

**Pioneer** *sound.vision.soul*

**DJ MIXER**

# **DJM-400**

Operating Instructions

Thank you for buying this Pioneer product.

Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.

In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However the method of connecting and operating the unit is the same.

K015 En

## IMPORTANT



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

### CAUTION

RISK OF ELECTRIC SHOCK  
DO NOT OPEN

**CAUTION:**  
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

D1-4-2-3\_En-A

## WARNING

This equipment is not waterproof. To prevent a fire or shock hazard, do not place any container filled with liquid near this equipment (such as a vase or flower pot) or expose it to dripping, splashing, rain or moisture.

D3-4-2-1-3\_A\_En

**IMPORTANT NOTICE** – THE SERIAL NUMBER FOR THIS EQUIPMENT IS LOCATED ON THE BOTTOM. PLEASE WRITE THIS SERIAL NUMBER ON YOUR ENCLOSED WARRANTY CARD AND KEEP IN A SECURE AREA. THIS IS FOR YOUR SECURITY.

D1-4-2-6-1\_En

### Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

D8-10-2\_En

**CAUTION:** This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

D8-10-3a\_En

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la Classe B est conforme à la norme NMB-003 du Canada.

D8-10-1-3\_EF

**WARNING:** Handling the cord on this product or cords associated with accessories sold with the product will expose you to chemicals listed on proposition 65 known to the State of California and other governmental entities to cause cancer and birth defect or other reproductive harm.

**Wash hands after handling**

D36-P4\_A\_En

## WARNING

To prevent a fire hazard, do not place any naked flame sources (such as a lighted candle) on the equipment.

D3-4-2-1-7a\_A\_En

## VENTILATION CAUTION

When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 5 cm at rear, and 3 cm at each side).

### WARNING

Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product, and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered with items (such as newspapers, table-cloths, curtains) or by operating the equipment on thick carpet or a bed.

D3-4-2-1-7b\_A\_En

## POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

5002\_En

# IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



P1-4-2-2\_En

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

D8-10-1-2\_En

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# CONFIRM ACCESSORIES

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# CAUTIONS REGARDING HANDLING

## Location

Install the unit in a well-ventilated location where it will not be exposed to high temperatures or humidity.

- Do not install the unit in a location which is exposed to direct rays of the sun, or near stoves or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the unit in a damp or dusty environment may also result in a malfunction or accident. (Avoid installation near cookers etc., where the unit may be exposed to oily smoke, steam or heat.)
- When the unit is used inside a carrying case or DJ booth, separate it from the walls or other equipment to improve heat radiation.

# FEATURES

## ① Designed for high sound quality

Analog signals are sampled at 96 kHz/24-bit, comparable to professional performance levels. Mixing is performed with the same type of 32-bit DSP as used in the DJM-1000 and DJM-800, thus eliminating any loss in fidelity, and producing clear and powerful club sound optimally suited for DJ play.

## ② 3-band equalizer with kill function

Equalizer functions are provided for each of the three bandwidths **HI**, **MID**, and **LOW**, and a kill function is provided to drop the attenuation level to  $-\infty$ .

## ③ Wide variety of effects

### 1) Beat effects

The "beat effects" so popular on the DJM-600 have been given further evolution. Effects can be applied in linkage to the **BPM (Beats Per Minute)** count, thus allowing the production of a variety of sounds. Some of the effects include delay, echo, filter, flanger, phaser, robot, and roll.

### 2) Beat select buttons

Automatically set the effect time linked to the BPM. Allows selection of desired BPM for synchronizing beat effects.

### 3) IN-LOOP sampler

Detects the current track's BPM and records up to 5 of 4-beat sources in banks, and plays a loop in time with the track's BPM.

## ④ 2 MIC input, AUX switching

Equipped with 2 MIC input jacks that can be switched to AUX, allowing use as a third LINE input.

## ⑤ Auto talk-over

The auto talk-over function automatically reduces track volume when microphone input is detected.

## ⑥ Other functions

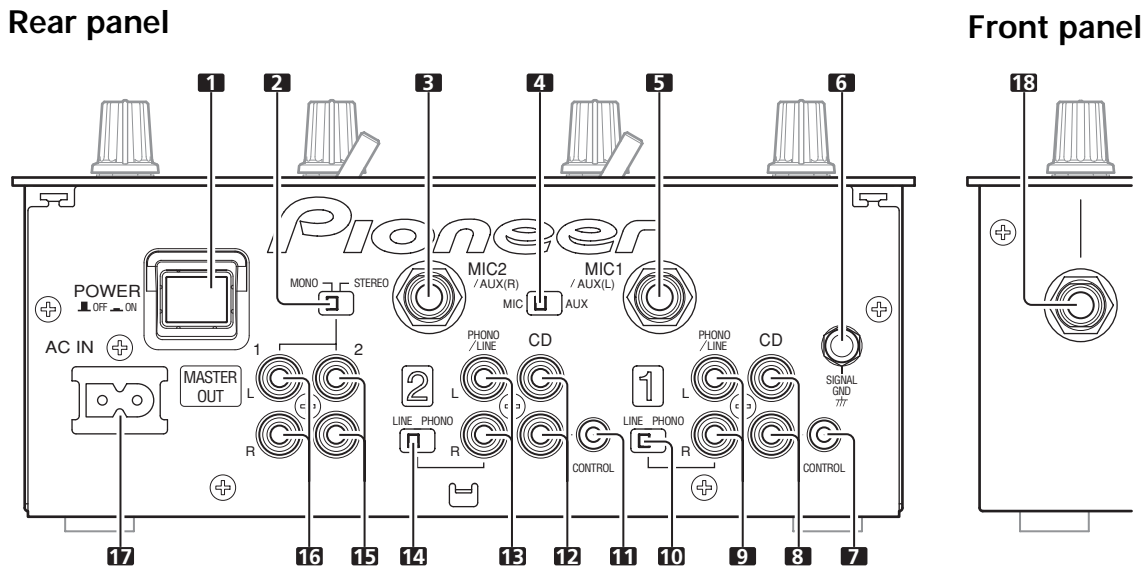
- A control cable can be used to connect the unit to a Pioneer DJ CD player, thus allowing playback to be linked to operation of the fader ("fader start play").
- "Fader curve adjustment" function allows modification of the cross fader curves.
- "Auto BPM counter" provides visual representation of a track's tempo.
- Monitor auto assignment function can be used to assign channel inputs and master outputs to the left and right channels of monitor headphones.
- Full lineup of input/output systems. Provided with two each of CD and LINE/PHONO (MM type) inputs and two microphone inputs for a total of six input systems, together with two output systems.

## Cleaning the Unit

- Use a polishing cloth to wipe off dust and dirt.
- When the surfaces are very dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water and wrung out well, then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzene, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.

