

Sampling Digital Reverb

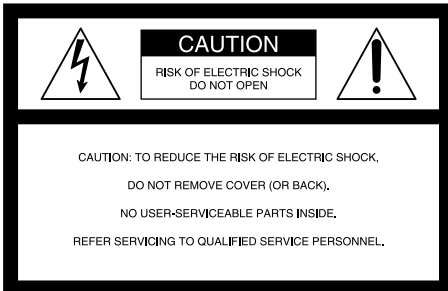
Operating Instructions

DRE-S777

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.



This symbol 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.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA

Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Warning

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

VORSICHT

Um Feuergefahr und die Gefahr eines elektrischen Schlages zu vermeiden, darf das Gerät weder Regen noch Feuchtigkeit ausgesetzt werden.

Um einen elektrischen Schlag zu vermeiden, darf das Gehäuse nicht geöffnet werden. Überlassen Sie Wartungsarbeiten stets nur einem Fachmann.

For the customers in Europe

This product with the CE marking complies with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European standards:

- EN60065: Product Safety
- EN55103-1: Electromagnetic Interference (Emission)
- EN55103-2: Electromagnetic Susceptibility (Immunity)

This product is intended for use in the following Electromagnetic Environment(s):

E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors) and E4 (controlled EMC environment, ex. TV studio).

Pour les clients européens

Ce produit portant la marque CE est conforme à la fois à la Directive sur la compatibilité électromagnétique (EMC) (89/336/CEE) et à la Directive sur les basses tensions (73/23/CEE) émises par la Commission de la Communauté européenne.

La conformité à ces directives implique la conformité aux normes européennes suivantes:

- EN60065: Sécurité des produits
- EN55103-1: Interférences électromagnétiques (émission)
- EN55103-2: Sensibilité électromagnétique (immunité)

Ce produit est prévu pour être utilisé dans les environnements électromagnétiques suivants:

E1 (résidentiel), E2 (commercial et industrie légère), E3 (urbain extérieur) et E4 (environnement EMC contrôlé ex. studio de télévision).

Für Kunden in Europa

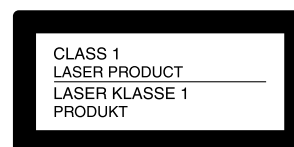
Dieses Produkt besitzt die CE-Kennzeichnung und erfüllt sowohl die EMV-Direktive (89/336/EEC) als auch die Direktive Niederspannung (73/23/EEC) der EG-Kommission.

Die Erfüllung dieser Direktiven bedeutet Konformität für die folgenden Europäischen Normen:

- EN60065: Produktsicherheit
- EN55103-1: Elektromagnetische Interferenz (Emission)
- EN55103-2: Elektromagnetische Empfindlichkeit (Immunität)

Dieses Produkt ist für den Einsatz unter folgenden elektromagnetischen Bedingungen ausgelegt:

E1 (Wohnbereich), E2 (kommerzieller und in beschränktem Maße industrieller Bereich), E3 (Stadtbereich im Freien) und E4 (kontrollierter EMV-Bereich, z.B. Fernsehstudio)



This Sampling Digital Reverb is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT label is located on the top exterior.

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

Dieser Sampling Digital Reverb wurde als Laser-Gerät der Klasse 1 (CLASS 1 LASER) klassifiziert. Das entsprechende Etikett (CLASS 1 LASER PRODUCT) befindet sich außen an der Oberseite des Geräts.

Table of Contents

Chapter 1

Overview

Features	6
Sampling Reverb Sources and Reverb Modes	8
Sampling Reverb Sources and Reverb Modes in the Supplied CD ROM	8
DASK-S70x Series Sampling Reverb Software	8
Block Diagrams	9
Internal Block Diagram	9
Block Diagrams for Each Reverb Mode	9
Location and Functions of Controls	10
Front Panel	10
Connector Panel	11

Chapter 2

Installation and Connections

Connecting a Mixer	14
Connection Examples with a Digital Mixer	14
Connection Examples with an Analog Mixer	16
Rack Mounting	18

Chapter 3

Operation

Starting the Program	20
REVERB Display	22
Selecting the Reverb Program	22
Adjusting the Pre-delay (PreDelay)	25
Adjusting the Reverb Time (RevTime)	25
MIXER Display	26
Basic Operation of the MIXER Display	26
The Items Available in the MIXER Display	28
SETUP Display	30
Basic Operation of the SETUP Display	30
The Items Available in the SETUP Display	32
Storing the Reverb Setup in the Memory Stick/Recalling it	34
Changing the CD ROM and the Memory Stick	36
Reverberation and Delay Adjustment	37

Chapter 4

Maintenance and Other

Error Messages	40
Precautions	41
Specifications	42

Overview

This chapter introduces you to the features, names and function of the parts and controls of the DRE-S777 Sampling Digital Reverb. It provides you with overall information about the Sampling Digital Reverb.

The Sony DRE-S777 Sampling Digital Reverb employs a newly-developed DSP (Digital Signal Processor) which allows Real Impulse Response processing. It performs high speed, real-time processing, and provides natural reverberations based on actual acoustic spaces such as concert halls.

The DRE-S777 features the following:

Several reverb data, including a plate reverb incorporated as standard

The supplied CD ROM holds reverb data of existing acoustic spaces (reverb sources) such as concert halls and churches, as well as a digitally-simulated plate reverb which was previously impossible. Variable reverb data, with different reverb times, are provided for each sound source.

Excellent signal-to-noise ratio

Thanks to the digital signal processing and use of high-quality A/D and D/A converters, the DRE-S777 achieves an excellent signal-to-noise ratio of 100 dB or better.

Variable reverb time

The reverb time can be changed over a range of 0.3 to 6 seconds in 0.25 second steps. (The adjustable range differs according to the sound source.)

Instant switching of reverb programs using 9 cache memories

A reverb program loaded from the CD ROM can be stored in a cache memory. Up to 9 reverb programs can be stored in 9 cache memories and switched instantly.

Pre-delay function

The delay time can be adjusted from 0 to 0.5 seconds.

Pre-equalizer function

The DRE-S777 is equipped with a four-band equalizer. The center frequency, gain and filter width (Q) for each band can be changed. The equalizer can be set to the original sound (Dry) only, the reverb sound (Wet) only or both (Input).

Memory Stick™ 1) storing up to 99 reverb setups

The memory stick is capable of storing up to 99 reverb setups, 92 adjusted on the MIXER and SETUP displays plus 7 factory presets. A memory label can be set for each setup.

This function is useful when you want to recall the status previously adjusted.

Sampling reverb software providing rich reverberation samples

Reverb programs based on famous halls, churches and natural environments worldwide are also available in the optional DASK-S70x series sampling reverb software CD ROMs.

For the DASK-S70x series sampling reverb software, consult your authorized Sony dealer.

A variety of signal processing options using the optional expansion DSP

As standard, the DRE-S777 allows the “Mono in Stereo out” mode. By installing the optional DABK-S703 expansion DSP, the following signal processing options are possible.

- Stereo in Stereo out
- Mono in 4-channel out
- Mono in Stereo out (2Fs)
- Split in 4-channel out (two sets of monaural inputs to be output as two sets of 2-channel outputs)

Optional A/D and D/A converters allowing analog inputs/outputs

The optional DABK-S701 A/D converter provides 2-channel analog inputs; the optional DABK-S702 D/A converter provides 2-channel analog outputs. Two DABK-S702 can be installed. With these converters, the following signal processing options are available.

- 48 kHz/24 bit Stereo analog in 4-channel analog out
- 96 kHz/24 bit Stereo analog in Stereo analog out

1) Memory Stick™ is a trademark of Sony Corporation.

Sampling Reverb Sources and Reverb Modes

Sampling Reverb Sources and Reverb Modes in the Supplied CD ROM

The following seven reverb sources are stored in the supplied CD ROM. Multiple sampling data are provided for each reverb source. The required sampling data is loaded according to the selected reverb program and the selected reverb mode.

Reverb sources

Select a reverb program from the following reverb sources on the REVERB display. The selected reverb program is loaded from the CD ROM.

- Medium-size Hall A
- Medium-size Hall B
- Church A
- Church B
- Studio
- Plate A
- Plate B

Sampling Data

The following four types of sampling data are stored in the CD ROM for each individual reverb source. Select the reverb mode on the SETUP display, and the data in the selected mode is loaded from the CD ROM.

- Mono in Stereo out
- Stereo in Stereo out
- Mono in 4-channel out
- Mono in Stereo out 2Fs

For details on the sampling data of each reverb source, see the CD ROM jacket.

DASK-S70x Series Sampling Reverb Software

Reverb programs based on reverb sources other than those included in the supplied CD ROMs are also available in the optional DASK-S70x series sampling reverb software CD ROMs. Each reverb source is provided with the same sampling data types as those in the supplied CD ROM.

Example: DASK-S701 European Halls & Churches

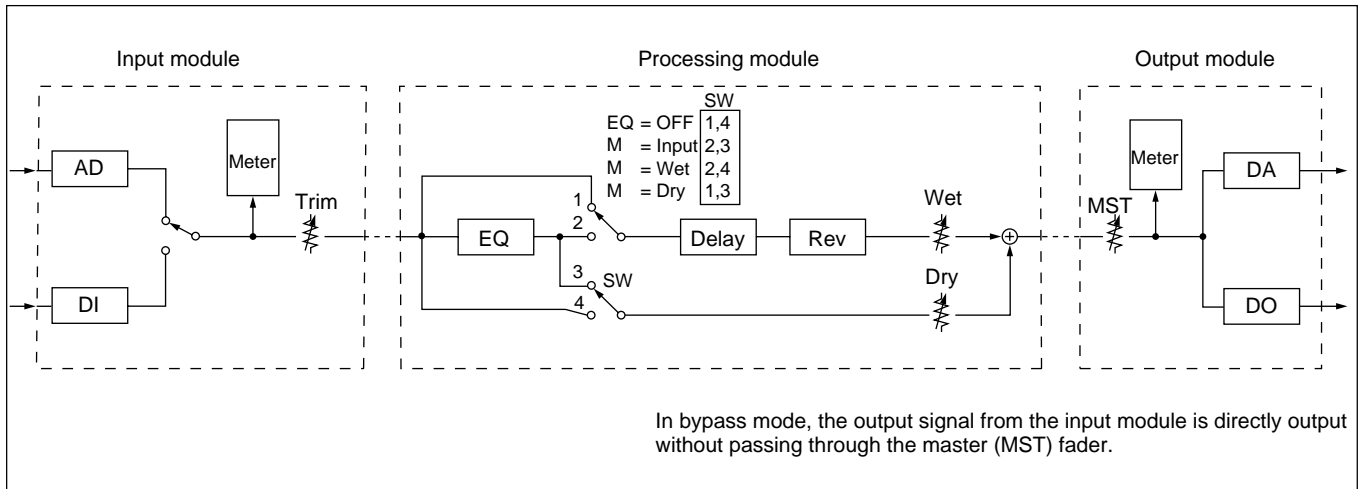
Includes seven famous halls and churches in Europe such as the large concert hall “Concertgebouw” in The Netherlands.

For the DASK-S70x series sampling reverb software, consult your authorized Sony dealer.

Block Diagrams

Internal Block Diagram

The following block diagram shows the DRE-S777 from input to output.

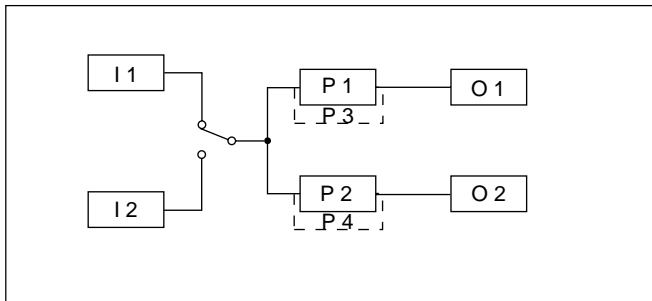


Block Diagrams for Each Reverb Mode

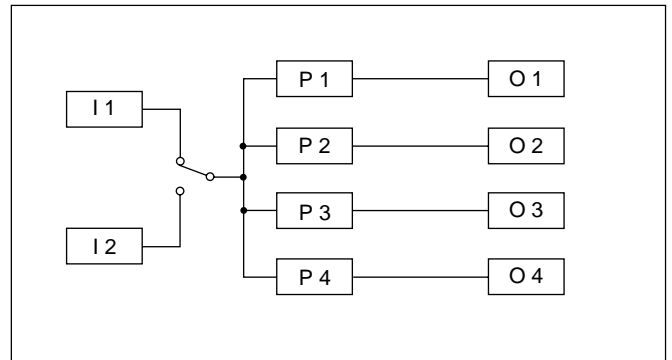
The following are block diagrams for each reverb mode.

