

# **gemini**<sup>®</sup>

## **SERVICE MANUAL**

### **XDJ-10**

#### **PROFESSIONAL STEREO PREAMP MIXER**

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WARNING: TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

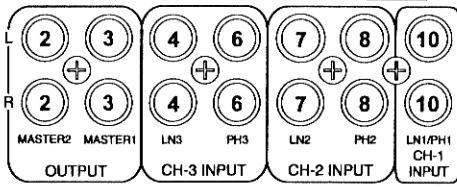
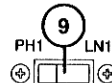
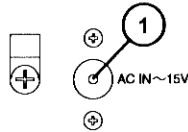
Model #: XDJ-10

DESIGNED AND ENGINEERED IN U.S.A. EXCLUSIVELY PRODUCED IN TAIWAN FOR GEMINI SOUND PRODUCTS

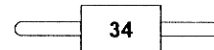
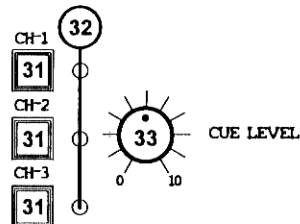
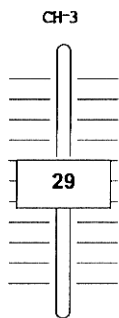
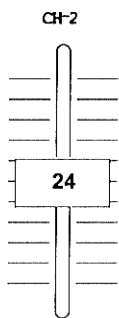
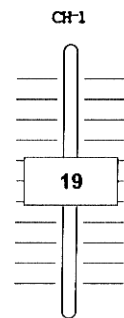
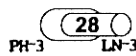
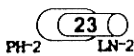
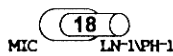
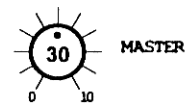
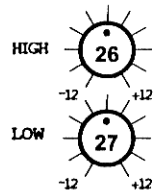
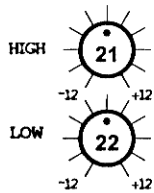
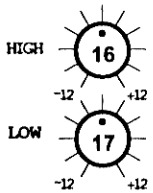
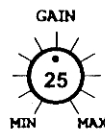
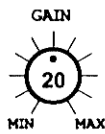
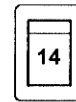
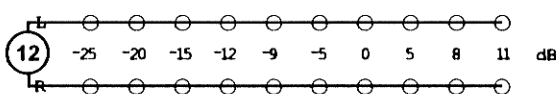
# BRAND X

by **gemini**

**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



## XDJ-10

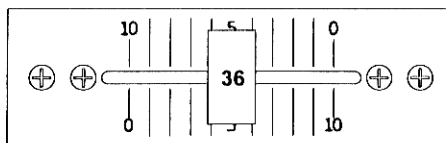


# BRAND X

by **gemini**

CH-2

CH-3



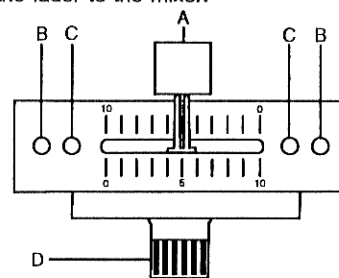
## Connections

1. Make sure that the **POWER (14)** switch is in the off position. The **POWER LED (13)** will be off. This unit comes supplied with a 15 volt AC adaptor. Plug the male pin of the adaptor into the rear panel **POWER JACK (1)**. Then plug the adaptor into a proper power source.
2. The XDJ-10 is supplied with 2 sets of amp output jacks. Use the **MASTER 1 (3)** or the **MASTER 2 (2)** jacks to connect to your mixer to your main amplifier. You can use the second set of jacks to connect the mixer to the record input of your recorder enabling you to record your mix or as a second zone with an additional amplifier.
3. The **MIC (11)** input (found on the front panel) accepts a 1/4" connector. Both balanced and unbalanced microphones can be used.
4. On the rear panel are 2 stereo **PHONO (6, 8)** inputs, 2 stereo **LINE (4, 7)** inputs and 1 stereo **PHONO/LINE (10)** input. The **PHONO/LINE (9)** switch enables you to set the (10) input to Phono or Line. The phono inputs will accept only turntables with a magnetic cartridge. A **GROUND (5)** screw for you to ground your turntables is located on the rear panel. The stereo line inputs will accept any line level input such as a CD player, a cassette player, etc.
5. Headphones can be plugged into the front panel mounted **HEADPHONE (35)** jack.

