

CHECKING THE VERSION NUMBER

Items Required

- BOSS FS-5U foot switches (optional, sold separately) 1pc
- Foot switch connector cable (PHONE-PHONE)

[SETTING OF FRONT PANEL]

Name of SW or VOL	state
PICKUP TYPE	PASSIVE
GAIN	Minimum(0)
AMP TYPE	MODERN
SHAPE	OFF
MODE	STANDARD
COMPRESSION	Minimum(0)
BASS	Minimum(-)
MIDDLE	Minimum(-)
FREQUENCY	Minimum(100)
TREBLE	Minimum(-)
TWEETER	Minimum(-)
EFFECT BLEND	Minimum(DIRECT)
VOLUME	Minimum(0)
MUTE	OFF
POWER	OFF

[SETTING AND CONNECT OF REAR PANEL]

Name of SW or VOL	state
GND LIFT	OFF
SELECT	DI OUT
FOOT SW	Connect the foot switch



Set the FS-5U's POLARITY switch to the JACK side.
Version number display mode cannot be entered unless the connections and panel settings are made correctly.

[Confirmation method]

1. While depressing the foot switch, switch on the power. The MUTE LED and POWER LED each flash at this time.
2. Within 4 seconds after switching on the power, switch the SELECT switch on the REAR PANEL from DI OUT -> LINE OUT -> DI OUT.
3. Use the MUTE and POWER LEDs to confirm the model display.

Model	MUTE LED	POWER LED
D-BASS210	blink	blink
D-BASS115	light	light



If the POWER LED blinks rapidly, the temperature SENSOR is not OK.
Confirm the connection of MAIN BOARD, AMP BOARD and PS BOARD.

4. Turn on SHAPE switch.
5. Confirm the version number by MUTE, POWER LED.

Version	MUTE LED	POWER LED
Ver. 1.0	dark	light
Ver. 2.0	dark	blink
Ver. 3.0	light	dark
Ver. 4.0	light	light
Ver. 5.0	light	blink

6. Turn off the power.

TEST MODE(210/115)

Items Required

- BOSS FS-5U foot switches (optional, sold separately) 1pc
- Foot switch connector cable (PHONE-PHONE)
- Blank plug

Entering Test Mode

1. Set the unit as follows.

[SETTING OF FRONT PANEL]

name of SW or JACK	state
PICKUP TYPE	PASSIVE
GAIN	Minimum(0)
AMP TYPE	MODERN
SHAPE	OFF
MODE	STANDARD
COMPRESSION	Minimum(0)
BASS	Minimum(-)
MIDDLE	Minimum(-)
FREQUENCY	Minimum(100)
TREBLE	Minimum(-)
TWEETER	Minimum(-)
EFFECT BLEND	Minimum(DIRECT)
VOLUME	Minimum(0)
MUTE	OFF
POWER	OFF

[SETTING AND CONNECTING OF REAR PANEL]

name of SW or JACK	state
GND LIFT	OFF
SELECT	DI OUT
FOOT SW	CONNECT THE FOOT SWITCH



Set the FS-5U's POLARITY switch to the JACK side.
Test mode cannot be entered unless the connections and panel settings are made correctly.

2. While depressing the foot switch, switch on the power. The MUTE LED and POWER LED each flash at this time.
3. Within 4 seconds after switching on the power, switch the SELECT switch on the REAR PANEL from DI OUT -> LINE OUT -> DI OUT.

Exiting Test Mode

Turn off the power to exit Test Mode.

Skipping

Test categories cannot be skipped.

Test Items

1. Model display
2. Version display
3. CPU/DSP/EEPROM/SENSOR test
4. Switch test
5. Volume test

Test Category Details

1. Model display

After entering Test Mode, display the model. Use the MUTE and POWER

LEDs to confirm the model display.

Model	MUTE LED	POWER LED
D-BASS210	blink	blink
D-BASS115	light	light

NOTE

If the POWER LED blinks rapidly, the temperature SENSOR is not OK. Confirm the connection of MAIN BOARD, AMP BOARD and PS BOARD.

2. Version display

Turn on SHAPE switch.

Confirm the version number by MUTE, POWER LED.

Version	MUTE LED	POWER LED
Ver. 1.0	dark	light
Ver. 2.0	dark	blink
Ver. 3.0	blink	dark
Ver. 4.0	blink	light
Ver. 5.0	blink	blink

3. CPU/DSP/EEPROM/SENSOR test

1. Turn off SHAPE switch.
2. The MUTE and POWER LEDs go dark and the CPU/DSP/EEPROM/SENSOR test starts automatically.
3. After approx. 2 seconds, the test results are displayed.

If the test passes

The LEDs appear as follows.

State	MUTE LED	POWER LED
Test OK	blink	light

If the test passes, the procedure automatically advances to the next test.

If the test fails

The LEDs appear as follows.

state	MUTE LED	POWER LED
CPU,DSP,EEPROM error	blink	dark
SPEAKER SENSOR error	dark	blink
Temperature SENSOR(AMP,PS) error	blink	blink
All SENSOR error	blink rapidly	blinks rapidly

If the test fails, advancing to the next item is impossible.

4.SWITCH TEST

Operate the switches in the sequence described below.

1. MODE SWITCH TEST
Turn on MODE switch. POWER LED is dark.
Turn off MODE switch. MUTE LED blinks.
2. MUTE SWITCH TEST
Turn on MUTE switch. MUTE LED is dark.
Turn off MUTE switch. MUTE LED blinks.
3. PHONES JACK test
Insert the blank plug in PHONES JACK. MUTE LED is dark.
Remove the PHONES blank plug in PHONES JACK.MUTE LED blinks.
4. FOOT SW test
Press the FOOT SW. MUTE LED is dark.
Remove the cable from FOOT SW JACK. MUTE LED blinks.
5. EFFECT RETURN JACK test
Insert the blank plug in EFFECT RETURN JACK. MUTE LED is dark.
Remove the PHONES blank plug in EFFECT RETURN JACK. MUTE LED blinks.
6. AMP TYPE SWITCH TEST
AMP TYPE switch position is VINTAGE. MUTE LED is dark.

AMP TYPE switch position is SUPER FLAT. MUTE LED blinks

AMP TYPE switch position is VINTAGE. MUTE LED is dark.

AMP TYPE switch position is MODERN. MUTE LED blinks.

If all switch tests pass, MUTE LED is dark and the procedure advances automatically to the 5. Volume test.

5. VOLUME TEST

Operate the volume knobs in the sequence described below (MIN -> CENTER -> MAX).

Confirm that the LED display and the volume level of the speaker change according to the operated position of the test volume.

[LED DISPLAY]

KNOB POSITION	MUTE LED	POWER LED
MIN	dark	dark
half the Left	light	dark
CENTER	light	light
half the Right	light	light
MAX	dark	dark

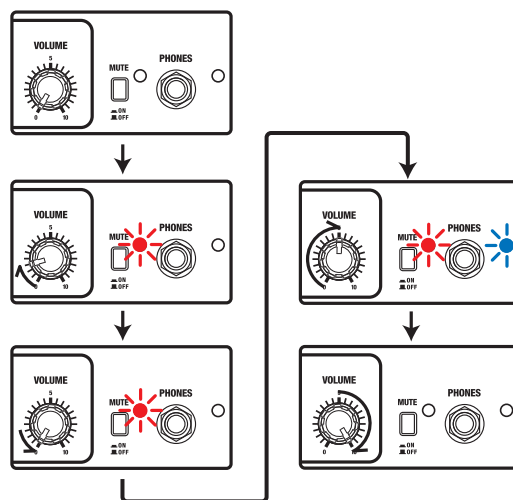
NOTE

Never leave the unit with sound coming from the speaker. The output circuit may be damaged.

1. COMPRESSION KNOB
2. BASS KNOB(confirm the center click)
3. MIDDLE KNOB(confirm the center click)
4. FREQUENCY KNOB
5. TREBLE KNOB(confirm the center click)
6. TWEETER KNOB(confirm the center click)
7. EFFECT BLEND KNOB(confirm the center click)
8. VOLUME KNOB

NOTE

Test after first raising the level of all volume knobs slight then again lowering them to minimum, as described below.



