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SERVICE MANUAL

FX-7000

PRO STEREO MIXER WITH DSP EFFECTS
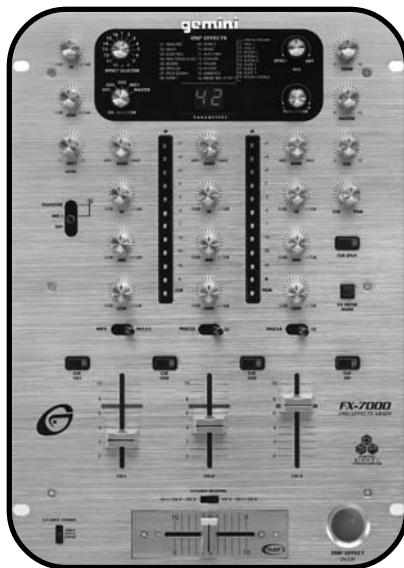
CONTENTS:

QUICK START GUIDE:

① **AC 15V:** Use this input to connect the power, plug the adapter into an outlet and the **AC 15V (1)** input.
② **POWER:** To turn on the **POWER (2)**, press this switch once.
③ **BALANCED OUTPUT:** Use the **BALANCED OUTPUT (3)** to connect to your amplifiers **BALANCED** input**.**
④ **MASTER OUTPUT:** An **unbalanced** output to connect to your amplifiers input.
⑤ **ZONE OUTPUT:** Connect this line to an additional amplifier or powered speakers.
⑥ **REC OUTPUT:** To record a mix, connect this line to a recording device.
⑦ **SEND:** An output used to send your mix to an outboard signal processor.
⑧ **RETURN:** An input that receives a signal from your outboard signal processor.
⑨ **LINE 5 INPUT:** To connect any line in devices, such as a **CD Player**, **DAT**, **MiniDisc**, etc.
⑩ **PH3/L4 INPUT (PHONO3/LINE4):** To connect a **TURNTABLE** or **LINE** input into the mixer.
⑪ **LINE 3 INPUT:** *SEE LINE 9*
⑫ **PH2/L2 INPUT (PHONO2/LINE2):** *SEE LINE 10*
⑬ **PH1/L1 INPUT (PHONO1/LINE1):** *SEE LINE 10*
⑭ **MIC 2:** Plug in your second **MICROPHONE** here.
⑮ **PHONO/LINE SWITCH:** Controls what kind of device is heard on the **PH3/L4 (10)** input.
⑯ **PHONO/LINE SWITCH:** Controls what kind of device is heard on the **PH2/L2 (12)** input.
⑰ **PHONO/LINE SWITCH:** Controls what kind of device is heard on the **PH1/L1 (13)** input.
⑱ **GROUND SCREW:** Connect your ground wire from your turntable here.
⑲ **MIC 1:** Plug in the main **MICROPHONE** here.
⑳ **HEADPHONES:** Plug in your **HEADPHONES** in here, to listen to your mix.
㉑ **CROSSFADER CURVE:** Pressing this button changes the **CROSSFADER (23)** curve from gradual to sharp.
㉒ **X-FADER ASSIGN:** Use to select **CHANNEL 1** or **2,** for which channel is assigned to the left side of the **CROSSFADER (23)**.
㉓ **CROSSFADER:** Shifting the **CROSSFADER (23)** from left to right will enable you to mix different channels.
㉔ **CROSSFADER REVERSE SWITCH:** This reverses the location of the channels assigned to the **CROSSFADER (23)**.
㉕ **DSP EFFECT:** Press **DSP EFFECT (25)** to turn the effect **on** or **off** that is being chosen.
㉖ **CHANNEL 1 SLIDE:** Moving this slide up or down raises and lowers the volume for **CHANNEL 1**.
㉗ **CHANNEL 2 SLIDE:** Moving this slide up or down raises and lowers the volume for **CHANNEL 2**.
㉘ **CHANNEL 3 SLIDE:** Moving this slide up or down raises and lowers the volume for **CHANNEL 3**.
㉙ **CUE CH1:** Press **CUE CH1 (29)** to hear **CHANNEL 1** thru the **HEADPHONES**.
㉚ **CUE CH2:** Press **CUE CH2 (30)** to hear **CHANNEL 2** thru the **HEADPHONES**.
㉛ **CUE CH3:** Press **CUE CH3 (31)** to hear **CHANNEL 3** thru the **HEADPHONES**.
㉜ **CUE EFF:** Press **CUE EFF (32)** to hear the effect that is being applied to **CHANNELS 1-3**, **MIC 1** or the **MASTER (PGM)** with the **HEADPHONES.**
㉝ **CH-1 SWITCH:** Flipping this switch changes the **CHANNEL 1** input from **MIC 2** to **PH1/L1**.
㉞ **CH-2 SWITCH:** Flipping this switch changes the **CHANNEL 2** input from **PH2/L2** to **L3**.
㉟ **CH-3 SWITCH:** Flipping this switch changes the **CHANNEL 3** input from **PH3/L4** to **L5**.
㊱ **LOW:** Controls the **LOW** (Bass) range for the channels.
㊲ **MID:** Controls the **MID** (Middle) range for the channels.
㊳ **HIGH:** Controls the **HIGH** (Treble) range for the channels.
㊴ **GAIN:** Controls the overall volume **GAIN** for each of the channels.
㊵ **VU METER:** The **VU METER (40)** displays the **LEFT** & **RIGHT CHANNEL** levels or the **CUE** and **PGM.**
㊶ **VU METER MODE:** Press **VU METER MODE (41)** button to change the **VU METER (40)** mode.
㊷ **CUE SPLIT:** Pressing **CUE SPLIT (42)** lets you hear the **CUE** on the left side earphone and the **PGM** on the right side.
㊸ **CUE-PGM:** Turning **CUE-PGM (43),** from left to right changes the monitored **CUE** to **PGM (MASTER)**.
㊹ **CUE LEVEL:** **CUE LEVEL (44)** controls the level of the **CUE.**
㊺ **MASTER:** **MASTER (45)** controls the level of the **MASTER OUTPUT (4)** & **BALANCED OUTPUT (3)**.
㊻ **ZONE:** **ZONE (46)** controls the level of the **ZONE OUTPUT (5)**.
㊼ **MIC 1/TALKOVER:** **MIC 1/TALKOVER (47)** switch activates **MIC 1 (19)** and **TALKOVER**.
㊽ **MIC 1/TALKOVER LED:** The **MIC 1/TALKOVER LED (48)** glows when the **MIC 1/TALKOVER (47)** switch is on.
㊾ **MIC1 LEVEL:** **MIC 1 LEVEL (49)** controls the volume of **MIC 1 (19)**.
㊿ **LOW:** For adjusting the **BASS** level on **MIC 1 (19)**.
51 **HIGH:** For adjusting the **TREBLE** level on **MIC 1 (19)**.
52 **CHANNEL SELECTOR:** Moving the **CHANNEL SELECTOR (52)** will assign **CHANNELS 1-3**, **MIC 1** or the **MASTER (PGM)** that the **DSP SIGNAL PROCESSOR** is affecting. Use **CUE EFF (32)** to hear the effect before pressing.
53 **EFFECT SELECTOR:** Turn this knob to select 1-16 effects.
54 **DSP EFFECTS:** Here is the list of effects, refer to *DSP SIGNAL PROCESSOR* section for details**.**
55 **PARAMETER LED DISPLAY:** **PARAMETER LED DISPLAY (55)** displays the chosen effect and the parameters.
56 **PARAMETER KNOB:** **PARAMETER (56)** knob changes the parameters **(1-99)** of the chosen effect.
57 **WET/DRY:** Turning the **WET/DRY (57)** knob lets you activate the effects signal in and out of the mix.

FX-7000 FACE

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54 DSP EFFECTS

	PRESET REVERB
01. SEND/RET	09. FILTER 2	F1. HALL 1
02. DELAY	10. BRAKE	F2. HALL 2
03. ECHO REG.	11. AUTO PAN	F3. ROOM 1
04. PING PONG ECHO	12. FLANGER	F4. ROOM 2
05. REVERB	13. PHASER	F5. ROOM 3
06. PITCH UP	14. ROTARY	F6. PLATE 1
07. PITCH-DOWN	15. AMBIENCE	F7. PLATE 2
08. FILTER 1	16. PRESET REV. F1 F9	F8. PLATE 3
		F9. ROOM CHORUS

51 HI -12dB +12dB

53 EFFECT SELECTOR 16 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

57 EFFECT DRY MIX

46 ZONE 0 10

50 LOW -12dB +12dB

52 CH. SELECTOR CH1 CH2 CH3 MIC1 MASTER

55 PARAMETERS 88

56 PARAMETER - +

45 MASTER 0 10

49 MIC1 LEVEL 0 10

39 GAIN MIN MAX

dB +7 +4 +2 0 -2 -4 -7 -10 -20 -30 L CUE

39 GAIN MIN MAX

dB +7 +4 +2 0 -2 -4 -7 -10 20 -30 R PGM

39 GAIN MIN MAX

44 CUE 0 10

48

47 TALKOVER MIC 1 OFF

38 HI -32dB +12dB

40

38 HI -32dB +12dB

40

38 HI -32dB +12dB

43 CUE PGM

37 MID -32dB +12dB

37 MID -32dB +12dB

37 MID -32dB +12dB

42 CUE SPLIT

36 LOW -32dB +12dB

36 LOW -32dB +12dB

36 LOW -32dB +12dB

41 VU METER MODE

MIC2 **33** PH1/L1   PH2/L2 **34** L3   PH3/L4 **35** L5

29 CUE CH1   **30** CUE CH2   **31** CUE CH3   **32** CUE EFF

26 CH-1 10 8 6 4 2 0

27 CH-2 10 8 6 4 2 0

28 CH-3 10 8 6 4 2 0

FX-7000 PRO EFFECTS MIXER

DIGITAL SIGNAL PROCESSING

X-FADER REVERSE CH1/CH2 - CH3   **24**   CH3 - CH1/CH2

X-FADER ASSIGN **22** CH-1 CH-2

23 10 5 0 / 0 5 10   RAIL SLIDE FADER

25 DSP EFFECT ON/OFF

PLEASE REFER TO FUNCTION DESCRIPTIONS FOR DETAILED INSTRUCTIONS

FX-7000
FRONT AND BACK PANEL

CURVE
21
GRADUAL   SHARP

19 MIC 1
(MICROPHONE INPUT)

20 HEADPHONES

FRONT

FX-7000   gemini   GEMINIDJ.COM   DIGITAL SIGNAL PROCESSING

POWER

BALANCED OUTPUT

CAUTION: DISCONNECT SUPPLY CORD BEFEORE CHANGING FUSE
ATTENTION: DEBRANCHER AVANY DE REMPLACER DE MEME TYPE

CAUTION: TO REDUCE THE RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE & RATING OF FUSE
ATTENTION: UTILISER UN FUSEIBLE DE RECHARGE DE MEME TYPE

GND
18

L4 PH3
15

L2 PH2
16

L1 PH1
17

1 (MICS)

2

OUTPUTS   EFFECT   CH 3   INPUTS   CH 2   CH1

2

AC 15V ~ LEFT

1

3   3

4 L 5 L 6   7 L 8   9 L 10   11 L 12   13 L

4 R 5 R 6   7 R 8   9 R 10   11 R 12   13 R

MIC 2
14
(MICROPHONE INPUT)

RIGHT   MASTER ZONE REC   SEND RETURN   L5   PH3/L4   L3   PH2/L2 PH1/L1

BACK

(1/4" CABLES)

(RCA CABLES)

R L R L R L   R L R L   R L R L R L R L R L

(AMPLIFIER INPUTS)

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(AMPLIFIER OUTPUT)   (AMPLIFIERS)

(ELECTRICAL OUTLET)

(AMPLIFIER OUTPUT)

(INPUT)   (OUTPUT)

(EFFECTS OR OUTBOARD UNIT)

(AUDIO INPUTS)

(CASSETTE OR CD RECORDER)

(GROUND WIRES)

(SPEAKER INPUTS)

(TURNTABLE OUTPUTS)

(SPEAKER INPUTS)

(CD PLAYER OUTPUTS)

(SPEAKERS)   (SPEAKERS)   (CD PLAYER)   (TURNTABLES)

PLEASE REFER TO CONNECTIONS SECTION FOR DETAILED INSTRUCTIONS

INTRODUCTION:

Congratulations on purchasing a **Gemini FX-7000 DSP EFFECTS** mixer. This state of the art mixer is backed by a three-year warranty, excluding crossfader and channel slides. Prior to use, we suggest that you carefully read all the instructions.

