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.

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.

NOTE: THE NO USER-SERVICEABLE PARTS COMPARTMENT WARNING IS LOCATED ON THE APPLIANCE BOTTOM.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS — All the safety and operating instructions should be read before the product is operated.

RETAIL INSTRUCTIONS — The safety and operating instructions should be retained for future reference.

RECORD MODEL NO. — All warnings on the product and on the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS — All operating and use instructions should be followed.

CLEANING — Unplug this product from the wall outlet before cleaning. The product should be cleaned only with a dry cloth. Do not use cleaning solvents as they may damage the finish of the cabinet.

ATTACHMENTS — Do not use attachments not recommended by the manufacturer as they may cause hazards.

WATER AND MOISTURE — Do not use this product near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

ACCESSORIES — Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious damage to the product.

GROUNDING OR POLARIZATION — This product is equipped with a polarized 2-prong plug (a plug having one blade wider than the other). This plug will fit into the outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

POWER-CORD PROTECTION — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

OUTDOOR ANTENNA GROUNDING — If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and measurements for the grounding electrodes. See Figure A.

LIGHTING — For added protection for this product during lightning storms, or when it is left unused and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system.

OVERLOADING — Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY — Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

SERVICING — Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

SAFETY CHECK — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

WALL OR CEILING MOUNTING — The product should not be mounted to a wall or ceiling.

HEAT — The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

Fig. A

NEC — NATIONAL ELECTRICAL CODE

ANTENNA

GROUND CLAMPS

ELECTRIC SERVICE EQUIPMENT

GROUND CLAMP DISCHARGE UNIT (NEC SECTION 810-28)

GROUNDING CONDUCTORS (NEC SECTION 810-21)

GROUND CLAMPS

POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)
IMPORTANT NOTICE
The serial number for this equipment is located on the bottom plate. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

[For Canadian model]
This Class B digital apparatus complies with Canadian ICES-003.

[Pour le modele Canadien]
Cet appareil numerique de la classe B est conforme à la norme NMB-003 du Canada.

WARNING:
Handling the cord on this product or cords associated with accessories sold with the product will expose you to lead, a chemical known to the State of California and other governmental entities to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

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

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.

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 setting your equipment at a safe level BEFORE your hearing adapts.

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.

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.

<table>
<thead>
<tr>
<th>Decibel Level</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>Quiet library, soft whispers</td>
</tr>
<tr>
<td>40</td>
<td>Living room, refrigerator, bedroom away from traffic</td>
</tr>
<tr>
<td>50</td>
<td>Light traffic, normal conversation, quiet office</td>
</tr>
<tr>
<td>60</td>
<td>Air conditioner at 20 feet, sewing machine</td>
</tr>
<tr>
<td>70</td>
<td>Vacuum cleaner, hair dryer, noisy restaurant</td>
</tr>
<tr>
<td>80</td>
<td>Average city traffic, garbage disposals, alarm clock at two feet</td>
</tr>
</tbody>
</table>

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.
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.

Condensation
When this unit is brought into a warm room from previously cold surroundings or when the room temperature rises sharply, condensation may form inside, and the unit may not be able to attain its full performance. In cases like this, allow the unit to stand for about an hour or raise the room temperature gradually.

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

When connecting or changing the connection of units, make sure to first turn off the power switch and disconnect the power cord from the outlet.

This mixer is not furnished with any connection cables; when performing connections, use the cables that came provided with your player and other components, or purchase commercially available audio cables.

1. Connecting Input Components

DJ CD Players

Connect the AUDIO OUT connectors from Player A to the CH-1 CD input jacks of the DJ mixer, and connect the AUDIO OUT connectors from Player B to the CH-2 CD input jacks. When using one of the listed DJ CD players, the control cord furnished with the CD player should be connected between the player and the DJ mixer. In this way, the DJ mixer's fader lever can be operated to control operation of the DJ CD player for fader start play and back cue.

Analog turntable / Cassette deck, etc.

Connect the analog turntable 1 output cables to the CH-1 PHONO/LINE jacks of the DJ mixer, and connect the ground wire to the SIGNAL GND terminal. Set the CH-1 PHONO/LINE selector switch to [PHONO]. When connecting a cassette deck or other such component to these jacks, set the CH-1 PHONO/LINE selector switch to [LINE].

Connect the analog turntable 2 output cables to the CH-2 PHONO/LINE jacks of the DJ mixer, and connect the ground wire to the SIGNAL GND terminal. Set the CH-2 PHONO/LINE selector switch to [PHONO]. When connecting a cassette deck or other such component to these jacks, set the CH-2 PHONO/LINE selector switch to [LINE].

MIC

The MIC jack on this unit supports use of either PHONE type or XLR type plugs.

SESSION IN

When using multiple mixers simultaneously, use the appropriate audio cables to connect the other mixer outputs to these jacks.
2. Connecting Foot Switch and Headphones (front panel)

**Foot switch**
Allows the connection of a foot switch with a 6.3 mm monaural plug. The foot switch control effect ON/OFF.

**Headphones**
Use to connect headphones with a 6.3 mm diameter stereo plug.

3. Output Connections

**External effector**
Use a 6.3 mm monaural plug to connect the external effector’s input connectors to the DJ mixer’s SEND jacks.
When using an effector with a monaural input, connect it to the L channel output only. The signal actually sent to the effector will represent a mix of L and R signals.
Use a 6.3 mm monaural plug to connect the external effector’s output connectors to the DJ mixer’s RETURN jacks.
When using an effector with monaural output, connect only the L channel input. The signal received from the effector will be input to both L and R channels.

**Master output**
**MASTER 1**
XLR type balanced output.

**MASTER 2**
RCA type unbalanced output.

**BOOTH/SESSION OUT**
These jacks are provided for booth monitor output.
The sound volume here is controlled by the booth monitor level dial, regardless of the setting of the MASTER LEVEL dial.
When using this unit in tandem with another mixer, connect these jacks to the other mixer’s session input connectors.

**Power cord**
After completing all other connections, connect the power plug to a standard power outlet or to the auxiliary power outlet of an amplifier.
1 CH-1 input selector switch
(MIC – PHONO 1/LINE 1 – CD 1)
Use to select input signal from MIC jack, CH-1 PHONO/LINE input jacks, or CH-1 CD input jacks, and send them to the TRIM control.
* When [MIC] is selected, the MIC signals are sent directly to the TRIM section without passing through the microphone level and microphone equalizer circuits.

2 CH-1 TRIM dial
Use to adjust the CH-1 input signal level (range of adjustment: +9 dB to –∞).

3 Microphone level dial (MIC LEVEL)
Use to adjust the microphone level (range of adjustment: 0 dB to –∞).

4 Microphone equalizer dials (HI/LOW)
HI
Use to adjust microphone treble response (range of adjustment: 10 kHz, ±12 dB).
LOW
Use to adjust microphone bass response (range of adjustment: 100 Hz, ±12 dB).
5  CH-1 equalizer dials (HI/MID/LOW)
   HI  Use to adjust CH-1 input treble response (range of adjustment: 13 kHz, +6 dB to –26 dB).
   MID Use to adjust CH-1 input midrange response (range of adjustment: 1 kHz, +6 dB to –26 dB).
   LOW Use to adjust CH-1 input bass response (range of adjustment: 70 Hz, +6 dB to –26 dB).

6  MIC SEND button and indicator
   When set to On, the indicator lights, and microphone signals are output at the SEND jacks. This function is disabled when the CH-1 input selector switch is set to [MIC].

7  Session input level dial (SESSION IN)
   Use to adjust the session input volume (range of adjustment: 0 dB to –∞).

8  CH-1 SEND button and indicator
   When set to On, the indicator lights, and CH-1 signals are output at the SEND jacks.

9  CH-1 EQ ON/OFF switch and indicator
   When set to [ON], the indicator lights and the CH-1 equalizer is enabled. When set to [OFF], the indicator goes out and the equalizer circuit is bypassed.

10 CH-2 input selector switch
    (CH-1 – PHONO 2/LINE 2 – CD 2)
   Use to select input signal from CH-1 (component selected with CH-1 input selector switch), CH-2 PHONO/LINE input jacks, or CH-2 CD input jacks, and send them to the TRIM control.
   * When [CH-1] is selected, signals are sent to the CH-2 TRIM control without being sent through the CH-1 TRIM control.

11 CH-2 TRIM dial
   Use to adjust the CH-2 input signal level (range of adjustment: +9 dB to –∞).

12 MASTER LEVEL dial
   Use to adjust the master output volume level (range of adjustment: 0 dB to –∞).

13 Booth monitor level dial
    (BOOTH/SESSION OUT)
   Use to adjust the volume level of signals at the BOOTH/SESSION OUT jacks (range of adjustment: 0 dB to –∞). This level can be set independently of the setting of the MASTER LEVEL dial.