# CONNECTIONS

## CONNECTION PANEL



**1. POWER switch**

**2. STEREO/MONO selector switch**

When switch is set to the [MONO] position, master output is in monaural.

**3. MIC2/AUX(R) input connector**

Ø6.3 mm phone-type input connector. Use for microphone input, or for right (R) channel of component with line level output.

**4. MIC/AUX input selector switch**

When this switch is set to [AUX], the MIC1 and MIC2 input connectors function as AUX (L) and AUX (R) input connectors.

**5. MIC1/AUX(L) input connector**

Ø6.3 mm phone-type input connector. Use for microphone input, or for left (L) channel of component with line level output.

**6. Signal grounding terminal (SIGNAL GND)**

Use to connect ground wires from analog players. This is not a safety grounding terminal.

**7. Channel 1 CONTROL connector**

Ø3.5 mm mini-phone type connector. Connect to control connector of the DJ CD player connected to channel 1 inputs. When this connection is made, the DJ mixer's fader lever can be used to perform fader start play and back cue on the channel 1 DJ CD player.

**8. Channel 1 CD input connectors (CD)**

RCA type line level input connectors. Use to connect a DJ CD player or other component with line level output.

**9. Channel 1 PHONO/LINE input connectors**

RCA type phono level (for MM cartridge) or line level input connectors. Select function using channel 1 PHONO/LINE selector switch.

**10. Channel 1 PHONO/LINE selector switch**

Use to select function of channel 1 PHONO/LINE input connectors.

**11. Channel 2 CONTROL connector**

Ø3.5 mm mini-phone type connector. Connect to control connector of the DJ CD player connected to channel 2 inputs. When this connection is made, the DJ mixer's fader lever can be used to perform fader start play and back cue on the channel 2 DJ CD player.

**12. Channel 2 CD input connectors (CD)**

RCA type line level input connectors. Use to connect a DJ CD player or other component with line level output.

**13. Channel 2 PHONO/LINE input connectors**

RCA type phono level (for MM cartridge) or line level input connectors. Select function using channel 2 PHONO/LINE selector switch.

**14. Channel 2 PHONO/LINE selector switch**

Use to select function of channel 2 PHONO/LINE input connectors.

**15. MASTER OUT 2 output connectors**

RCA type unbalanced output.

**16. MASTER OUT 1 output connectors**

RCA type unbalanced output.

**17. Power inlet (AC IN)**

Use the accessory power cord to connect to an AC power outlet of the proper voltage.

**18. Headphones jack (PHONES)**

Use to connect stereo headphones equipped with Ø6.3 mm stereo headphones plug.

Always turn off the power switch and disconnect the power plug from its outlet when making or changing connections.

## CONNECTING INPUTS

### Pioneer DJ CD players

Connect a DJ CD player's audio output connectors to one of the channel 1 to 2 CD input connectors, and connect the player's control cable to the corresponding channel's CONTROL connector. Set the connected channel's input selector switch to [CD].

### Analog turntable

To connect an analog turntable, connect the turntable's audio output cable to one of the channel 1 to 2 PHONO/LINE input connectors. Set the corresponding channel's PHONO/LINE switch to [PHONO], and set the channel's input selector switch to [PHONO/LINE]. The DJM-400's PHONO inputs support MM cartridges. Connect the turntable's ground wire to the DJM-400's SIGNAL GND terminal.

### Connecting other devices with line level output

To use a cassette deck or other CD player, connect the component's audio output connectors to one of the channel 1 to 2 PHONO/LINE input connectors. Then set the corresponding channel's PHONO/LINE switch to [LINE], and the input selector switch to [PHONO/LINE].

### Microphone

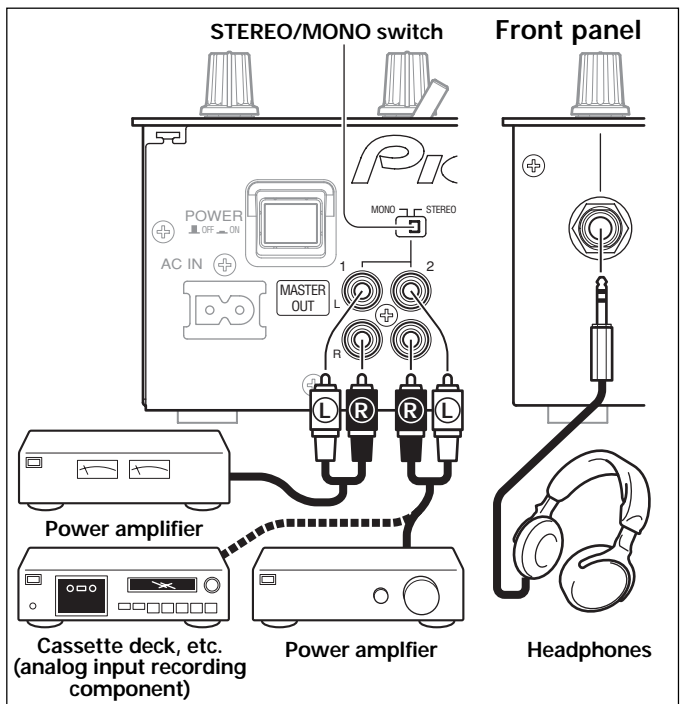
The MIC1 and MIC2 jacks can be used to connect microphones with Ø6.3 mm phone plugs. Set MIC/AUX switch to [MIC] position.

### Auxiliary input connectors

The MIC1 and MIC2 jacks can also be used together as a pair of stereo line input connectors to connect a component equipped with line level output connectors. Connect the component's L channel to MIC1 (AUX(L)) jack and the R channel to the MIC2 (AUX(R)) jack. Then set the MIC/AUX switch to [AUX] (this connection requires the use of Ø6.3 mm phone plugs).

### Headphones

The front panel PHONES jack can be used to connect headphones with a Ø6.3 mm stereo phone plug.