FEATURES:

- **14 Variable Effects: Delay, Echo, Reverb, Pitch Shifters, Filters, Brake, Auto-Pan, Flanger, Phaser, Rotary, Ambient, & 9 Additional Preset Reverbs**
- **Parameter Adjustment & LED Display for easy Effect Settings**
- **Wet/Dry Adjustment Knob for Proper Program/Effect Mix**
- **Reversible Crossfader and Curve Switch**
- **Crossfader with a RAIL-GLIDE™ Fader**
- **3 Channel DSP 10" Mixer** • **3 Phono/5 Line/2 Mic Inputs**
- **Effect Loop Send & Return** • **Mic with Talkover**
- **Split Cueing**

CAUTIONS:

1. All operating instructions should be read before using this equipment.

2. To reduce the risk of electrical shock, do not open the unit. There are, **NO USER REPLACEABLE PARTS INSIDE**. Please refer servicing to a qualified Gemini Sound Products service technician.

In the USA: If you experience problems with this unit, please call 1 (732) 738-9003 for Gemini Customer Service. Do not attempt to return this equipment to your dealer.

3. Do not expose this unit to direct sunlight or to a heat source such as a radiator or stove.

4. This unit should be cleaned only with a damp cloth. Avoid solvents or other cleaning detergents.

5. When moving this equipment, it should be placed in its original carton and packaging. This will reduce the risk of damage during transit.

6. **DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE**.

7. **DO NOT USE ANY SPRAY CLEANER OR LUBRICANT ON ANY CONTROLS OR SWITCHES**.

CONNECTIONS:

1. Before plugging the adapter in the **AC 15V (1)** input, make sure that the **POWER (2)** switch is in the off position. The **VU METER LEDS (40)** will be off.

2. The **FX-7000** is supplied with **4** sets of output jacks:
- The **1/4" BALANCED OUTPUT (3)** jacks are used to connect to your main amplifier using standard balanced cables. We recommend using **BALANCED OUTPUT (3)** if the cables to your amp are **25** feet or more.
- The **MASTER OUTPUT (4) (RCA type)** jacks are unbalanced and used to connect to your main amplifier.
- The **ZONE OUTPUT (5) (RCA type)** jacks allow you to hook up an additional amplifier.
- The **REC OUTPUT (6) (RCA type)** jacks can be used to connect the mixer to the record input of your recorder enabling you to record your mix.

3. The **FX-7000** also has an effect **SEND (7)** output and **RETURN (8)** input, for use with an outboard processor or effects unit.

4. On the rear panel are **3 STEREO PHONO/LINE INPUTS (10, 12, 13)** and **2 STEREO LINE INPUTS (9, 11)**. The **PHONO/LINE SWITCH (15)** enables you to set the **PHONO 3/LINE 4 INPUT (10)** to **PHONO** or **LINE**. The **PHONO/LINE SWITCH (16)** enables you to set the **PHONO 2/LINE 2 INPUT (12)** to **PHONO** or **LINE**. The **PHONO/LINE SWITCH (17)** enables you to set the **PHONO 1/LINE 1 INPUT (13)** to **PHONO** or **LINE**. The **PHONO** inputs will accept only turntables with a magnetic cartridge. A **GROUND SCREW (18)** for you to ground your turntables is located on the rear panel. The **STEREO LINE INPUTS (9, 11)** will accept any line level input such as a **CD**, **DAT**, **MiniDisc**, **etc**.

5. Headphones can be plugged into the front panel mounted **HEADPHONES (20)** jack.

6. The **MIC 1 (19)** input (found on the front panel) accepts a **1/4"** connector. The **MIC 2 (14)** input (found on the rear panel) accepts **1/4"** connector. They both accept **BALANCED** or **UNBALANCED** microphones.

OPERATION:

1. **POWER ON:** Once you have made all the equipment connections to your mixer, press the **POWER SWITCH (2)**. The power will turn on and the **VU METER (40) LEDS** will glow.

2. **CHANNEL 1:** The **GAIN (39)**, **HIGH (38)**, **MID (37)**, and **LOW (36)** controls allows you to fully adjust the selected source. **CH-1 SWITCH (33)** allows you to select either the **MIC 2 (14)** or the **PHONO 1/LINE 1 (13)** input. The **CHANNEL 1 SLIDE (26)** controls the output level of this channel.

3. **CHANNEL 2:** The **GAIN (39)**, **HIGH (38)**, **MID (37)**, and **LOW (36)** controls allows you to fully adjust the selected source. **CH-2 SWITCH (34)** allows you to select the **PHONO 2/LINE 2 (12)** or the **LINE 3 (11)** input. The **CHANNEL 2 SLIDE (27)** controls the input level of this channel.

4. **CHANNEL 3:** The **GAIN (39)**, **HIGH (38)**, **MID (37)**, and **LOW (36)** controls allows you to fully adjust the selected source. **CH-3 SWITCH (12)** allows you to select the **PHONO 3/LINE 4 (10)** or the **LINE 5 (9)** input. The **CHANNEL 3 SLIDE (28)** controls the input level of this channel.

NOTE: THERE IS LOW, MID AND HIGH EQUALIZATION FOR EACH CHANNEL WITH AN EXTREMELY WIDE RANGE OF ADJUSTMENT.

SUGGESTION: YOU CAN USE THE CUT FEATURES ON EACH CHANNEL TO REMOVE LOW, MID AND/OR HIGH RANGE TO CREATE SPECIAL EFFECTS.

5. **CROSSFADER CURVE:** The **CROSSFADER CURVE (21)** button allows you to adjust the kind of curve the crossfader has. Depress the **CROSSFADER CURVE (21)** button ▄▙ to make the curve steep and cutting (perfect for scratching). Release the **CROSSFADER CURVE (21)** button ▐█ to make the curve gradual and gentle.

6. **X-FADER ASSIGN:** The **X-FADER ASSIGN (22)** enables you to set the left side of the crossfader to either **CHANNEL 1** or **2**.

7. **CROSSFADER SECTION:** The **CROSSFADER (23)** allows the mixing of one source into another. The left side of the **CROSSFADER (23)** is **CHANNEL 1** or **2** and the right side is **CHANNEL 3**. The **CROSSFADER (23)** in your unit is removable and if the need arises can be easily replaced. Your Gemini mixer comes with an **RG-45 PRO (RAILGLIDE™) Dual-Rail Crossfader**. **RAIL GLIDE™** crossfaders have internal dual stainless steel rails that allow the slider to ride smoothly and accurately from end to end. Also available is our **CF-45 PRO (PROGLIDE™) Dual-Rail Crossfader**. This unique crossfader features, state of the art conductive plastic technology, for unlimited usage. Another crossfader we have available is the **PSF-45 (PRO SCRATCH™)** crossfader with a special curve designed for scratch mixing. Just purchase one from your Gemini dealer and follow the instructions:

1. Unscrew the outside FADER PLATE SCREWS (B). *Do not touch the* INSIDE SCREWS (C).

2. Carefully lift the fader and unplug the CABLE (D).

3. Plug the new fader into the cable and place it back in the mixer.

4. Screw the fader to the mixer.
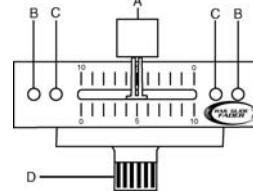
8. **CROSSFADER REVERSE SWITCH:** The **CROSSFADER REVERSE SWITCH (24)** allows you to reverse the crossfader so that the left side of the crossfader controls **CHANNEL 3** and **CHANNEL 1** or **2** is controlled by the right side of the crossfader.

NOTE: WHEN THE CROSSFADER REVERSE SWITCH (24) IS ACTIVATED, ONLY THE CROSSFADER REVERSES. THE CHANNEL SLIDES, GAIN, AND TONAL CONTROLS DO NOT REVERSE.

9. **OUTPUT CONTROL SECTION:** The level of the **MASTER OUTPUT (4) & BALANCED OUTPUT (3)** are controlled by the **MASTER (45)** control. The **ZONE (46)** control adjusts the level of the **ZONE OUTPUT (5)**.

HINT: ZONE OUTPUT (5) IS USED BY SOME DJS TO RUN MONITOR SPEAKERS IN THE DJ BOOTH. YOU CAN ALSO USE IT AS A SECOND ZONE OR AMP OUTPUT.

NOTE: THE RECORD OUT (6) HAS NO LEVEL CONTROL. THE LEVEL IS SET BY THE CHANNEL SLIDES AND THE GAIN CONTROLS OF THE SELECTED CHANNEL. TONAL QUALITIES ARE SET BY THE LOW, MID AND HIGH CONTROLS OF THE SAME CHANNEL.

10. **MIC 1/TALKOVER:** The purpose of the **TALKOVER** section is to allow the program playing to be muted so that the **MIC** can be heard above the music. The **MIC 1/TALKOVER SWITCH (47)** controls **MIC 1 (19)** and has three settings. When the **MIC 1/TALKOVER SWITCH (47)** is in the **"OFF"** position, **MIC 1** and **TALKOVER** are off. When the **MIC/TALKOVER SWITCH (47)** is in the **"MIC 1"** position **MIC 1** is on, the **MIC/TALKOVER LED (48)** will glow, but **TALKOVER** is off. When the **MIC/TALKOVER SWITCH (47)** is in the **"TALKOVER"** position, **MIC 1** and **TALKOVER** will be on and the volume of all sources except the **MIC 1** input are lowered by **16 dB**. The **HIGH (51)** and **LOW (50) CONTROLS** allow you to fully adjust the tone of **MIC 1**. **MIC 1 LEVEL (49)** controls the level of **MIC 1**.

11. **CUE SECTION:** By connecting a set of headphones to the **HEADPHONE (20)** jack, you can monitor any or all of the channels. Press the **CUE ASSIGN BUTTONS (29, 30, 31,)** for **CHANNELS 1-3** to select the channel or channels to be monitored and the buttons will illuminate. Use the **CUE LEVEL (44)** control to adjust the headphone volume without affecting the overall mix. By rotating the **CUE PGM PAN (43)** control to the left you will be able to monitor the assigned cue signal. Rotating to the right will monitor the **PGM (program)** output. Pressing the **CUE SPLIT (42)** button lets you hear the **CUE** on the left side earphone and the **PGM (program)** on the right. Pressing the **CUE EFFECT (32)** button allows you to send your **EFFECT** output to your **CUE MIX**.

