

TASCAM[®]
TEAC PROFESSIONAL

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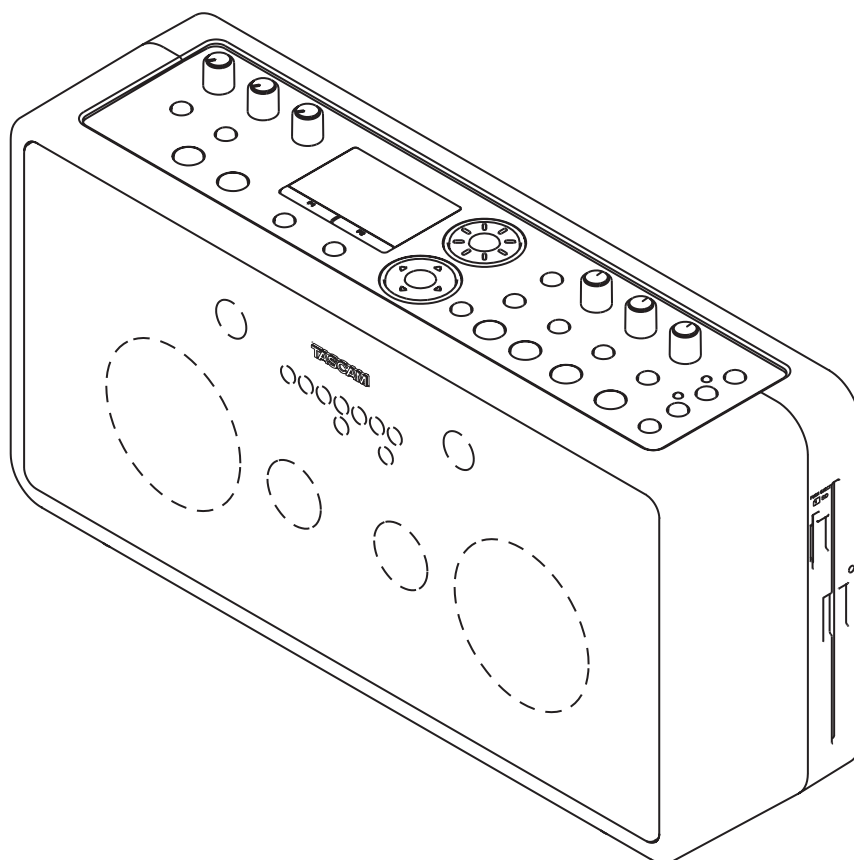
BB-1000CD

Portable CD/SD Recorder

BB-800

Portable SD Recorder

OWNER'S MANUAL



IMPORTANT SAFETY PRECAUTIONS



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



The lightning flash with arrowhead symbol, within 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.



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

For U.S.A. _____

TO THE USER

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 instruction manual, 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.

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

CAUTION

Changes or modifications to this equipment not expressly approved by TEAC CORPORATION for compliance could void the user's authority to operate this equipment.

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

This appliance has a serial number located on the rear panel. Please record the model number and serial number and retain them for your records.

Model number _____

Serial number _____

产品有毒有害物质或元素的名称及含量

机种: BB-1000CD/BB-800		有毒有害物质或元素					
	品名	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
1	CHASSIS部份	○	○	○	○	○	○
2	PCB Assy部份	×	○	○	○	○	○
3	线材部份	○	○	○	○	○	○
4	附属品部份	×	○	○	○	○	○
7	SEAL部份	○	○	○	○	○	○
8	包装部份	○	○	○	○	○	○

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

(针对现在代替技术困难的电子部品及合金中的铅)

IMPORTANT SAFETY INSTRUCTIONS

- 1 Read these instructions.
 - 2 Keep these instructions.
 - 3 Heed all warnings.
 - 4 Follow all instructions.
 - 5 Do not use this apparatus near water.
 - 6 Clean only with dry cloth.
 - 7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
 - 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
 - 9 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
 - 10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
 - 11 Only use attachments/accessories specified by the manufacturer.
 - 12 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Do not expose this apparatus to drips or splashes.
 - Do not place any objects filled with liquids, such as vases, on the apparatus.
 - Do not install this apparatus in a confined space such as a book case or similar unit.
 - The apparatus draws nominal non-operating power from the AC outlet with its POWER or STANDBY/ON switch not in the ON position.
 - The apparatus should be located close enough to the AC outlet so that you can easily grasp the power cord plug at any time.
 - The main plug is used as the disconnect device, the disconnect device shall remain readily operable.
 - If the product uses batteries (including a battery pack or installed batteries), they should not be exposed to sunshine, fire or excessive heat.
 - CAUTION for products that use replaceable lithium batteries: there is danger of explosion if a battery is replaced with an incorrect type of battery. Replace only with the same or equivalent type.
 - Caution should be taken when using earphones or headphones with the product because excessive sound pressure (volume) from earphones or headphones can cause hearing loss.



- 13 Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

IMPORTANT SAFETY PRECAUTIONS

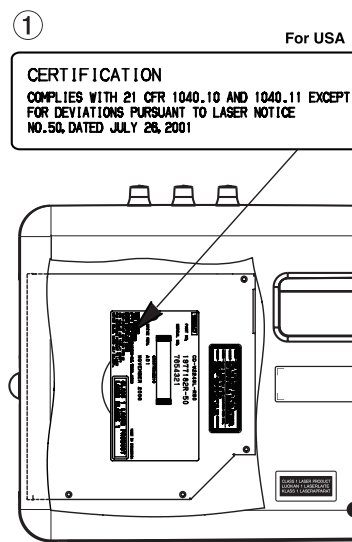
■ CAUTIONS ABOUT BATTERIES

This product uses batteries. Misuse of batteries could cause a leak, rupture or other trouble. Always abide by the following precautions when using batteries.

- Never recharge non-rechargeable batteries. The batteries could rupture or leak, causing fire or injury.
- When installing batteries, pay attention to the polarity indications (plus/minus (+/-) orientation), and install them correctly in the battery compartment as indicated. Putting them in backward could make the batteries rupture or leak, causing fire, injury or stains around them.
- When throwing used batteries away, follow the disposal instructions indicated on the batteries and the local disposal laws. When you store or dispose batteries, isolate their terminals with insulation tape or something like that to prevent them from contacting other batteries or metallic objects.
- Do not use batteries other than those specified. Do not mix and use new and old batteries or different types of batteries together. The batteries could rupture or leak, causing fire, injury or stains around them.
- Do not carry or store batteries together with small metal objects. The batteries could short, causing leak, rupture or other trouble.
- Do not heat or disassemble batteries. Do not put them in fire or water. Batteries could rupture or leak, causing fire, injury or stains around them.
- If the battery fluid leaks, wipe away any fluid on the battery case before inserting new batteries. If the battery fluid gets in an eye, it could cause loss of eyesight. If fluid does enter an eye, wash it out thoroughly with clean water without rubbing the eye and then consult a doctor immediately. If the fluid gets on a person's body or clothing, it could cause skin injuries or burns. If this should happen, wash it off with clean water and then consult a doctor immediately.
- The unit power should be off when you install and replace batteries.
- Remove the batteries if you do not plan to use the unit for a long time. Batteries could rupture or leak, causing fire, injury or stains around them. If the battery fluid leaks, wipe away any fluid on the battery compartment before inserting new batteries.
- Small children may mistakenly swallow a lithium coin battery and it is very dangerous. Keep the battery and the remote control out of the reach of small children. In the event a battery is swallowed, immediately consult a physician.

■ CAUTIONS ABOUT LASER RADIATION

This product has been designed and manufactured according to FDA regulations "title 21, CFR, chapter 1, subchapter J, based on the Radiation Control for Health and Safety Act of 1968", and is classified as a class 1 laser product. There is no hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings. The label required in this regulation is shown at ①.



CAUTION

- **DO NOT REMOVE THE PROTECTIVE HOUSING USING A SCREWDRIVER.**
- **USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**
- **IF THIS PRODUCT DEVELOPS TROUBLE, CONTACT YOUR NEAREST QUALIFIED SERVICE PERSONNEL, AND DO NOT USE THE PRODUCT IN ITS DAMAGED STATE.**
- **CLASS 1M INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.**

Optical pickup

Type	: HOP-6201TC
Manufacturer	: Hitachi Media Electronics Co.,Ltd.
Laser output	: Less than 75 mW on the objective lens (record)
Wavelength	: 777 to 787 nm

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1 – Introduction

Thank you very much for purchasing the TASCAM BB-1000CD/BB-800 Portable CD/SD Recorder. Please read this Owner's Manual carefully in order to maximize your use of all the unit's features. We hope that you will enjoy using this recorder for many years to come. After you have finished reading this manual, keep it in a safe place.

Main features

- Portable CD/SD recorder (BB-1000CD)
- Portable SD recorder (BB-800)
- Built-in speakers and microphones
- Recording directly to an SD (SDHC) card possible (WAV or MP3 format)
- Long duration recording possible (MP3 format)
- Recording directly to a CD-R/RW (CD-DA format) possible (BB-1000CD only)
- Easy operation with knobs and keys
- Changing playback speed without changing pitch possible
- Changing playback pitch without changing speed possible
- Instrument tuner functions
- Metronome functions
- 5 W + 5 W digital amplifier
- Two pairs of stereo microphones on the front and back allow 360-degree recording
- Mix and record input sounds with playback (overdubbing)
- Copying from audio CDs to SD cards (WAV or MP3 format) possible (BB-1000CD only)
- Copying files from SD cards to audio CDs possible (BB-1000CD only)
- Duplicating audio CDs possible (BB-1000CD only)
- Power with included AC adaptor or 8 AA batteries
- Remote control unit (RC-BB1000) included
- 2 XLR mic input jacks can provide 48V phantom power for condenser microphones
- Stereo pair of RCA line input jacks for connecting external devices
- Stereo pair of RCA line output jacks for connecting external devices
- Sound from connected external microphones can be output through speakers

Differences between BB-1000CD and BB-800 models

The BB-1000CD has all the features of the BB-800 and adds CD recording functions. In order to utilize these features, the BB-1000CD has additional CD and SD

selection keys, as well as a CD eject key. In addition to recording to CDs, the BB-1000CD can also copy files between CDs and SD cards, including allowing the duplication of CDs for backup.

Included items

The items included with the product are listed below. Take care when opening the package to avoid damaging the items. Keep the packaging materials for transportation in the future.

Please contact the store where you purchased this unit if any of these items are missing or have been damaged during transportation.

- Main unit 1
- PS-1225LAC adaptor 1
- RC-BB1000 Wireless remote control 1
- Coin battery (CR2025) for remote 1
- Warranty card 1
- Owner's manual (this document) 1

Note about this manual

This manual uses the following conventions.

- "SD memory cards" are called "SD cards."
- Keys and connectors on the unit and external devices and messages on the display are written like this: **MENU**.
- The CD-DA format is also called the "audio CD" format. In addition, a disc on which tracks are recorded in the audio CD format is called an "audio CD."
- Additional information is introduced as needed in the following categories.

TIP

This is a useful hint about ways to use the unit.

NOTE

A note explains actions in special situations and supplemental information.

CAUTION

These instructions should be followed to avoid injury, damage to the unit or other equipment, or loss of recording data.

Intellectual property rights

- TASCAM is a registered trademark of TEAC Corporation.

- SDHC Logo is a trademark.



- Supply of this product does not convey a license nor imply any right to distribute MPEG Layer-3 compliant content created with this product in revenue-generating

1 – Introduction

broadcast systems (terrestrial, satellite, cable and/or other distribution channels), streaming applications (via Internet, intranets and/or other networks), other content distribution systems (pay-audio or audio-on-demand applications and the like) or on physical media (compact discs, digital versatile discs, semiconductor chips, hard drives, memory cards and the like). An independent license for such use is required. For details, please visit <http://mp3licensing.com>.

- MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.
- Other company names, product names and logos in this document are the trademarks or registered trademarks of their respective owners.

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This product is designed to help you record and reproduce sound works to which you own the copyright, or where you have obtained permission from the copyright holder or the rightful licensor. Unless you own the copyright, or have obtained the appropriate permission from the copyright holder or the rightful licensor, your unauthorized recording, reproduction or distribution thereof may result in severe criminal penalties under copyright laws and international copyright treaties. If you are uncertain about your rights, contact your legal advisor. Under no circumstances will TEAC Corporation be responsible for the consequences of any illegal copying performed using the recorder.

Cautions on installation

- The unit's nominal operating temperature is between 5° and 35° C (41° – 95° F).
- Do not install in the following types of places. Doing so could degrade the sound quality and/or cause malfunctions.
 - Places with significant vibrations or that are otherwise unstable
 - Near windows or other places exposed to direct sunlight
 - Near heaters or other extremely hot places

- Extremely cold places
- Places with bad ventilation or high humidity
- Humming noises could occur when using the unit near a power amplifier or other device that has a large transformer. Increase the distance between the devices and change their orientations if humming occurs.
- Using the unit near a TV or radio may cause picture deterioration or noise. Increase the distance from such devices
- Using wireless equipment, such as cellular phones, near the unit may cause noise, especially when calls are incoming and outgoing and being made with a phone. Increase the distance from such devices or turn them off.
- Do not use the unit upside down or lying on its side. Doing so could cause CD recording and playback to malfunction. Place it with its operation panel up.

Beware of condensation

Condensation could occur if the unit is moved from a cold to a warm place or used after a sudden temperature change. If this occurs, let the unit sit for one or two hours at the new room temperature before using it.

Cleaning the unit

To clean the unit, wipe it gently with a soft dry cloth. Do not use benzene, paint thinner, ethyl alcohol or other chemical agents to clean the unit as they could damage the surface or cause fading.

About SD cards

This unit uses SD cards for recording and playback. You can use 64 MB – 2 GB SD cards and 4 GB – 32 GB SDHC cards with this unit. A list of SD cards that have been tested with this unit can be found on the TASCAM web site (www.tascam.com).

Precautions for use

- SD cards are delicate media. In order to avoid damaging a card or the card slot, please take the following precautions when handling them.
- Do not leave them in extremely hot or cold places.
- Do not leave them in extremely humid places.
- Do not let them get wet.
- Do not put things on top of them or twist them.
- Do not strike them.

About Compact Discs

The built-in CD drive in BB-1000CD units can record and play audio in the CD-DA format on CD-R and CD-RW discs.

1 – Introduction

Precaution for CD use

- Use only CD, CD-R and CD-RW discs that bear the following logos.

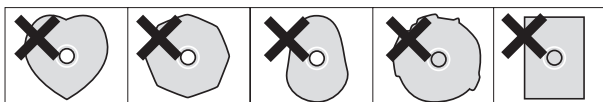
CD-R



CD-RW



- Always insert the disc into the slot with the label side toward you.
- To remove a disc from its storage case, press down on the center of the case and lift the disc out, holding it carefully by the edges.
- Avoid touching the signal recording side (the side without the label). Fingerprints and oil on the disc, for example, could cause errors during recording and playback.
- Should fingerprints or dust get on the signal recording side, wipe the surface from the center hole outward towards the outer edge with a soft, dry cloth. Discs should always be cleaned before storage to remove grime that could cause reduced sound quality.
- Never clean discs with record sprays, antistatic sprays or fluids, benzene, thinner or other chemicals. Such chemicals can do irreparable damage to the disc's plastic surface and make playback impossible.
- Do not affix any labels or stickers to the label side of a disc. Do not insert discs that have adhesive remaining from tape or stickers that have been removed. Doing so could cause the disc to become stuck in the unit or otherwise make it malfunction.
- Never use a stabilizer. Using a commercially-available CD stabilizer with this unit could prevent playback or cause malfunction.
- Do not use cracked discs.
- Do not use CDs with irregular shapes, including octagonal, heart-shaped and business card-sized CDs, because they could cause the unit to malfunction.

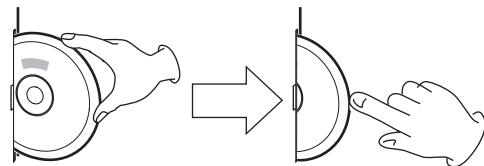


- Copy-protected discs and other discs which do not conform to the CD standard may not play back correctly in this player. If you use such discs in this unit, TEAC Corporation and its subsidiaries cannot be responsible for any consequences or guarantee the quality of reproduction. If you experience problems with such non-standard discs, you should contact the producers of the disc.

About CD-R and CD-RW discs

CD-R discs can be recorded only once, and recorded tracks cannot be erased. However, if the disc has not been finalized and sufficient space is available on the disc, additional material can be recorded. After finishing recording, finalizing a CD-R makes it playable in most ordinary CD players (some CD players might not be able to play these discs). In contrast, if a CD-RW disc becomes full, tracks on it can be erased, and the space on the disc can be reused for new recordings. However, only the last recorded track or all recorded tracks can be deleted. Selectively deleting tracks recorded earlier is not possible. Even after being finalized, CD-RW discs can only be played in players that specifically support their playback.

Inserting a disc into the slot-loading drive



- 1 Insert the disc partway into the slot by holding the disc by the edge with the label side forward as illustrated.**
- 2 Push the disc further until the disc is almost completely hidden and it will be automatically pulled into the slot.**

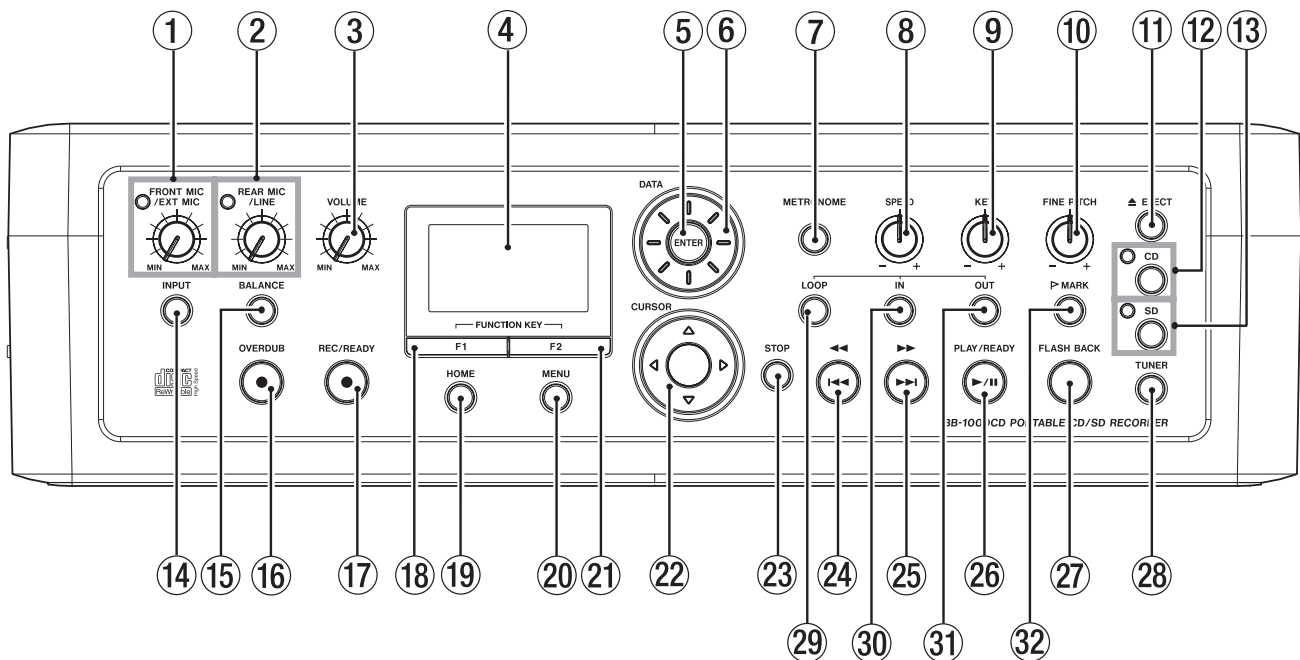
If a disc does not load properly

If a disc does not load properly, pull out the disc and press the **EJECT** (▲) key, and then try to load it again. (Do not force the disc in, because this could damage the unit and the disc.)

