjust REC LEVEL so that the REC monitor output becomes -30dBs at 1kHz, then record and reproduce signal of 1kHz and 10kHz in alternation. | B DECK :<br>VR5(L)<br>VR6(R)                                   | Adjust the bias current adjusting VR so that the playback level of the 10kHz signal is +0.5dB higher than that of the 1kHz signal when recording a 1kHz signal and a 10kHz signal alternately. |      |
| 3   | RECORD LEVEL                | (A)<br>1kHz, -30dBs                               | (B)            | Record and reproduce a 1kHz signal under the conditions set in (2).  | B DECK :<br>VR15(L)<br>VR16(R)<br>(X26)A/4                     | Adjust the variable resistors so that a playback level of -10dBs is obtained.  |      |

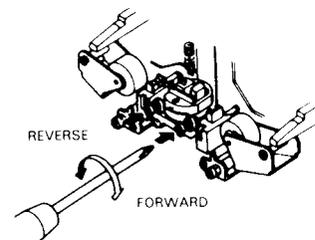
※ TEST MODE

Short circuit PT ⑤ → ④ and turn the POWER ON. FF KEY : HIGH SPEED, FWD KEY : NORMAL SPEED

### SYSTEM CONNECTIONS (B)



### (a) AZIMUTH ADJUSTMENT SCREW



# KX-W8070S

## AJUSTES

### Cassette Deck sección

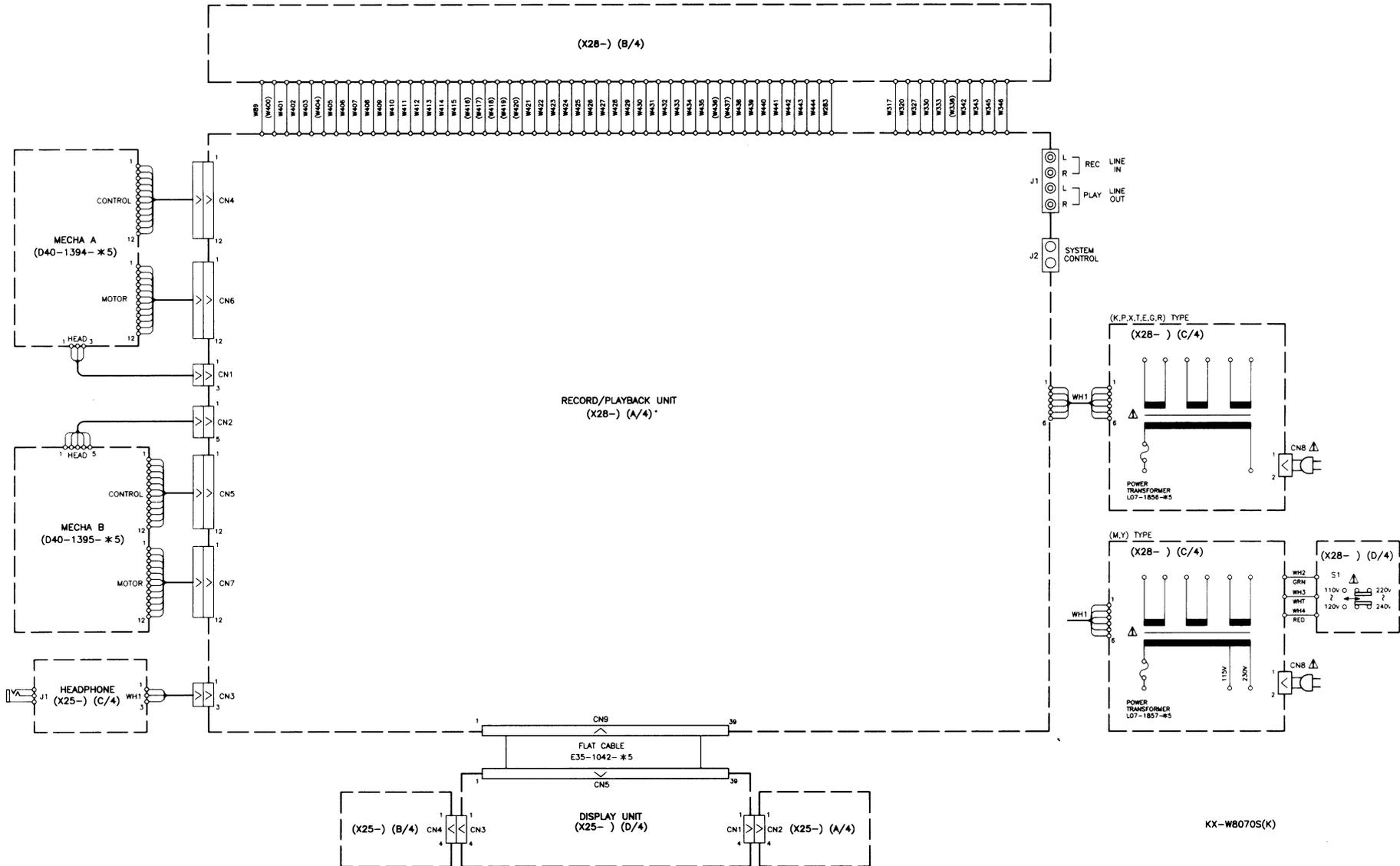
| Orden  | Ítem  | Ajuste de entrada                                 | Ajuste de salida | Ajuste de la platina  | Puntos de ajuste   | Método de ajuste   | Fig. |
|--|---|---|------------------|---|--|--|------|
| <b>A menos que se indique lo contrario, ajustar los interruptores respectivos de la manera siguiente:</b><br><b>TAPE : NORMAL DOLBY : OFF INPUT : LINE</b> |   |   |                  |   |  |  |      |
| <b>I. sección del mecanismo de la cassette (ajuste de la cabeza de grabación/reproducción)</b>   |   |   |                  |   |  |  |      |
| 1  | Desmagnetización y limpieza                   | —   | —                | Alimentación : apagado, desmagnetización, limpieza, reproducción  | Cabezas de grabación, cabezas de borrado, ejes de arrastre, rodillos presores (PLATINA A, B) | Desmagnetizar las cabezas de grabación/reproducción con un borrador de cabezas. Limpiar las cabezas de grabación/reproducción, cabezas de borrado, ejes de arrastre y rodillos presores con un bastoncillo de algodón humedecido en alcohol. |      |
| 2  | Acimut de la cabeza de grabación/reproducción | SCC-1727<br>TCC-153<br>MTT-114<br>10kHz<br>-10dBs | (B)              | REPRODUCCIÓN (PLAY)   | Tornillo de ajuste del acimut (PLATINA A, B)   | Maximizar la salida y ajustar de manera que la forma de Lissajous se aproxime a una línea inclinada 45°  |      |
| <b>II. Ajuste de la tarjeta de circuito impreso</b> <span style="float: right;"><b>Nota : Efectuar primero el ajuste de la velocidad doble.</b></span>     |   |   |                  |   |  |  |      |
| 1  | Velocidad de la cinta (1.5 duplicación)       | SCC-1727,<br>TCC-110,<br>MTT-111,<br>3kHz,        | (B)              | * Modo de prueba  | PLATINA A : VR2<br>PLATINA B : VR4   | Ajustar de manera que la frecuencia sea de 4.5 kHz en el centro de la cinta.   |      |
| 2  | Velocidad de la cinta (normal)                | SCC-1727,<br>TCC-110,<br>MTT-111,<br>3kHz,        | (B)              |   | PLATINA A : VR1<br>PLATINA B : VR3   | Ajustar de manera que la frecuencia sea de 3 kHz en el centro de la cinta.   |      |
| <b>III. Ajuste de la tarjeta de circuito impreso(X28-5620-XX)</b>  |   |   |                  |   |  |  |      |
| 1  | NIVEL DE REPRODUCCIÓN                         | MTT-150<br>400Hz(200nWb)                          | (B)              | REPRODUCCIÓN  | PLATINA A :<br>VR9(L)<br>VR10(R)   | Nivel de salida : -1.0dBs  |      |
|  |   | MTT-256,SCC-1727<br>315Hz(160nWb)                 |                  |   | PLATINA B :<br>VR11(L)<br>VR12(R)  | Nivel de salida : -4.0dBs  |      |
|  |   | MTT-256,TCC-160<br>315Hz(250nWb)                  |                  |   |  | Nivel de salida : 0dBs   |      |
| 2  | CORRIENTE DE POLARIZACIÓN                     | (A)<br>1kHz, -10dB<br>10kHz, -30dBs               | (B)              | Ajuste REC VR LEVEL, de forma que la salida del monitor de grabación sea de -30dBs a 1kHz, y después grabe y reproduzca alternativamente señales de 1kHz y 10kHz. | PLATINA B :<br>VR5(L)<br>VR6(R)<br>(X26)(A/4)  | Ajuste la corriente de polarización regulando el resistor variable de forma que el nivel de reproducción de la señal de 10kHz sea +0.5dB superior que el de la señal de 1kHz cuando grabe alternativamente señales de 1kHz y de 10kHz.       |      |
| 3  | NIVEL DE GRABACIÓN                            | (A)<br>1kHz, -30dBs                               | (B)              | Grabe y reproduzca una señal de 1kHz en las condiciones establecidas en (2).  | PLATINA B :<br>VR15(L)<br>VR16(R)<br>(X26)(A/4)  | Ajuste los resistores variables hasta obtener un nivel de reproducción de -10dBs.  |      |

\* Modo de prueba

Cortocircuite PT ⑤ → ④ (y conecte la alimentación. Tecla FF : Alta velocidad. Tecla FEW : Velocidad normal