12. **VU METER MODE:** The peak hold, dual function **VU METER (40)** indicates either the **MASTER (38)** output left and right levels, or the **CUE** and **PGM (program)** levels. You can choose the option you want by pressing the **VU METER MODE (41)** button.

DSP SIGNAL PROCESSOR:

DSP EFFECT (25): Tap the **DSP EFFECT (25)** button to turn **ON** or turn **OFF** the desired effect.

CHANNEL SELECTOR (52): The channel selector is for selecting the channel you want the effect to have effect on. Use the **CHANNEL SELECTOR (52)** to select **CHANNELS 1, 2, 3, MIC 1,** or the **MASTER** output. To hear it before you mix it in the **PGM (program)** use the **CUE EFFECT (32)** button.

EFFECT SELECTOR (53): Turning this knob selects the effect **(1-16)**; refer to **D.S.P. EFFECTS (54)** for which effect you want to use. Displayed by the **PARAMETER LED DISPLAY (55)**. The effects parameters **(1-99)** can be adjusted using the **PARAMETER (56)** knob.

DSP EFFECTS (54): All the **DSP** effects are listed on the mixer here. Turning the **PARAMETER (56)** knob clockwise increases the effect in most cases. Here is a brief explanation of their uses:

01. SEND/RETURN: Used to connect outboard effect units.

02. DELAY: Delay effect; adjust time with **PARAMETER (56)** knob.

03. ECHO REGULAR: Echo effect, adjust time like delay effect.

04. PING PONG ECHO: Echo effect with left/right panning, adjust time like delay effect.

05. REVERB: Reverb effect for depth, adjust time just like delay effect.

06. PITCH UP: Increases the pitch of the selected **CHANNEL, Mic 1** or **MASTER (PGM)**.

07. PITCH DOWN: Decreases the pitch of the selected **CHANNEL, MIC 1** or **MASTER (PGM)**.

08. FILTER 1: Low pass filter increases with clockwise knob movement.

09. FILTER 2: High pass effect increases with clockwise knob movement.

10. BRAKE: Simulates the manual stop of a record on a turntable.

11. AUTO PAN: Automatic panning from left to right, turning knob clockwise increases the effect speed.

12. FLANGER: Flanger sound is an effect, which is often referred to as a "whooshing" or "airplane fly-by" sound, turning knob clockwise increases the intensity of the effect.

13. PHASER: Very close to flanger, phaser is a similar but different effect.

14. ROTARY: Simulates a rotating speaker effect.

15. AMBIENCE: Adds ambient effect to mix.

16. PRESET REVERBS: F1. HALL 1, F2. HALL 2, F3. ROOM 1, F4. ROOM 2, F5. ROOM 3, F6. PLATE 1, F7. PLATE 2, F8. PLATE 3, F9. ROOM CHORUS

PARAMETER LED DISPLAY (55): The **PARAMETER LED DISPLAY (55)** displays which effect is chosen as well as the parameters.

PARAMETER (56): The **PARAMETER (56)** knob changes the effects parameters from **(1-99)**, except for effect number **1**. However effect number **16**, has **9** different preset reverb settings **(F1- F9)**.

WET/DRY (57): Turning the **WET/DRY (57)** knob lets you pan the selected effect into and out of the **PGM (program)**

SPECIFICATIONS:

AUDIO SECTION:

INPUT TERMINAL (input level/impedance) @ gain max.:

LINE 1, 2, 4	-20dB(100mV) 47 KOhm
LINE 3, 5	-20dB(100mV) 13 KOhm
PHONO 1, 2, 3	-54dB(2mV) 47 KOhm
MIC 1, 2	-56dB(1.5mV) 2 KOhm (Balanced)
RETURN	-20 dB (100mV) 5 KOhm

OUTPUT TERMINAL (output level/impedance):

MASTER OUTPUT (RCA)	0 dBV (1V) 300 Ohm
MASTER OUTPUT (1/4" BALANCED)	6 dBV (2V) 600 Ohm
REC OUTPUT	-18dB(120mV) 5 KOhm
ZONE MONITOR	0 dBV (1V) 300 Ohm
SEND	-18dB(120mV) 2 KOhm
PHONES	0 dBV (1V) 47 Ohm

FREQUENCY CHARACTERISTICS:

LINE/MIC	20Hz – 20 kHz (+/-2dB)
PHONO (RIAA)	20Hz – 20 kHz
SN RATIO (with effect off)	better than 80dB
TOTAL HARMONIC DISTORTION	rate less than 0.02%

CHANNEL EQUALIZER (LINE, PHONO, MIC 2);

HI	+12 dB, -32 dB
MID	+12 dB, -32 dB
LOW	+12 dB, -32 dB

MICROPHONE EQUALIZER (MIC 1):

HI	+12 dB, -12 dB
LOW	+12 dB, -12 dB
TALKOVER ATTENUATION	16dB

ELECTRICAL SECTION, ETC.:

POWER SUPPLY VOLTAGE	AC 18 V, 50-60 Hz (from adapter)
POWER CONSUMPTION	20 W
OPERATING TEMPERATURE	+5C to +35C (+41F - +95F)
OPERATING HUMIDITY	5% to 85%
EXTERNAL DIMENSIONS	254(W) 355 (D) 110 (H) mm/10(W) 14 (D) 4-1/3(H) in.
WEIGHT	8 lbs/3.7 Kgs

ACCESSORIES:

	Power Adapter

CABINET PARTS AND PACKING

ITEM	PART NUMBER	Q'ty	ENGLISH NAME
1	012-073	1	PANEL CONTROL
3	034-153	1	PANEL, REAR
4	032-171	1	COVER, BOTTOM
5	022-392	1	HOLDER, FADER
7			
8	023-674	4	KNOB SWING
9	002-589	1	PUSH KNOB -WHITE
10	002-531	2	KNOB PUSH (SMALL)
11	002-532	1	KNOB PUSH BUSHING (SMALL)
12	002-585	5	KNOB PUSH
15	002-724	4	KNOB SLIDE (BIG)
16			
17	003-171	11	KNOB ROTARY (A)
18	003-172	5	KNOB ROTARY (B)
19	003-173	3	KNOB ROTARY (C)
20	003-174	1	KNOB ROTARY (D)
21	003-175	3	KNOB ROTARY (E)
22			
25			
42	255-291	1	GIFT BOX
43	257-036	1	OWNER'S MANUAL
44	153-237	1	POLYFORM
45	END CABINET PARTS		
10			
11	074-145	5	INTEGRATED CIRCUIT NJM2068LD
12	074-104	1	INTEGRATED CIRCUIT NJM4558LD (M5218AL,BA4558N)
13	074-113	1	INTEGRATED CIRCUIT NJM4556L
14	074-166	1	INTEGRATED CIRCUIT LB1482M
15	074-107	1	INTEGRATED CIRCUIT NJM7812FA
16	074-114	1	INTEGRATED CIRCUIT NJM7912FA
17	074-074	1	INTEGRATED CIRCUIT NJM7805FA
18	074-211	1	INTEGRATED CIRCUIT NJM79L08A
19	074-212	1	INTEGRATED CIRCUIT NJM78L08A
20	074-216	1	INTEGRATED CIRCUIT W78E58B-40
21	074-210	21	INTEGRATED CIRCUIT NJM2068MD
22	074-213	1	INTEGRATED CIRCUIT TB62706BF
23	074-214	1	INTEGRATED CIRCUIT TC4052BFN
24	074-215	6	INTEGRATED CIRCUIT TC4053BFN
25			
26	074-207	1	INTEGRATED CIRCUIT AL1101
27	074-208	1	INTEGRATED CIRCUIT AL1201
28	074-209	1	INTEGRATED CIRCUIT AL3201
29			
30	076-104	1	TRANSISTOR 2SA1048 (2SA1317)
31	076-095	6	TRANSISTOR 2SC2878
32	076-002	1	SILICON TRANSISTORS 2SC945 (Q)(P)
33	076-003		SILICON TRANSISTORS OR 2SC1815 (Y)(GR)
34			
35	079-027	6	RECTIFIER DIODE 1N4002
36	079-003	33	SILICON DIODE 1N4148
37	079-021P	7	ZENER DIODE 1/2W 3V (限用BZX79C3V0)

CABINET PARTS AND PACKING

ITEM	PART NUMBER	Q'ty	ENGLISH NAME
38	079-056P	7	ZENER DIODE 1/2W 3.3V (限用BZX79C3V3)
39	079-058	1	ZENER DIODE 1/2W 16V
40			
41	052-019	1	CERAMIC RESONATOR 33.86MHz
42	058-023	1	CRYSTAL OSCILLATOR 8MHz
43			
44	059-216	1	AC ADAPTER AC120V 60Hz/AC 18V 750mA
45	059-217		AC ADAPTER AC230V 50Hz/AC 18V 750mA
46	059-218		AC ADAPTER AC240V 50Hz/AC 18V 750mA
47			
48	092-134	1	TELEPHONE JACK 6P6C
49	092-128	1	IC SCOKET 40P
50			
51	081-051	2	SLIDE SWITCH 4P2C FD-ASSIGN,REVERSE SW
52	081-004	3	SLIDE SWITCH 2S6P PH/LN SW
53			
54	082-048	1	ROTARY SWITCH L=22.5 CH SELECTOR
55	082-049	1	ROTARY SWITCH 1P16C L=16.5 EFF SELECTOR
56	082-006	1	TACT SWITCH
57	082-019	3	LEVER SW 4P2C P=18
58	082-022	1	LEVER SW 4P3C P=24 PGM
59			
60	083-123	1	ROTARY ENCODER
61	083-069	4	PUSH SWITCH 2P2C L=12.5 CUE1-3 SW
62	083-097	2	PUSH SWITCH 4P2C L=12.5 CUE/SPLIT,DISP MODE
63	083-110	1	PUSH SWITCH 4P2C L=12.5 FADER CURVE
64	083-111	1	POWER SWITCH UL
65			
66	071-239	2	ROTARY VR L=22.5 20KA MICTONE/HI LOW
67	071-240	1	ROTARY VR L=22.5 250KA×2 MIC LEVEL
68	071-166	4	ROTARY VR L=22.5 50KA×2 CH2,3 CUE,GAIN,MASTER
69	071-167	9	ROTARY VR L=22.5 50KE×2 CH HIGH MID BASS
70	071-168	1	ROTARY VR L=22.5 10KA×2 ZONE
71	071-204	1	ROTARY VR L=22.5 50KB CH1 GAIN
72			
73	071-222	1	ROTARY VR L=22.5 20KB×2 CUE PGM
74	071-241	1	ROTARY VR L=22.5 10KB×2 FX LEVEL
75			
76	072-122	3	SLIDE VR 45mm L=20 10KA×2 CH-VOL
77	072-113	1	SLIDE VR 45mm L=20 100KB×2 FADER
78			
79	080-106	8	LED (RED) 3.15φ
80	080-113	8	LED (RED) 2.2×3.0
81	080-115	4	LED (YELLOW) 2.2×3.0
82	080-114	12	LED (GREEN) 2.2×3.0
83	080-125	1	LED (RED) 2.2×3.0
84	080-123	1	LED NUMERIC DISPLAY
85			
86	092-078	5	PHONE JACK 6.3φ
87	161-165	3	4P RCA JACK
88	161-166	1	6P RCA JACK
89	161-174	1	2P RCA JACK