NOTE

If volume detection fails, advancing to the next volume knob is impossible.

9. When testing of all volume knobs ends, the MUTE LED blinks and POWER LED lights and sound stops.

This completes the inspection procedure. Switch off the power.

SPEAKER CALIBRATION (210/115)

When replacing the circuit board or woofer, be sure to perform speaker calibration.

Items Required

- BOSS FS-5U foot switches (optional, sold separately) 1pcs
- Foot switch connector cable (PHONE-PHONE)

[SETTING OF FRONT PANEL]

Name of SW and JACK	state
PICKUP TYPE	PASSIVE
GAIN	Minimum(0)
AMP TYPE	MODERN
SHAPE	OFF
MODE	STANDARD
COMPRESSION	Minimum(0)
BASS	Minimum(-)
MIDDLE	Minimum(-)
FREQUENCY	Minimum(100)
TREBLE	Minimum(-)
TWEETER	Minimum(-)
EFFECT BLEND	Minimum(DIRECT)
VOLUME	Minimum(0)
MUTE	OFF
POWER	OFF

[SETTING AND CONNECTING OF REAR PANEL]

Name of SW and JACK	state
GND LIFT	OFF
SELECT	DI OUT
FOOT SW	Connect the foot switch

NOTE

Set the FS-5U's POLARITY switch to the JACK setting.
Speaker calibration cannot be entered unless the connections and panel settings are made correctly.

[Calibration method]

1. While depressing the foot switch, switch on the power. The MUTE LED blinks and POWER LED lights at this time.
2. Within 4 seconds after switching on the power, switch the SELECT switch on the REAR PANEL from DI OUT -> LINE OUT -> DI OUT.
3. Confirm the model display shown below.

Model	MUTE LED	POWER LED
D-BASS210	blink	blink
D-BASS115	light	light

NOTE

If the POWER LED blinks rapidly, the temperature SENSOR is not OK.
Confirm the connection of MAIN BOARD, AMP BOARD and PS BOARD.

4. Turn on the MUTE switch.
Confirm the version number by MUTE, POWER LED.

Version	MUTE LED	POWER LED
Ver. 1.0	dark	light
Ver. 2.0	dark	blink
Ver. 3.0	blink	dark
Ver. 4.0	blink	light
Ver. 5.0	blink	blink

NOTE

The procedure after this is different according to the model and version.
Advance to the corresponding procedure.

MODEL,VERSION	PROCEDURE
D-BASS210 Ver. 1.0	A
D-BASS210 Ver. 2.0	B
D-BASS115 Ver. 1.0	B
the others	C

[PROCEDURE A]

5. Calibrate with manual operation.
Turn off MUTE switch.
6. Display the state of calibration of L channel speaker with MUTE LED and POWER LED.
Adjust BASS knob so that the both LEDs may flash.
Confirm that the both LEDs keeps flashing for more than five seconds.

MUTE LED	POWER LED	BASS KNOB
flash	dark	turn clockwise
dark	flash	turn counterclockwise
flash	flash	Wait for 5 seconds

- * If a error occurs, the both LEDs don't flash.
Confirm the connections of L channel speaker.
- * If a error occurs several times, replace in the sequence of SENSOR BOARD, WOOFER, and MAIN BOARD.

7. Turn on MUTE switch.
Calibrate R channel speaker.(D-BASS210 only)
Operate the BASS knob in the same way as procedure 6. after minimize BASS knob once.
- * If a error occurs, the both LEDs don't flash.
Confirm the connections of R channel speaker.
8. Turn off MUTE switch.
MUTE LED and POWER LED flashes.
9. Turn off the power.

[PROCEDURE B]

5. Turn off MUTE switch.
The MUTE LED and POWER LED blink rapidly and calibration automatic determination is performed.

NOTE

Calibration automatic determination takes approx. 10 seconds. During this time, do not switch off the power.

6. The calibration determination results are displayed.
In either case, perform 7. Calibration Automatic Correction.

Decision	MUTE LED	POWER LED
OK	light	light
NG	blink	dark

7. Calibration Automatic Correction
 - 7-1. Press the MODE switch.
 - 7-2. The MUTE LED and POWER LED blink and calibration automatic correction is performed.
 - 7-3. The calibration correction results are displayed.

Decision	MUTE LED	POWER LED	Response
OK	light	light	Completed. Turn off the power.
NG (210:L channel NG)	blink	dark	Confirm the connections of L channel speaker and do from procedure 1 again.

Decision	MUTE LED	POWER LED	Response
R channel NG (only 210)	dark	blink	Confirm the connections of R channel speaker and do from procedure 1 again.
both channel NG (only 210)	blink	blink	Confirm the connections of the both channel speaker and do from procedure 1 again.

* If failure occurs several times, replace in the sequence of *SENSOR BOARD*, *WOOFER*, and *MAIN BOARD*.

[PROCEDURE C]

- Turn off MUTE switch.
The MUTE LED and POWER LED blink and calibration automatic correction is performed.

NOTE

Calibration automatic correction takes approx. 40 seconds. During this time, do not switch off the power.

- The calibration correction results are displayed.

Decision	MUTE LED	POWER LED	Response
OK	light	light	Completed. Turn off the power.
NG (210:L channel NG)	blink	dark	Confirm the connections of L channel speaker and do from procedure 1 again.
R channel NG (only 210)	dark	blink	Confirm the connections of R channel speaker and do from procedure 1 again.
both channel NG (only 210)	blink	blink	Confirm the connections of the both channel speaker and do from procedure 1 again.

* If failure occurs several times, replace in the sequence of *SENSOR BOARD*, *WOOFER*, and *MAIN BOARD*.

CHECKING THE VERSION NUMBER(115X)

[SETTING OF PANEL]

Name of SW and JACK	state
TWEETER LEVEL	Minimum(-)
MODE SELECT	FULL RANGE
FREQUENCY	Minimum(60)
VOLUME	Minimum(0)
POWER	OFF



Version display mode cannot be entered unless the connections and panel settings are made correctly.

[Confirmation method]

1. Within 4 seconds after switching on the power, switch the MODE SELECT switch from ON (SUBWOOFER) -> OFF (FULL RANGE) -> ON -> OFF -> ON -> OFF.

(Repeat ON/OFF switching 3 times.)



If the FULL RANGE LED or SUBWOOFER LED blinks rapidly, the temperature SENSOR is not OK.

Confirm the connection of MAIN BOARD, AMP BOARD and PS BOARD.

2. After that, model determination display is performed automatically. Confirm the model display shown below.

Model	FULL RANGE LED	SUBWOOFERLED
D-BASS115X	blink	light

3. Turn on MODE SELECT switch(SUBWOOFER).
4. Use the FULL RANGE and SUBWOOFER LED to confirm the version number display.

Version	FULL RANGE LED	SUBWOOFERLED
Ver. 1.0	light	dark
Ver. 2.0	blink	dark
Ver. 3.0	dark	light
Ver. 4.0	light	light
Ver. 5.0	blink	light

5. Turn off the power.

TEST MODE (115X)

1.Entering Test Mode

1. Set the unit as follows.

[SETTING OF PANEL]

Name of SW and JACK	state
TWEETER LEVEL	Minimum(-)
MODE SELECT	FULL RANGE
FREQUENCY	Minimum(60)
VOLUME	Minimum(0)
POWER	OFF



Test mode cannot be entered unless the connections and panel settings are made correctly.

2. Within 4 seconds after switching on the power, switch the MODE SELECT switch from ON (SUBWOOFER) -> OFF (FULL RANGE) -> ON -> OFF -> ON -> OFF.

(Repeat ON/OFF switching 3 times.)

3. FULL RANGE LED blinks and SUBWOOFER LED flashes.



If the FULL RANGE LED or SUBWOOFER LED blinks rapidly, the temperature SENSOR is not OK.

Confirm the connection of MAIN BOARD, AMP BOARD and PS BOARD.

Test mode cannot be entered unless the connections and panel settings are made correctly.