“I” represents Input module, “P” Processing module and “O” Output module.

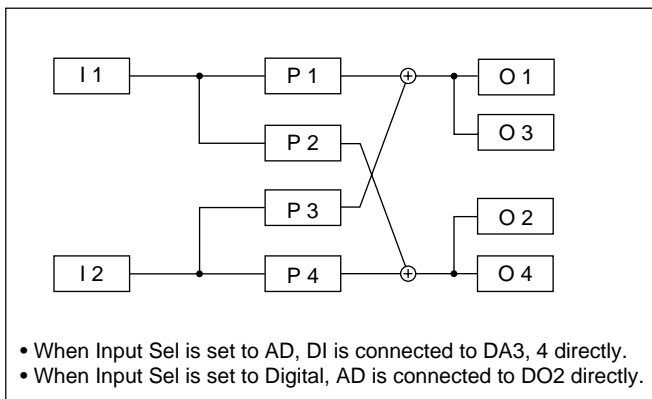
Mono in Stereo out mode Mono in Stereo out 2Fs mode



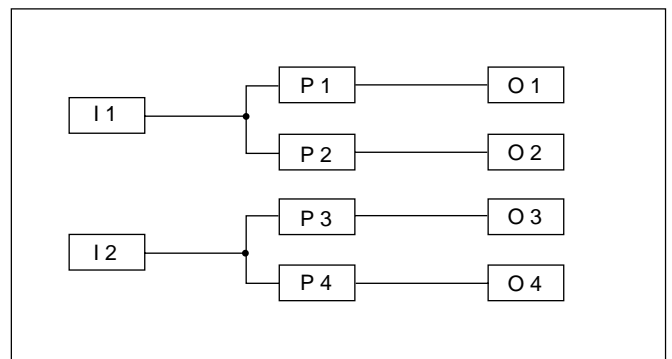
Mono in 4ch out mode



Stereo in Stereo out mode

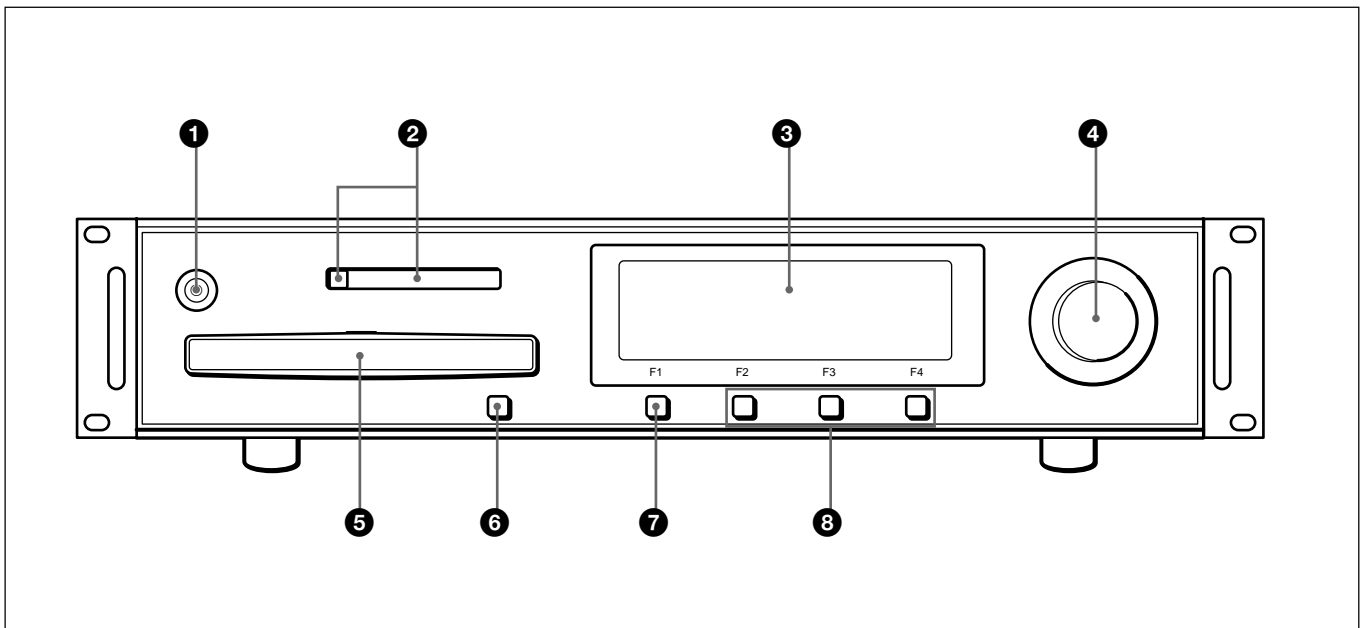


Split in 4ch out mode



Location and Functions of Controls

Front Panel



❶ ① POWER switch

Turns the unit on/off.

❷ ② MEMORY CARD insertion slot and eject button

Place the Memory Stick in the supplied PC card adapter and insert it into this slot.

To remove the PC card adapter, press the eject button on the left of the insertion slot.

❸ ③ Display window

❹ ④ Jog dial

Selects the item or adjusts the value in the display window.

❺ ⑤ CD tray

Insert a CD ROM.

❻ ⑥ EJECT key

When inserting/removing the CD ROM, press this key to open the CD tray.

Note

This key does not operate after the program in the CD ROM has been started.

❼ ⑦ F1 key

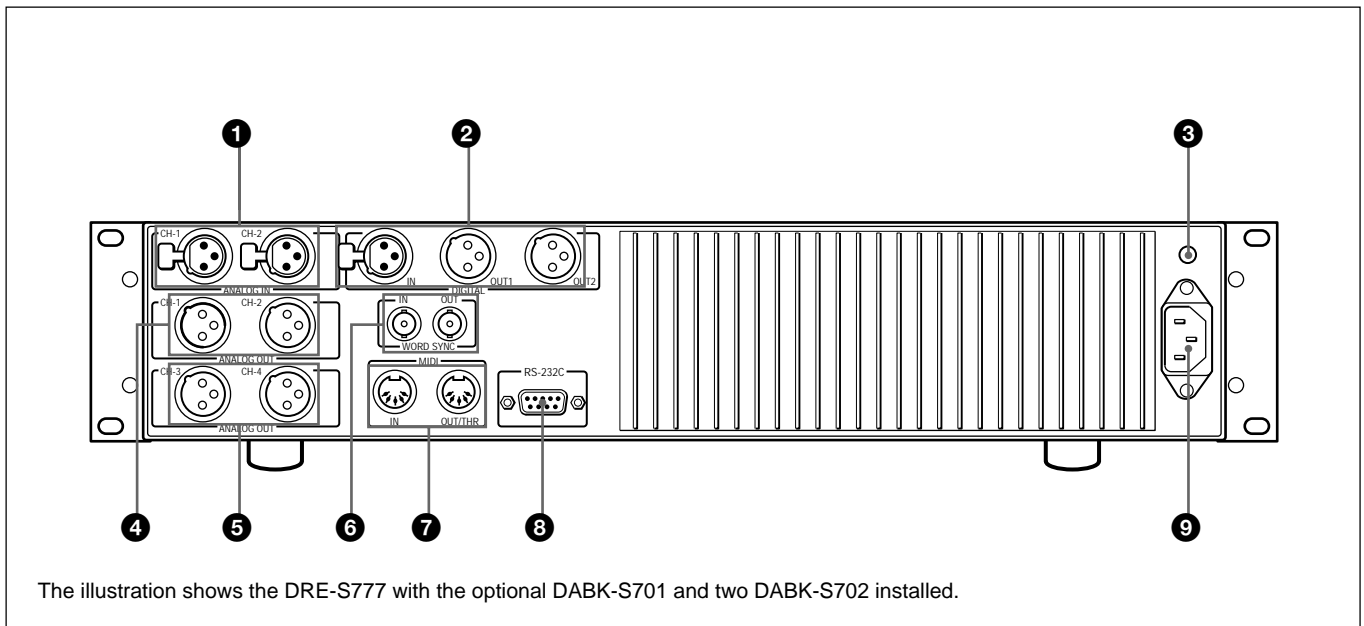
Switches the display. Each time this key is pressed, the display changes in order:

REVERB → MIXER → SETUP

❽ ⑧ F2, F3 and F4 keys

Used for various settings in the display window. The current function of the key is displayed at the bottom of the display window just above the corresponding key.

Connector Panel



The illustration shows the DRE-S777 with the optional DABK-S701 and two DABK-S702 installed.

1 ANALOG IN connectors (XLR type)

By installing the optional DABK-S701 A/D converter, channel 1 (CH 1) and channel 2 (CH 2) analog inputs are provided. The DABK-S701 is equipped with the XLR-3-31 type connectors.

The DABK-S701 is equipped with a 600 ohm/high impedance selector and a +4 dBm/0 dBm input gain selector on its board.

2 DIGITAL input/output connectors (XLR type)

These digital input/output connectors are equipped as standard.

One channel for digital input (IN) and two channels for digital outputs (OUT) are provided.

IN is a XLR-3-31 type connector and OUT 1 and OUT 2 are XLR-3-32 type connectors.

The OUT 2 connector functions only when the optional DABK-S703 expansion DSP is installed.

3 Ground terminal

Connect to the ground line.

4 ANALOG OUT connectors (XLR type)

By installing the optional DABK-S702 D/A converter, channel 1 (CH 1) and channel 2 (CH 2) analog outputs are provided. The DABK-S702 is equipped with the XLR-3-32 type connectors.

The DABK-S702 is equipped with a +4 dBm/0 dBm output gain selector on its board.

5 ANALOG OUT connectors (XLR type)

By installing the optional DABK-S702 D/A converter, channel 3 (CH 3) and channel 4 (CH 4) analog outputs are provided. The DABK-S702 is equipped with the XLR-3-32 type connectors.

6 WORD SYNC connectors (BNC)

IN: Inputs the word sync signal. A 75-ohm terminator is installed.

OUT: Outputs the word sync signal (regeneration output signal).

Note

The word sync signal is output only when the input connector of the destination equipment is terminated at 75 ohms.

(continued)

7 MIDI connectors (5-pin DIN)

These connectors are for future expansion. (Inactive with Version 1.0.)

IN: Connect to the MIDI OUT (or THRU) connector of other MIDI equipment.

OUT/THRU: Outputs the MIDI signal from this reverb or directly outputs the signal input to the MIDI IN connector (loop-through output).

8 RS232C connectors (D-sub 9-pin)

An RS-232C port for maintenance.

9 ~AC IN (inlet) connector

Connect to an AC power source with the AC power cord (supplied).

Installation and Connections

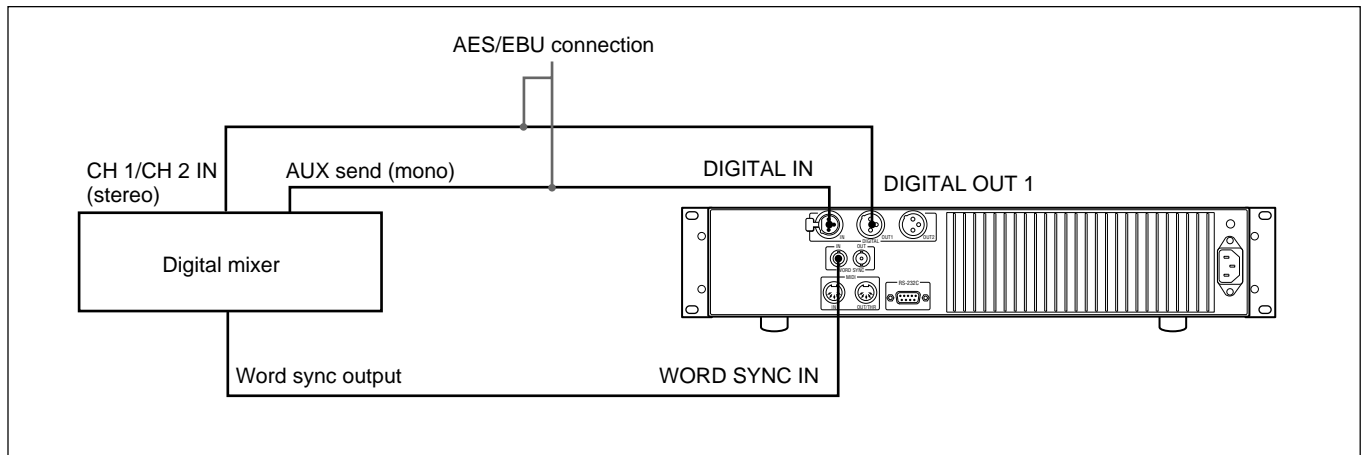
This chapter shows examples of DRE-S777 connections with a digital mixer or an analog mixer for each reverb mode.