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On 5-Dec-2002 at 07:38:53

PART NUMBER	Comment	Pattern	Quantity	Components
082-019		LBC42B	3	SW5, SW7, SW10
082-022		LBC43	1	SW2
081-051		MISAKI1	2	SW1, SW8
082-006		PB	1	SW14
083-069		SPEC12HB07	4	SW3, SW6, SW9, SW13
083-097		SPEC14HB	2	SW11, SW12
083-110		SPUN4/2_BOR	1	SW4
072-113	100KBX2	TOKYO-ALPHA	1	X1_1
071-168	10KAX2	RK14K124	1	VR19
072-091	10KAX2	VR45D	3	VR8, VR13, VR18
079-003	1N4148	D6	6	D12, D15, D17, D18, D19, D20
074-210	2068MD	DMP8	16	IC1, IC2, IC3, IC5, IC6, IC8, IC9, IC10, IC11, IC12, IC13, IC14, IC16, IC17, IC18, IC19
071-239	20KA	RK11K114	2	VR1, VR2
071-222	20KB	RK14K124	1	VR22
071-240	250KA	RK11K114	1	VR3
076-002	2SC1815	TO-92	1	Q1
079-021P	3V0	D6	4	D4, D7, D10, D34
079-056P	3V3	D10	2	D6, D33
079-056P	3V3	D7.5	2	D3, D9
074-113	4556L	SIP8	1	IC15
071-166	50KAX2	RK14K124	3	VR9, VR14, VR21
071-166	50KAX2	RK14K124	1	VR20
071-204	50KB	RK14K124	1	VR4

PART NUMBER	Comment	Pattern	Quantity	Components
071-167	50KE	RK14K124	9	VR5, VR6, VR7, VR10, VR11, VR VR15, VR16, VR17
074-212	78L08A	TO-92	1	IC4
074-211	79L08A	TO-92	1	IC7
080-106	LED	LED	6	D1, D2, D5, D8, D14, D16
080-125	LED(RED)	LED	1	D11
074-214	TC4052B	SO-16	1	U4
074-215	TC4053B	SO-16	5	U1, U2, U3, U5, U6

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PART NUMBE	Comment	Pattern	Quantity	Components
080-114	GRN	LEDREC	12	D6, D7, D8, D9, D10, D12, D18, D19, D20, D21, D22, D24
074-166	LB1482	LB1482	1	IC1
080-113	RED	LEDREC	8	D1, D2, D3, D13, D14, D15,D11,D23
080-115	YLW	LEDREC	4	D4, D5, D16, D17

PART NUMBER	Comment	Pattern	Quantity	Components
083-123		ENCODER	1	EC1
071-241	10KBX2	RK14K124	1	VR1
079-058	16V	D12.5	1	D10
079-003	1N4148	D10	1	D12
079-003	1N4148	D6	24	D1, D2, D3, D4, D5, D6, D7, D8, D9, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D26, D27, D28
074-210	2068MD	DMP8	5	IC1, IC2, IC3, IC5, IC6
052-019	33.86MHz	CRYSTAL	1	Q2
079-021P	3V0	D12.5	1	D30
079-021P	3V0	D6	1	D32
079-056P	3V3	D6	2	D29, D31
058-023	8.000MHz	CRYSTAL	1	Q1
074-207	ADC	ADC	1	U1
074-208	DAC	DAC	1	U4
074-209	DSP	DSP	1	U2
080-123	LED_DISP	LED_DISP	1	LED1
080-123	P87C58	DIP40	1	U3
082-049	RSW16	SR3012-16	1	SW1
082-048	SR1712	SR1712	1	SW2
074-213	TB62706	TB62706	1	IC4
074-215	TCC4053B	SO-16	1	U5

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PART NUMBER	Comment	Pattern	Quantity	Components
092-078		1/4"	3	J1, J7, J9
161-174		2RCA-N	1	J2
161-165		4RCA-N	3	J3, J4, J5
092-134		6P6C	1	J8
161-166		6RCA-N	1	J6
081-004		SS7	3	SW01, SW02, SW03
079-027	1N4004	D10	4	D3, D4, D6, D7
079-027	1N4004	D7.5	2	D5, D8
079-003	1N4148	D10	2	D1, D2
074-145	2068LD	SIP8	4	IC1, IC2, IC3, IC4
074-145	2068LD	sIP8	1	IC5
076-104	2SA1317	TO-92	1	Q4
076-095	2SC2878	TO-92	6	Q1, Q2, Q3, Q5, Q6, Q7
079-021P	3V0	D6	1	D10
079-056P	3V3	D6	1	D9
074-104	4558LD	SIP8	1	IC6
074-074	7805	TO-220	1	IC7
074-107	7812	TO-220	1	IC9
074-114	7912	TO-220	1	IC8
092-078	MIC1	1/4"	1	J1
161-174	PH	1/4"	1	J2

MAIN PCB
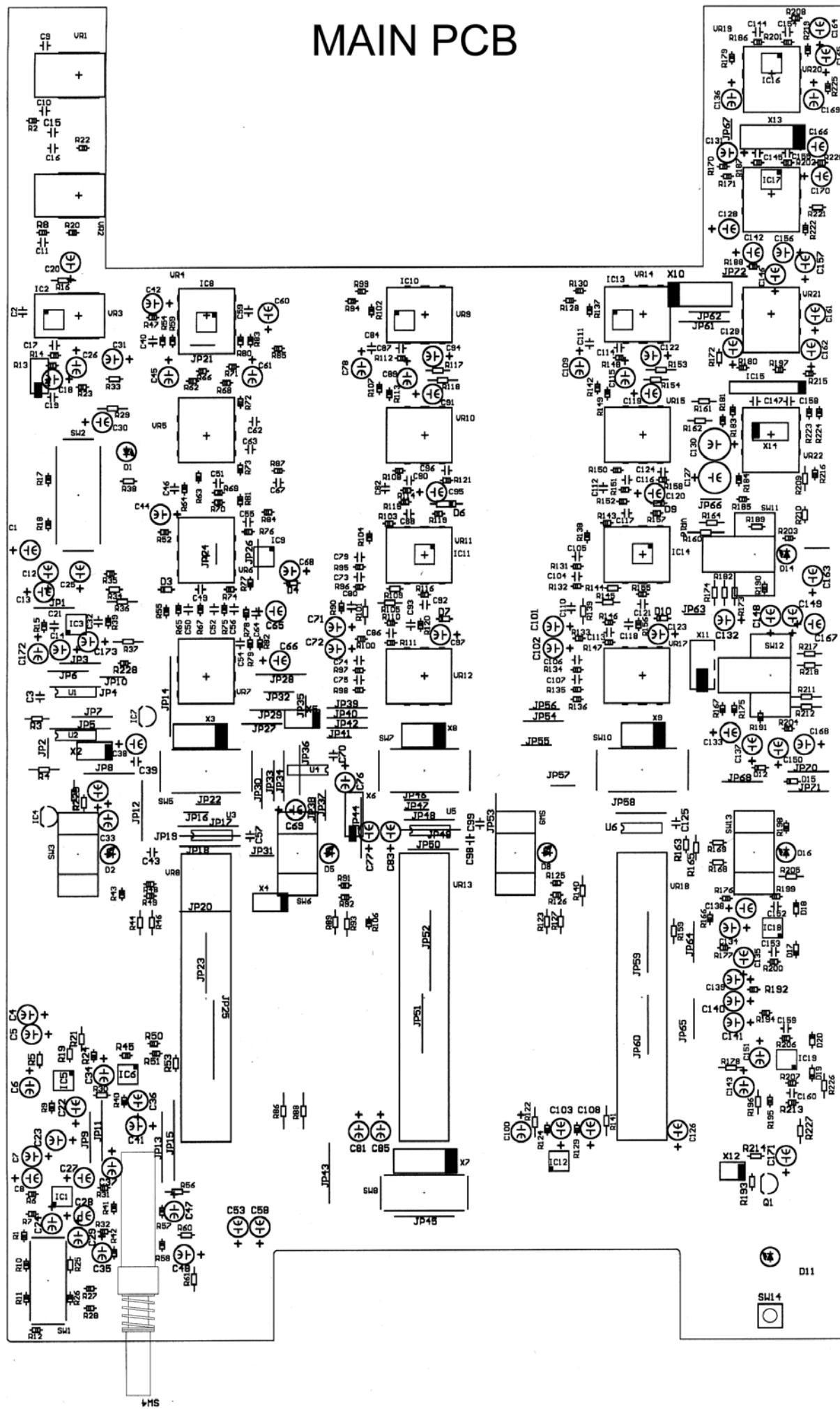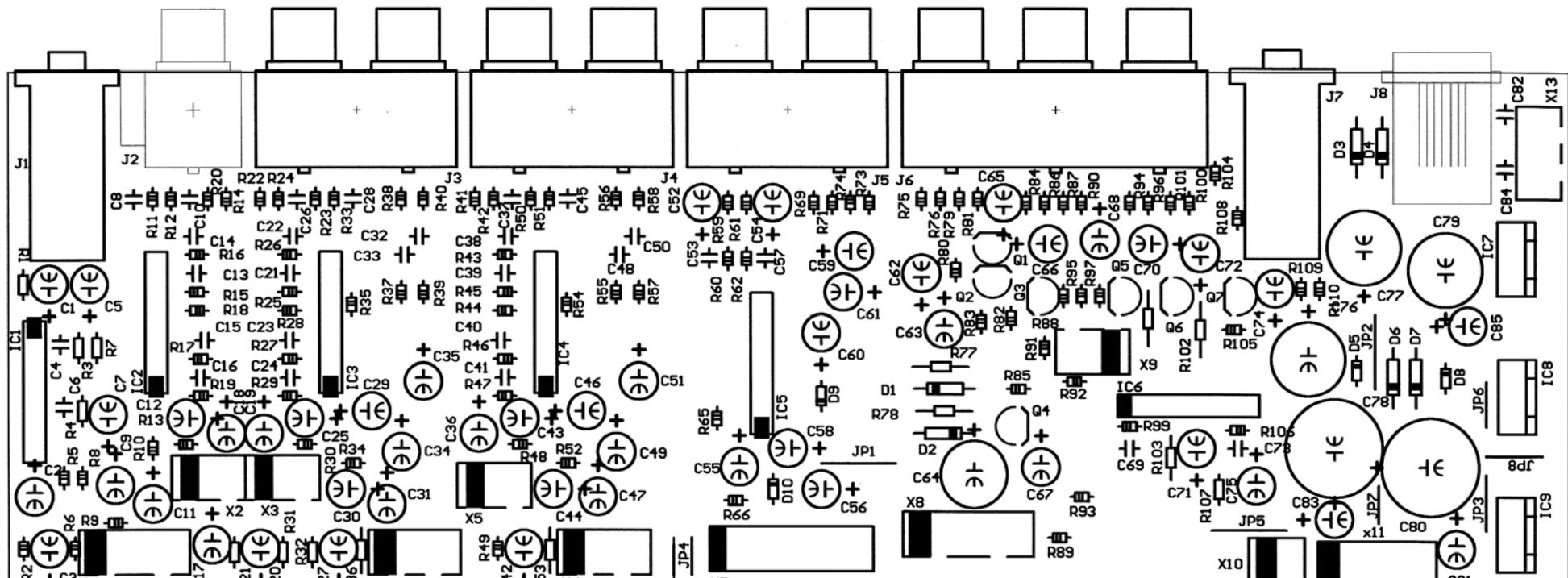
INPUT/OUTPUT PCB