14 Headphones level dial (PHONES)
   Use to adjust the volume level of the headphones output (range of adjustment: 0 dB to –∞).

15  Monitor SELECT switch
    MASTER position
   selects MASTER output. (This setting allows output regardless of the setting of the MASTER LEVEL dial.)
   EFFECT position
   Regardless of the [ON/OFF] setting of the EFFECT switch, the output is the signal selected with CUE, with effects added.
   CUE position
   selects the channel adjusted with the headphone mixing lever (17).

16  CH-2 equalizer dials (HI/MID/LOW)
   HI  Use to adjust CH-2 input treble response (range of adjustment: 13 kHz, +6 dB to –26 dB).
   MID Use to adjust CH-2 input midrange response (range of adjustment: 1 kHz, +6 dB to –26 dB).
   LOW Use to adjust CH-2 input bass response (range of adjustment: 70 Hz, +6 dB to –26 dB).

17  Headphone mixing lever (CH-1 – CH-2)
   This lever does not function when the monitor SELECT switch (15) is set to [MASTER]. When the monitor SELECT switch (15) is set to [EFFECT] or [CUE], moving the lever to the left side produces CH-1 monitor output, while moving it to the right produces CH-2 monitor output. Centering the lever at the center detent position produces balanced output of CH-1 and CH-2 signals.

18  CH-2 SEND button and indicator
   When set to On, the indicator lights, and CH-2 signals are output at the SEND jacks.

19  CH-2 EQ ON/OFF switch and indicator
   When set to [ON], the indicator lights and the CH-2 equalizer is enabled. When set to [OFF], the indicator goes out and the equalizer circuit is bypassed.

20  CH-1 FADER START button
   When this button is set to On, fader start and back cue can be performed on the CH-1 CD player.
   Whether the operation is initiated by operation of the CH-1 fader lever, or by the cross fader lever is determined by the position of the front panel’s FADER START selector switch; the selection is indicated by the lighting of the top panel’s CH-1 FADER START indicator or C.F.1 FADER START indicator.
   * For DJ CD players supporting the fader start/back cue function, see page 5, “1. Connecting Input Components”.

21  CH-1 output On/Off lever (TRANSFORM)
   Use to set CH-1 output to On or Off (Mute). The lever’s setting angle can be changed in 45° increments (changing of the angle should be performed by an authorized Pioneer service technician).
PART NAMES AND FUNCTIONS

22 CH-1 REVERSE indicator
When lighted, indicates that the front panel’s FADER REVERSE switch has been set so that the CH-1 fader lever operates in the reverse direction (see front panel item 52).

23 CH-1 fader lever
The CH-1 fader lever is used to control the level of signals sent to the cross fader. Signal level is maximum at scale mark “10,” and minimum at scale mark “0.”

24 CH-1 FADER START indicator
Lights when the CH-1 fader start/back cue function is enabled (see also top panel item 20 and front panel item 53).

25 C.F.1 FADER START indicator
Lights when CH-1 cross-fader start/back cue function is enabled (see also top panel item 20 and front panel item 53).

26 Level meters
Displays CH-1 and CH-2 peak levels or master output (stereo) peak levels (see also item 33).

27 Cross fader REVERSE indicator
Indicates that the front panel’s FADER REVERSE switch has been set so that the cross fader now operates in reverse (left side is CH-2, right side is CH-1) (see also front panel item 52).

28 Cross fader lever
When the lever is moved to the left side, CH-1 is at maximum output and CH-2 is at minimum. When moved to the right side, CH-2 is at maximum output and CH-1 is at minimum.

29 Operating load adjust screw (FEELING ADJ.)
The hexagonal Allen screw located next to the panel’s slider opening can be rotated with a hexagonal Allen driver to adjust the sliding resistance of the cross fader lever. (See page 17, “Operating load adjust screw”.)

30 CH-2 FADER START button
When this button is set to On, fader start and back cue can be performed on the CH-2 CD player. Whether the operation is initiated by operation of the CH-2 fader lever, or by the cross fader lever is determined by the position of the front panel’s FADER START selector switch; the selection is indicated by the lighting of the top panel’s CH-2 FADER START indicator or C.F.2 FADER START indicator.

31 CH-2 output On/Off lever (TRANSFORM)
Use to set CH-2 output to On or Off (Mute). This lever’s setting angle can be changed in 45° increments (changing of the angle should be performed by an authorized Pioneer service technician).

32 CH-2 REVERSE indicator
When lighted, indicates that the front panel’s FADER REVERSE switch has been set so that the CH-2 fader lever operates in the reverse direction (see front panel item 52).

33 MASTER LEVEL display button and indicator
When depressed to the On position, the indicator lights and the level meters display the master output (stereo) peak levels. When turned Off, the level meters display the peak levels for CH-1 (left) and CH-2 (right) (see also item 26).

34 CH-2 fader lever
The CH-2 fader lever is used to control the level of signals sent to the cross fader. Signal level is maximum at scale mark “10,” and minimum at scale mark “0.”

35 CH-2 FADER START indicator
Lights when the CH-2 fader start/back cue function is enabled (see also top panel item 30 and front panel item 53).

36 C.F.2 FADER START indicator
Lights when CH-2 cross-fader start/back cue function is enabled (see also top panel item 30 and front panel item 53).

* The channel fader curve can be adjusted by means of the front panel FADER CURVE dials.

* The channel fader curve can be adjusted by means of the front panel FADER CURVE dials.
PART NAMES AND FUNCTIONS

Top Panel (2)

37 Touch Panel
Touch this screen to set effects in accordance with the displayed menus.
* The panel’s screen contrast and backlight luminance can be adjusted (see rear panel items 61 and 63).

38 CH-1 effect bank buttons and indicators (BANK 1, 2, 3)
When one of these buttons is pressed, the indicator lights and the corresponding preset effect is enabled. Each BANK button can be recorded with three effects for CH-1 (at time of shipping, the buttons have been factory preset with typically used effects). BANK 1 is selected in the default condition after power is initially turned on.

39 CH-1 effect parameter adjust button (FX ADJ.)
Press to display the touch panel’s CH-1 effect parameter adjust menu.

40 Fader curve display and CH-1 effect select button (FAADER CURVE/BANK EDIT)
Press to display the fader curve on the touch panel. Holding the button depressed for about one second will cause the touch panel to display the CH-1 effect select menu.

41 CH-1 effect time adjust/select dial (TIME/SELECT)
Use to adjust the time parameters of effects applied to CH-1 (rotate clockwise to lengthen, counterclockwise to shorten). When the effect select menu is displayed, causes the effects list to scroll.

42 CH-1 effect mix ratio/depth adjust dial (MIX/DEPTH)
Use to adjust the volume (amount) of effects applied to CH-1 (rotate clockwise to increase effects, counterclockwise to reduce).
43 CH-1 effect switch and indicator
(EFFECT LOCK ON/OFF/ON)
To turn effects [ON], either pull switch forward (switch
returns automatically to [OFF] when released) or slide to far
side to the [LOCK ON] position. When effects are [ON], the
indicator flashes and effects are applied to CH-1.

44 CH-1 TAP button
Under normal conditions, the automatic BPM counter
operates to display the track’s BPM value on the touch panel.
Automatic BPM counting may be difficult with some tracks,
however. In such cases, or if you wish to deliberately set a
different BPM, use the TAP button.
• The BPM value can be changed by rotating the TIME/
SELECT dial while holding the TAP button depressed.
• Tapping the button in time with the beat will cause the
function to switch to the manual BPM count mode; the
tapped beat will be counted and displayed as the BPM
value. Returning to the auto BPM mode is performed from
the effect parameter adjust screen (see page 16,
“Automatic Mode BPM Counting”).

45 CH-2 effect bank buttons and indicators
(BANK 1, 2, 3)
When one of these buttons is pressed, the indicator lights
and the corresponding preset effect is enabled. Each BANK
button can be recorded with three effects for CH-2 (at time of
shipping, the buttons have been factory preset with typically
used effects). BANK 1 is selected in the default condition
after power is initially turned on.

46 CH-2 effect parameter adjust button (FX ADJ.)
Press to display the touch panel’s CH-2 effect parameter
adjust menu.

47 Fader curve display and CH-2 effect select
button (FADER CURVE/BANK EDIT)
Press to display the fader curve on the touch panel. Holding
the button depressed for about one second will cause the
touch panel to display the CH-2 effect select menu.

48 CH-2 effect time adjust/select dial
(TIME/SELECT)
Use to adjust the time parameters of effects applied to CH-2
(rotate clockwise to lengthen, counterclockwise to shorten).
When the effect select menu is displayed, causes the effects
list to scroll.

