

CDP-M333ES/M555ES

SERVICE MANUAL

US Model
Canadian Model



Photo: CDP-M555ES

Model Name Using Similar Mechanism	NEW
CD Mechanism Type	CDM62-K1BD35B
Base Unit Name	BU-K1BD35B
Optical Pick-up Name	KSM-213BFN/C2NP

SPECIFICATIONS

Compact disc player

Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$) Emission duration: continuous
Laser output	Max 44.6 μW^* * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up block with 7 mm aperture.
Frequency response	2 Hz to 20 kHz $\pm 0.5 \text{ dB}$
Dynamic range	More than 95 dB
Harmonic distortion	Less than 0.003%

Output

	Jack type	Maximum output level	Load impedance
LINE OUT	Phono jacks	2 V (at 50 kilohms)	Over 10 kilohms
DIGITAL OUT (OPTICAL)	Optical output connector	-18 dBm	Wave length: 660 nm
MONITOR OUT (CDP-M555ES)	Phono jacks	1 Vp-p	75 ohms, unbalanced sync negative

General

Power requirements	120 V AC, 60 Hz
Power consumption	20 W (CDP-M333ES) 23 W (CDP-M555ES)
Dimensions (approx.) (w/h/d)	430 $\times$ 189 $\times$ 537 mm (17 $\times$ 7 1/2 $\times$ 21 1/4 in.) incl. projecting parts
Mass (approx.)	9.5 kg (20 lbs 16 oz.)

Supplied accessories

- Audio cord (1)
- Video cord (1) (CDP-M555ES)
- Monaural (2P) mini-plug cord (1) (Connecting cord for CONTROL A1II) (supplied for Canadian models only)
- Remote commander (remote) (1)
- Size AA (LR6) batteries (3)

Design and specifications are subject to change without notice.

COMPACT DISC PLAYER

SONY®

CD-TEXT TEST DISC

This unit is able to display the TEXT data (character information) written in the CD on its fluorescent indicator tube.

The CD-TEXT TEST DISC (TGCS-313:J-2501-126-A) is used for checking the display.

To check, perform the following procedure.

Checking Method:

1. Turn ON the power, set the disc on the disc table with the side labeled as “test disc” as the right side, close the front cover, and chuck the disc.
2. The following will be displayed on the fluorescent indicator tube. (The display switches each time the **[SCROLL]** button is pressed.)
Display: CD TEXT TEST DISC (Album Title)
3. Press the **[▶]** button and play back the disc.
4. The following will be displayed on the fluorescent indicator tube. (If nothing is displayed, press the **[SCROLL]** button.)
Display: 1 kHz/0 dB/ L&R
5. Rotate **[◀◀AMS▶▶]** knob to switch the track. The text data of each track will be displayed.
For details of the displayed contents for each track, refer to “Table 1: CD-TEXT TEST DISC Text Data Contents” and “Table 2: CD-TEXT TEST DISC Recorded Contents and Display”.

Restrictions in CD-TEXT Display

In this unit, some special characters will not be displayed properly. These will be displayed as a space or a character resembling it. For details, refer to “Table 2: CD-TEXT DISC Recorded Contents and Display”.

Table 1: CD-TEXT TEST DISC Text Data Contents (TRACKS No. 1 to 41:Normal Characters)

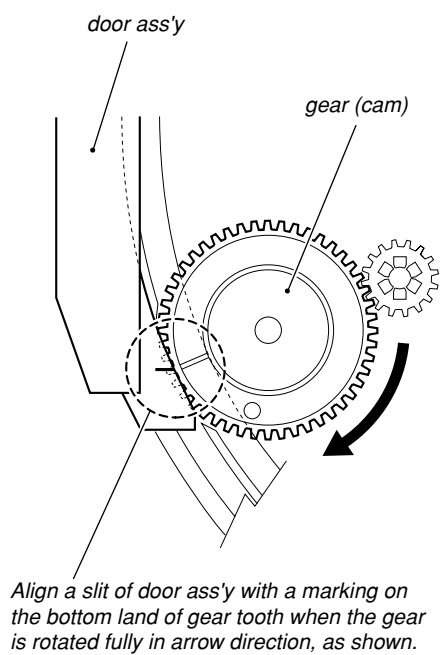
TRACK No.	Displayed Contents	TRACK No.	Displayed Contents
1	1 kHz/0 dB/L&R	22	1 kHz/-90 dB/L&R
2	20 Hz/0 dB/L&R	23	Infinity Zero w/o emphasis//L&R
3	40 Hz/0 dB/L&R	24	Infinity Zero with emphasis//L&R
4	100 Hz/0 dB/L&R	25	400 Hz+7 kHz(4:1)/0 dB/L&R
5	200 Hz/0 dB/L&R	26	400 Hz+7 kHz(4:1)/-10 dB/L&R
6	500 Hz/0 dB/L&R	27	19 kHz+20 kHz(1:1)/0 dB/L&R
7	1 kHz/0 dB/L&R	28	19 kHz+20 kHz(1:1)/-10 dB/L&R
8	5 kHz/0 dB/L&R	29	100 Hz/0 dB/L*
9	7 kHz/0 dB/L&R	30	1 kHz/0 dB/L*
10	10 kHz/0 dB/L&R	31	10 kHz/0 dB/L*
11	16 kHz/0 dB/L&R	32	20 kHz/0 dB/L*
12	18 kHz/0 dB/L&R	33	100 Hz/0 dB/R*
13	20 kHz/0 dB/L&R	34	1 kHz/0 dB/R*
14	1 kHz/0 dB/L&R	35	10 kHz/0 dB/R*
15	1 kHz/-1 dB/L&R	36	20 kHz/0 dB/R*
16	1 kHz/-3 dB/L&R	37	100 Hz Squer Wave//L&R
17	1 kHz/-6 dB/L&R	38	1 kHz Squer Wave//L&R
18	1 kHz/-10 dB/L&R	39	1 kHz w/emphasis/-0.37 dB/L&R
19	1 kHz/-20 dB/L&R	40	5 kHz w/emphasis/-4.53 dB/L&R
20	1 kHz/-60 dB/L&R	41	16 kHz w/emphasis/-9.04 dB/L&R
21	1 kHz/-80 dB/L&R		

Note: The contents of Track No. 1 to 41 are the same as those of the current TEST DISC-their titles are displayed.

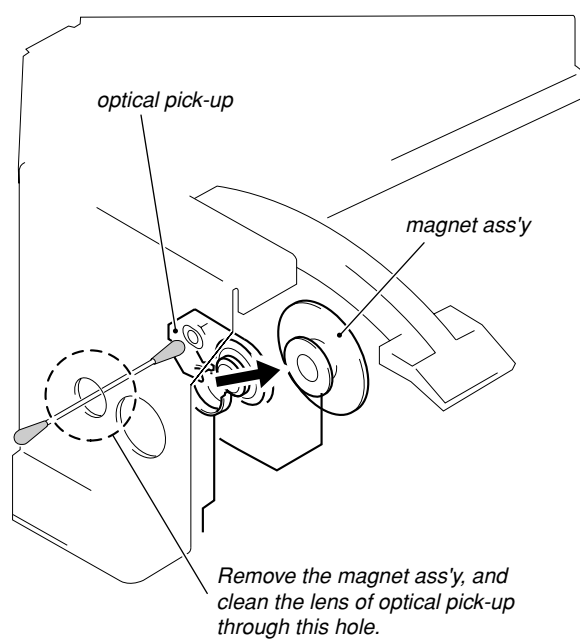
Table 2: CD-TEXT TEST DISC Recorded Contents and Display
(In this unit, some special characters cannot be displayed. This is no a fault.)

TRACK No.	Recorded Contents	Displayed Contents
42	! " # \$ % & ' (21h to 27h) 1kHz 0dB L&R	← All the same
43	() * + , - . / (28h to 2Fh)	← All the same
44	0 1 2 3 4 5 6 7 (30h to 37h)	← All the same
45	8 9 : ; < = > ? (38h to 3Fh)	← All the same
46	@ A B C D E F G (40h to 47h)	← All the same
47	H I J K L M N O (48h to 4Fh)	← All the same
48	P Q R S T U V W (50h to 57h)	← All the same
49	X Y Z [¥] ^ _ (58h to 5Fh)	X Y Z [\] ^ _ (58....
50	` a b c d e f g (60h to 67h)	← All the same
51	h i j k l m n o (68h to 6Fh)	← All the same
52	p q r s t u v w (70h to 77h)	← All the same
53	x y z { } ~ ■ (78h to 7Fh)	x y z { } ~ (78....
54	■ i ¢ £ ¤ ¥ ¦ § (A0h to A7h) 8859-1	i ¢ £ ¤ ¥ ¦ § (A0.... ■ is not displayed
55	♪ © ª « ¬ ® ¯ (A8h to AFh)	♪ (A8.... © ª « ¬ ® ¯ are not displayed
56	• ± ² ³ ´ µ ¶ · (B0h to B7h)	´ µ • (B0.... • ± ² ³ ¶ are not displayed
57	† º » ¼ ½ ¾ ¿ (B8h to BFh)	† ¿ (B8.... º » ¼ ½ ¾ are not displayed
58	À Á Â Ã Ä Å Æ Ç (C0h to C7h)	← All the same
59	È É Ê Ë Ì Í Î Ï (C8h to CFh)	← All the same
60	Ð Ñ Ò Ó Ô Õ Ö × (D0h to D7h)	← All the same
61	Ø Ù Ú Û Ü Ý Þ ß (D8h to DFh)	Φ Ù Ú Û Ü Ý Þ ß (D8....
62	à á â ã ä å æ ç (E0h to E7h)	← All the same
63	è é ê ë ì í î ï (E8h to FFh)	← All the same
64	đ ñ ò ó ô õ ö ÷ (F0h to F7h)	đ ñ ò ó ô õ ö ÷ (F0....
65	ø ù ú û ü ý þ ÿ (F8h to FFh)	← All the same
66	No.66	← All the same
67	No.67	← All the same
to	to	to
99	No.99	← All the same

ALIGNMENT OF GEAR (CAM) PHASE WITH DOOR ASS'Y



CLEANING OF OPTICAL PICK-UP



SECTION 4 SERVICE MODE

SPECIAL FUNCTION

This unit is provided with several service modes.
Details are shown in the following table.

Turn on the power and press **[GROUP FILE]**, **[MEGA CTRL]** and **[I/O]** buttons.
Rotate the **[DISC/CHARACTER]** knob to enter any of the following modes.