2. Exiting Test Mode

Turn off the power to exit Test Mode.

3. Skipping

Test categories cannot be skipped.

4. Test Items

1. Model display
2. Version display
3. CPU/DSP/EEPROM/SENSOR test
4. Volume test

5. Test Category Details

1. Model display

After entering Test Mode, display the model. Use the FULL RANGE and SUBWOOFERLED to confirm the model display.

Model	FULL RANGE LED	SUBWOOFERLED
D-BASS115X	blink	blink

2.Version display

1. Turn on MODE SELECT(SUBWOOFER).
2. Confirm the version number by FULL RANGE, SUBWOOFER LED.

Version	FULL RANGE LED	SUBWOOFERLED
Ver. 1.0	light	dark
Ver. 2.0	blink	dark
Ver. 3.0	dark	blink
Ver. 4.0	light	blink
Ver. 5.0	blink	blink

3.CPU/DSP/EEPROM/SENSOR test

1. Turn off MODE SELECT switch(FULL RANGE).
2. The CPU/DSP/SENSOR test begins automatically.
3. After about 2 second test result is appeared.

If the test passes

The LEDs appear as follows.

state	FULL RANGE LED	SUBWOOFERLED
Test OK	light	blink

If the test fails

The LEDs appear as follows.

state	FULL RANGE LED	SUBWOOFER LED
CPU,DSP,EEPROM error	dark	blink
SPEAKER SENSOR error	blink	dark
Temperature SENSOR(AMP,PS) error	blink	blink

state	FULL RANGE LED	SUBWOOFER LED
ALL SENSOR error	blink rapidly	blink

If the test fails, advancing to the next item is impossible.

4. Volume TEST

1. Turn on MODE SELECT(set to SUBWOOFER).
2. Operate the switches in the sequence described below.
Operate the volume knobs in the sequence described below (MIN -> CENTER -> MAX).

Confirm that the LED display and the volume level of the speaker change according to the operated position of the test volume.

[LED DISPLAY]

KNOB POSITION	FULL RANGE LED	SUBWOOFER LED
MIN	dark	dark
Half left	light	dark
CENTER	light	light
Half right	light	light
MAX	dark	dark

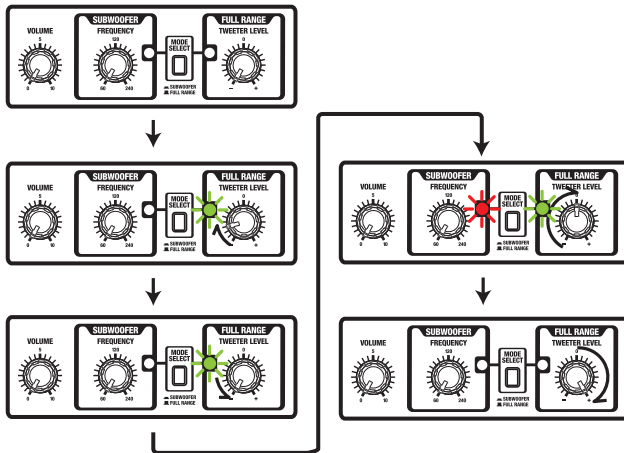
NOTE

Never leave the unit with sound coming from the speaker. The output circuit may be damaged.

3. TWEETER LEVEL KNOB(confirm the center click)
4. FREQUENCY KNOB
5. VOLUME KNOB

NOTE

Test after first raising the level of all volume knobs slight then again lowering them to minimum, as described below.



NOTE

If volume detection fails, advancing to the next volume knob is impossible.

6. When testing of all volume knobs ends, the FULL RANGE LED flashes and SUBWOOFER LED goes dark and sound stops.

This completes the inspection procedure. Switch off the power.

SPEAKER CALIBRATION(115X)

NOTE

When replacing the circuit board or woofer, be sure to perform speaker calibration.

[SETTING OF PANEL]

SW, VOL name	state
TWEETER LEVEL	Minimum(-)
MODE SELECT	FULL RANGE
FREQUENCY	Maximum(240)
VOLUME	Minimum(0)
POWER	OFF

NOTE

Speaker calibration cannot be entered unless the connections and panel settings are made correctly.

[Calibration method]

1. Within 4 seconds after switching on the power, switch the MODE SELECT switch from ON (SUBWOOFER) -> OFF (FULL RANGE) -> ON -> OFF -> ON -> OFF.

(Repeat ON/OFF switching 3 times.)

Confirm the connection of SENSOR BOARD, AMP BOARD and PS BOARD.

NOTE

If the FULL RANGE LED or SUBWOOFER LED blinks rapidly, the temperature SENSOR is not OK.

Confirm the connection of MAIN BOARD, AMP BOARD and PS BOARD.

2. After that, model determination display is performed automatically. Confirm the model display shown below.
3. After that, model determination display is performed automatically. Confirm the model display shown below.

Model	FULL RANGE LED	SUBWOOFER LED
D-BASS115X	blink	light

4. Turn on MODE SELECT switch (SUBWOOFER).
Confirm the version number by FULL RANGE, SUBWOOFER LED.

Version	FULL RANGE LED	SUBWOOFER LED
Ver. 1.0	light	dark
Ver. 2.0	blink	dark
Ver. 3.0	dark	blink
Ver. 4.0	light	blink
Ver. 5.0	blink	blink

NOTE

The procedure after this is different according to the model and version. Advance to the corresponding procedure.

VERSION	PROCEDURE
Ver. 1.0	A
the others	C

[PROCEDURE A]

5. Turn off MODE SELECT switch (Set to FULL RANGE).
The FULL RANGE LED and SUBWOOFER LED blink rapidly and calibration automatic determination is performed.

NOTE

Calibration automatic determination takes approx. 10 seconds. During this time, do not switch off the power.

- 6. The calibration determination results are displayed.
In either case, perform 7. Calibration Automatic Correction.

Decision	FULL RANGE LED	SUBWOOFER LED
OK	light	light
NG	blink	dark

7. Calibration Automatic Correction

7-1. Turn on MODE SELECT switch (Set to SUBWOOFER).

7-2. FULL RANGE LED and SUBWOOFER LED blink and calibration automatic correction is performed.

7-3. The calibration correction results are displayed.

Decision	FULL RANGE LED	SUBWOOFER LED	Response
OK	light	light	Completed. Turn off the power.
NG	blink	dark	Confirm the connections of speaker and do from procedure 1 again.

* If failure occurs several times, replace in the sequence of SENSOR BOARD, WOOFER, and MAIN BOARD.

[PROCEDURE B]

- 5. Turn off MODE SELECT switch (Set to FULL RANGE).
FULL RANGE LED and SUBWOOFER LED blink and calibration automatic correction is performed.