## Operation

1. **POWER ON:** Once you have made all the equipment connections to your mixer, press the **POWER (14)** switch. The power will turn on and the **POWER LED (13)** will glow RED.
2. **CHANNEL 1:** The **GAIN (15)**, **HIGH (16)** and **LOW (17)** controls allow you to fully adjust the selected source. Switch # (18) allows you to select either the **MIC (11)** or the **LINE 1/PHONO 1 (10)** input. The **CHANNEL (19)** slide controls the output level of this channel.
3. **CHANNEL 2:** The **GAIN (20)**, **HIGH (21)** and **LOW (22)** controls allow you to fully adjust the selected source. Switch # (23) allows you to select either the **PHONO 2 (8)** or the **LINE 2 (7)** input. The **CHANNEL (24)** slide controls the output level of this channel.
4. **CHANNEL 3:** The **GAIN (25)**, **HIGH (26)** and **LOW (27)** controls allow you to fully adjust the selected source. Switch # (28) allows you to select either the **PHONO 3 (6)** or the **LINE 3 (4)** input. The **CHANNEL (29)** slide controls the output level of this channel.
5. **CROSSFADER SECTION:** The **CROSSFADER (36)** allows the mixing of one source into another. The left side of the **CROSSFADER (36)** is channel 2 and the right side is channel 3. The **CROSSFADER (36)** in your unit is removable and if the need arises can be easily replaced. Crossfader units are available in three varieties. Part # RF-45 (which is identical to the crossfader supplied with the mixer) has a 45 mm travel from side to side. Part # RF-30 is available with a 30 mm travel distance. Also available is the PSF-45 with a special curve designed for scratch mixing. Just purchase one of these crossfader units from your Gemini dealer and follow these 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.



6. **OUTPUT CONTROL:** The level of the **MASTER OUTPUT (2, 3)** is controlled by the **MASTER (30)** control.
7. **CUE SECTION:** By connecting a set of headphones to the **HEADPHONE (35)** jack, you can monitor any or all of the channels. Select the correct **CUE (31)** button or buttons and their respective **CUE LED (32)** indicators will glow. Use the **CUE LEVEL (33)** control to adjust the headphone volume without effecting the overall mix. By sliding the **CUE PGM PAN (34)** control to the left you will be able to monitor the assigned cue signal. Sliding the **CUE PGM PAN (34)** to the right will monitor the PGM (program) output.
8. **DISPLAY:** The **DISPLAY (12)** indicates the **MASTER** output left and right levels.

## Specifications

### INPUTS:

DJ Mic.....	1.5mV 2 kOhm balanced
Phono.....	3mV 47 kOhm
Line.....	150 mV 10 kOhm

### OUTPUTS:

Masters.....	0 dB 1 V 400 Ohm
Max.....	20 V Peak to Peak

### GENERAL:

Low.....	±12 dB
High.....	±12 dB
Gain (Mic).....	0 to -30dB
Gain (Chnls 1-3).....	0 to -30dB
Frequency Response.....	20 Hz - 20 kHz ±2dB
Distortion.....	0.02%
S/N Ratio.....	better than 80dB
Headphone Impedance.....	16 Ohm
Power Source.....	115V/15V AC 0.5 A
	230V/15V AC 0.5 A
Dimensions.....	10" x 12" x 4.75" (254 x 305 x 121 mm)
Weight.....	5.6 lbs (2.5 kg)