# WIRING DIAGRAM

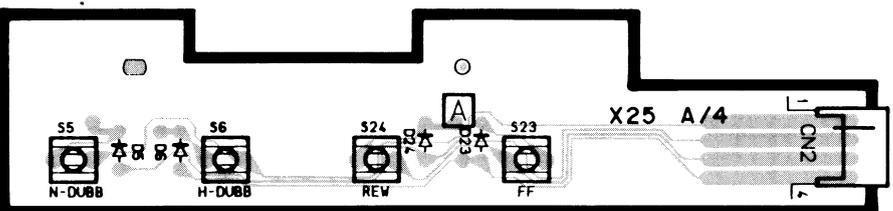
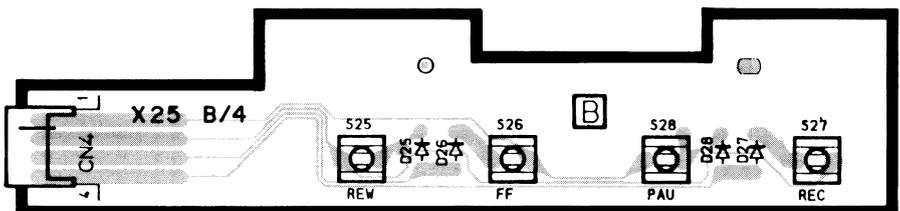
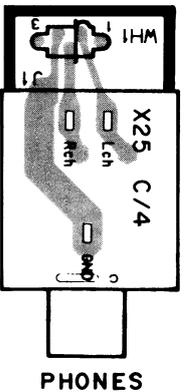
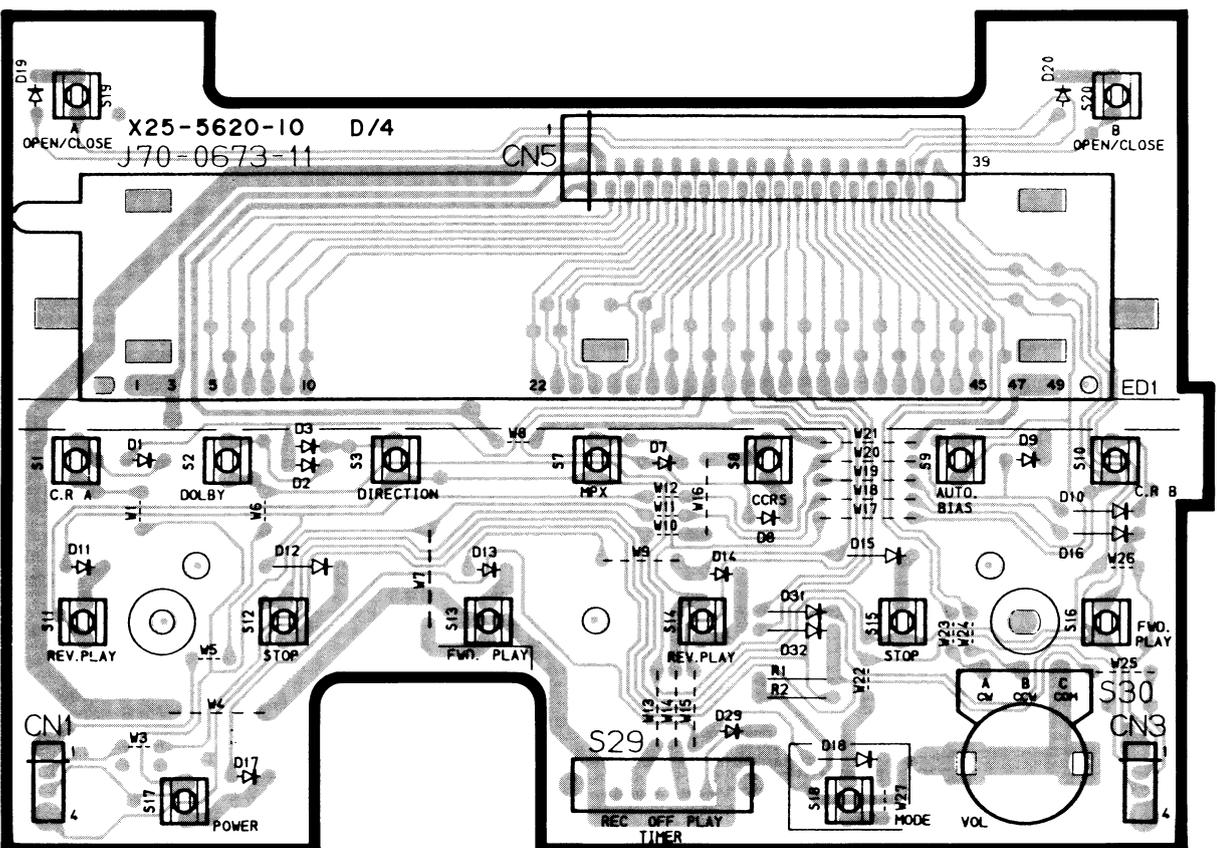
# KX-W8070S



KX-W8070S(K)

# PC BOARD (Component side view)

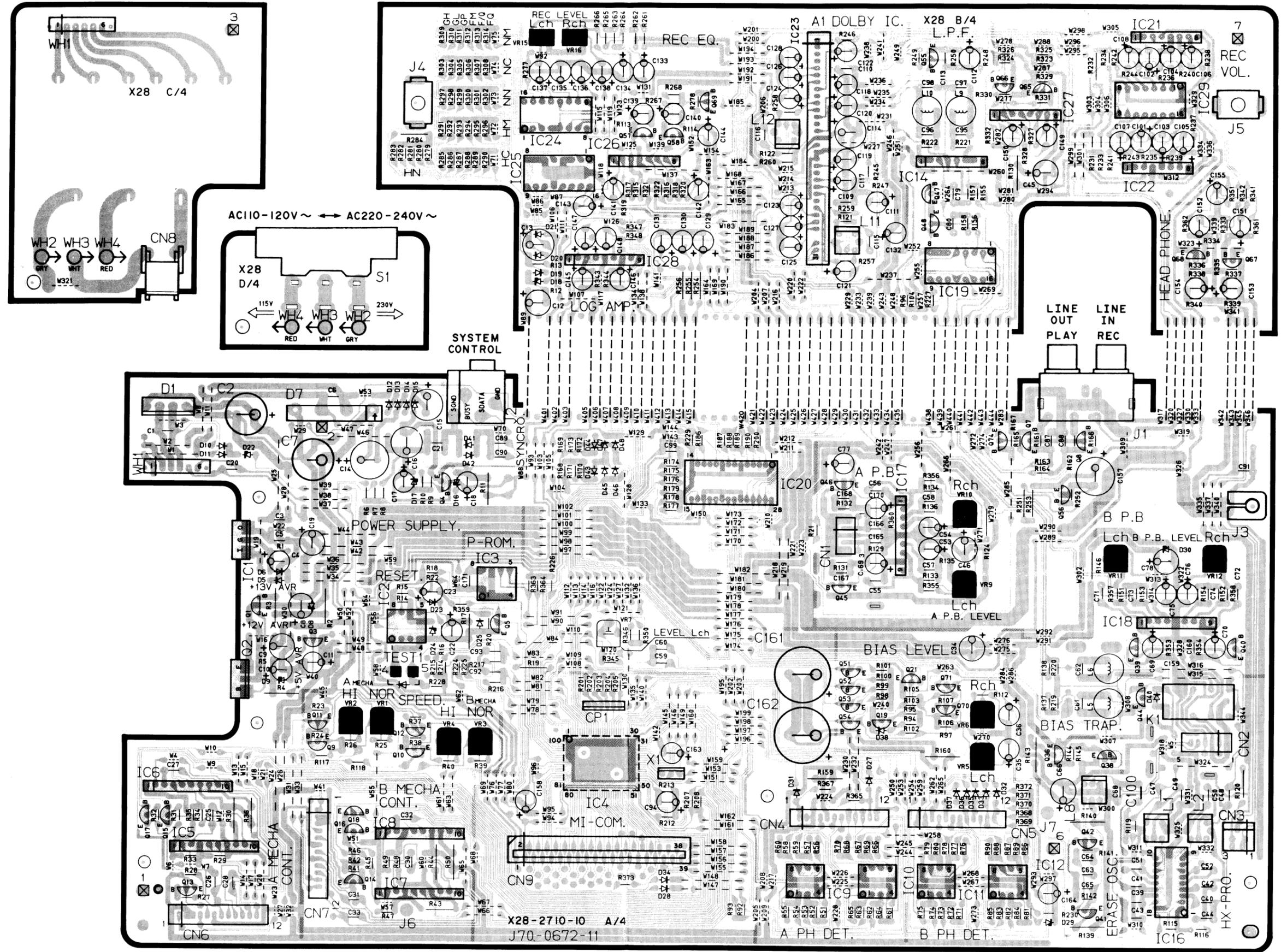
DISPLAY UNIT (X25-5620-10)



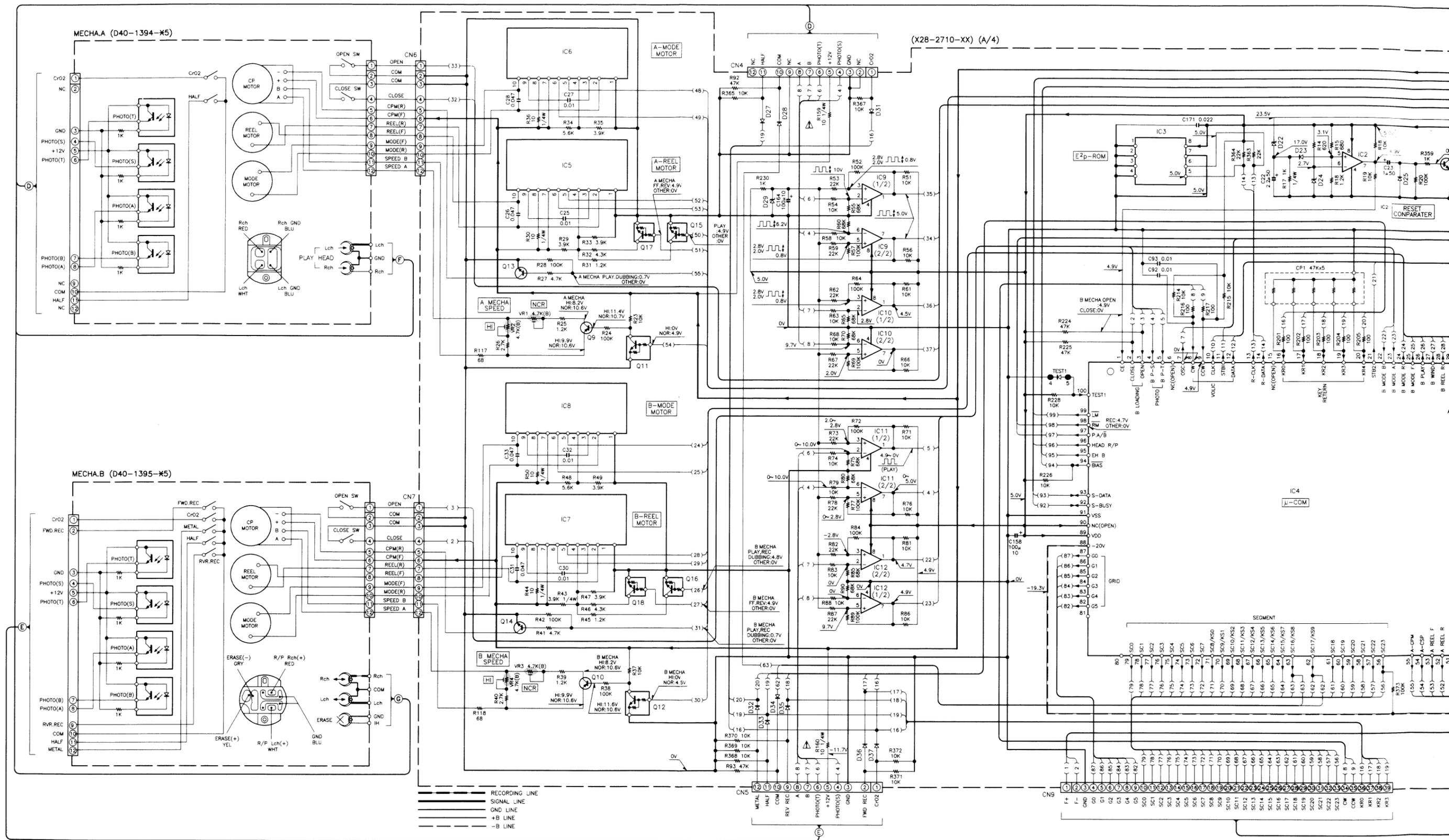
Refer to the schematic diagram for the values of resistors and capacitors.

