Pioneer *sound.vision.soul*

DJ MIXER

DJM-400

Pioneer

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

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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:
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

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 are provided for your safety. If the provided plug 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

WARNING
This equipment is not waterproof. To prevent a fire or shock hazard, do not place any container filed 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.

S002_En

CONTENTS

CONFIRM ACCESSORIES

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 –∞.

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.

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.

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

Rear panel   **Front panel**
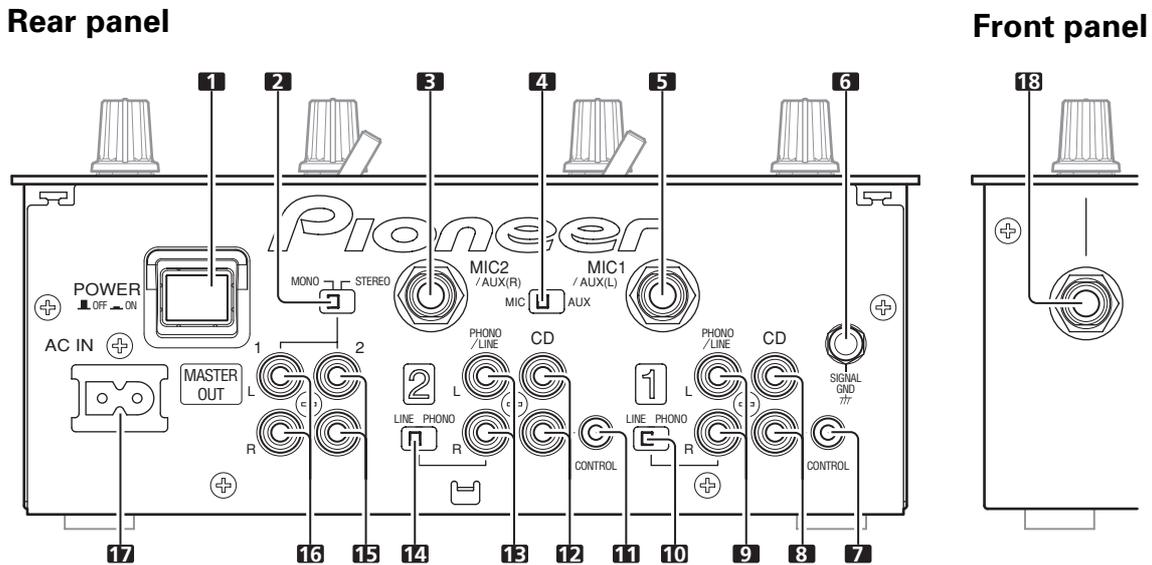
1. POWER switch

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.

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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**].
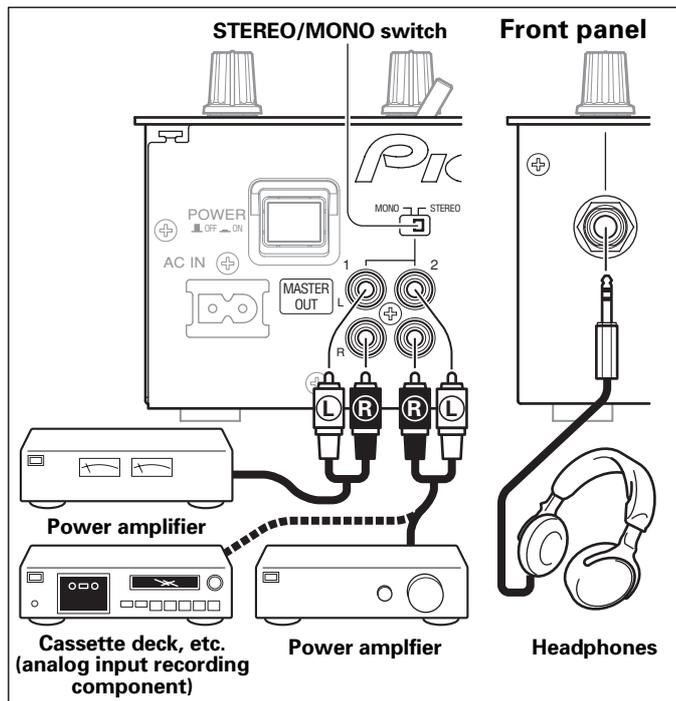
Microphone

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).

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.

Headphones

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

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.