49 CH-2 effect mix ratio/depth adjust dial
(MIX/DEPTH)
Use to adjust the volume (amount) of effects applied to CH-2
(rotate clockwise to increase effects, counterclockwise to
reduce).

50 CH-2 effect switch and indicator
(EFFECT LOCK ON/OFF/ON)
To turn effects [ON], either pull switch forward (switch
returns automatically to [OFF] when released) or slide to far
side to the [LOCK ON] position. When effects are [ON], the
indicator flashes and effects are applied to CH-2.

51 CH-2 TAP button
Under normal conditions, the automatic BPM counter
operates to display the track’s BPM value on the touch panel.
Automatic BPM counting may be difficult with some tracks,
however. In such cases, or if you wish to deliberately set a
different BPM, use the TAP button.
• The BPM value can be changed by rotating the TIME/SELECT
dial while holding the TAP button depressed.
• Tapping the button in time with the beat will cause the
function to switch to the manual BPM count mode; the
tapped beat will be counted and displayed as the BPM
value. Returning to the auto BPM mode is performed from
the effect parameter adjust screen (see page 16,
“Automatic Mode BPM Counting”).
PART NAMES AND FUNCTIONS

Front Panel

52 FADER REVERSE switches
CH-1 ON/OFF
When set to [ON], the top panel’s CH-1 REVERSE indicator lights, and the CH-1 fader lever operates in the reverse direction (scale mark “0” becomes 0 dB attenuation, and “10” becomes minus infinity). The fader start function also operates in reverse.

CH-2 ON/OFF
When set to [ON], the top panel’s CH-2 REVERSE indicator lights, and the CH-2 fader lever operates in the reverse direction (scale mark “0” becomes 0 dB attenuation, and “10” becomes minus infinity). The fader start function also operates in reverse.

C.F. ON/OFF
When set to [ON], the top panel’s cross fader REVERSE indicator lights, and the cross fader lever operates in the reverse direction (left side becomes CH-2, and right side becomes CH-1). The fader start function also operates in reverse.

53 FADER START selector switches
C.F.1 / CH-1
This switch determines whether the fader start operation for the CD player connected to CH-1 is activated by the cross fader lever, or by the CH-1 fader lever.

When the top panel’s CH-1 FADER START button is set to On, selecting [C.F.1] causes the top panel’s C.F.1 FADER START indicator to light, and selecting [CH-1] causes the top panel’s CH-1 FADER START indicator to light.

C.F.2 / CH-2
This switch determines whether the fader start operation for the CD player connected to CH-2 is activated by the cross fader lever, or by the CH-2 fader lever.

When the top panel’s CH-2 FADER START button is set to On, selecting [C.F.2] causes the top panel’s C.F.2 FADER START indicator to light, and selecting [CH-2] causes the top panel’s CH-2 FADER START indicator to light.

54 Headphone output jack (PHONES)
Accepts a 6.3 mm stereo headphones plug.

55 POWER switch

56 Fader attenuation dials (FADER CURVE)
CH-1
Use to adjust CH-1’s fader attenuation curve.

CH-2
Use to adjust CH-2’s fader attenuation curve.

CROSS FADER 1
Use to adjust cross fader’s CH-1 attenuation curve.

CROSS FADER 2
Use to adjust cross fader’s CH-2 attenuation curve.

FADER CUT LAG
Use to adjust mechanical play at both extremes of the cross fader movement (the range in which lever movement produces no effect).

(See page 17, “Fader attenuation curve adjustment”.)

57 Foot switch channel select switch
(FOOT SW CH-1/OFF/CH-2)
Use to select whether the Effect On/Off foot switch function operates on channel 1 [CH-1], channel 2 [CH-2]. When the switch is in the center position, both CH-1 and CH-2 are [OFF].

58 Foot switch jack (FOOT SW)
This 6.3 mm RCA jack can be used to connect an On/Off type pedal switch used to turn effects On and Off. Various types of foot switch are available; some turn On when pressed, some turn Off when pressed, and others have locking mechanisms (alternate On/Off with successive presses). Select the type in accordance with your own preferences.
59  CH-2 input jacks
   CD
   Connect to audio output from CH-2 CD player.
   PHONO / LINE
   Connect to audio output from CH-2 analog turntable, cassette deck or other line signal level component.

60  External effector output jacks (SEND)
   Connect to the input connectors of an external effector. When the top panel switches (MIC SEND, CH-1 SEND, and CH-2 SEND) are set to On, these jacks output the MIC, CH-1, and CH-2 signals to the external effector. When using an effector with a monaural input, connect it to the L channel output only. The signal actually sent to the effector will represent a mix of L and R signals.

61  Touch panel screen contrast control (CONTRAST)
   Use to adjust the top panel’s touch panel contrast.

62  External effector return jacks (RETURN)
   Connect to the output connectors of the external effector. When using an effector with monaural output, connect only to the L channel input. The signal received from the effector will be input to both L and R channels.

63  Touch panel backlight control (BRIGHT)
   Use to adjust the top panel’s touch panel backlight luminance.

64  CH-1 input jacks
   CD
   Connect to the audio output of the CH-1 CD player.
   PHONO / LINE
   Connect to audio output from CH-1 analog turntable, cassette deck or other line signal level component.

65  Microphone input jack (MIC)
   Connect to a microphone with XLR type or PHONE type plug. When applying effects to the microphone sound, set the top panel’s CH-1 input selector switch (MIC–PHONO 1/LINE 1–CD1) to the [MIC] position.

66  Session input jacks (SESSION IN)
   When using multiple mixers simultaneously, connect the other mixer outputs to these jacks.

67  CH-1 PHONO/LINE selector switch
   Use to set the input sensitivity at the CH-1 PHONO/LINE connectors. The [PHONO] position supports an MM type cartridge.
   * When no analog turntable is used, set this switch to the [LINE] side.

68  CH-1 signal ground (SIGNAL GND)
   Connect to the CH-1 analog turntable’s ground wire. Note that this is not meant as a safety ground.

69  CH-1 PLAYER CONTROL jack
   When a Pioneer DJ CD player is connected to the CH-1 CD jacks, a special control cord can be used to connect this jack to the player’s control jack, thus enabling the fader start function.

70  MASTER 1 jacks
   XLR type balanced output. Connect to the power amplifier’s balanced input jacks.

71  CH-2 PLAYER CONTROL jack
   When a Pioneer DJ CD player is connected to the CH-2 CD jacks, a special control cord used to connect this jack to the player’s control jack, thus enabling the fader start function.

72  CH-2 PHONO/LINE selector switch
   Use to set the input sensitivity at the CH-2 PHONO/LINE connectors. The [PHONO] position supports an MM type cartridge.
   * When no analog turntable is used, set this switch to the [LINE] side.

73  CH-2 signal ground (SIGNAL GND)
   Connect to the CH-2 analog turntable’s ground wire. Note that this is not meant as a safety ground.

74  BOOTH/SESSION OUT jacks
   Connector jacks for booth monitor output. When using this unit in tandem with another mixer, connect these jacks to the other mixer’s session input jacks.

75  MASTER 2 jacks
   RCA type unbalanced output. Connect to the power amplifier’s unbalanced input jacks.
The touch panel display has four basic patterns (A-D). The screen contents shown in the accompanying illustrations depict one example of the basic patterns, while actual displays may differ, depending on the kind of settings and status involved.

A. Effect type display (main page)
This display appears when the power is first turned on, or when one of the BANK (1-3) buttons is pressed. The effects for each channel are displayed as buttons, with the currently selected button displayed in reverse illumination (in this manual, indicated as black characters against white background). Other displays show status of foot switch, selected effect parameters, frequency bands subject to effects, TIME display and BPM display.

When a foot switch is connected, FOOT is displayed.
The frequency band subjected to effects is highlighted (HI, MID, LOW).
BPM count method is displayed (AUTO).
Currently selected effect is highlighted (ECHO, PITCH SHIFTER).

B. Effect select display
Hold the FADER CURVE/BANK EDIT button depressed for about one second to change the screen to the main page effect select menu (settable independently for each channel). Rotate the TIME/SELECT dial to select the effect to be allocated to each button from the list of 50 effects displayed (see page 23, “Presetting effects”).

(Example): CH-1 side.

C. Effect parameter adjust display
Press the FX ADJ. button to display the effect parameter adjust menu (settable independently for each channel). From this menu, BPM AUTO can be selected. Also, effect selection (cross fader / channel fader) can be selected for fader type.