# Parts Lists

## Cabinet Parts and Packing

Item #	Description	Part #
1	PANEL CONTROL	002-300
2	BRACKET VR	021-797
3	PANEL REAR	034-076
4	COVER BOTTOM	032-019
5	HOLDER X-FADER	022-391
6	SWING LEVEL (LONG)	023-674
7	KNOB PUSH (SMALL)	002-531
8	BUSHING FOR KNOB (SMALL)	002-532
9	KNOB SLIDE (BIG)	002-704
10	KNOB SLIDE (SMALL)	002-703
11	KNOB ROTARY (B)	003-110
12	KNOB INLAY (BLACK)	148-236
13	KNOB INLAY (RED)	148-238
14	KNOB INLAY (GRAY)	148-239
15	VR INLAY	003-970
16	EVA PAD	003-510
17	HOLDER LED 3φ (17mm)	003-969
18	PCB SPACER SUPPORT	047-474
19	CLIP WIRE	049-190
20	PAD FOOT	049-206
21	GND SCREW	146-710
22	VR DUST PROOF CLOTH (SMALL)	159-167
23	VR DUST PROOF CLOTH	159-171
24	SWING DUST PROOF CLOTH	159-216
25	OWNER'S MANUAL	157-966
26	GIFT BOX	255-144
27	PAN-HEAD MACHINE SCREW 2x4(B)	102-007
28	PAN-HEAD MACHINE SCREW 2.6x4(B)	102-025
29	PAN-HEAD TAPPING SCREW 2x6(AB)	109-018A
30	BAND-HEAD TAPPING SCREW/TWIN	110-172A
31	SCREW3x8(AB)	
32	FLAT-HEAD TAPPING SCREW 3x6(AB)	111-043A
33	BAND-HEAD TAPPING SCREW 3x6(AB)	111-046A
34	FLAT-HEAD TAPPING SCREW 3x12(AB)	111-049A
35	BAND-HEAD TAPPING SCREW 3x5(AB)	111-051A
36	BAND-HEAD TAPPING SCREW/TW-E 3x6(AB)	121-003A

## Printed Circuit Boards

Item #	Description	Part #
1	PRINTED CIRCUIT BOARD XDJ-10-1	262-252
2	PRINTED CIRCUIT BOARD XDJ-10-2	262-253
3	PRINTED CIRCUIT BOARD XDJ-10-3	262-254
4	PRINTED CIRCUIT BOARD XDJ-10-4	262-255
5	PRINTED CIRCUIT BOARD XDJ-10-5	262-256
6	PRINTED CIRCUIT BOARD XDJ-10-6	262-257

## Parts Lists - Main PCB

### ICs

Item #	Designators	Description	Part #
1	IC4-6, IC9-10, IC13, IC17	INTEGRATED CIRCUIT NJM4558LD (M5218AL,BA15218N)	074-104
2	IC16	INTEGRATED CIRCUIT NJM4556L	074-113
3	IC7-8, IC11, IC12	INTEGRATED CIRCUIT LB1403N (BA6124)	074-022
4	IC14	INTEGRATED CIRCUIT NJM7812FA	074-107
5	IC15	INTEGRATED CIRCUIT NJM7912FA	074-114

### Diodes

Item #	Designators	Description	Part #
1	D25, D26	RECTIFIER DIODE 1N4002 (1N4003,1N4004)	079-027
2	D17-24	LIGHT EMITTING DIODE (RED) 3.15φ	080-091
3	D1-12	LIGHT EMITTING DIODE (GREEN) 3.15φ	080-104
4	D13-16	LIGHT EMITTING DIODE (YELLOW) 3.15φ	080-103

### Electrical Parts

Item #	Designators	Description	Part #
1	SW3-5	SLIDE SWITCH 2P2C	081-004
2	SW6-8	PUSH SW CUE CH-(1,2,3)	083-076
3	VR14	SLIDE VR 30mm L=15 20KBx2 CUE/PGM	072-092L
4	X-FADER	SLIDE VR 45mm L=20 100KBx2 FADER	072-081L
5	VR4, VR8, VR12	SLIDE VR 45mm L=20 50KAx2 CH1-CH3	072-035L
6	VR1, VR5, VR9	ROTARY VR 16φ L=20 10KAx2 GAIN	071-161
7	VR2-3, VR6-7, VR10-11	ROTARY VR 16φ L=20 20KCx2C.C HIGH,BASS	071-138
8	VR13	ROTARY VR 16φ L=20 50KBx2 MASTER	071-103
9	VR15	ROTARY VR 16φ L=20 50KAx2 CUE LEVEL	071-084
10	J4, J5	PHONE JACK 6.3φ	092-078