## CONNECTING OUTPUTS

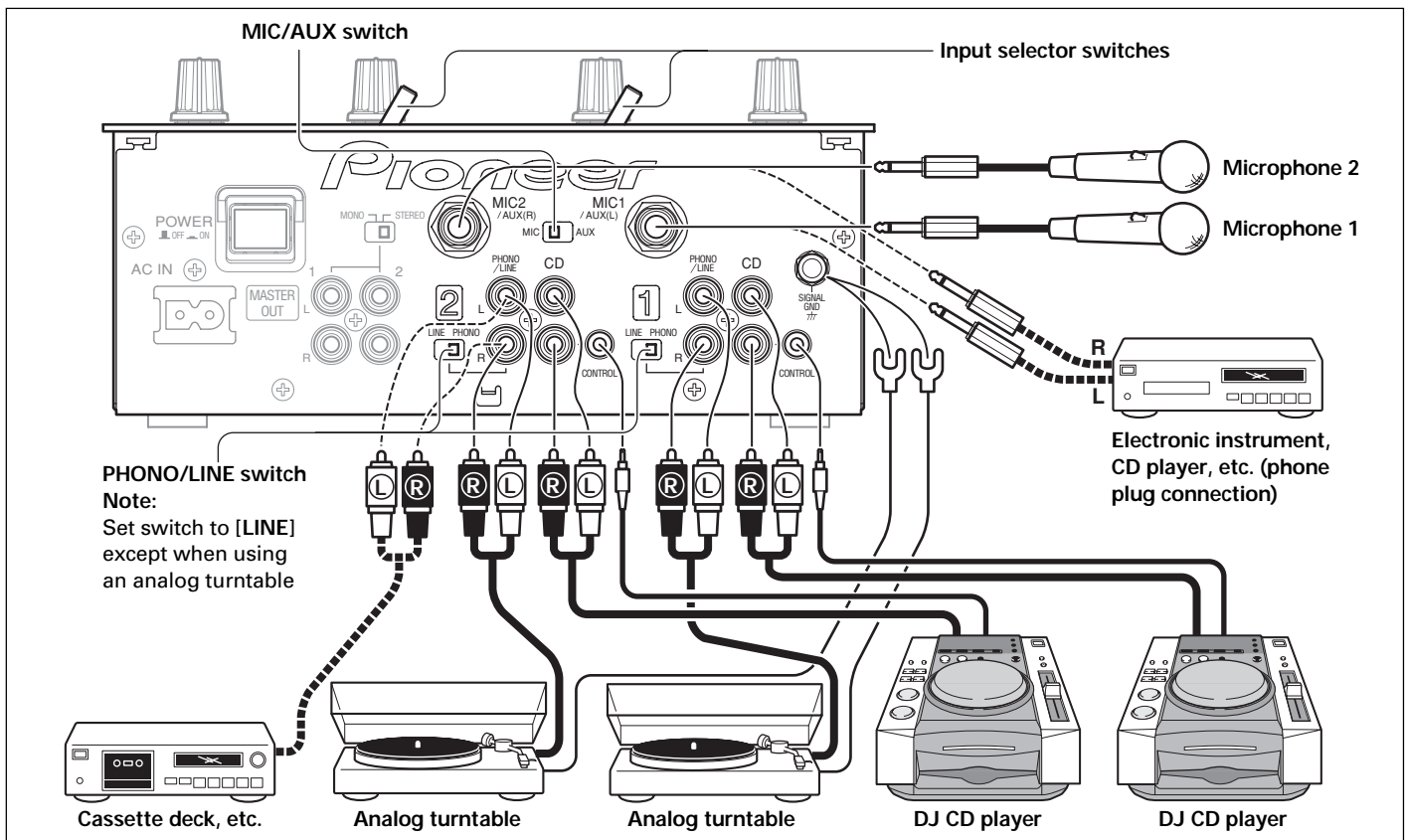
### Master output

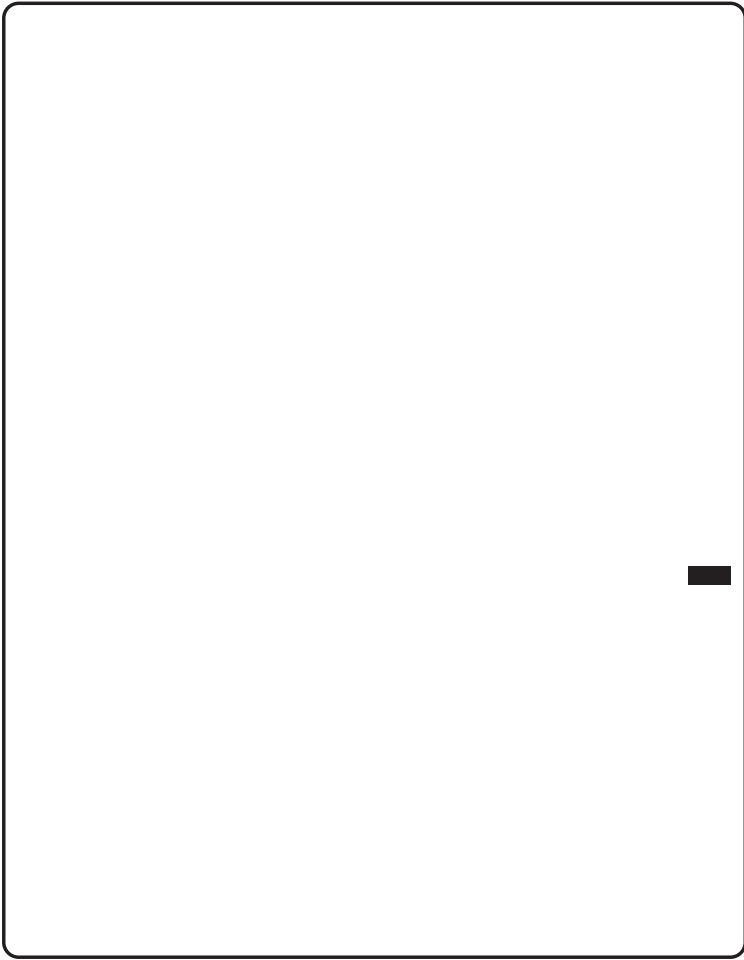
This unit is furnished with MASTER OUT 1 and MASTER OUT 2 output systems, both of which support the use of RCA plugs. If the unit's STEREO/MONO switch is set to [MONO], the master output will be a monaural combination of L+R channels.

## CONNECTING THE POWER CORD

Connect the power cord last.

- After completing all other connections, connect the accessory power cord to the AC inlet on the back of the player, then connect the plug to a standard wall outlet or to the auxiliary power outlet of your amplifier.
- Use only the supplied power cord.





**Beat effect section**

**15 BPM display**

Displays the current track tempo as Beats Per Minute (BPM).

- The display flashes during BPM calculation and when BPM cannot be calculated.

**16 BPM measuring mode button/indicator (AUTO)**

Each time the button is pressed, the BPM measuring mode alternates as follows:

**AUTO mode:**

The **AUTO** button lights and the BPM is calculated automatically.

This is the default mode whenever power is first turned on.

**TAP mode (manual input):**

The **AUTO** button does not light, and BPM is input manually by using the **TAP** button.

**17 TAP button**

The BPM is calculated from the intervals at which the **TAP** button is struck. If the **TAP** button is tapped in the **AUTO** mode, the mode automatically switches to the **TAP** mode (manual input).