METER PCB

D12　D11　D10　D9　D8　D7　D6　D5　D4　D3　D2　D1

JP1　R10　R9　R8　R7　R6　R5

R4　R3　R2　JP2

R1

IC1　C4　R11　C2

X2　C3

JP4　R14　R13　+C5　R12

C1

X1

JP3
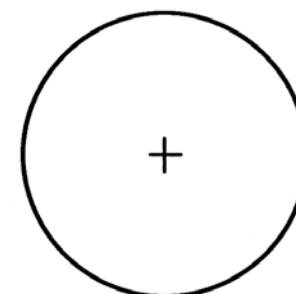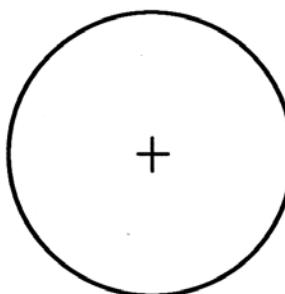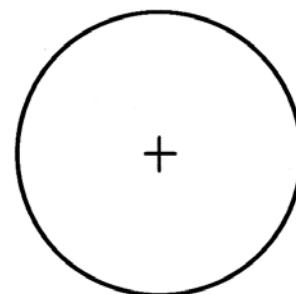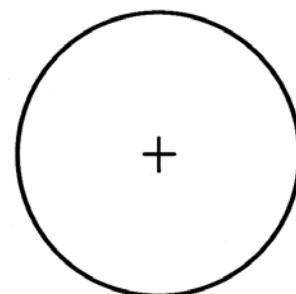