Connecting a Mixer

Connection Examples with a Digital Mixer

Mono in Stereo out mode

Connect a digital mixer to the DIGITAL IN and DIGITAL OUT 1 connectors equipped as standard.



Setting up

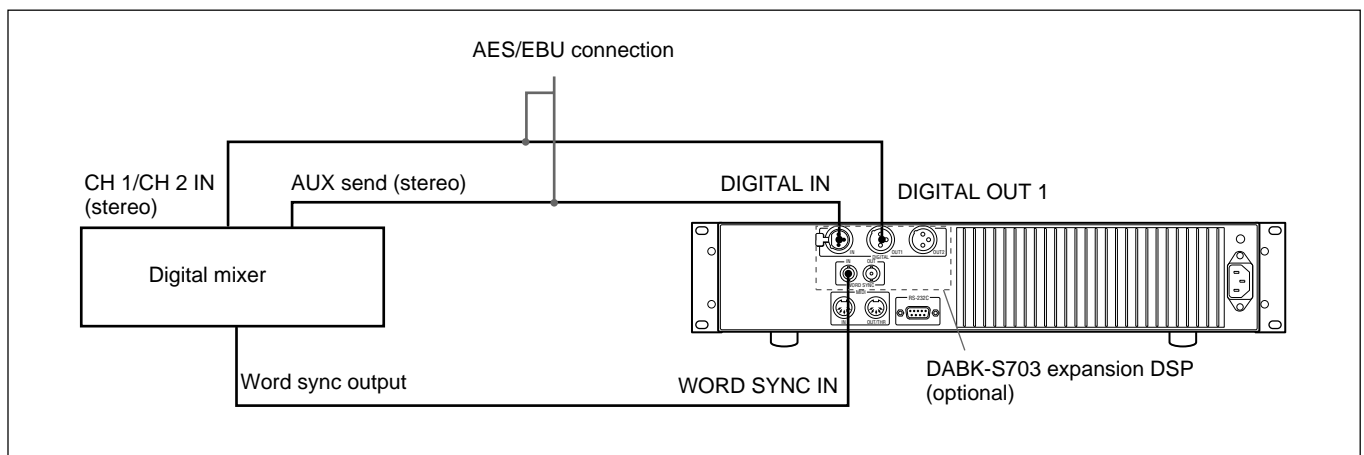
When the mixer is connected above, set the items on the SETUP display as follows:

- Rev mode: Mono (1) in Stereo out or Mono (2) in Stereo out
- Input Sel: Digital
- Clock Sel: Word 48.0 kHz (or 44.1 kHz)

Stereo in Stereo out mode

Install the optional DABK-S703 expansion DSP to the DRE-S777 and connect a digital mixer to the DIGITAL IN and DIGITAL OUT 1 connectors equipped as standard.

For the installation of the DABK-S703, ask authorized Sony service personnel.



Setting up

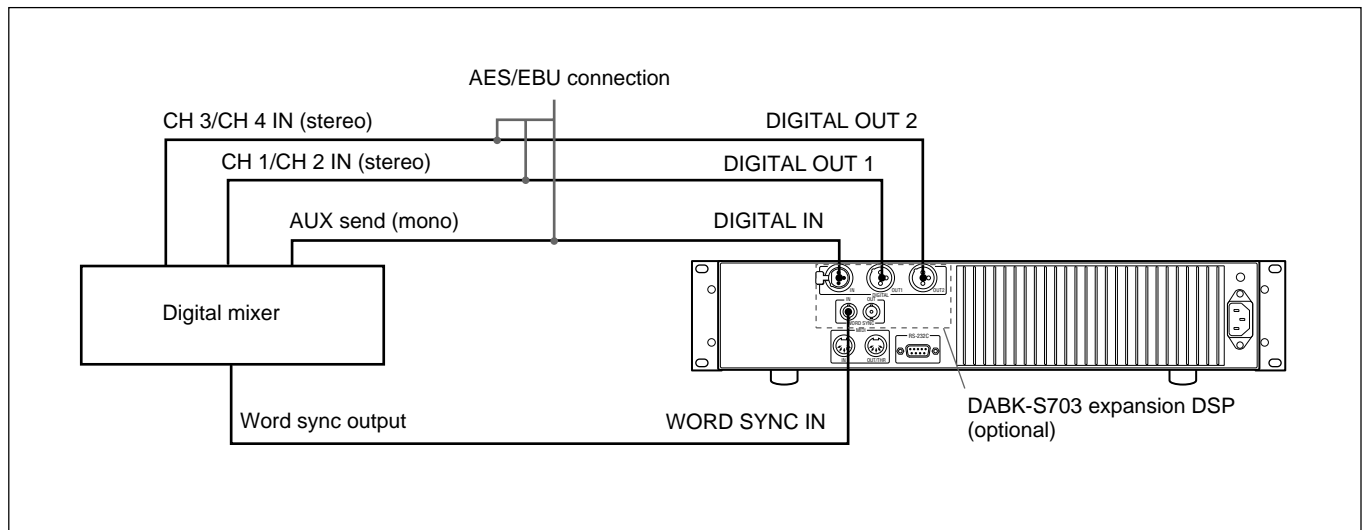
When the mixer is connected above, set the items on the SETUP display as follows:

- Rev mode: Stereo in Stereo out
- Input Sel: Digital
- Clock Sel: Word 48.0 kHz (or 44.1 kHz)

Mono in 4ch out mode

Install the optional DABK-S703 expansion DSP to the DRE-S777 and connect a digital mixer to the DIGITAL IN, DIGITAL OUT 1 and DIGITAL OUT 2 connectors equipped as standard.

For the installation of the DABK-S703, ask authorized Sony service personnel.



Note

The DIGITAL OUT 2 connector functions only when the DABK-S703 is installed.

Setting up

When the mixer is connected above, set the items on the SETUP display as follows:

- Rev mode: Mono (1) in 4ch out or Mono (2) in 4ch out
- Input Sel: Digital
- Clock Sel: Word 48.0 kHz (or 44.1 kHz)

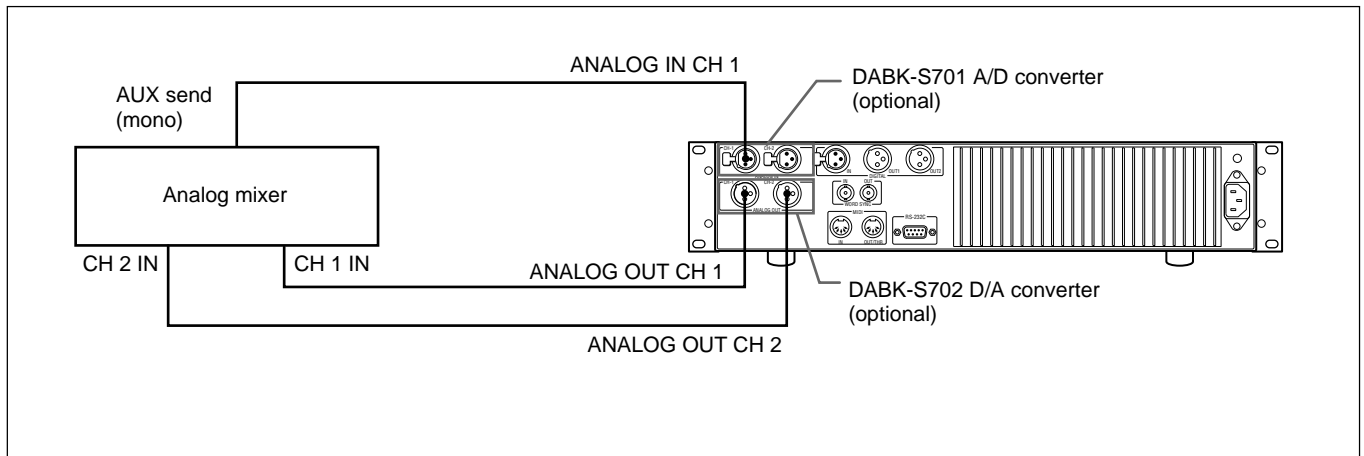
Connecting a Mixer

Connection Examples with an Analog Mixer

Mono in Stereo out mode

Install the optional DABK-S701 A/D converter and DABK-S702 D/A converter to the DRE-S777 and connect an analog mixer to the ANALOG IN CH 1 connector and ANALOG OUT CH 1 and CH 2 connectors.

For the installation of the DABK-S701 and DABK-S702, ask authorized Sony service personnel.



Setting up

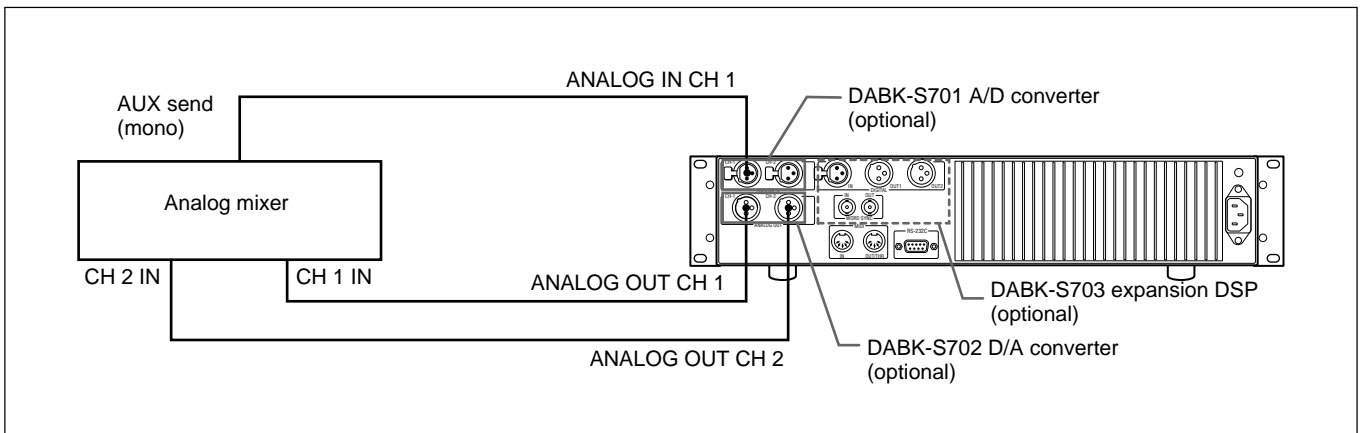
When the mixer is connected above, set the items on the SETUP display as follows:

- Rev mode: Mono (1) in Stereo out
- Input Sel: AD
- Clock Sel: Internal 48.0 kHz (or 44.1 kHz)

Mono in Stereo out 2Fs mode

Install the optional DABK-S701 A/D converter, DABK-S702 D/A converter and DABK-S703 expansion DSP to the DRE-S777 and connect an analog mixer to the ANALOG IN CH 1 connector and ANALOG OUT CH 1 and CH 2 connectors.

For the installation of the DABK-S701, DABK-S702 and DABK-S703, ask authorized Sony service personnel.