**18 Beat select buttons (BEAT/PITCH -, +)**

+ (Beat up): Doubles the calculated BPM.

- (Beat down): Halves the calculated BPM.

- If one of the **BEAT/PITCH** buttons (-, +) is pressed while holding the **TAP** button depressed, the BPM can be changed (40 to 999, in 1-step increments).

During in-loop sampler play, the loop play speed is changed.

+ (Beat up): Play speed becomes faster while button is pressed.

- (Beat down): Play speed becomes slower while button is pressed.

**19 Beat select/bank buttons/indicators (BEAT 1 (1/2), 2 (3/4), 4 (1/1), 8 (2/1), 16 (4/1) / BANK)**

Use to select the beat for synchronizing effects (P.11)

The selected button lights.

During in-loop sampler play, the buttons function as bank buttons to record samples of the music (P. 12).

- If the **BEAT/BANK** button is pressed while holding the **ERASE (BEAT/PITCH-)** button depressed, the music sample recorded in the **BEAT/BANK** button will be erased.

**20 Effect selector (DELAY/ECHO/FILTER/FLANGER/ PHASER/ROBOT/ROLL/IN-LOOP SAMPLER)**

Use to select desired type of effect (P. 10 to 12).

**21 Effect channel selector (CH. SELECT 1/2/MIC/MASTER)**

Use to select the channel to which beat effects are applied (P. 11).

When [**MIC**] is selected, effects are applied to both microphone 1 and microphone 2.

**22 Effect parameter dial (LEVEL/DEPTH)**

Adjusts the quantitative parameters for selected beat effect (P. 11 to 12)

**23 Effect button/indicator (ON/OFF)**

Sets selected beat effects ON/OFF (P. 11).

When effects are disabled (OFF), the button lights. When effects are enabled (ON), the button flashes. Whenever power is first turned ON, effects default to OFF.

**Microphone input control**

**24 Microphone 1 level control dial (MIC 1 LEVEL)**

Use to adjust the volume of microphone 1. (Adjustable range  $-\infty$  to 0 dB)

When the connection panel's **MIC/AUX** switch is set to [**AUX**], this dial adjusts the sound volume for the left channel (**AUX(L)**).

**25 Microphone 2 level control dial (MIC 2 LEVEL)**

Use to adjust the volume of microphone 2. (Adjustable range  $-\infty$  to 0 dB)

When the connection panel's **MIC/AUX** switch is set to [**AUX**], this dial adjusts the sound volume for the right channel (**AUX(R)**).

**26 Microphone equalizer control dial (EQ)**

Use to adjust the tone of microphones 1 and 2. When rotated fully clockwise, attenuation of low-range sound is maximized. When rotated fully counterclockwise, attenuation of high-range sound is maximized. (Adjustable range 0 dB to -12 dB)

**27 Microphone function selector switch (MIC)**

**OFF:**

No microphone sound is output.

**ON:**

Microphone sound is output normally.

**TALK OVER:**

Microphone sound is output; when sound is input to a connected microphone, the **TALK OVER** function operates and all sound other than that from the microphone is attenuated by 20 dB.

**Headphones output section**

**28 Headphone cue button/indicator (CH-1, CH-2, MASTER)**

Press the button for the source you wish to monitor with headphones. When a button is OFF, its indicator lights dimly; when ON, the button indicator lights brightly (P. 8).

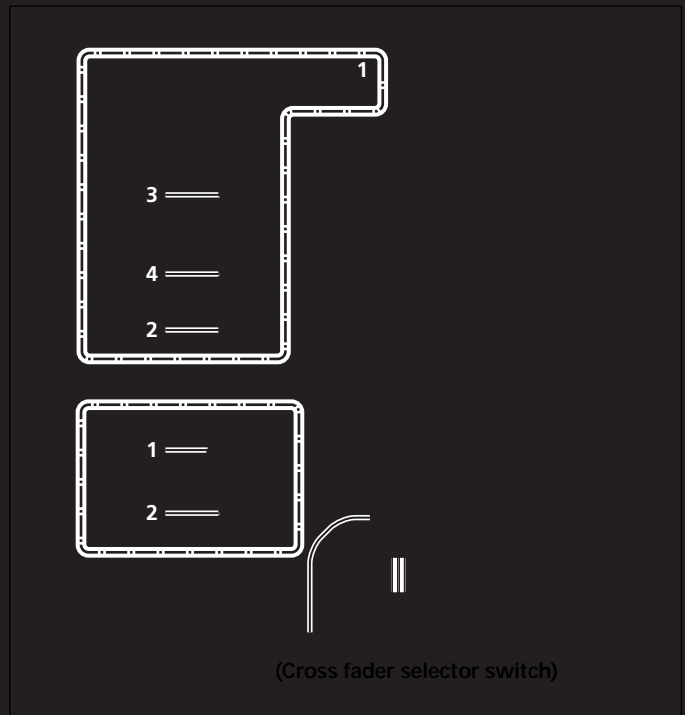
When the [**ECHO**] effect is selected, the effect is not applied to headphone outputs if headphone cue buttons **CH-1** or **CH-2** are set to ON.

**29 Headphones level adjust dial (LEVEL)**

Adjusts the output level of the headphones jack. (Adjustable range:  $-\infty$  to 0 dB).

**30 Headphones jack (PHONES)**

Located on the unit's front panel.



### [Auxiliary Input]

- Set the connection panel's MIC/AUX switch to [AUX].
  - The MIC1 input connector functions as AUX(L) input, and the MIC2 input connector functions as AUX(R) input.
- Set the MIC switch to [ON] or [TALK OVER].
  - When the switch is set to [TALK OVER], if a sound is input to the AUX connectors, the output for all sources other than the AUX input is attenuated by 20 dB.
- Use the MIC 1 LEVEL dial to adjust the sound from the L channel, and MIC 2 LEVEL dial to adjust the sound from the R channel.
- Use the microphone equalizer dial (EQ) to adjust sound tone.

### [Headphones Output]

- Use the headphones cue button (CH-1, CH-2, MASTER) to select the source to be output to the headphones.
  - The selected source button lights brightly.

#### [Relationship of headphones cue button and headphones output]

Headphone cue button			Headphones Output	
CH-1	CH-2	MASTER	L channel	R channel
<u>ON</u>	OFF	OFF	CH-1(L)	CH-1(R)
OFF	<u>ON</u>	OFF	CH-2(L)	CH-2(R)
OFF	OFF	<u>ON</u>	MASTER(L)	MASTER(R)
<u>ON</u>	<u>ON</u>	OFF	CH-1(L)+CH-2(L)	CH-1(R)+CH-2(R)
<u>ON</u>	OFF	<u>ON</u>	CH-1(MONO)	MASTER(MONO)
OFF	<u>ON</u>	<u>ON</u>	CH-2(MONO)	MASTER(MONO)
<u>ON</u>	<u>ON</u>	<u>ON</u>	CH-1(MONO)+CH-2(MONO)	MASTER(MONO)

- Use the LEVEL dial to adjust the headphones sound level.