D. Fader status display
Press the FADER CURVE/BANK EDIT button to view the fader status in a graphic display. By rotating the front panel FADER CURVE dial, the various attenuation responses can be set in 33 steps, and each step number also displayed. The amount of cross fader lag is also given a numerical display.
Touch Panel Display Selection
Changing between the touch panel’s four basic display patterns (A, B, C, D) is performed by pressing the operating buttons at the panel’s sides.
BPM COUNTING

Automatic Mode BPM Counting
This function automatically counts the track’s speed in BPM (Beats Per Minute), displaying the results as a numerical value. The functions does not merely count the bass beat, but uses a computer to calculate the track’s original BPM required by the DJ. The display provides a visual standard in addition to the human ear, thus allowing the DJ to quickly match two tracks possessing differing speeds.

When auto mode is used to count BPM, the calculated BPM value is displayed on the LCD panel, allowing quick matching of tracks with differing speeds. (Counting range: 70.0 to 180.0 BPM)

The display flashes during BPM counting.

* Some tracks may not be counted properly, in which case manual count should be used.
(See page 11, top panel items 44, 51)

Touch panel (main page)

- AUTO lights in auto mode.
- BPM value display
- TAP lights during manual count mode (TAP button input)

- The BPM value can be input directly by rotating the TIME/SELECT dial while holding the TAP button depressed.

Selecting Auto Mode
1. Press the FX ADJ. button to cause the touch panel screen to display the effect parameter adjust menu.

If the CH-1 FX ADJ. button is pressed, the CH-1 display appears; if the CH-2 FX ADJ. button is pressed, the CH-2 display appears.

2. Press the BPM TAP button (displayed in manual mode), to display the BPM AUTO button.
FADER OPERATIONS

Adjusting Fader Lever Operating Sensation

Operating load adjust screw (FEELING ADJ.)
The supplied hexagonal Allen driver can be used to adjust the hexagonal Allen screw located next to the top panel’s cross fader slider opening, thus modifying the sliding resistance of the lever. Rotate the screw clockwise to increase sliding resistance and counterclockwise to reduce resistance.

Cross fader lag adjustment
The mechanical play (the lag or range of movement in which no functional effect takes place) at the two extreme ends of the top panel cross fader lever movement can be adjusted by using the front panel’s FADER CUT LAG dial, within a range of 1-6 mm.

Fader attenuation curve adjustment
The front panel’s FADER CURVE dials can be used to adjust the attenuation curve response of the cross fader and channel fader. The cross fader can be adjusted independently for CH-1 and CH-2 sides. By pressing the top panel’s FADER CURVE/BANK EDIT button, the adjustment status can be displayed on the touch panel.

Channel fader curve adjustment (CH-1, CH-2)

Cross fader curve adjustment (CROSS FADER 1, 2)

Fader reverse function
The operating directions of the CH-1, CH-2 and cross fader levers can be reversed by setting the front panel’s FADER REVERSE switches to their [ON] positions. When the CH-1 (or CH-2) FADER REVERSE switch is set to [ON], the top panel CH-1 (or CH-2) REVERSE indicator lights, and the corresponding lever’s operating direction is reversed (scale mark “0” becomes attenuation 0 dB, while scale mark “10” becomes minus infinity). The fader start function also operates in reverse.

When the C.F. FADER REVERSE switch is set to [ON], the top panel’s cross fader REVERSE indicator lights, and the lever operating direction is reversed (left side becomes CH-2 and right side becomes CH-1). The fader start function also operates in reverse.

Fader Start Function
When the CH-1 and CH-2 jacks of this unit are connected to a separately sold Pioneer DJ CD player (models CDJ-1000, CDJ-1000MK2, CDJ-800, CDJ-100S, CDJ-700S, CDJ-500II, CMX-3000, CMX-5000 or DMP-555), the channel fader and cross fader functions can be used to automatically start playback of the connected CD player (the applicable control cord must be connected). By moving the mixer’s channel fader or cross fader lever, the CD player’s pause function is released and play starts instantly. Also, by returning the fader lever to its original position, the CD player can be returned to its cue point (back cue function), thus allowing sampling playback.
**FADER OPERATIONS**

**Cross fader start play and back cue play**

When the CH-1 CD player is held in standby at the cue point, merely moving the cross fader lever from the right (CH-2) side to the left (CH-1) side will cause the CH-1 CD player to begin playback.

When the cross fader lever reaches the left (CH-1) side, CH-2 CD player performs back cue (returns to its cue point).

Likewise, when the CH-2 CD player is in standby at its cue point, moving the cross fader lever from the left (CH-1) side to the right (CH-2) side causes CH-2 CD player to begin playback. When the cross fader lever reaches the right (CH-2) side, CH-1 CD player performs back cue.

* Back cue is performed even if the input selector switch is not set to CD.

**Start playback with channel fader**

1. To control a connected CD player, set the front panel FADER START selector switch for the corresponding channel to its [CH-1] or [CH-2] position.

When using the CH-1 fader lever to start the CH-1 CD player, set the front panel C.F.1/CH-1 switch to the [CH-1] position; when using the CH-2 fader lever to start the CH-2 CD player, set the front panel C.F.2/CH-2 switch to [CH-2] position.

2. Press the top panel FADER START button so that the indicator lights.

When the CH-1 FADER START button is pressed, the C.F.1 FADER START indicator lights. When the CH-2 FADER START button is pressed, the C.F.2 FADER START indicator lights.

3. Set the channel fader lever to the [0] scale mark.

4. Adjust the CD player to its cue point and set for cue point standby.

5. Begin moving the channel fader lever with the timing you wish, thereby beginning playback on the CD player.

* If the cue point has already been set, there is no need to set the CD player again for standby at the cue point.

* After playback has once begun, moving the channel fader lever back to the "0" scale mark will cause the CD player to return to its cue point and enter the standby mode again (back cue).

---

**Start playback with cross fader**

1. To control a connected CD player, set the front panel FADER START selector switch for the corresponding channel to its [C.F.1] or [C.F.2] position.

When using cross fader lever to start the CH-1 CD player, set the front panel C.F.1/CH-1 switch to the [C.F.1] position; when using the cross fader lever to start the CH-2 CD player, set the front panel C.F.2/CH-2 switch to [C.F.2] position.

2. Press the top panel FADER START button so that the indicator lights.

When the CH-1 FADER START button is pressed, the C.F.1 FADER START indicator lights. When the CH-2 FADER START button is pressed, the C.F.2 FADER START indicator lights.

3. Move the cross fader lever to the side opposite from the channel you wish to start.

4. Adjust the CD player to its cue point and set for cue point standby.

5. Begin moving the cross fader lever with the timing you wish, thereby beginning playback on the CD player.

* If the cue point has already been set, there is no need to set the CD player again for standby at the cue point.

* If the cross fader lever is moved fully after the beginning of playback, the opposite channel's CD player will return to its cue point and enter standby there (back cue).
Types of Effects
This unit is equipped with a beat effector linked to the BPM, and fader effector linked to the channel or cross fader, producing a total of 50 basic effects, but an even wider variety of effects can be produced by varying the parameters of each effect.

Beat Effector (effects linked to BPM)