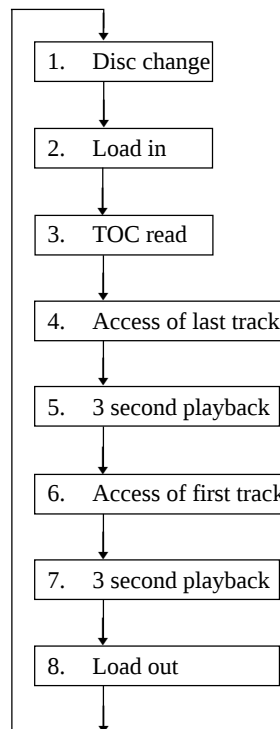
Display	Contents
Mech Adjust	Mechanism adjustment mode
Table Roatation	Mode in which table keeps rotating
All Lit Mode	All lights ON mode
Ship Mode	Default mode
Normal Aging	Normal aging mode
Table Aging	Table aging mode
Door Popup Aging	Door/popup aging mode
Color Bar (OSD)	Color bar on OSD
Test Disp (OSD)	Test display for OSD
Memo Copy Mode	Memo copy mode
Model Name	Model name display
Show Mcom Ver.	Software version display
Demo	400-memo writing mode
BUS Check	Bus check
M kentou	Loading aging

To exit the mode, press **[I/O]** button to enter the standby state.
(When selecting the Ship mode, the standby mode is automatically entered.)

AGING MODE

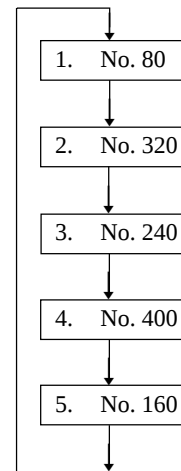
- Mode which repeatedly changes and plays back discs automatically in the unit.
- It will repeat aging as long as no errors occur.
- If an error occurs during aging, it will stop all servos, motors, etc. instantaneously, display the error number, and stop operations. However, the stopping conditions differ according to whether the unit is equipped with the “self-protection function during errors” described later.
The function serves to maintain the state of the unit when errors occur.

Sequence of Aging Mode



Order of Disc Change

(1 cycle takes 3 minutes)



SPECIAL AGING MODE FUNCTIONS

The aging mode is provided with the following convenient functions

- Disc setting mode (*1)
 - Selection of presence of protection function during error (*2)
 - Count function of aging cycle (*3)
- *1 Disc setting mode:
5 discs are set before setting the aging mode. This mode makes the setting of these discs more easy.
- *2 Self protection function during errors:
Function which voluntarily corrects errors which occur during normal operations by retries.
If this function is not provided, all operations will be stopped without retiring. It is suitable for checking errors with low reproducibility.
If this function is provided, and errors can be corrected by retries, aging will be continued without stopping.
- *3 Aging cycle count function:
Functions which displays the number of agings carried out on the Fluorescent indicator tube in numbers. One aging cycle consists of five discs.

AGING PROCEDURE

1. Turn on the power and press the **[GROUP FILE]**, **[MEGA CTRL]** and **[I/O]** buttons.
2. Rotate **[DISC/CHARACTER]** knob, select "Normal Aging" and press the button to start the aging mode.
3. When the disc set mode is set, the **[>]** and **[■]** LEDs blink.
4. Rotate the **[DISC/CHARACTER]** knob. The slits (No. 80, 160, 400, 240, 320) for setting the discs will come forward. Insert the discs into these slits. Do not set the discs in other slits.
5. Set whether the self-protection function during errors is equipped with the unit. Press the **[REPEAT]** button. If "REPEAT" is displayed on the fluorescent indicator tube, it means the function is provided. If "REPEAT" is not displayed, it means the function is not provided.
6. Press the **[>]** button.
7. The **[>]** LED blinks, the aging mode is set, and aging is started.
8. The aging cycle lasts 3 minutes. If errors occur during aging, the error number will be displayed on the fluorescent indicator tube. (Refer to the following table for the details of the errors.)
9. Aging will be repeated as long as no errors occur.
10. After each aging cycle, the number displayed on the Fluorescent indicator tube will increase.
11. To end aging, to end aging, press the **[I/O]** button to enter the standby mode.

Error code

Code number	Name	Contents
#Err 01	DISC sensor check 1	No disc in the specified slit
#Err 02	DISC sensor check 2	Disc in other slits
#Err 03	Table operation check 1	Table motor current over
#Err 04	Table operation check 2	No table sensor input
#Err 05	Loading operation check 1	Load in timeover
#Err 06	Loading operation check 2	Load out timeover
#Err 08	Table stop precision check 1	Table is not stopped within the specified time.
#Err 09	Table stop precision check 2	Stopped while both T.SENS 1 and 2 are "LOW".
#Err *1	BU related check 1	Access timeover
#Err *2	BU related check 2	During high speed playback, COUNT timeout
#Err *3	BU related check 3	Q data read error
#Err *4	BU related check 4	JBU operation (from focus search to until signal can be read) timeover
#Err *5	BU related check 5	GFS monitor error
#Err *6	BU related check 6	Focus cannot be imposed by focus search

The * numbers mean the following according to the state of the unit during aging

- 2 : From chucking to end of TOC read
- 3 : From end of TOC read to end of last track playback
- 4 : From end of last track playback to end of first track playback
- # : DISC No.

LOADING AGING MODE

- This mode is used for repeating loading operations continuously.
- Aging will be performed continuously unless an error occurs.
- When an error occurs, the error code will be displayed on the fluorescent indicator tube.

Procedure:

1. Set a disc in the DISC 1 slit.
2. Turn on the power and press the **GROUP FILE**, **MEGA CTRL** and **I/O** buttons.
Rotate the **DISC/CHARACTER** knob, select “Table Roatation” and press the dial.
3. When the mode is set, both the **▷** and **■** indicators will start to blink.
4. When the **▷** button is pressed, only the **▷** indicator will blink and aging starts.
5. To end the mode, press the **I/O** button or disconnect the power cord from the outlet.

The error codes displayed during operations and when errors occur are the same as the “AGING MODE” described earlier.

TABLE AGING MODE

- This mode is used for rotating the table randomly.
- Aging will be performed continuously unless an error occurs.
- When an error occurs, the error code will be displayed on the fluorescent indicator tube.

Procedure:

1. Turn on the power and press the **GROUP FILE**, **MEGA CTRL** and **I/O** buttons.
Rotate the **DISC/CHARACTER** knob, select “Table Aging” and press the dial.
Rotate the **DISC/CHARACTER** knob and set the disk in the slit whose number is being displayed (150, 149, 300, 1, 2)
2. When the mode is set, both the **▷** and **■** indicators will start to blink.
3. When the **▷** button is pressed, only the **▷** indicator will blink and aging starts.
4. To end the mode, press the **I/O** button or disconnect the power cord from the outlet.

During aging, operations will be carried out sequentially in the order of No. 1, No. 2, No. 150, No. 149, and No. 300 slits.

The error codes displayed during operations and when errors occur are the same as the “AGING MODE” described earlier.

DOOR POP UP AGING MODE

- This mode is used for performing aging of the CD pop up part and door open/close.
It is used for checking if operations are performed normally.

Method:

1. Turn on the power and press the **GROUP FILE**, **MEGA CTRL** and **I/O** buttons.
Rotate the **DISC/CHARACTER** knob, select “Door Popup Aging” and press the dial.
2. Aging starts, and door open/close and up/down operations of the pop up part are performed continuously.
3. To end the mode, press the **I/O** button.

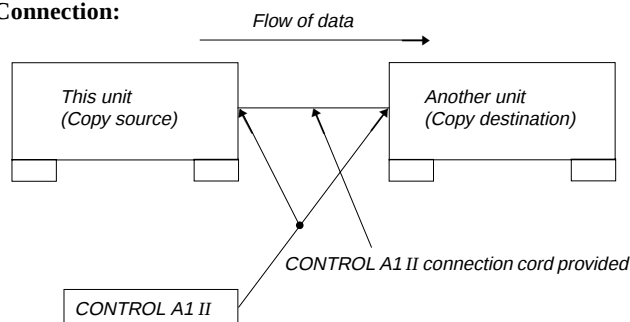
TABLE ROTATION MODE

- This mode is used for electrical adjustments. Refer to the section on Electrical Adjustments.

TITLE MEMO SHIFT MODE

- This mode is used for writing title memo information recorded in this unit in a different unit.
Use it for transferring disc memo contents written by the customer to the new units when replacing the unit, etc.

Connection:



Procedure:

1. Connect two units using the **CONTROL A1 II** connection cord shown in the figure.
2. With the power on, while pressing the **GROUP 7** button and **OPEN/CLOSE** button of the copy destination unit, press the **+100** button.
3. When the data has been transferred, the fluorescent indicator tube displays “complete” for about 1 second.

MODEL NAME DISPLAY

- Model names can be displayed on the fluorescent indicator tube for checking the microprocessor model setting, etc.

Procedure:

With the power ON, while pressing the **GROUP FILE** and **MEGA CTRL** buttons, press the **I/O** button.
Rotate the **DISC/CHARACTER** knob, select “Model Name” and press the dial.
The model name is displayed on the fluorescent indicator tube.
Let the model name be displayed for three seconds and exit the mode.

MICROPROCESSOR VERSION DISPLAY

- The microprocessor version can be displayed on the fluorescent indicator tube.

Procedure:

With the power ON, while pressing the **GROUP FILE** and **MEGA CTRL** buttons, press the **I/O** button.
Rotate the **DISC/CHARACTER** knob, select “Show Mcom Ver.” and press the dial.
The microprocessor version is displayed on the fluorescent indicator tube.
Let the model name be displayed for three seconds and exit the mode.

ALL LIT MODE

- This mode is used for lighting the whole fluorescent indicator tubes and LEDs.

Procedure:

With the power ON, while pressing the **GROUP FILE** and **MEGA CTRL** buttons, press the **I/O** button.

Rotate the **DISC/CHARACTER** knob, select “All Lit Mode” and press the dial.

Both the fluorescent indicator tubes and LEDs will light up completely.

To end this mode, press the **I/O** mode.

MECHANISM ADJUSTMENT MODE

- This mode is used for mechanism adjustments. Refer to the section on Mechanism Adjustments.

SHIPMENT MODE

- This mode is used for setting the unit to the shipment state.
Do not execute it without a proper reason as it erases the memory of the title memo recorded by the customer.

Procedure:

Set the **TIMER** switch to **OFF**. Next, with the power ON, while pressing the **GROUP FILE** button and **MEGA CTRL** button, press the **I/O** button. If the switch state is normal, the model name will be displayed on the fluorescent indicator tube and the unit will set into the shipment mode.

If the various switches are not set to their designated positions, error will be displayed on the fluorescent indicator tube.

TITLE MEMO RECORDING CHECK MODE

This mode is not required for servicing. Do not execute without a proper reason.

If executed, the memory of the title memo recorded by the customer will be erased.

SECTION 5 TEST MODE

ADJ MODE

1. Turn ON the power of the unit, set disc to disc table, and perform chucking.
2. Remove the power cord from the outlet.
3. To set ADJ mode, connect the TP4 (ADJ) of the MAIN board to ground, and connect the power cord to the outlet.

In this mode, table rotation and loading operations are not performed because it is taken that the disc has already been chucked.