### [Selecting the Cross Fader Curve]

The sound volume response to fader lever operation can be set to one of two characteristic curves.

- Use the cross fader selector switch to select the desired cross fader response curve.
  - At the center position ( ), the curve operates to produce an even, neutral rise throughout the cross fader's movement.
  - At the right position ( ), the curve operates to produce a rapid rise with the cross fader's movement (sound from [2 >] is produced as soon as the lever leaves side [< 1]).
  - The curve settings operate the same on both sides [< 1] and [2 >].



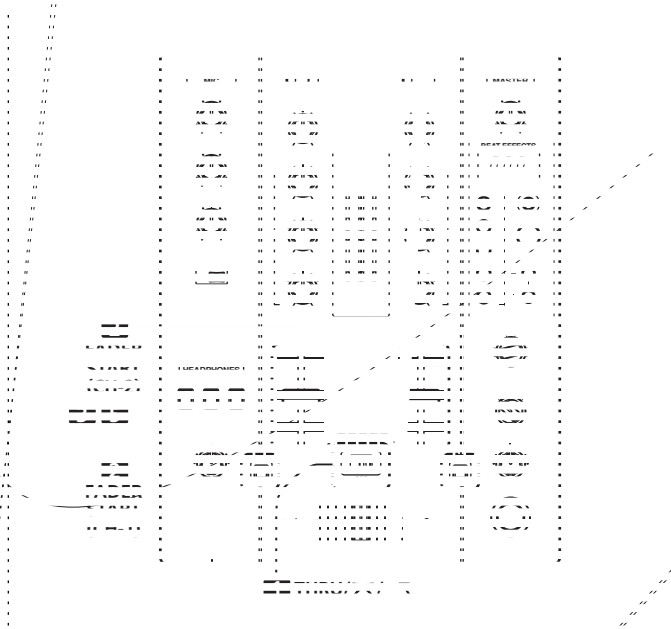
**START PLAYBACK**

By combining the optional Channel Select Filter control cable, channel selector and cross reader can be used to control playback when the cross reader level is above the level of the selected channel. When the cross reader level reaches the level of the selected channel, the channel selector automatically returns the channel selector to its original position and the CD player returns to its original playback position.

When the CD player assigned to channel 1 is set to standby at a point where the cross reader level is above the level of channel 1, the CD player automatically starts play on the channel 1 CD player. When the cross reader level reaches the level of channel 1, the CD player assigned to channel 1 goes to back cue (return to cue point). When the CD player assigned to channel 2 is set to standby at a point where the cross reader level is above the level of channel 2, the CD player automatically starts playback on the channel 2 CD player. When the cross reader level reaches the level of channel 2, the channel CD player goes to back cue (return to cue point).

The back cue is performed even if the in/out selector switch is set to out.

**Using the Channel Filter to Start Playback**



1. Set the cross reader selector switch to the left (in) position.
2. Place the channel selector switch in the position of the channel that is the CD player you wish to control.
  - a. The button for the selected channel lights.
3. Set the channel selector mode to standby position.
4. Set the CD player in the desired playback position.
  - a. If a cue point has already been set, it is not necessary to set the CD player to standby in the playback position.
5. At the instant you wish to start playback, move the channel selector switch.
  - a. CD player begins playback.
  - b. After playback has begun, if the channel selector lever is returned to its standby position, the CD player returns to the cue point and repeats playback if set cue.
6. If the cross reader selector switch is set to a position other than standby, the cross reader level is limited and channel filter cannot be used for control.



When the cross reader level is above the level of the channel selector, the channel selector switch is set to the position of the channel selector mode to standby position. When the cross reader level reaches the level of the channel selector, the channel selector switch returns to its original position and the CD player returns to its original playback position.

The back cue is performed even if the in/out selector switch is set to out.

# EFFECT FUNCTIONS

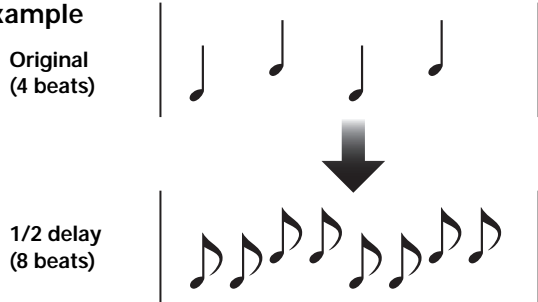
This unit is equipped with a total of 8 basic effects using beat effects and in-loops linked to the BPM. By changing the parameters for each effect, a wide variety of new effects can be produced. By using the **BEAT/BANK** buttons to set the time parameters, an even wider assortment of beat effects can be produced.

## TYPES OF BEAT EFFECTS

### 1. DELAY (One repeat sound)

This function allows a delay sound with beat of 1/2, 3/4, 1/1, 2/1 or 4/1 to be added quickly and simply. For example, When a 1/2 beat delay sound is added, four beats become eight beats. Also, by adding a 3/4 beat delay sound, the rhythm becomes syncopated.

#### Example

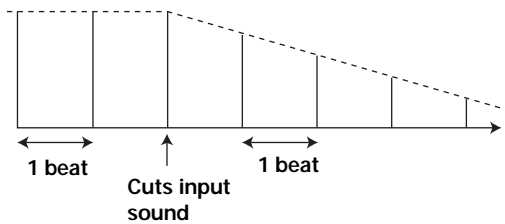


### 2. ECHO (Multiple repeat sounds)

This function allows an echo sound with beat of 1/2, 3/4, 1/1, 2/1 or 4/1 to be added quickly and simply. For example, when a 1/1 beat echo sound is used to cutoff the input sound, a sound in synch with the beat is repeated together with fadeout.

Also, by adding a 1/1 beat echo to the microphone, the microphone sound repeats in synch with the music beat. If a 1/1 beat echo is applied to the vocal portion of a track, the song takes on an effect reminiscent of a "round".

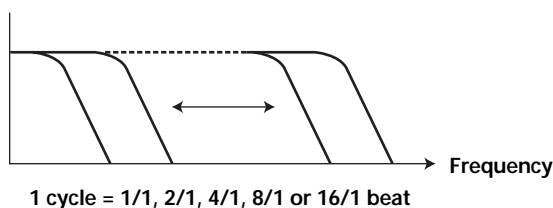
#### Example



### 3. FILTER

In units of 1/1, 2/1, 4/1, 8/1 or 16/1 beat, the filter frequency is moved, greatly changing the sound coloration.