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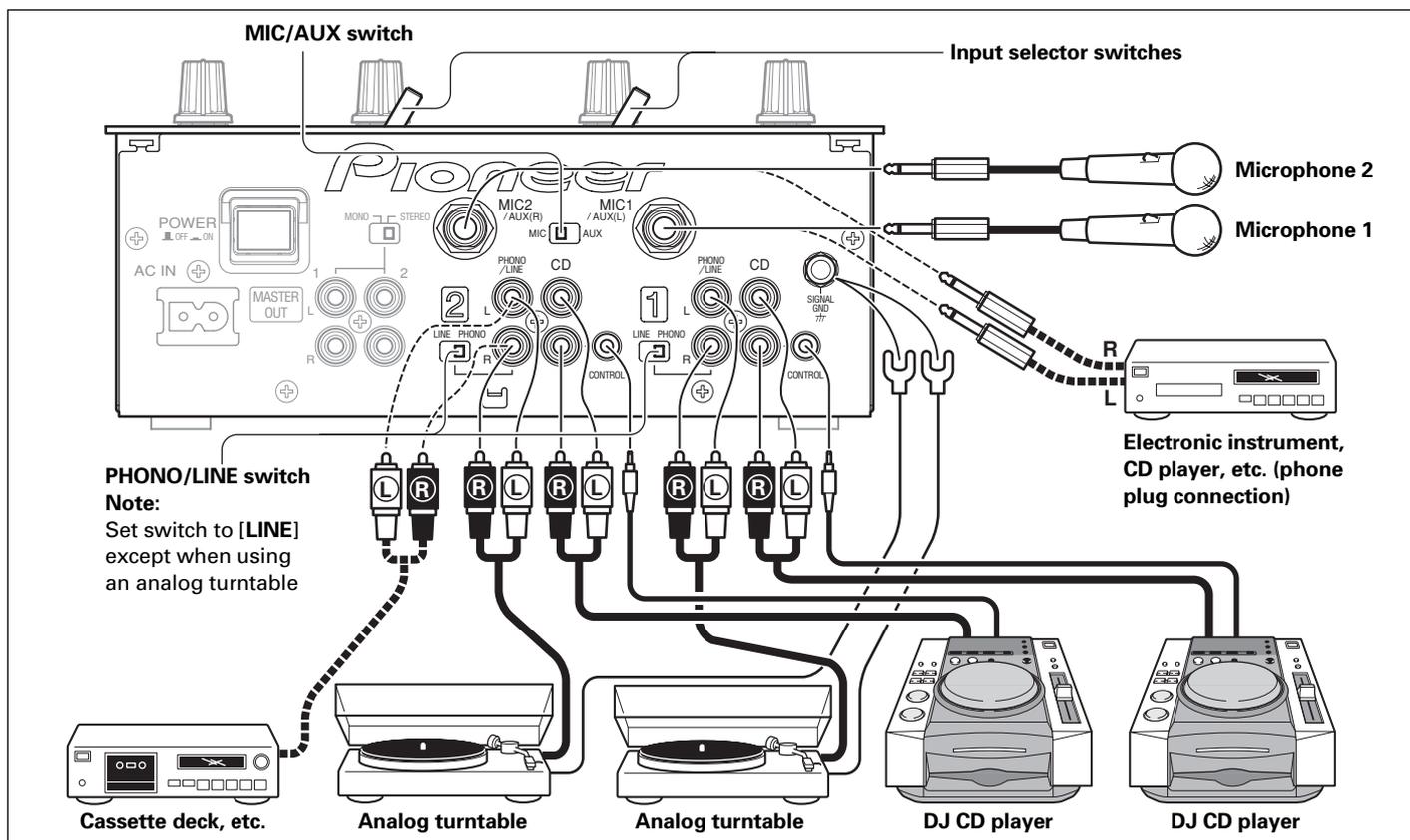
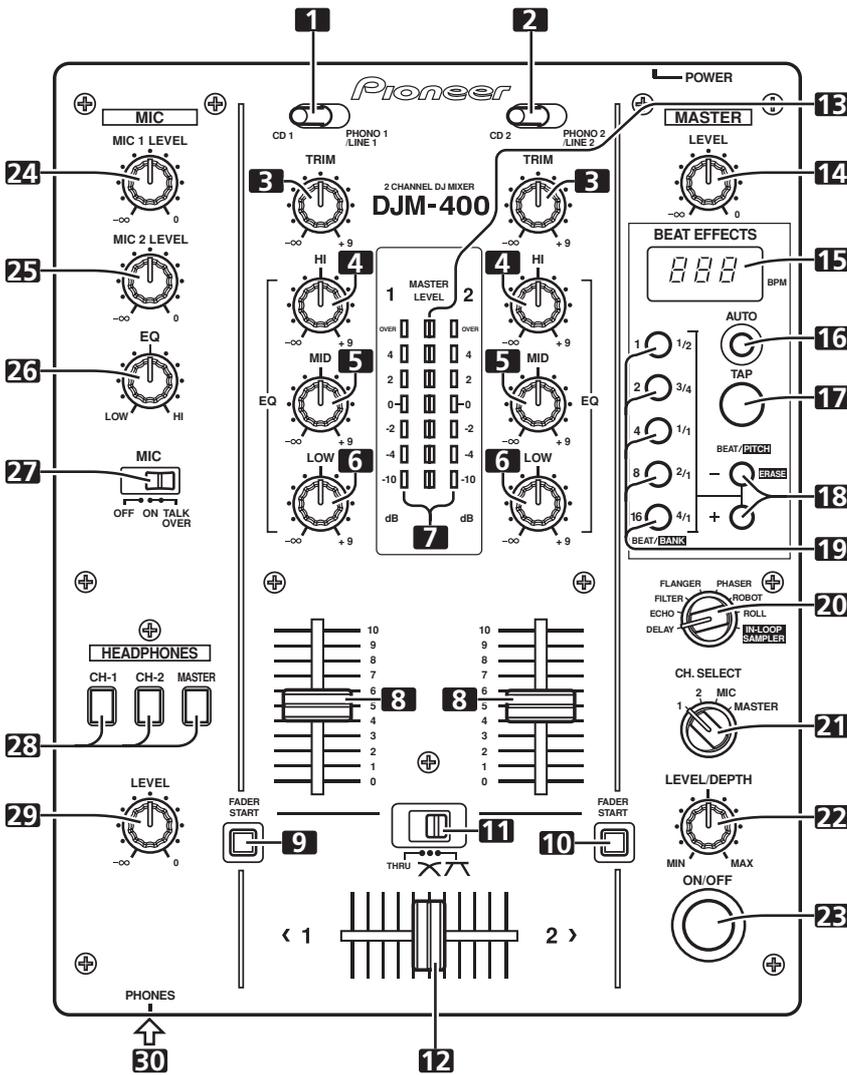# NAMES AND FUNCTIONS OF PARTS

6 Channel equalizer low-range adjust dial (LOW)

Use to adjust the bass (low-range) frequency sound for each channel (includes kill function). (Adjustable range: –∞ to +9 dB)

7 Channel level indicators

Display the current level for each channel, with 0.6 second peak hold.