NOTE

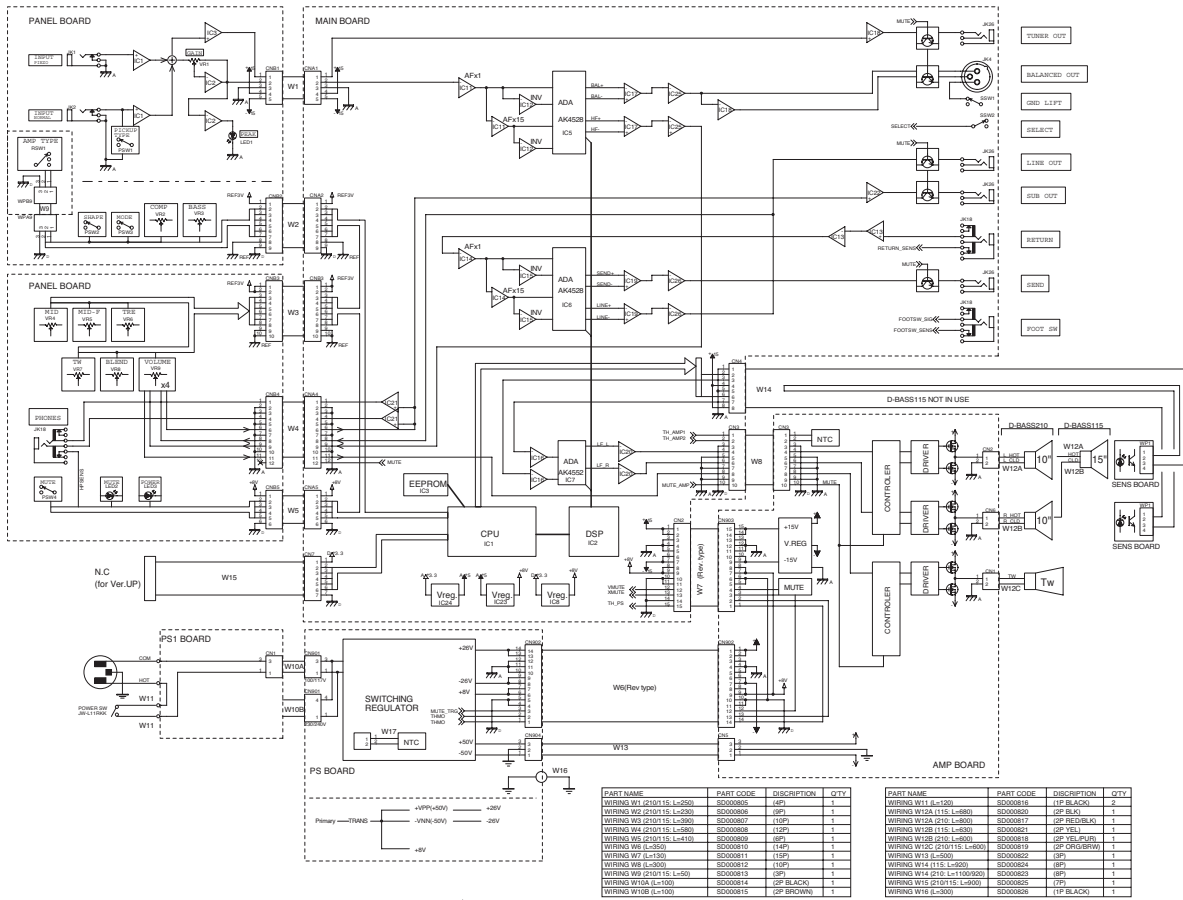
Calibration automatic correction takes approx. 40 seconds. During this time, do not switch off the power.

- 6. The calibration correction results are displayed.

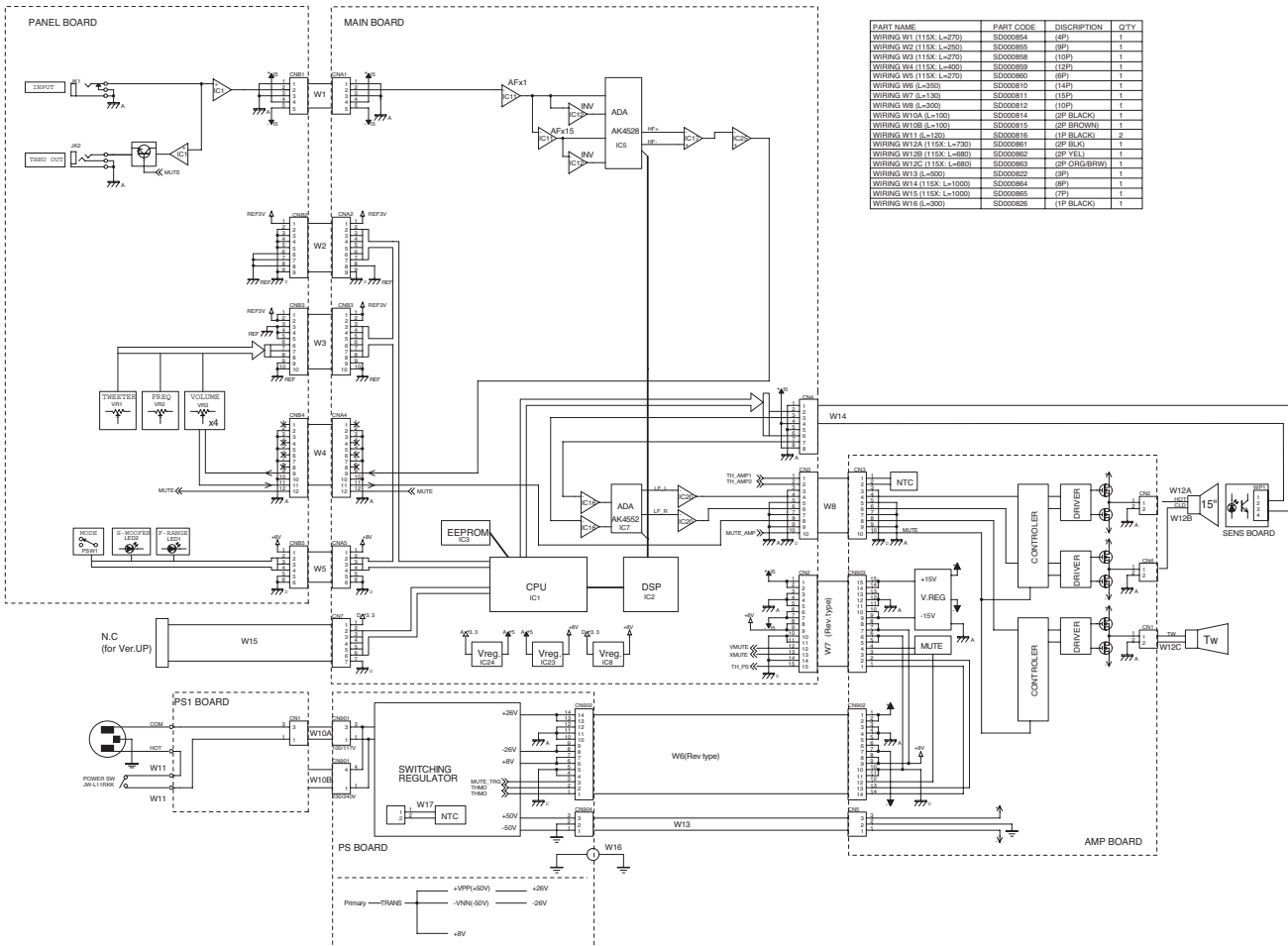
Decision	FULL RANGE LED	SUBWOOFER LED	Response
OK	light	light	Completed. Turn off the power.
NG	blink	dark	Confirm the connections of speaker and do from procedure 1 again.

* If failure occurs several times, replace in the sequence of SENSOR BOARD, WOOFER, and MAIN BOARD.

BLOCK, WIRING DIAGRAM (210/115)