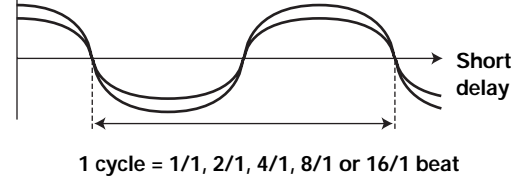
#### Example



### 4. FLANGER

In units of 1/1, 2/1, 4/1, 8/1 or 16/1 beat, 1 cycle of flanger effect is produced quickly and easily.

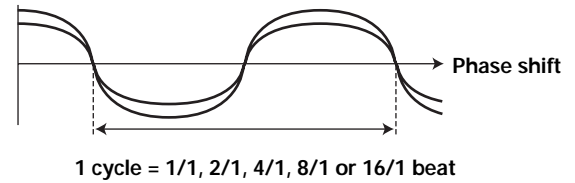
#### Example



### 5. PHASER

In units of 1/1, 2/1, 4/1, 8/1 or 16/1 beat, 1 cycle of phaser effect is produced quickly and easily.

#### Example



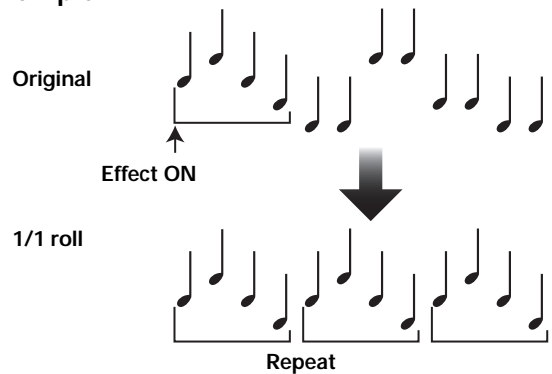
### 6. ROBOT

Generates a sound effect resembling that produced by a robot.

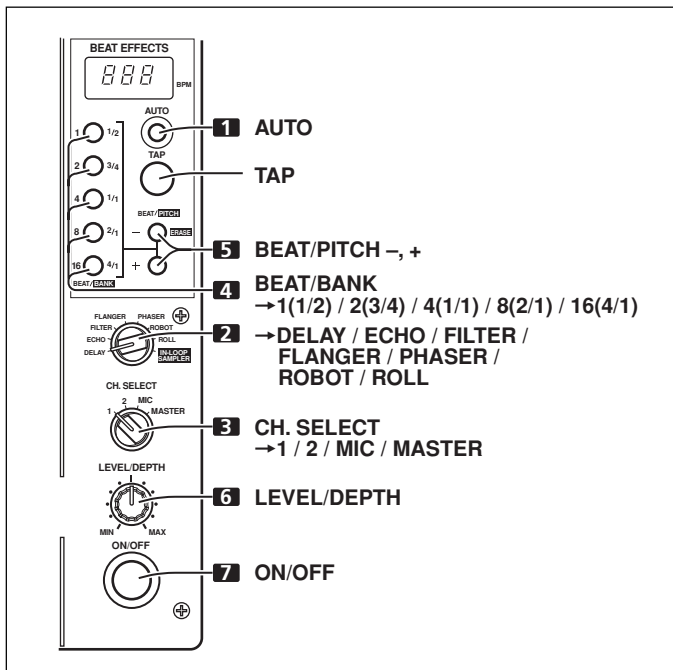
### 7. ROLL

Sounds of 1/2, 3/4, 1/1, 2/1 or 4/1 beat are recorded and output repetitively.

#### Example



## PRODUCING BEAT EFFECTS



Beat effects allow the instant setting of effect times in synch with the BPM (beats per minute), thus allowing the production of a wide variety of effects in synch with the current rhythm, even during live performances.

### 1. Press the AUTO button to set the Beats Per Minute (BPM = track tempo) measuring mode.

**AUTO:** The AUTO button lights, and the BPM of the input sound is measured automatically.

**TAP:** The BPM is input manually by tapping on the TAP button. The AUTO button indicator does not light.

- Whenever power is first turned ON, the function defaults to the [AUTO] mode.
- In the event the track's BPM cannot be detected automatically, the display's BPM counter will flash.
- The effective range in the AUTO mode is 70 to 180 BPM. It may not be possible to measure some tracks accurately. In this case, use the TAP mode for manual BPM input.

#### [Using the TAP Button for Manual BPM Input]

If the TAP button is tapped two times or more in synch with beat (1/4 notes), the BPM will be recorded as the average value recorded during that interval.

- When BPM mode is set to [AUTO], tapping the TAP button will cause the BPM mode to change to the TAP mode, and the interval at which the TAP button is pressed will be measured.
- When the BPM is set via the TAP button, the beat multiple becomes "1/1" or "4/1" (depending on the effect selected), and the time for 1 beat (1/4 notes) or 4 beats will be set as the effect time.

#### [Using the BEAT/PITCH buttons for Manual BPM Input]

By pressing the BEAT/PITCH buttons (-, +) while holding the TAP button depressed, the BPM can be changed.

- The BPM can be set from 40 to 999 in 1-step increments.

### 2. Set the effect selector to an effect other than [IN-LOOP SAMPLER].

- See P. 10 regarding the various effects.

### 3. Set the effect channel selector to the channel you wish to apply the effect to.

- If [MIC] is selected, the effect will be applied to both microphone 1 and microphone 2.

### 4. Press one of the BEAT/BANK buttons to select the beat to which you wish to synchronize the effect.

- Values can be selected from [1/2, 3/4, 1/1, 2/1, 4/1] or [1, 2, 4, 8, 16]. (The multiple differs depending on the effect. See page 10 for details.)
- The selected button will light.
- The effect time corresponding to the beat's multiple is set automatically.  
Example: When BPM=120  
1/1 = 500 ms  
1/2 = 250 ms  
2/1 = 1 000 ms

### 5. Use the BEAT/PITCH buttons (-, +) to select the beat multiple to which you wish to synchronize the effects.

- When [+] is selected, the beat calculated from the BPM is doubled, and when [-] is pressed, the beat calculated from the BPM is halved.
- When the time parameter lies within the range calculated from the BPM, the BEAT/BANK button corresponding to that value lights. When the parameter falls between two beat values, both BEAT/BANK buttons will flash. When the values is less than 1/2 (1), the 1/2(1) button will flash, and when greater than 4/1 (16), the 4/1(16) button will flash.
- During use of [DELAY], [ECHO], or [ROLL] effects, if the [-], [+] buttons are used to shift the multiple, the "3/4" value will be skipped. However, the 3/4 multiple can be selected by pressing the 3/4 button directly.