8 Channel fader levers

Use to adjust sound volumes for each channel. (Adjustable range: –∞ to 0 dB)

9 Channel 1 fader start button/indicator (FADER START)

Pressing this button toggles ON/OFF, the fader start/back cue function for the DJ CD player connected to channel 1. The button lights when set to ON. When set to ON, the operation differs depending on the setting of the cross fader selector switch.

● When the cross fader selector switch is at the left (**THRU**) position, the function is linked to the operation of the channel fader lever (not linked to cross fader).

● When the cross fader selector switch is at the middle (✕) or right (⊓) position, the function is linked to the cross fader lever (not linked to channel fader).

10 Channel 2 fader start button/indicator (FADER START)

Pressing this button toggles ON/OFF, the fader start/back cue function for the DJ CD player connected to channel 2. The button lights when set to ON. When set to ON, the operation differs depending on the setting of the cross fader selector switch.

● When the cross fader selector switch is at the left (**THRU**) position, the function is linked to the operation of the channel fader lever (not linked to cross fader).

● When the cross fader selector switch is at the middle (✕) or right (⊓) position, the function is linked to the cross fader lever (not linked to channel fader).

1 Channel 1 input selector switch

CD 1:
The **CD** input connectors (line level input) are selected.
PHONO 1/LINE 1:
PHONO/LINE input connectors are selected.
● The connection panel's **PHONO/LINE** switch is used to switch the function of the channel 1 connectors between phonograph input (analog turntable input) and line input (line level input).

2 Channel 2 input selector switch

CD 2:
The **CD** input connectors (line level input) are selected.
PHONO 2/LINE 2:
PHONO/LINE input connectors are selected.
● The connection panel's **PHONO/LINE** switch is used to switch the function of the channel 2 connectors between phonograph input (analog turntable input) and line input (line level input).

3 TRIM adjust dial

Use to adjust the input level for each channel. (Adjustable range: –∞ to +9 dB, mid-position is about 0 dB)

4 Channel equalizer high-range adjust dial (HI)

Use to adjust the treble (high-range) frequency sound for each channel (includes kill function). (Adjustable range: –∞ to +9 dB)

5 Channel equalizer mid-range adjust dial (MID)

Use to adjust the mid-range frequency sound for each channel (includes kill function). (Adjustable range: –∞ to +9 dB)

11 Cross fader selector switch

Select whether or not to use the cross fader, and to select from two types of curve response.

● When the switch is set to left (**THRU**) position, the cross fader is disabled, and the channel fader output is mixed without passing through the cross fader.

● When this switch is set to the center (✕) position, the cross fader is enabled, and a slowly rising curve response is selected.

● When set to the right position (⊓), the cross fader is enabled, and a rapidly rising curve response is selected (as soon as the lever leaves the [**< 1**] side, the [**2 >**] sound is heard).

12 Cross fader lever

Outputs channel 1 and channel 2 sounds in accordance with cross fader curve response selected with the cross fader selector switch. The cross fader function is disabled when the cross fader selector switch is set to the [**THRU**] position.

13 Master level indicators (MASTER LEVEL)

These indicators show the master output level in a monaural display. Each indicator has a 0.6 second peak hold.

14 Master output level dial (MASTER LEVEL)

Use to adjust the master output level. (adjustable range: –∞ to 0 dB)

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 –∞ 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 –∞ 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.
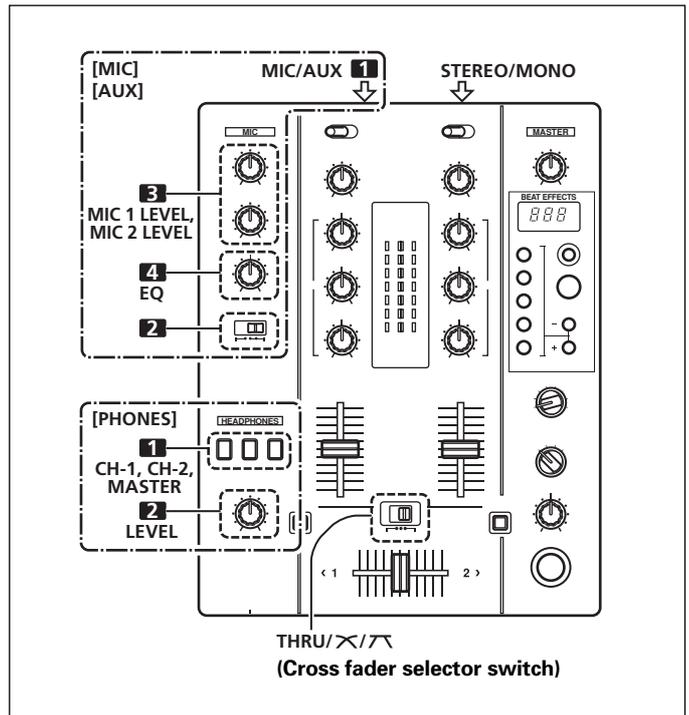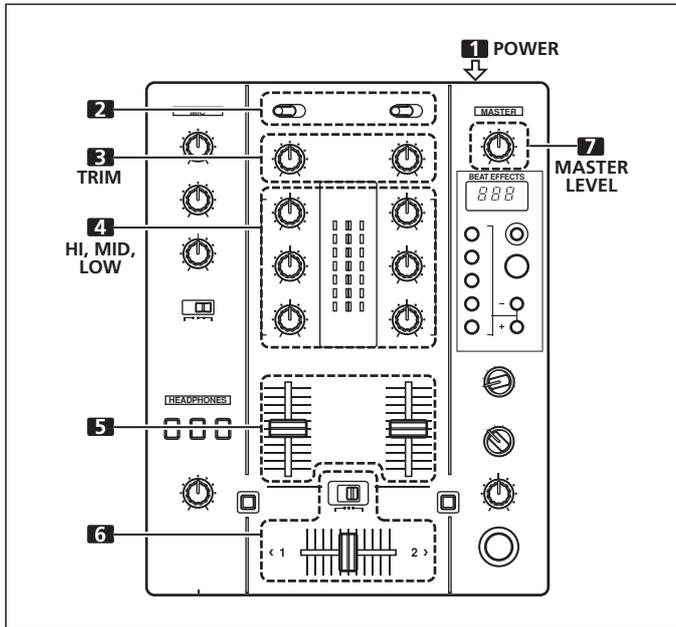
29 Headphones level adjust dial (LEVEL)

Adjusts the output level of the headphones jack. (Adjustable range: –∞ to 0 dB).