Note: The same operations are also performed in the following when the TP4 (ADJ) is connected to ground after turning on the power.

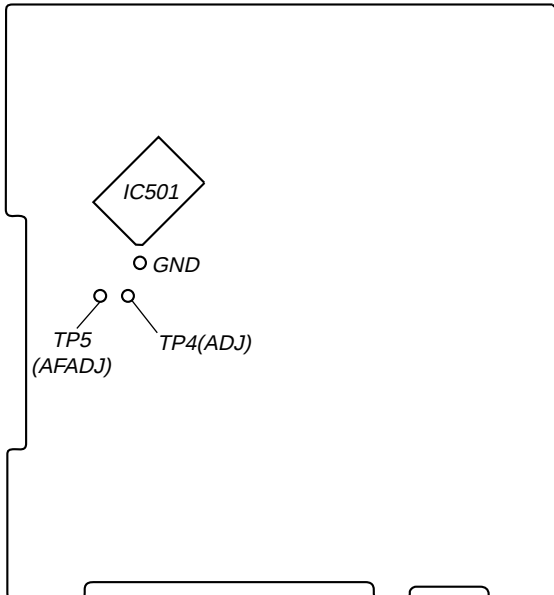
- Direct search (movement of sledding motor) is not performed during accessing
- Ignored even when GFS becomes L
- Ignored even when the Q data cannot be read
- Focus gain does not decrease

ADJ Mode Special Functions Table

Button	Function
CONTINUE	Servo average display Displays VC, FE, RF, TE and traverse in hexadecimal numbers
SHUFFLE	Focus bias display Each time this is pressed, the focus bias is switched between 1 and 2 (1) Bias actually set Optimum bias Minimum jitter (2) U:Upper aliasing bias L:Lower aliasing bias
PROGRAM	Auto gain display Displays focus, tracking, sledding in hexadecimal numbers
GROUP 3 (3)	Turns off the tracking and sledding servo
GROUP 8 (8)	Turns on the tracking and sledding servo
CHECK	S-curve observation mode. (Release this mode when the  button is pressed.)

• Checking Location

– MAIN BOARD (Conductor Side) –



KEY AND DISPLAY CHECK MODE

To set this mode, connect the TP5 (AFADJ) on the MAIN board to ground, and connect the power cord to the outlet.

Note: When this mode is executed, all title memos recorded will be erased.

- When this button is pressed, “line # No. #” will be displayed. However, these will not be displayed for the following special buttons. However, these will not be displayed for the following special buttons.

 (stop) button : FL segment check
(Refer to FL Tube Check Patterns)

 (pause) button : FL grid check
(Refer to FL Tube Check Patterns)
The  LED also lights up simultaneously.

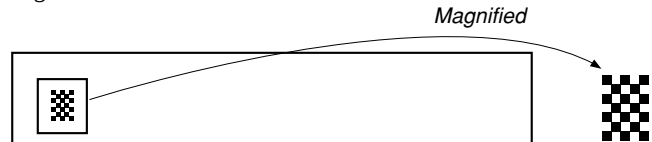
 (play) button : All FL segment and grid will light up.
 LED also lights up simultaneously.

TIMER switch : When the switch position is **PLAY**, the **STANDBY** LED lights up. It goes OFF when set to **OFF**.

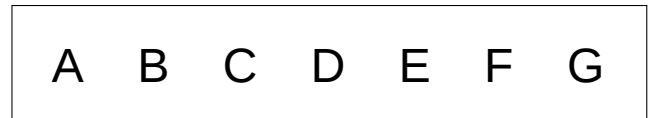
Each time this button is pressed, the value of the “Go+ ## keys” increases. Buttons pressed once will not be counted when pressed again.

FL Tube Check Patterns

Segment check



Grid check



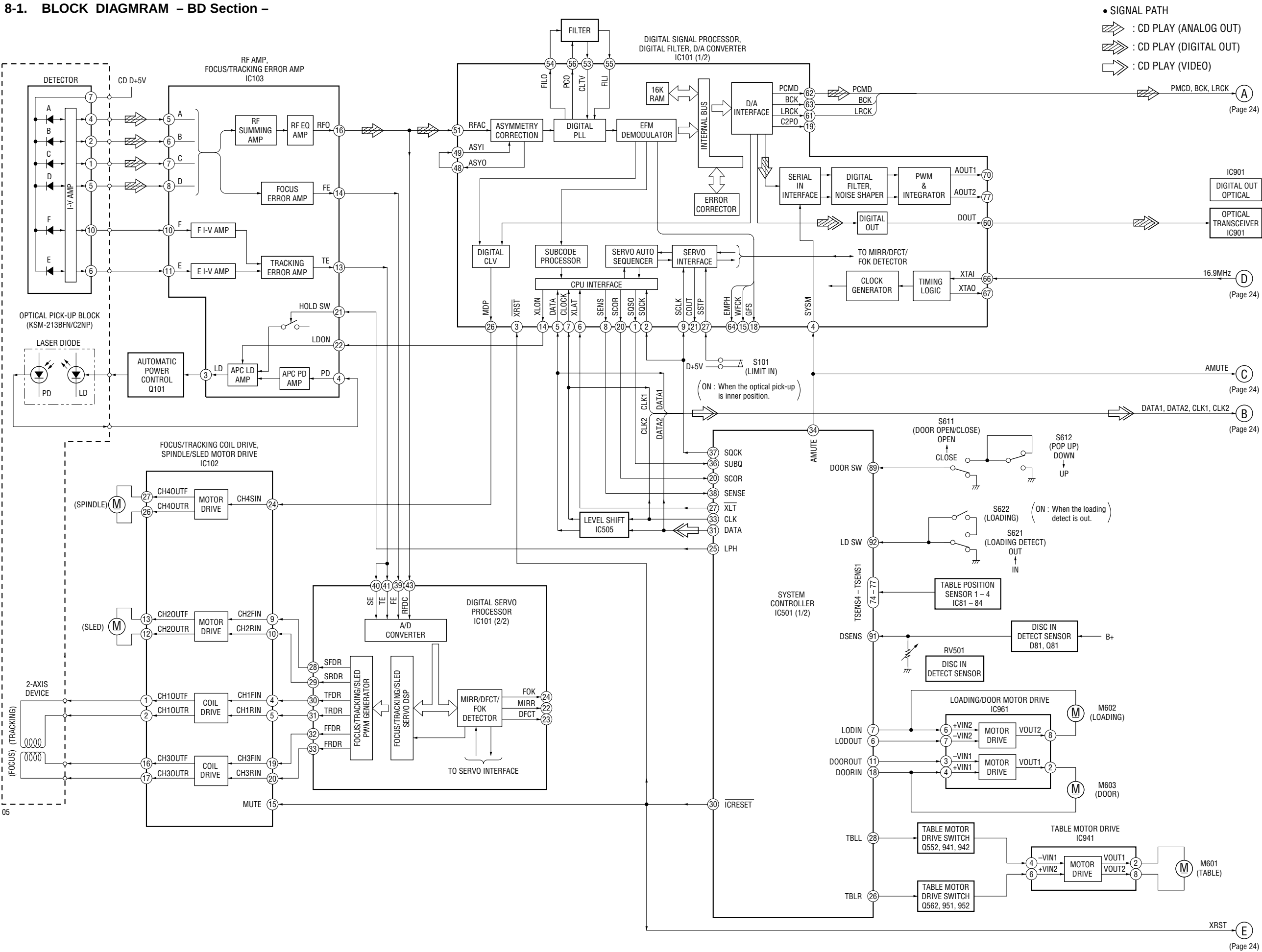
- When the jog dial is rotated to the right, the GROUP LEDs light up in the order of 1→2..8→HIT LIST→EASY PLAY→ARTIST MODE→MEGA CTRL→1.
- When the jog dial is rotated to the left, the GROUP LEDs light up in the order of 8→7..1→MEGA CTRL→ARTIST MODE→EASY PLAY→HIT LIST→8.