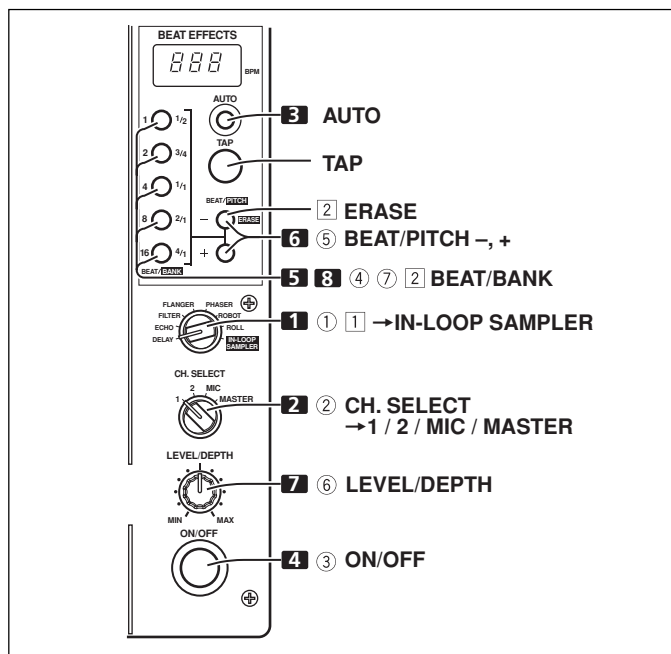
### 6. Rotate the LEVEL/DEPTH dial to set the quantitative parameter for the selected effect.

- See P. 12 for details regarding the effect of rotating the dial on the parameter.

### 7. Set the ON/OFF button to ON to enable the selected effect.

- Each time the button is pressed, the effect is toggled ON/OFF. (Whenever power is first turned ON, the function defaults to OFF).
- The ON/OFF button flashes when effects are ON.

## IN-LOOP SAMPLER



This function detects the current track's BPM, and 4 beat sources are recorded in up to five memory banks, and played as loops in synch with the current track's BPM. Overlapped recording is also possible.

### 1. Set the effect selector to [IN-LOOP SAMPLER].

### 2. Set the effect channel selector to the channel you wish to sample record.

### 3. Measure the BPM.

- Perform step 1 of the section "PRODUCING BEAT EFFECTS" (P. 11).

### 4. Set the ON/OFF button to ON.

5. At the point you wish to sample record, press one of the non-lighted BEAT/BANK buttons.

- Lighted BEAT/BANK buttons have already been recorded, and cannot be used again unless their recorded contents are erased.
- Recording begins automatically when the sound signal from CD player or other component is detected. During recording, the BEAT/BANK button will flash quickly. During recording standby, the button will flash slowly at intervals.
- When 4 beats of sound at the measured BPM have been recorded, the BEAT/BANK button flashes slowly and loop play is performed.

6. If the beat becomes unsynchronized, press one of the BEAT/PITCH buttons (-, +) to resynchronize the timing of the playback sample to the currently playing track.

- The playback speed increases while the [+] button is depressed, and decreases while the [-] button is depressed.

7. Rotate the LEVEL/DEPTH dial to adjust the sound balance between source and sample.

8. To stop loop playback, press the corresponding BEAT/BANK button.

- The BEAT/BANK button indicator will change from slow flashing to steadily lighted.

[To Playback a Recorded Sample]

- ① Set the effect selector switch to [IN-LOOP SAMPLER].
- ② Use the effect channel selector to choose the channel for loop playback.
- ③ Set the ON/OFF button to ON.
- ④ Press the BEAT/BANK button containing the sample you wish to play as a loop.
  - The BEAT/BANK buttons with recorded samples are lighted.
  - The selected button will flash slowly and loop play will begin.
- ⑤ If the beat becomes unsynchronized, press one of the BEAT/PITCH buttons (-, +) to resynchronize the timing of the playback sample to the currently playing track.
  - The playback speed increases while the [+] button is depressed, and decreases while the [-] button is depressed.

⑥ Rotate the LEVEL/DEPTH dial to adjust the sound balance between source and sample.

⑦ To stop loop playback, press the corresponding BEAT/BANK button.

- The BEAT/BANK button indicator will light steadily.

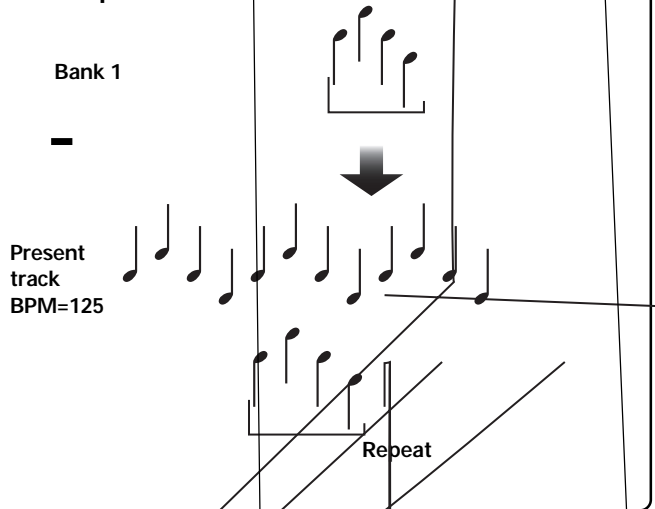
[Erasing a Recorded Sample]

- ① Set the effect selector to [IN-LOOP SAMPLER].
- ② While holding the ERASE (BEAT/PITCH -) button depressed, press the BEAT/BANK button containing the sample you wish to erase.
  - The BEAT/BANK buttons containing recorded samples are lighted.
  - The indicator in the selected BEAT/BANK button will go out and the sample will be erased.

8. IN-LOOP SAMPLER

This function allows you to store 4-beat sounds in up to 5 banks, then output them repeatedly.

Example



EFFECT PARAMETERS

# TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think there is something wrong with this component, check the points below. Sometimes the trouble may originate from another component. Thus, also check the other electrical appliances also in use.