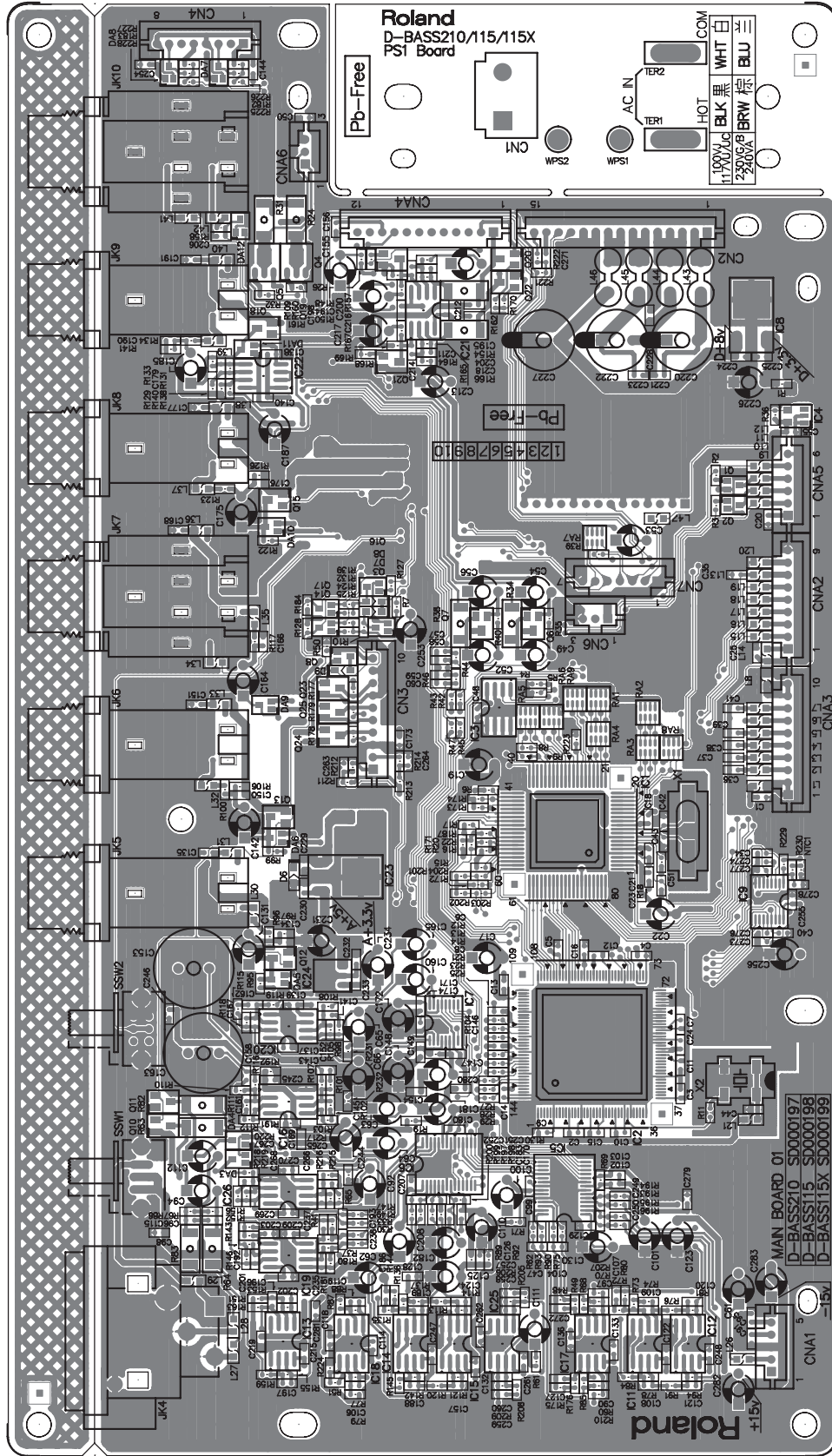


BLOCK,WIRING DIAGRAM(115X)



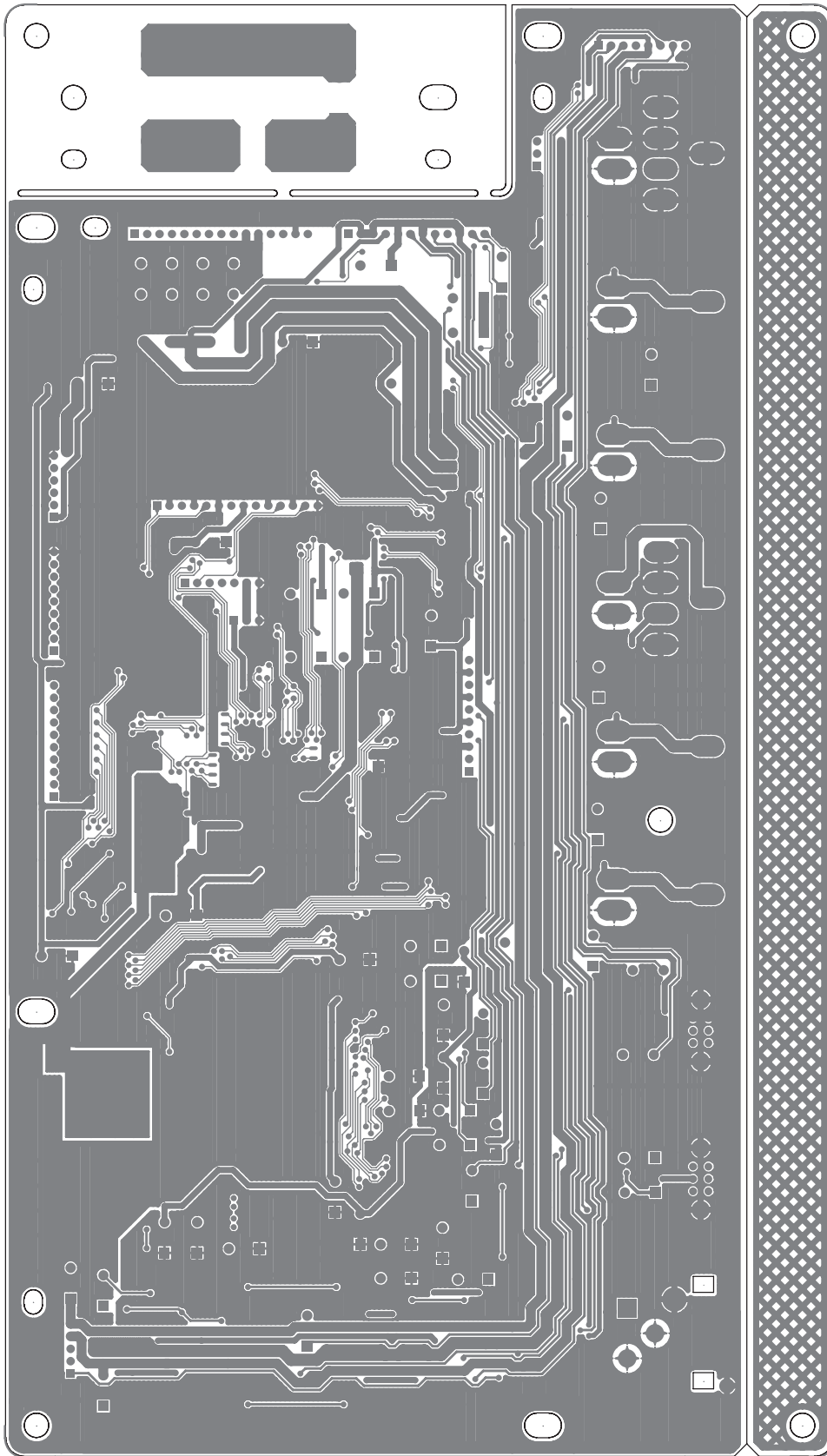
CIRCUIT BOARD(210/115/115X MAIN BOARD)