• Abbreviation

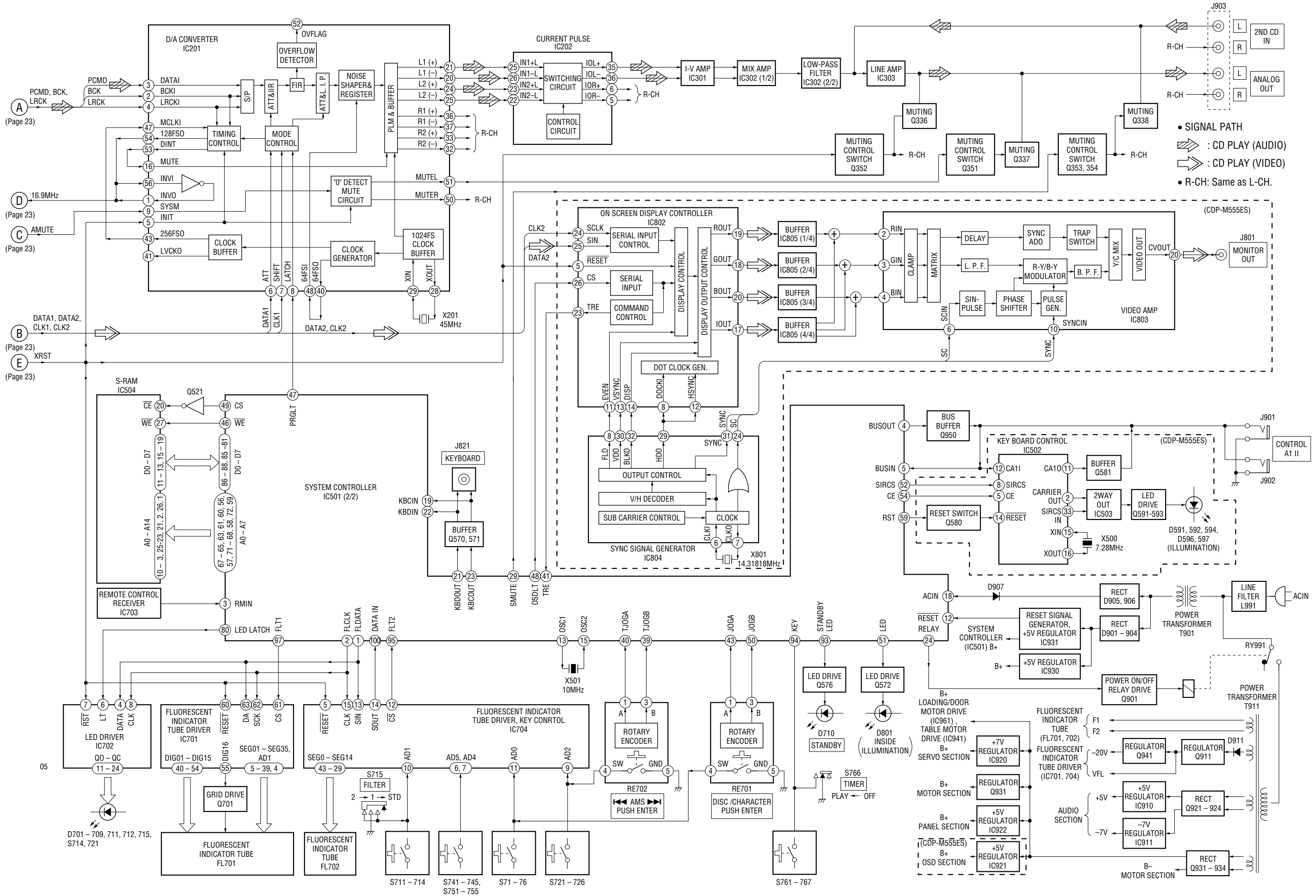
FL: Fluorescent Indicator Tube

SECTION 8
DIAGRAMS

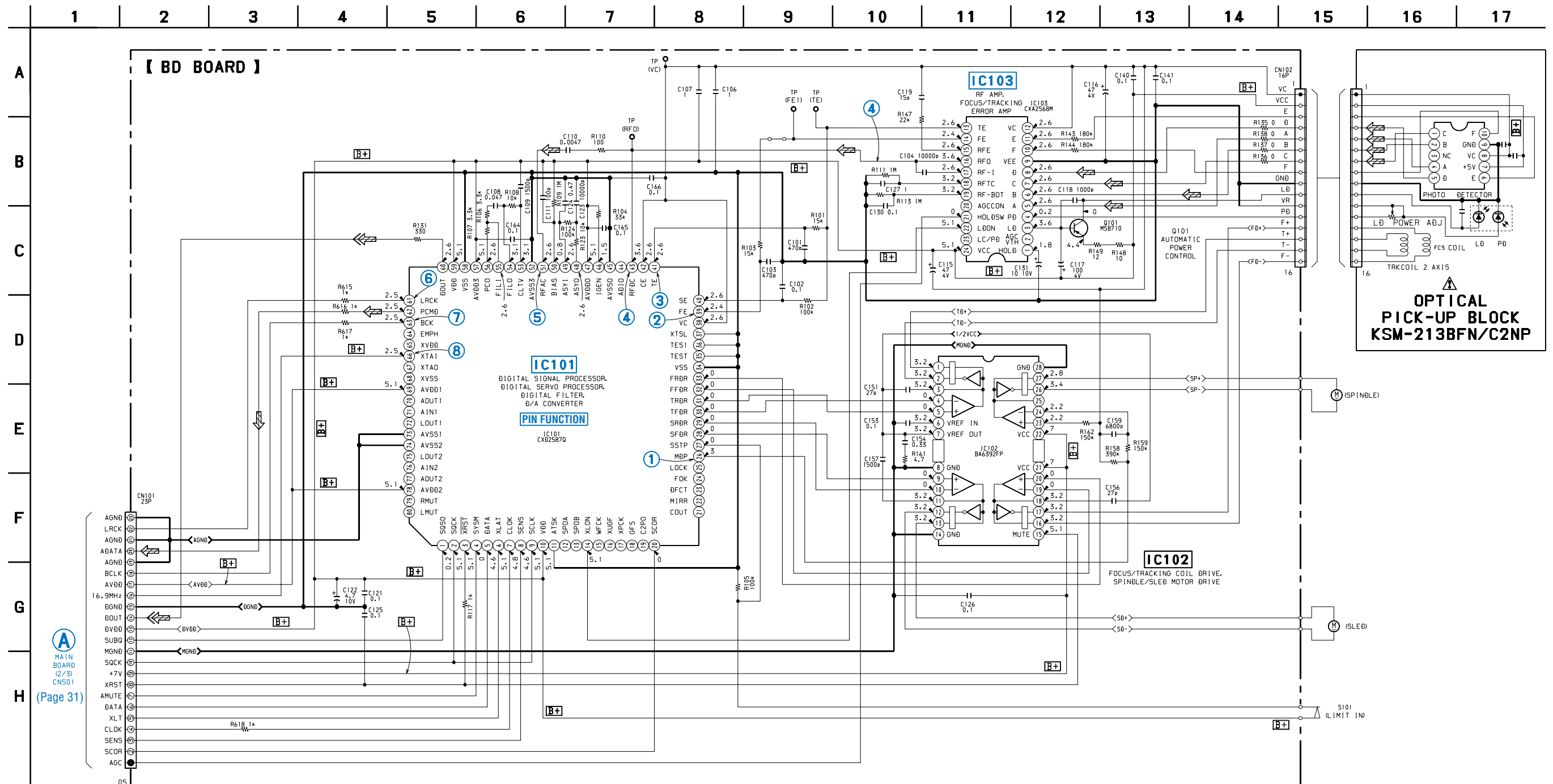
8-1. BLOCK DIAGMMRAM – BD Section –



8-2. BLOCK DIAGRAM - MAIN Section -



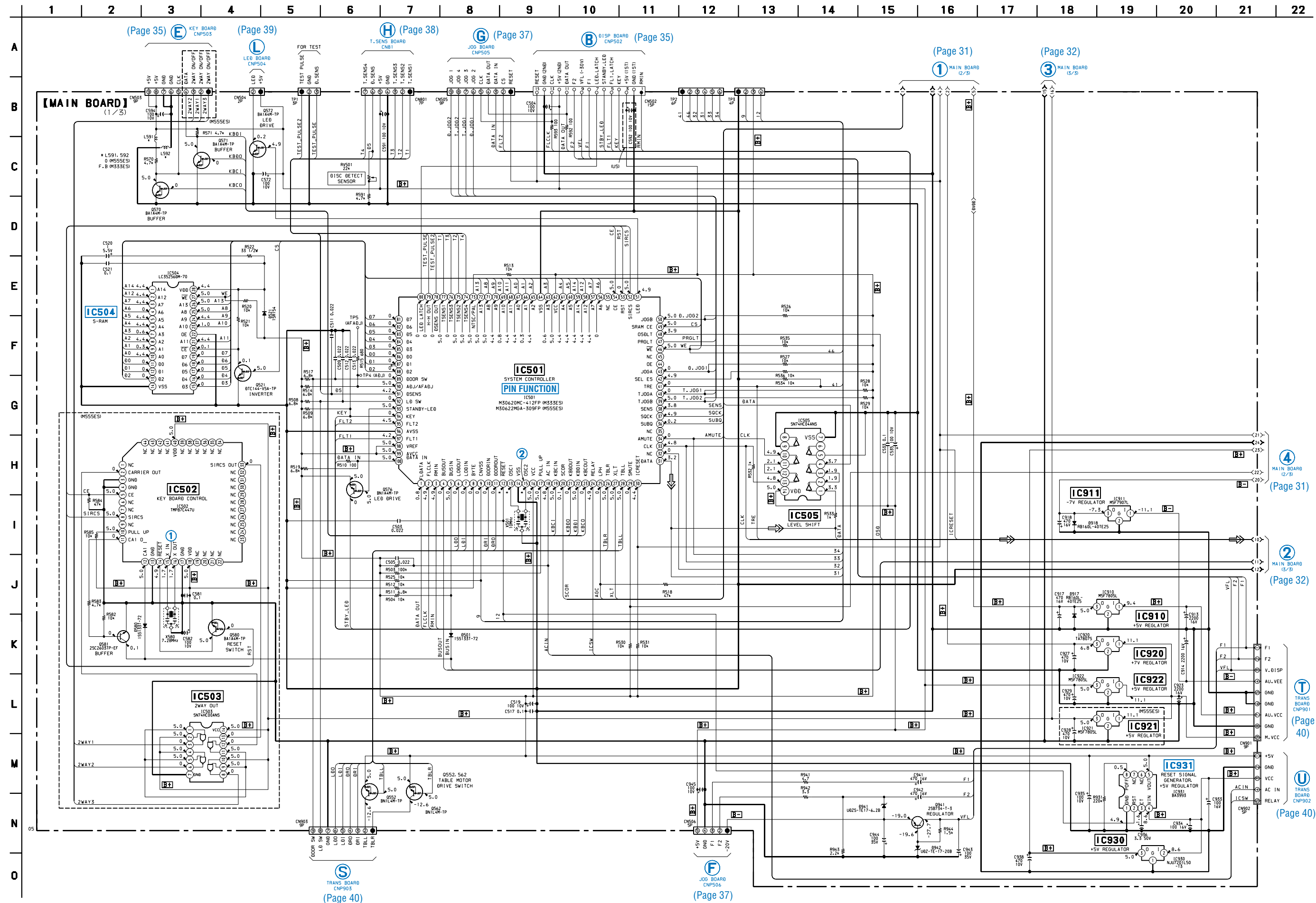
8-5. SCHEMATIC DIAGRAM – BD Board – • See page 33 for Waveforms. • See page 42 for IC Block Diagrams.



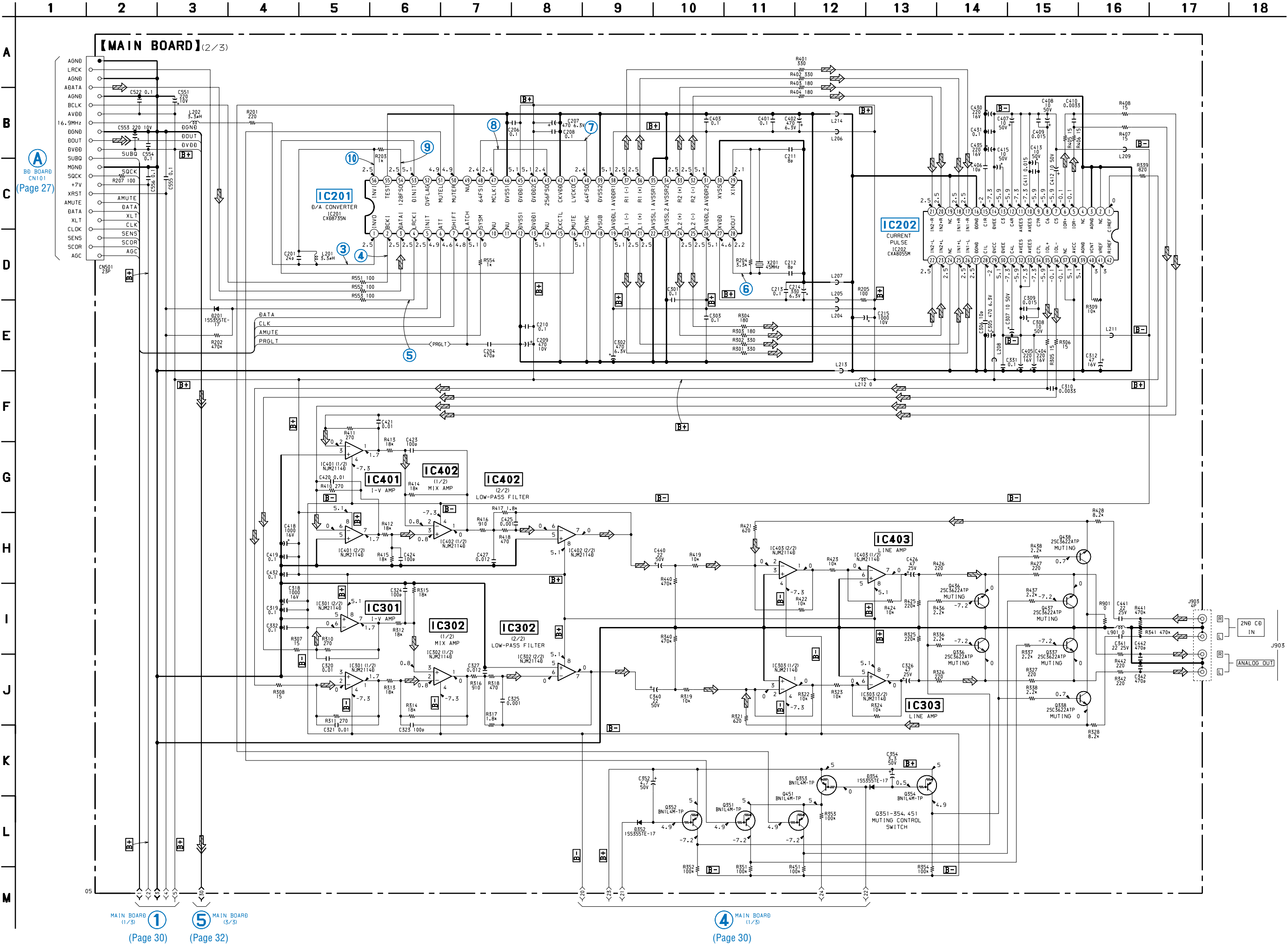
The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