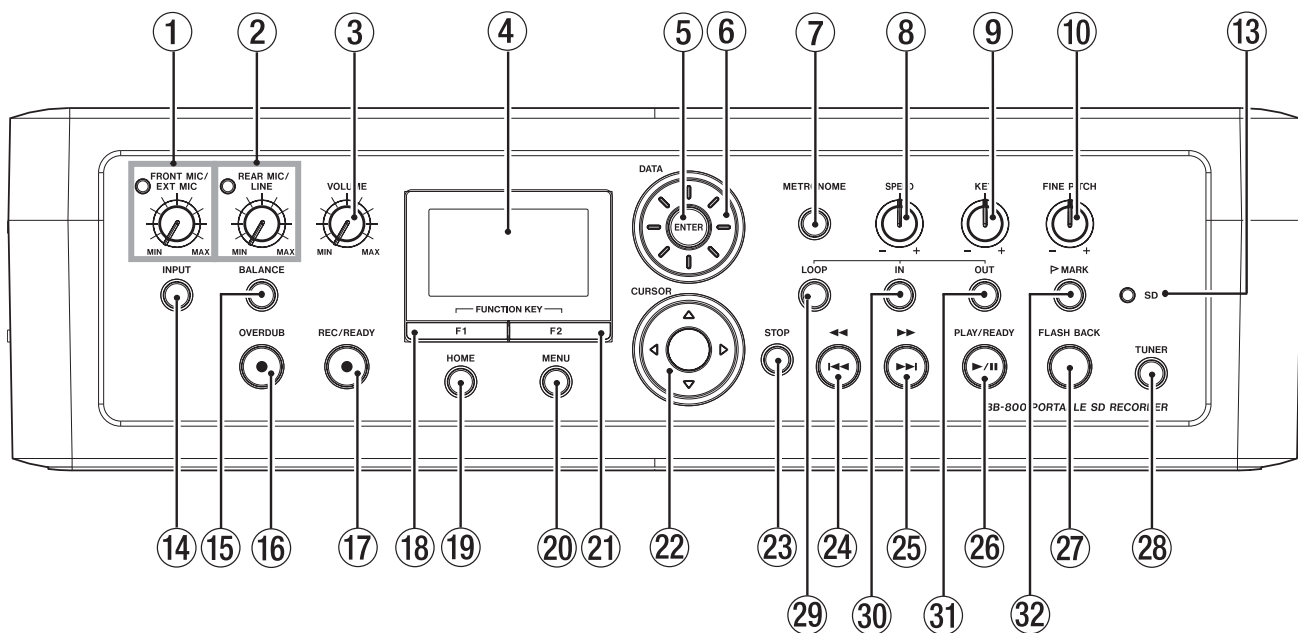
2 – Part Names and Functions

Top panel

■ BB-1000CD



■ BB-800



- ① **FRONT MIC/EXT MIC knob and overload indicator**
Use this knob to adjust the input level of the front built-in microphones (**FRONT MIC**) or external microphones (**EXT MIC**). The indicator on the upper left lights when the input level is too high.
- ② **REAR MIC/LINE knob knob and overload indicator**
Use this knob to adjust the input level of the rear built-in microphones (**REAR MIC**) or the signal from the **LINE IN** jacks. The indicator on the upper left lights when the input level is too high.
- ③ **VOLUME knob**
Use this knob to adjust the speaker volume and the output level of headphones and line out signals.
- ④ **Display**
This shows variety information.
- ⑤ **ENTER key**
Use this key to confirm selections when using a settings screen.
- ⑥ **DATA wheel**
When a setting screen is open, use the wheel to select items and change setting values.

2 – Part Names and Functions

When the Home screen is open, use the wheel to adjust the playback position in a song.

⑦ **METRONOME key**

This opens the METRONOME screen.

When the METRONOME screen is open, press this key to return to the Home screen. (See “Using the metronome” on page 36.)

⑧ **SPEED knob**

Use this to adjust the playback speed. (See “Practicing with a CD or SD card” on page 37.)

⑨ **KEY knob**

Use this to adjust the pitch of playback in semitones. (See “Practicing with a CD or SD card” on page 36.)

⑩ **FINE PITCH knob**

Use this to adjust the pitch of playback in cents. (See “Practicing with a CD or SD card” on page 36.)

⑪ **▲ EJECT key (BB-1000CD only)**

Press this to eject a CD.

⑫ **CD key and indicator (BB-1000CD only)**

When the Home screen is open, press this key to change the recording/playback media to CD. The indicator lights when CD is selected.

⑬ **SD key and indicator (BB-1000CD only)**

When the Home screen is open, press this key to change the recording/playback media to SD card. The indicator lights when SD card is selected.

⑭ **INPUT key**

Press this to open the INPUT screen.

When the INPUT screen is open, press this key to return to the Home screen.

⑮ **BALANCE key**

Press this to open the BALANCE screen where you can adjust the input balance.

When the BALANCE screen is open, press this key to return to the Home screen.

⑯ **OVERDUB key [●]**

Press this key when playing a track on a CD or an SD card to record the playback track mixed with input signals.

Press this key to put the unit into overdub recording standby. The OVERDUB key lights and the REC/READY key flashes.

⑰ **REC/READY [●] key**

Press this when the unit is stopped to put the unit into recording standby. The key flashes when in standby.

Press this when in recording standby to start recording. This key lights during recording.

Press this during recording to put the unit into recording standby again.

⑱ **F1 key**

The function of this key depends on the current operation. The current function is shown on the bottom left of the display and could be confirmation of a selection or returning to the previous step.

⑲ **HOME key**

When one of the setting screens is open, press this key to return to the Home screen.

⑳ **MENU key**

When the Home screen is open, press this key to open the menu list (MENU screen).

When a setting screen is open, press this key to return to the MENU screen.

㉑ **F2 Key**

The function of this key depends on the current operation. The current function is shown on the bottom right of the display and could be confirmation of a selection or moving to the next step.

㉒ **CURSOR [▲/▼/◀/▶] keys**

Use these keys to move the cursor (highlighted area) on setting screens.

㉓ **STOP key**

Press this key to stop playback and return to the beginning of the stopped track.

㉔ **◀◀/▶▶ key**

Press this key within 1 second from the beginning of a track to skip to the beginning of the previous track.

Press it more than 1 second after the beginning of a track to skip to the beginning of the current track.

Press and hold this key to search backward.

Press this key during loop playback to move the end point of the loop to the current start point, while maintaining the length of the loop.

㉕ **▶▶/▶▶ key**

Press this key to skip to the next track.

Press and hold this key to search forward.

Press this key during loop playback to move the start point of the loop forward to the current end point, while maintaining the length of the loop.

㉖ **PLAY/READY [▶/||] key**

When the Home screen is open and playback is stopped, press this key to start playback.

During playback, press this key to pause it at the current point in the track.

㉗ **FLASH BACK key**

Press this key to skip a few seconds back in a track during playback. You can adjust the flash back time on the SETUP screen. (See “Going back a few seconds (FLASH BACK)” on page 46.)

㉘ **TUNER key**

Press this to open the TUNER screen, which can be used to help tune instruments. (See “Tuning instruments” on page 35.)

When the TUNER screen is open, press this key to return to the Home screen.

㉙ **LOOP key**

Use this to turn the loop playback and repeat playback functions on and off.

When start and end points are set, this turns loop playback on and off. (See “Repeating playback of a set interval (loop playback)” on page 34.)

2 – Part Names and Functions

When start and end points are not set, this turns repeat playback on and off. (See “Repeating playback of a track” on page 34.)

Press the IN/OUT/MARK key while pressing and holding this key to clear the corresponding start/end/ marker point.

③① IN key

Use this key to set the start point for loop playback of a desired interval.

Press this key while pressing and holding the LOOP key to clear the start point. (See “Repeating playback of a set interval (loop playback)” on page 34.)

③② OUT key

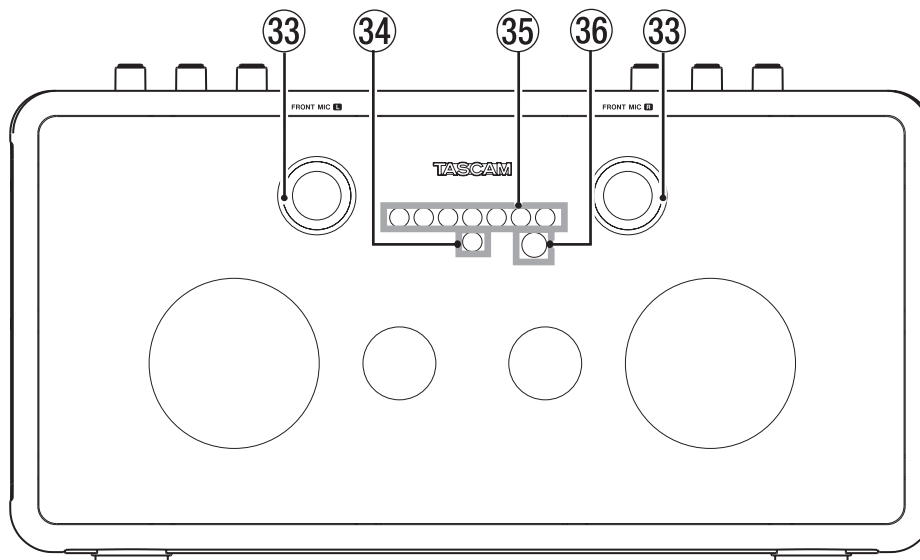
Use this key to set the end point for loop playback of a desired interval.

Press this key while pressing and holding the LOOP key to clear the end point. (See “Repeating playback of a set interval (loop playback)” on page 34.)

③③ ▷ MARK key

Press this to set a marker point at the desired position in a track. Press this key while pressing and holding the LOOP key to clear the marker point currently shown on the Home screen. (See “Setting marker points where desired in tracks” on page 34.)

Front Panel



③③ FRONT MIC L/R

This is a built-in stereo pair of microphones. The left microphone is also used when tuning.

③④ Power indicator

This indicator lights when the power is ON.

③⑤ Volume/playback/recording indicator

When adjusting the volume, the number of green LEDs lit shows the volume.

The center LED lights green during playback.

The center LED lights red during recording.

When using the metronome function, the green light moves left to right along with the tempo.

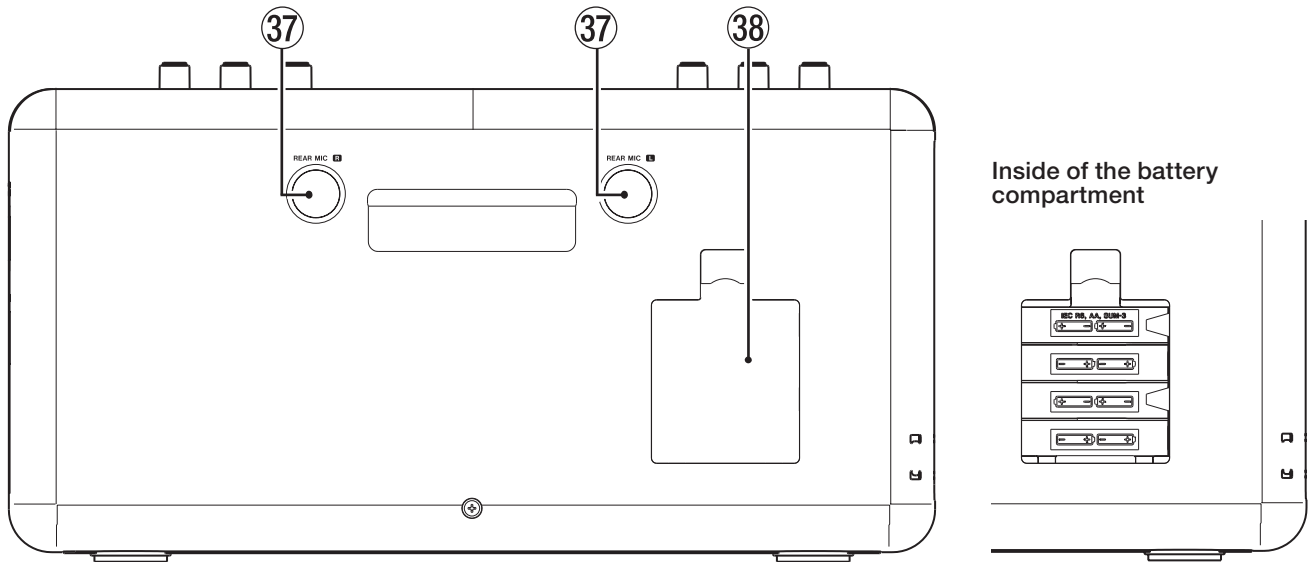
When using the chromatic tuner function, the LEDs indicate the difference between the detected and desired pitches.

③⑥ Remote sensor

This receives signals from the included remote control unit (RC-BB1000). Point the tip of the remote control at the sensor when operating the unit with it.

2 – Part Names and Functions

Rear Panel



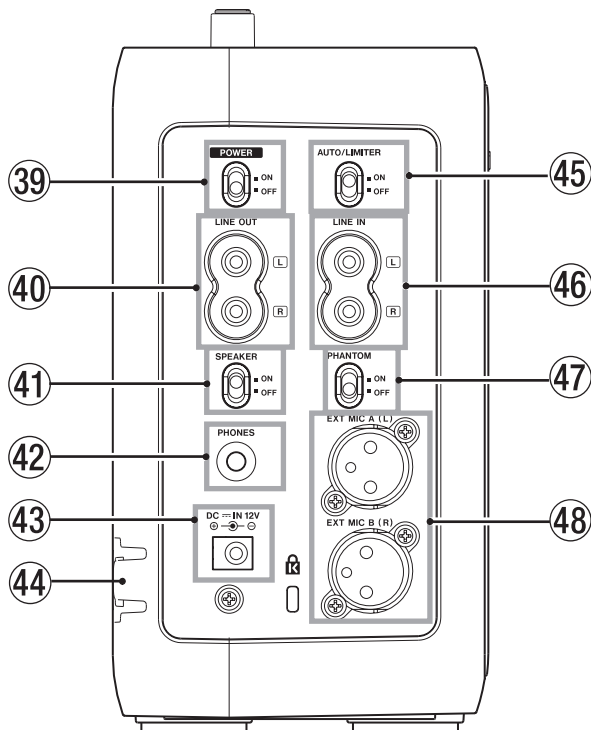
37 REAR MIC L/R

This is a built-in stereo pair of microphones.

38 Battery compartment

The compartment holds 8 AA batteries.

Left side panel



39 POWER switch

Use this switch to turn the power on and off.

40 LINE OUT jacks

Use these to connect electronic instruments with built-in speakers, powered speakers and other audio equipment.

41 SPEAKER switch

Use this switch to turn the built-in speakers ON and OFF.

42 PHONES jack

Use this to connect headphones.

43 DC IN 12V jack

Connect the included AC adaptor (TASCAM PS-1225L) here.

44 Power cord holder

This holds the power cord to prevent unexpected disconnection of the cord.

45 AUTO/LIMITER

Use this to activate and deactivate the automatic gain control and limiter functions.

46 LINE IN jacks

Connect the line out jacks of an electronic instrument, CD player or other external audio device.

47 PHANTOM switch

Turn this on to supply phantom power (+48 V) to condenser mics connected to the EXT MIC jacks.

CAUTION

Do not connect or disconnect microphones when the PHANTOM switch is ON.