COMPONENT SIDE VIEW

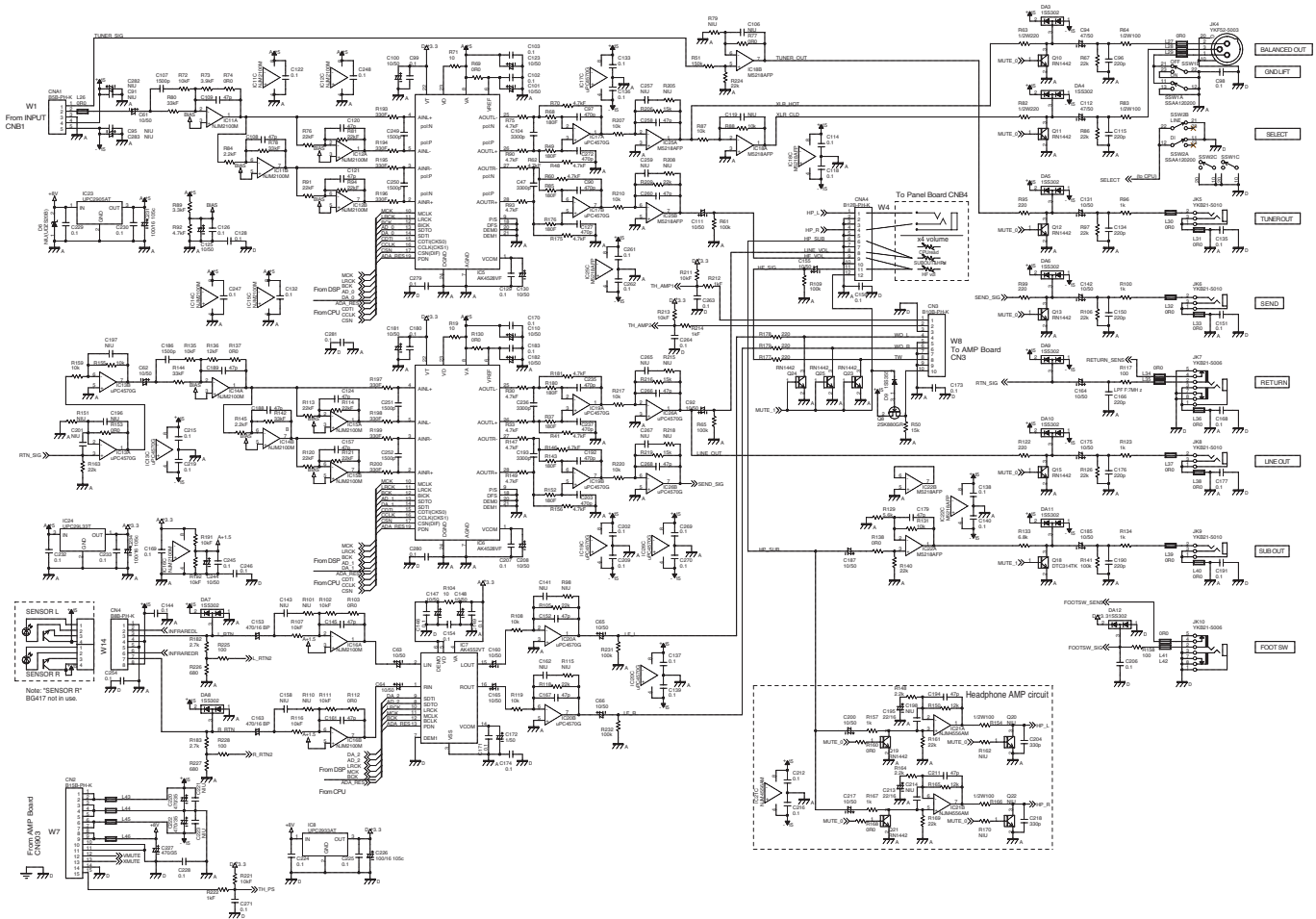


CIRCUIT BOARD(210/115/115X MAIN BOARD)

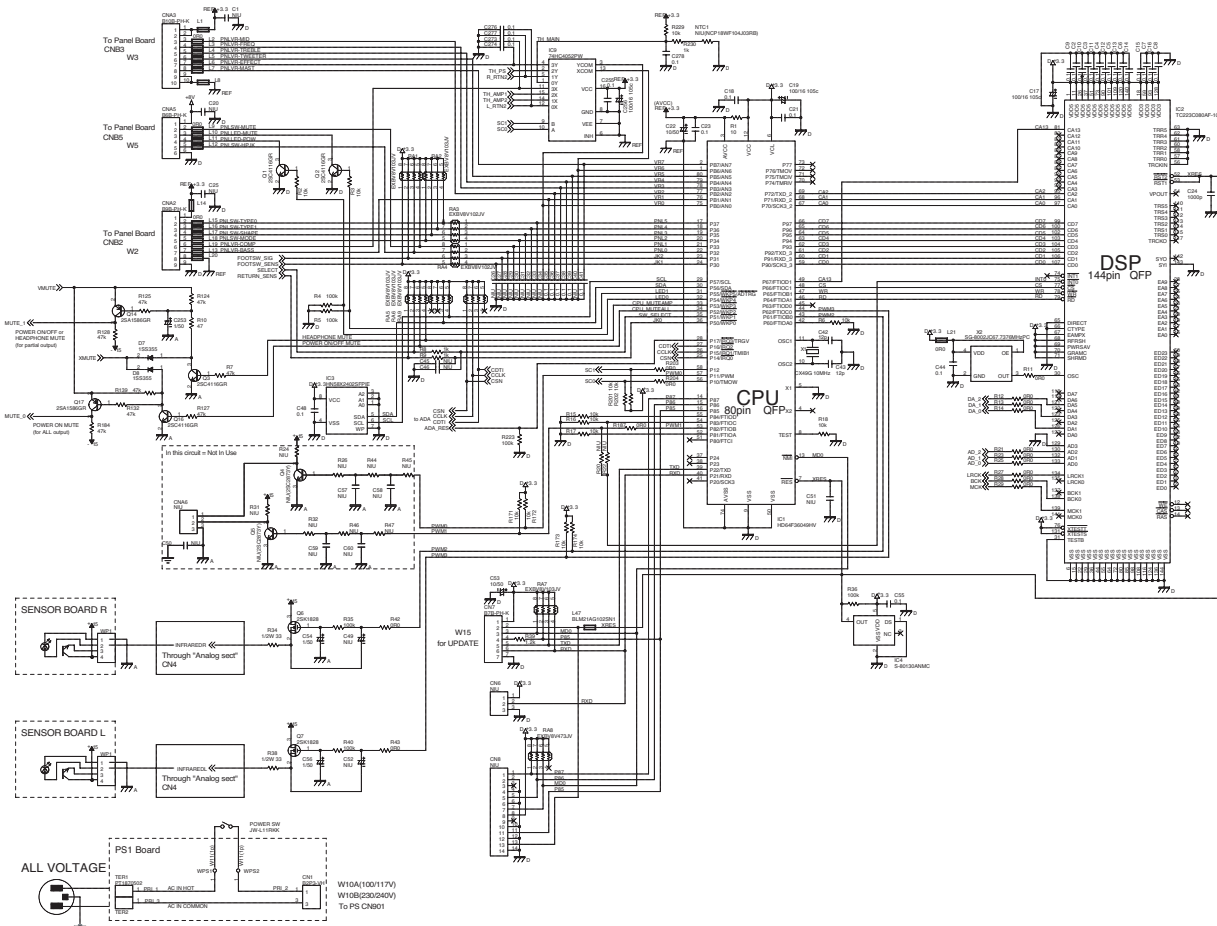
SOLDER SIDE VIEW



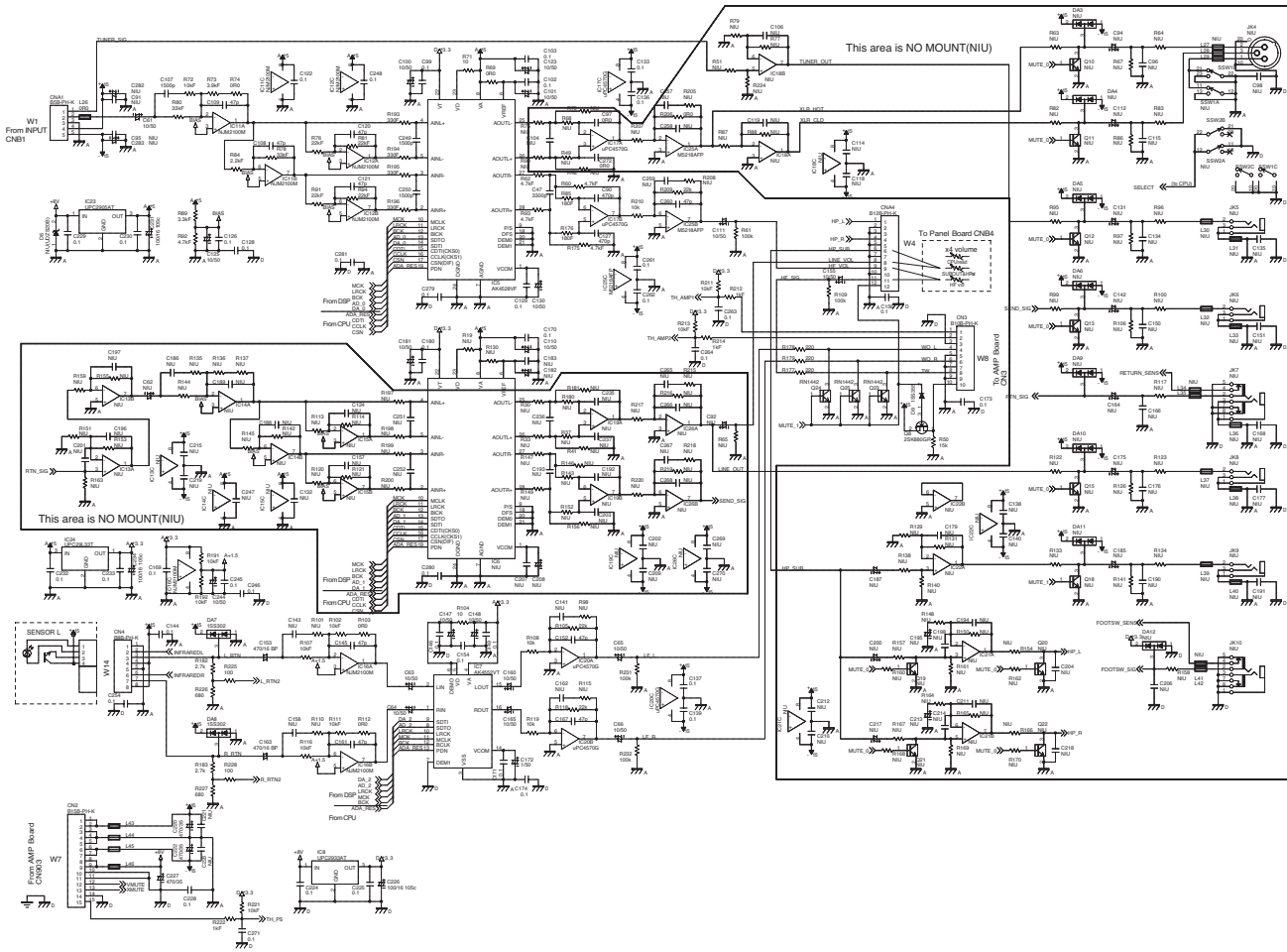
CIRCUIT DIAGRAM(MAIN 210/115 1/2)