8-7. SCHEMATIC DIAGRAM – MAIN Board (1/3) – • See page 33 for Waveforms. • See page 42 for IC Block Diagrams.



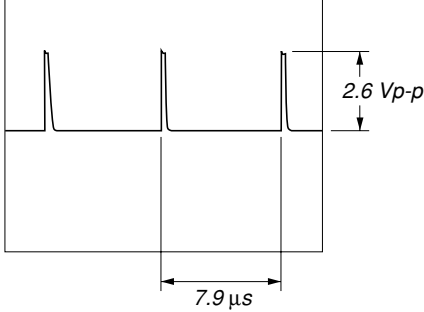
8-8. SCHEMATIC DIAGRAM – MAIN Board (2/3) – • See page 33 for Waveforms. • See page 42 for IC Block Diagrams.



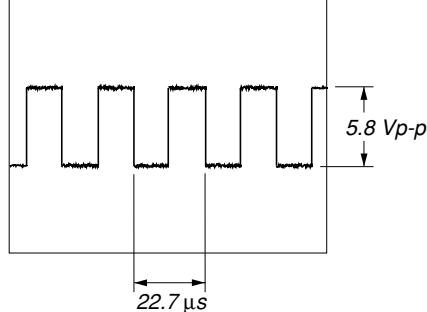


• Waveforms
– BD Board –

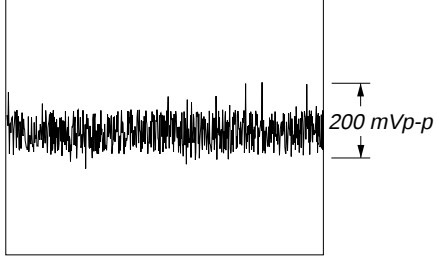
① IC101 ②⑥ (MDP) (CD play mode)



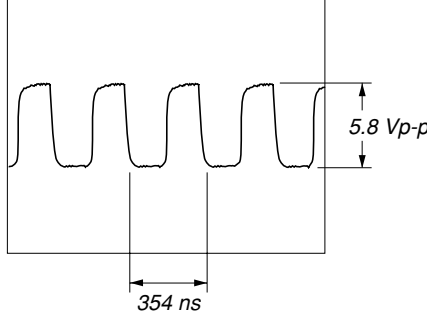
⑥ IC101 ⑥① (LRCK)



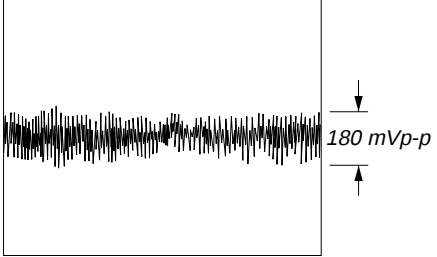
② IC101 ③⑨ (FE) (CD play mode)



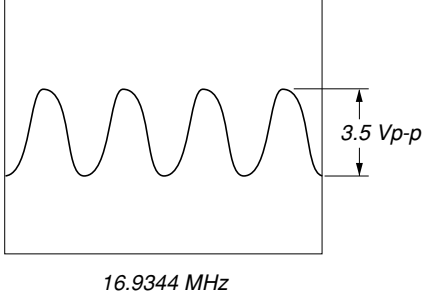
⑦ IC101 ③③ (BCK)



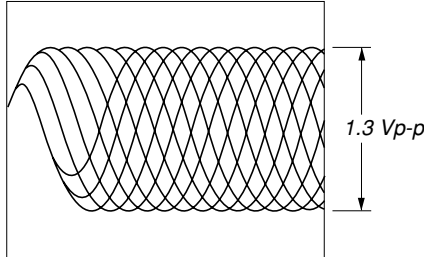
③ IC101 ④① (TE) (CD play mode)



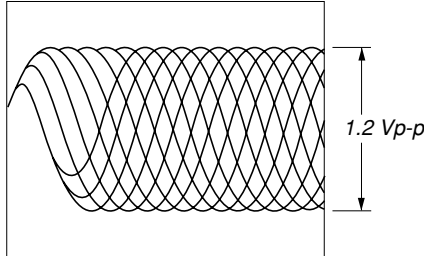
⑧ IC101 ⑥⑥ (XTAI)



④ IC101 ④③ (RFDC), IC103 ①⑥ (RFO)
(CD play mode)

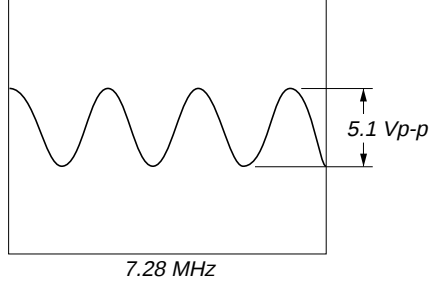


⑤ IC101 ⑤① (RFAC) (CD play mode)

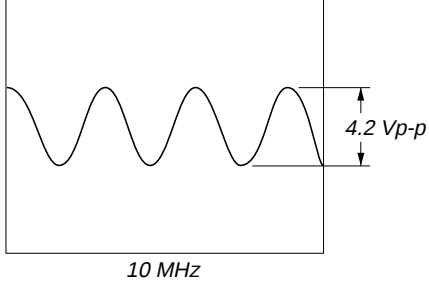


– MAIN Board –

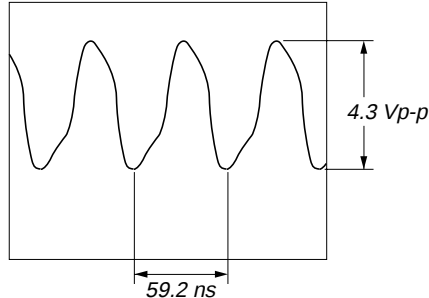
① IC502 ①⑤ (X IN)



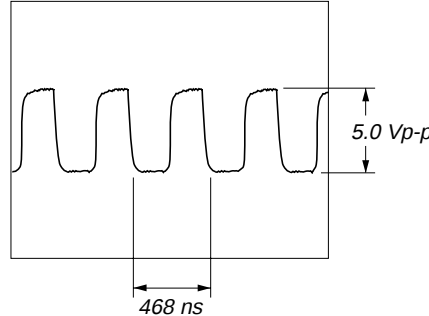
② IC501 ①⑤ (OSC2)



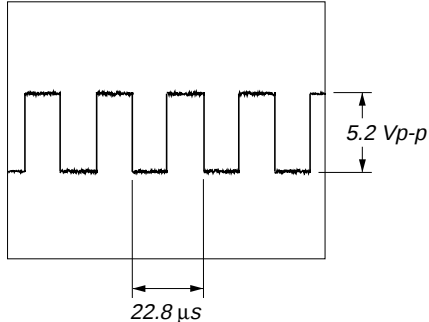
③ IC201 ① (INVO)



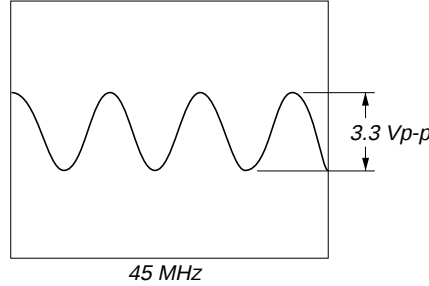
④ IC201 ② (BCKI)



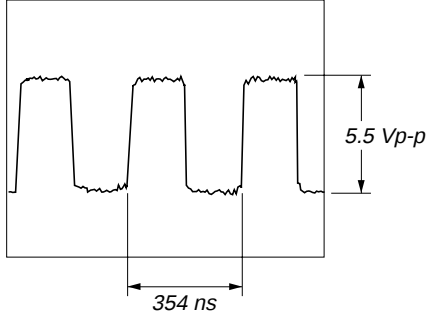
⑤ IC201 ④ (LRCKI)



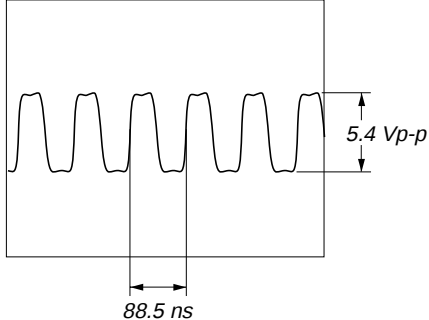
⑥ IC201 ②⑧ (XOUT)



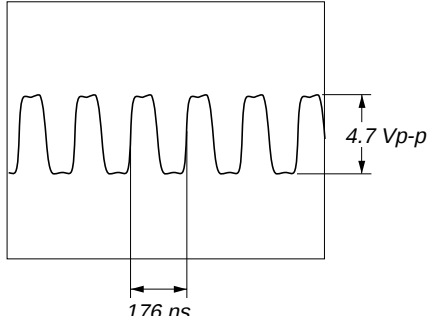
⑦ IC201 ④⑩ (64FSO), ④⑧ (64FSI)