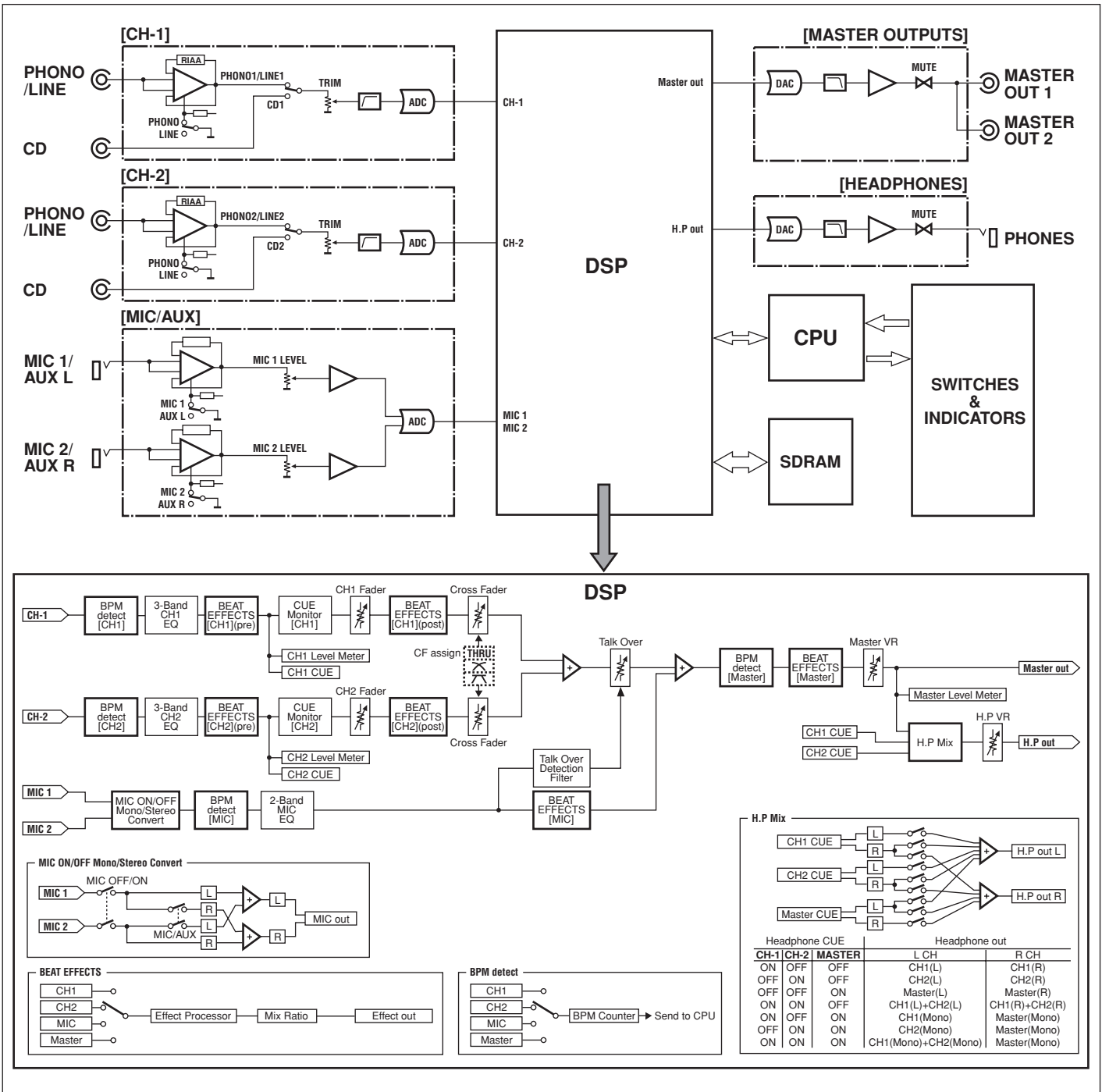
If the trouble cannot be rectified even after checking the following items, contact your dealer or nearest PIONEER service center.

Symptom	Possible Cause	Remedy
No power	<ul style="list-style-type: none"> <li>The power cord is not connected.</li> </ul>	<ul style="list-style-type: none"> <li>Connect to power outlet.</li> </ul>
No sound, or sound volume is too low.	<ul style="list-style-type: none"> <li>Input selector switch is set incorrectly.</li> <li>PHONO/LINE input selector switch is set incorrectly.</li> <li>Connection cables are connected incorrectly, or connections are loose.</li> <li>Jacks or plugs are dirty.</li> </ul>	<ul style="list-style-type: none"> <li>Set input selector to playback component.</li> <li>Set the PHONO/LINE input selector to the component being played.</li> <li>Connect correctly.</li> <li>Clean soiled jacks/plugs before connecting.</li> </ul>
Sound is distorted.	<ul style="list-style-type: none"> <li>Master output level is too high.</li> <li>Input level is too high.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust master output level (MASTER LEVEL) dial.</li> <li>Adjust the TRIM dial so that the input level approaches 0 dB on the channel level indicator.</li> </ul>
Cross fader doesn't work.	<ul style="list-style-type: none"> <li>Cross fader selector switch is set to [THRU].</li> </ul>	<ul style="list-style-type: none"> <li>Correctly set the switch to a setting other than [THRU].</li> </ul>
Can't perform fader start with CD player.	<ul style="list-style-type: none"> <li>The FADER START button is set to OFF.</li> <li>Rear panel CONTROL jack is not connected to CD player.</li> <li>Only the rear panel CONTROL jack is connected to the CD player.</li> </ul>	<ul style="list-style-type: none"> <li>Set the FADER START button to ON.</li> <li>Use a control cable to connect the CONTROL jacks of DJM-400 and CD player.</li> <li>Connect both the CONTROL jacks and CD input connectors.</li> </ul>
Effects don't work.	<ul style="list-style-type: none"> <li>Effect channel selector (CH. SELECT) setting is incorrect.</li> <li>Effect parameter adjust dial (LEVEL/DEPTH) is set to [MIN].</li> </ul>	<ul style="list-style-type: none"> <li>Correctly select the channel on which you wish to apply effects.</li> <li>Adjust the effect parameter adjust dial.</li> </ul>
BPM can't be measured. Measured BPM value is incorrect.	<ul style="list-style-type: none"> <li>Input level is set too high, or too low.</li> <li>BPM may not be correctly measurable with some tracks.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the TRIM dial.</li> <li>Strike the TAP button to set BPM manually.</li> </ul>
The measured BPM value is different from the value published with the CD.	<ul style="list-style-type: none"> <li>Some differences may occur due to differences in BPM detection methods.</li> </ul>	<ul style="list-style-type: none"> <li>No remedy is necessary.</li> </ul>

Static electricity or other external interference may cause the unit to malfunction. To restore normal operation, turn the power off and then on again.



# BLOCK DIAGRAM





*Dear Customer:*



Should this product require service in the U.S.A. and you wish to locate the nearest Pioneer Authorized Independent Service Company, or if you wish to purchase replacement parts, operating instructions, service manuals, or accessories, please call the number shown below.

**800 - 782 - 7210**

Please do not ship your product to Pioneer without first calling the Customer Support Division at the above listed number for assistance.

**PIONEER ELECTRONICS (USA), INC.  
CUSTOMER SUPPORT DIVISION  
P.O. BOX 1760 LONG BEACH**

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