30 Headphones jack (PHONES)

Located on the unit's front panel.

7

MIXER OPERATIONS

BASIC OPERATIONS

1. **Set rear panel POWER switch to ON.**
2. **Set the input selector switch for the desired channel to choose the connected component.**
   - The function of the **PHONO/LINE** input connectors is set using the **PHONO/LINE** switch on the connection panel.
3. **Use the TRIM dial to adjust the input level.**
4. **Use the channel equalizer dials (HI, MID, LOW) to adjust the tone.**
5. **Use the channel fader lever to adjust the sound volume of the selected channel.**
6. **To use the cross fader on the selected channel, set the cross fader selector switch to either the middle position (✕) or the right position (⼢), then operate the cross fader lever.**
   - When not using the cross fader, set the cross fader selector switch to [**THRU**].
7. **Use the MASTER LEVEL dial to adjust the overall sound volume.**

[Selecting Stereo or Monaural]
When the connection panel's **STEREO/MONO** switch is set to [**MONO**], the master output becomes a monaural combination of L+R channels.

[Microphone Input]
1. **Set the connection panel's MIC/AUX switch to [MIC].**
2. **Set the MIC switch to [ON] or [TALK OVER].**
   - When the switch is set to [**TALK OVER**], if sounds of over –15 dB are detected by the microphone, the output for all sound sources other than the microphone is attenuated by 20 dB.
3. **Use the MIC 1 LEVEL dial to adjust the sound volume of MIC 1, and the MIC 2 LEVEL dial to adjust the sound volume of MIC 2.**
4. **Use the microphone equalizer dial (EQ) to adjust the tone of the microphone sound.**
   - The microphone equalizer function operates simultaneously on microphones 1 and 2.

THRU/✕/⼢
(Cross fader selector switch)

[Auxiliary Input]
1. **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.
2. **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.
3. **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.**
4. **Use the microphone equalizer dial (EQ) to adjust sound tone.**

[Headphones Output]
1. **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
ON	OFF	OFF	CH-1(L)	CH-1(R)
OFF	**ON**	OFF	CH-2(L)	CH-2(R)
OFF	OFF	**ON**	MASTER(L)	MASTER(R)
ON	**ON**	OFF	CH-1(L)+CH-2(L)	CH-1(R)+CH-2(R)
ON	OFF	**ON**	CH-1(MONO)	MASTER(MONO)
OFF	**ON**	**ON**	CH-2(MONO)	MASTER(MONO)
ON	**ON**	**ON**	CH-1(MONO)+CH-2(MONO)	MASTER(MONO)

2. **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 (⼢), 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 >**].

FADER START FUNCTION

By connecting the optional Pioneer DJ CD Player control cable, the channel fader and cross fader can be used to start CD playback. When the mixer's channel fader lever or cross fader lever are moved, the CD player is released from the pause mode and automatically – and instantly – begins playback of the selected track. Also, when the fader lever is returned to its original position, the CD player returns to its cue point (back cue), thus allowing "sampler" type play.

Cross fader start play and back cue play

When the CD player assigned to channel 1 is set to standby at a cue point, moving the cross fader lever from the right (**2**) side toward the left (**1**) side, automatically starts play on the channel 1 CD player. When the cross fader lever reaches the left (**1**) side, the CD player assigned to channel 2 goes to back cue (returns to cue point). Also, when the CD player assigned to channel 2 is set to standby at a cue point, moving the cross fader lever from the left (**1**) side to the right (**2**) side, automatically starts playback on the channel 2 CD player. When the cross fader lever reaches the right (**2**) side, the channel 1 CD player goes to back cue (returns to cue point).

* The back cue is performed even if the input selector switch is not set to [**CD**].

[Using the Channel Fader to Start Playback]
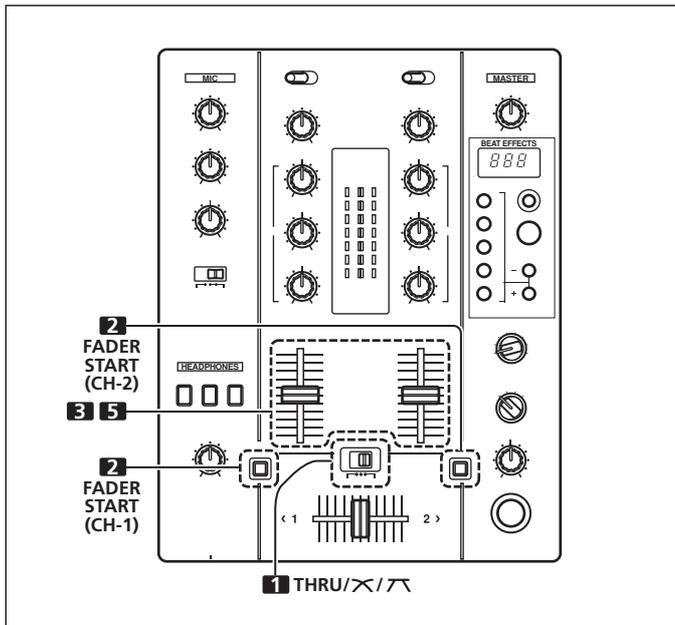
1. **Set the cross fader selector switch to the left (THRU) position.**
2. **Press the FADER START button for the channel (1 to 2) connected to the CD player you wish to control.**
   ● The button for the selected channel lights.
3. **Set the channel fader lever to its lowest position.**
4. **Set the CD player to the desired cue point, and engage cue point standby.**
   ● If a cue point has already been set, it is not necessary to set the CD player to standby at the cue point.
5. **At the instant you wish to start playback, move the channel fader lever.**
   ● CD player begins playback.
   ● After playback has begun, if the channel fader lever is returned to its minimum position, the CD player returns to the cue point and reenters standby mode (back cue).