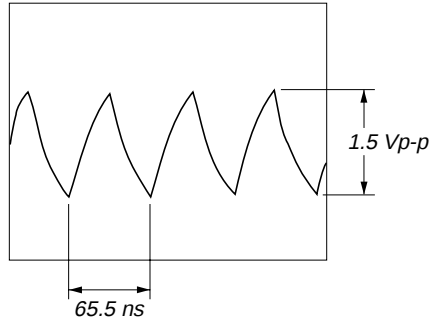
⑧ IC201 ④③ (256FSO), ④⑦ (MCLKI)



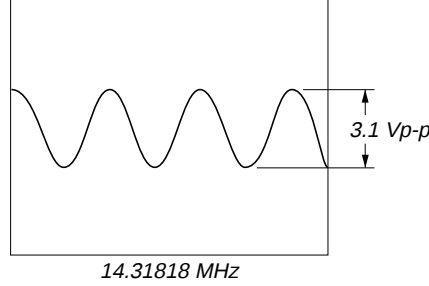
⑨ IC201 ⑤④ (128FSO)



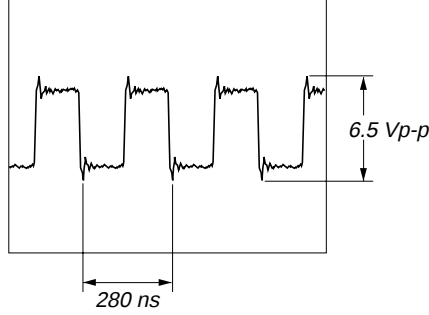
⑩ IC201 ⑥⑥ (INVI)



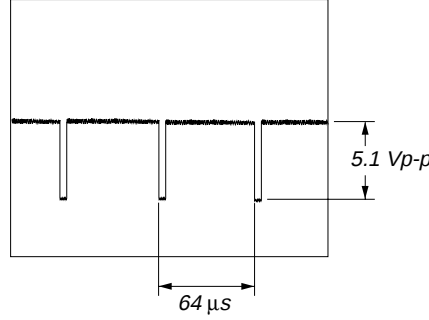
⑪ IC804 ⑥ (CLKI)



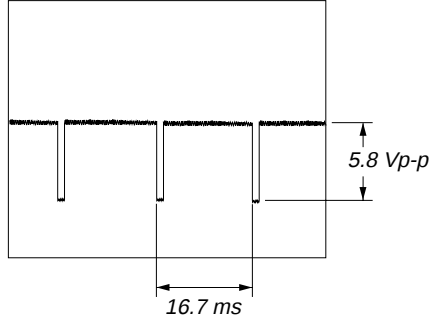
⑫ IC804 ②④ (SC)



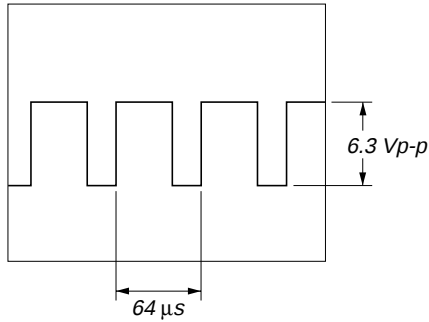
⑬ IC804 ②⑨ (HDO), IC802 ⑧ (DOCKI), ⑫ (HSYNC)



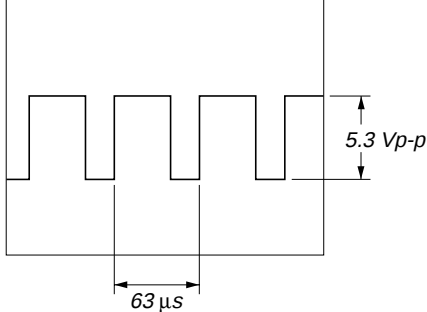
⑭ IC804 ③⑩ (VDO), IC802 ⑬ (VSYNC)



⑮ IC804 ③② (BLKO), IC802 ⑭ (DISP)

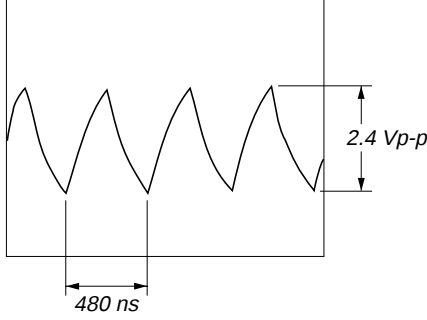


⑯ IC803 ⑥ (SCIN)



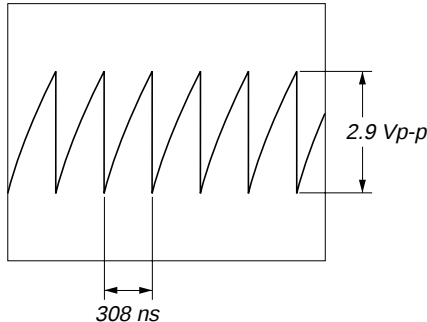
– DISP Board –

① IC701 ⑤⑧ (OSC0)

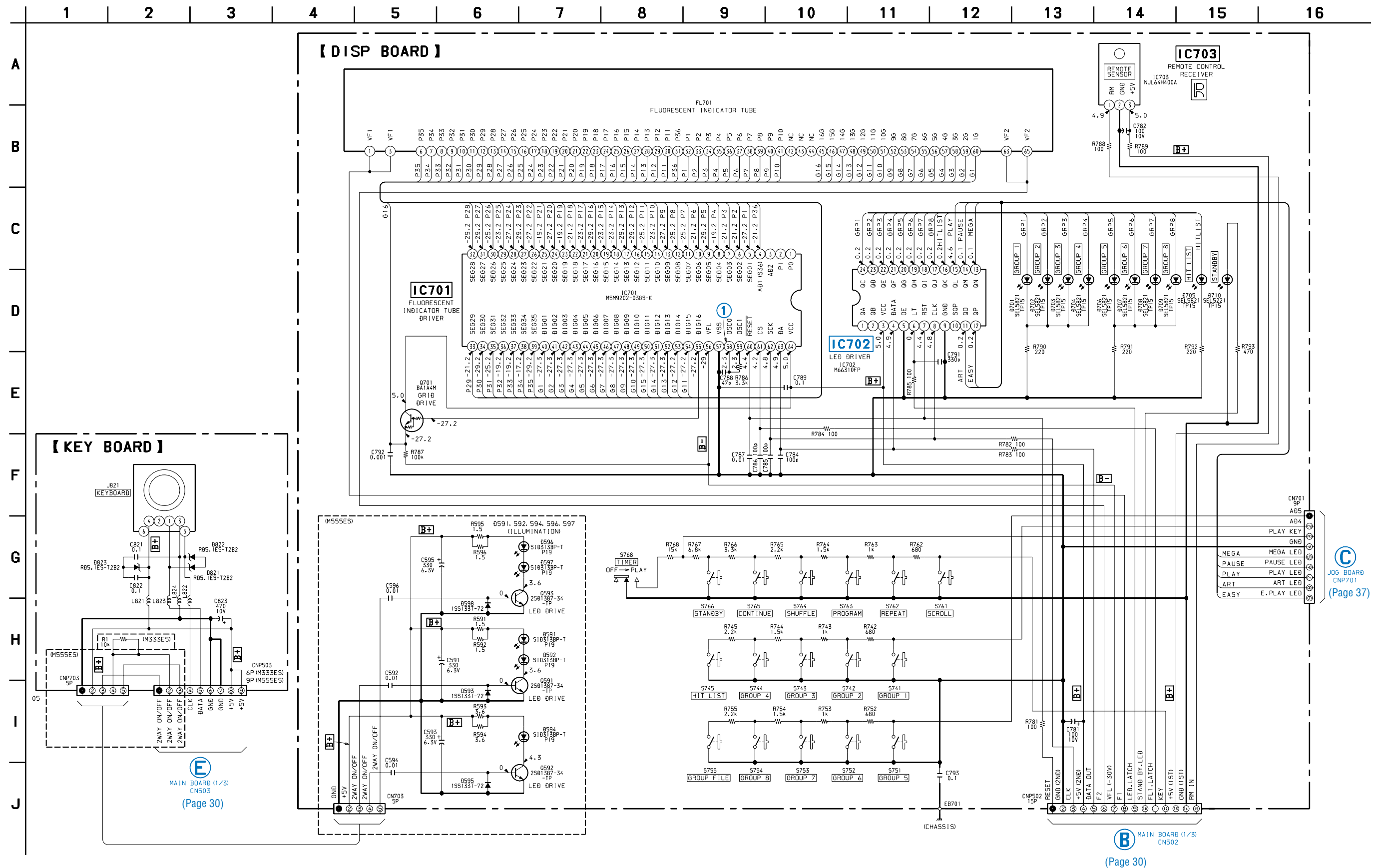


– JOG Board –

① IC704 ② (XOUT), ④ (XIN)