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
<th>FX ADJ. Parameter (touch panel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 DELAY (*1)</td>
<td>In time with BPM, outputs repeat sound once.</td>
<td>Set delay time of 1/8 to 8/1 of each beat of BPM.</td>
</tr>
<tr>
<td>2 ECHO (*1)</td>
<td>In time with BPM, outputs repeat sound several times, while diminishing.</td>
<td>Set delay time of 1/8 to 8/1 of each beat of BPM.</td>
</tr>
<tr>
<td>3 PAN ECHO (*1)</td>
<td>In time with BPM, outputs repeat sound, alternately to left and right.</td>
<td>Set delay time of 1/8 to 8/1 of each beat of BPM.</td>
</tr>
<tr>
<td>4 PITCH ECHO (*1)</td>
<td>In time with BPM, outputs repeat sound while changing pitch.</td>
<td>Set delay time of 1/8 to 2/1 of each beat of BPM; and set pitch shifter up or down.</td>
</tr>
<tr>
<td>5 REVERSE DELAY (*1)</td>
<td>In time with BPM, outputs repeat sound in reverse of playback direction.</td>
<td>Set delay time of 1/8 to 8/1 of each beat of BPM.</td>
</tr>
<tr>
<td>6 DUCKING ECHO (*1)</td>
<td>Outputs repeat sound when input sound level drops below a certain point.</td>
<td>Set delay time of 1/8 to 8/1 of each beat of BPM.</td>
</tr>
<tr>
<td>7 ROLL (*2)</td>
<td>With the turning ON of the EFFECT switch as a trigger, the input sound is recorded, and the recorded sound is repeated in units of individual beat.</td>
<td>Set effect time of 1/8 to 8/1 of each beat of BPM.</td>
</tr>
<tr>
<td>8 HOLD ECHO (*1) (*2)</td>
<td>In time with BPM, outputs repeat sound several times while diminishing. Set delay time of 1/8 to 8/1 of each beat of BPM.</td>
<td>Repeat sound is preserved even if EFFECT switch is turned OFF.</td>
</tr>
<tr>
<td>9 MULTI TAP DELAY (*1)</td>
<td>Output delay sound in time with beat, at intervals of preset delay time.</td>
<td>Set delay time of 1/4 to 1/1 of each beat of BPM; select delay pattern; and set feedback ON/OFF.</td>
</tr>
<tr>
<td>10 RAIN (*1)</td>
<td>Outputs sound with feeling of being in water.</td>
<td>Set delay time of 1/8 to 8/1 of each beat of BPM.</td>
</tr>
<tr>
<td>11 REVERB1 (*1)</td>
<td>Produces reverberation sound similar to that of a garage-sized room.</td>
<td>8 patterns can be set based on different filters.</td>
</tr>
<tr>
<td>12 REVERB2 (*1)</td>
<td>Produces reverberation sound similar to that of a large hall.</td>
<td>8 patterns can be set based on different filters.</td>
</tr>
<tr>
<td>13 REVERB3 (*1)</td>
<td>Hall reverberation (echo) is added to sound lag timed to BPM.</td>
<td>Set delay time of 1/8 to 4/1 of each beat of BPM.</td>
</tr>
<tr>
<td>14 PITCH SHIFTER1</td>
<td>Allows changing of pitch within range of ± 1 octave.</td>
<td>Set amount of pitch shift.</td>
</tr>
<tr>
<td>15 PITCH SHIFTER2</td>
<td>Outputs three types of pitches together with preset pitches.</td>
<td>Set type of changing pitch harmonies.</td>
</tr>
<tr>
<td>16 PAN</td>
<td>In time with BPM, outputs sound alternately to left and right.</td>
<td>Set right-left allocation time in units of 1/8 to 8/1 of each beat of BPM.</td>
</tr>
<tr>
<td>17 TRANS</td>
<td>In time with BPM, cut sound.</td>
<td>Set cut time in units of 1/8 to 8/1 of each beat of BPM.</td>
</tr>
<tr>
<td>18 RHYTHM TRANS</td>
<td>Cut sound in time with BPM and preset pattern.</td>
<td>Set effect time of 1/2 to 2/1 of each beat of BPM; and select cut pattern.</td>
</tr>
<tr>
<td>19 TRANS PAN</td>
<td>In time with BPM, cut long-period PAN outputs at set time.</td>
<td>Set cut time in units of 1/16 to 1/1 of each beat of BPM; and set PAN period.</td>
</tr>
<tr>
<td>20 TREMOL0</td>
<td>Produces wavering sound by applying tonal modulation.</td>
<td>Set modulation period based on beats calculated from BPM.</td>
</tr>
<tr>
<td>21 VIBRATO</td>
<td>Apply modulation to frequency, thus producing tonal variation.</td>
<td>Set modulation period based on beats calculated from BPM.</td>
</tr>
</tbody>
</table>

(*1) When the channel fader or cross fader is used to lowering sound volume, no effect sounds will be heard, even if monitor SELECT switch is set to the [EFFECT] position.

(*2) When EFFECT switch is turned OFF, no effect sounds will be heard even if the monitor SELECT switch is set to the [EFFECT] position.
# EFFECT FUNCTIONS

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
<th>FX ADJ. Parameter (touch panel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 CHORUS1</td>
<td>Produces broadened musical effect resembling the production of same pitch sounds from multiple sources.</td>
<td>Set period of chorus wavers based on beats calculated from BPM.</td>
</tr>
<tr>
<td>23 CHORUS2</td>
<td>Produces even broader musical effect than CHORUS1.</td>
<td>Set period of chorus wavers based on beats calculated from BPM.</td>
</tr>
<tr>
<td>24 CHORUS3</td>
<td>Changes degree of waver in chorus sound.</td>
<td>Set period of chorus waver based on beats calculated from BPM, and set degree of chorus sound waver.</td>
</tr>
<tr>
<td>25 FLANGER1</td>
<td>Produce flange effect by adding delayed sound. In time with BPM, change frequency band receiving flange effect.</td>
<td>Set period of flange effect shift based on beats calculated from BPM.</td>
</tr>
<tr>
<td>26 FLANGER2</td>
<td>In time with BPM, change frequency band receiving flange effect, thus producing either undulating or rotating effect.</td>
<td>Set period of flange effect shift based on beats calculated from BPM.</td>
</tr>
<tr>
<td>27 PHASER1</td>
<td>Phase effect is produced by adding sound with delayed phase. The phase-affected frequency band changes in time with BPM.</td>
<td>Set period of phase effect shift based on beats calculated from BPM.</td>
</tr>
<tr>
<td>28 PHASER2</td>
<td>Phase-affected frequency band changes in time with BPM. Phase effect change is inverted between L and R.</td>
<td>Set period of phase effect shift based on beats calculated from BPM.</td>
</tr>
<tr>
<td>29 TOUCH PHASER</td>
<td>Phase effect is produced in correspondence to input volume. The higher the input volume, the higher the frequencies producing the effect.</td>
<td>Set the number of filter stages producing the phase effect. Greater numbers of stages produce deeper effects.</td>
</tr>
<tr>
<td>30 TOUCH PHASER2</td>
<td>Phase effect is produced in correspondence to input volume. The higher the input volume, the lower the frequencies producing the effect.</td>
<td>Set the number of filter stages producing the phase effect. Greater numbers of stages produce deeper effects.</td>
</tr>
<tr>
<td>31 FILTER (LPF)</td>
<td>Change low-pass filter’s cutoff frequency in time with BPM.</td>
<td>Set period of cutoff frequency shift based on beats calculated from BPM.</td>
</tr>
<tr>
<td>32 FILTER (HPF)</td>
<td>Change high-pass filter’s cutoff frequency in time with BPM.</td>
<td>Set period of cutoff frequency shift based on beats calculated from BPM.</td>
</tr>
<tr>
<td>33 FILTER (BPFF)</td>
<td>Change band pass filter’s center frequency in time with BPM.</td>
<td>Set period of center frequency shift based on beat calculated from BPM.</td>
</tr>
<tr>
<td>34 FILTER PAN</td>
<td>In time with BPM, bass and treble sounds pan in opposite directions.</td>
<td>Set period of cutoff frequency shift based on beats calculated from BPM.</td>
</tr>
<tr>
<td>35 COMPRESSOR</td>
<td>Inputs above the threshold level are compressed before output.</td>
<td>Set degree of compression.</td>
</tr>
</tbody>
</table>
## EFFECT FUNCTIONS

### Fader Effector (effects linked to channel or cross fader)

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
<th>FX ADJ. Parameter (touch panel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 FADER ROLL (*2)</td>
<td>EFFECT switch turn ON or fader position is used as trigger to record input sound, and then output the sound repeatedly within range of 1/1 to 1/16 beat.</td>
<td>Select either channel fader or cross fader. Set base ROLL time to 1/2, 1/1, or 2/1.</td>
</tr>
<tr>
<td>37 FADER MULTI TAP DELAY (*1)</td>
<td>At preset intervals repeat sound is output at 1/1 to 1/16 beat set with fader.</td>
<td>Select either channel fader or cross fader. Set basic beat time of 1/2 to 2/1 for each BPM beat, and set delay pattern selection.</td>
</tr>
<tr>
<td>38 FADER TRANS PAN</td>
<td>In time with the BPM, long-period PAN output is cut at time corresponding to fader position.</td>
<td>Select either channel fader or cross fader. Set PAN operation period and basic effect time to be cut with fader.</td>
</tr>
<tr>
<td>39 FADER PITCH SHIFTER</td>
<td>In response to fader position, pitch of input sounds is changed.</td>
<td>Select either channel fader or cross fader. Set type of pitch change.</td>
</tr>
<tr>
<td>40 FADER RING</td>
<td>Produces metallic bass sound effect.</td>
<td>Select either channel fader or cross fader. Set frequency of sound effect.</td>
</tr>
<tr>
<td>41 FADER VOCODER1</td>
<td>Vocoder effect; modulates internal oscillator sound in response to input sound. Depending on fader position, changes internal oscillator sound’s fundamental frequency. 7 code sounds can be added.</td>
<td>Select either channel fader or cross fader. Set code type.</td>
</tr>
<tr>
<td>42 FADER VOCODER2</td>
<td></td>
<td>Select either channel fader or cross fader.</td>
</tr>
<tr>
<td>43 FADER FILTER (LPF)</td>
<td>Changes low-pass filter’s cutoff frequency, depending on fader position.</td>
<td>Select either channel fader or cross fader.</td>
</tr>
<tr>
<td>44 FADER FILTER (HPF)</td>
<td>Changes high-pass filter’s cutoff frequency, depending on fader position.</td>
<td>Select either channel fader or cross fader.</td>
</tr>
<tr>
<td>45 FADER FILTER (BPF)</td>
<td>Changes band-pass filter’s center frequency depending on fader position.</td>
<td>Select either channel fader or cross fader.</td>
</tr>
<tr>
<td>46 FADER FLANGER</td>
<td>Changes frequency band subjected to flanger effect, depending on fader position.</td>
<td>Select either channel fader or cross fader.</td>
</tr>
<tr>
<td>47 FADER PHASER</td>
<td>Changes frequency band subjected to phaser effect, depending on fader position.</td>
<td>Select either channel fader or cross fader. Set number of filter stages producing phase effect. Greater numbers of stages produce deeper effects.</td>
</tr>
<tr>
<td>48 FADER SYNTHE1</td>
<td>Outputs sine wave sound source.</td>
<td>Select either channel fader or cross fader. Set frequency equivalent to note “DO”.</td>
</tr>
<tr>
<td>49 FADER SYNTHE2</td>
<td>Outputs sawtooth wave sound source.</td>
<td>Select either channel fader or cross fader. Set frequency equivalent to note “DO”.</td>
</tr>
<tr>
<td>50 FADER SYNTHE3</td>
<td>Outputs square wave sound source.</td>
<td>Select either channel fader or cross fader. Set frequency equivalent to note “DO”.</td>
</tr>
</tbody>
</table>