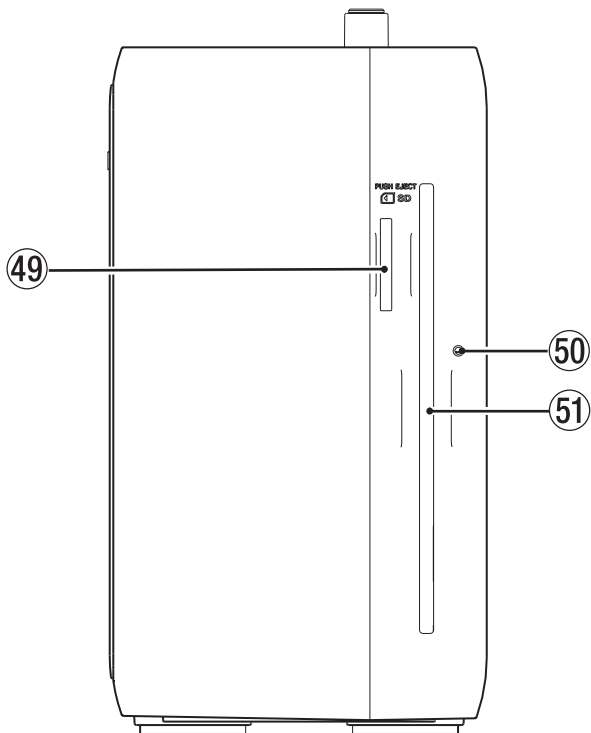
48 EXT MIC A (L)/EXT MIC B (R) jacks

Connect microphones to these XLR jacks. (1: GND 2: HOT 3: COLD)

2 – Part Names and Functions

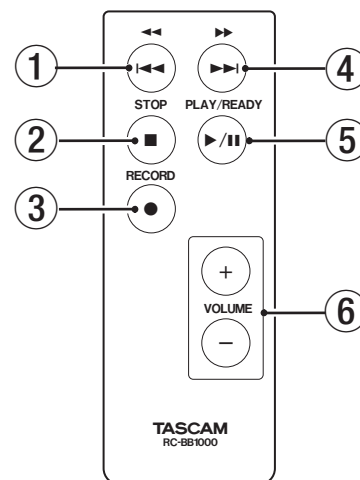
Right side panel

■ BB-1000CD

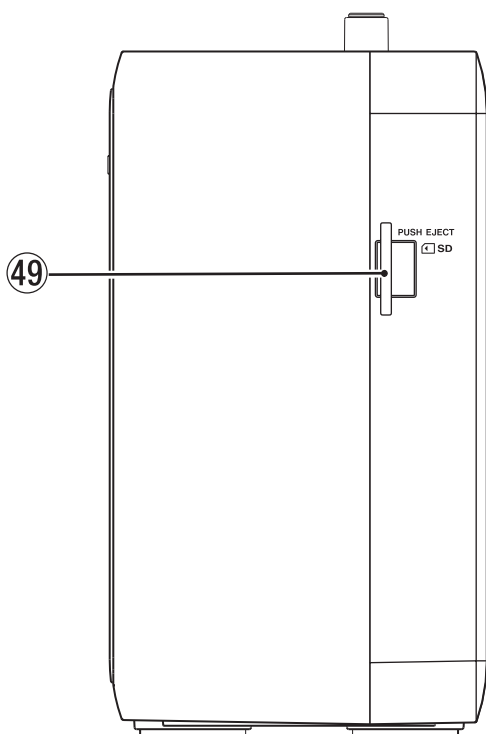


- ④⑨ SD card slot
Insert SD cards into this slot.
- ⑤⑩ Force disc ejection hole (BB-1000CD only)
Use this to eject a disc if the CD drive malfunctions and does not eject the disc
(See “Forcing disc ejection” on page 19.)
- ⑤① CD slot (BB-1000CD only)
Insert CDs into this slot

Remote control unit (RC-BB1000)



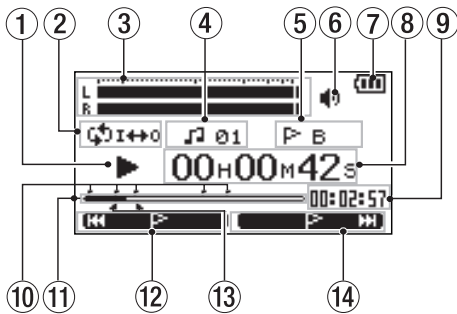
■ BB-800



- ① ◀◀/▶▶ key
Press this key within 1 second from the beginning of a track to skip to the beginning of the previous track.
Press it more than 1 second after the beginning of a track to skip to the beginning of the current track.
Press and hold this key to search backward.
Press this key during loop playback to move the end point of the loop to the current start point, while maintaining the length of the loop.
- ② STOP [■] key
Press this key to stop playback and return to the beginning of a stopped track.
- ③ RECORD [●] key
Press this when the unit is stopped to put the unit into recording standby.
Press this when in recording standby to start recording.
- ④ ▶▶/▶▶ key
Press this key to skip to the next track.
Press and hold this key to search forward.
Press this key during loop playback to move the start point of the loop forward to the current end point, while maintaining the length of the loop.
- ⑤ PLAY/READY [▶/||] key
When the Home screen is open and playback is stopped, press this key to start playback.
During playback, press this key to pause it at that point.
- ⑥ VOLUME [+/-] keys
Use these to adjust the volume.

2 – Part Names and Functions

Home screen



- ① **Current operation status icon**
 - ▶ Track playing
 - ⏸ File stopped in progress (paused)
 - File stopped at its beginning
 - ▶▶ Searching forward
 - ◀◀ Searching backward
 - ▶▶▶ Skipping to the beginning of the next track
 - ◀◀◀ Skipping to the beginning of the current or previous track
 - ⌘: File dividing mode
- ② **Loop/repeat status icon**

The following icons appear depending on the current loop/repeat setting.

 - 🔄 Repeat playback
 - 🔄▶ Loop playback
- ③ **Level meter**

During playback, the signal levels of the playing track are indicated.

The right end of a meter stays lit for a while if the signal level on that channel becomes too high.
- ④ **File number**

The number of the file currently playing is shown.
- ⑤ **Marker name**

The name of the marker nearest to and before the current playback position is shown.
- ⑥ **Speaker output status**

The speaker output status is shown.

 - 🔊: Built-in speakers ON
 - 🔊: Built-in speakers OFF
 - 🎧: Headphones connected
- ⑦ **Power status**

When batteries are being used, the battery icon shows the amount of power remaining with bars (🔋, 🔋, 🔋). If the icon has no bars (🔋), the batteries are almost dead and the power will soon turn OFF. When using the AC adaptor, 🔌 is shown.
- ⑧ **Elapsed time**

Shows the elapsed time (hours: minutes: seconds) of the currently playing track.
- ⑨ **Remaining time**

Shows the remaining playback time of the current track (hours: minutes: seconds).
- ⑩ **Marker positions**

The positions of markers are indicated with ■ icons above the playback position display bar.

- ⑪ **Playback position display bar**

This bar shows the current playback position, darkening from the left as playback proceeds.
- ⑫ **F1 key function**

This shows the function currently assigned to the F1 key. On the Home screen, pressing it skips playback to the nearest previous marker position.
- ⑬ **Status of loop IN and OUT points**

These show the status of the IN and OUT point settings for loop playback.

If an IN point is set, the ■ icon appears at its location under the playback position display bar.

If an OUT point is set, the ■ icon appears at its location under the playback position display bar.
- ⑭ **F2 key function**

This shows the function currently assigned to the F2 key. On the Home screen, pressing it skips playback to the next marker position.

3 – Preparation

Powering the unit

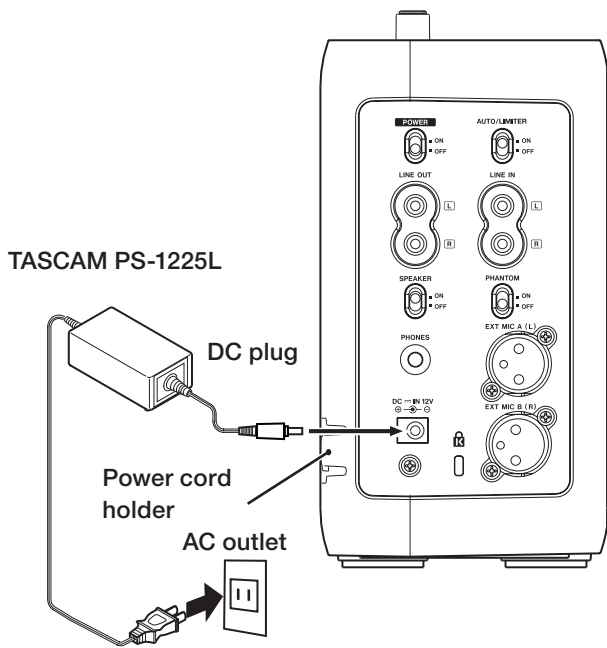
You can power the unit with the included AC adaptor or commercially-available AA batteries.

CAUTION

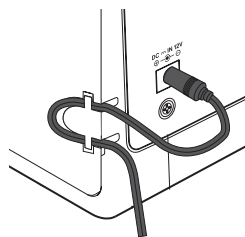
You cannot record on a CD when operating on battery power. Use the AC adaptor.

Connecting the AC adaptor

Connect the AC adaptor to the unit, the power cord to the AC adaptor, and the power cord to an AC outlet.



The left side panel of the unit has a power cord holder indentation for fastening the cable of the AC adaptor. Insert the cord into the holder to prevent accidental disconnection of the cord.

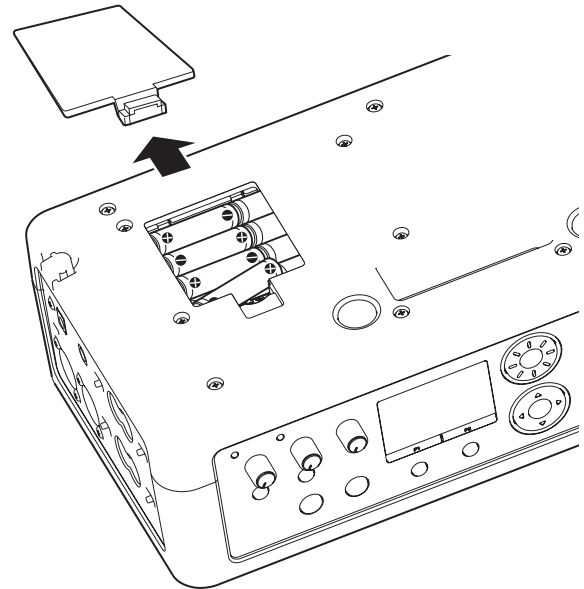


CAUTION

- Do not force the power cord into the holder. Doing so could damage the cord.
- Uninstall the batteries when using the included AC adaptor to prevent battery consumption.

Installing batteries

Remove the battery compartment cover and install 8 commercially-available AA batteries following the polarity indications on the case.



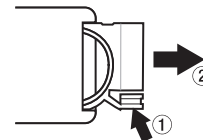
NOTE

Batteries are not supplied with this product. . We recommend using Ni-MH or alkaline batteries.

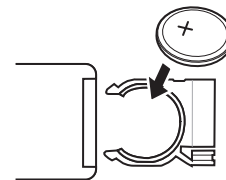
Preparing the remote control

Installing the battery

- 1 Pull the battery holder out of the remote control.



- 2 Put a lithium coin battery (CR2025) into the holder with the + side up.



- 3 Put the battery holder into the remote control.

Battery replacement

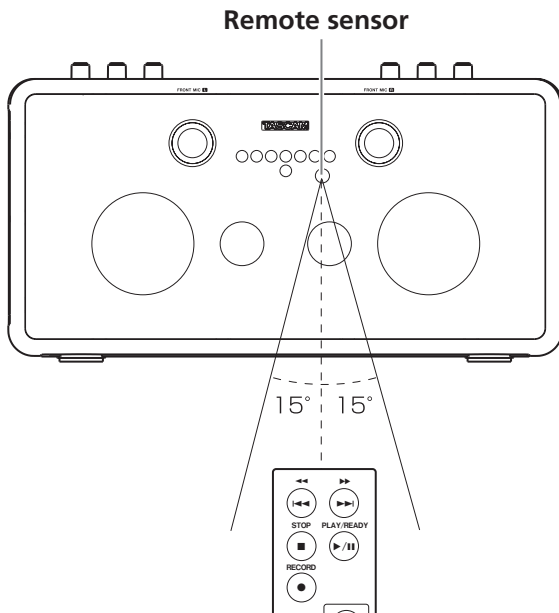
Replace the battery when the operation range decreases or the unit does not respond to keys pushed on the remote control unit.

Use a lithium coin battery (CR2025) for replacement.

3 – Preparation

Precautions about using the remote control

- Remove the batteries if you do not plan to use the remote control for a long time (longer than a month).
- Using this remote control while other equipment that can be controlled with infrared rays is operating nearby might cause that equipment to function improperly.
- Aim the remote control unit at the remote sensor. Obstacles could interfere with operation by the remote control.

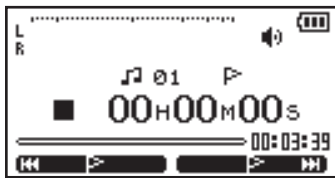


Operating distance
 Head-on to the sensor: 7 m
 15° left/right from the sensor: 4 m

Turning the power on and off

Turning the power ON

Slide the **POWER** switch on the left side of the unit to **ON**. The Home screen opens after the startup screen disappears.



Turning the power OFF

Slide the **POWER** switch to **OFF**.

CAUTION

Do not turn the power OFF when a media indicator (CD or SD) is flashing because the unit is writing data.

Setting the date and time

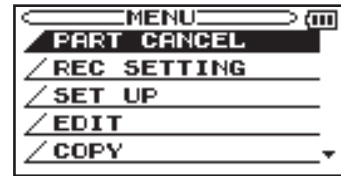
Set the current date and time of the built-in clock. The time information of files recorded by this unit to an SD card is

based on this setting.

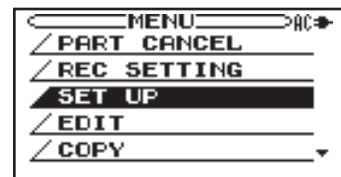
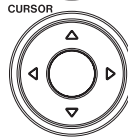
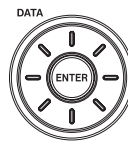
- 1 Press the **HOME** key to open the Home screen.



- 2 Press the **MENU** key to open the MENU screen.

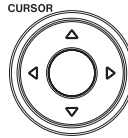
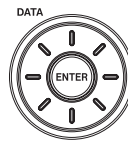


- 3 Use the **DATA** wheel or **CURSOR** [▲/▼] keys to select **SETUP**, and press the **ENTER** key.



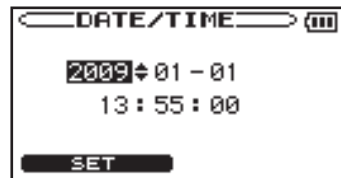
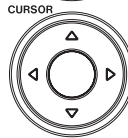
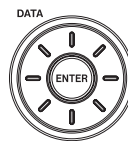
The **SETUP** screen appears.

- 4 Use the **CURSOR** [▲/▼] keys to select the **DATE/TIME** item, and press the **ENTER** key.

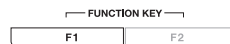


The **DATE/TIME** screen appears.

- 5 Use the **DATA** wheel to adjust the value. Use the **CURSOR** [▲/▼/◀/▶] keys to move the cursor.



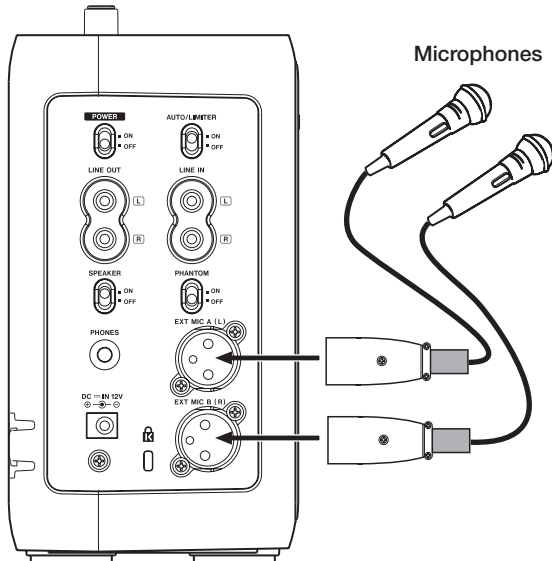
- 6 After making the setting, press the **F1** key to to return to the **SETUP** screen and start the clock.



3 – Preparation

Connecting microphones

To record with external mics or use the unit as an amplifier, connect microphones to the **EXT MIC A (L)** and **EXT MIC B (R)** jacks (XLR jacks) on the left side panel. Use microphones with XLR connectors.



CAUTION

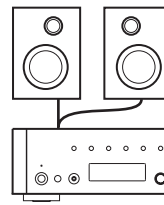
- Do not connect or disconnect microphones when the **PHANTOM** switch is **ON**.
- Some microphones might be damaged if phantom power is turned **ON** when they are connected. Refer to the microphone manuals and other documentation for details.
- Turn the **PHANTOM** switch **ON** after connecting condenser microphones and other microphones that require power from the unit.
- Turn the switch **OFF** when using dynamic microphones and other types that do not require power.

Connecting external audio devices

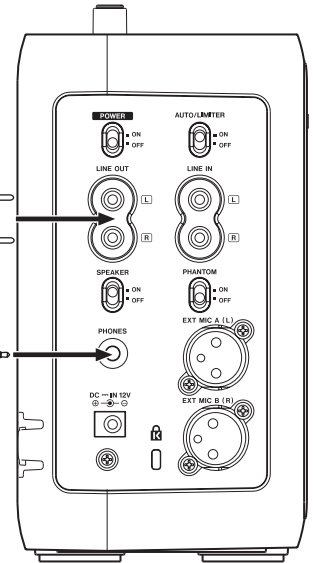
Connecting headphones, amplifiers and powered speakers

You can connect headphones to the **PHONES** jack (stereo mini jack) and powered speakers, audio systems and other monitoring systems to the **LINE OUT** jacks (RCA) using commercially-available RCA cables.

Powered speakers or audio system

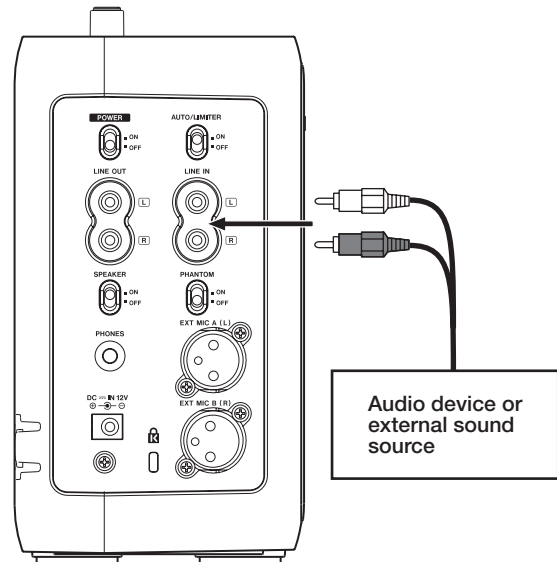


Headphones



Connecting external audio devices to the unit's input

Connect the outputs of external audio equipment to the **LINE IN** jacks (RCA) on the left side panel using RCA cables.

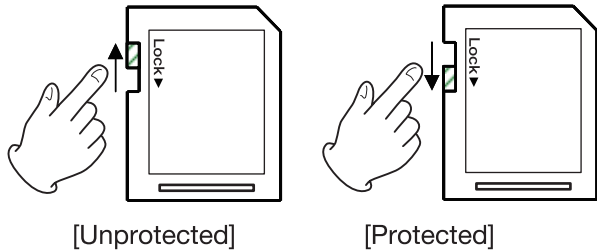


Using SD cards

SD card write protection

SD cards have write protection switches that prevent new data from being written. If you try to record to a protected card, a “Protected Card” error message appears.