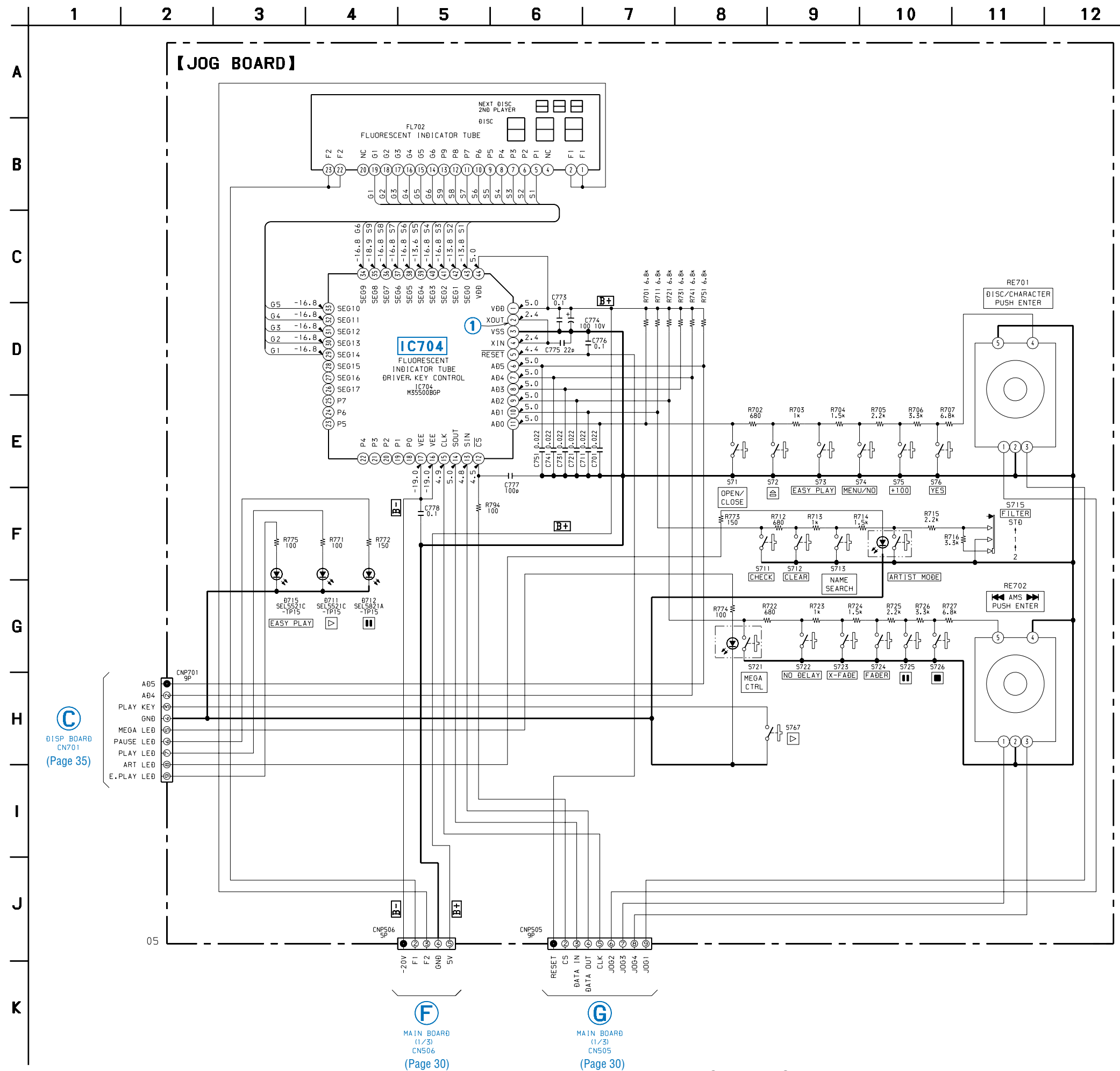


8-11. SCHEMATIC DIAGRAM – DISP/KEY Boards – • See page 33 for Waveform. • See page 42 for IC Block Diagram.

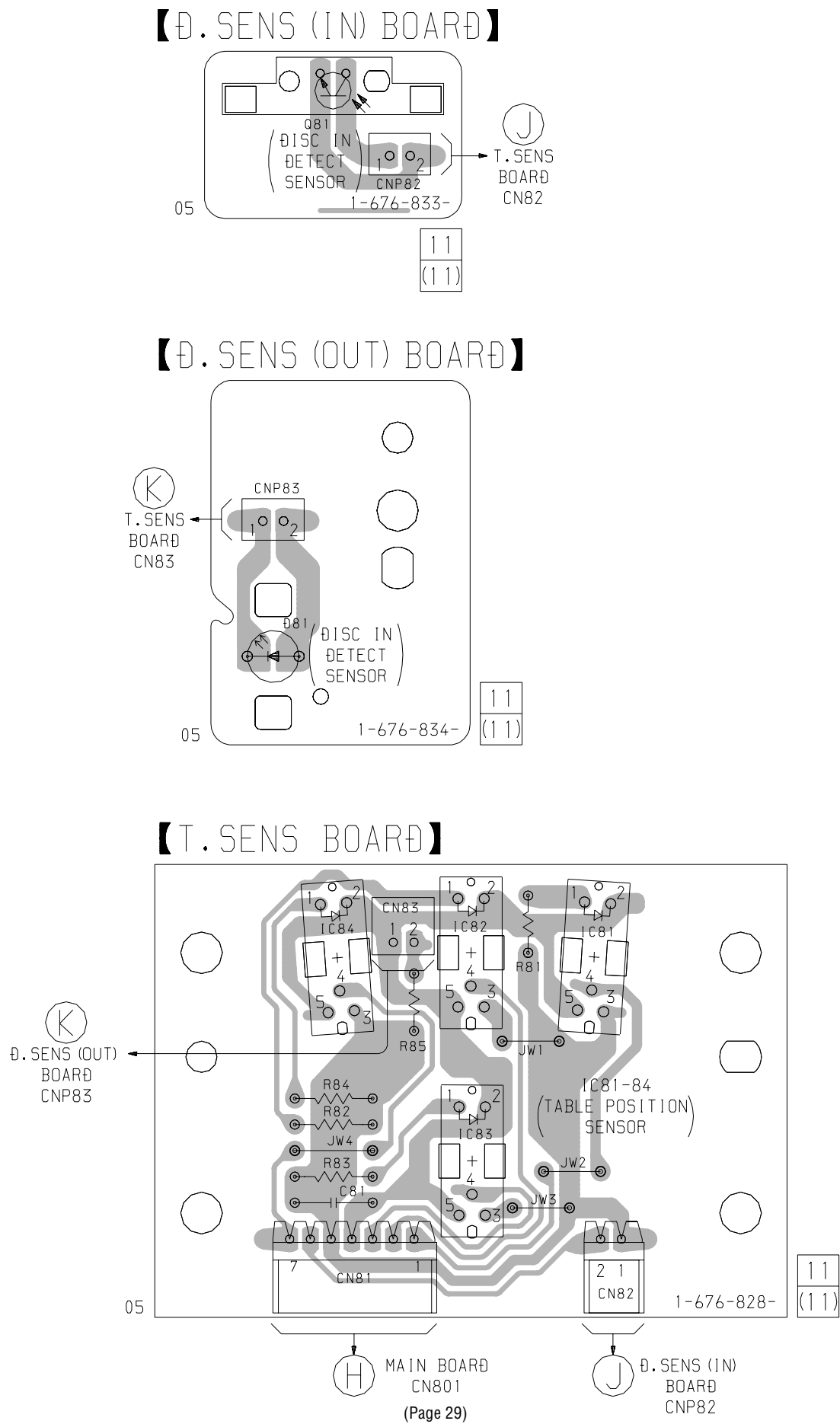


8-13. SCHEMATIC DIAGRAM – JOG Board –

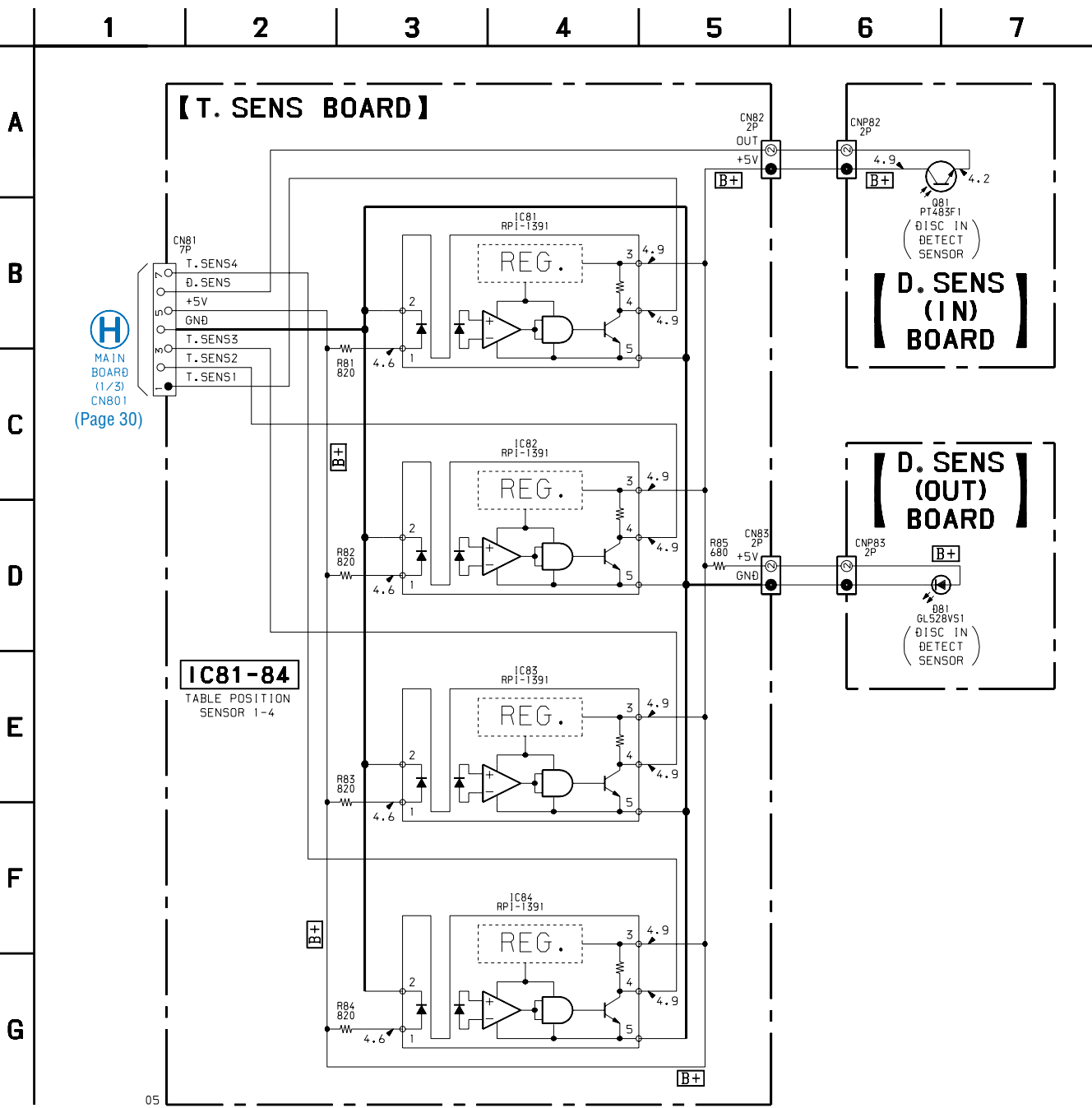
• See page 33 for Waveform. • See page 42 for IC Block Diagram.



8-14. PRINTED WIRING BOARDS – D. SENS (IN)/D. SENS (OUT)/T. SENS Boards –
• See page 25 for Circuit Boards Location.