* If the cross fader selector switch is set to a position other than [**THRU**], the cross fader control is enabled and channel fader cannot be used for control.

[Using the Cross Fader to Start Playback]
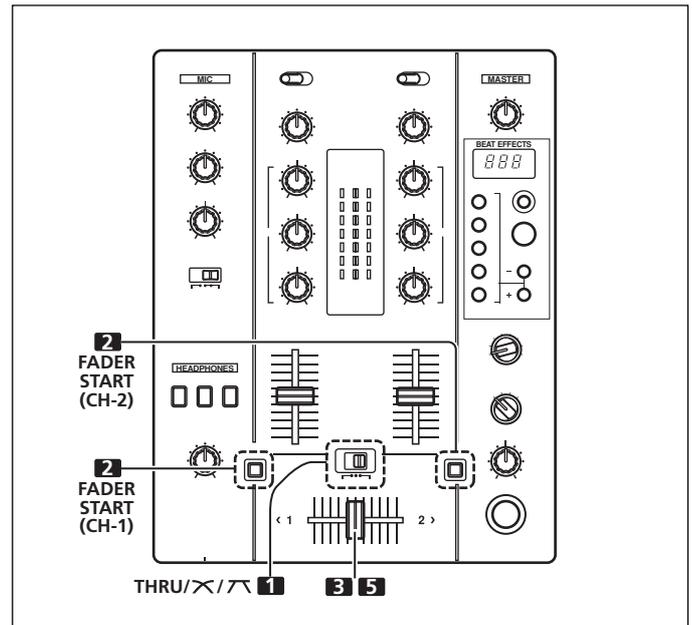
1. **Set the cross fader selector switch to the middle (⤬) or the right (⤬) position.**
2. **Press the FADER START button for the channel (1 to 2) connected to the CD player you wish to control.**
   ● The button for the selected channel lights.
3. **Set the cross fader lever fully to the opposite side from the channel you wish to start.**
4. **Set the CD player to the desired cue point, and engage cue point standby.**
   ● If a cue point has already been set, it is not necessary to set the CD player to standby at the cue point.
5. **At the instant you wish to start playback, move the cross fader lever.**
   ● CD player begins playback.
   ● After playback has begun, if the cross fader lever is moved fully to the side opposite from its start, the CD player assigned to the opposite side channel will return to the cue point and enter standby mode (back cue).

* If the cross fader selector switch is set to [**THRU**], channel fader operation is enabled, and the cross fader cannot be used to control playback.

9

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
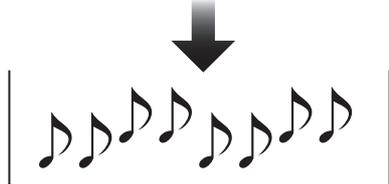
1. DELAY (One repeat sound)

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

Original
(4 beats)

1/2 delay
(8 beats)

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

1 beat   1 beat

Cuts input
sound
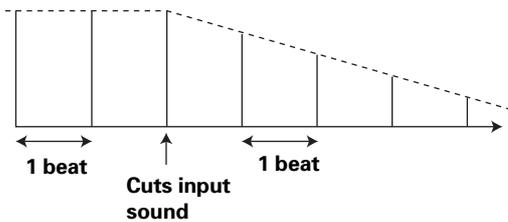
3. FILTER

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

Frequency

1 cycle = 1/1, 2/1, 4/1, 8/1 or 16/1 beat
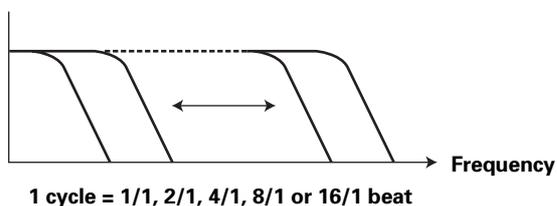
4. FLANGER

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

Short
delay

1 cycle = 1/1, 2/1, 4/1, 8/1 or 16/1 beat
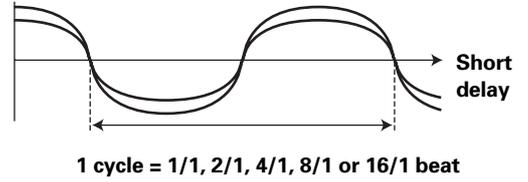
5. PHASER

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

Phase shift

1 cycle = 1/1, 2/1, 4/1, 8/1 or 16/1 beat
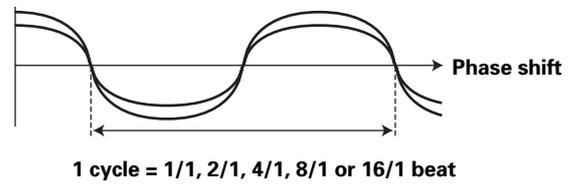
6. ROBOT