3 – Preparation



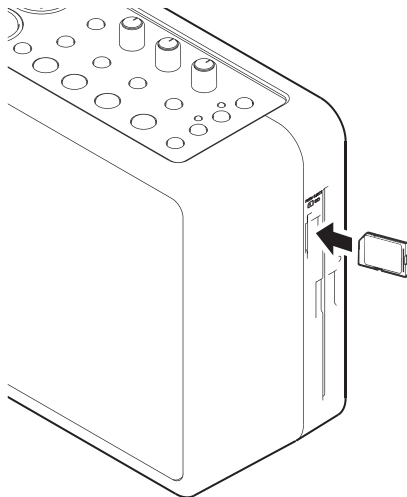
NOTE

In addition to during recording, this unit also writes information to the SD card when editing and setting marks, for example. When the write protection is engaged, this information cannot be written. Disengage the write-protect switch to enable these functions.

Inserting and removing SD cards

■ Inserting SD cards

Push an SD card in until it clicks fully into place.



■ Removing SD cards

Press the inserted card in slightly to make it eject.

NOTE

Do not remove the SD card during recording or playback, or while the SD indicator is flashing (writing data).

Formatting an SD card

To use a new SD card or a card that has been formatted for another device or by a computer, we recommend that you format the card with this unit. Using an SD card formatted on another device or a computer could cause recording errors.

CAUTION

• Beware that formatting erases all the data on an SD card, including data written by other equipment.

• When formatting, use the AC adaptor or batteries that have sufficient remaining charge. If the power turns OFF during formatting, formatting could fail.

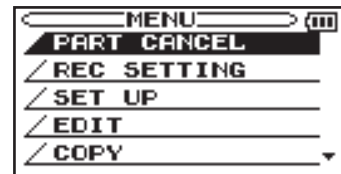
- 1 Insert the SD card.
- 2 Press the HOME key to open the Home screen.



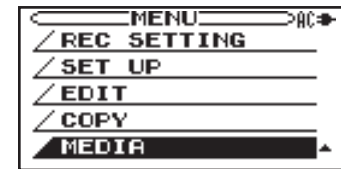
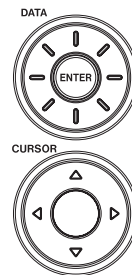
- 3 Press the SD key (BB-1000CD only). The indicator above and to the left of the SD key lights.



- 4 Press the MENU key to open the MENU screen.

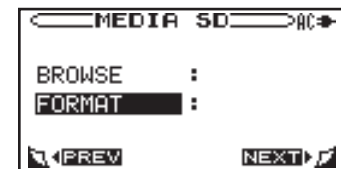
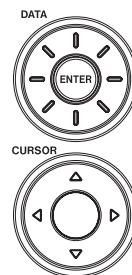


- 5 Use the DATA wheel or CURSOR [▲/▼] keys to select MEDIA, and press the ENTER key.



The MEDIA SD screen opens.

- 6 Use the DATA wheel or CURSOR [▲/▼] keys to select FORMAT, and press the ENTER key.



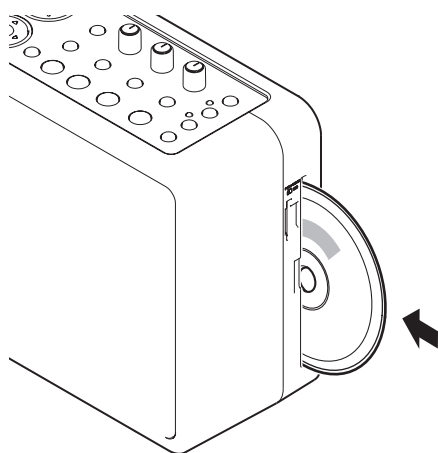
- 7 The following confirmation screen appears. Press the F1 key to start formatting. When formatting completes, the MEDIA SD screen reopens.



USING CDS (BB-1000CD only)

Inserting a disc

- 1 Insert the disc halfway with the label facing forward as shown in the following illustration.



- 2 Push the disc in further until it is pulled in automatically when almost hidden.

CAUTION

- You cannot insert a disc when the unit is turned OFF.
- If a disc sticks, for example becoming difficult to push, pull out the disc and press the EJECT [▲] key, and then try to load it again. Do not force the disc in. Doing so could damage the unit or the disc.
- If a disc other than an audio CD is inserted, or a disc is inserted backwards, it will be automatically ejected when CD is selected.

Ejecting a disc

Press the EJECT [▲] key. After the disc is ejected halfway, pull it out by holding its edge.

NOTE

- You cannot eject a disc when the unit is turned OFF.
- A disc can only be ejected when the Home screen is open.
- A disc cannot be ejected when an SD card file is being played.
- A finalization confirmation message appears before ejecting a disc that has not yet been finalized. (See "Finalizing a CD-R/RW so that it can be played in other CD players (BB-1000CD only)" on page 29.)

Forcing disc ejection

If pressing the EJECT [▲] key does not eject the disc because the CD drive is malfunctioning, for example, you can force a disc to eject by using the force disc ejection hole.

To force a disc to eject, turn the unit's power OFF and follow the procedures below

- 1 Prepare a long pin such as a stretched paper clip.
- 2 Insert the pin into the force disc ejection hole and push it in several times.
- 3 Pull the disc out by hand after it is ejected halfway.

CAUTION

Never try to force a disc to eject using the force disc ejection hole when the unit's power is ON.

4 – Recording

Selecting whether to record to an SD card or a CD (BB-1000CD only)

- 1 Press the STOP key to stop the recorder.

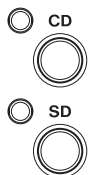


- 2 Press the HOME key to open the Home screen.



- 3 To record to an SD card, press the SD key. The indicator above and to the left of the SD key lights.

To record to a CD, press the CD key. The indicator above and to the left of the CD key lights.



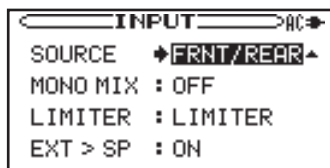
CAUTION

When operating on battery power, the unit cannot record to a CD. To record to a CD, use the AC adaptor.

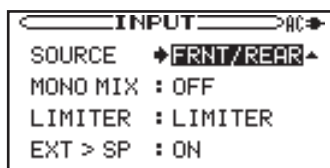
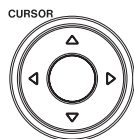
Selecting the input

Recording with built-in microphones

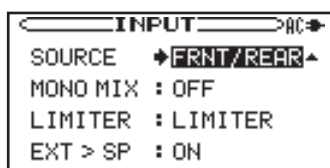
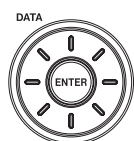
- 1 Press the INPUT key to open the INPUT screen.



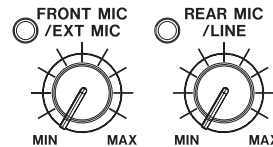
- 2 Use the CURSOR [▲/▼] keys to select the SOURCE item.



- 3 Use the DATA wheel to select FRNT/REAR.



- 4 Raise the levels of both the FRONT MIC/EXT MIC and REAR MIC/LINE knobs to record sound in 360° around the unit.

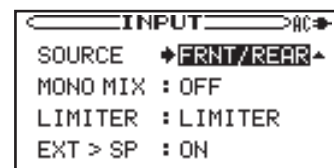


NOTE

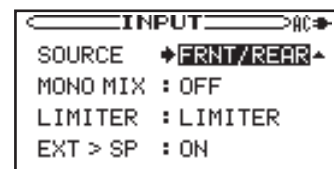
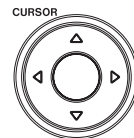
When using the built-in microphones no sound is output from the unit's speakers.

Recording with external microphones

- 1 Press the INPUT key to open the INPUT screen.



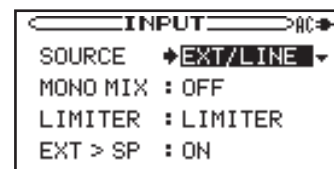
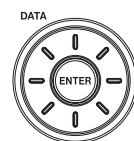
- 2 Use the CURSOR [▲/▼] keys to select the SOURCE item.



- 3 Use the DATA wheel to select EXT/REAR or EXT/LINE.

When EXT/REAR is selected, external microphones and the unit's rear microphones can be input and recorded simultaneously.

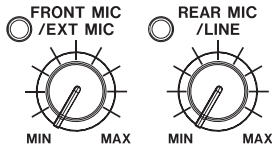
When EXT/LINE is selected, external microphones and external devices connected to the LINE IN jacks can be used simultaneously.



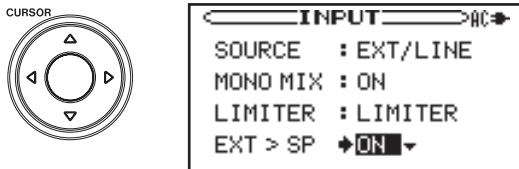
- 4 Use the FRONT MIC/EXT MIC knob to adjust the external microphone input levels.

To record signals input through the rear microphones or the line inputs at the same time, use the REAR MIC/LINE knob to adjust the rear microphone or line input levels. Turn the REAR MIC/LINE knob all the way to the left (MIN) to record sound only from the external microphones.

4 – Recording



- Use the CURSOR [▲/▼] keys to select the EXT > SP item.



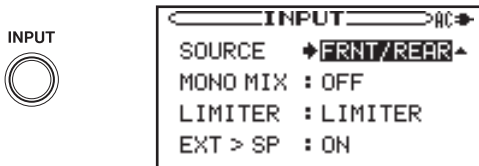
- Set it to ON to output the external microphone sounds from the speakers. Set it to OFF to disable the speakers.

TIP

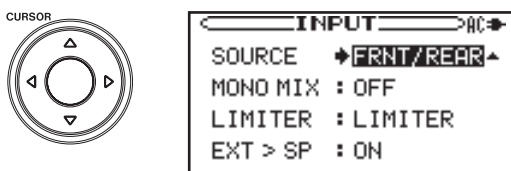
When the speakers are set to output sounds input from the external microphones, feedback could occur. When recording with external microphones, we recommend that you disable the speakers and use headphones to monitor the input from external microphones.

Recording with line inputs

- Press the INPUT key to open the INPUT screen.



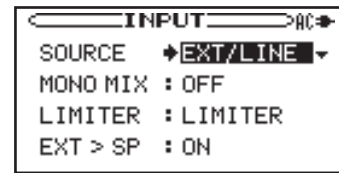
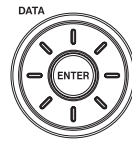
- Use the CURSOR [▲/▼] keys to select the SOURCE item.



- Use the DATA wheel to select FRNT/LINE or EXT/LINE.

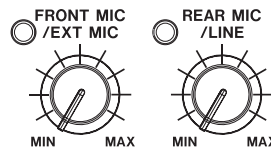
When set to FRNT/LINE, the line inputs and the unit's front microphones can be used simultaneously.

When set to EXT/LINE, signals from the line inputs and external microphones can be used simultaneously.



- Use the REAR MIC/LINE knob to adjust the line input recording level.

To record signals input through the front microphones or external microphones at the same time, use the FRONT MIC/EXT MIC knob to adjust the front microphone or external microphone recording level. Turn the FRONT MIC/EXT MIC knob all the way to the left (MIN) to record sounds only from the line inputs.



Setting the recording file format

Recording to an SD card

The four recording file formats that can be selected are MP3 (low), MP3 (normal), MP3 (high) and WAV, with the sound quality increasing in that order. As sound quality increases, however, so does file size, reducing the amount of time that can be recorded. (See the following section for details.)

- Press the STOP key to stop the unit.



- Press the HOME key to open the Home screen.

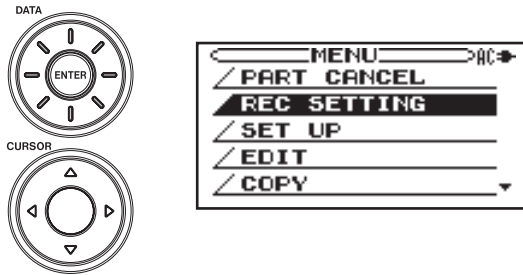


- Press the MENU key to open the MENU screen.



- Use the DATA wheel or CURSOR [▲/▼] keys to select REC SETTING, and press the ENTER key.

4 – Recording



5 Use the CURSOR [▲/▼] keys to select the FILE TYPE item.



6 Use the DATA wheel to set the file type.



7 Press the HOME key to return to the Home screen.



About recording time

The following tables show the recording times for each recording format and medium capacity.

CD-R/CD-RW (BB-1000CD only)

Recording format	CD/capacity	
	650MB	700MB
CD-DA 16 Bit, 44.1 kHz	1 hour 14 minutes	1 hour 20 minutes

SD/SDHC card

Recording format (FILE TYPE)	SD/SDHC card capacity					
	1GB	2GB	4GB	8GB	16GB	
WAV 16 Bit, 44.1 kHz	1 hour 39 minutes	3 hours 18 minutes	6 hours 36 minutes	13 hours 12 minutes	26 hours 24 minutes	
MP3	Low (44.1 kHz, 64 kbps)	35 hours 50 minutes	71 hours 40 minutes	143 hours 20 minutes	286 hours 40 minutes	573 hours 20 minutes
	Normal (44.1 kHz, 128 kbps)	17 hours 55 minutes	35 hours 50 minutes	71 hours 40 minutes	143 hours 20 minutes	286 hours 40 minutes
	High (44.1 kHz, 192 kbps)	11 hours 57 minutes	23 hours 54 minutes	47 hours 48 minutes	95 hours 36 minutes	191 hours 12 minutes

• The recording times in the table above are approximate. Actual recording times could vary depending on the SD/SDHC card used.

4 – Recording

- The recording times in the table above show total recordable times on SD/SDHC cards, not maximum continuous recording times.
- You cannot continuously record for more than 23 hours and 59 minutes. The maximum size of a single recording file is also 2 GB.
- Record a WAV file if you want to divide a file after recording it to an SD card. The DIVIDE function on the EDIT screen cannot be used on MP3 files.
- When recording to a CD, the sampling frequency is 44.1 kHz and the quantization bit rate is 16-bit (BB-1000CD only).

Creating new SD card folders

- 1 Press the STOP key to stop the unit.



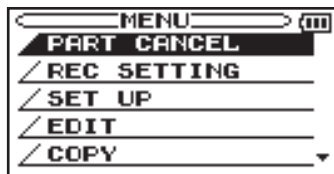
- 2 Press the HOME key to open the Home screen.



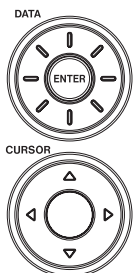
- 3 Press the SD key (BB-1000 CD only). The indicator above and to the left of the SD key lights.



- 4 Press the MENU key to open the MENU screen.

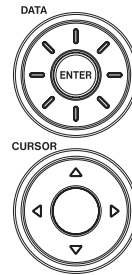


- 5 Use the DATA wheel or CURSOR [▲/▼] keys to select MEDIA, and press the ENTER key.



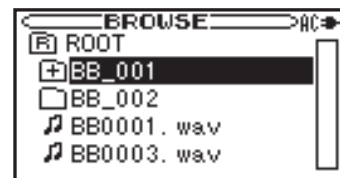
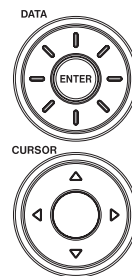
The MEDIA SD screen opens.

- 6 Use the DATA wheel or CURSOR [▲/▼] keys to select BROWSE, and press the ENTER key.



The BROWSE screen opens.

- 7 Use the DATA wheel or CURSOR [▲/▼] keys to move the cursor to where you want to create a new folder.



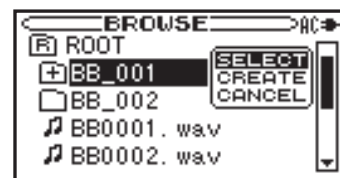
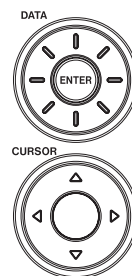
To create a folder on the first level of the SD card, select ROOT. To create a folder on the second level, select the folder that you want the new folder to be in.

To select a folder on the level above, press the CURSOR [◀] key. To open the selected folder press the CURSOR [▶] key.

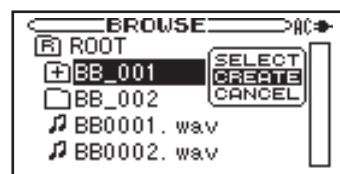
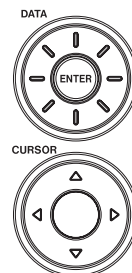
NOTE

This unit can only make folders on two levels. It can also only play back files in the first two folder levels.

- 8 Press the ENTER key to open a pop-up window.



- 9 Use the DATA wheel or CURSOR [▲/▼] keys to select CREATE, and press the ENTER key.

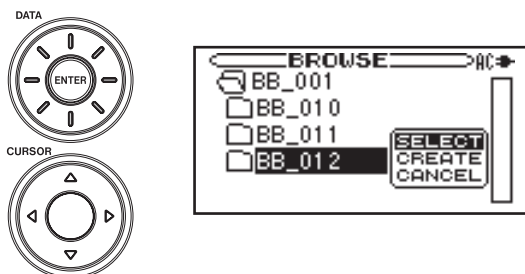


4 – Recording

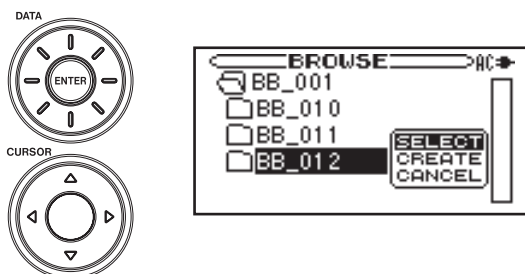
10 The following screen opens. Press the F1 key to create a new folder. Press the F2 key to cancel the operation.



11 Use the DATA wheel or CURSOR [▲/▼] keys to select the newly created folder, and press the ENTER key to open a pop-up window.



12 Use the DATA wheel or CURSOR [▲/▼] keys to choose SELECT, and press the ENTER key.



NOTE

- When folders are created by this unit, folder names are automatically assigned with incremental suffixes in a range from "BB_001" to "BB_999".
- The unit can recognize a maximum of 999 total files and folders.
- Each folder can have a maximum of 99 files.
- If a folder is selected and SELECT is chosen on the BROWSE screen pop-up window, press the enter key to set that folder for recording and as the playback area and return to the Home screen. Choose CANCEL to cancel the operation related to the selected folder.