# PC BOARD (Component side view)

## RECORD/PLAYBACK UNIT (X28-2710-XX)



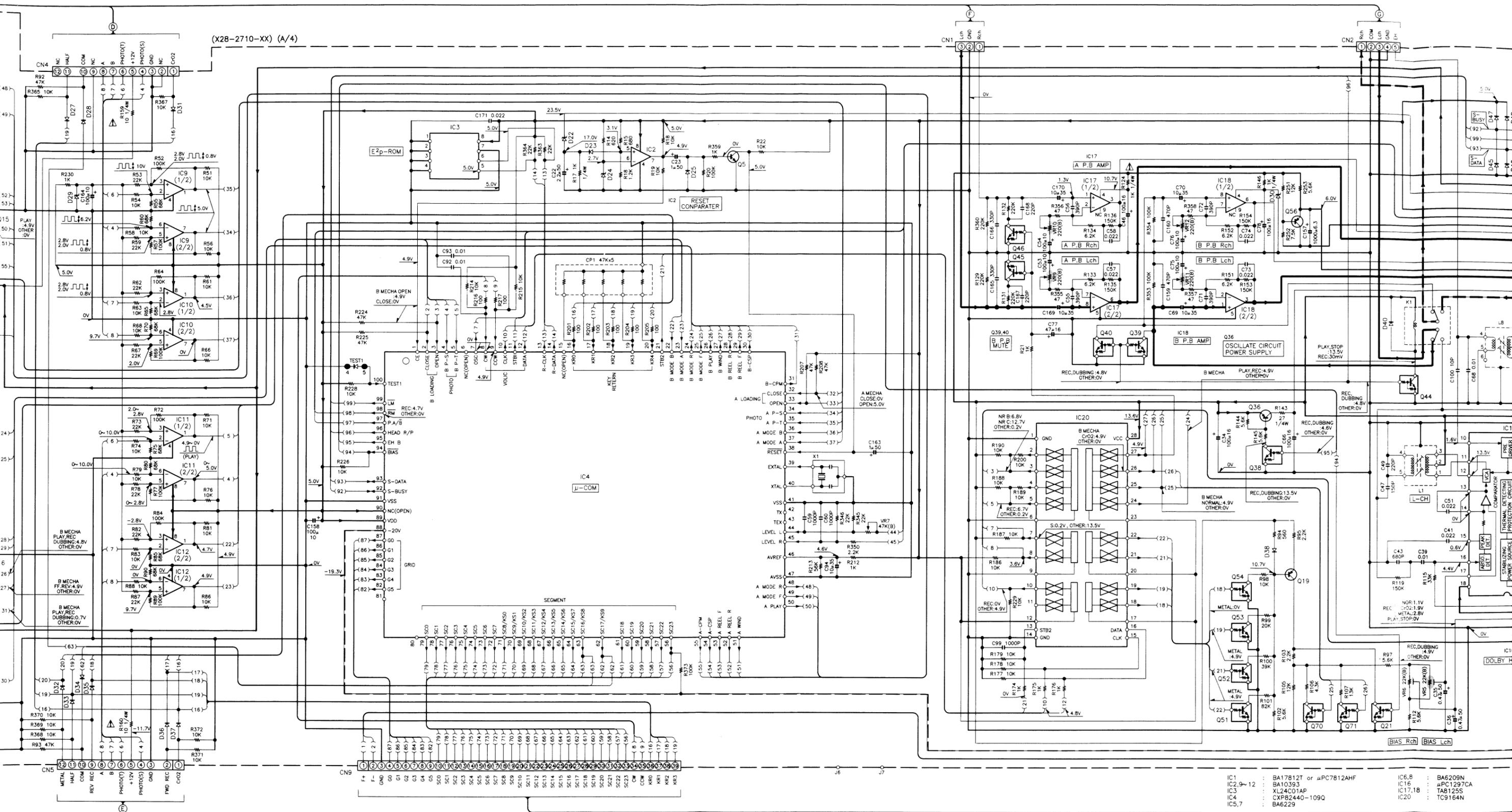
Refer to the schematic diagram for the values of resistors and capacitors.



Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen. "DOLBY", the double-D symbol and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

DC voltages are as measured with a high impedance cassette loaded at playback mode. Values may vary to variations between individual instruments or/a circuit DC voltages are as measured while in the re





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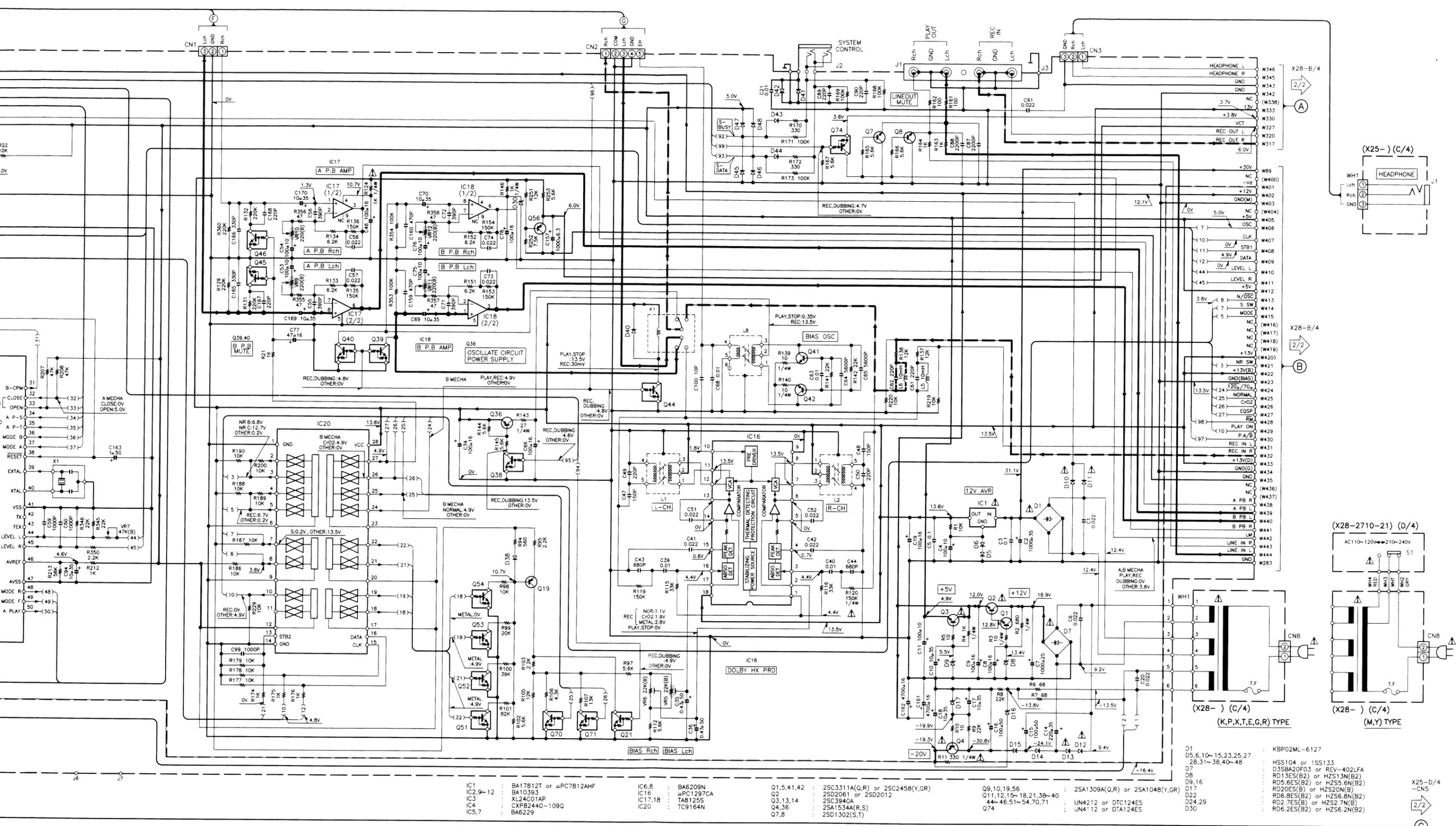
DC voltages are as measured with a high impedance voltmeter with a cassette loaded at playback mode. Values may vary slightly due to variations between individual instruments or/and units. Bias circuit DC voltages are as measured while in the record mode.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance, une cassette étant insérée en mode de lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les tensions c.c. du circuit de polarité doivent être mesurées, l'appareil étant en mode d'enregistrement.

Die angegebenen Gleichspannungswerte wurden bei eingesetzter Cassette in der Wiedergabe mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die angegebenen Gleichspannungswerte der Vomagnetisierungsschaltung wurden in der Aufnahme-Betriebsart gemessen.

**CAUTION:** For continuity measurements only with maximum voltage (see parts list). **⚠** in reduce the risk of electric shock, measurements shall be taken with the device properly insulated from the ground and returned to the customer.

- IC1 : BA17812T or  $\mu$ PC7812AHF
- IC2,9-12 : BA10393
- IC3 : X12AC01AP
- IC4 : CXP82440-109Q
- IC5,7 : BA6229
- IC6,8 : BA6209N
- IC16 :  $\mu$ PC1297CA
- IC17,18 : TAB125S
- IC20 : TC9164N



|          |                             |         |                |            |                                |                       |                                |
|----------|-----------------------------|---------|----------------|------------|--------------------------------|-----------------------|--------------------------------|
| IC1      | BA17812T or $\mu$ PC7812AHF | IC6,8   | BA6209N        | Q1,5,41,42 | 2SC3311A(Q,R) or 2SC2458(Y,GR) | Q9,10,19,56           | 2SA1309A(Q,R) or 2SA1048(Y,GR) |
| IC2,9-12 | BA10393                     | IC16    | $\mu$ PC1297CA | Q2         | 2SD2061 or 2SD2012             | Q11,12,15-18,21,38-40 | 4A-46,51-54,70,71              |
| IC3      | XL24C01AP                   | IC17,18 | TA8125S        | Q3,13,14   | 2SC3940A                       | 4A-46,51-54,70,71     | UN4212 or DTC124ES             |
| IC4      | CXPB2440-109Q               | IC20    | TC9164N        | Q4,36      | 2SA1534A(R,S)                  | UN4112 or DTA124ES    | UN4112 or DTA124ES             |
| IC5,7    | BA6229                      |         |                | Q7,8       | 2SD1302(S,T)                   |                       |                                |

meter with  
ightly due  
s. Bias  
ode.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance, une cassette étant insérée en mode de lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les tensions c.c. du circuit de polarité doivent être mesurées, l'appareil étant en mode d'enregistrement.

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**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  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.