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

Original

Effect ON

1/1 roll

Repeat

PRODUCING BEAT EFFECTS

1 AUTO

TAP

5 BEAT/PITCH –, +

4 BEAT/BANK
→1(1/2) / 2(3/4) / 4(1/1) / 8(2/1) / 16(4/1)

2 →DELAY / ECHO / FILTER / FLANGER / PHASER / ROBOT / ROLL

3 CH. SELECT
→1 / 2 / MIC / MASTER

6 LEVEL/DEPTH

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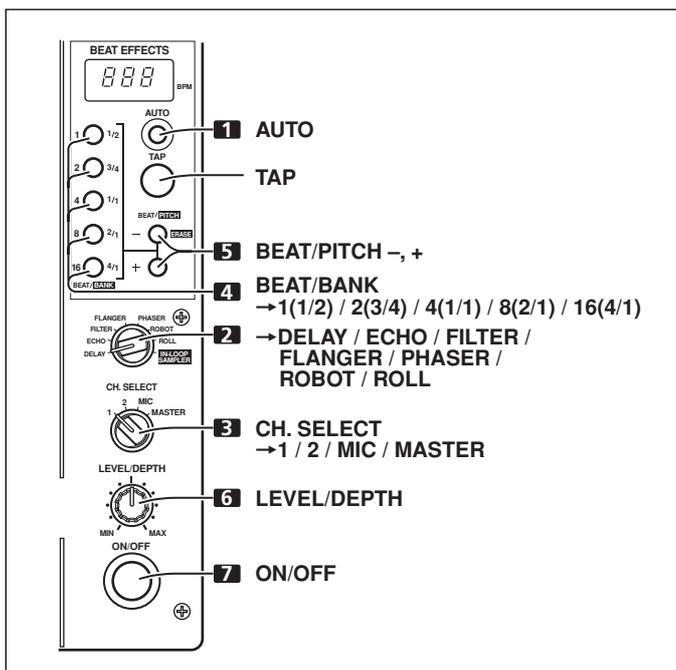
Beat effects allow the instant setting of effect times in synch with the BPM (beats per minute), thus allowing the production of a wide variety of effects in synch with the current rhythm, even during live performances.

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.
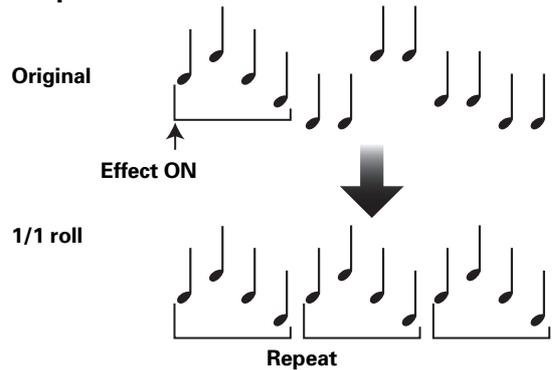   **TAP:** The BPM is input manually by tapping on the **TAP** button. The **AUTO** button indicator does not light.
   ● Whenever power is first turned ON, the function defaults to the [**AUTO**] mode.
   ● In the event the track's BPM cannot be detected automatically, the display's BPM counter will flash.
   ● 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

3 AUTO

TAP

2 ERASE

6 **5** BEAT/PITCH –, +

5 **8** **4** **7** **2** BEAT/BANK

1 ① **1** →IN-LOOP SAMPLER

2 ② CH. SELECT
→1 / 2 / MIC / MASTER

7 ⑥ LEVEL/DEPTH

4 ③ ON/OFF
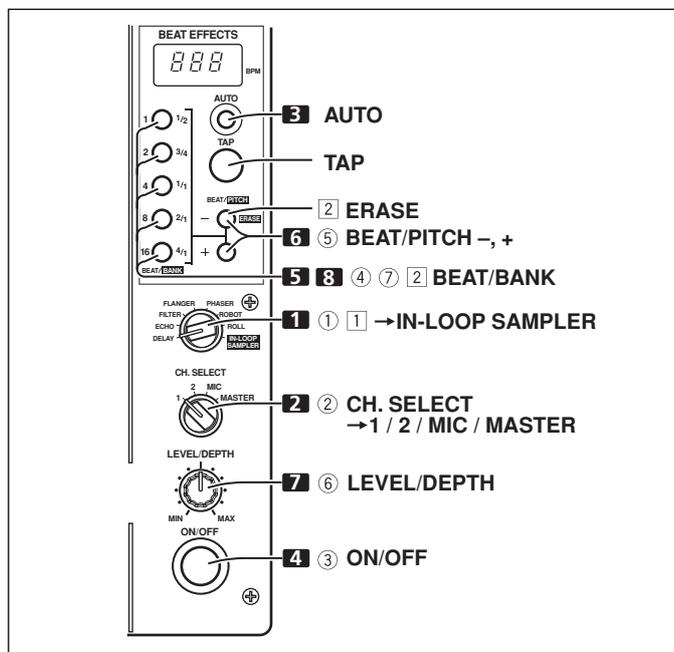
This function detects the current track's BPM, and 4 beat sources are recorded in up to five memory banks, and played as loops in sync with the current track's BPM. Overlapped recording is also possible.

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.

11

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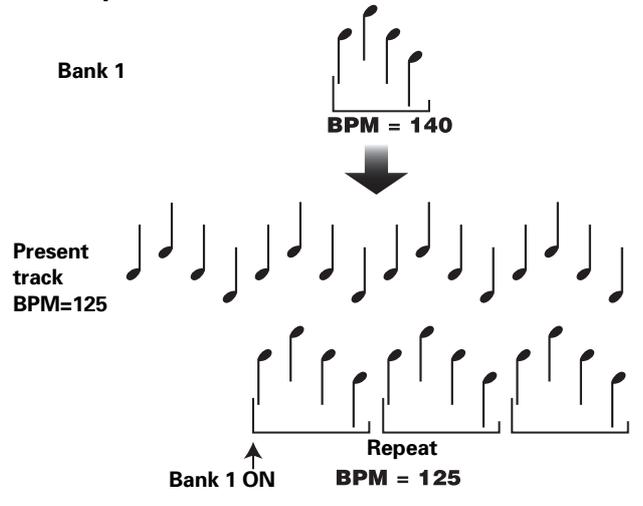
8. IN-LOOP SAMPLER
This function allows you to store 4-beat sounds in up to 5 banks, then output them repeatedly.