Setting up

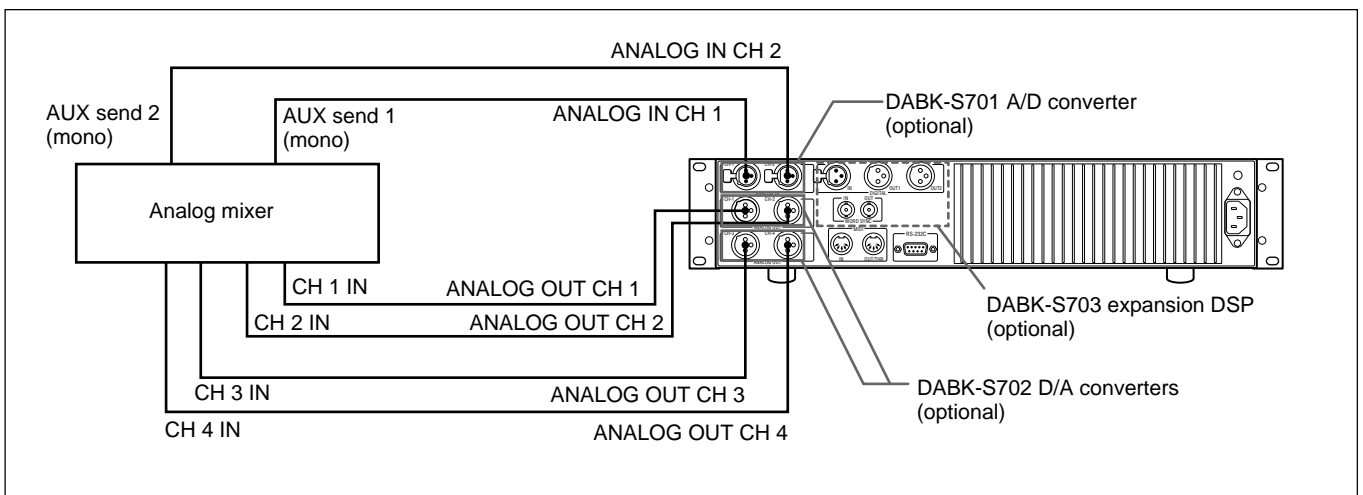
When the mixer is connected above, set the items on the SETUP display as follows:

- Rev mode: Mono (1) in Stereo out 2Fs
- Input Sel: AD
- Clock Sel: Internal 96.0 kHz (or 88.2 kHz)

Split in 4ch out mode

Install the optional DABK-S701 A/D converter, two DABK-S702 D/A converters and DABK-S703 expansion DSP to the DRE-S777 and connect an analog mixer to the ANALOG IN CH 1 and CH 2 connectors and ANALOG OUT CH 1, CH 2, CH 3 and CH 4 connectors.

For the installation of the DABK-S701, DABK-S702 and DABK-S703, ask authorized Sony service personnel.



Setting up

When the mixer is connected above, set the items on the SETUP display as follows:

- Rev mode: Split in 4ch out
- Input Sel: AD
- Clock Sel: Internal 48.0 kHz (or 44.1 kHz)

Rack Mounting

The DRE-S777 can be mounted on a 19-inch EIA standard rack. Use the following mounting parts.

Necessary parts

- **RMM-30 rail/rail bracket set (optional): 1 set**

Front bracket (Part No. 2-142-214-01): 2, Rear bracket (Part No. 2-142-215-01): 2, Screw B5 × 8: 8, Screw PWH4 × 10: 2, Plate nut M4 (Part No. 3-169-990-01): 2

Guide rail (Part No. 2-295-915-11): 2, Screw B4 × 8: 4, Plate nut (C) (Part No. 3-651-812-01): 1

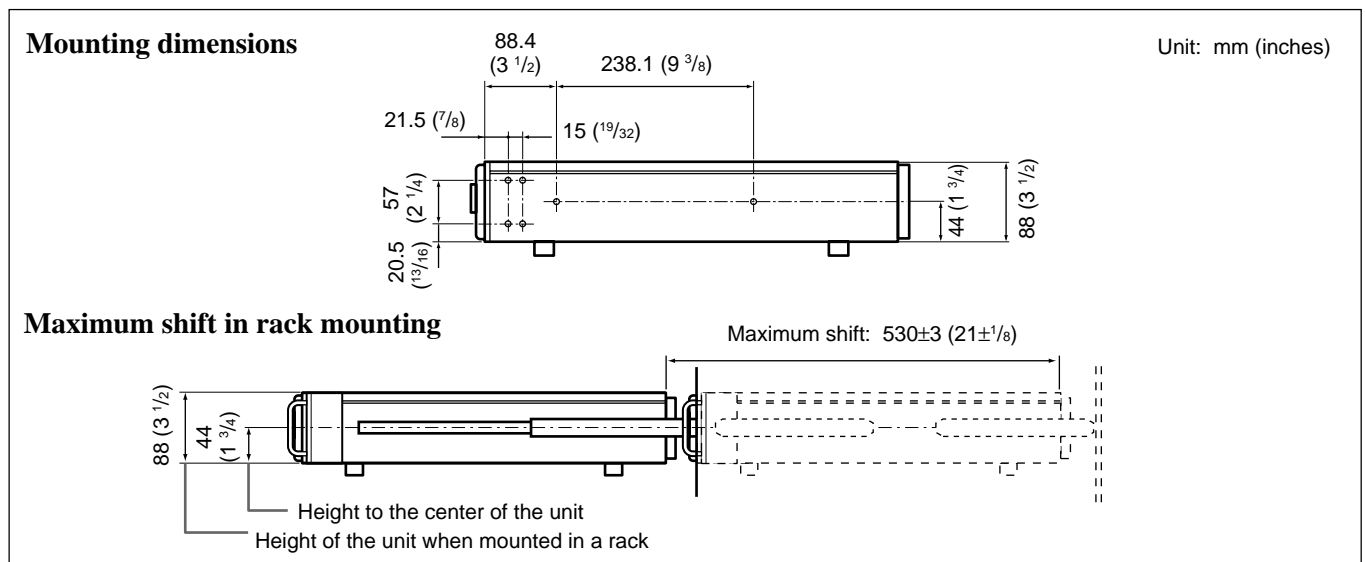
- **Inner member mounting screw B4 × 10 (supplied with this unit): 4**

Notes on mounting

- When mounting the DRE-S777 and other equipment on a rack, installing a ventilation fan is recommended. To prevent heat build-up in the rack, leave sufficient spaces above and below the unit so that the temperature in the rack is lower than 35 °C (95°F).
- When mounting other equipment on the same rack, be sure to leave space equivalent to one unit both above and below of the DRE-S777.
- Keep space of more than 30 mm (1 ³/₁₆ inches) at the rear of the heat sink of the DRE-S777.

Rack mounting

- 1 Attach the guide rails to the right and left sides of the unit using the supplied inner member mounting screws.
- 2 Temporarily attach the front and rear rail brackets to the rack using the screws included in the rail bracket kit.
- 3 While pressing in the stopper of the guide rail, insert the DRE-S777 into the rail brackets attached to the rack.
- 4 Tighten the screws securing the front and rear rail brackets firmly.



Operation

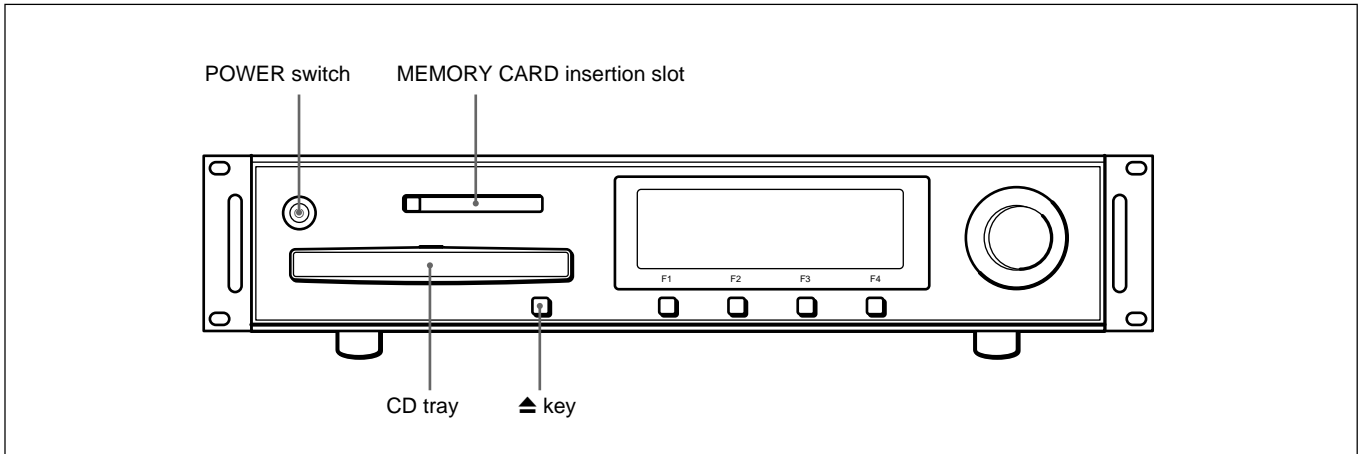
This chapter explains how to operate the DRE-S777 from starting the program to setting and adjusting the REVERB, MIXER and SETUP displays.

Starting the Program

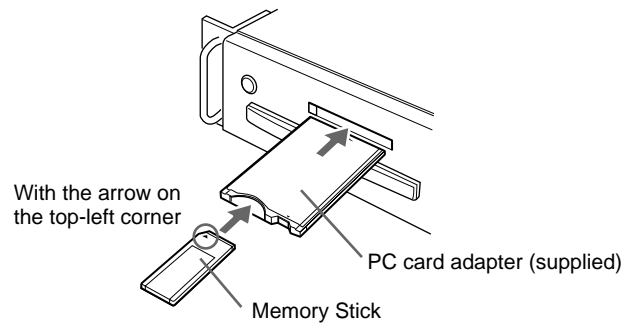
To start the program, insert the supplied or optional CD ROM and the Memory Stick supplied with the CD ROM.

Note

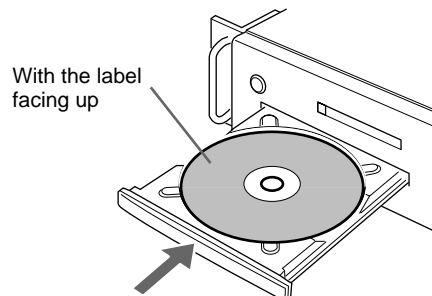
Each Memory Stick holds the licence code corresponding to the program in the CD ROM with which the Memory Stick is supplied. The program in the CD ROM will not start if an incorrect Memory Stick is inserted.



- 1 Insert the Memory Stick into the supplied PC card adapter and insert them into the MEMORY CARD insertion slot of the unit. Use the correct Memory Stick, which is stored in the MEMORY STICK holder on the CD ROM jacket.

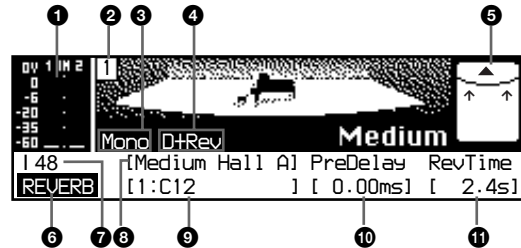


- 2 Press the POWER switch to turn the unit on.
- 3 Press the ▲ key. The CD tray opens.
- 4 Insert the supplied or optional CD ROM, and lightly press the front end of the CD tray or the ▲ key to close the tray.



The unit starts running and the program is loaded from the CD ROM. “Loading CD-ROM” is displayed while loading. The loading is completed within about 3 minutes and the status in which the same CD ROM and Memory Stick were last used is recalled.