1/2

**KX-W8070S**

**KENWOOD**

Y26-3960-10

X25-D/4  
-CN5  
Z/2

X28-A/4  
-CN9

(1/2)

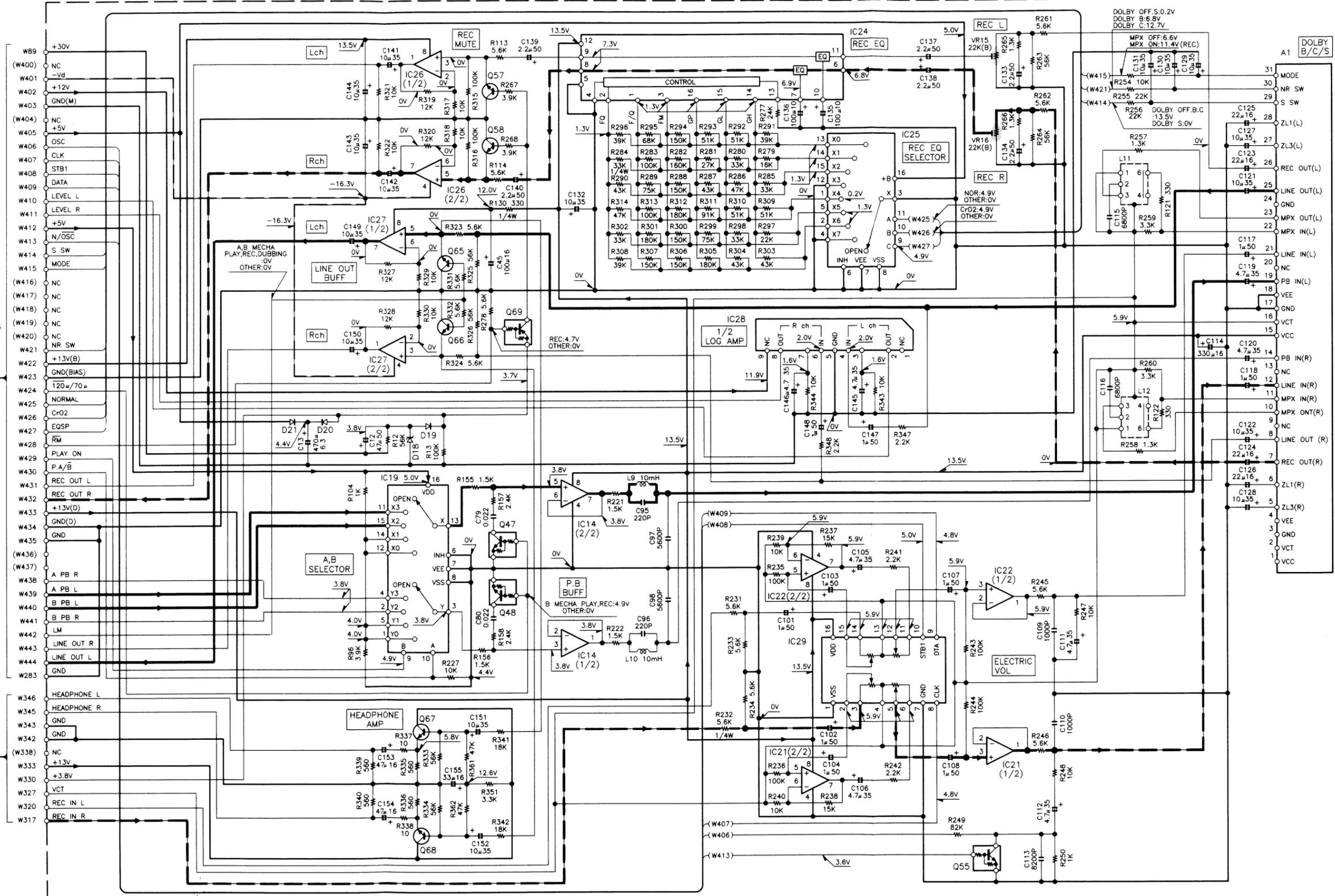
X28-A/4  
(1/2)

(B)

X28-A/4  
(1/2)

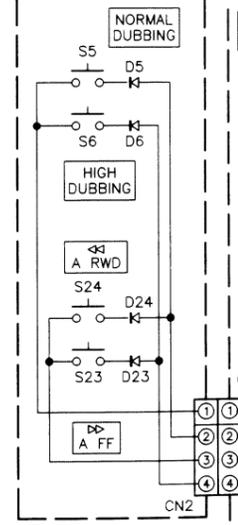
(A)

(X28-2710-XX) (B/4)

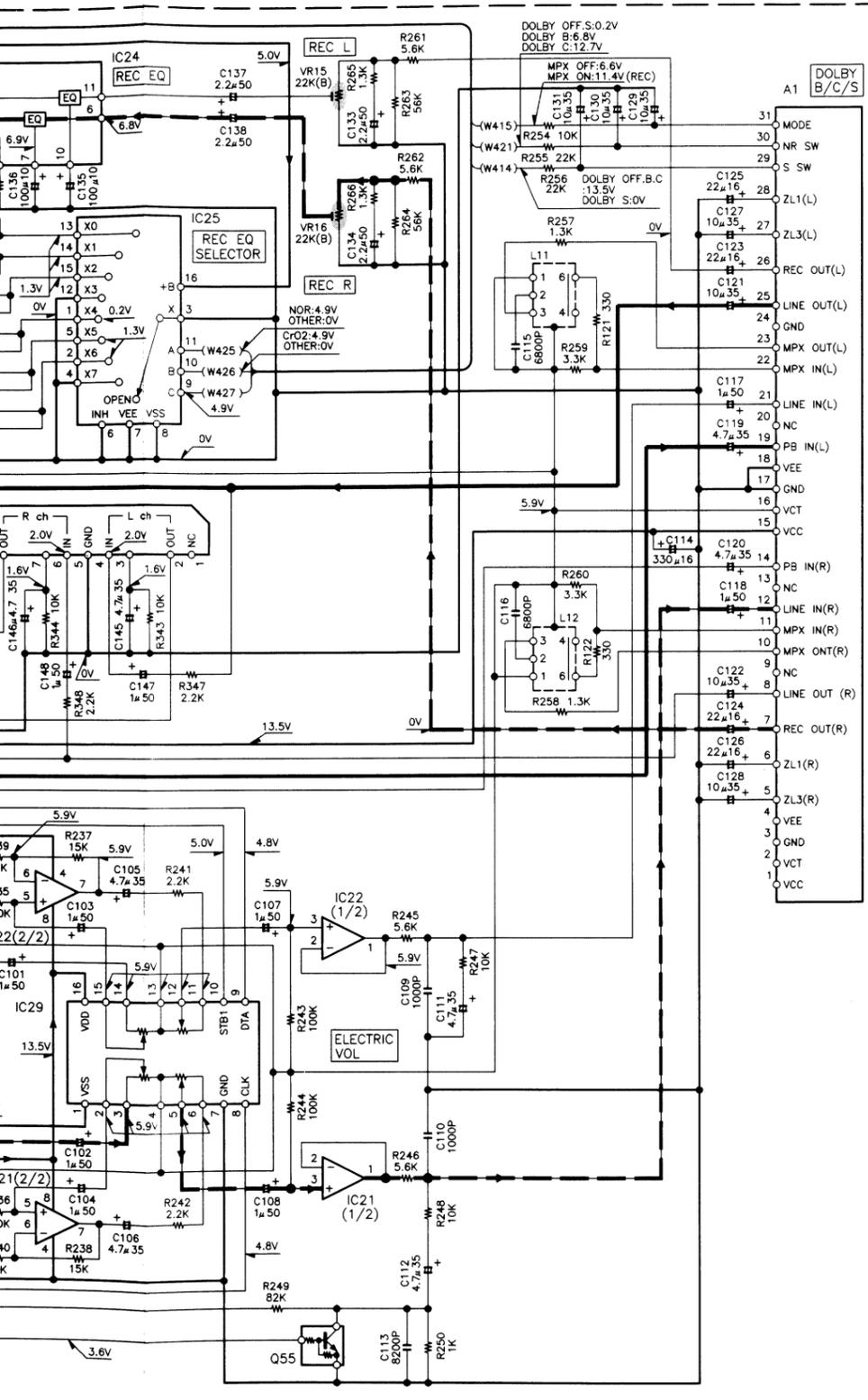


|     | 1G      | 2G    | 3G | 4G        | 5G    | 6G    |
|-----|---------|-------|----|-----------|-------|-------|
| S1  | ▶       | ◀     | p  | p         | MPX   | ▶     |
| S2  | ◀       | (     | o  | o         | CCRS  | ▶     |
| S3  |         | )     |    | DUBBING   | BAL.  |       |
| S4  | ●(DP)   | RELAY |    | NORMAL    | BIAS  | ●     |
| S5  | ●(DP)   | LEVEL |    | HIGH      | ●(DP) | LEVEL |
| S6  | STANDBY |       |    | DOLBY NR  |       |       |
| S7  | BIAS    |       |    | [B]       |       |       |
| S8  |         |       |    | [S]       |       |       |
| S9  |         |       |    | AUTO BIAS |       |       |
| S10 |         |       |    |           |       |       |
| S11 | h       | h     | h  | h         | h     | h     |
| S12 | i       | i     | i  | i         | i     | i     |
| S13 | m       | m     | m  | m         | m     | m     |
| S14 | n       | n     | n  | n         | n     | n     |
| S15 | j       | j     | j  | j         | j     | j     |
| S16 | l       | l     | l  | l         | l     | l     |
| S17 | k       | k     | k  | k         | k     | k     |
| S18 | d       | d     | d  | d         | d     | d     |
| S19 | e       | e     | e  | e         | e     | e     |
| S20 | c       | c     | c  | c         | c     | c     |
| S21 | g       | g     | g  | g         | g     | g     |
| S22 | f       | f     | f  | f         | f     | f     |
| S23 | b       | b     | b  | b         | b     | b     |
| S24 | a       | a     | a  | a         | a     | a     |

(X25- ) (A/4)