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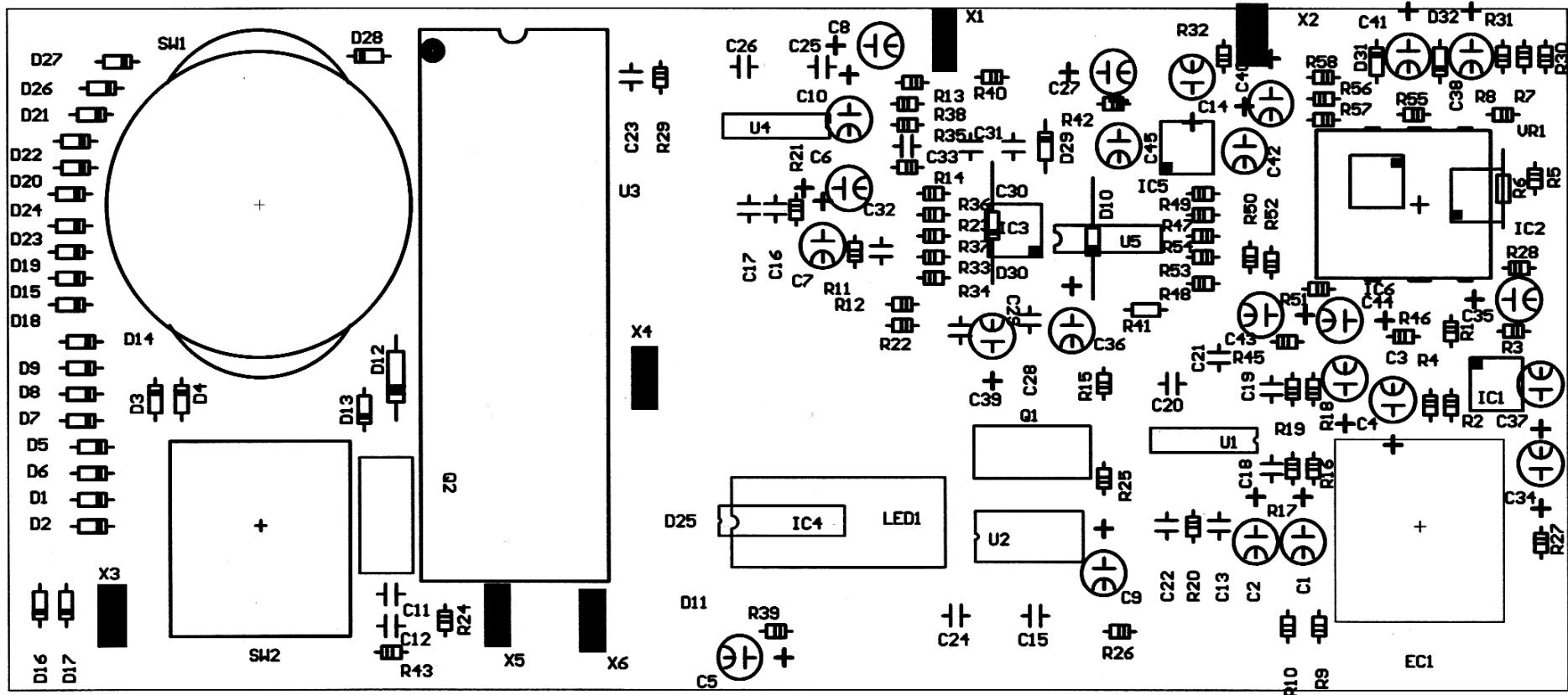
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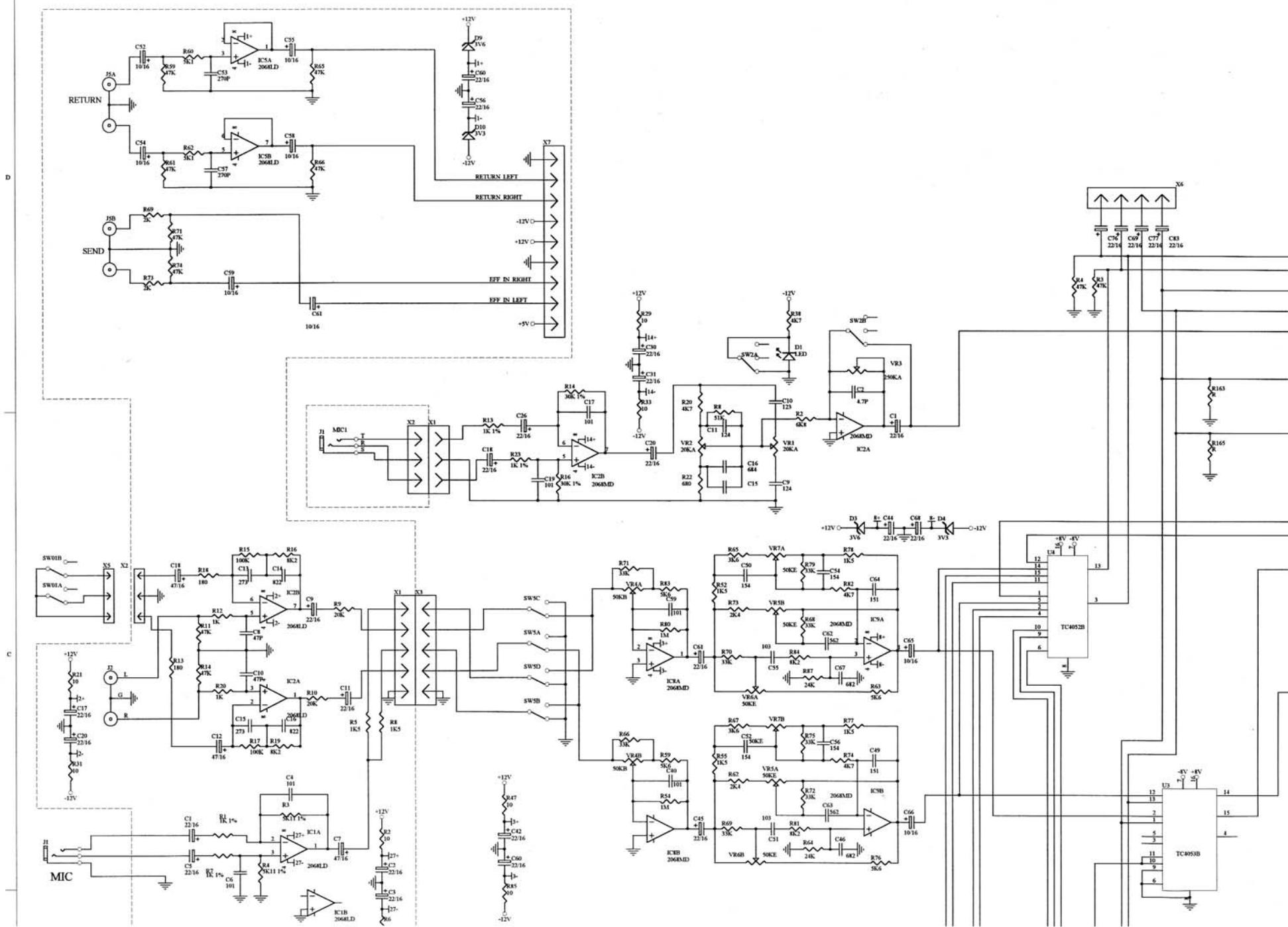
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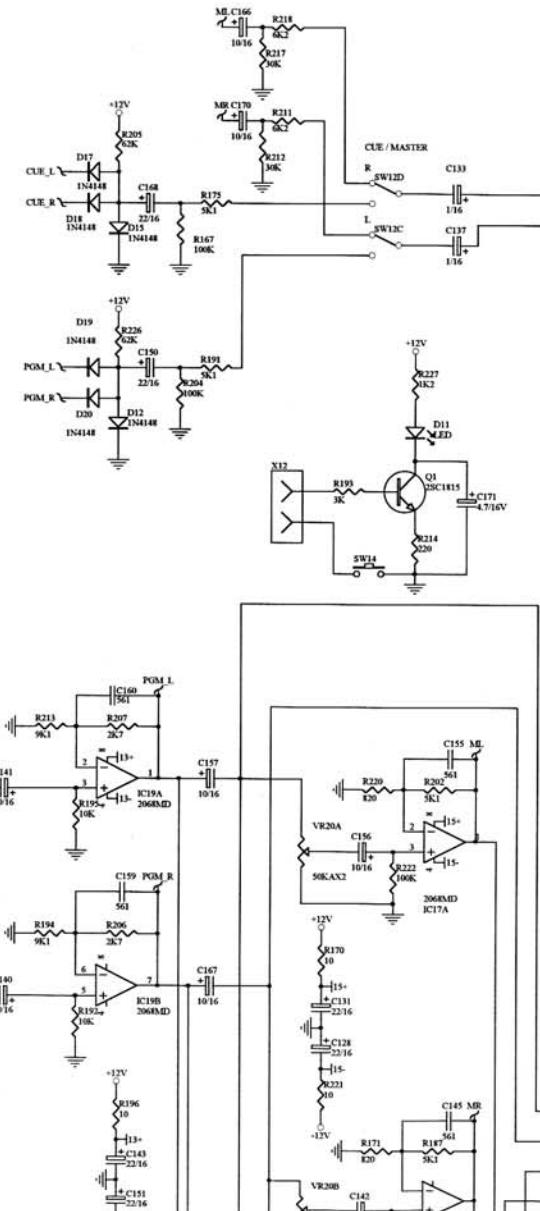