Making a recording

1 Press the HOME key to open the Home screen.

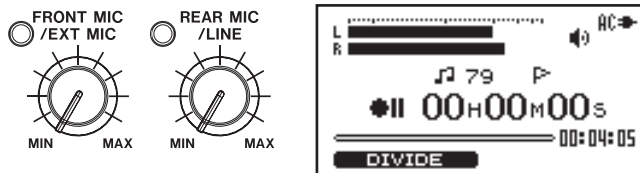


2 Press the REC/READY [●] key to put the unit into recording standby. The REC/READY [●] key flashes.

REC/READY



3 Use the FRONT MIC/EXT MIC knob and the REAR MIC/LINE knob to adjust the recording levels. Adjust the levels so that the meters on the display do not peak at their right ends.



4 After setting the levels, press the REC/READY [●] key to start recording. During recording the REC/READY [●] key lights.

REC/READY



5 Press the REC/READY [●] key during recording to put the unit into recording standby again. The REC/READY [●] key flashes when the unit is in standby.

During recording or when in recording standby, press the STOP key to stop recording. The REC/READY [●] key becomes unlit.

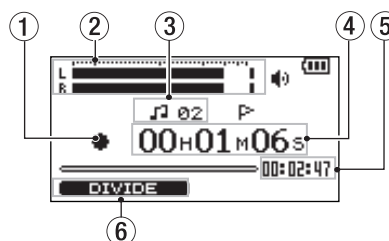
REC/READY



NOTE

- A maximum of 99 tracks can be recorded on a CD.
- A maximum of 99 files can be recorded in each SD card folder.
- A maximum combined total of 999 files and folders can be created on one SD card.

Recording Screen



① Recorder operation

This icon shows the current recorder operation.

- Recording
- || Recording standby
- Stopped

4 – Recording

② Recording level meters

The input signal levels of the selected inputs appear as separate left (L) and right (R) channels. The right end of a meter stays lit for a while if the signal level is too high.

③ File number

The number of the file currently being recorded is shown.

④ Elapsed recording time

The elapsed time of the track being recorded opens in hours: minutes: seconds.

⑤ Remaining recording time

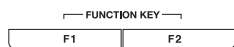
The remaining time available for recording on the medium is shown in hours: minutes: seconds.

⑥ Current function of the F1 key

The current function of the F1 key is shown. On the Recording screen, pressing this key divides the file during recording.

Creating new tracks while continuing to record

Press the F1 key during recording to create a new track at that instant and continue recording without pause.



CAUTION

You cannot divide a track during recording in the following circumstances.

- If the remaining recordable time is four seconds or less
- If only four seconds or less have passed since starting recording
- If only four seconds or less have passed since dividing the track previously
- If 99 tracks have already been recorded to the CD
- If 99 tracks have already been recorded in the selected folder on the SD card
- When recording to an SD card, if the total number of files and folders on the SD card is already 999

Various recording settings

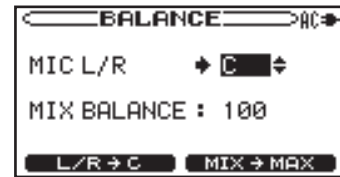
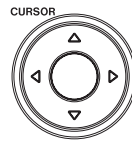
Adjusting the balance of microphones

- 1 Press the BALANCE key to open the BALANCE screen.

BALANCE

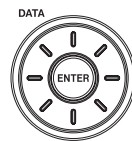


- 2 Use the CURSOR [▲/▼] keys to select the MIC L/R item.



- 3 Use the DATA wheel to adjust the microphone balance.

The range is L50 – C (center) – R50.



NOTE

- This setting affects both the built-in microphones and the external microphones.
- Press the F1 key to restore the balance to the center.

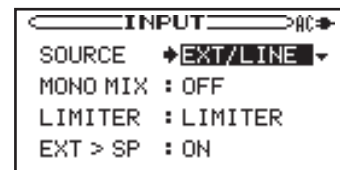
Recording in monaural

You can mix the left and right input signals and record in monaural (mono).

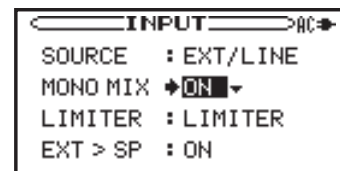
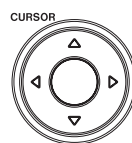
Turn this function ON when, for example, you are only using one external microphone.

- 1 Press the INPUT key to open the INPUT screen.

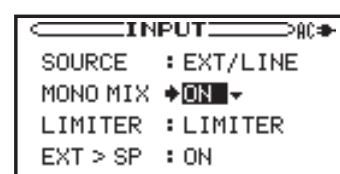
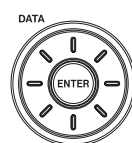
INPUT



- 2 Use the CURSOR [▲/▼] keys to select the MONO MIX item.



- 3 Use the DATA wheel to set it to ON.



4 – Recording

- Press the HOME key to return to the Home screen.



NOTE

When recording in monaural, the same signal is recorded to both left and right channels as a stereo file.

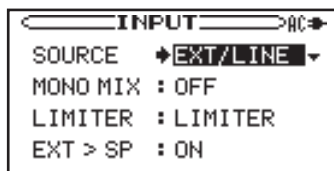
Using the limiter function

During a live performance, for example, loud noises could be input unexpectedly. By using the limiter function, audio clipping can be avoided and recordings made without distortion.

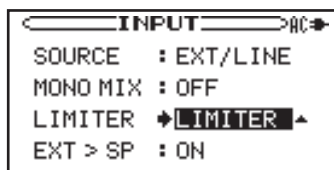
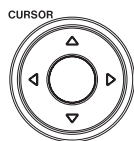
- Set the AUTO/LIMITER switch on the left side panel to ON.



- Press the INPUT key to open the INPUT screen.



- Use the CURSOR [▲/▼] keys to select the LIMITER item.



- Use the DATA wheel to choose one of the following options.

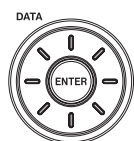
• LIMITER

The input gain changes automatically according to the input signal level to prevent distortion caused by excessively loud sounds.

• AGC HIGH/AGC LOW

The input gain changes automatically according to the input signal level to make both loud and quiet sounds the same level. This is useful when recording people speaking, such as during meetings.

Select AGC HIGH when the input level is low and AGC LOW when it is high.



CAUTION

When using AGC, the FRONT MIC/EXT MIC and REAR MIC/LINE knobs cannot be used to adjust input levels.

- Press the HOME key to return to the Home screen.



Using the automatic recording function

From recording standby, the unit can start and stop recording automatically in response to input signal levels.

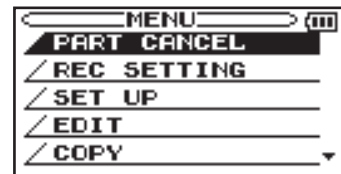
- Press the STOP key to stop the unit.



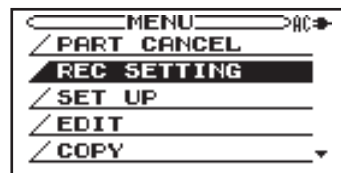
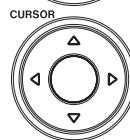
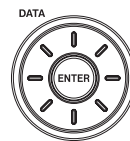
- Press the HOME key to open the Home screen.



- Press the MENU key to open the MENU screen.

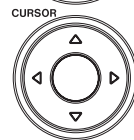
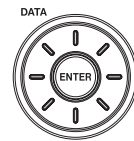


- Use the DATA wheel or CURSOR [▲/▼] keys to select REC SETTING, and press the ENTER key.



The REC SETTING screen opens.

- Make settings for the following four items. Use the CURSOR [▲/▼] keys to select the items, and use the DATA wheel to make settings.



AUTO LEVEL

Set the signal level at which recording starts and stops automatically. Choose -48 dB, -24 dB, -12 dB or -6 dB. Lower numbers make recording start at smaller input volumes. In other words, -48 dB is the most sensitive setting, which will start recording at the lowest input volume.

4 – Recording

START

If set to ON, recording automatically starts if the unit is in recording standby and detects an input signal with a level higher than that set in the AUTO LEVEL item.

STOP

Set the time from detecting that the input signal level is lower than the AUTO LEVEL setting until the unit stops recording and resumes standby. Choose OFF (default setting), 5, 10, 15, 20, 25 or 30 seconds.

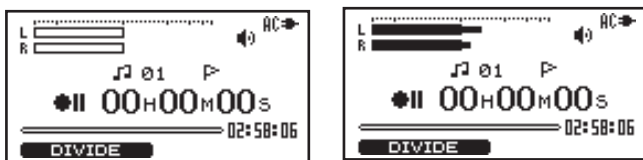
DIV

When set to ON, the recording file is divided when the input signal level becomes higher than the AUTO LEVEL setting again after 2 or more seconds below that setting level.

6 Press the HOME key to return to the Home screen.



When the automatic recording function is ON, the level set in the AUTO LEVEL item is shown, as in the following illustrations, on the display meters when in recording standby (left) or recording (right).



TIP

You can automatically skip unnecessary silent moments during recording by using START and STOP. If you want to divide recording files at each silence but do not want to skip silence, activate DIVIDE only. Using the combination of START, STOP and DIVIDE, you can set the unit to record while only skipping silences longer than 5 seconds (time set in STOP) or dividing files at each silence, for example.

Adding performances to an existing recording (OVERDUB)

While playing back a track from a CD (BB-1000CD only) or an SD card, you can mix new sounds in and record them together (overdubbing) on an SD card. For example, you can record new layers of sound or record playing or singing along with a karaoke track.

In the following procedures, the playback and performance sounds are recorded together by the built-in microphones.

NOTE

- An SD card must be inserted in the unit to use the overdubbing function.
- When the overdubbing function is used to record, WAV files are created.

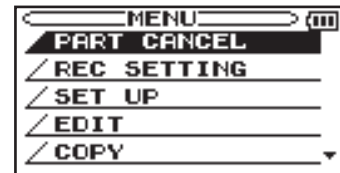
1 Press the STOP key to stop the unit.



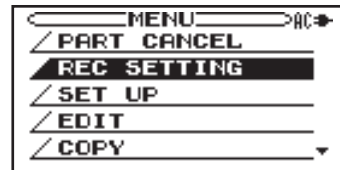
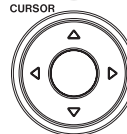
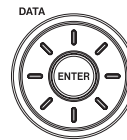
2 Press the HOME key to open the Home screen.



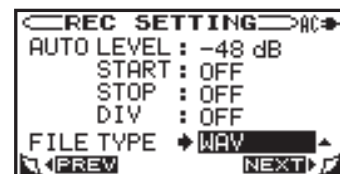
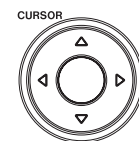
3 Press the MENU key to open the MENU screen.



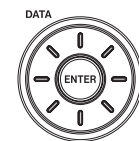
4 Use the DATA wheel or CURSOR [▲/▼] keys to select REC SETTING, and press the ENTER key.



5 Use the CURSOR [▲/▼] keys to select FILE TYPE.



6 Use the DATA wheel to select WAV.



7 Press the HOME key to open the Home screen.



8 Press the CD or SD key to select the playback medium (BB-1000CD only).



4 – Recording

- 9 Use the **◀◀** and **▶▶** keys to select the track for playback.



- 10 Press the **PLAY/READY [▶/II]** key to start playback. Perform along with the playback to check and adjust the volume balance between the playback and live signals as necessary.

PLAY/READY



- 11 Set the **SPEAKER** switch to ON. If any headphones are connected to the **PHONES** jack disconnect them.



- 12 Press the **OVERDUB [●]** key to start recording standby. You can also start overdubbing while a track is playing.

OVERDUB



NOTE

- When overdubbing, the playback file number is shown instead of the recording file number and the recording file number is shown instead of the marker name on the Recording screen.
- Press the **PLAY/READY [▶/II]** key during recording standby to start playback without starting recording. You can also search backward and forward by pressing and holding the **◀◀/▶▶** keys.

- 13 If necessary, adjust the balance by adjusting the volume of the playback signal. Press the **BALANCE** key to open the **BALANCE** screen.

BALANCE

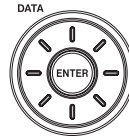


- 14 Use the **CURSOR CURSOR [▲/▼]** keys to select the **MIX BALANCE** item.

CURSOR



- 15 Use the **DATA** wheel to adjust the unit's playback volume. Set the playback volume between 10 and 100, with 100 being the maximum.



NOTE

Press the **F2** key to set the **MIX BALANCE** to 100. Doing this, however, could cause the volume to increase suddenly, so stop playback or turn the output volume down beforehand.

- 16 Press the **REC/READY [●]** key to simultaneously start recording and playback. The **REC/READY [●]** key lights during recording.

REC/READY



- 17 During recording, press the **REC/READY [●]** key to put the unit into recording standby. The **REC/READY [●]** key flashes when in recording standby.

When recording or in recording standby, press the **STOP** key to stop recording. The **REC/READY [●]** key becomes unlit.

REC/READY



NOTE

When using external microphones, we recommend that you position them at equal distances from the unit and the sources of the sounds being input.

CAUTION

- When using external microphones, do not point the external microphones toward the speakers. Doing so could cause feedback.
- Turning up the **FRONT MIC/EXT MIC** and **VOLUME** knobs increases the probability of feedback.

Overdubbing with higher sound quality (DIRECT MIX)

In the DIRECT MIX mode, the playback sound and mic input sounds are mixed in the unit when recording, allowing overdubbing at higher quality.

Headphones should be used for monitoring to prevent the microphones from picking up the playback sound.

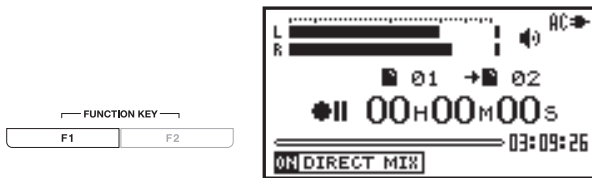
The DIRECT MIX mode is automatically activated when headphones are connected. You can also follow the steps below to activate the DIRECT MIX mode manually to overdub sounds in higher quality without using headphones for monitoring. Do this when you overdub the sound of an electric instrument through the LINE IN jacks, for example.

- 1 Press the OVERDUB [●] key to start recording standby.

OVERDUB



- 2 Press the F1 key to activate DIRECT MIX mode.



After this, follow the same procedures as for ordinary overdubbing (OVERDUB).

Finalizing a CD-R/RW so that it can be played in other CD players (BB-1000CD only)

To play a CD-R/RW disc that was recorded with this unit on other devices, you must finalize the CD-R/RW disc. Once a disc has been finalized, new recordings cannot be added to it unless it is later unfinalized (see below).

The following explanation assumes that CD is selected as the playback and recording medium and that an unfinalized CD-R/RW is in the unit.

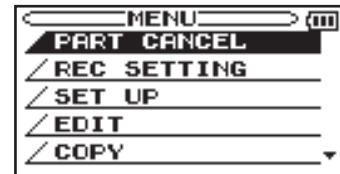
- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



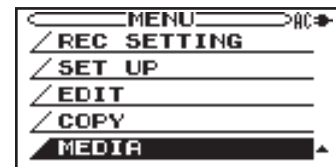
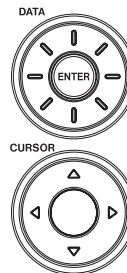
- 3 Press the CD key. The indicator above and to the left of the CD key lights.



- 4 Press the MENU key to open the MENU screen.

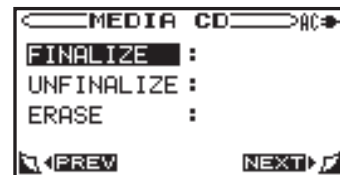
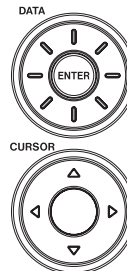


- 5 Use the DATA wheel or CURSOR [▲/▼] keys to select MEDIA, and press the ENTER key.

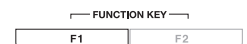


The MEDIA CD screen opens.

- 6 Use the CURSOR [▲/▼] keys to select FINALIZE, and press the ENTER key.



- 7 The following confirmation screen opens. Press the F1 key to start finalizing the disc. When finalization completes, the MEDIA CD screen reopens.



4 – Recording

NOTE

If you try to eject a CD-R/RW disc that has not yet been finalized, a finalization confirmation message opens. Press the F1 key to finalize it, or press the F2 key to eject it without finalizing.



Preparing a CD-RW so that additional recordings can be made (BB-100CD only)

You can unfinalize a CD-RW that has been finalized to record additional files.

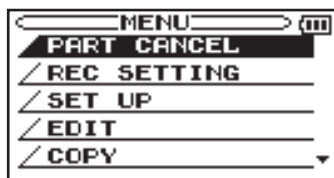
- 1 Load the CD-RW that you want to unfinalize and confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



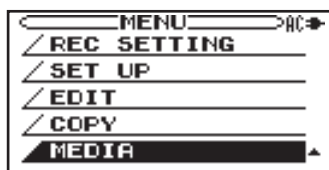
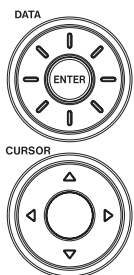
- 3 Press the CD key. The indicator above and to the left of the CD key lights.



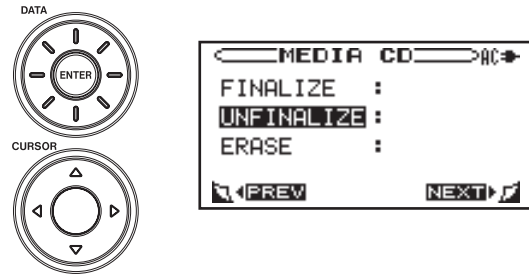
- 4 Press the MENU key to open the MENU screen.



- 5 Use the DATA wheel or CURSOR [▲/▼] keys to select MEDIA, and press the ENTER key.



- 6 The MEDIA CD screen opens. Use the CURSOR [▲/▼] keys to select UNFINALIZE, and press the ENTER key.



- 7 The following confirmation screen opens. Press the F1 key to start unfinalization. When unfinalization completes, the MEDIA CD screen reopens.



Deleting tracks from a CD-RW (BB-100CD only)

You can erase all the tracks or the last track recorded on a CD-RW. If the disk has been finalized, you must unfinalize it first. (See “Preparing a CD-RW so that additional recordings can be made” above).