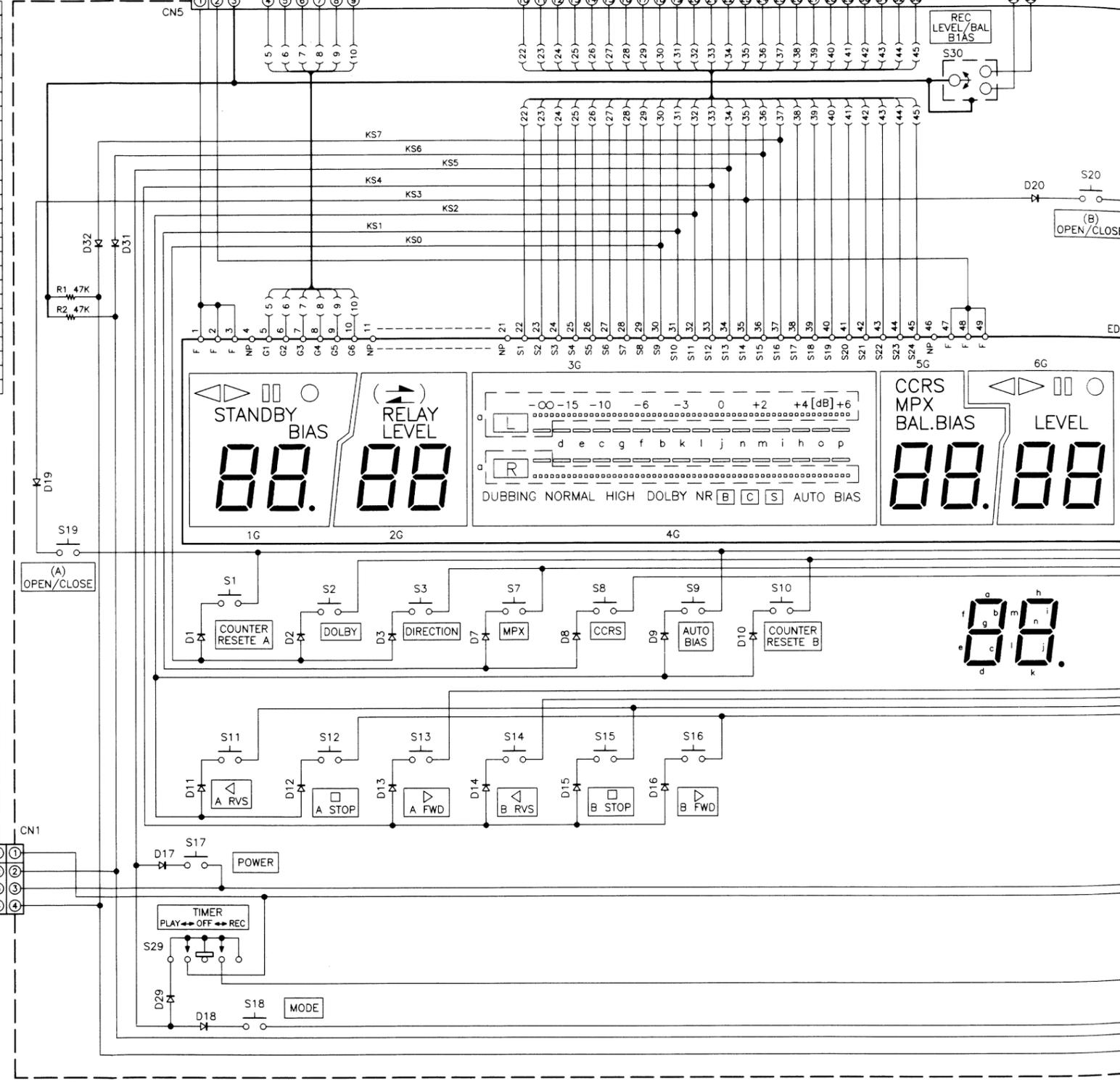


- (X28- ) (B/4)  
A1 : KAM02
- IC14,21,22,26,27 : NJM4565L-D  
 IC19 : XR4052BC  
 IC24 : CXA1198AP  
 IC25 : TC4051BP  
 IC28 : BA6138  
 IC29 : TC9213P
- Q47,48,55 : UN4212 or DTC124ES  
 Q57,58 : 2SD1302(S,T)  
 Q65,66 : 2SC3311A(Q,R) or 2SC2458(Y,GR)  
 Q67,68 : BA6138  
 Q69 : UN4112 or DTA124ES
- D18 : RD4.7ES(B) or HZS4.7N(B)  
 D19~21 : HSS104 or 1SS133

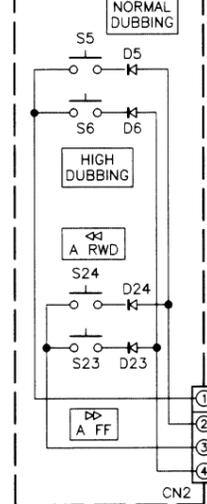


|     | 1G      | 2G    | 3G | 4G        | 5G    | 6G    |
|-----|---------|-------|----|-----------|-------|-------|
| S1  | ▶       | ▶     | p  | p         | MPX   | ▶     |
| S2  | ◀       | ◀     | o  | o         | CCRS  | ◀     |
| S3  |         | )     |    | DUBBING   | BAL.  |       |
| S4  | ●       | RELAY |    | NORMAL    | BIAS  | ●     |
| S5  | ●(DP)   | LEVEL |    | HIGH      | ●(DP) | LEVEL |
| S6  | STANDBY |       |    | DOLBY NR  |       |       |
| S7  | BIAS    |       |    | □         |       |       |
| S8  |         |       |    | □         |       |       |
| S9  |         |       |    | □         |       |       |
| S10 |         |       |    | AUTO BIAS |       |       |
| S11 | h       | h     | h  | h         | h     | h     |
| S12 | i       | i     | i  | i         | i     | i     |
| S13 | m       | m     | m  | m         | m     | m     |
| S14 | n       | n     | n  | n         | n     | n     |
| S15 | j       | j     | j  | j         | j     | j     |
| S16 | l       | l     | l  | l         | l     | l     |
| S17 | k       | k     | k  | k         | k     | k     |
| S18 | d       | d     | d  | d         | d     | d     |
| S19 | e       | e     | e  | e         | e     | e     |
| S20 | c       | c     | c  | c         | c     | c     |
| S21 | g       | g     | g  | g         | g     | g     |
| S22 | f       | f     | f  | f         | f     | f     |
| S23 | b       | b     | b  | b         | b     | b     |
| S24 | a       | a     | a  | a         | a     | a     |

(X25-5620-XX) (D/4)



(X25- ) (A/4)

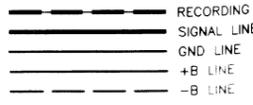


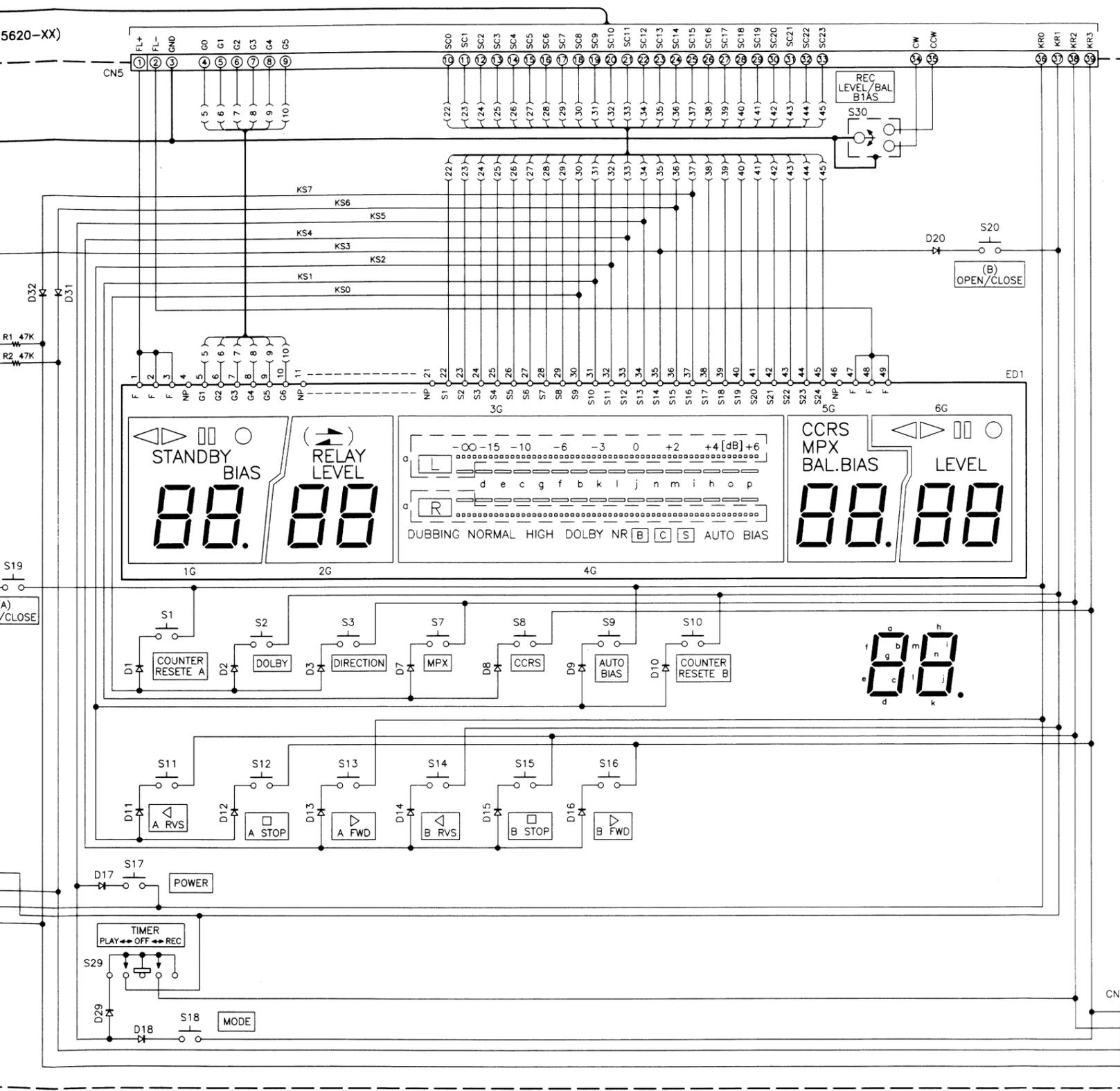
(X28- ) (B/4)

- A1 : KAM02
- IC14,21,22,26,27 : NJM4565L-D
- IC19 : XRU4052BC
- IC24 : CXA1198AP
- IC25 : TC4051BP
- IC28 : BA6138
- IC29 : TC9213P
- Q47,48,55 : UN4212 or DTC124ES
- Q57,58 : 2SD1302(S,T)
- Q65,66 : 2SC3311A(Q,R) or 2SC2458(Y,G,R)
- Q67,68 : 2SC1845(F,E)
- Q69 : UN4112 or DTA124ES
- D18 : RD4.7ES(B) or HZS4.7N(B)
- D19~21 : HSS104 or 1SS133

(X25- ) (D/4)

- D1~3,5~20,23~29,31,32 : HSS104 or 1SS133
- ED1 : FIP6AMW6





(D/4)  
20,23~29,31,32 : HSS104 or 1SS133  
: FIP6AMW6

RECORDING LINE  
SIGNAL LINE  
GND LINE  
+B LINE  
-B LINE

Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen. \*DOLBY\*, the double-D symbol and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

- |  |                        |                        |            |
|--|------------------------|------------------------|------------|
| 2SA1534A<br>2SC1845<br>2SC3940A<br>2SD1302           | 2SD2012                | BA6138                 | UPC1297CA  |
| DTA124ES<br>DTC124ES<br>UN4112<br>2SA1048<br>2SC2458 | CXA1198AP<br>XRU4052BC | BA10393<br>XL24C01AP   | TC9164N    |
| 2SD2061  | TC4051BP<br>TC9213P    | BA17812T<br>UPC7812AHF | NJM4565L-D |
| UN4212<br>2SA1309A<br>2SC3311A                       | TA8125S                | BA6229                 | BA6209N    |
|  |                        |                        | KAM02      |

DC voltages are as measured with a high impedance voltmeter with a cassette loaded at playback mode. Values may vary slightly due to variations between individual instruments or/and units. Bias circuit DC voltages are as measured while in the record mode.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance, une cassette étant insérée en mode de lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les tensions c.c. du circuit de polarité doivent être mesurées, l'appareil étant en mode d'enregistrement.

Die angegebenen Gleichspannungswerte wurden bei eingesetzter Cassette in der Wiedergabe mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die angegebenen Gleichspannungswerte der Vormagnetisierungsschaltung wurden in der Aufnahme-Betriebsart 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.





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

No.1

Table with columns: Ref. No., Address, New Parts, Parts No., Description, Destination, Remarks. Includes sub-sections for DISPLAY UNIT, REC/PLAY UNIT, and MECHANISM ASSY.