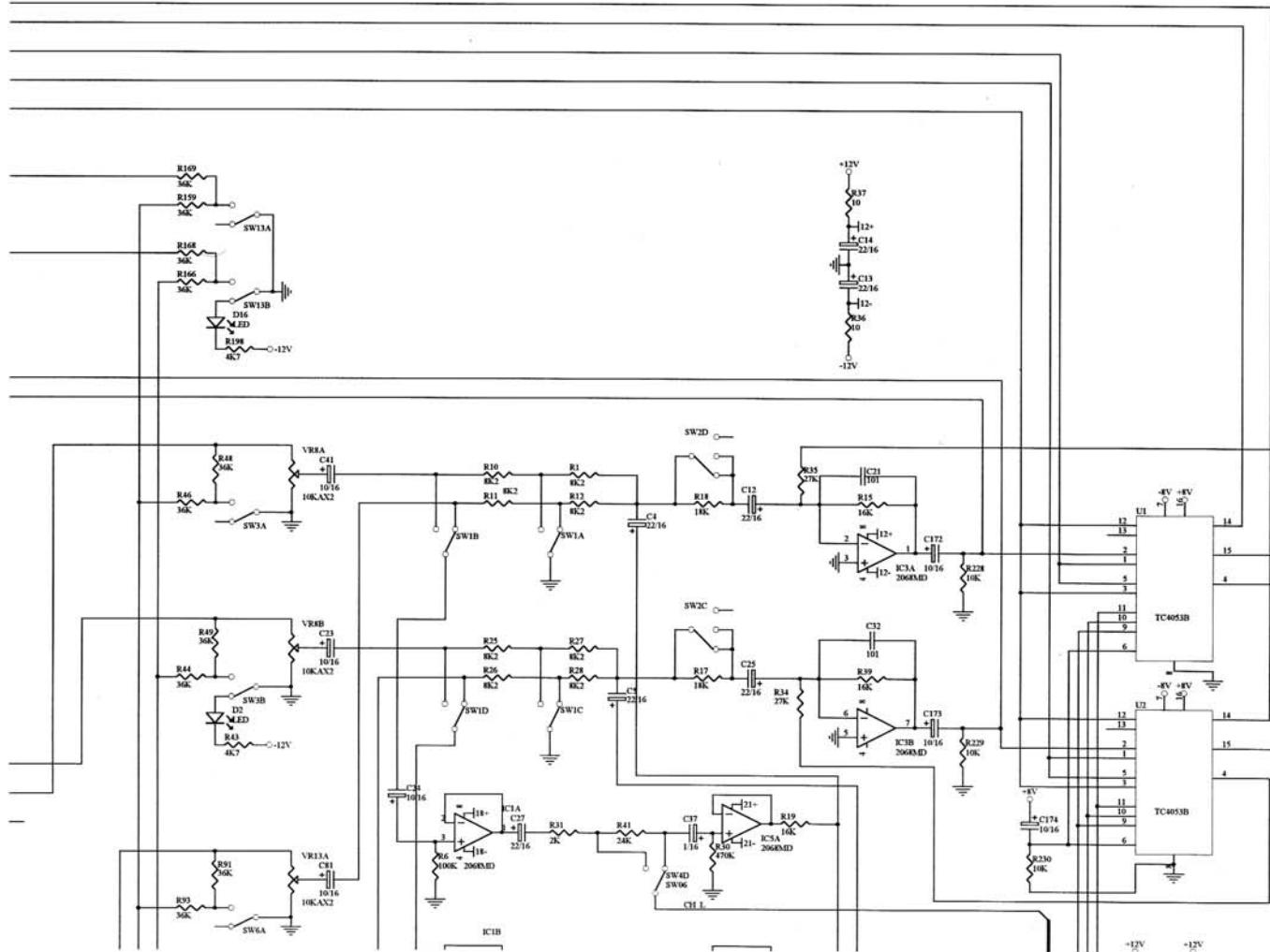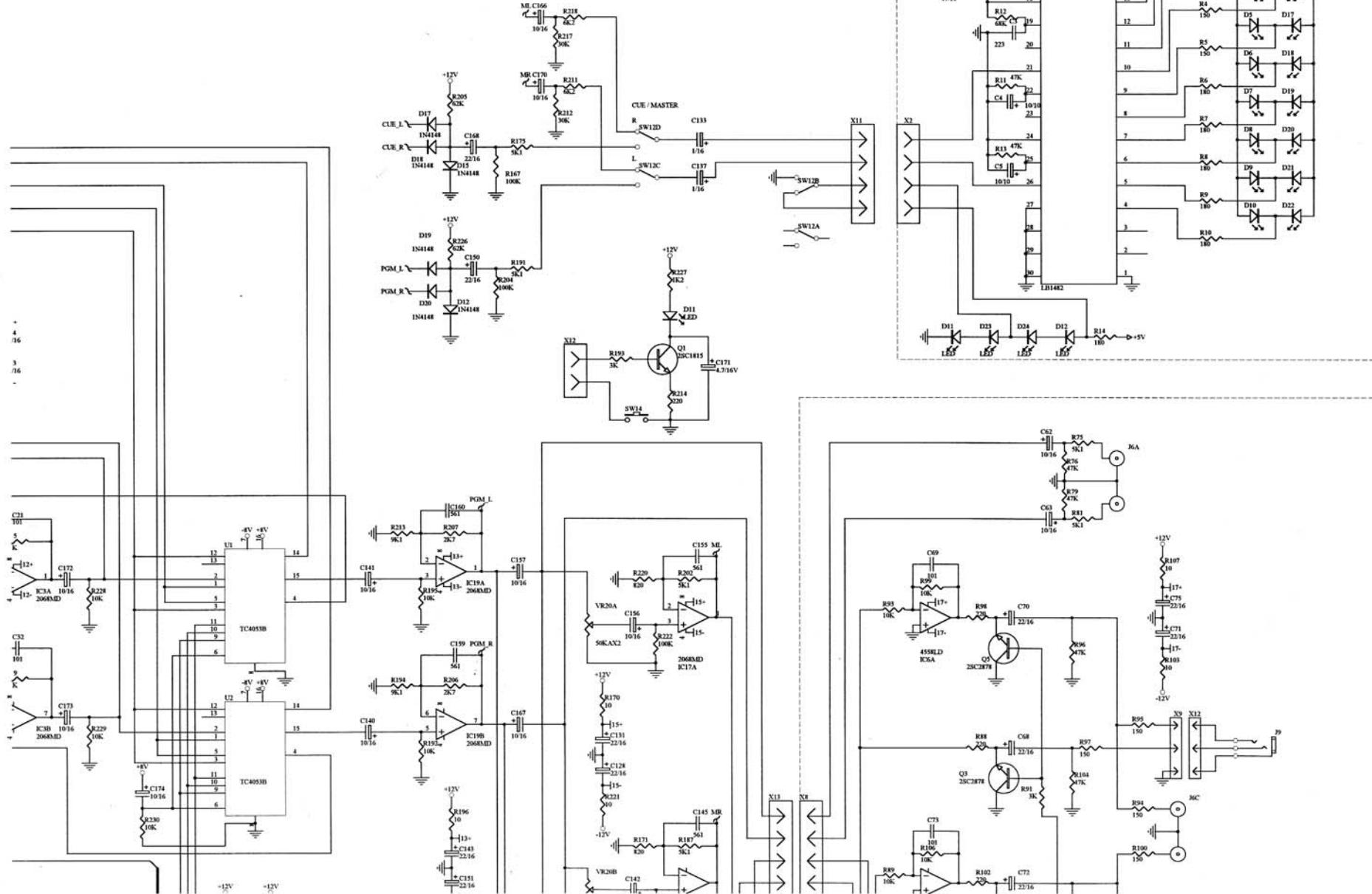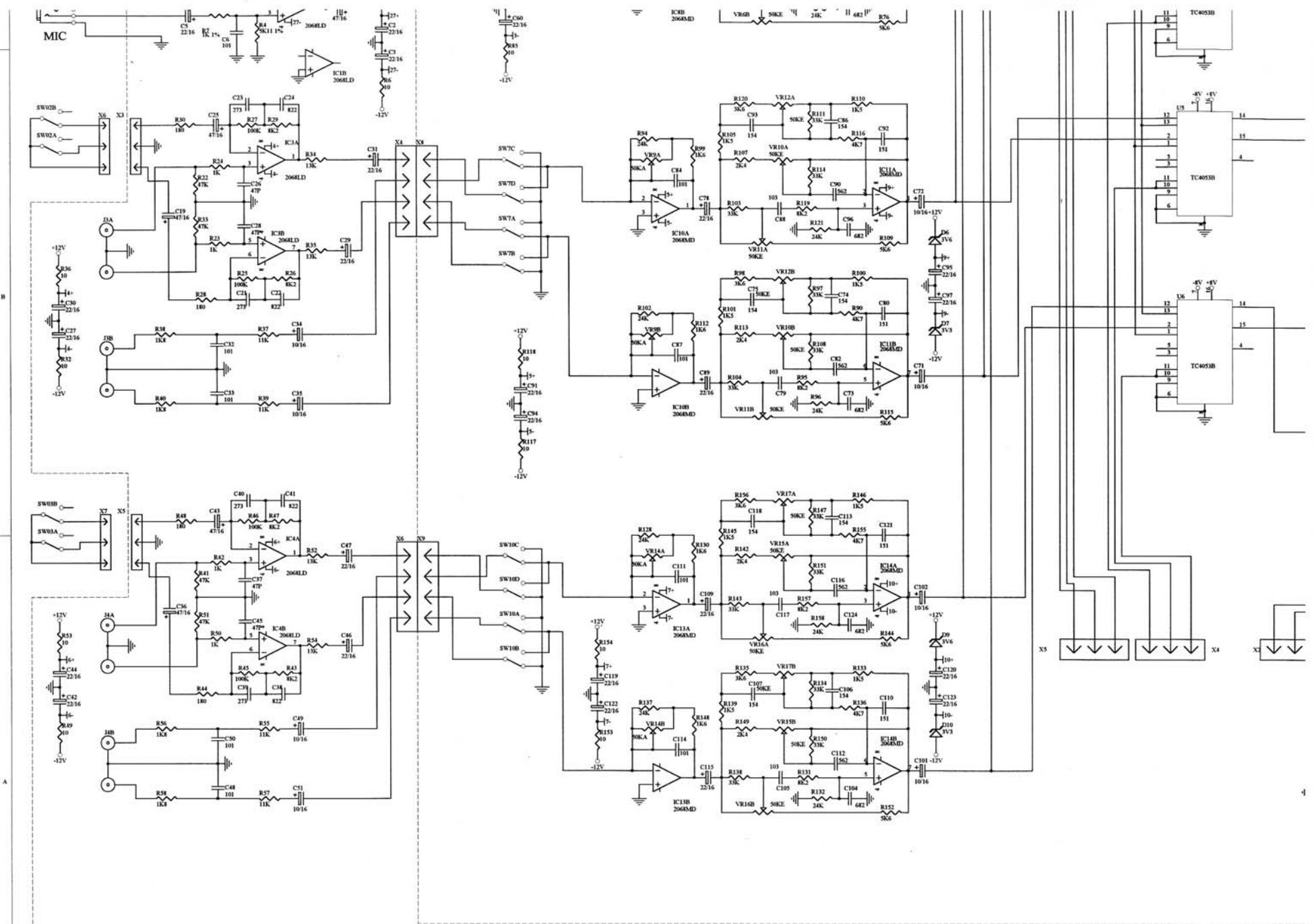
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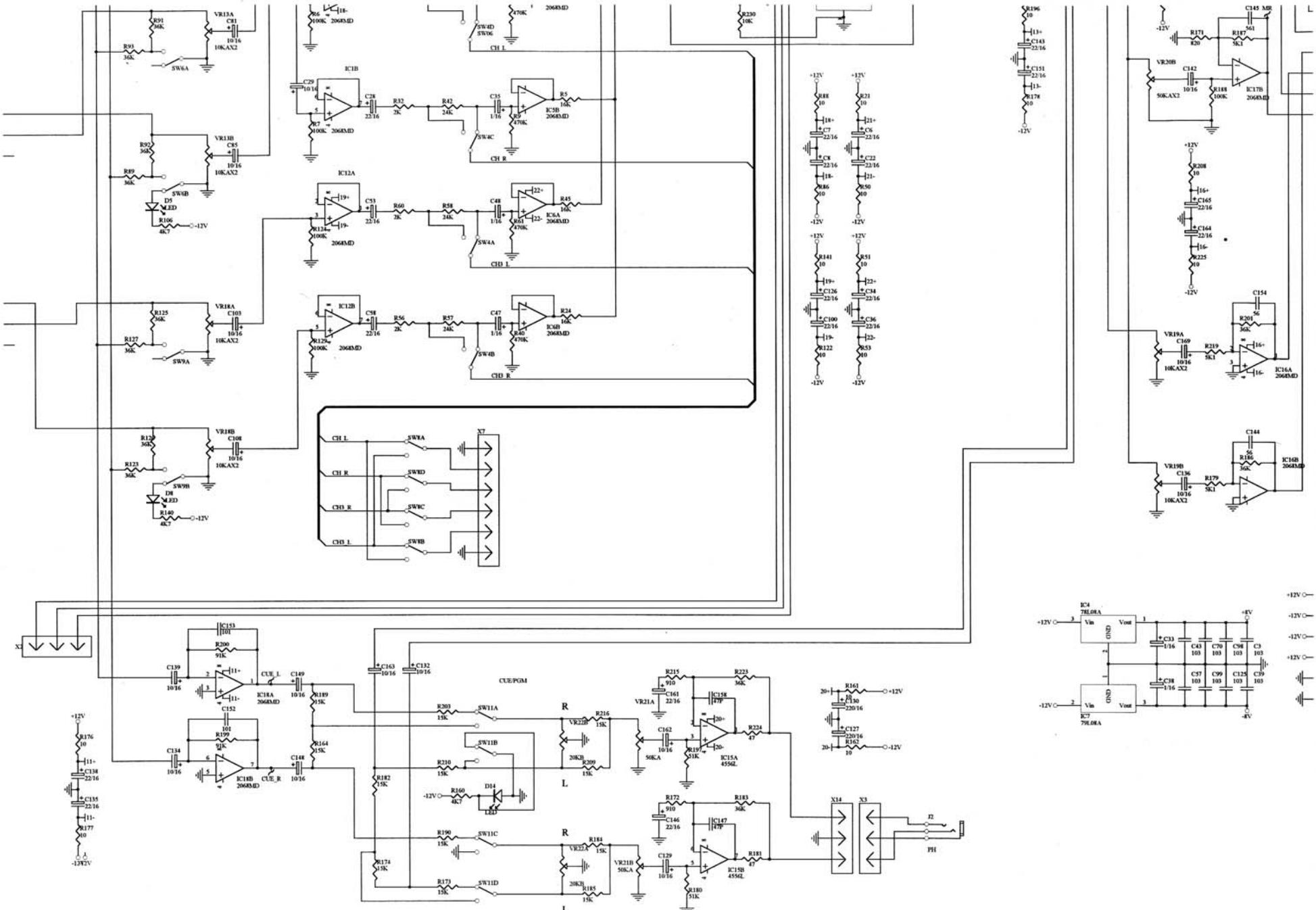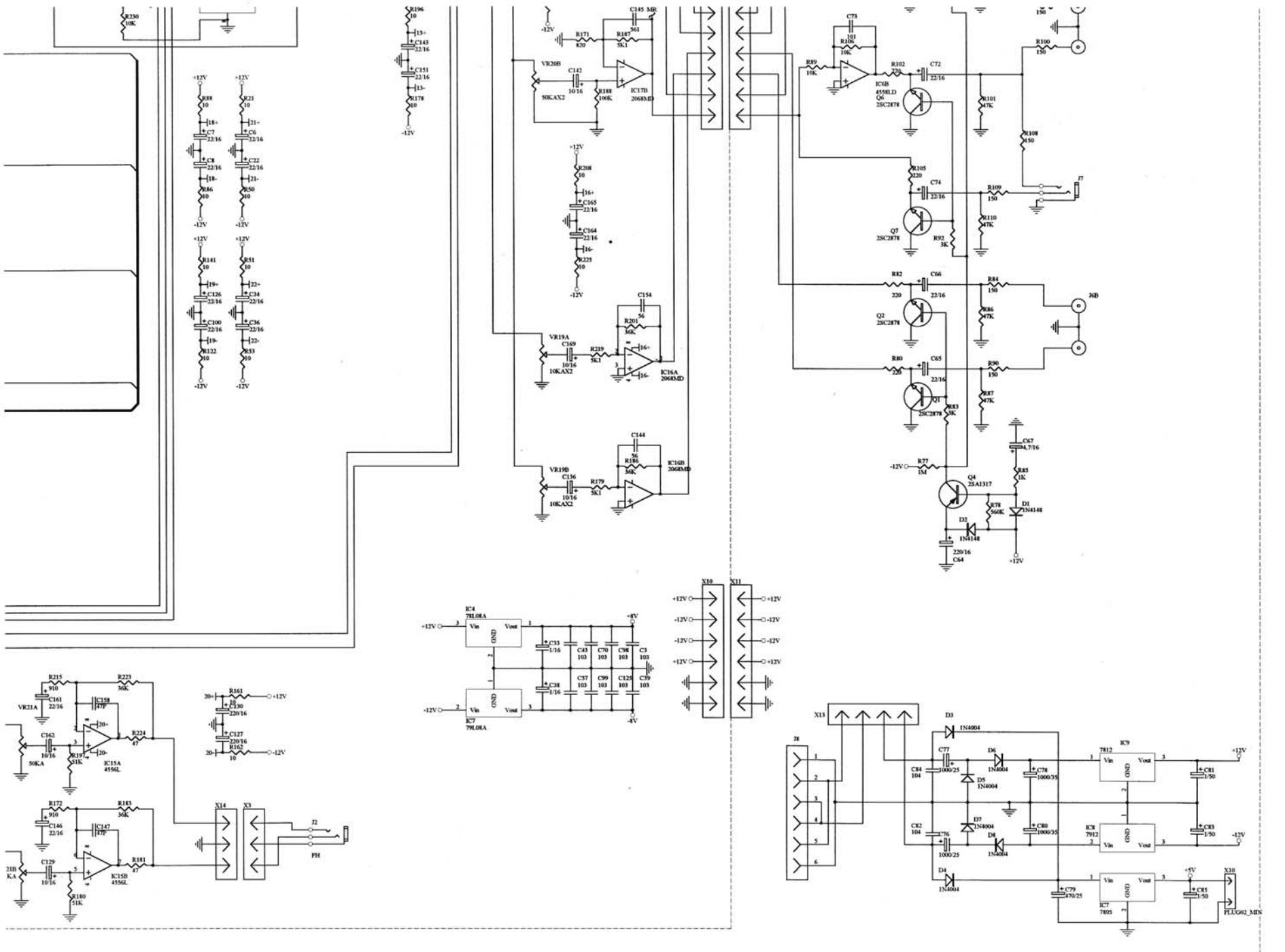
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MAIN SCHEMATIC