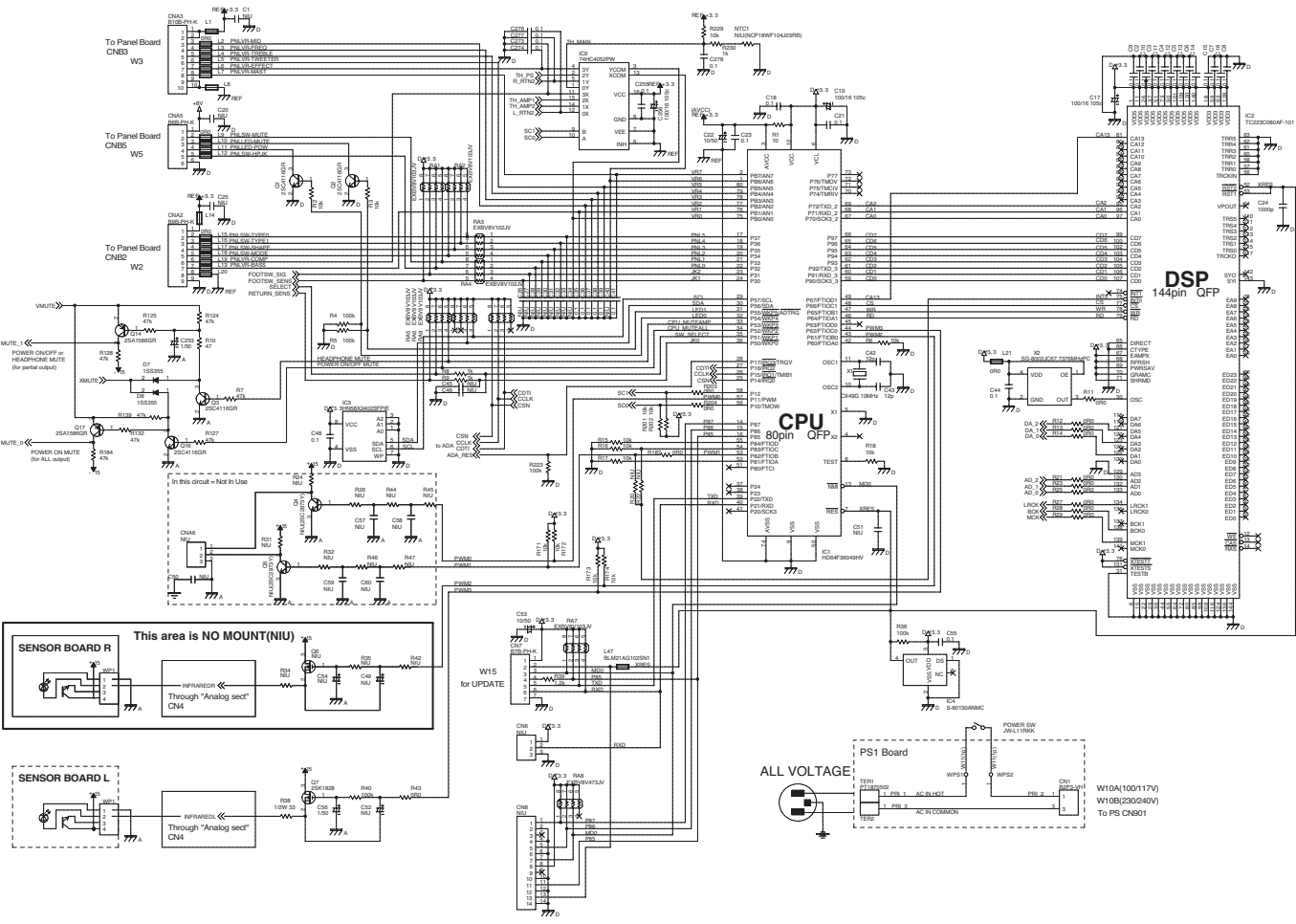
CIRCUIT DIAGRAM(MAIN 210/115 2/2)



CIRCUIT DIAGRAM(MAIN 115X 1/2)