L: Scandinavia K: USA P: Canada R: Mexico H: CHINA MADE
Y: PX (Far East, Hawaii) T: England E: Europe G: Germany J: JAPAN MADE
Y: AAFES (Europe) X: Australia M: Other Areas

DISPLAY UNIT

Table with columns: UNIT NO., Description. Row: X25-5620-10

REC/PLAY UNIT

Table with columns: UNIT NO., Description. Rows: X28-2710-10, X28-2710-21

MECHANISM ASSY

Table with columns: UNIT NO., Description. Rows: D40-1394-05, D40-1395-05

PARTS LIST

KX-W8070S

KX-W8070S

PARTS LIST

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No.2

Table with columns: Ref. No., Address, New Parts, Parts No., Description, Destination, Remarks. Includes sub-sections for DISPLAY UNIT (X25-5620-10), RECORD/PLAYBACK UNIT (X28-2710-XX).

L: Scandinavia K: USA P: Canada R: Mexico H: CHINA MADE
Y: PX (Far East, Hawaii) T: England E: Europe G: Germany J: JAPAN MADE
Y: AAFES (Europe) X: Australia M: Other Areas

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No.3

Table with columns: Ref. No., Address, New Parts, Parts No., Description, Destination, Remarks. Lists various electronic components like capacitors, resistors, and diodes.

L: Scandinavia K: USA P: Canada R: Mexico
Y: PX (Far East, Hawaii) T: England E: Europe G: Germany
Y: AAFES (Europe) X: Australia M: Other Areas

× New Parts

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Teile ohne Parts No. werden nicht geliefert.

No.4

| Ref. No.<br>参照番号 | Address<br>位置 | New Parts<br>新 | Parts No.<br>部品番号 | Description<br>部品名/規格         | Desti-<br>nation<br>仕向 | Re-<br>marks<br>備考 |
|------------------|---------------|----------------|-------------------|-------------------------------|------------------------|--------------------|
| C109,110         |               |                | CK45FB1H102K      | CERAMIC 1000PF K              |                        |                    |
| C111,112         |               |                | CE04LW1V4R7M      | ELECTR0 4.7UF 35WV            |                        |                    |
| C113             |               | *              | CQ93FMC1H822J     | MYLAR 8200PF J                |                        |                    |
| C114             |               |                | CE04LW1C331M      | ELECTR0 330UF 16WV            |                        |                    |
| C115,116         |               |                | CK45FB1H682K      | CERAMIC 6800PF K              |                        |                    |
| C117,118         |               |                | CE04LW1H010M      | ELECTR0 1.0UF 50WV            |                        |                    |
| C119,120         |               |                | CE04LW1V4R7M      | ELECTR0 4.7UF 35WV            |                        |                    |
| C121,122         |               |                | CE04LW1V100M      | ELECTR0 10UF 35WV             |                        |                    |
| C123-126         |               |                | CE04LW1C220M      | ELECTR0 22UF 16WV             |                        |                    |
| C127-132         |               |                | CE04LW1V100M      | ELECTR0 10UF 35WV             |                        |                    |
| C133,134         |               |                | CE04LW1H2R2M      | ELECTR0 2.2UF 50WV            |                        |                    |
| C135,136         |               |                | CE04LW1A101M      | ELECTR0 100UF 10WV            |                        |                    |
| C137-140         |               |                | CE04LW1H2R2M      | ELECTR0 2.2UF 50WV            |                        |                    |
| C141-144         |               |                | CE04LW1V100M      | ELECTR0 10UF 35WV             |                        |                    |
| C145,146         |               |                | CE04LW1V4R7M      | ELECTR0 4.7UF 35WV            |                        |                    |
| C147,148         |               |                | CE04LW1H010M      | ELECTR0 1.0UF 50WV            |                        |                    |
| C149-152         |               |                | CE04LW1V100M      | ELECTR0 10UF 35WV             |                        |                    |
| C153,154         |               |                | CE04LW1C470M      | ELECTR0 47UF 16WV             |                        |                    |
| C155             |               |                | CE04LW1C330M      | ELECTR0 33UF 16WV             |                        |                    |
| C157             |               |                | CE04EWOJ102M      | ELECTR0 1000UF 6.3WV          |                        |                    |
| C158             |               |                | CE04LW1A101M      | ELECTR0 100UF 10WV            |                        |                    |
| C159,160         |               |                | CK45FB1H471K      | CERAMIC 470PF K               |                        |                    |
| C161,162         |               |                | CE04LW1C472M      | ELECTR0 4700UF 16WV           |                        |                    |
| C163             |               |                | CE04LW1H010M      | ELECTR0 1.0UF 50WV            |                        |                    |
| C164             |               |                | CE04LW1A101M      | ELECTR0 100UF 10WV            |                        |                    |
| C165,166         |               |                | CC45FSL1H331J     | CERAMIC 330PF J               |                        |                    |
| C167,168         |               |                | CC45FSL1H221J     | CERAMIC 220PF J               |                        |                    |
| C169,170         |               |                | CE04LW1V100M      | ELECTR0 10UF 35WV             |                        |                    |
| C171             |               |                | CK45FF1H223Z      | CERAMIC 0.022UF Z             |                        |                    |
| CN9              | 2F            |                | E40-4179-05       | FLAT CABLE CONNCTOR           |                        |                    |
| J1               | 2F            |                | E63-0046-15       | PHONE JACK (4P)               |                        | J                  |
| J1               | 2F            |                | E63-0136-05       | PHONE JACK (4P)               |                        | H                  |
| J2               | 2F            |                | E11-0188-05       | MINIATURE PHONE JACK(2P ㉞)    |                        |                    |
| L1 ,2            |               |                | L32-0547-05       | BIAS OSCILATING COIL          |                        |                    |
| L5 ,6            |               |                | L40-1035-29       | SMALL FIXED INDUCTOR(10MH, J) |                        |                    |
| L8               |               |                | L32-0554-05       | BIAS OSCILATING COIL          |                        |                    |
| L9 ,10           |               |                | L40-1035-29       | SMALL FIXED INDUCTOR(10MH, J) |                        |                    |
| L11 ,12          |               |                | L79-1201-05       | LC FILTER                     |                        |                    |
| X1               |               |                | L78-0294-05       | RESONATOR (10.000M)           |                        |                    |
| CP1              |               |                | R90-0818-05       | MULTI-COMP 47KX5 J 1/6W       |                        |                    |
| R2               |               |                | RD14NB2E681J      | RD 680 J 1/4W                 |                        |                    |
| R3               |               |                | RD14NB2E100J      | RD 10 J 1/4W                  |                        |                    |
| R4               |               |                | RD14NB2E102J      | RD 1.0K J 1/4W                |                        |                    |
| R11              |               |                | RD14NB2E331J      | RD 330 J 1/4W                 |                        |                    |
| R17              |               |                | RD14NB2E102J      | RD 1.0K J 1/4W                |                        |                    |
| R30              |               |                | RD14NB2E100J      | RD 10 J 1/4W                  |                        |                    |
| R36              |               |                | RD14NB2E100J      | RD 10 J 1/4W                  |                        |                    |
| R44              |               |                | RD14NB2E100J      | RD 10 J 1/4W                  |                        |                    |
| R50              |               |                | RD14NB2E100J      | RD 10 J 1/4W                  |                        |                    |
| R130             |               |                | RD14NB2E331J      | RD 330 J 1/4W                 |                        |                    |
| R139,140         |               |                | RD14NB2E100J      | RD 10 J 1/4W                  |                        |                    |
| R143             |               | *              | RD14NB2E270J      | RD 27 J 1/4W                  |                        |                    |

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⚠ indicates safety critical components.

× New Parts

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No.5

| Ref. No.<br>参照番号 | Address<br>位置 | New Parts<br>新 | Parts No.<br>部品番号 | Description<br>部品名/規格       | Desti-<br>nation<br>仕向 | Re-<br>marks<br>備考 |
|------------------|---------------|----------------|-------------------|-----------------------------|------------------------|--------------------|
| R159,160         |               |                | RD14NB2E100J      | RD 10 J 1/4W                |                        |                    |
| VR1 -4           |               |                | R12-1619-05       | TRIMMING POT.(4.7K ㉞)       |                        |                    |
| VR5 ,6           |               |                | R12-3686-05       | TRIMMING POT.(22K ㉞)        |                        |                    |
| VR7              |               |                | R12-1619-05       | TRIMMING POT.(4.7K ㉞)       |                        |                    |
| VR9 -12          |               |                | R12-0605-05       | TRIMMING POT.(220 ㉞)        |                        |                    |
| VR15,16          |               |                | R12-3129-05       | TRIMMING POT.(22K,㉞)        |                        |                    |
| K1               |               |                | S76-0018-05       | MAGNETIC RELAY              |                        |                    |
| S1               |               |                | S31-2131-05       | SLIDE SWITCH (POWER TYPE)   |                        | YM                 |
| A1               |               |                | KAM02             | HYBRID IC                   |                        |                    |
| D1               |               |                | KBP02ML-6127      | DIODE                       |                        |                    |
| D5 ,6            |               |                | HSS104            | DIODE                       |                        |                    |
| D5 ,6            |               |                | 1SS133            | DIODE                       |                        |                    |
| D7               |               |                | D35BA20F03        | DIODE                       |                        |                    |
| D7               |               |                | RBV-402LFA        | DIODE                       |                        |                    |
| D8               |               |                | HZS13N(B2)        | ZENER DIODE                 |                        |                    |
| D8               |               |                | RD13ES(B2)        | ZENER DIODE                 |                        |                    |
| D9               |               |                | HZS5.6N(B2)       | ZENER DIODE                 |                        |                    |
| D9               |               |                | RD5.6ES(B2)       | ZENER DIODE                 |                        |                    |
| D10 -15          |               |                | HSS104            | DIODE                       |                        |                    |
| D10 -15          |               |                | 1SS133            | DIODE                       |                        |                    |
| D16              |               |                | HZS5.6N(B2)       | ZENER DIODE                 |                        |                    |
| D16              |               |                | RD5.6ES(B2)       | ZENER DIODE                 |                        |                    |
| D17              |               |                | HZS20N(B)         | ZENER DIODE                 |                        |                    |
| D17              |               |                | RD20ES(B)         | ZENER DIODE                 |                        |                    |
| D18              |               |                | HZS4.7N(B)        | ZENER DIODE                 |                        |                    |
| D18              |               |                | RD4.7ES(B)        | ZENER DIODE                 |                        |                    |
| D19 -21          |               |                | HSS104            | DIODE                       |                        |                    |
| D19 -21          |               |                | 1SS133            | DIODE                       |                        |                    |
| D22              |               |                | HZS6.8N(B2)       | ZENER DIODE                 |                        |                    |
| D22              |               |                | RD6.8ES(B2)       | ZENER DIODE                 |                        |                    |
| D23              |               |                | HSS104            | DIODE                       |                        |                    |
| D23              |               |                | 1SS133            | DIODE                       |                        |                    |
| D24              |               |                | HZS2.7N(B)        | ZENER DIODE                 |                        |                    |
| D24              |               |                | RD2.7ES(B)        | ZENER DIODE                 |                        |                    |
| D25              |               |                | HSS104            | DIODE                       |                        |                    |
| D25              |               |                | 1SS133            | DIODE                       |                        |                    |
| D27 ,28          |               |                | HSS104            | DIODE                       |                        |                    |
| D27 ,28          |               |                | 1SS133            | DIODE                       |                        |                    |
| D29              |               |                | HZS2.7N(B)        | ZENER DIODE                 |                        |                    |
| D29              |               |                | RD2.7ES(B)        | ZENER DIODE                 |                        |                    |
| D30              |               |                | HZS6.2N(B2)       | ZENER DIODE                 |                        |                    |
| D30              |               |                | RD6.2ES(B2)       | ZENER DIODE                 |                        |                    |
| D31 -38          |               |                | HSS104            | DIODE                       |                        |                    |
| D31 -38          |               |                | 1SS133            | DIODE                       |                        |                    |
| D40 -48          |               |                | HSS104            | DIODE                       |                        |                    |
| D40 -48          |               |                | 1SS133            | DIODE                       |                        |                    |
| IC1              |               |                | BA17812T          | IC(VOLTAGE REGULATOR/ +12V) |                        |                    |
| IC1              |               |                | UPC7812AHF        | IC(VOLTAGE REGULATOR/ +12V) |                        |                    |
| IC2              |               |                | BA10393           | IC(DUAL COMPALATOR)         |                        |                    |
| IC3              |               |                | XL24C01AP         | MEMORY IC                   |                        |                    |
| IC4              |               | *              | CXP82440-109Q     | MI-COM IC                   |                        |                    |
| IC5              |               |                | BA6229            | IC(MOTOR DRIVER)            |                        |                    |
| IC6              |               |                | BA6209N           | IC(MOTOR DRIVER)            |                        |                    |

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⚠ indicates safety critical components.