(*1) When the channel fader or cross fader is used to lowering sound volume, no effect sounds will be heard, even if monitor SELECT switch is set to the [EFFECT] position.

(*2) When EFFECT switch is turned OFF, no effect sounds will be heard even if the monitor SELECT switch is set to the [EFFECT] position.
Using the Effect Functions

The basic procedures is as follows: [Select effect type] → [Set parameters (while monitoring through headphones)] → [Set EFFECT switch to ON]. Below are examples of this basic operation procedure; other effects are produced in much the same way:

[Example 1] Apply delay to CH-1 track:

1. Touch the touch panel’s CH-1 (left side) DELAY button (select effect type).
   - If the DELAY button is not displayed, select and display the button as follows:
     1. Hold the CH-1 (left side) FADER CURVE/BANK EDIT button depressed for about 1 second to set the touch panel to the effect select menu.
     2. Of the touch panel’s three buttons, select (touch) the one in which you wish to record the DELAY.
     3. Rotate the TIME/SELECT dial to select DELAY.
     4. Press (touch) the MEMORY button.
     5. Press the FADER CURVE/BANK EDIT button to leave the effect select menu.
   - If DELAY is preset in the BANK 1, 2, 3 buttons, DELAY can be selected by pressing the corresponding button (see page 23 "Presetting Effects.")

2. Press the CH-1 (left side) FX ADJ. button to display the effect parameter adjust menu on the touch panel.

3. Use the touch panel’s LOW, MID, and HI buttons to select the frequency ranges for the effect.
   - The selected range button will appear highlighted.
   * It may not be possible to select the frequency range, depending on the type of effect.

4. Press the touch panel’s 1/8 to 8/1 buttons as desired to select the delay time (parameter value setting).
   - Set delay time of 1/8 to 8/1 for each beat of BPM.
   - Set monitor SELECT switch to [EFFECT] to confirm the effect sound through the headphones (effects marked with the note *1 on the effects chart cannot be heard unless the EFFECT switch is set to [ON]).
   - The TIME/SELECT dial can be rotated to produce even finer delay time settings. Setting delay time of 1/1 per beat of tempo (BPM) will cause the touch panel’s 1/1 button to be highlighted, and this can be used as a general reference when adjusting the parameter.

5. Use the MIX/DEPTH dial to set the level balance between sound source and delay sound.
   - Rotate to left to reduce, and rotate to right to increase the delay sound.

6. Set EFFECT switch to [ON] or [LOCK ON].
   - The EFFECT indicator will begin flashing red, and the effect (delay) will be applied to the master output.
   - When the EFFECT switch is set to [ON] by pulling the switch forward, the switch will automatically return to [OFF] when released.

Note:
- Select effects only when the EFFECT switch is in the [OFF] position. If effects are selected when the EFFECT switch is in the [LOCK ON] position, noise may be produced.

[Example 2] Apply fader roll to CH-1 track

1. Touch the touch panel’s CH-1 (left side) FADER ROLL button (select effect type).
   - If the FADER ROLL button is not displayed, select and display the button as follows:
     1. Hold the CH-1 (left side) FADER CURVE/BANK EDIT button depressed for about 1 second to set the touch panel to the effect select menu.
     2. Of the touch panel’s three buttons, select (touch) the one in which you wish to record the FADER ROLL.
     3. Rotate the TIME/SELECT dial to select FADER ROLL.
     4. Press (touch) the MEMORY button.
     5. Press the FADER CURVE/BANK EDIT button to leave the effect select menu.
   - If FADER ROLL is preset in the BANK 1, 2, 3 buttons, FADER ROLL can be selected by pressing the corresponding button (see page 23 "Presetting Effects.")

2. Press the CH-1 (left side) FX ADJ. button to display the effect parameter adjust menu on the touch panel.

3. Use the touch panel’s LOW, MID, and HI buttons to select the frequency ranges for the effect.
   - The selected range button will appear highlighted.
   * It may not be possible to select the frequency range, depending on the type of effect.

4. Press the touch panel’s 1/2, 1/1, and 2/1 buttons as desired to select the roll time (parameter value setting).
   - Standard roll times can be set as 1/2, 1/1, or 2/1.
   - Set monitor SELECT switch to [EFFECT] to confirm the effect sound through the headphones (effects marked with the note *1 on the effects chart cannot be heard unless the EFFECT switch is set to [ON]).
   - The TIME/SELECT dial can be rotated to produce even finer roll time settings. Setting roll time to 1/1 per beat of tempo (BPM) will cause the touch panel’s 1/1 button to be highlighted, and this can be used as a general reference when adjusting the parameter.

5. Use the MIX/DEPTH dial to set the roll sound level.
   - Rotate to left to reduce, and rotate to right to increase the roll sound.

6. Use touch panel’s CROSS FADER button to select fader.
   - The fader used for fader effects can be set to either channel fader or cross fader.

7. Set EFFECT switch to [ON] or [LOCK ON].
   - The EFFECT indicator will begin flashing red, and the effect will be applied to the master output.
   - When the EFFECT switch is set to [ON] by pulling the switch forward, the switch will automatically return to [OFF] when released.

Note:
- Make selection of effects and type of fader (channel or cross) only when the EFFECT switch is in the [OFF] position. If effects are selected when the EFFECT switch is in the [LOCK ON] position, noise may be produced.
**Presetting Effects**

Of the effects displayed on the touch panel’s main page (effect type menu), three types can be set for each channel CH-1 and CH-2 in the BANK buttons (1/2/3). The preset effects can then be called up at a single touch.

1. **Select the channel (CH-1/CH-2) whose preset value you wish to change.**
   - Press and hold depressed for about one second the FADER CURVE/BANK EDIT button corresponding to the channel (CH-1/CH-2) in which you wish to change the effect setting. The touch panel will change to show the effect selection menu for the chosen channel.

2. **Change the effect**
   1. Press the BANK button (1/2/3) whose setting you wish to change.
   2. Of the three touch panel buttons, press (touch) the one in which you wish to record a new effect.
   3. Rotate the TIME/SELECT dial to select effect.
   4. Press (touch) the touch panel’s MEMORY button.

   *If a different BANK button is pressed or EFFECT switch operated without first pressing the MEMORY button, no effect will be recorded.*

   - Up to three effects can be recorded in a single BANK button. Repeat steps 2–4 to record the presets.

3. **Leave the effect selection (BANK EDIT) menu**
   - Press the FADER CURVE/BANK EDIT button to leave the effect selection menu.
**EFFECT FUNCTIONS**

**Effect Parameters**
The 50 built-in effects can be modified by parameters for time and amount to produce a wider variety of effects. Operate the TIME/SELECT dial to adjust time parameters (parameter 1), and use the MIX/DEPTH dial to adjust amount parameters (parameter 2). Also with fader effects, the position of the fader lever can be used to produce changes resulting in an even wider range of effects.