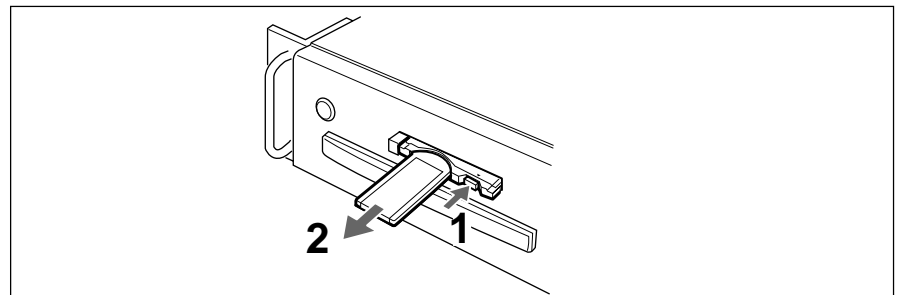
REVERB display



- ❶ Input meter: Shows the level of the active channel only. (e.g. When Rev mode is Mono (1) in Stereo out, it shows the level of channel 1 only. No indication for channel 2.)
- ❷ Cache memory number (1 to 9)
- ❸ Rev mode (set on the SETUP display)
- ❹ Direct/Rev mode (set on the SETUP display)
- ❺ Speaker and mic arrangement for sampling: ▲ (Speaker), + (Omni-directional mic), ↓ or ↑ (Uni-directional mic)
- ❻ REVERB display indicator
- ❼ Clock indicator (set on the SETUP display): I (Internal), W (Word), D (AES (DI)), 44.1 (44.1 kHz), 48 (48.0 kHz), 88.2 (88.2 kHz), 96 (96.0 kHz)
- ❽ Reverb program (set with the F2 key on the REVERB display)
- ❾ Speaker and mic arrangement for sampling: Speaker position C (Center), L (Left), R (Right), Mic position 1 to 6
For details, see the explanation on the CD ROM jacket.
- ❿ Delay time (set with the F3 key on the REVERB display)
- ⓫ Reverb time (set with the F4 key on the REVERB display)

Removing/inserting the Memory Stick

To remove the Memory Stick, press the EJECT button on the PC card adapter. To use the Memory Stick again, reinsert it into the slot of the PC card adapter.



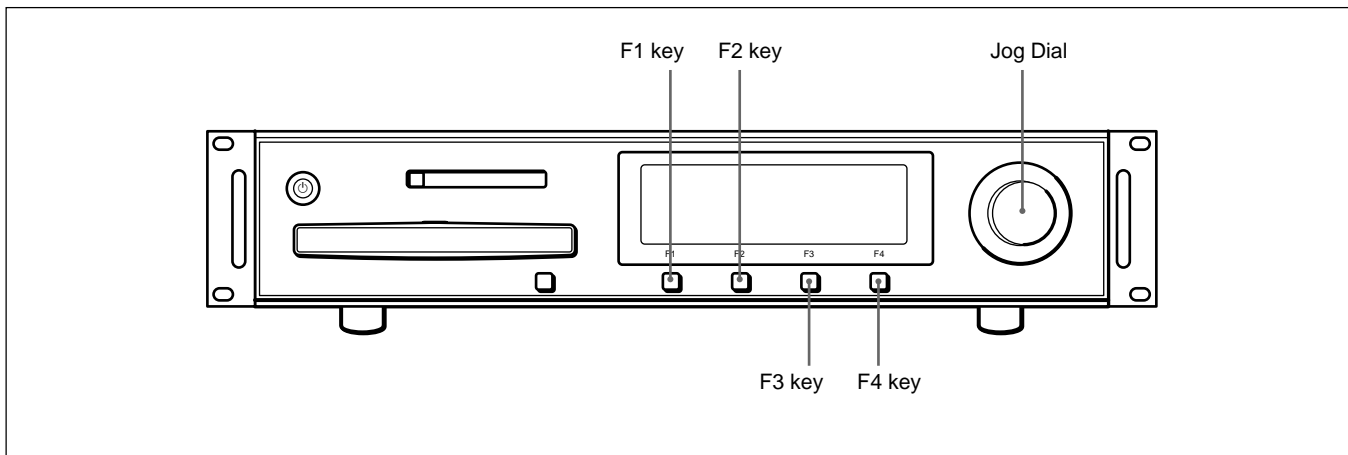
Note

Do not remove the Memory Stick or the PC card adapter during the operation of the DRE-S777. If you did, it might damage the data stored in the Memory Stick. You can remove them in the following cases only:

- when the power is turned off,
- when “Eject CD/MS” is selected on the SETUP display, or
- when “Please change CDROM/MS” or “Please change licence MS” appears.

REVERB Display

Selecting the Reverb Program



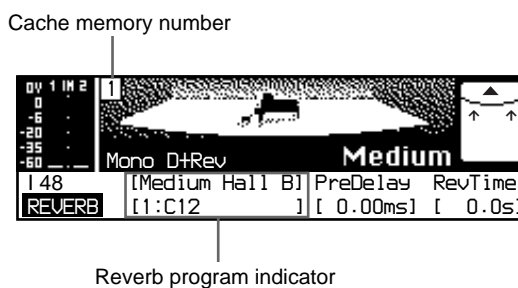
Loading the reverb program from the CD ROM

To load the reverb program recorded on the CD ROM, proceed as follows:

- 1 Press the F1 key to show the REVERB display.



- 2 Press the F2 key.
The F2 key lights in green.
- 3 Turn the jog dial until the desired reverb program is displayed.
The F2 key flashes in green.



For the reverb program options, see the CD ROM jacket.

- 4 Press the F2 key.
The F2 key stops flashing and lights. The selected reverb program is loaded from the CD ROM to the cache memory. "Loading CD-ROM" is displayed while loading. When loading is completed, the F2 key turns off.

To change to another reverb program

Turn the jog dial while the F2 key is lit in green to display another reverb program. Then press the F2 key. The selected reverb program is loaded from the CD ROM.

When “Rev mode” is set to “Split in 4ch out” on the SETUP display

You can select different reverb programs for both CH1-2 and CH3-4. Make sure that the F2, F3 and F4 keys are not lit, and turn the jog dial to display “Split CH1-2” or “Split CH3-4” on the bottom left of the reverb source graphic. Then, press the F2 key until the desired reverb program is displayed.

The delay time and reverb time can also be adjusted for both CH1-2 and CH3-4.

Loading the reverb program from the cache memory

You can store the reverb program loaded from the CD ROM in one of the 9 cache memories. Up to 9 programs can be stored and you can switch from one to another quickly. The content of the cache memory is retained until the power is turned off. To load the reverb program from the cache memory, proceed as follows:

- 1 Press the F1 key to show the REVERB display.



- 2 If the F2, F3 or F4 key is lit or flashing, press the key to turn it off.

- 3 Turn the jog dial until the desired cache memory number (1 to 9) is displayed.

The reverb program stored in the selected cache memory is loaded instantly.

Cache memory number



Note

If no reverb source graphic (e.g., a hall) is displayed, no reverb program is stored to the cache memory you selected. No sound is reproduced with such a cache memory.

To load a reverb program from the CD ROM to an empty cache memory, see “Loading a reverb program from the CD ROM to the selected cache memory” on page 24.

(continued)

If “Please change CDROM/MS” is displayed

Name of the CD ROM to be changed





This message appears if the reverb program of another CD ROM was loaded when the power of the unit was turned off last time. Together with the message, the F2 key flashes.

If “Please change CDROM/MS” appears, proceed as follows:

- 1 Press the F2 key.
The CD tray opens.
- 2 Replace the CD ROM with that indicated on the display and insert the Memory Stick (MS) supplied with that CD ROM.
You need not change the Memory Stick when changing to the CD ROM supplied with this unit if the Memory Stick currently in use is the one supplied with the DASK-S70x series software (optional).
- 3 Press the F2 key again.
The CD tray closes and the reverb program is loaded from the CD ROM.

Note

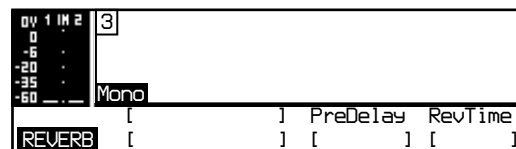
The  key does not function after the program has been started from a CD ROM. Use the  key when inserting a CD ROM immediately after the power is turned on.

Loading a reverb program from the CD ROM to the selected cache memory

When loading a reverb program from the CD ROM, you can select one of 1 to 9 cache memories and load the program to that cache memory. This function is useful when you store a reverb program to an empty cache memory or overwrite the program with a new one.

- 1 Make sure that the F2, F3 and F4 keys are not lit, and turn the jog dial to display the cache memory number to which you want to store a reverb program.

Display example of an empty cache memory



- 2 Press the F2 key.
The F2 key flashes in green.
- 3 Turn the jog dial until the reverb program you want to load is displayed.
- 4 Press the F2 key again.
The reverb program is loaded from the CD ROM.

Adjusting the Pre-delay (PreDelay)

- 1 Press the F3 key when the REVERB display is selected. The F3 key lights in green.
- 2 Adjust the delay time by turning the jog dial. The delay time is adjustable between 0.00 and 500 ms.



Delay time

The unit of the delay time can be selected from ms, cm and feet. See "PreDelay" on the SETUP display on page 33.

To adjust the delay time finely

If you turn the jog dial while holding the F3 key, the value changes $1/50$ to $1/5$ of a normal unit in one step. This allows you to adjust the delay time precisely.

Adjusting the Reverb Time (RevTime)

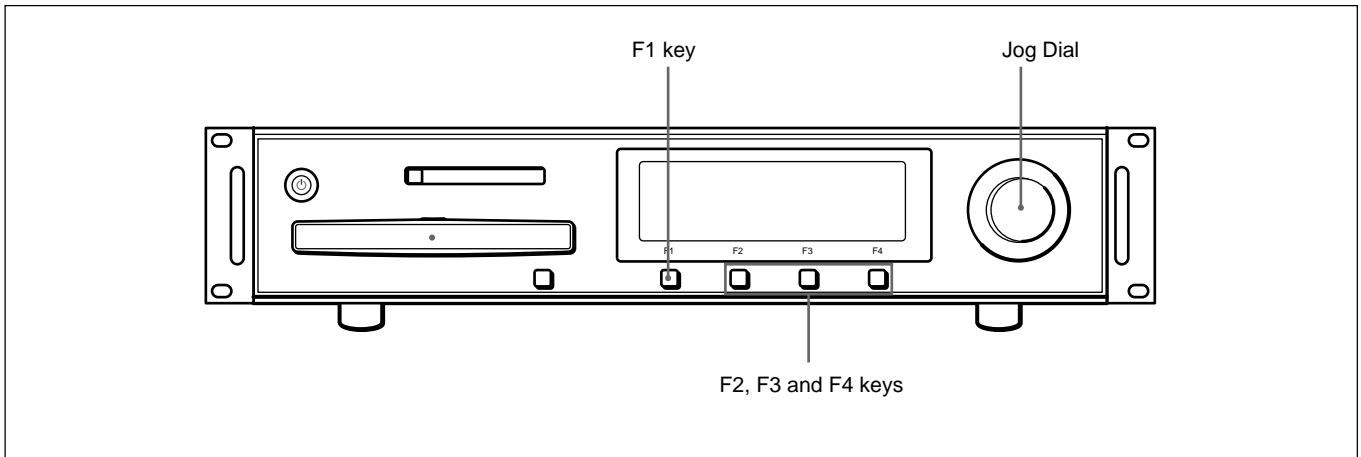
- 1 Press the F4 key when the REVERB display is selected. The F4 key lights in green.
- 2 Adjust the reverb time by turning the jog dial. The reverb time is adjustable between 0.3 s (seconds) and 6.0 s (seconds). The maximum adjustable value differs depending on the current reverb program.



Reverb time

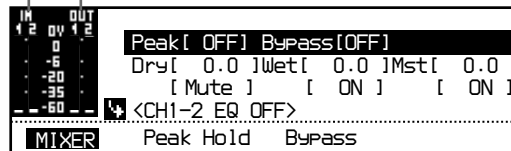
MIXER Display

Basic Operation of the MIXER Display

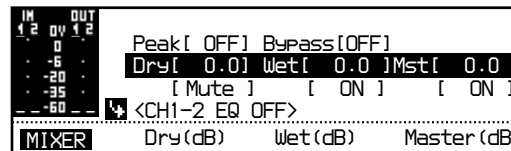


- 1 Press the F1 key to show the MIXER display.

Input meter Output meter



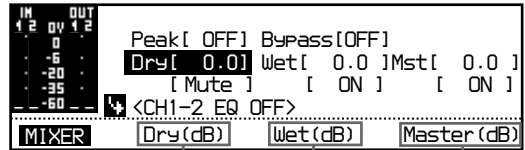
- 2 Turn the jog dial to highlight the menu line including the item you want to set/adjust.



The MIXER display consists of three pages: page 1 (mixer menu), page 2 (equalizer menu) and page 3 (input trim menu). If you turn the jog dial further counterclockwise when the bottom line is highlighted, the next page, if present, appears automatically. If you turn it further clockwise when the top line is highlighted, the previous page appears automatically.

For details on the menu items on each page of the MIXER display, see “The Items Available in the MIXER Display” on page 28.