PARTS LIST

KX-W8070S



× New Parts

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Teile ohne Parts No. werden nicht geliefert.

No.6

| Ref. No.<br>参照番号 | Address<br>位置 | New<br>Parts<br>新 | Parts No.<br>部品番号 | Description<br>部品名/規格           | Desti-<br>nation<br>仕向 | Re-<br>marks<br>備考 |
|------------------|---------------|-------------------|-------------------|---------------------------------|------------------------|--------------------|
| IC7              |               |                   | BA6229            | IC(MOTOR DRIVER)                |                        |                    |
| IC8              |               |                   | BA6209N           | IC(MOTOR DRIVER)                |                        |                    |
| IC9 -12          |               |                   | BA10393           | IC(DUAL COMPALATOR)             |                        |                    |
| IC14             |               |                   | NJM4565L-D        | IC(OP AMP X2)                   |                        |                    |
| IC16             |               |                   | UPC1297CA         | IC(DOL HX PRO SYSTEM)           |                        |                    |
| IC17,18          |               |                   | TA8125S           | IC(2CH PRE AMP)                 |                        |                    |
| IC19             |               |                   | XRU4052BC         | MOS-IC                          |                        |                    |
| IC20             |               |                   | TC9164N           | IC(16CH BILATERAL SELECTOR SW)  |                        |                    |
| IC21,22          |               |                   | NJM4565L-D        | IC(OP AMP X2)                   |                        |                    |
| IC24             |               |                   | CXA1198AP         | IC(CASSETTE DECK REC EQUALIZER) |                        |                    |
| IC25             |               |                   | TC4051BP          | IC(8CH MPX/ DE-MPX)             |                        |                    |
| IC26,27          |               |                   | NJM4565L-D        | IC(OP AMP X2)                   |                        |                    |
| IC28             |               |                   | BA6138            | IC(ROOT AMP X2)                 |                        |                    |
| IC29             |               |                   | TC9213P           | IC(2CH ELECTRONIC VOLUME)       |                        |                    |
| Q1               |               |                   | 2SC2458(Y,GR)     | TRANSISTOR                      |                        |                    |
| Q1               |               |                   | 2SC3311A(Q,R)     | TRANSISTOR                      |                        |                    |
| Q2               |               |                   | 2SD2012           | TRANSISTOR                      |                        |                    |
| Q2               |               |                   | 2SD2061           | TRANSISTOR                      |                        |                    |
| Q3               |               |                   | 2SC3940A          | TRANSISTOR                      |                        |                    |
| Q4               |               |                   | 2SA1534A(R,S)     | TRANSISTOR                      |                        |                    |
| Q5               |               |                   | 2SC2458(Y,GR)     | TRANSISTOR                      |                        |                    |
| Q5               |               |                   | 2SC3311A(Q,R)     | TRANSISTOR                      |                        |                    |
| Q7 ,8            |               |                   | 2SD1302(S,T)      | TRANSISTOR                      |                        |                    |
| Q9 ,10           |               |                   | 2SA1048(Y,GR)     | TRANSISTOR                      |                        |                    |
| Q9 ,10           |               |                   | 2SA1309A(Q,R)     | TRANSISTOR                      |                        |                    |
| Q11 ,12          |               |                   | DTC124ES          | DIGITAL TRANSISTOR              |                        |                    |
| Q11 ,12          |               |                   | UN4212            | TRANSISTOR                      |                        |                    |
| Q13 ,14          |               |                   | 2SC3940A          | TRANSISTOR                      |                        |                    |
| Q15 -18          |               |                   | DTC124ES          | DIGITAL TRANSISTOR              |                        |                    |
| Q15 -18          |               |                   | UN4212            | TRANSISTOR                      |                        |                    |
| Q19              |               |                   | 2SA1048(Y,GR)     | TRANSISTOR                      |                        |                    |
| Q19              |               |                   | 2SA1309A(Q,R)     | TRANSISTOR                      |                        |                    |
| Q21              |               |                   | DTC124ES          | DIGITAL TRANSISTOR              |                        |                    |
| Q21              |               |                   | UN4212            | TRANSISTOR                      |                        |                    |
| Q36              |               |                   | 2SA1534A(R,S)     | TRANSISTOR                      |                        |                    |
| Q38 -40          |               |                   | DTC124ES          | DIGITAL TRANSISTOR              |                        |                    |
| Q38 -40          |               |                   | UN4212            | TRANSISTOR                      |                        |                    |
| Q41 ,42          |               |                   | 2SC2458(Y,GR)     | TRANSISTOR                      |                        |                    |
| Q41 ,42          |               |                   | 2SC3311A(Q,R)     | TRANSISTOR                      |                        |                    |
| Q44 -48          |               |                   | DTC124ES          | DIGITAL TRANSISTOR              |                        |                    |
| Q44 -48          |               |                   | UN4212            | TRANSISTOR                      |                        |                    |
| Q51 -55          |               |                   | DTC124ES          | DIGITAL TRANSISTOR              |                        |                    |
| Q51 -55          |               |                   | UN4212            | TRANSISTOR                      |                        |                    |
| Q56              |               |                   | 2SA1048(Y,GR)     | TRANSISTOR                      |                        |                    |
| Q56              |               |                   | 2SA1309A(Q,R)     | TRANSISTOR                      |                        |                    |
| Q57 ,58          |               |                   | 2SD1302(S,T)      | TRANSISTOR                      |                        |                    |
| Q65 ,66          |               |                   | 2SC2458(Y,GR)     | TRANSISTOR                      |                        |                    |
| Q65 ,66          |               |                   | 2SC3311A(Q,R)     | TRANSISTOR                      |                        |                    |
| Q67 ,68          |               |                   | 2SC1845(F,E)      | TRANSISTOR                      |                        |                    |
| Q69              |               |                   | DTA124ES          | DIGITAL TRANSISTOR              |                        |                    |
| Q69              |               |                   | UN4112            | TRANSISTOR                      |                        |                    |
| Q70 ,71          |               |                   | DTC124ES          | DIGITAL TRANSISTOR              |                        |                    |
| Q70 ,71          |               |                   | UN4212            | TRANSISTOR                      |                        |                    |
| Q74              |               |                   | DTA124ES          | DIGITAL TRANSISTOR              |                        |                    |
| Q74              |               |                   | UN4112            | TRANSISTOR                      |                        |                    |

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⚠ indicates safety critical components.

× New Parts

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No.7

| Ref. No.<br>参照番号                    | Address<br>位置 | New<br>Parts<br>新 | Parts No.<br>部品番号 | Description<br>部品名/規格     | Desti-<br>nation<br>仕向 | Re-<br>marks<br>備考 |
|-------------------------------------|---------------|-------------------|-------------------|---------------------------|------------------------|--------------------|
| <b>MECHANISM ASSY (D40-139X-XX)</b> |               |                   |                   |                           |                        |                    |
| 301                                 | 2A            | *                 | A10-3210-08       | HEAD CHASSIS CALKED ASSY  |                        |                    |
| 302                                 | 1B            |                   | A11-0769-08       | BASE CHASSIS ASSY         |                        |                    |
| 305                                 | 2C            |                   | D01-0158-08       | FLYWHEEL ASSY RIGHT       |                        |                    |
| 306                                 | 2C            |                   | D01-0148-08       | FLYWHEEL ASSY LEFT        |                        |                    |
| 307                                 | 1B            |                   | D10-3290-08       | BRAKE ARM                 |                        |                    |
| 308                                 | 1A            | *                 | D10-3575-08       | EJECT LEVER               |                        |                    |
| 309                                 | 1A            |                   | D10-3323-08       | FRICTION ARM ASSY         |                        |                    |
| 310                                 | 2B            |                   | D10-3356-08       | RV LEVER                  |                        |                    |
| 311                                 | 2B            |                   | D12-0143-08       | PLAY CAM GEAR             |                        |                    |
| 312                                 | 1A            |                   | D12-0144-08       | LOADING CAM GEAR          |                        |                    |
| 313                                 | 1C            |                   | D12-0145-08       | UNIT HOLDER               |                        |                    |
| 314                                 | 2A            |                   | D13-0981-08       | ROTATION GEAR             |                        |                    |
| 315                                 | 2B            |                   | D13-1503-08       | EXTENTION GEAR A          |                        |                    |
| 316                                 | 2B            |                   | D13-1504-08       | EXTENTION GEAR B          |                        |                    |
| 317                                 | 1B            |                   | D13-1505-08       | SELECT GEAR               |                        |                    |
| 318                                 | 1B,2B         |                   | D13-1506-08       | REEL GEAR                 |                        |                    |
| 319                                 | 1A            |                   | D13-1507-08       | IDLE GEAR                 |                        |                    |
| 320                                 | 1A            |                   | D13-1509-08       | HOLDER GEAR A             |                        |                    |
| 321                                 | 1A            |                   | D13-1510-08       | HOLDER GEAR B             |                        |                    |
| 322                                 | 2A            |                   | D13-1511-08       | RETURN GEAR               |                        |                    |
| 323                                 | 2C            |                   | D15-0335-08       | PULLEY GEAR (MB)          |                        |                    |
| 324                                 | 1B            |                   | D15-0336-08       | PULLEY (LA)               |                        |                    |
| 325                                 | 1A            |                   | D15-0339-08       | PULLEY GEAR               |                        |                    |
| 326                                 | 2B            |                   | D19-0270-18       | REEL CAP                  |                        |                    |
| 327                                 | 2B            |                   | D23-0278-08       | HOUSING ASSY RIGHT        |                        |                    |
| 327                                 | 2A            |                   | D23-0279-08       | HOUSING ASSY LEFT         |                        |                    |
| 328                                 | 2C            |                   | D23-0303-08       | CAPSTAN SPACER            |                        |                    |
| 330                                 | 1C            |                   | E35-1152-08       | CONNECTOR WIRE 12P        |                        | B                  |
| 330                                 | 1C            | *                 | E35-1153-08       | CONNECTOR WIRE 12P        |                        | A                  |
| 331                                 | 1C            | *                 | E35-0911-08       | FLAT WIRE 12P             |                        | B                  |
| 331                                 | 1C            | *                 | E35-1151-08       | FLAT WIRE 12P             |                        | A                  |
| 332                                 | 2A            | *                 | E35-1005-08       | HEAD WIRE 3P PLAYBACK     |                        | A                  |
| 333                                 | 2A            | *                 | E35-1006-08       | HEAD WIER 5P REC/PLAY/ERA |                        | A                  |
| 336                                 | 1B            |                   | G01-3521-08       | PULLEY GEAR SPRING        |                        | B                  |
| 337                                 | 1B            |                   | G01-3522-08       | BRAKE ARM SPRING          |                        | B                  |
| 338                                 | 2B            |                   | G01-3523-08       | REEL SPRING               |                        |                    |
| 339                                 | 1B,2B         |                   | G01-3524-08       | BACK TENTION SPRING       |                        |                    |
| 340                                 | 2A            |                   | G01-3525-08       | PINCH ROLLER SPRING RIGHT |                        |                    |
| 340                                 | 2A            |                   | G01-3555-08       | PINCH ROLLER SPRING LEFT  |                        |                    |
| 341                                 | 2A            |                   | G01-3527-08       | HEAD SHASSIS SPRING       |                        |                    |
| 342                                 | 1A            |                   | G01-3528-08       | EJECT LEVER SPRING        |                        |                    |
| 343                                 | 2C            |                   | G01-3529-08       | EARTH SPRING              |                        |                    |
| 344                                 | 2A            |                   | G01-3556-08       | RETURN SPRING             |                        |                    |
| 345                                 | 2A            |                   | G01-3557-08       | TAPE GUIDE SPRING         |                        |                    |
| 346                                 | 2A            |                   | G02-0994-08       | AZIMUTH SPRING            |                        |                    |
| 347                                 | 1A            |                   | G02-1006-08       | FRICTION SPRING           |                        |                    |
| 348                                 | 2A            |                   | G11-2117-08       | HEAD WIRE CLAMPER         |                        |                    |
| 349                                 | 2B            |                   | G16-0790-08       | MODE REFLECTOR            |                        |                    |
| 350                                 | 1B,2B         |                   | G16-0791-81       | REFLECTOR SEAL            |                        |                    |
| 351                                 | 2B            |                   | G16-0809-08       | SHIBET                    |                        |                    |
| 353                                 | 1C            |                   | J11-0192-08       | CORD CLAMPER              |                        |                    |
| 354                                 | 1A            |                   | J19-3521-08       | LOADING HOLDER ASSY       |                        |                    |
| 355                                 | 1C            |                   | J19-3550-08       | LEAD HOLDER               |                        |                    |