### Beat effects

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Parameter 1 (TIME/SELECT dial)</th>
<th>Parameter 2 (MIX/DEPTH dial)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Explanation</td>
<td>Setting range (unit)</td>
</tr>
<tr>
<td>1</td>
<td>DELAY (*1)</td>
<td>Set delay time.</td>
<td>1 – 10000 (msec)</td>
</tr>
<tr>
<td>2</td>
<td>ECHO (*1)</td>
<td>Set delay time.</td>
<td>1 – 10000 (msec)</td>
</tr>
<tr>
<td>3</td>
<td>PAN ECHO (*1)</td>
<td>Set delay time.</td>
<td>1 – 10000 (msec)</td>
</tr>
<tr>
<td>4</td>
<td>PITCH ECHO (*1)</td>
<td>Set delay time.</td>
<td>40 – 10000 (msec)</td>
</tr>
<tr>
<td>5</td>
<td>REVERSE DELAY (*1)</td>
<td>Set delay time.</td>
<td>10 – 10000 (msec)</td>
</tr>
<tr>
<td>6</td>
<td>DUCKING ECHO (*1)</td>
<td>Set delay time.</td>
<td>1 – 10000 (msec)</td>
</tr>
<tr>
<td>7</td>
<td>ROLL (*2)</td>
<td>Set effect time.</td>
<td>10 – 10000 (msec)</td>
</tr>
<tr>
<td>8</td>
<td>HOLD ECHO (*1) (*2)</td>
<td>Set delay time.</td>
<td>2 – 10000 (msec)</td>
</tr>
<tr>
<td>9</td>
<td>MULTI TAP DELAY (*1)</td>
<td>Set effect time.</td>
<td>8 – 1200 (msec)</td>
</tr>
<tr>
<td>10</td>
<td>RAIN (*1)</td>
<td>Set effect time.</td>
<td>40 – 10000 (msec)</td>
</tr>
<tr>
<td>11</td>
<td>REVERB1 (*1)</td>
<td>Reverberation time</td>
<td>10 – 200 (%)</td>
</tr>
<tr>
<td>12</td>
<td>REVERB2 (*1)</td>
<td>Reverberation time</td>
<td>10 – 200 (%)</td>
</tr>
<tr>
<td>13</td>
<td>REVERB3 (*1)</td>
<td>Delay time.</td>
<td>10 – 6000 (msec)</td>
</tr>
<tr>
<td>14</td>
<td>PITCH SHIFTER1</td>
<td>Set pitch to be changed.</td>
<td>–100 to +100 (%)</td>
</tr>
<tr>
<td>15</td>
<td>PITCH SHIFTER2</td>
<td>Set type of harmonization.</td>
<td>1 – 5</td>
</tr>
<tr>
<td>16</td>
<td>PAN</td>
<td>Set effect time.</td>
<td>10 – 16000 (msec)</td>
</tr>
<tr>
<td>17</td>
<td>TRANS</td>
<td>Set effect time.</td>
<td>10 – 16000 (msec)</td>
</tr>
<tr>
<td>18</td>
<td>RHYTHM TRANS</td>
<td>Set effect time.</td>
<td>10 – 8000 (msec)</td>
</tr>
<tr>
<td>19</td>
<td>TRANS PAN</td>
<td>Set effect time.</td>
<td>10 – 2000 (msec)</td>
</tr>
<tr>
<td>20</td>
<td>TREMOLO</td>
<td>Fine setting of modulation period.</td>
<td>10 – 16000 (msec)</td>
</tr>
<tr>
<td>21</td>
<td>VIBRATO</td>
<td>Fine setting of modulation period.</td>
<td>1 – 16000 (msec)</td>
</tr>
<tr>
<td>22</td>
<td>CHORUS1</td>
<td>Set period of chorus modulation.</td>
<td>10 – 32000 (msec)</td>
</tr>
<tr>
<td>23</td>
<td>CHORUS2</td>
<td>Set period of chorus modulation.</td>
<td>10 – 32000 (msec)</td>
</tr>
<tr>
<td>24</td>
<td>CHORUS3</td>
<td>Set period of chorus modulation.</td>
<td>10 – 32000 (msec)</td>
</tr>
<tr>
<td>25</td>
<td>FLANGER1</td>
<td>Set period of flange effect frequency shift.</td>
<td>10 – 32000 (msec)</td>
</tr>
<tr>
<td>26</td>
<td>FLANGER2</td>
<td>Set period of flange effect frequency shift.</td>
<td>10 – 32000 (msec)</td>
</tr>
</tbody>
</table>
### EFFECT FUNCTIONS

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Parameter 1 (TIME/SELECT dial)</th>
<th>Parameter 2 (MIX/DEPTH dial)</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>PHASER1</td>
<td>Set period of phase effect</td>
<td>Rotate to right for stronger effect.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>frequency shift.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>PHASER2</td>
<td>Set period of phase effect</td>
<td>Rotate to right for stronger effect.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>frequency shift.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>TOUCH PHASER1</td>
<td>Set sensitivity corresponding</td>
<td>Rotate to right for stronger effect.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>to input volume.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>TOUCH PHASER2</td>
<td>Set sensitivity corresponding</td>
<td>Rotate to right for stronger effect.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>to input volume.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>FILTER (LPF)</td>
<td>Set period of cutoff frequency</td>
<td>Rotate to right for increased resonance and more unusual sound.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>shift.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>FILTER (HPF)</td>
<td>Set period of cutoff frequency</td>
<td>Rotate to right for increased resonance and more unusual sound.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>shift.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>FILTER (BPF)</td>
<td>Set period of center frequency</td>
<td>Rotate to right for increased resonance and more unusual sound.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>shift.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>FILTER PAN</td>
<td>Set period of cutoff frequency</td>
<td>Rotate to right for increased resonance and more unusual sound.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>shift.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>COMPRESSOR</td>
<td>Set time until completely</td>
<td>Change threshold level. Rotate to right for stronger effect.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>compressed.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*1) When the channel fader or cross fader is used to lowering sound volume, no effect sounds will be heard, even if monitor SELECT switch is set to the [EFFECT] position.

(*2) When EFFECT switch is turned OFF, no effect sounds will be heard even if the monitor SELECT switch is set to the [EFFECT] position.

### Fader effects

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Parameter 1 (TIME/SELECT dial)</th>
<th>Parameter 2 (MIX/DEPTH dial)</th>
<th>Fader lever</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>FADER ROLL (*2)</td>
<td>Set reference ROLL time</td>
<td>Set balance between source and ROLL sounds.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 – 10000 (msec)</td>
<td></td>
<td>Change roll time</td>
</tr>
<tr>
<td>37</td>
<td>FADER MULTI TAP DELAY</td>
<td>Set reference effect time</td>
<td>Set balance between source and delay sounds.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(*1)</td>
<td>8 – 1200 (msec)</td>
<td></td>
<td>Change reference beat time.</td>
</tr>
<tr>
<td>38</td>
<td>FADER TRANS PAN</td>
<td>Set reference effect time</td>
<td>Set balance between source and effect sounds.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 – 2000 (msec)</td>
<td></td>
<td>Change cut time</td>
</tr>
<tr>
<td>39</td>
<td>FADER PITCH SHIFTER</td>
<td>Set type of pitch change</td>
<td>Set balance between source and pitch-shifted sounds.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 – 3</td>
<td></td>
<td>Change pitch of input sound.</td>
</tr>
<tr>
<td>40</td>
<td>FADER RING</td>
<td>Change fundamental frequency</td>
<td>Change effect sound level.</td>
<td>Change frequency of effect sound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of effect sound.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 – 8000 (Hz)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>FADER VOCODER1</td>
<td>Set sensitivity corresponding</td>
<td>Adjust volume of code selected on panel menu.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>to input volume.</td>
<td></td>
<td>Change fundamental frequency of oscillating sound.</td>
</tr>
<tr>
<td>42</td>
<td>FADER VOCODER2</td>
<td>—</td>
<td>—</td>
<td>Changes cutoff frequency of oscillating sound.</td>
</tr>
<tr>
<td>43</td>
<td>FADER FILTER (LPF)</td>
<td>—</td>
<td>Rotate to right for increased resonance and more unusual sound.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>—</td>
<td></td>
<td>Changes cutoff frequency of low-pass filter.</td>
</tr>
<tr>
<td>44</td>
<td>FADER FILTER (HPF)</td>
<td>—</td>
<td>Rotate to right for increased resonance and more unusual sound.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>—</td>
<td></td>
<td>Changes cutoff frequency of high-pass filter.</td>
</tr>
<tr>
<td>45</td>
<td>FADER FILTER (BPF)</td>
<td>—</td>
<td>Rotate to right for increased resonance and more unusual sound.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>—</td>
<td></td>
<td>Changes band-pass filter’s center frequency.</td>
</tr>
</tbody>
</table>
**EFFECT FUNCTIONS**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Parameter 1 (TIME/SELECT dial)</th>
<th>Parameter 2 (MIX/DEPTH dial)</th>
<th>Fader lever</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Explanation</td>
<td>Explanation</td>
<td>Explanation</td>
</tr>
<tr>
<td>46</td>
<td>FADER FLANGER</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>47</td>
<td>FADER PHASER</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>48</td>
<td>FADER SYNTHE1</td>
<td>Base frequency 40 – 23999 (Hz)</td>
<td>Left half changes volume, right half changes volume of the set frequency.</td>
<td>Changes to stair-stepped sound.</td>
</tr>
<tr>
<td>49</td>
<td>FADER SYNTHE2</td>
<td>Base frequency 40 – 23899 (Hz)</td>
<td>Left half changes volume, right half changes volume of neighboring frequency.</td>
<td>Changes to stair-stepped sound.</td>
</tr>
<tr>
<td>50</td>
<td>FADER SYNTHE3</td>
<td>Base frequency 40 – 23899 (Hz)</td>
<td>Left half changes volume, right half changes volume of neighboring frequency.</td>
<td>Changes to stair-stepped sound.</td>
</tr>
</tbody>
</table>

(*1) When the channel fader or cross fader is used to lowering sound volume, no effect sounds will be heard, even if monitor SELECT switch is set to the [EFFECT] position.