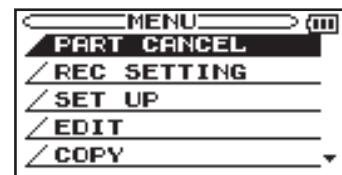
- 1 Load the CD-RW that you want to delete files from and confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



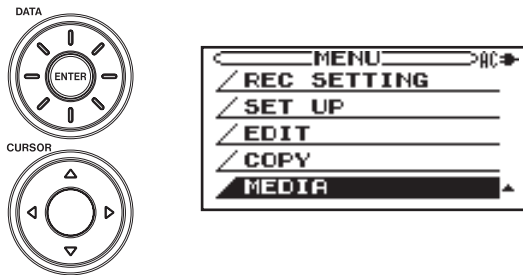
- 3 Press the CD key. The indicator above and to the left of the CD key lights.



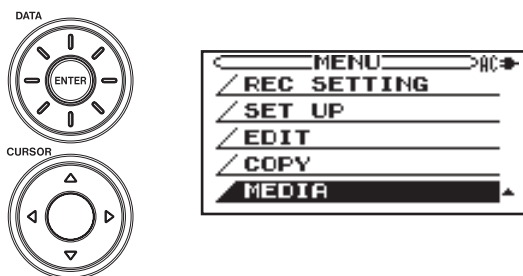
- 4 Press the MENU key to open the MENU screen.



- 5 Use the DATA wheel or CURSOR [▲/▼] keys to select MEDIA, and press the ENTER key.



- 6 The MEDIA CD screen opens. Use the CURSOR [▲/▼] keys to select ERASE, and press the ENTER key.



- 7 Use the DATA wheel to select LAST TRACK (last track added to the disc) or ALL TRACK (all tracks on the disc). Press the F1 key to erase the last track or all tracks. Press the F2 key to cancel the operation.



5 – Playback

The audio file formats that this unit can play back from SD cards are MP3 (32–320 kbps, 44.1 kHz) and WAV (44.1 kHz, 16 bit).

Discs must be in the audio CD format to be played back on this unit (BB-1000CD only).

CAUTION

If a disc other than an audio CD is inserted, or a disc is inserted backwards, it will be automatically ejected when CD is selected.

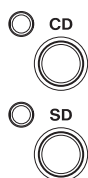
Selecting SD card or CD playback (BB-1000CD only)

- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



- 3 Press the SD key to play a file on the SD card. The indicator above and to the left of the SD key lights.

Press the CD key to play a file on the CD. The indicator above and to the left of the CD key lights.



Selecting the SD card folder for playback

Use the BROWSE screen to view folders and audio files on the SD card, and select the playback folder.

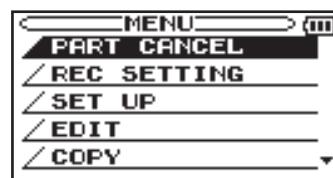
- 1 Confirm that the unit is stopped.
- 2 Insert an SD card.
- 3 Press the HOME key to open the Home screen.



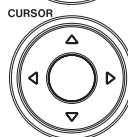
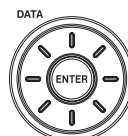
- 4 Press the SD key (BB-1000CD only). The indicator above and to the left of the SD key lights.



- 5 Press the MENU key to open the MENU screen.

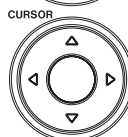
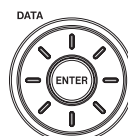


- 6 Use the the DATA wheel or CURSOR [▲/▼] keys to select MEDIA, and press the ENTER key.



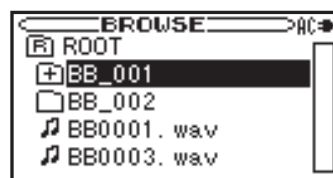
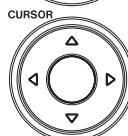
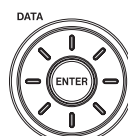
The MEDIA SD screen opens.

- 7 Use the DATA wheel or CURSOR [▲/▼] keys to select BROWSE, and press the ENTER key.



The contents of the folder that contains the currently selected file are shown.

- 8 Use the DATA wheel or CURSOR [▲/▼] keys to select a file or folder.



- When a folder is selected, press the CURSOR [▶] key to show the contents of the folder.
- When a file or folder is selected, press the CURSOR [◀] key to close the currently opened folder and show the higher level that contains the folder.

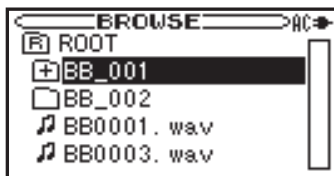
NOTE

- Before changing the recording and playback medium, stop playback or recording. The recording and playback medium cannot be changed during

playback or recording, or when the unit is in standby (BB-1000CD only).

- When using an SD card, the folder that contains the currently playing track is the playback area. When you want to play tracks in another folder, select that folder from the BROWSE screen.
- The unit can recognize a maximum of 999 files and folders total. Each folder can have a maximum of 99 files.
- The order that files are shown on the BROWSE screen is different from the playback order. Open the EDIT screen to check the playback order. (See “7–Editing functions and file operations” on page 38.)
- You can change the playback order using the MOVE function. (See “7–Editing functions and file operations” on page 38.)

Icons on the BROWSE screen



ROOT folder

When the root level is open on the BROWSE screen, the ROOT folder appears as the top level.

Audio file (WAV or MP3 files)

The names of audio files appear after these icons.

Plus folder

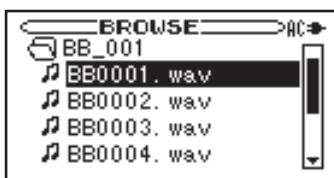
These folders contain subfolders.

Plain folder

These folders do not contain subfolders.

Open folder

The contents of this folder are currently shown on the screen.



Playing tracks

Press the HOME key to open the Home screen.



When the unit is stopped, press the PLAY/READY [▶/||] key to start playback.

Pausing playback

During playback, press the PLAY/READY [▶/||] key to pause playback at that point in the track.

Stopping playback

During playback, press the STOP key to stop playback and return to the beginning of the track.

Selecting a track

During playback or when the unit is stopped, use the ◀◀ and ▶▶ keys to select a track.

During playback or when paused in the middle of the track, press the ◀◀ key to return to the beginning of the current track.

Press the ◀◀ key within 1 second from the beginning of a track to skip to the beginning of the previous track.

Press the ▶▶ key to skip to the beginning of the next track.

NOTE

The ■ icon appears on the display when playback is stopped at the beginning of a track, and the || icon appears when playback is paused in the middle of a track.

Searching backward and forward

Press and hold the ◀◀ or ▶▶ key to search backward or forward through a track.

Changing playback position with the DATA wheel

Turn the DATA wheel to adjust the playback position. This movement is reflected in the playback position display bar.

NOTE

If you turn the DATA wheel during playback, playback restarts again at the new position when you stop turning the wheel.

Going back a few seconds (FLASH BACK)

Press the FLASH BACK key during playback or when the unit is in standby to go back in the track by a preset number of seconds. The default setting is 2 seconds, but this setting can be changed to between 1 and 5 seconds using the FLASH BACK item on the SETUP screen. (See “Operation settings (SETUP screen settings)” on page 46.)


FLASH BACK



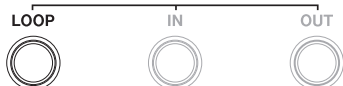
5 – Playback

Repeating playback of a track

You can repeat the playback of a single track (single track repeat).

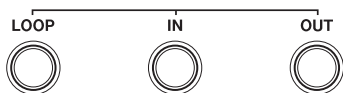
Press the **LOOP** key start repeat playback. The  icon appears on the screen, and the currently playing track plays repeatedly.

Press the **LOOP** key again to stop playback.

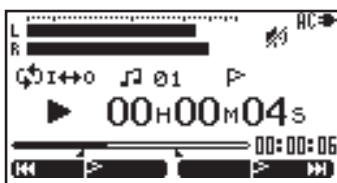







Repeating playback of a set interval (loop playback)

You can repeat the playback of a selected interval within a track (loop playback).



- 1 During playback or when paused, press the **IN** key to set the point when you want to start loop playback. The current position is set as the **IN** point.
- 2 Press the **OUT** key at the point when you want the loop to end. The current position is set as the **OUT** point, and loop playback begins between the **IN** and **OUT** points.



- The current positions of the **IN** and **OUT** points are shown by the  and  icons that appear below the playback position display bar on the Home screen. During loop playback, the  indicator also appears.
 - Press the  key during loop playback to move the start point of the loop forward to the current end point, while maintaining the length of the loop. Press the  key during loop playback to move the end point of the loop to the current start point, while maintaining the length of the loop.
 - Press the **IN** key or the **OUT** key while pressing and holding the **LOOP** key to clear the start point or the end point.
- 3 To cancel loop playback, press the **LOOP** key. The **IN** and **OUT** points remain and loop playback of the section can be restarted by pressing the **LOOP** key again.

NOTE

- If only the **IN** point is set, the part from the **IN** point to the end of the track is played back repeatedly.

- If only the **OUT** point is set, the part from the beginning of the track to the **OUT** point is played back repeatedly.
- When neither the **IN** point nor the **OUT** point is set, the whole track is played back repeatedly.

Setting marker points where desired in tracks

You can set marker points where desired in tracks and start playback from these points.



- 1 During playback or when paused, press the **MARK** key at the position you want to mark.

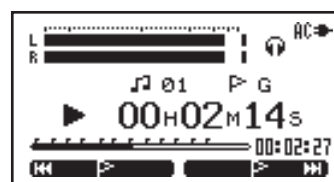


- 2 Press the **F1** key to go to the next earlier marker in the track. Press it again to go back further.

Press the **F2** key to go to the next marker in the track.



- You can use up to 26 markers (from A to Z) in one track.
- The positions of markers are shown by  icons that appear above the playback position display bar on the Home screen. In addition, the name of the previous nearest marker is indicated to the right of the track number.
- Press the  **MARK** key while pressing and holding the **LOOP** key to delete the marker that is currently indicated.



6 – Practicing with musical instruments

Tuning instruments

This unit has a built-in tuner. By using a mic to input the sound of an instrument, you can use the tuning meter on the display to tune that instrument accurately. You can also output tuning pitches.

CAUTION

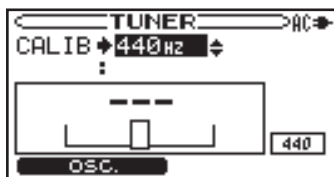
Playback pauses if you press the TUNER key during playback of a CD or an SD.

Setting the standard frequency (calibration)

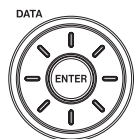
- 1 Press the TUNER key.



The chromatic tuner mode screen opens.



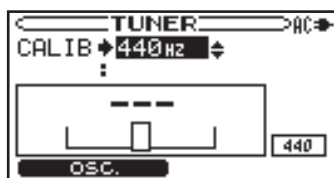
- 2 Use the DATA wheel to set the CALIB item (standard frequency of A) between 435 and 445 Hz.



The set value also appears in the lower right part of the screen. This setting affects both tuner modes.

Changing the tuning mode

- 1 Press the TUNER key.

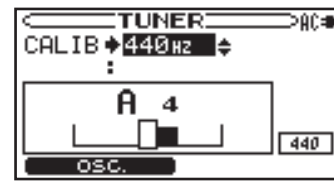


- 2 Press the F1 key to select a tuner mode. Each time you press F1, the mode changes between chromatic and oscillator modes.



- OSC.** Set to oscillator mode
- CHROMATIC** Set to chromatic mode

Chromatic tuner mode



Use the tuning meter on the screen to tune an instrument. The tuning meter and input signal pitch appear on the screen. (When no sound is input or the input sound cannot be measured, "—" appears.)

- 1 Play the instrument to be tuned into the left microphone on the front panel. The nearest pitch name appears on the screen
- 2 Tune the instrument until the desired pitch is shown and the center of the meter lights. A bar appears to the left if the tuning is too low and a bar appears to the right if it is too high. The longer the bar is the more out of tune the instrument is.

TIP

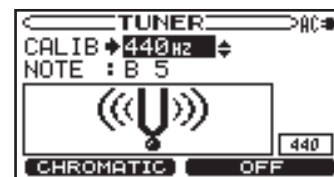
When tuning you can also check the indicators on the front panel. The center indicator lights up in green when in tune with the note. When out of tune, the center indicator lights up in red and the green indicators to one side show the degree that the pitch is out of tune.

Oscillator mode

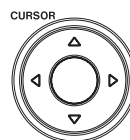
Press the F1 key when in chromatic tuner mode to activate the unit's oscillator function and output a standard pitch. The output page can be set in a three-octave range between C3 and B5.



In addition to the CALIB item described above, you can change the output pitch with NOTE.

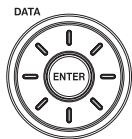


- 1 Use the CURSOR [▲/▼] keys to select the NOTE item.

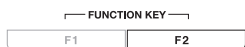


6 – Practicing with musical instruments

- Use the DATA wheel to select the output pitch (C3–B5).



Press the F2 key to turn the oscillator sound ON and OFF.

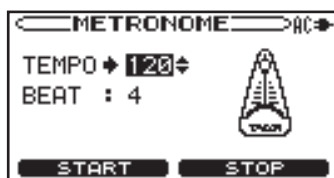


Using the metronome

This unit has a built-in metronome function. The volume/playback/recording indicators on the front panel light in time with the metronome.

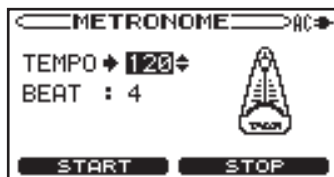
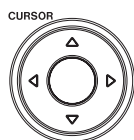
To use the metronome, press the METRONOME key to open the METRONOME screen.

METRONOME

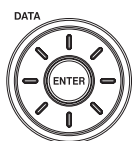


Changing the speed (TEMPO)

- Use the CURSOR [▲/▼] keys to select the TEMPO item.

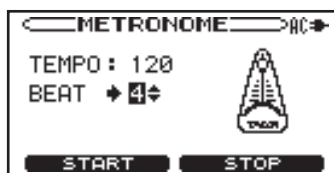
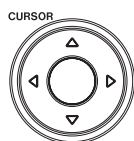


- Use the DATA wheel to set the tempo in a range between 20–250 beats per minute.

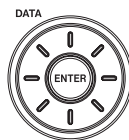


Setting the rhythm (BEAT)

- Use the CURSOR [▲/▼] keys to select the BEAT item.

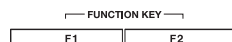


- Use the DATA wheel to set the accent frequency (time signature) from 0-9. The accent occurs on the 1. When set to 0, there is no accent. For example, set it to 4 for a 4/4 time signature.



Starting and stopping the metronome

On the METRONOME screen, press the F1 to start the metronome and the F2 key to stop it.



NOTE

- The indicators on the front panel light in time with the metronome when it is operating
- When using the metronome, you cannot return to the Home screen. To return to the Home screen, press the F2 key to stop the metronome and then press the HOME key.

CAUTION

Playback pauses if you start the metronome during playback of a CD or an SD.

Practicing with CD or SD card playback

You can change the playback tempo of a track without changing the pitch and change the playback pitch of a track without changing the tempo.

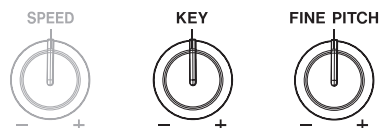
Furthermore, you can also reduce the sound of a voice or solo instrument in a track. You can use these special playback functions to practice and learn parts effectively.

Changing the playback pitch

Use the KEY and FINE PITCH knobs to change that pitch of playback without changing the speed.

Use the KEY knob to adjust the pitch up or down by semitones (♭6–#6).

Use the FINE PITCH knob to adjust the pitch by cents (1/100 of a semitone) in a range of –50 to +50.



6 – Practicing with musical instruments

Changing the playback speed

Use the SPEED knob to adjust the playback speed without changing the pitch.

The speed adjustment range is –50% to +16% (in 1% increments), so the slowest speed setting is half the original speed.



Reducing the sound at a certain stereo position (PART CANCEL)

You can select a certain stereo position and reduce the volume of the sound from that position. For example, selecting C (center) on commercially-available audio CDs reduces the vocal sound.

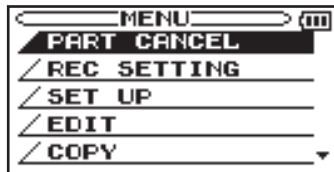
CAUTION

Depending on the stereo position of the sound and the use of reverb (echo), the part cancel function might not be effective or might be less effective than expected.

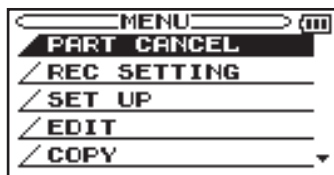
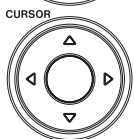
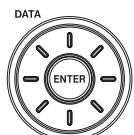
- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



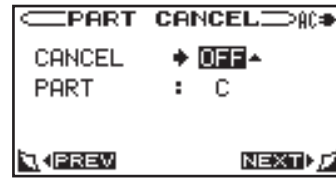
- 3 Press the MENU key to open the MENU screen.



- 4 Use the DATA wheel or CURSOR [▲/▼] keys to select PART CANCEL, and press the ENTER key.



- 5 Adjust the following settings as necessary. Use the CURSOR [▲/▼] keys to select items. Use the DATA wheel to make settings.



CANCEL (default setting is OFF)

Set to ON to activate the part cancel function.

PART (default setting is C)

Set this to the stereo position of the sound that you want to reduce. The setting range is L10 (far left) – C (center) – R10 (far right).

Practicing a certain phrase repeatedly

You can continuously repeat the playback of a selected interval (loop playback). (See “Repeating playback of a set interval (loop playback)” on page 34.)

Recording while playing along with a CD or SD card

You can mix and record the playback track with the sounds input by microphones and the LINE IN jacks. (See “Adding performances to an existing recording (OVERDUB)” on page 27.)

7 – Editing functions and file operations

From the EDIT screen, you can edit files on an SD card. The following procedures assume that an SD card is inserted and that it has been selected as the recording and playback medium. The files shown on the EDIT screen are the files in the currently selected folder. Select the folder that contains the file that you want to edit beforehand using the BROWSE screen.