Example

Bank 1

BPM = 140

Present track BPM=125

Bank 1 ON   Repeat   BPM = 125

EFFECT PARAMETERS

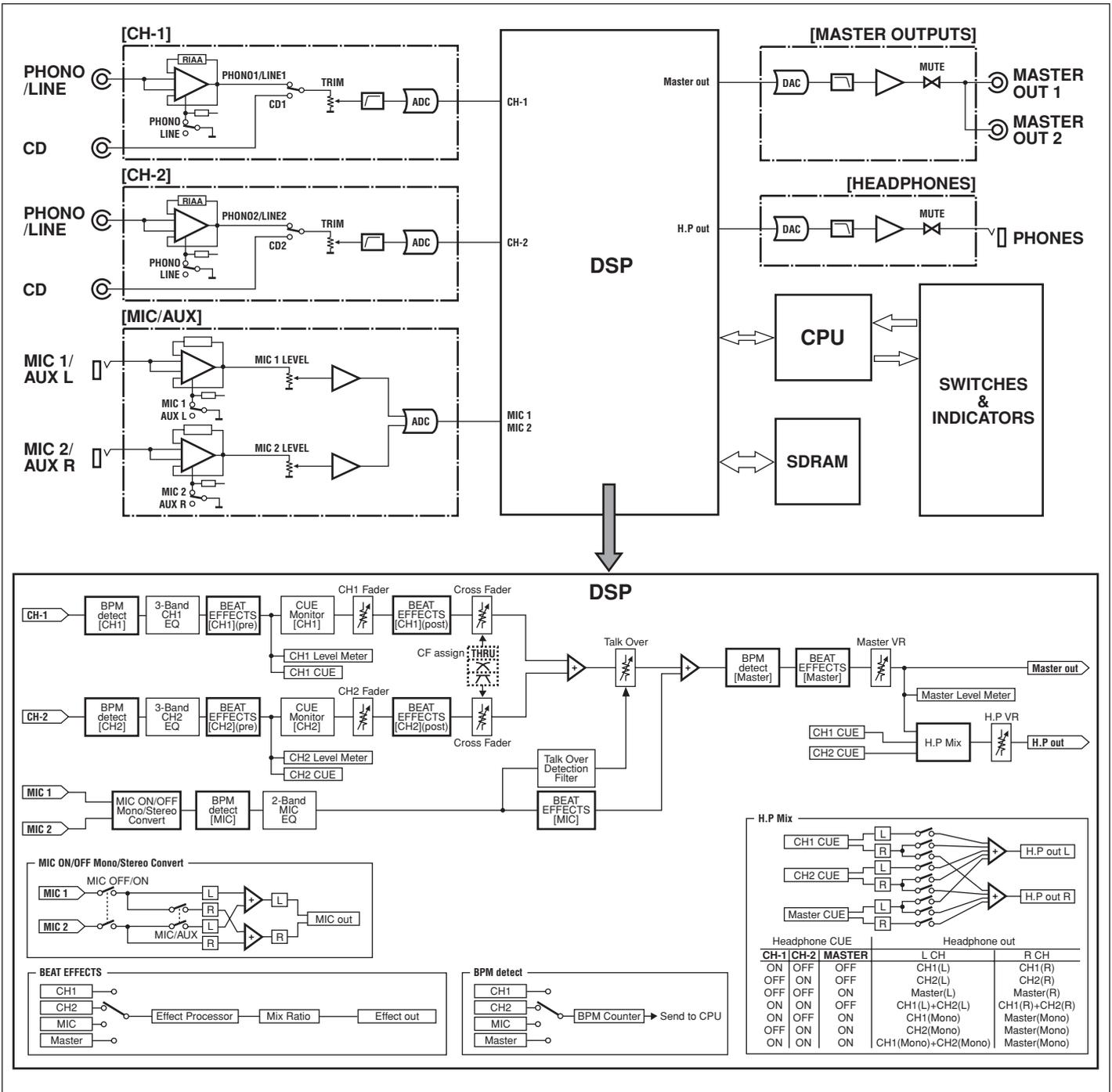| Name | BEAT/BANK button parameters | Parameter 1 (BEAT button) | | Parameter 2 (LEVEL/DEPTH dial) |
		Contents	Setting Range (unit)	
1 DELAY	Sets delay time of 1/2 to 4/1 per 1 beat of BPM time.	Sets delay time.	1 to 8 000 (ms)	Sets balance between original and delay sound.
2 ECHO	Sets delay time of 1/2 to 4/1 per 1 beat of BPM time.	Sets delay time.	1 to 8 000 (ms)	Sets balance between original sound and echo sound.
3 FILTER	Cycle of cutoff frequency shift is set in unit of 1/1 to 16/1 relative to 1 beat of BPM.	Sets cycle for cutoff time shift.	10 to 32 000 (ms)	Amount of effect increases when dial is turned clockwise.
4 FLANGER	Cycle of flanger shift is set in units of 1/1 to 16/1 relative to 1 beat of BPM.	Sets cycle for flanger effect shift.	10 to 32 000 (ms)	Amount of effect increases when dial is turned clockwise. When dial is turned fully counterclockwise, only original sound is output.
5 PHASER	Cycle of phaser effect shift is set in units of 1/1 to 16/1 relative to 1 beat of BPM.	Sets cycle for phase effect shift.	10 to 32 000 (ms)	Amount of effect increases when dial is turned clockwise. When dial is turned fully counterclockwise, only original sound is output.
6 ROBOT	Robot sound effects can be set in 7 fixed values from –100 % to +100 %.	Set robot sound effect.	–100, –66, –50, 0, +26, +50, +100 (%) (fixed values)	Amount of effect increases when dial is turned clockwise.
7 ROLL	Sets effect time of 1/2 to 4/1 per 1 beat of BPM time.	Sets effect time.	10 to 8 000 (ms)	Sets balance of original sound and ROLL sound. No change is produced when dial is turned toward the right side of the center position.
8 IN-LOOP SAMPLER	Selects bank for recording/playback of 4 beat source.	———	———	Sets balance of original sound and recorded sample. No change is produced when dial is turned toward the right side of the center position.