## Parts Lists - IO PCB

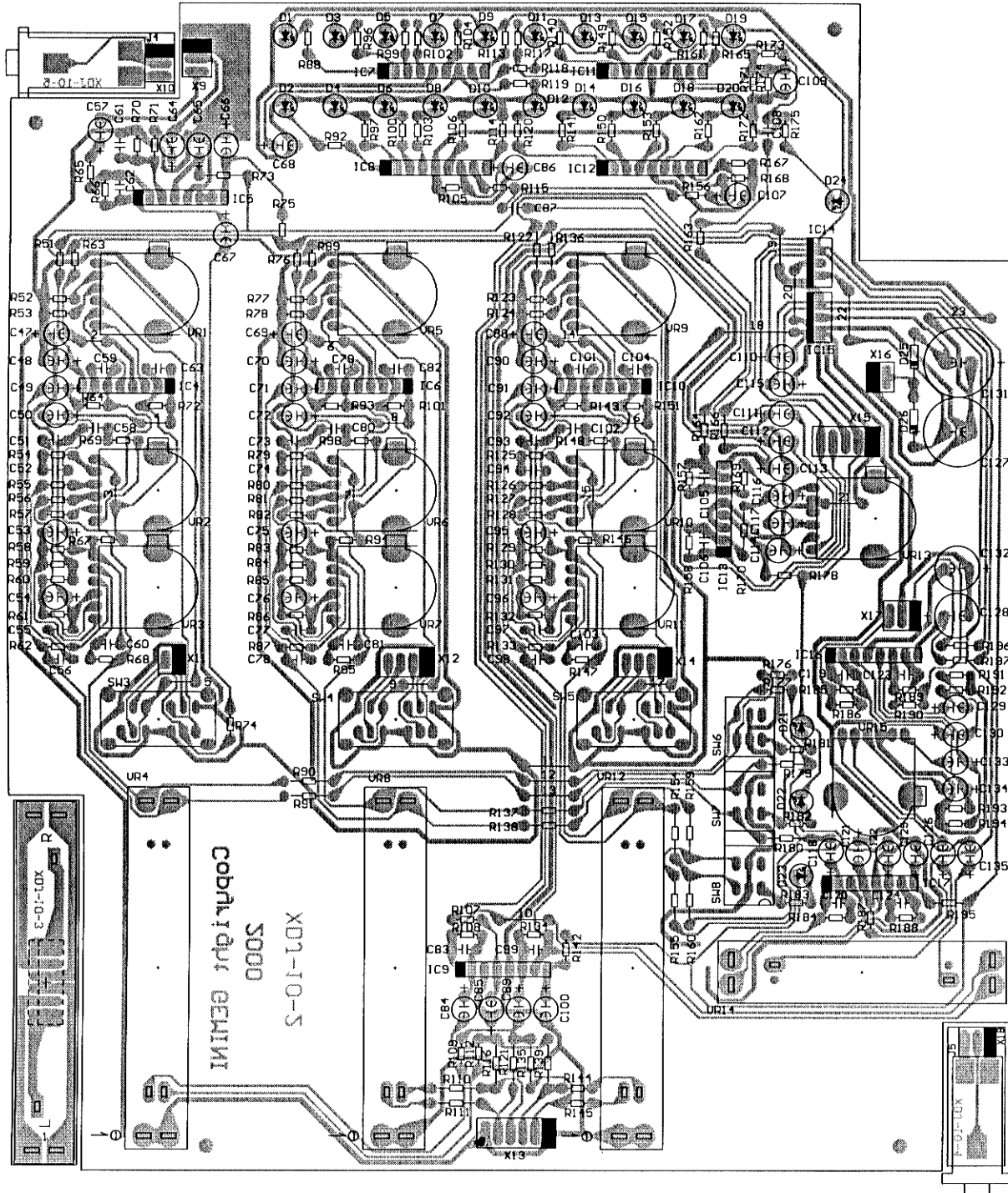
### ICs

Item #	Designators	Description	Part #
1	IC1-3	INTEGRATED CIRCUIT NJM4558DD (BA15218,M5218AP)	074-163