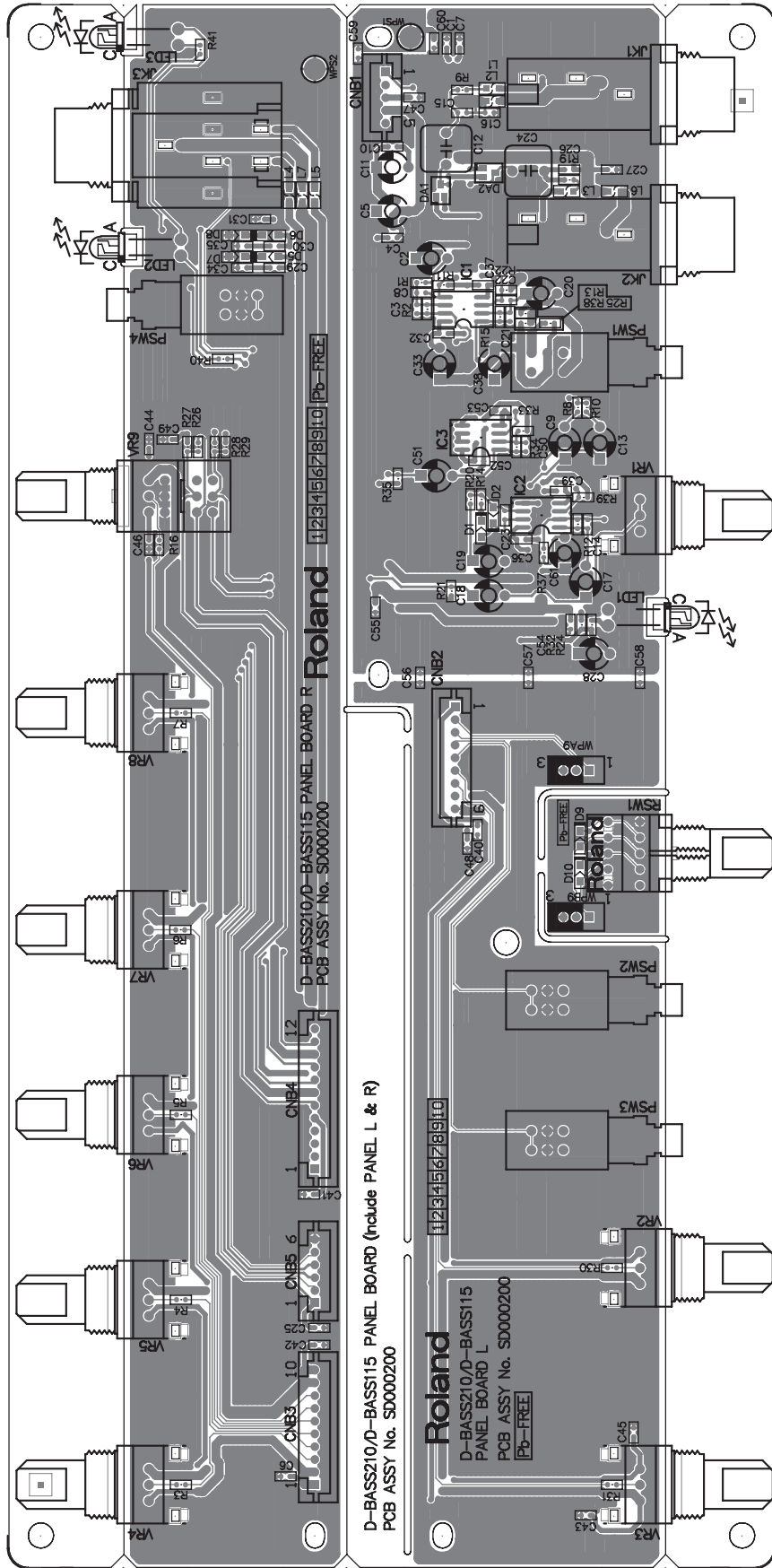


CIRCUIT DIAGRAM(MAIN 115X 2/2)



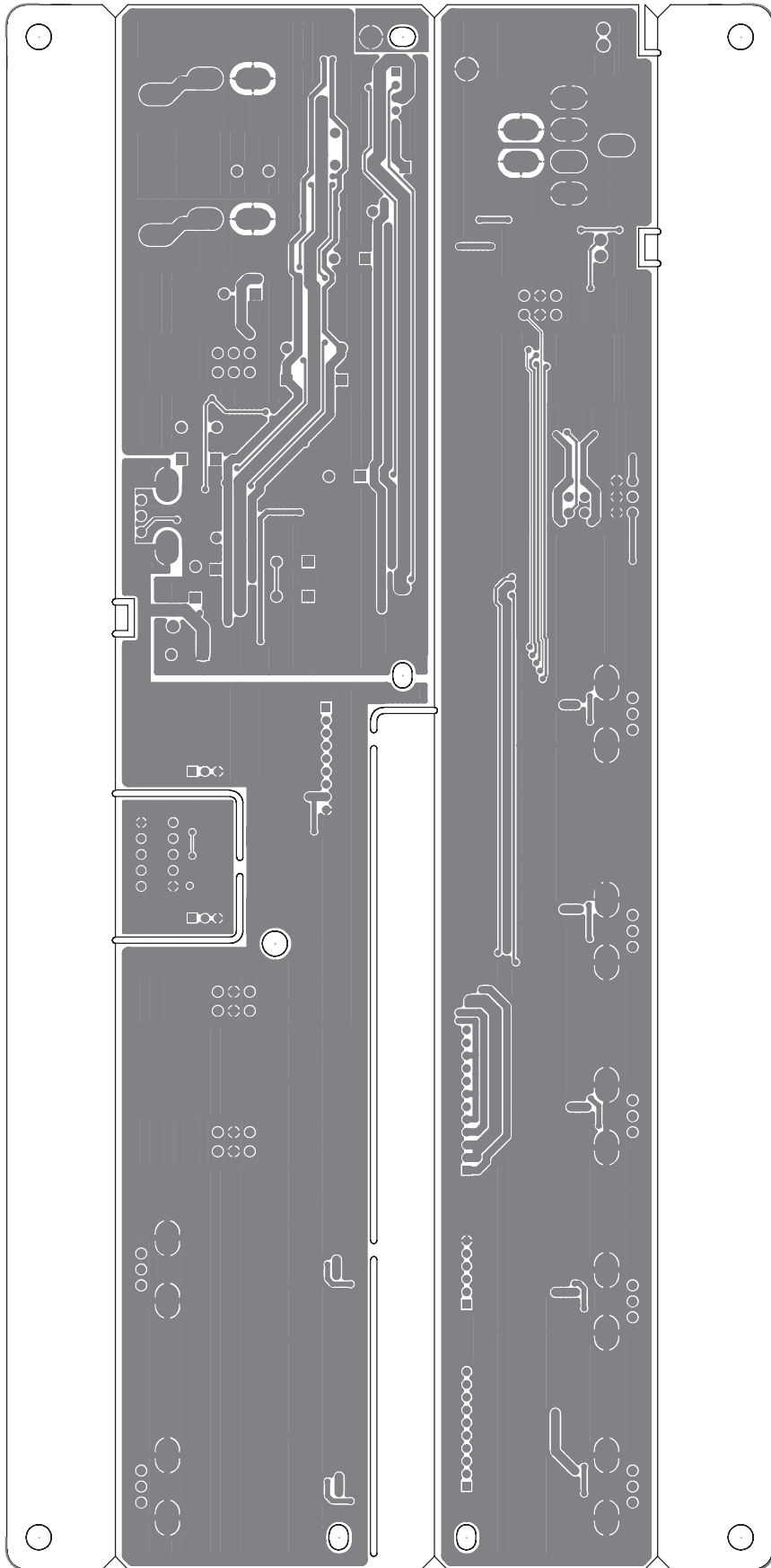
CIRCUIT BOARD(210/115 PANEL BOARD)

COMPONENT SIDE VIEW

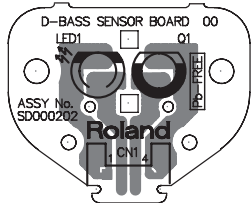


CIRCUIT BOARD(210/115 PANEL BOARD)

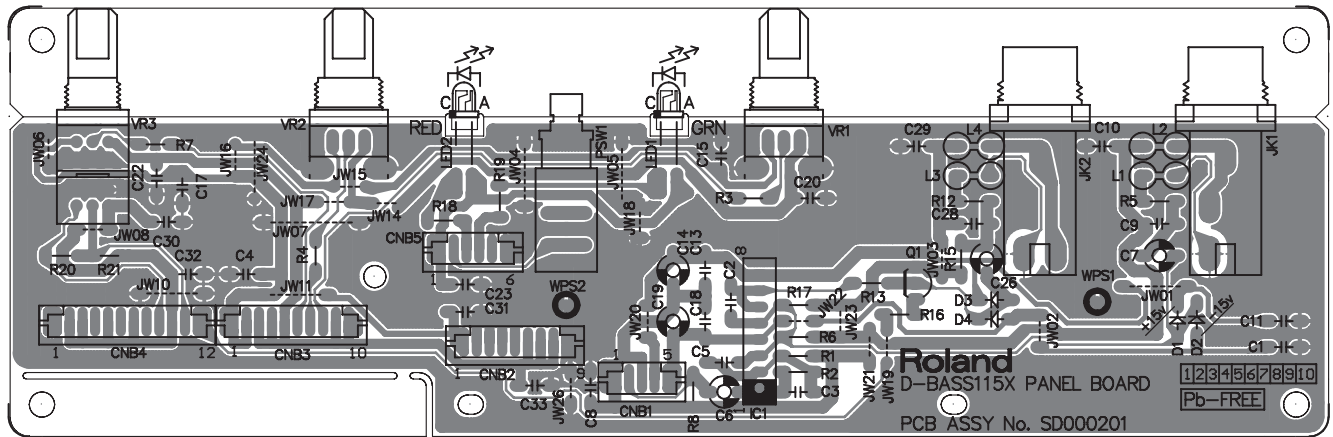
SOLDER SIDE VIEW



CIRCIUT BOARD(210/115/115X SENSOR BOARD)



CIRCIUT BOARD(115X PANEL BOARD)



CIRCUIT DIAGRAM(115X PANEL BOARD)