NOTE

- These editing functions and other file and folder operations cannot be used with CDs.
- When the unit is playing or in standby, press the ENTER key to open the EDIT screen directly. The playing or paused file becomes the file subject to editing.
- If you select PLAY from the pop-up window on the EDIT screen, the Home screen opens and that file begins to play. If you select CANCEL, no operation is conducted on the selected file.
- If you select PLAY from the pop-up window on the BROWSE screen when a file is selected, the Home screen opens and that file begins to play. If you select CANCEL, no operation is conducted on the selected file.

Dividing files (DIVIDE)

You can divide files that have been recorded in WAV format.

NOTE

MP3 files cannot be divided.

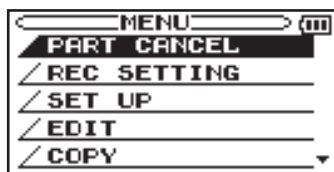
- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



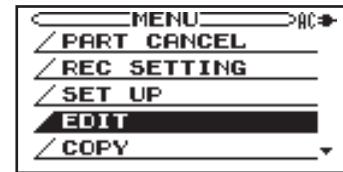
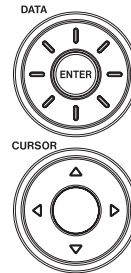
- 3 Press the SD key (BB-1000CD only). The indicator above and to the left of the SD key lights.



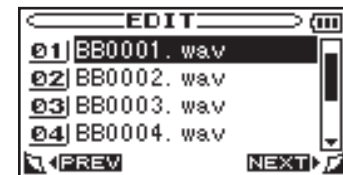
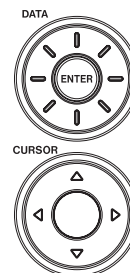
- 4 Press the MENU key to open the MENU screen.



- 5 Use the DATA wheel or the CURSOR [▲/▼] keys to select EDIT, and press the ENTER key.



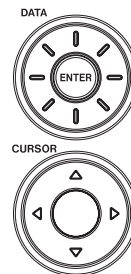
- 6 The contents of the folder that contains the currently selected file are shown.



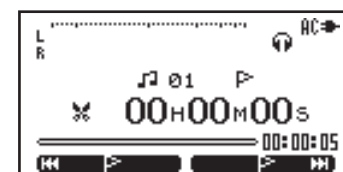
The following pop-up window opens.



- 7 Use the DATA wheel or the CURSOR [▲/▼] keys to select DIVIDE, and press the ENTER key.



- 8 The Home screen reopens and playback starts. The operation status icon shown is



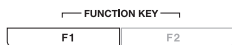
7 – Editing functions and file operations

- 9 Press the ENTER key at the point where you want to divide the file.

The following confirmation screen opens, and the track plays back for two seconds from the point when you pressed the ENTER key.



- 10 Press the F1 key to divide the file. Press the F2 key to cancel the operation.



NOTE

If you press the ENTER key when the unit is playing or in standby, the playing or paused file remains selected. If you select DIVIDE, a confirmation screen opens and the track plays for two seconds from the point when you pressed the ENTER key when the track was playing or paused

If you want to stop dividing a file, select NO by pressing the F2 key, then press the MENU key. The EDIT screen reopens.

Changing the order of track playback (MOVE)

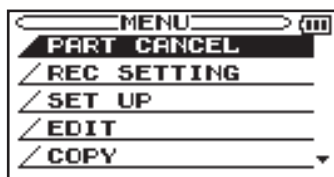
- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



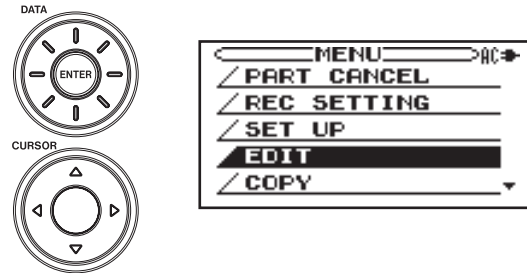
- 3 Press the SD key (BB-1000CD only). The indicator above and to the left of the SD key lights.



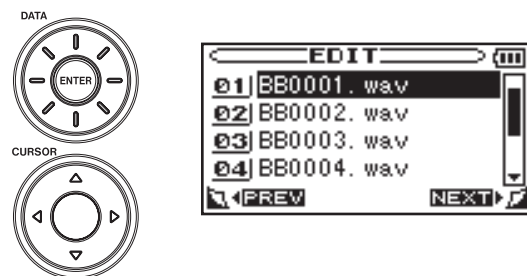
- 4 Press the MENU key to open the MENU screen.



- 5 Use the DATA wheel or the CURSOR [▲/▼] keys to select EDIT, and press the ENTER key.



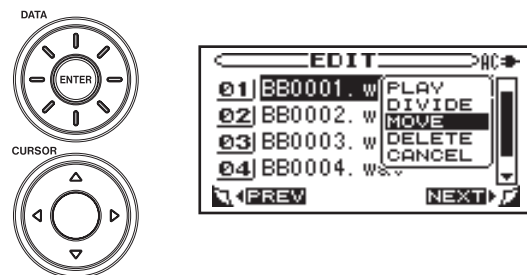
- 6 The folder that contains the currently selected file opens. Use the CURSOR [▲/▼] keys to select the file that you want to move, and press the ENTER key.



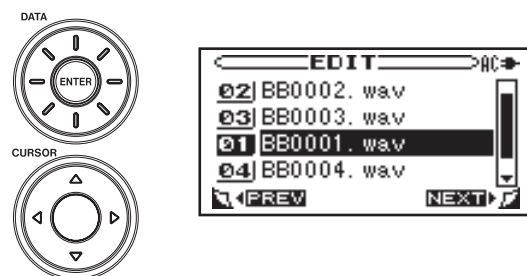
The following pop-up window opens.



- 7 Use the DATA wheel or the CURSOR [▲/▼] keys to select MOVE, and press the ENTER key.

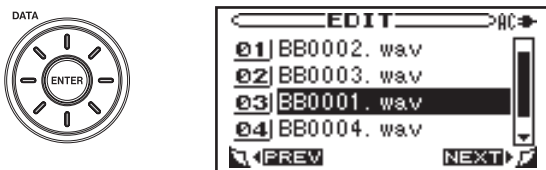


- 8 Use the DATA wheel or the CURSOR [▲/▼] keys to move the selected file.

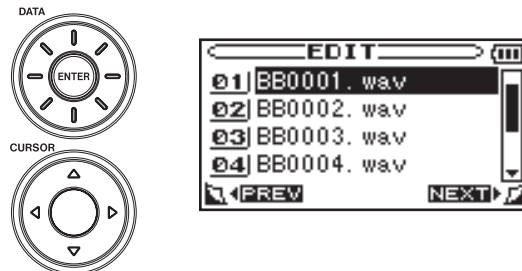


7 – Editing functions and file operations

- 9 Press the ENTER key when the file is at the desired position.



- 6 Use the CURSOR [▲/▼] keys to select the file that you want to delete, and press the ENTER key.



Deleting unneeded files (DELETE)

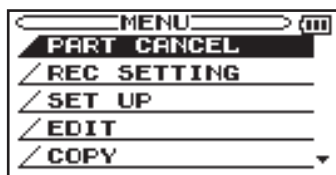
- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



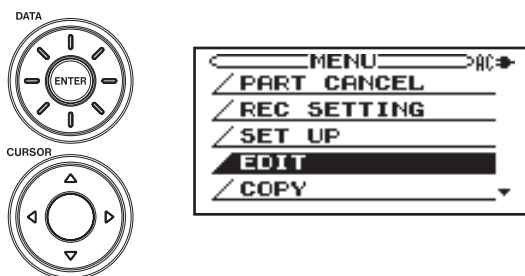
- 3 Press the SD key (BB-1000CD only). The indicator above and to the left of the SD key lights.



- 4 Press the MENU key to open the MENU screen.



- 5 Use the DATA wheel or the CURSOR [▲/▼] keys to select EDIT, and press the ENTER key.

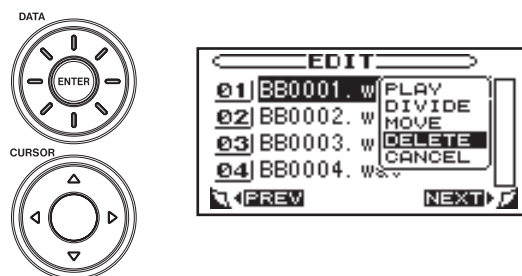


The contents of the folder that contains the currently selected file are shown.

The following pop-up window opens.



- 7 Use the DATA wheel or the CURSOR [▲/▼] keys to select DELETE, and press the ENTER key.



- 8 The FILE DELETE confirmation message opens. Press the F1 key to delete the file, or press the F2 key to cancel the operation.



You can also delete unwanted files from the BROWSE screen.

- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



- 3 Press the SD key (BB-1000CD only). The indicator above and to the left of the SD key lights.

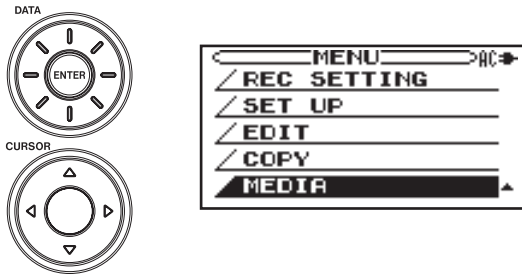


7 – Editing functions and file operations

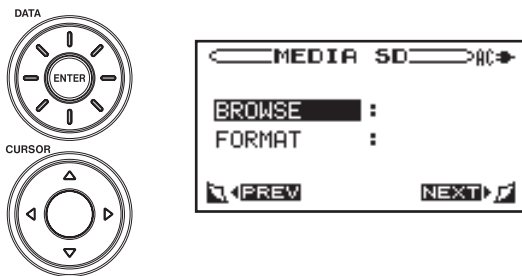
4 Press the MENU key to open the MENU.



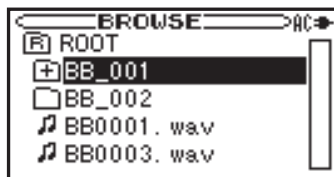
5 Use the DATA wheel or the CURSOR [▲/▼] keys to select MEDIA, and press the ENTER key.



6 Use the DATA wheel or the CURSOR [▲/▼] keys to select BROWSE, and press the ENTER key.

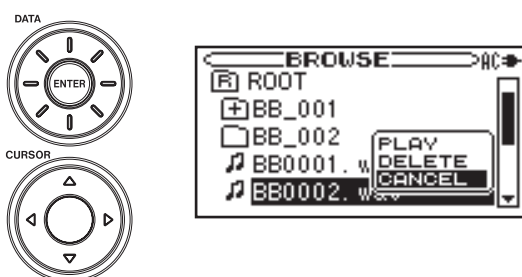


The contents of the folder that contains the currently selected file are shown.

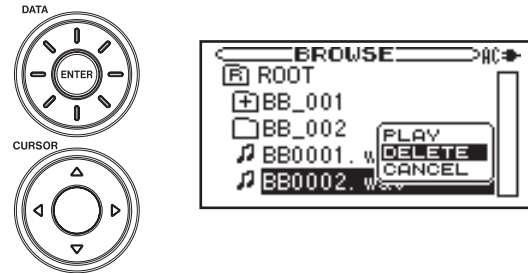


- Press the CURSOR [▶] key when a folder is selected to open that folder and show its contents.
- Press the CURSOR [◀] key when a file or folder is selected to close the currently open folder and show the contents of the next higher level.

7 Use the DATA wheel or CURSOR [▲/▼] keys, to select the audio file that you want to delete, and press the ENTER key. The following pop-up window opens.



8 Use the DATA wheel or the CURSOR [▲/▼] keys to select DELETE, and press the ENTER key.



9 The FILE DELETE confirmation message opens. Press the F1 key delete the file, or press the F2 key to cancel the operation.



8 – Other useful functions

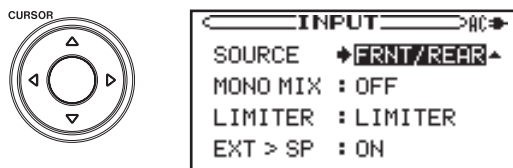
Outputting external microphone signals from the speakers

You can connect external microphones to this unit and use it as an amplifier.

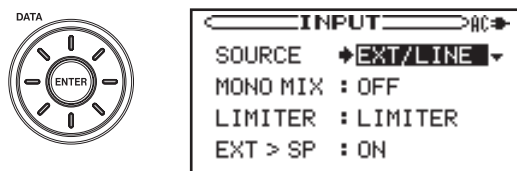
- 1 Press the INPUT key to open the INPUT screen.



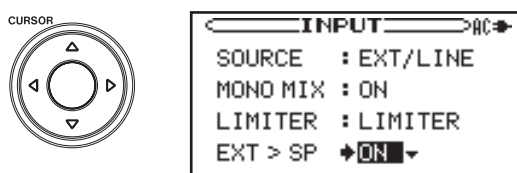
- 2 Use the CURSOR [▲/▼] keys to select the SOURCE item.



- 3 Use the DATA wheel to select EXT/REAR or EXT/LINE.



- 4 Use the CURSOR [▲/▼] keys to select the EXT > SP item.



- 5 Use the DATA wheel to set it to ON, allowing the sounds input from the external microphones to be output through the speakers.

NOTE

- This function is for outputting the sound input by external microphones. Sound input from the built-in microphones cannot be output through the speakers.
- When using only one microphone, set MONO MIX to ON to output the sound through both the left and right speakers.

CAUTION

- When EXT > SP is set to ON, do not point external microphones toward the speakers. Doing so could cause feedback.
- Turning up the FRONT MIC/EXT MIC and VOLUME knobs increases the probability of feedback. Please use care when adjusting these.

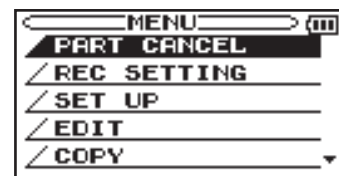
Copying CD tracks to an SD card (BB-1000CD only)

You can copy tracks from a CD to an SD card. The tracks from the CD are copied to the currently open folder on the SD card. To change the destination folder select the folder on the BROWSE screen in advance.

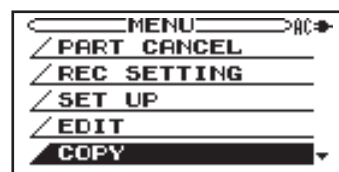
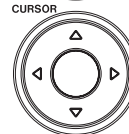
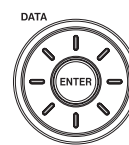
- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



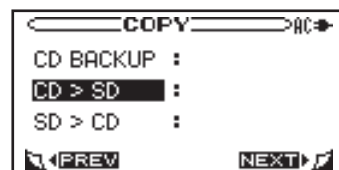
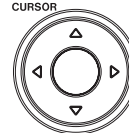
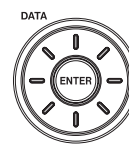
- 3 Press the MENU key to open the MENU screen.



- 4 Use the DATA wheel or CURSOR [▲/▼] keys to select COPY, and press the ENTER key.



- 5 Use the DATA wheel or CURSOR [▲/▼] keys to select CD > SD, and press the ENTER key.



8 – Other useful functions

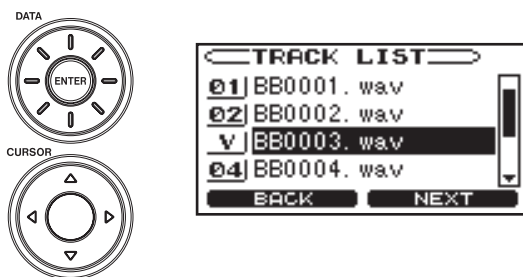
- 6 Use the DATA wheel to set the format for the files saved on the SD card, and press the F2 key.



NOTE

The four recording file formats that can be selected are MP3 (low), MP3 (normal), MP3 (high) and WAV, with the sound quality increasing in that order. As sound quality increases, however, so does file size, reducing the amount of time that can be recorded.

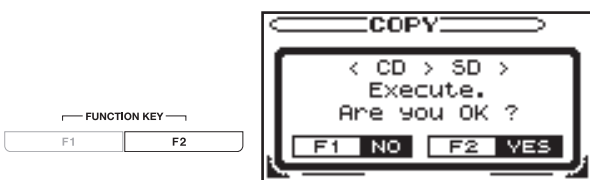
- 7 Use the DATA wheel or CURSOR [▲/▼] keys to select a track that you want to copy to the SD card, and press the ENTER key. A check mark appears next to the selected track.



NOTE

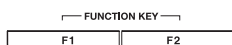
If you choose an already checked track, you can remove the check mark by pressing the ENTER key.

- 8 Repeat the previous step to mark other files to be copied to the card, and press the F2 key. A confirmation screen opens.



- 9 Press the F2 key again to start copying the tracks. When complete, the COPY screen reopens.

To cancel the operation, press the F1 key to reopen the COPY screen without copying any files.



Creating a CD from files on an SD card (BB-1000CD only)

You can make an audio CD from files on an SD card. Choose tracks to be copied to the CD from those contained in the SD card folder that is currently being used. Select the folder that contains the files that you want to put on the audio CD beforehand using the BROWSE screen.

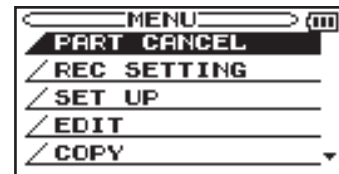
NOTE

MP3 files can be copied to a CD, but they will automatically be converted into WAV format to create an audio CD.

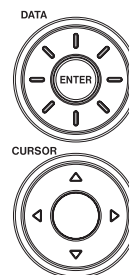
- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



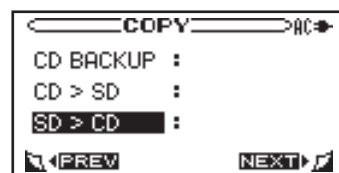
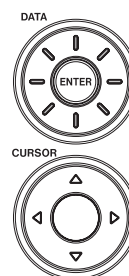
- 3 Press the MENU key to open the MENU screen.



- 4 Use the DATA wheel or CURSOR [▲/▼] keys to select COPY, and press the ENTER key.



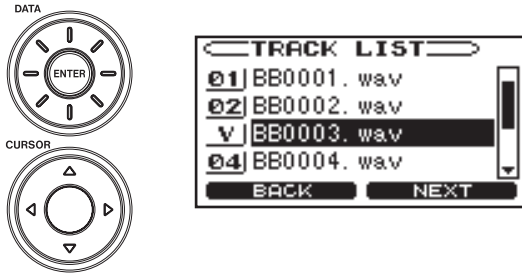
- 5 Use the DATA wheel or CURSOR [▲/▼] keys to select SD > CD, and press the ENTER key.