- 3** Press the F2, F3 or F4 key to select the desired option directly, or highlight the item to be adjusted only. When only one item of the line is highlighted, the pressed function key lights in green. The functions of the F2, F3 and F4 keys currently in action are displayed at the bottom of the display window.



- 4** Turn the jog dial to change the value, if required.

When adjusting the Dry, Wet or Mst level or the Input Trim level, turn the jog dial while holding the F2, F3 or F4 key. The value changes in a step five times greater than normal, allowing you to reach the target value quickly.

To set/adjust another item

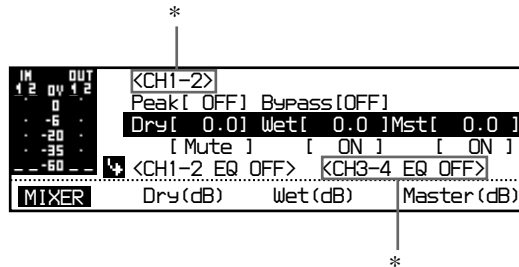
To set/adjust another item in the same line, press the F2, F3 or F4 key corresponding to the desired item. Then repeat from step **3** or **4** above. To set/adjust another item in any other line, first press the F2, F3 or F4 key that is lit in green so that the key turns off. Then repeat from step **2** on the previous page.

When “Rev mode” is set to “Mono in 4ch out” or “Split in 4ch out” on the SETUP display

You can set/adjust the mixer and equalizer functions for CH1-2 and CH3-4 independently. Therefore, the mixer menu and the equalizer menu have two pages each (one for CH1-2 and the other for CH3-4). Make sure that the F2, F3 and F4 keys are not lit, and turn the jog dial to display “CH1-2” or “CH3-4” on the top of the page.

The Items Available in the MIXER Display

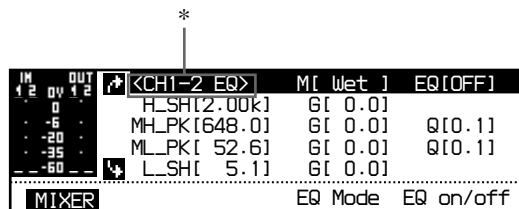
Page 1 (Mixer menu)



* Appears only when the Rev mode is 4ch out.

Item	Setting range	Function
Peak	OFF, ON	Turns on/off the peak hold function of the meter.
Bypass	ON, OFF	Turns on/off the reverb and mixer (bypass).
Dry	OFF, -78.3 to 6.0 dB	Adjusts the original (dry) sound level.
Wet	OFF, -78.3 to 6.0 dB	Adjusts the reverb (wet) sound level.
Mst	OFF, -78.3 to 0.0 dB	Adjusts the master (dry + wet) sound level.
Dry out	ON, Mute	Outputs the original (dry) sound (ON) or mutes it.
Wet out	ON, Mute	Outputs the reverb (wet) sound (ON) or mutes it.
Mst out	ON, Mute	Outputs the master sound (ON) or mutes it.

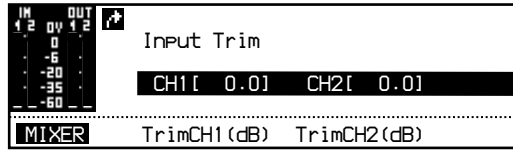
Page 2 (Equalizer menu)



* Appears only when the Rev mode is 4ch out.

Item	Setting range	Function
M	Wet, Dry, Input	Selects the sound to which the equalizer is applied.
EQ	OFF, ON	Turns on/off the equalizer.
H_SH G	2.00 kHz to 19.0 kHz -12 to 12 dB	Adjusts the high center frequency (Hz) and gain (dB) of the shelving-type equalizer.
MH_PK G Q	648.0 Hz to 12.4 kHz -12 to 12 dB 0.1 to 4.0	Adjusts the mid-high range center frequency (Hz), gain (dB) and filter width (Q) of the peaking-type equalizer.
ML_PK G Q	52.6 Hz to 1.00 kHz -12 to 12 dB 0.1 to 4.0	Adjusts the mid-low range center frequency (Hz), gain (dB) and filter width (Q) of the peaking-type equalizer.
L_SH G	5.0 Hz to 420.0 Hz -12 to 12 dB	Adjusts the low center frequency (Hz) and gain (dB) of the shelving-type equalizer.

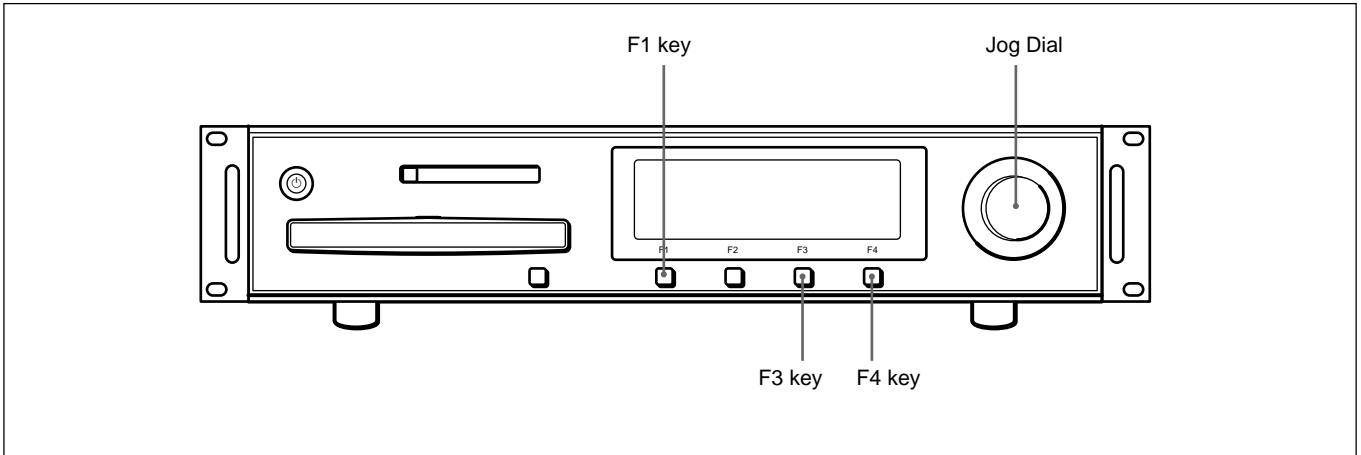
Page 3 (Input trim menu)



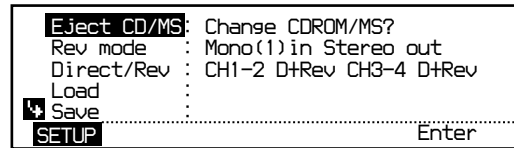
Item	Setting range	Function
CH1	-12.0 to 6.0 dB	Adjusts the input trim level of channel 1.
CH2	-12.0 to 6.0 dB	Adjusts the input trim level of channel 2.

SETUP Display

Basic Operation of the SETUP Display

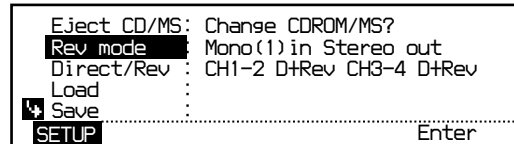


- 1 Press the F1 key to show the SETUP display.



The current settings are displayed.

- 2 Turn the jog dial to highlight the item you want to set/adjust.



The SETUP display consists of three pages. If you turn the jog dial further counterclockwise when the bottom item is highlighted, the next page, if present, appears automatically. If you turn it further clockwise when the top item is highlighted, the previous page appears automatically.

For details on the menu items on each page of the SETUP display, see "The Items Available in the SETUP Display" on page 32.

- 3 Press the F4 key.
The setting options appear in a pop-up window.
The * symbol indicates the current setting.



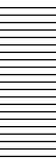
-
- 4** Turn the jog dial to highlight the option you want to set/adjust or to change the value.
 - 5** Press the F4 key.
The set/adjusted option is confirmed and the * symbol appears at the beginning of the option.
If necessary, the data is loaded from the CD ROM and “Loading CD-ROM” is displayed while loading.

To close the pop-up window

Press the F3 key.

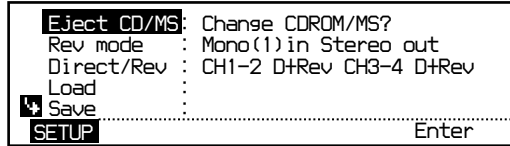
To set/adjust another item

Repeat from step **2** on the previous page.



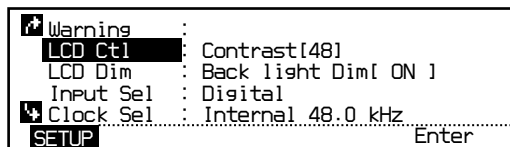
The Items Available in the SETUP Display

Page 1



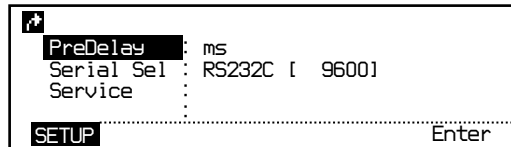
Item	Setting range	Function
Eject CD/MS	—	Use to change the CD ROM and the Memory Stick. <i>For details, see “Changing the CD ROM and the Memory Stick” on page 36.</i>
Rev mode	Mono (1) in Stereo out Stereo in Stereo out Mono (1) in 4ch out Split in 4ch out Mono (1) in Stereo out 2Fs Mono (2) in Stereo out Mono (2) in 4ch out Mono (2) in Stereo out 2Fs AD to DO & DI to DA AD to DO & DI to DA 2Fs	Selects the reverb mode. Read (1) for input channel 1, and (2) for input channel 2. AD to DO & DI to DA means that the A/D converter and D/A converter are connected directly to external equipment without reverb and mixer processing. 2Fs is used to double the sampling frequency to 88.2 kHz or 96 kHz. Note Changing the reverb mode clears the reverb program, delay time and reverb time set on the REVERB display.
Direct/Rev	CH1-2 D+Rev CH3-4 D+Rev CH1-2 D+Rev CH3-4Rev CH1-2 Rev CH3-4 D+Rev CH1-2 Rev CH3-4 Rev	Sets the sound to be reproduced in each channel. Read D for direct sound, and Rev for reverberation. CH3-4 is effective only when the reverb mode is Mono (1) in 4ch out, Mono (2) in 4ch out or Split in 4ch out. <i>For details, see “Reverberation and delay adjustment” on page 37.</i>
Load	01 to 99	Assigns the memory number and loads the setup from the Memory Stick. <i>For details, see “Storing the Reverb Setup in the Memory Stick/Recalling it” on page 34.</i>
Save	08 to 99	Assigns the memory number and stores the setup in the Memory Stick. <i>For details, see “Storing the Reverb Setup in the Memory Stick/Recalling it” on page 34.</i>

Page 2



Item	Setting range	Function
Warning	—	Describes an error of the digital input signal. Validity Error: Error of the validity bit Slipped Sample: The input signal is not synchronized with the clock. CRC Error: Error of the CRC bit Parity Error: Error of the parity bit Bi-phase Coding Error: Error of bi-phase coding Unlock: Digital input signal is not locked.
LCD Ctl	Contrast 0 to 63	Adjusts the contrast of the display. The adjusted value is directly reflected on the display.
LCD Dim	Back light Dim ON, OFF	Turns on/off the dimmer of the display. The setting is directly reflected on the display.
Input Sel	Digital AD	Selects the input. Digital: Input from the DIGITAL IN connector AD: Input from the ANALOG IN connector of the DABK-S701 A/D converter
Clock Sel	Internal Word AES (DI) 44.1 kHz/88.2 kHz 48.0 kHz/96.0 kHz	Selects the clock format. Select one of the clock signals: Internal, Word or AES (DI), and one of the sampling frequencies: 44.1 kHz/88.2 kHz* or 48.0 kHz/96.0 kHz*. Internal: Clock signal from the built-in quartz oscillator Word: Word sync signal input to the WORD SYNC IN connector AES (DI): Clock signal included in the signal input to the DIGITAL IN connector * 88.2 kHz and 96.0 kHz are displayed only when the Rev mode is Mono in Stereo out 2Fs.