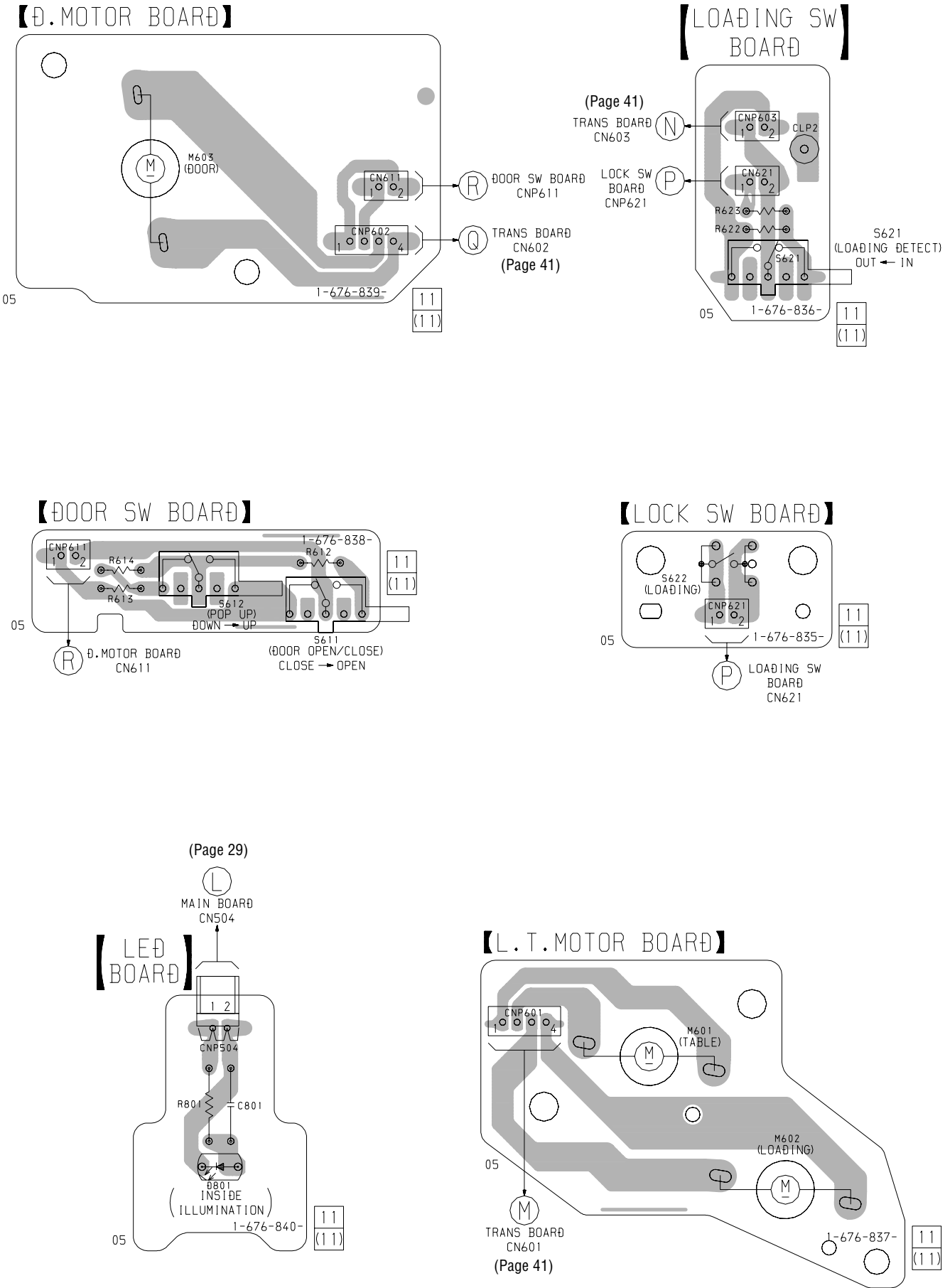


8-15. SCHEMATIC DIAGRAM – D. SENS (IN)/D. SENS (OUT)/T. SENS Boards –



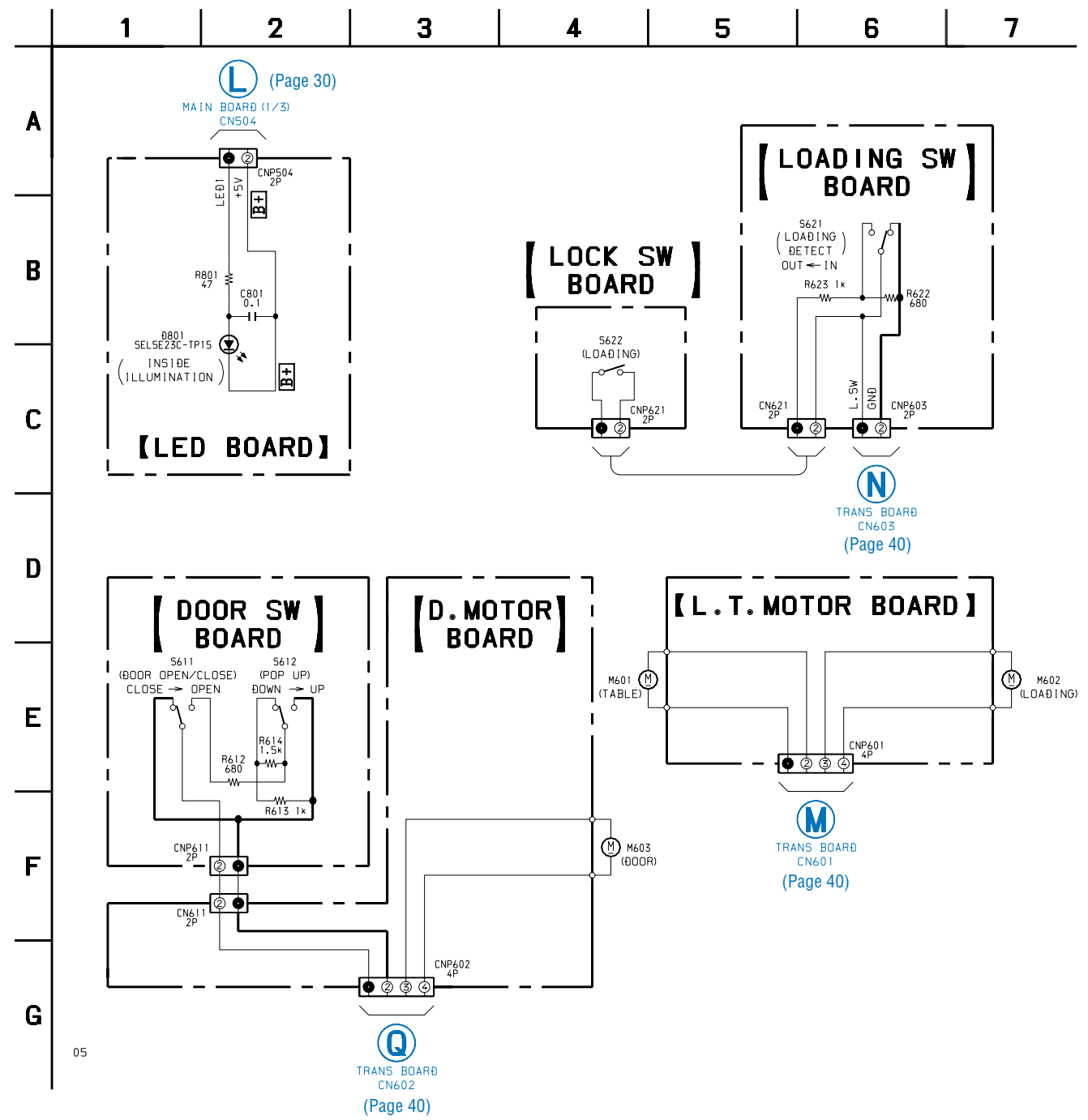
8-16. PRINTED WIRING BOARDS

- D. MOTOR/DOOR SW/LED/LOADING SW/LOCK SW/L. T. MOTOR Boards -
• See page 25 for Circuit Boards Location.

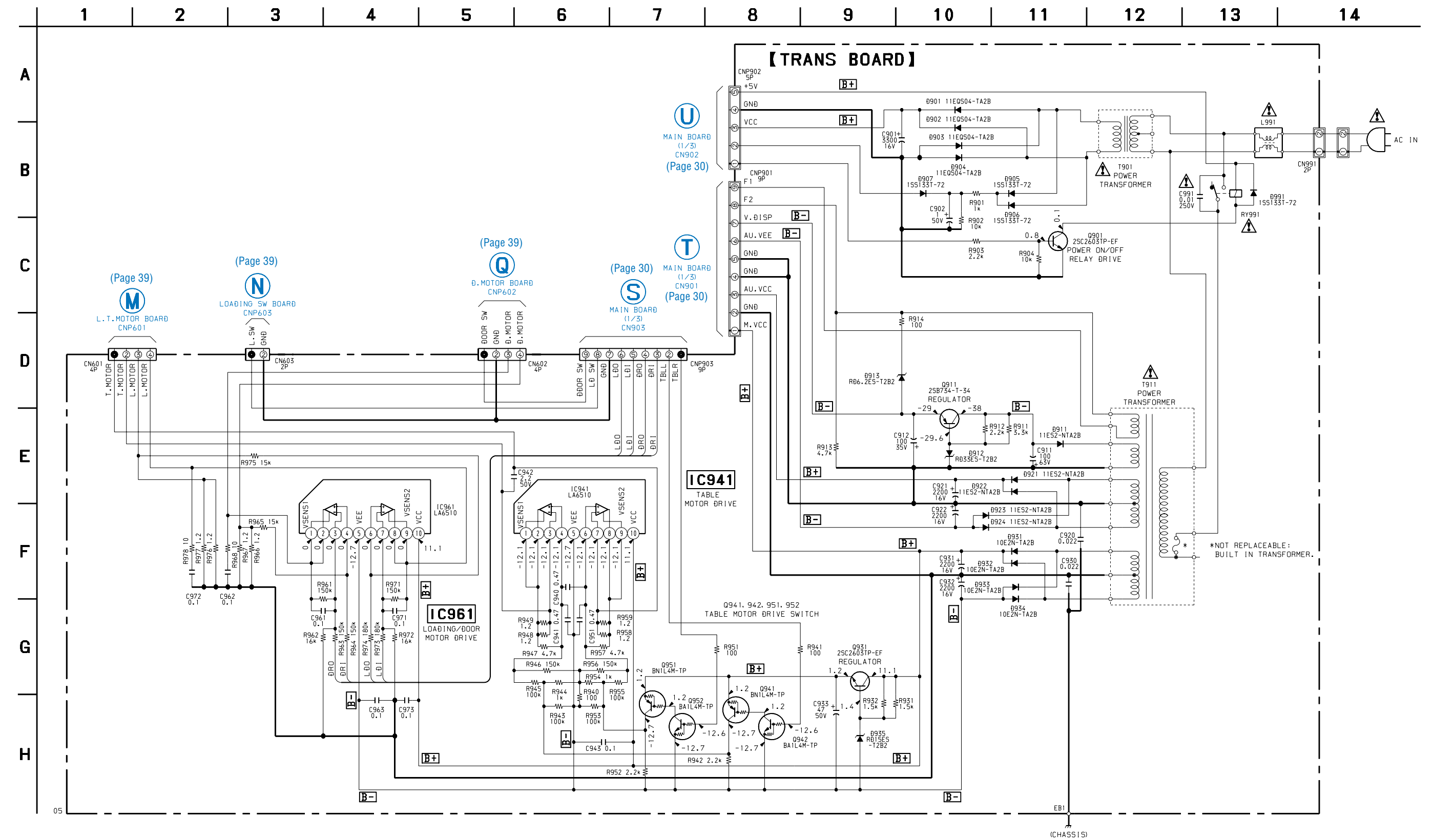


8-17. SCHEMATIC DIAGRAM

- D. MOTOR/DOOR SW/LED/LOADING SW/LOCK SW/L. T. MOTOR Boards -



8-18. SCHEMATIC DIAGRAM – TRANS Board –



The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.