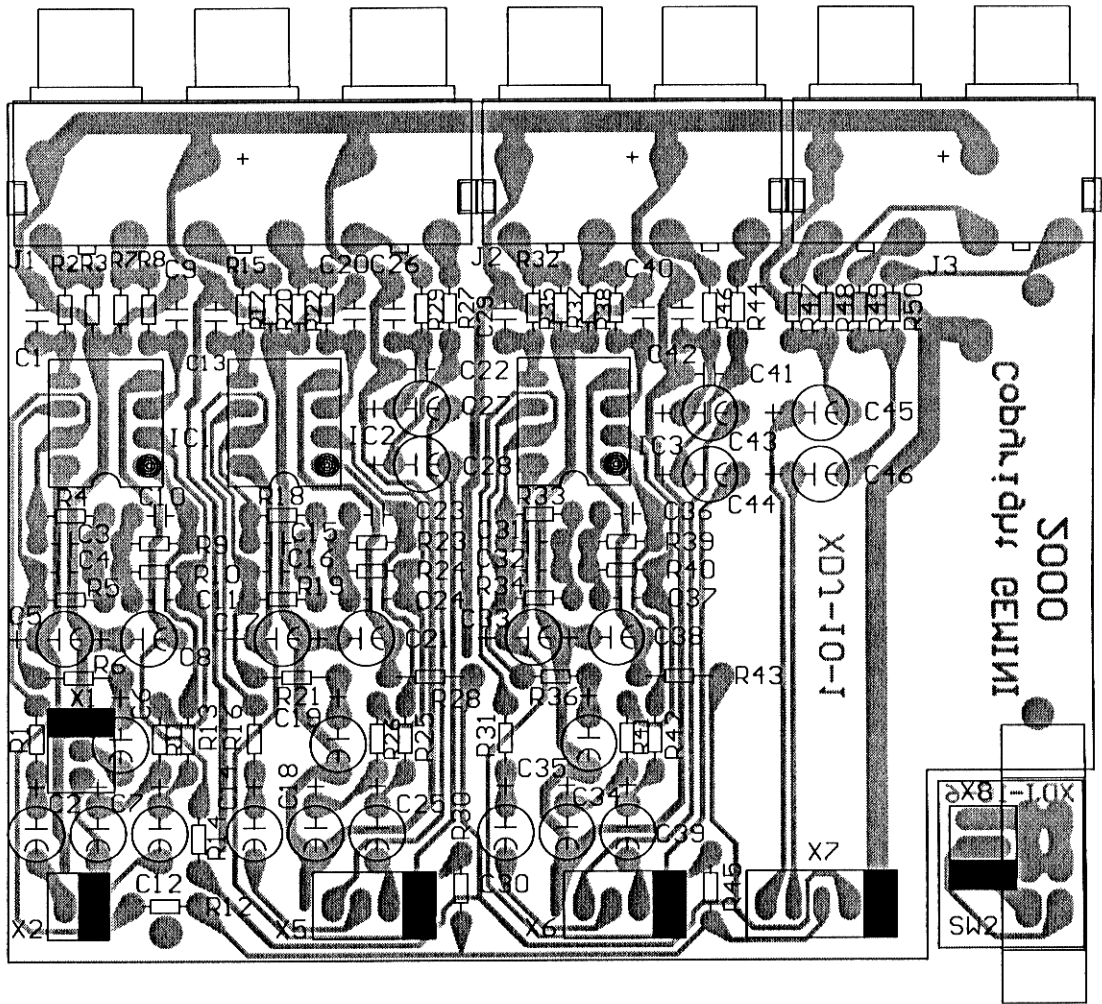
### Electrical Parts

Item #	Designators	Description	Part #
1	SW2	SLIDE SWITCH 2P2C	081-004
2	J2, J3	4P RCA JACK	161-167
3	J1	6P RCA JACK	161-168

# Main PCB



Input Output PCB



# Schematic