Page 3



Item	Setting range	Function
PreDelay	ms cm feet	Selects the unit for the Pre-delay adjustment.
Serial Sel	MIDI ch 1 to16 MIDI Through RS232C 9600, 19200, 38400, 57600, 115200 Disable	Selects the serial interface. MIDI ch 1 to 16, MIDI Through: MIDI interface RS232C: RS-232C interface Select the baud rate. Disable: No interface is used. Note MIDI does not function with Version 1.0.
Service	CD-ROM Test DSP Test Display Test Memory Card Test MIDI Test/RS232C Test	Selects to perform the self-diagnostic test. (for service personnel only)

Storing the Reverb Setup in the Memory Stick/Recalling it

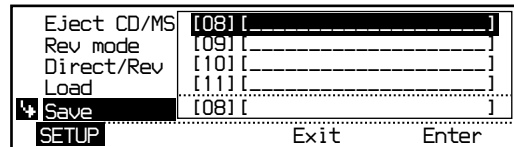
You can store the setups for the reverb program loaded to the cache memory in the Memory Stick supplied with the CD ROM. Memory numbers 08 to 99 can be used for storing the reverb setups you adjusted. (Memory numbers 01 to 07 come with the factory presets.) You can set a memory label of up to 20 characters to each memory number.

Reverb setup data which can be stored in the Memory Stick

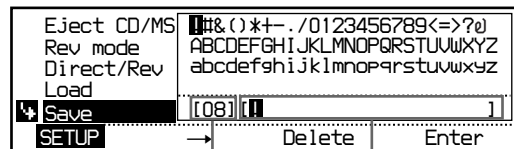
- PreDelay and RevTime data on the REVERB display
- Set or adjusted data of all items on the MIXER display
- Set or adjusted data of all items on the SETUP display

Storing the reverb setup in the Memory Stick

- 1 On the SETUP display, turn the jog dial to highlight “Save.”
- 2 Press the F4 key.
The memory list is displayed.



- 3 Select the desired memory number 08 to 99 using the jog dial, and press the F4 key.
The memory label setting menu is displayed.

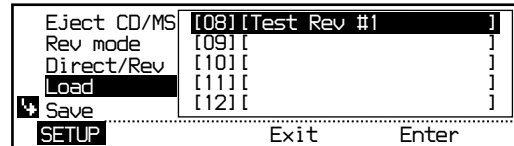


Memory number Memory label input area

- 4 Set a memory label of up to 20 characters.
 - To input a character:** Select the desired character using the jog dial and press the F2 key. The cursor in the memory label input area moves to the next position.
 - To insert a space:** Press the F2 key, or select space at the right end of the first line of the character map (next to @).
 - To delete an input character:** Press the F2 key repeatedly to highlight the character you want to delete, then press the F3 key.
- 5 Press the F4 key.
“Really Save?” message appears.
- 6 To store, press the F4 key.
The memory list display returns.
To abort storage, press the F3 key. The memory label setting menu closes.

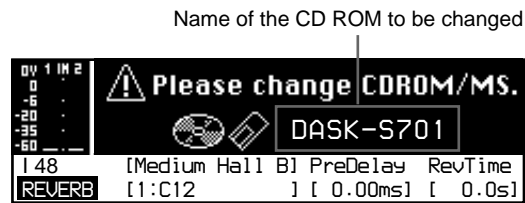
Recalling the reverb setup from the Memory Stick

- 1 On the SETUP display, turn the jog dial to highlight “Load.”
- 2 Press the F4 key.
The memory list is displayed.



- 3 Select the desired memory number 08 to 99 using the jog dial, and press the F4 key.
The data stored in the selected memory number is loaded from the Memory Stick.



If “Please change CDROM/MS” is displayed



This message appears on the REVERB display if the setup you recalled from the Memory Stick is the one for the reverb program of another CD ROM. Together with the message, the F2 key flashes.
If “Please change CDROM/MS” appears, proceed as follows:

- 1 Press the F2 key.
The CD tray opens.
- 2 Replace the CD ROM with that indicated on the display and insert the Memory Stick supplied with that CD ROM.
You need not change the Memory Stick when changing to the CD ROM supplied with this unit if the Memory Stick currently in use is the one supplied with the DASK-S70x series software (optional).
- 3 Press the F2 key again.
The CD tray closes and the reverb program is loaded from the CD ROM.

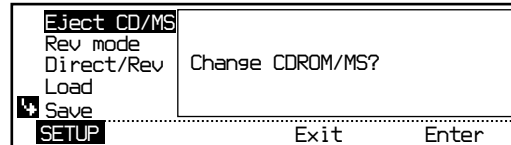
Note

The  key does not function after the program has been started from a CD ROM. Use the  key when inserting a CD ROM immediately after the power is turned on.

Changing the CD ROM and the Memory Stick

To change the CD ROM without turning off the power, proceed as follows:

- 1 On the SETUP display, turn the jog dial to highlight “Eject CD/MS.”
- 2 Press the F4 key.
The following pop-up window opens.



- 3 Press the F4 key again.
The CD tray opens.
- 4 Change the CD ROM and insert the Memory Stick supplied with a CD ROM now in use.
You need not change the Memory Stick when changing to the CD ROM supplied with this unit if the Memory Stick currently in use is the one supplied with the DASK-S70x series software (optional).
- 5 Press the F3 key.
The CD tray closes and the reverb program is loaded from the CD ROM.

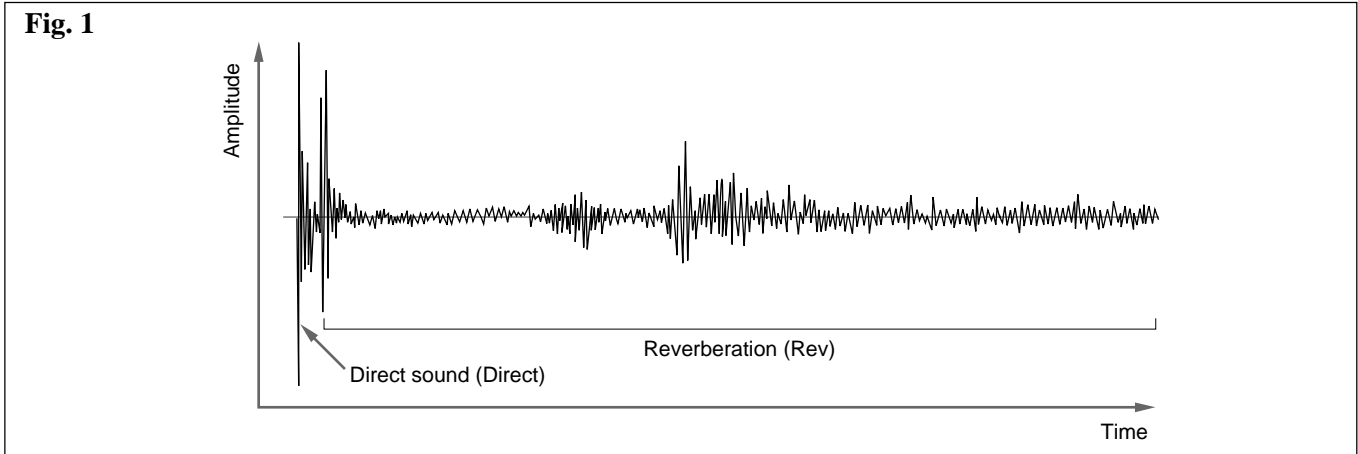
Note

The ▲ key does not function after the program has been started from a CD ROM. Use the ▲ key when inserting a CD ROM immediately after the power is turned on.

Reverberation and Delay Adjustment

The direct sound (Direct) reaches a microphone directly from a speaker. And the reverberation (Rev) is the indirect sound reflected by a wall, floor, etc. (Fig. 1).

The reverb program sampled in an actual acoustic space naturally includes both the direct sound and reverberations. You can reproduce both the direct sound and reverberations or the reverberations only by setting the “Direct/ Rev” item on the SETUP display: “Direct + Rev” for the direct sound and reverberations, or “Rev” for the reverberations only.



Secondly, the delay time corresponds to the distance between a microphone and a speaker. It differs according to the position of the microphone.

For example, when microphones 1 and 2, and 5 and 6 are arranged as in Fig. 2, the waveforms starting from the speaker position are shown in Fig. 3.

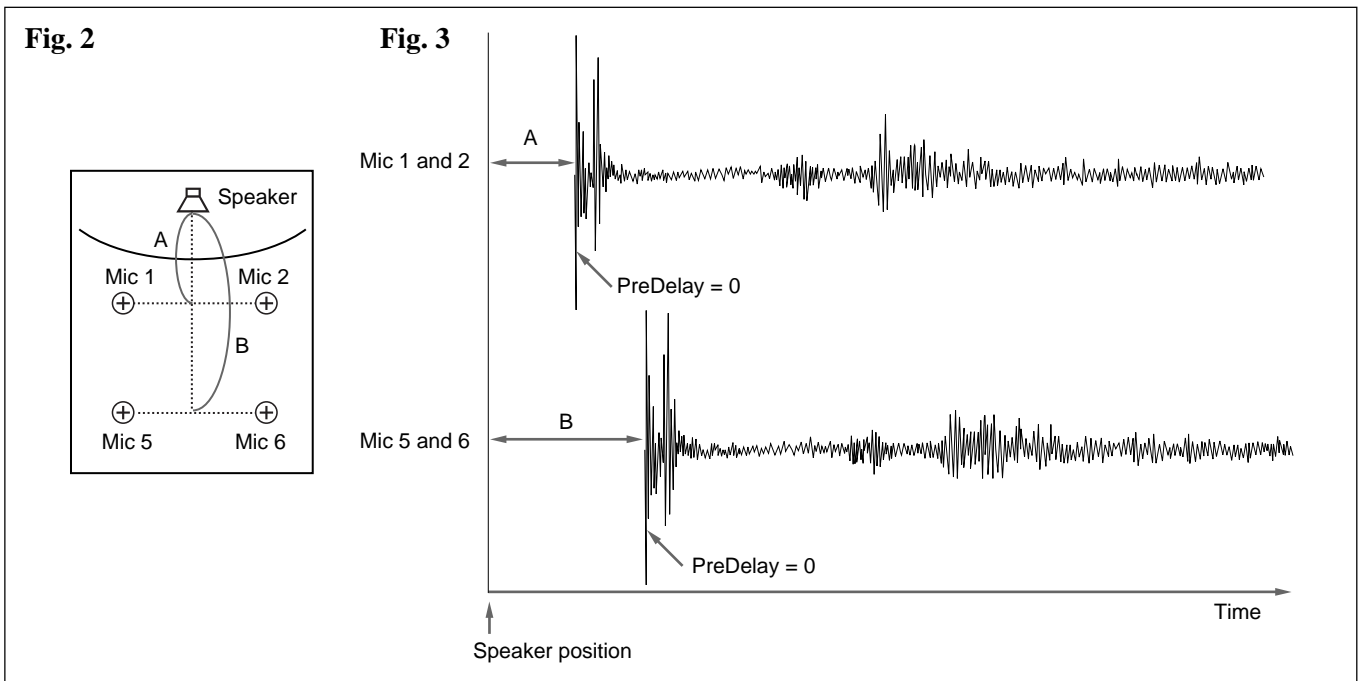
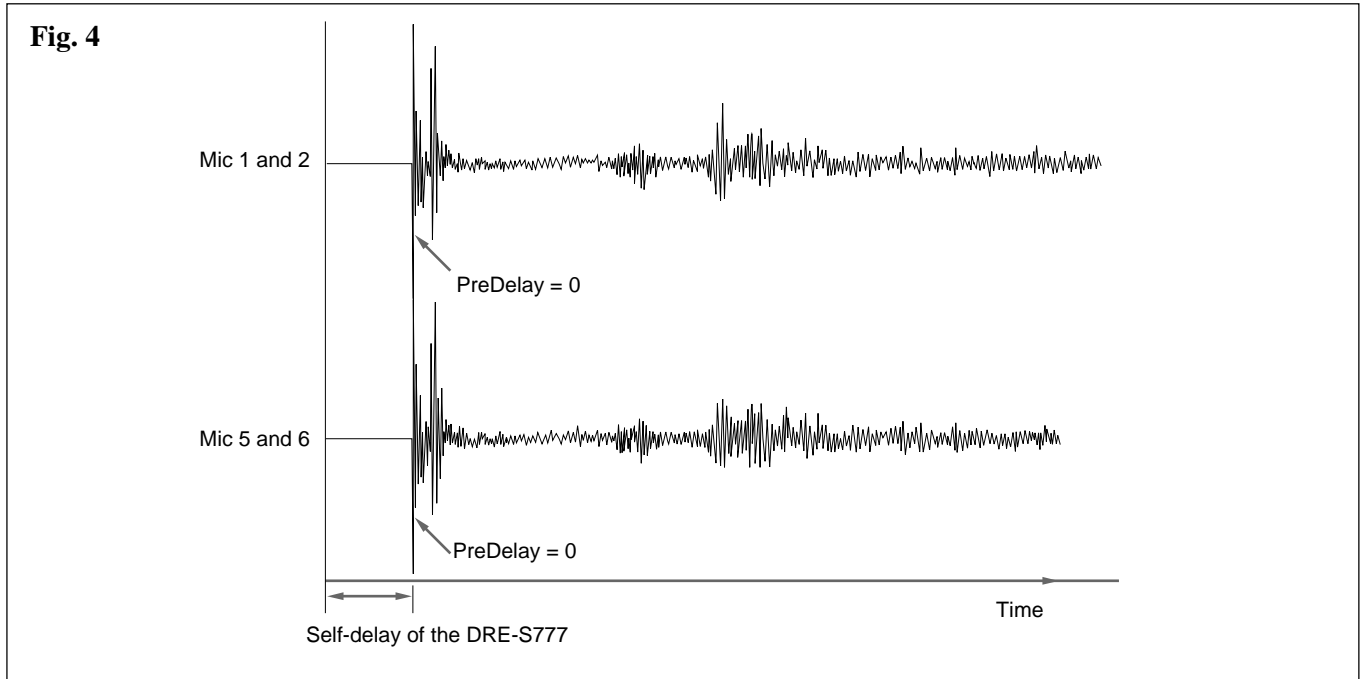