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	● The power cord is not connected.	● Connect to power outlet.
No sound, or sound volume is too low.	● Input selector switch is set incorrectly. ● **PHONO/LINE** input selector switch is set incorrectly. ● Connection cables are connected incorrectly, or connections are loose. ● Jacks or plugs are dirty.	● Set input selector to playback component. ● Set the **PHONO/LINE** input selector to the component being played. ● Connect correctly. ● Clean soiled jacks/plugs before connecting.
Sound is distorted.	● Master output level is too high. ● Input level is too high.	● Adjust master output level (**MASTER LEVEL**) dial. ● Adjust the **TRIM** dial so that the input level approaches 0 dB on the channel level indicator.
Cross fader doesn't work.	● Cross fader selector switch is set to [**THRU**].	● Correctly set the switch to a setting other than [**THRU**].
Can't perform fader start with CD player.	● The **FADER START** button is set to OFF. ● Rear panel **CONTROL** jack is not connected to CD player. ● Only the rear panel **CONTROL** jack is connected to the CD player.	● Set the **FADER START** button to ON. ● Use a control cable to connect the **CONTROL** jacks of DJM-400 and CD player. ● Connect both the **CONTROL** jacks and **CD** input connectors.
Effects don't work.	● Effect channel selector (**CH. SELECT**) setting is incorrect. ● Effect parameter adjust dial (**LEVEL/DEPTH**) is set to [**MIN**].	● Correctly select the channel on which you wish to apply effects. ● Adjust the effect parameter adjust dial.
BPM can't be measured. Measured BPM value is incorrect.	● Input level is set too high, or too low. ● BPM may not be correctly measurable with some tracks.	● Adjust the **TRIM** dial. ● Strike the **TAP** button to set BPM manually.
The measured BPM value is different from the value published with the CD.	● Some differences may occur due to differences in BPM detection methods.	● No remedy is necessary.

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

SPECIFICATIONS

1.General

Power source .... AC 120 V, 60 Hz
Power consumption .... 13 W
Operating temperature .... +5 °C to +35 °C (+41 °F to +95 °F)
Operating humidity .... 5 % to 85 % (without condensation)
Weight ....3.2 kg (7.05 lb)
Maximum dimensions .... 223 (W) × 304.7 (D) × 106.6 (H) mm
8-3/4 (W) × 12 (D) ×4-3/16 (H) in

2. Audio section

Sampling rate .... 96 kHz
A/D, D/A converter .... 24 bits
Frequency response
    LINE .... 20 Hz to 20 kHz
    MIC .... 20 Hz to 20 kHz
    PHONO .... 20 Hz to 20 kHz (RIAA)
S/N ratio (at rated output)
    LINE .... 97 dB
    PHONO .... 82 dB
    MIC .... 78 dB
Distortion (LINE-MASTER OUT) .... 0.007 %
Input level/ Impedance
    PHONO .... −52 dBu/47 kΩ
    MIC 1, MIC 2 .... −52 dBu/47 kΩ
    CD, LINE .... −12 dBu/47 kΩ
Output Level/Impedance
    MASTER OUT .... +2 dBu/10 kΩ
    PHONES .... + 2 dBu/32 Ω
Crosstalk (LINE) .... 78 dB
Channel equalizer response (Isolater)
    HI.. +9 dB to −∞ (13 kHz)
    MID .... +9 dB to −∞ (1 kHz)
    LOW .... +9 dB to −∞ (70 Hz)
Microphone equalizer response
    HI .... −12 dB (full counterclockwise) to 0 dB (center) (10 kHz)
    LOW .... −12 dB (full clockwise) to 0 dB (center) (100 Hz)

3. Input/output connector systems

PHONO/LINE input connectors
    RCA pin jacks 2
CD input connectors
    RCA pin jacks 2
MIC/AUX input connectors
    Phone jacks (Ø6.3 mm) 2
MASTER output connectors
    RCA pin jacks 2
PHONES connectors
    Stereo phone jack (Ø6.3 mm) 1
CONTROL connectors
    Mini-phone jacks (Ø3.5 mm) 2

4. Accessories

Operating Instructions 1
Power cord 1
Warranty card 1

Specifications and appearance are subject to change without notice.

BLOCK DIAGRAM

We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

**Decibel
Level   Example**

30   Quiet library, soft whispers
40   Living room, refrigerator, bedroom away from traffic
50   Light traffic, normal conversation, quiet office
60   Air conditioner at 20 feet, sewing machine
70   Vacuum cleaner, hair dryer, noisy restaurant
80   Average city traffic, garbage disposals, alarm clock at two feet.

THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

 90   Subway, motorcycle, truck traffic, lawn mower
100   Garbage truck, chain saw, pneumatic drill
120   Rock band concert in front of speakers, thunderclap
140   Gunshot blast, jet plane
180   Rocket launching pad

Information courtesy of the Deafness Research Foundation.

S001_En

Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion-and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:
• Start your volume control at a low setting.
• Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:
• Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.