The TRACK LIST screen opens, showing the files in the selected folder on the SD card.

- 6 Use the DATA wheel or CURSOR [▲/▼] keys to select a file that you want to put on the CD-R/RW disc, and press the ENTER key. A check mark appears next to the selected track.

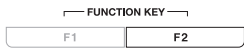
8 – Other useful functions



NOTE

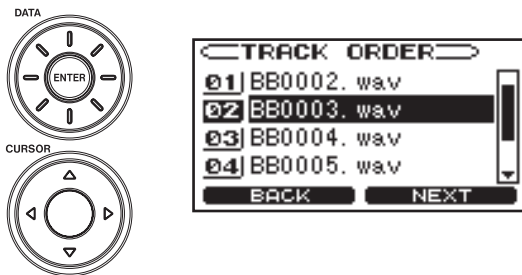
If you choose an already checked track, you can remove the check mark by pressing the ENTER key.

- Repeat the previous step to mark all the other files to be put on the CD, and press the F2 key.

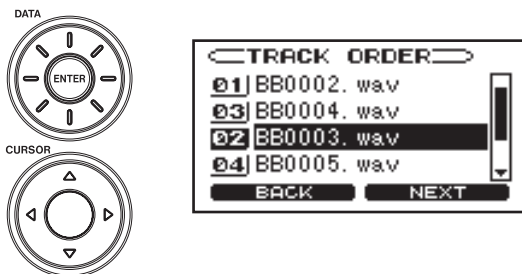


The TRACK ORDER screen opens.

- You can change the order of the tracks if desired. Use the DATA wheel or CURSOR [▲/▼] keys to select the file that you want to move, and press the ENTER key.



- Use the DATA wheel or CURSOR [▲/▼] key to change the order, and press the ENTER key.

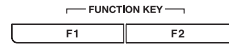


- Repeat the previous two steps as necessary to put the tracks in the order that you want them on the CD, and press the F2 key. The following confirmation screen opens.



- Insert a blank CD-R/RW, and press the F2 key to start writing the selected files to the CD-R/RW. After the disc has been written completely if you want to make another copy of the same CD, follow the instructions on the screen, and insert a blank disc and press the F2 key.

Press the F1 key to end the operation and reopen the COPY screen.



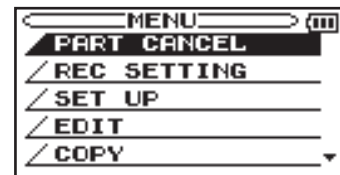
Backing up an audio CD (BB-1000CD only)

You can use an SD card to make a backup copy of an audio CD.

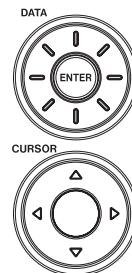
- Confirm that the unit is stopped.
- Press the HOME key to open the Home screen.



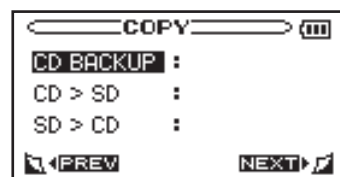
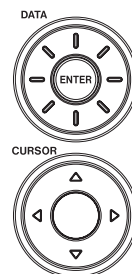
- Press the MENU key to open the MENU screen.



- Use the DATA wheel or CURSOR [▲/▼] keys to select COPY, and press the ENTER key.



- Use the DATA wheel or CURSOR [▲/▼] keys to select CD BACKUP, and press the ENTER key.



- Insert an SD card and the CD that you want to backup, and press the F2 key to start making a temporary copy on the SD card.

8 – Other useful functions

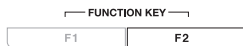


NOTE

The following warning appears if the SD card does not have enough open capacity.



- 7 Insert an SD card that has enough capacity, and press the F2 key to start making the backup.



When the contents of the CD have been completely backed up on the SD card, the CD is automatically ejected. A message asking you to insert a new CD-R/RW disc appears.



- 8 Insert a blank CD-R/RW, and press the F2 key to start creation of a backup on the CD-R/RW. After the backup is completed, the disc is automatically ejected.

If you want to make another backup of the same disc, insert a new CD-R/RW, and press the F2 key.

Press the F1 key to end the operation and reopen the COPY screen.



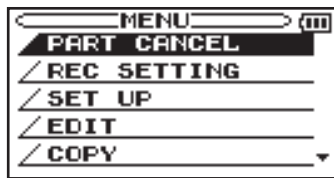
9 – Operation settings (SETUP screen settings)

Make settings according to your use needs on the SETUP screen.

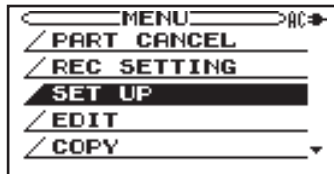
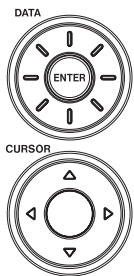
- 1 Confirm that the unit is stopped.
- 2 Press the HOME key to open the Home screen.



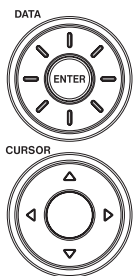
- 3 Press the MENU key to open the MENU screen.



- 4 Use the CURSOR [▲/▼] keys to select SETUP, and press the ENTER key.



- 5 Settings for the items below can be made on the SETUP screen. Use the CURSOR [▲/▼] keys to select an item, and use the DATA wheel to change its settings.



Set automatic backlight OFF time (BACKLIGHT)

Use this item to set how long after the last operation until the backlight turns off when operating on battery power. Select OFF (backlight always on), 5 sec (default setting), 10 sec, 15 sec, or 30 sec.

Adjust display contrast (CONTRAST)

Use this to adjust the display contrast. Set the value between 1 and 20 (default setting: 8).

Set flash back time (FLASH BACK)

Use this to set the number of seconds that the flashback function goes back in a track. Set the value from 1–5 sec (default setting: 2 sec).

Set date and time (DATE/TIME)

Use this item to set the unit's internal clock. (See "Setting the date and time" on page 46.)

10 – Messages

The table below is a list of pop-up messages. Under certain circumstances, the unit may show one of these messages. Please check this table if you want to know the meaning and how you should respond.

Message	Meaning and response
File not found	The audio file cannot be found or is corrupted. Check the audio file that caused this message.
Non-Supported	The audio file is not a supported format. Check the file format.
Battery Empty	The battery is almost out of power. Turn off the power and replace the batteries or supply power using the dedicated TASCAM PS-1225L AC adaptor.
I/O Too Short	When trying to start loop playback using the IN or OUT key, the IN and OUT points are too close together. Reset the IN and OUT points and try again.
Write Timeout	Writing to the SD card timed out. Backup files on the card to your computer, and format the card using the unit. (See “Formatting an SD card” on page 18.)
Media Full	The SD card does not have any more open space. Erase unnecessary files or move them to your computer to make open space.
Max File Size	The size of a file exceeds 2 GB or recording has continued for 24 hours or more.
File Full	The total number of files in a folder is already 99 or the combined total number of folders and files on the SD card is already 999. Erase unnecessary files or move them to your computer
No Card	No SD card was found when trying to record to an SD card. Insert a recordable SD card and try again.
Protected Card	The SD card that you tried to record on or write other data to is protected. Eject the SD card, disengage its protect switch and insert it again.
Battery Low	This appears if you try to record when the battery power is low. Replace the batteries or supply power using the dedicated TASCAM PS-1225L AC adaptor.
No CD	When you tried to record, no CD was loaded. Insert a recordable CD-R/CD-RW and try again.
Not Audio CD	When you tried to record, the inserted CD was not an audio CD. Insert a recordable CD-R/CD-RW and try again.
CD is CLOSED	When you tried to record, the inserted CD was a finalized disc. If the disc is a finalized CD-RW, unfinalize it to make recording on it possible. (See “Preparing a CD-RW so that additional recordings can be made (BB-1000CD only)” on page 30) and try again. Otherwise, replace the inserted disc with a recordable CD-R/CD-RW.
Format is MP3	You tried to overdub a recording, but the recording format was set to MP3. Set the FILE TYPE under the REC SETTING menu to "WAV." (See “Setting the recording file format” on page 21.)
No PB File	You tried to overdub a recording, but no playback track was found. If the playback media is set to CD, insert an audio CD that is not blank and try again. If the playback media is an SD card, add an audio file that can be played back to it and try again.
Layer too Deep	You cannot make a folder at the current level. Make it at the level above.
File Protected	This appears when trying to delete or divide a read-only file. You cannot delete or divide such a file with the unit.
File Num Full	Recording to an SD card is stopped because the unit tried to make a new recording file automatically, but 99 recording files have already been made.
Over 74 minutes	When copying files from an SD card to a disc, if the total time of the selected files is more than 74 minutes, this message appears. Use a disc with 80-minute capacity or deselect some files.
Over 80 minutes	When copying files from an SD card to a disc, if the total time of the selected files is more than 80 minutes, this message appears. You cannot copy all the selected files even on an 80-minute disc. Deselect some files.
Over track	More than 99 tracks have been selected on the screen for selecting tracks to copy. You cannot select more tracks. Deselect some tracks.
Cannot Execute	Execution of some operations are not possible under the following circumstances: <ul style="list-style-type: none"> • You cannot ERASE a disc other than an audio CD-RW. • You cannot FINALIZE a disc other than an audio CD-R/RW. • You cannot UNFINALIZE a disc other than an audio CD-RW.

10 – Messages

Messages	Meaning and response
Finalized Disc	You tried to execute FINALIZE with a disc that is already finalized. You do not need to finalize it.
Not Finalized	You tried to execute UNFINALIZE with an unfinalized disc. You do not need to unfinalize it.
Execute Failed	The unit failed to execute a FINALIZE, UNFINALIZE or ERASE operation for some reason. Check for scratches or dirt on the media.
Cannot DIVIDE less than 2sec	You selected DIVIDE for a WAV file that is less than 2 seconds long, but you cannot divide a file that is 2 seconds or less.
MBR Error Init CARD	The SD card is not formatted properly or the formatting is broken. When “Are you Sure?” appears, press the ENTER key to format the entire SD card in FAT format. All data on the file is erased during formatting.
Format Error Format CARD	The FAT formatting of the SD card is abnormal or broken.
Invalid Card Change Card	This appears when an SD card error occurs when the unit is turned on.
Card Error	There was some sort of error with the SD card. Turn the power off once and replace the card with a working card.
Disc Error	The unit failed when writing data on a disc. Check scratches or dirt on the disc.
CD Drive Error	If any of these errors occur, turn the unit's power off once and restart the unit. Disconnect the AC adaptor and remove the batteries if you cannot turn the power off. If the error message continues to appear, contact a TASCAM Service Center
Not Continued	
File Error	
Player Error	
Device Error	
Writing Failed	
Sys Rom Err	
System Err 50	
System Err 1	
System Err 2	
System Err 3	
System Err 4	
System Err 5	
System Err 6	
System Err 7	
System Err 8	
System Err 9	

11 – Troubleshooting

If the unit does not function properly, please review the following troubleshooting tips before requesting service. If you are still unable to resolve the problem, contact the store where you purchased the unit or a TASCAM Service Center.

■ No power

- Is the power plug fully connected to the power outlet?
- Are the batteries installed with the proper +/- orientation?

■ Remote control does not work.

- Is a battery in the remote control and does it have sufficient charge?

■ No sound

- Are headphones plugged in?
- Is the **SPEAKER** switch **OFF**?
- Is the monitoring system properly connected?
- Is the **VOLUME** knob set to **MIN**?

■ Sound is distorted when recording

- Are the **FRONT MIC/EXT MIC** or **REAR MIC/LINE** knobs on the top panel turned up too high?
- Are the levels of the input signals too high?

■ I hear noise

- Are the cables connected and working properly?

■ A CD does not play

- Is the disc scratched or dirty?

■ Input levels cannot be adjusted with their knobs.

- Is the automatic gain control (AGC) function on?

■ A CD recorded on this unit cannot be played on other CD players.

- Has the CD been finalized?

■ The playback sounds strange.

- Is the part cancel function on?
- Have you adjusted the playback pitch?
- Have you adjusted the playback speed?

12 – Specifications

Ratings

■ Recording media

SD card (64 MB - 2 GB), and SDHC card (4 GB - 32 GB)
CD-R, CD-RW, CD-R-DA, CD-RW-DA (high speed
CD-RW is supported) (BB-1000CD only)

■ Playback media

SD card (64 MB - 2 GB), and SDHC card (4 GB - 32 GB)
CD-DA, CD-R, CD-RW, CD-R-DA, CD-RW-DA (high
speed CD-RW is supported) (BB-1000CD only)

■ Recording/Playback format

WAV (when SD/SDHC card is used)

Sampling frequency: 44.1 kHz

Quantization bit rate: 16 bit

MP3 (when SD/SDHC card is used)

Sampling frequency: 44.1 kHz

Bit rate: 64 kbps, 128 kbps, 192 kbps

Audio input and output ratings

■ LINE INPUT (L/R) [UNBALANCED]

Connector: RCA pin jack

Nominal input level: -10 dBV

Maximum input level: +6 dBV

Minimum input level: -22 dBV

Input impedance: 20 kΩ

■ EXT MIC A/B (L/R) [BALANCED]

Connector: XLR-3-32 (1: GND 2: HOT 3: COLD)

Nominal input level: -13 dBu

Maximum input level: +3 dBu

Minimum input level: -55 dBu

Input impedance: 2.4 kΩ

■ Build-in microphone

Front: Omnidirectional L/R

Rear: Omnidirectional L/R

■ LINE OUTPUT (L/R) [UNBALANCED]

Connector: RCA pin jack

Nominal output level: -10 dBV

Maximum output level: +6 dBV

Output impedance: 200Ω

■ PHONES

Connector: Stereo mini jack (3.5 mm dia.)

Output: more than 30 mW + 30 mW

(THD+N less than 1.0%, 32Ω load)

■ SPEAKERS

3 inch x 2

■ AMPLIFIERS

5 W + 5 W

Audio performance

Frequency response

20-20 kHz (±1 dB)

Distortion (THD+N)

0.05% (1 kHz LPF 20 kHz)

Signal to noise ratio

85 dB (1 kHz, LPF 20 kHz A-Weighted)

General

■ Power: AC adaptor or 8 AA batteries

AC adapter

AC adaptor input: AC100 - 240V, 50 - 60 Hz

AC adaptor output: 12V DC

AC adaptor output current: 2.5 A

■ Battery life (Continuous operation):

About 1.5 hours (JEITA CD playback, Speaker output
mode, BB-1000CD only)

About 2.5 hours (JEITA SD record/playback, Speaker
output mode)

About 4.5 hours (SD record/playback, headphone output
mode)

■ Power consumption:

30 W (when playing back SD, Line In: +6 dBV input,
Maximum speaker output)

■ Dimensions (W x H x D):

380 x 204.7 x 107 mm/14.96 x 8.06 x 4.21 in.

■ Weight:

BB-1000CD: 3.4 kg/7.50 lb

BB-800: 3.2 kg/7.06 lb

■ Controllable range of the remote control:

Head-on to the sensor: 7 m

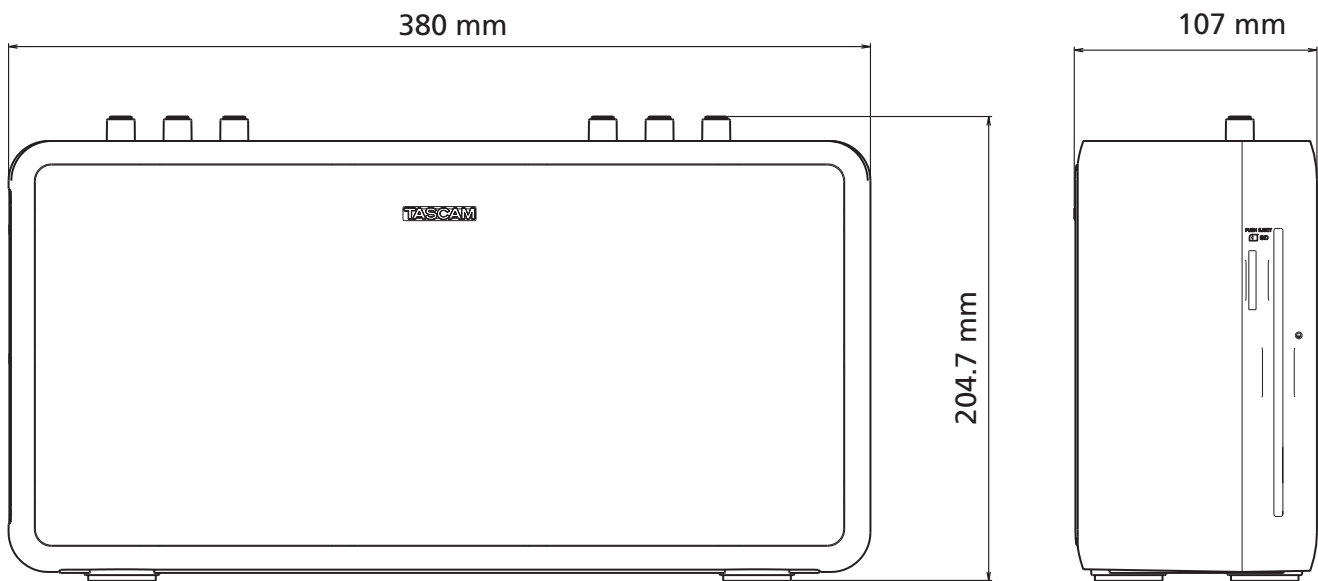
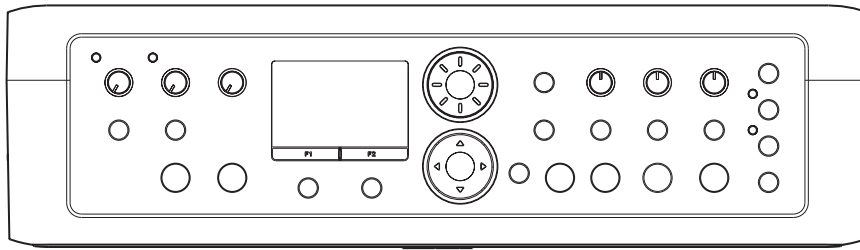
15° left/right from the sensor: 4 m

■ Operating temperature:

5 to 35°C

12 – Specifications

Dimensional drawings



- Illustrations may differ slightly from production models.
- Design and specifications are subject to change without notice.

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