Fig. 4 shows how the DRE-S777 reproduces the reverb program sampled with the arrangement shown in Fig. 2 when “Rev mode” is set to “Mono in 4ch out” and “PreDelay” on the REVERB display is set to 0 ms.



To process the waveforms in Fig. 4 to output the same waveforms as those in Fig. 3, change the settings as follows:

- 1 On the SETUP display, set “Rev mode” to “Split in 4ch out.”
- 2 Display “Split CH1-2” on the REVERB display, select the reverb program sampled from microphones 1 and 2, and set “PreDelay” to A (ms).
- 3 Display “Split CH3-4” on the REVERB display, select the reverb program sampled from microphones 5 and 6, and set “PreDelay” to B (ms).

Self-delay of the DRE-S777

When “PreDelay” is set to 0.00 and “Direct + Rev” is selected, the delay time caused by the DRE-S777 itself is about 270 words for digital input/output, and about 370 words for analog input/output.

Maintenance and Other

This chapter provides advice on troubleshooting, maintenance and specifications. Refer to it when necessary.

Error Messages

If an error occurs, the error message appears in the display window or the F1 key lights or flashes in red.

Error message/F1 key	Cause	Countermeasure
Licence code error. Please change licence MS.	The license code in the CD ROM does not coincide with that in the Memory Stick. (The F2 key flashes together with this error message.)	Change the Memory Stick to the correct one and press the F2 key.
SYNC UNLOCK	When Word Sync or DI Sync is selected, the clock signal frequency is outside the range between -12.5 % and +8 % of the sampling frequency. (The F1 key lights in red together with this error message.)	Input an appropriate clock signal.
F1 key flashes in red.	An error occurs with the digital input signal.	Confirm the error description in "Warning" item on page 2 of the SETUP display (<i>see page 33</i>), and input the correct signal.
CD ROM ERROR	The disc content cannot be read due to fingerprints or scratches.	Clean the fingerprints or dust with a cleaning cloth. If the problem is not resolved, changing the disc is necessary. Consult your authorized Sony dealer.
PC CARD RRROR	Reading data from the Memory Stick or writing data is not possible.	Unlock the erasure prevention switch at the rear of the Memory Stick. If the Memory Stick is damaged, changing the Memory Stick is necessary. Consult your authorized Sony dealer.
Please change CDROM/MS	The reverb program of another CD ROM is included in the loaded setup.	Change the CD ROM and Memory Stick to the correct ones, and press the F2 key (<i>see page 24 or 35</i>).
Please insert MS.	No Memory Stick is inserted.	Insert a Memory Stick and press the F2 key.
Mismatched Options	The optional board required for the loaded data is not installed.	Install the optional DABK-S701 or DABK-S703 as required.

Precautions

On safety

- Operate the unit only with a power source as specified in the “Specifications” section.
- The nameplate indicating operating voltage, power consumption, etc., is located at the rear of the unit.
- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Do not drop or place heavy objects on the power cord. If the power cord is damaged, turn off the power immediately. It is dangerous to use the unit with a damaged power cord.
- Unplug the unit from the wall outlet if it is not to be used for several days or more.
- Disconnect the power cord from the AC outlet by grasping the plug, not by pulling the cord.
- The socket-outlet should be near the equipment and should be easily accessible.

On installation

- Allow adequate air circulation to prevent internal heat build-up.
Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

On cleaning

To keep the unit looking brand-new, periodically clean it with a mild detergent solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers since they will damage the cabinet. As a safety precaution, unplug the unit before cleaning it.

On repacking

Do not throw away the carton and packing materials. They make an ideal container with which to transport the unit. When shipping the unit to another location, repack it as illustrated on the carton.

On use of the Memory Stick

- Do not remove the Memory Stick or the PC card adapter during the operation of the DRE-S777. If you did, it might damage the data stored in the

Memory Stick. You can remove them only in the following cases:

- when the power is turned off,
- when “Eject CD/MS” is selected on the SETUP display, or
- when “Please change CDROM/MS” or “Please change licence MS” appears.
- Use the Memory Stick supplied with this unit or those supplied with optional Sampling Digital Software CD ROMs only. If the Memory Stick is damaged, consult your authorized Sony dealer.
- Do not set the erasure prevention switch at the rear of the Memory Stick to the LOCK position. If you did, writing and deleting the data on the Memory Stick could not be performed.
- Do not delete the data in the Memory Stick using a personal computer, etc. The operation of such a Memory Stick is not guaranteed.

On handling the Memory Stick

- Do not touch the connector at the rear of the Memory Stick with hand or metal.
- Do not stick paper or tape on the surface of the Memory Stick. Only the specified label is suitable.
- Avoid inserting dust or foreign objects into the Memory Stick insertion slot or the connector on the PC card adapter.
- Do not expose the Memory Stick to mechanical shock or bend or drop it.
- Do not disassemble or modify the Memory Stick.
- Avoid use or storage of the Memory Stick in a place subject to heat sources, direct sunlight, excessive dust, corrosion, static noise or electrical noise.
- Carry or store the Memory Stick in its holder which is attached to the CD ROM jacket.

On handling the CD ROM

- Handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.
- Do not expose the disc to direct sunlight, heat sources or moisture.
- After using, store the disc in its case.
- Clean fingerprints or dust accumulated on the disc with a cleaning cloth wiping from the center out.
- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.

If you have any questions about this unit, contact your authorized Sony dealer.

Specifications

Audio

Reverb algorithm	Real Impulse Response
Number of standard reverb	7
Reverb parameters	2
Reverb time	0.3 to 6 seconds (max.)
Pre-delay time	0 to 0.5 seconds
Sampling frequency	44.1/48 kHz (standard) 88.2/96 kHz (optional)
External sync	Word sync/DI sync -12.5 % to +8 %, deviation tracing
Equalizer	4 bands HIGH: 2.0 kHz to 19.0 kHz, ± 12 dB, shelving-type MID HIGH: 648.0 Hz to 12.4 kHz, ± 12 dB, peaking-type MID LOW: 52.6 Hz to 1.00 kHz, ± 12 dB, peaking-type LOW: 5.1 Hz to 420.0 Hz, ± 12 dB, shelving-type

Input/Output

Digital input	DIGITAL IN (1) Equivalent to XLR-3-31 type
Digital output	DIGITAL OUT 1, DIGITAL OUT 2 (2) Equivalent to XLR-3-32 type
Audio interface	AES/EBS 24 bit (2 Fs: high sampling mode) Monaural input/2 channel outputs (standard) 2 channel inputs/2 channel outputs (optional) 4 channel outputs (optional) A/D 2 channels (optional) D/A 2 channels (optional, 4 channels max.)
Control interface	MIDI (Not supported with Version 1.0)

A/D converter DABK-S701 (optional)

Input impedance	600 ohms or 10 kilohms selectable
Standard level	0 or +4 dBu selectable
Maximum level	+24 dBu
CMRR	More than 50 dB (1 kHz)
Dynamic range	110 dB
Signal-to-noise ratio	110 dB
T.H.D.	0.005 % (-20 dB Fs)
Crosstalk	90 dB (8 kHz)
Frequency response	20 Hz to 20 kHz +0.2 dB/-0.3 dB (Fs = 44.1 kHz, 48 kHz) 20 Hz to 40 kHz +0.2 dB/-0.3 dB (Fs = 88.2 kHz, 96 kHz)

D/A converter DABK-S702 (optional)

Output impedance	Less than 50 ohms
Standard level	0 or +4 dBu (600 ohms) selectable
Maximum level	+24 dBu (600 ohms)
Dynamic range	110 dB
Signal-to-noise ratio	110 dB
T.H.D.	0.015 % (-20 dB Fs)
Crosstalk	90 dB (8 kHz)
Frequency response	20 Hz to 20 kHz +0.2 dB/-0.3 dB (Fs = 44.1 kHz, 48 kHz) 20 Hz to 40 kHz +0.5 dB/-0.6 dB (Fs = 88.2 kHz, 96 kHz)

General

Power requirements	120 V AC, 60 Hz (U.S.A. and Canada) 220 - 240 V AC, 50/60 Hz (Europe)
Dimensions	481.5 × 110 × 514.5 mm (w/h/d) (19 × 4 ³ / ₈ × 20 ³ / ₈ inches) incl. projecting parts and controls
Mass	Approx. 15 kg (33 lb 1 oz) with all optional boards installed
Power consumption	60 W (U.S.A. and Canada) 55 W (Europe) With all optional boards installed

Peak inrush current

- (1) Power ON, current probe method: 20 A (240 V)
- (2) Hot switching inrush current, measured in accordance with European standard EN55103-1 10 A (230 V)

Operating temperature

5 °C to 40 °C (41 °F to 104 °F)

Performance guarantee temperature

10 °C to 35 °C (50 °F to 95 °F)

Storage temperature

-20 °C to +60 °C (-4 °F to +140 °F)

Laser diode properties

Material: GaAlAs
Wave length: 780 nm
Emission duration: Continuous
Laser output power: Max. 800 uW
Beam divergence: (H) 12° +4.5°/
-4°, (V) 24° +6.5°/-2°

Daten der Laserdiode

Material: GaAlAs
Wellenlänge: 780 nm
Emissionsdauer: Kontinuierlich
Laser-Ausgangsleistung: Max.
800 uW
Strahldivergenz: (H) 12° +4,5°/
-4°, (V) 24° +6,5°/-2°

Laserdiode data

Materiale: GaAlAs
Bølgelængde: 780 nm
Strålingsvarighed: Kontinuerlig
Lasereffekt: Max. 800 uW
Strålens divergens: (H) 12° +4,5°/
-4°, (V) 24° +6,5°/-2°

Laserdiodens egenskaper

Material: GaAlAs
Våglängd: 780 nm
Strålningstid: utan avbrott
Laseruteffekt: Max. 800 uW
Strålens divergens: (H) 12° +4,5°/
-4°, (V) 24° +6,5°/-2°

Laserdiodens egenskaper

Materiale: GaAlAs
Bølgelengde: 780 nm
Emisjonslengde: Kontinuerlig
Laser utgangseffekt: Max. 800 uW
Stråledivergens: (H) 12° +4,5°/
-4°, (V) 24° +6,5°/-2°

Supplied accessories

CD ROM (1)
PC card adapter (1)
Memory Stick (1)
Operating Instructions (1)

Optional accessories

A/D converter DABK-S701
D/A converter DABK-S702
Expansion DSP DABK-S703
Sampling Reverb Software DASK-S70x series

Design and specifications are subject to change without notice.

Sony **on** line

<http://www.world.sony.com/>

Printed on recycled paper