(*2) When EFFECT switch is turned OFF, no effect sounds will be heard even if the monitor SELECT switch is set to the [EFFECT] position.

**BLOCK DIAGRAM**

![Block Diagram](image)
**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.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Countermeasure</th>
</tr>
</thead>
<tbody>
<tr>
<td>The power does not turn on.</td>
<td>• The power cord has not been connected.</td>
<td>● Connect the cord to a power outlet.</td>
</tr>
<tr>
<td>There is little or no sound.</td>
<td>• The Input selector switch is in the wrong position.</td>
<td>● Set the Input selector switch to the device currently playing.</td>
</tr>
<tr>
<td></td>
<td>• The rear panel’s PHONO/LINE selector switch is set to [LINE] when a analog turntable is</td>
<td>● Set the PHONO/LINE selector switch to [PHONO].</td>
</tr>
<tr>
<td></td>
<td>connected to the input connectors.</td>
<td>● Connect it properly.</td>
</tr>
<tr>
<td></td>
<td>• The connection cable hasn’t been connected properly or has been disconnected.</td>
<td>● Clean and reconnect.</td>
</tr>
<tr>
<td></td>
<td>• The terminal or plug is dirty.</td>
<td>● Return the TRANSFORM lever to its upright position.</td>
</tr>
<tr>
<td></td>
<td>• The TRANSFORM lever is tripped.</td>
<td></td>
</tr>
<tr>
<td>Sound is distorted.</td>
<td>• Master output level is too high.</td>
<td>● Adjust MASTER LEVEL dial.</td>
</tr>
<tr>
<td></td>
<td>• Input level is too high.</td>
<td>● Adjust the TRIM dial so that the input level approaches 0 dB on the peak level meter.</td>
</tr>
<tr>
<td></td>
<td>• The rear panel’s PHONO/LINE selector switch is set to [PHONO] when a cassette deck or other</td>
<td>● Set the PHONO/LINE selector switch to [LINE].</td>
</tr>
<tr>
<td></td>
<td>line component is connected to the input connectors.</td>
<td></td>
</tr>
<tr>
<td>CD player’s fader won’t start.</td>
<td>• The top panel’s FADER START button is set to Off.</td>
<td>● Set the top panel’s FADER START button to On.</td>
</tr>
<tr>
<td></td>
<td>• The rear panel’s PLAYER CONTROL jack hasn’t been connected.</td>
<td>● Use the control cord to connect the unit and CD player.</td>
</tr>
<tr>
<td>Effects don’t work.</td>
<td>• EFFECT switch is [OFF]. (If hand is released when switch is in [ON] position, it will return</td>
<td>● Either hold EFFECT switch at [ON] position, or set to [LOCK ON].</td>
</tr>
<tr>
<td></td>
<td>to [OFF].)</td>
<td>● Adjust effect MIX/DEPTH dial properly.</td>
</tr>
<tr>
<td></td>
<td>• The effect MIX/DEPTH dial is set to [MIN].</td>
<td></td>
</tr>
<tr>
<td>External effector’s sound distorted.</td>
<td>• The input level from the external effector is too high.</td>
<td>● Lower the external effector’s output level.</td>
</tr>
<tr>
<td>External effector don’t work.</td>
<td>• The top panel’s SEND buttons (MIC SEND, CH-1 SEND, CH-2 SEND) are set to Off.</td>
<td>● Turn on the top panel’s SEND button corresponding to the channel you wish to apply external effects to (indicator will light).</td>
</tr>
<tr>
<td></td>
<td>• An external effector’s output coupler is not connected to the RETURN jacks.</td>
<td>● Connect an external effector’s output coupler to the RETURN jacks.</td>
</tr>
<tr>
<td>BPM can’t be measured, or value is strange.</td>
<td>• Input level is too high or too low.</td>
<td>● Adjust TRIM dial to set input level around 0 dB on the peak level meter.</td>
</tr>
<tr>
<td></td>
<td>• BPM may not measure properly with some tracks.</td>
<td>● Set other channels so that input level is around 0 dB.</td>
</tr>
<tr>
<td>The counted BPM differs from the CD’s published value.</td>
<td>• Different counting methods are used, resulting in some variation in values.</td>
<td>● Strike TAP switch to count BPM manually.</td>
</tr>
<tr>
<td>Can’t see touch panel display.</td>
<td>• Improper contrast adjustment.</td>
<td>● No response necessary.</td>
</tr>
<tr>
<td></td>
<td>• Backlight is too dark.</td>
<td>● Adjust touch panel CONTRAST control on rear-panel.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Adjust the rear panel’s touch panel backlight control (BRIGHT).</td>
</tr>
</tbody>
</table>

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

Audio Section

Input terminal (input level/impedance)
CD 1, 2 .................................... -14 dBV (200 mV) / 22 kΩ
LINE 1, 2 .................................... -14 dBV (200 mV) / 22 kΩ
PHONO 1, 2 .................................. -54 dBV (2 mV) / 47 kΩ
MIC .................................................. -54 dBV (2 mV) / 3 kΩ
SESSION IN .................................. -14 dBV (200 mV) / 22 kΩ
RETURN ...................................... -14 dBV (200 mV) / 22 kΩ

Output terminal (output level/impedance)
MASTER OUT 1 (XLR) .......................... 0 dBV (1 V) / 600 Ω
MASTER OUT 2 (RCA) ........................... 0 dBV (1 V) / 1 kΩ
BOOTH / SESSION OUT ...................... 0 dBV (1 V) / 1 kΩ
SEND ........................................... -14 dBV (200 mV) / 1 kΩ
PHONES ........................................ 6 dBV (2 V) / 22 Ω or less
(Rated load impedance 32 Ω)

Frequency characteristics
CD, LINE, MIC ................................. 20 Hz to 20 kHz
PHONO (RIAA) ................................... 20 Hz to 20 kHz

SN ratio
CD, LINE ........................................ 93 dB or more (EFFECT OFF)
PHONO .............................................. 78 dB or more
MIC ................................................... 64 dB or more

Total harmonic distortion rate
CD, LINE ........................................ 0.02% or less

Cross talk (1 kHz) ......................... 77 dB or more

Channel equalizer (CD, LINE/PHONO)
HI .................................................. +6 dB to -26 dB
MID ............................................... +6 dB to -26 dB
LOW ............................................. +6 dB to -26 dB

Microphone equalizer (MIC)
HI .................................................. +12 dB to -12 dB
LOW ............................................. +12 dB to -12 dB

Electrical Section, etc.

Power supply voltage ......................... AC 120 V, 60 Hz
Power consumption ............................ 31 W
Operating temperature ..................... +5 °C to +35 °C (41 °F to 95 °F)
Operating humidity ........................ 5% to 85%
External dimensions .... 251 (W) x 381.6 (D) x 107.9 (H) mm
Weight .......................................... 6.5 kg
9-7/8 (W) x 15 (D) x 4-1/4 (H) in
14 lbs 5 oz

Accessories
- Hexagonal Allen driver ...................... 1
- These operating instructions .............. 1
- Warranty ................................ 1

For improvement purposes, specifications and design may be subject to modification without notice.

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,
CA 90801-1760, U.S.A.

For warranty information please see the Limited Warranty sheet included with your product.

Should this product require service in Canada, please contact a Pioneer Canadian Authorized Dealer to locate the nearest Pioneer Authorized Service Company in Canada.

Alternatively, please contact the Customer Service Department at the following address:

Pioneer Electronics of Canada, Inc.
300 Allstate Parkway
Markham, ON L3R OP2
(905) 479-4411
1 (877) 283-5901

For warranty information please see the Limited Warranty sheet included with your product.

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