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KX-W8070S

PARTS LIST

x New Parts

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No.8

| Ref. No.<br>参照番号 | Address<br>位置 | New<br>Parts<br>新 | Parts No.<br>部品番号 | Description<br>部品名 / 規格   | Desti-<br>nation<br>仕向 | Re-<br>marks<br>備考 |
|------------------|---------------|-------------------|-------------------|---------------------------|------------------------|--------------------|
| 357              | 2A            |                   | J21-5909-08       | HEAD PLATE ASSY           |                        |                    |
| 358              | 1B            |                   | J31-0853-08       | EJECT LEVER COLLAR RIGHT  |                        |                    |
| 359              | 1A            |                   | J31-0854-08       | EJECT LEVER COLLAR LEFT   |                        |                    |
| 360              | 2A            |                   | J31-0857-08       | HEAD COLLAR               |                        |                    |
| 362              | 1B, 2B        |                   | J42-0191-08       | REEL BUSH                 |                        |                    |
| 363              | 1A            |                   | J60-0022-08       | ACETATE TAPE 9X20         |                        |                    |
| 364              | 2A            |                   | J60-0024-08       | ACETATE TAPE 8X36         |                        |                    |
| 365              | 1C            |                   | J61-0095-08       | WIRE CLAMPER              |                        |                    |
| 366              | 1B            |                   | J70-0320-08       | MECHANISM CONTROL PCB     |                        |                    |
| 368              | 2A            |                   | J90-0689-08       | TAPE GUIDE                |                        |                    |
| 369              | 2A            |                   | J90-0695-08       | CASSETTE GUIDE (B)        |                        |                    |
| 370              | 2A            |                   | N09-1497-08       | TAP TITE SCREW M2X5       |                        |                    |
| 371              | 2A, 1C        |                   | N09-2871-08       | TAPPING SCREW M2X6        |                        |                    |
| 372              | 1A, 2A        |                   | N09-2872-08       | TAPPING SCREW M1.7X8      |                        |                    |
| 373              | 2A            |                   | N09-2986-08       | HEAD SCREW                |                        |                    |
| 374              | 1A, 2A        |                   | N09-2877-08       | TAP TITE SCREW M2X4       |                        |                    |
| 375              | 2A            |                   | N09-2951-08       | AZIMUTH SCREW             |                        |                    |
| 376              | 2A            |                   | N09-2962-08       | BIND TAPTITE S M2.6X6     |                        |                    |
| 377              | 1B            |                   | N09-2963-08       | TAP TITE SCREW M2X6       |                        |                    |
| 378              | 1A            |                   | N09-2966-08       | TAP TITE SCREW M2X9       |                        |                    |
| 379              | 2A            |                   | N09-2987-08       | TAPPING SCREW M2X4        |                        |                    |
| 380              | 2A            |                   | N09-2989-08       | TAPE GUIDE SCREW          |                        |                    |
| 381              | 2A            |                   | N09-2990-08       | HEAD SCREW                |                        |                    |
| 382              | 1A, 2C        |                   | N19-1031-08       | FLAT WASHER /1.6X3.5X0.5  |                        |                    |
| 383              | 1A            |                   | N19-1242-08       | FLAT WASHER /2.1X5.0X0.5  |                        |                    |
| 384              | 2C            |                   | N19-1321-08       | FLAT WASHER /2.6X6.0X0.25 |                        |                    |
| 385              | 1B, 2B        |                   | N19-1322-08       | FLAT WASHER /2.1X4.0X0.25 |                        |                    |
| 386              | 2C            |                   | N19-1326-08       | FLAT WASHER /2.3X5.0X0.25 |                        |                    |
| 387              | 2A            |                   | N19-1328-08       | FLAT WASHER /3.4X6.0X0.5  |                        |                    |
| 388              | 2A            |                   | N19-1341-08       | FLAT WASHER /2.1X5.0X0.5  |                        |                    |
| 389              | 2A            | *                 | N19-1368-08       | FLAT WASHER /2.43X5.0X0.5 |                        |                    |
| 390              | 1B            |                   | N19-1344-08       | FLAT WASHER /1.5X5.0X0.13 |                        |                    |
| 391              | 1A            |                   | N29-0206-04       | E RING /2.0               |                        |                    |
| 392              | 1B, 2C        |                   | N30-2604-46       | PAN HEAD SCR: M2.6X4      |                        |                    |
| 395              | 1A, 2A        |                   | S74-0011-08       | SWITCH OPEN/CLOSE         |                        |                    |
| 396              | 1B, 1C        |                   | S74-0016-08       | LEAF                      |                        |                    |
| BA               | 2C            | *                 | D16-0389-08       | ASSIST BELT               |                        |                    |
| BL               | 1A            |                   | D16-0340-08       | LOADING BELT              |                        |                    |
| BM               | 2C            |                   | D16-0346-08       | MAIN BELT                 |                        |                    |
| PF               | 2A            |                   | D14-0341-08       | PINCH ROLLER ASSY         |                        |                    |
| PR               | 2A            |                   | D14-0340-08       | PINCH ROLLER ASSY         |                        |                    |
| PHA              | 1C            |                   | T95-0125-08       | PHOTO INTERRUPTER         |                        |                    |
| PHB              | 1C            |                   | T95-0125-08       | PHOTO INTERRUPTER         |                        |                    |
| PHS              | 1C            |                   | T95-0125-08       | PHOTO INTERRUPTER         |                        |                    |
| PHT              | 1C            |                   | T95-0125-08       | PHOTO INTERRUPTER         |                        |                    |
| AM               | 1C            |                   | T42-0630-08       | ASSIST MOTOR ASSY         |                        |                    |
| MM               | 1C            |                   | T42-0635-08       | MAIN MOTOR ASSY           |                        |                    |
| RM               | 1C            |                   | T42-0629-08       | REEL MOTOR ASSY           |                        |                    |
| PH               | 2A            | *                 | T31-0073-08       | PLAYBACK HEAD             |                        | A                  |
| RPEH             | 2A            | *                 | T39-0029-08       | REC/PLAY/ERESE HEAD       |                        | B                  |

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KX-W8070S

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# KX-W8070S

## SPECIFICATIONS

|                             |  |
|-----------------------------|--|
| Track System .....          | 4 track, 2 channel stereo                    |
| Recording System .....      | AC bias (Frequency: 105 kHz)                 |
| Heads.....                  | A DECK                                       |
|                             | Playback head ..... 1                        |
|                             | B DECK                                       |
|                             | Playback/recording heads .... 1              |
|                             | Erasing head ..... 1                         |
| Motors.....                 | A DECK..... DC motor × 3                     |
|                             | B DECK..... DC motor × 3                     |
| Wow and Flutter .....       | ±0.13 % (IEC)                                |
|                             | ±0.17 % (DIN)                                |
|                             | 0.06 % (W.R.M.S)                             |
| Fast Winding Time .....     | Approx. 90 seconds (C-60 tape)               |
| Frequency Response          |  |
| Normal Tape.....            | 30 Hz to 18,000 Hz, ±3 dB                    |
| CrO <sub>2</sub> Tape.....  | 30 Hz to 19,000 Hz, ±3 dB                    |
| Metal Tape.....             | 30 Hz to 20,000 Hz, ±3 dB                    |
| Signal to Noise Ratio       |  |
| Dolby NR OFF .....          | 56 dB  |
|                             | (IEC, 250 nWb/m, Metal tape)                 |
| Dolby NR OFF.....           | 58 dB (Metal tape)                           |
| Dolby B NR ON.....          | 67 dB (Metal tape)                           |
| Dolby C NR ON.....          | 75 dB (Metal tape)                           |
| Dolby S NR ON.....          | 78 dB (Metal tape)                           |
|                             | (3rd, H.D., 3 %, Metal tape)                 |
| Harmonic Distortion.....    | Less than 2.0 %                              |
|                             | (at 315 Hz, 3rd H.D., 250 nWb/m, Metal tape) |
| Input sensitivity/Impedance |  |
| LINE IN .....               | 122.8 mV/10 kΩ                               |
| Output Level/Impedance      |  |
| LINE OUT .....              | 775 mV/1.0 kΩ                                |
| Headphones.....             | 0.5 mW/32 Ω                                  |
| [General]                   |  |
| Power Consumption .....     | 30 W   |
| Dimensions.....             | W: 440 mm (17-5/16")                         |
|                             | H: 137 mm (5-3/8")                           |
|                             | D: 271 mm (10-11/16")                        |
| Weight (Net) .....          | 5.0 kg (11.0 lb)                             |

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

### Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the U.S.A. (K) 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.