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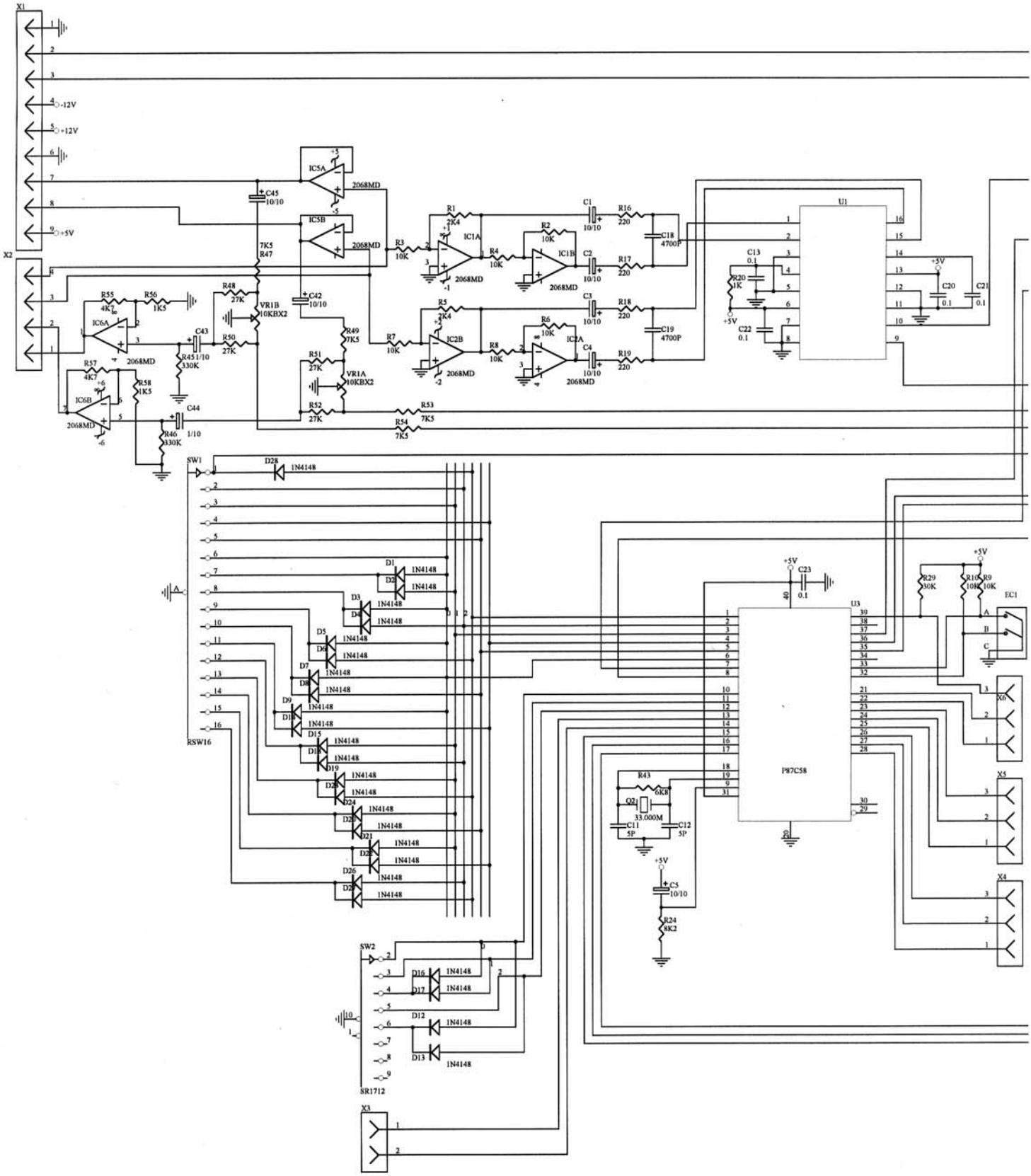
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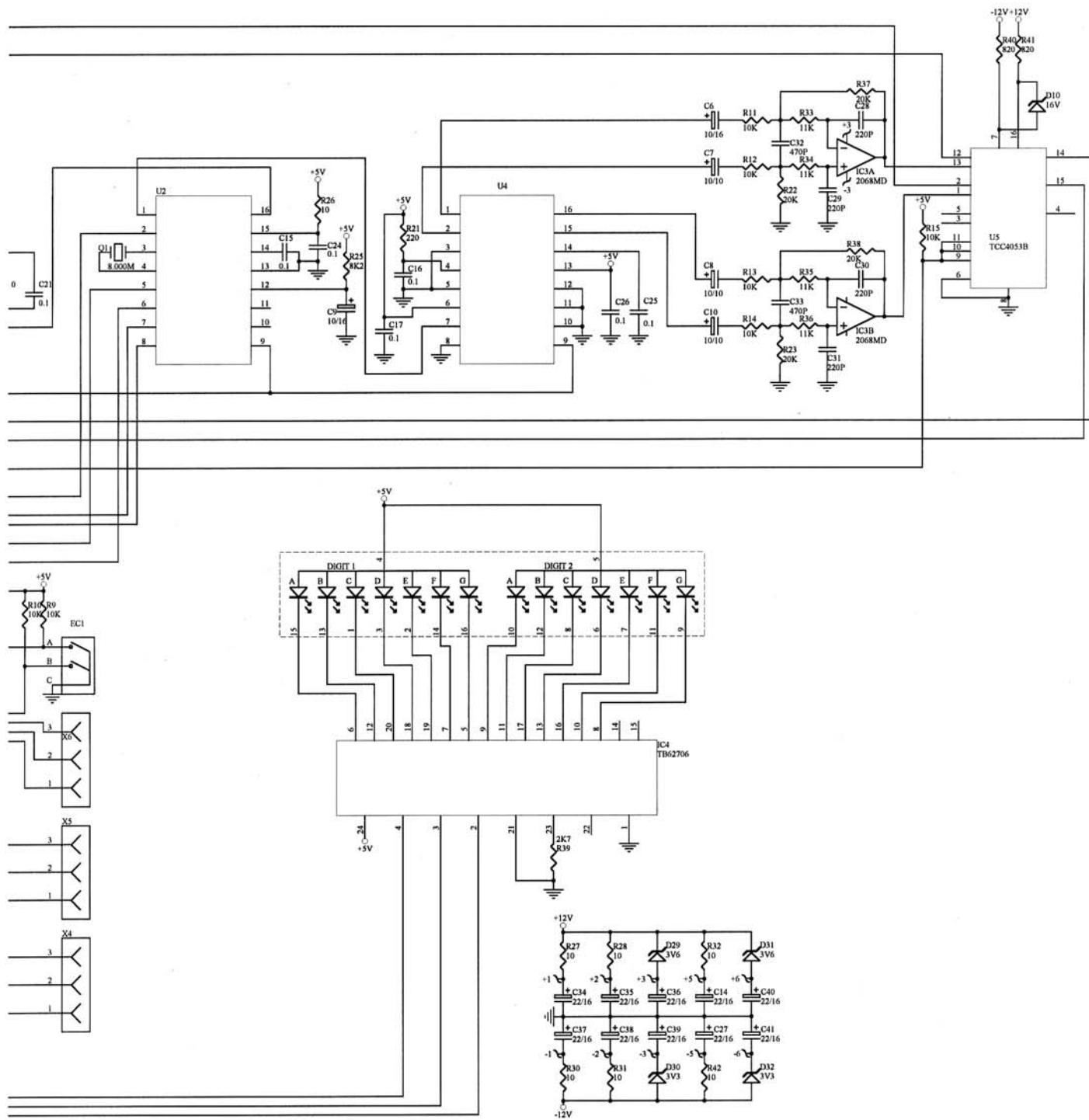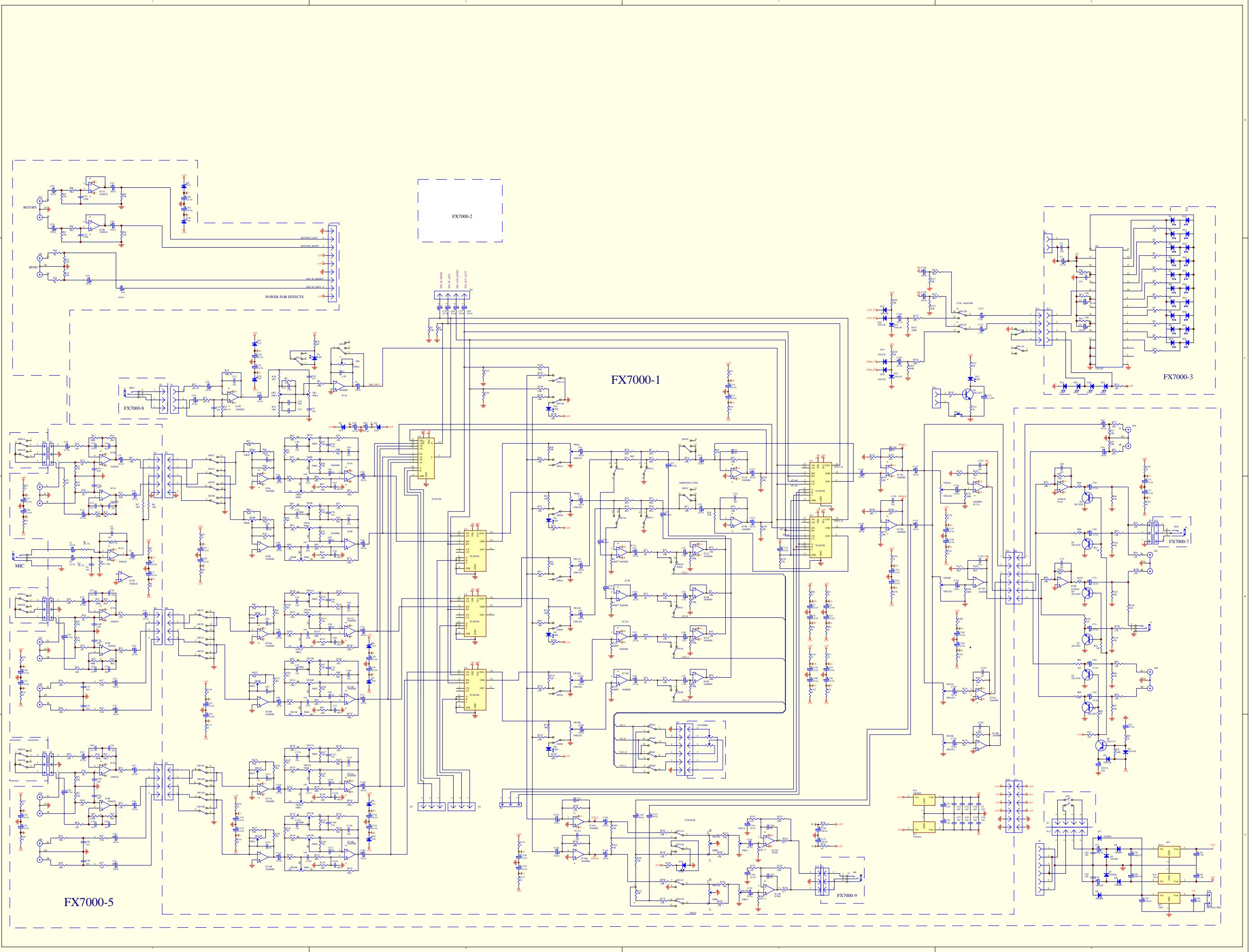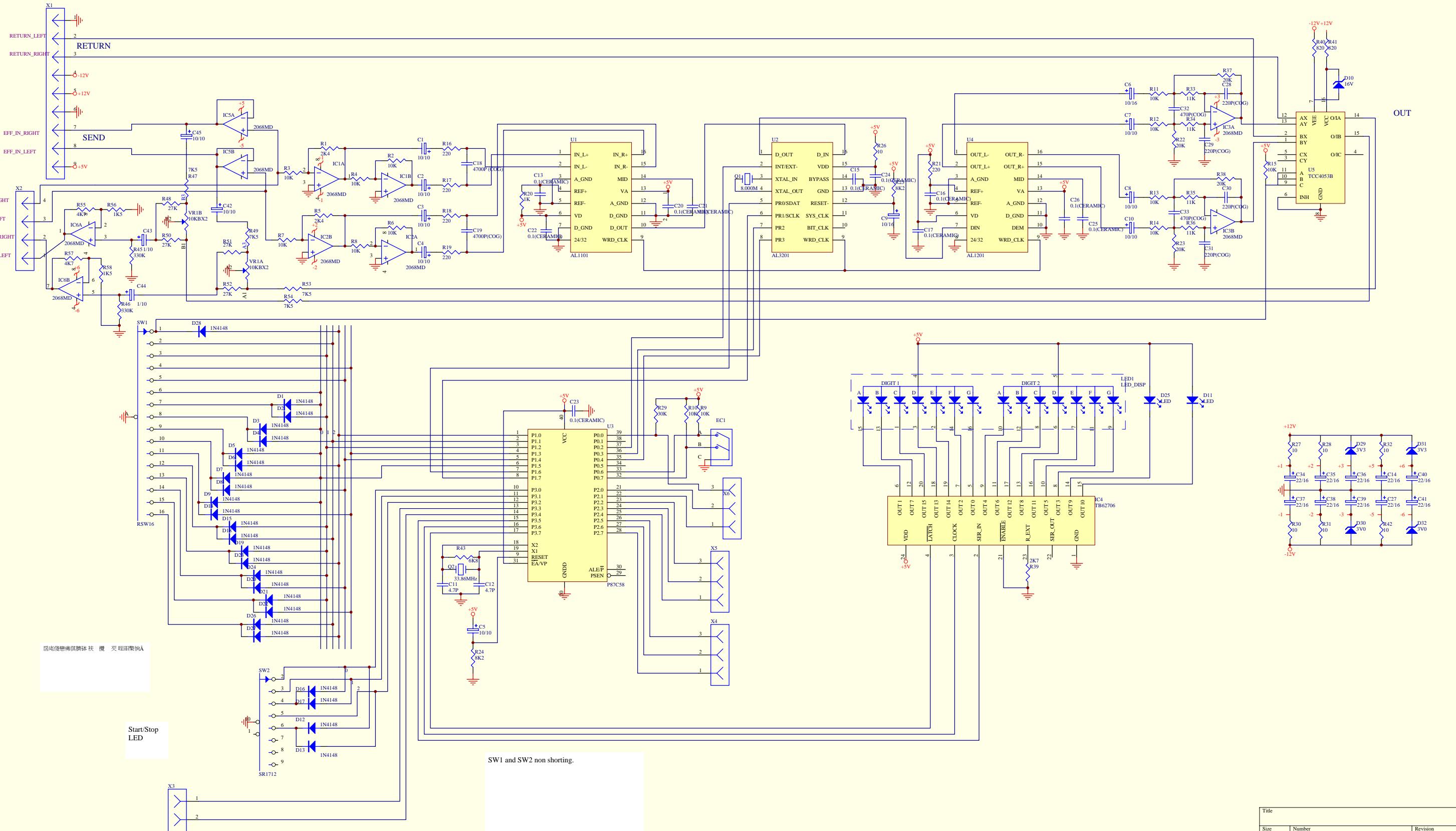
FX7000-2

FX7000-1

FX7000-3

FX7000-8

FX7000-7

FX7000-9

FX7000-5

RETURN

SEND

RETURN_LEFT

RETURN_RIGHT

SEE_IN_RIGHT

SEE_IN_LEFT_A

POWER FOR EFFECTS

MIC

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