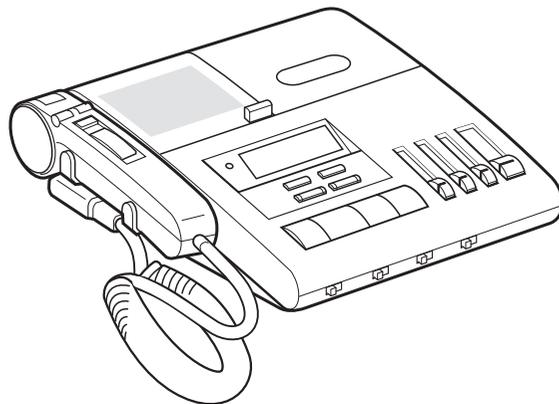


# ***Microcassette Dictator/Transcriber***

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Operating Instructions



***BM-850D  
BM-850T***

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## WARNING

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

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

## CAUTION

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

## Owner's Record

The model and serial numbers are located on the bottom. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_

---

## Precautions

### On safety

- Should any solid object or liquid fall into the unit, unplug the unit and have it checked by qualified personnel before operating it any further.

### On power sources

- Operate the unit only on 9 V DC.
- For AC operation, use the AC power adaptor supplied with this unit. Do not use any other AC power adaptor as it may cause malfunction.
- Unplug the AC power adaptor from the wall outlet when it will not be used of an extended period of time. To disconnect the adaptor, pull it out by grasping the adaptor. Never pull it by the cord.
- The AC power adaptor which has been supplied becomes hot if it is connected to an AC outlet for a long period of time. But, this will not cause any trouble.

### On placement

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

If you have any question or problem concerning your unit that is not covered in this manual, please consult the Sony dealer from whom you purchased the unit.

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## About This Manual

The instructions in this manual are for the BM-850D and BM-850T. Before you start, please check your model number.

The main unit is the BM-850 for both the BM-850D and the BM-850T. You can use the BM-850D as a dictator since the BM-850D is supplied with accessories for dictating, while you can use the BM-850T as a transcriber since the BM-850T is supplied with accessories for transcribing. Any differences in operation are clearly indicated in the text, for example, "BM-850D only".

If you buy the accessories which your model does not have, your model works as both dictator and transcriber.

### Differences in supplied accessories

Accessory	Model	
	BM-850D	BM-850T
Hand Control Unit	Supplied	Not supplied
Cradle of the hand control unit	Supplied	Not supplied
Foot Control Unit	Not supplied	Supplied
Earphone	Not supplied	Supplied

## Features

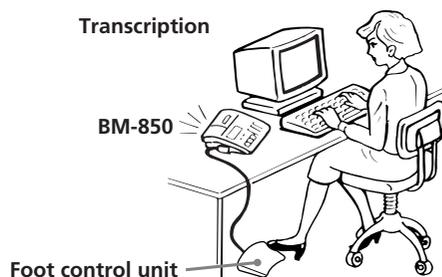
### As a dictator (BM-850D)

- The hand control unit remotely controls the BM-850.
- Dual electronic indexing function signals—"LTR" (end of letter) and "SEC" (special instructions to secretary) signals—can be recorded on a tape during dictating, recording of telephone calls, listening or in the stop mode.
- The REC/ERASE lamp for checking that the recording or erasing is done.
- Alarm sound and indication on the display window informs recording error.
- Recording of telephone calls can be performed with the use of the optional TL-4 telephone recording adaptor.
- With the use of the optional DE-45 or MDR-U10M earphones, you can monitor the sound with the desired sound level during recording.



### As a transcriber (BM-850T)

- The foot control unit allows you to move the tape without using your hands.
- Auto-stop function quickly accesses instructions and documents.
- Auto backspace function with the REVERSE TIME control makes transcribing easy by enabling the reviewing of the last recorded words each time listening is resumed.
- Two tape speeds (2.4 cm/sec. and 1.2 cm/sec.) can be selected according to the user's needs.
- Rapid erasing function with ERASE and REW buttons.
- The Electronic "Index OFF" mode allows you to transcribe a cassette which was not recorded using a Sony Professional Dictating Machine.



# Operation Flow Chart

For details, refer to the pages in ( ).

□ : Necessary step [ □ ] : Optional step

## Dictation (BM-850D)



Connect the AC power adaptor to the unit and to an AC outlet (6).

Connect the hand control unit (6).

Set POWER to ON.

Insert a cassette (7).

Set TAPE SPEED.

Press RESET to set the digital counters to zero.

Set the function selector of the hand control unit to DICT.  
Speak into the microphone.

Record the SEC signal before giving instructions to the secretary (10).

Quick review playback and correct the dictated material.  
Keep the function selector of the hand control unit pressed down toward B. SPACE to rewind the tape until the desired point on the tape is reached. Release the selector and playback of the dictation begins. When the reviewing is completed, set the function selector to DICT to proceed with dictation.

Record the LTR signal at the end of each document (10).

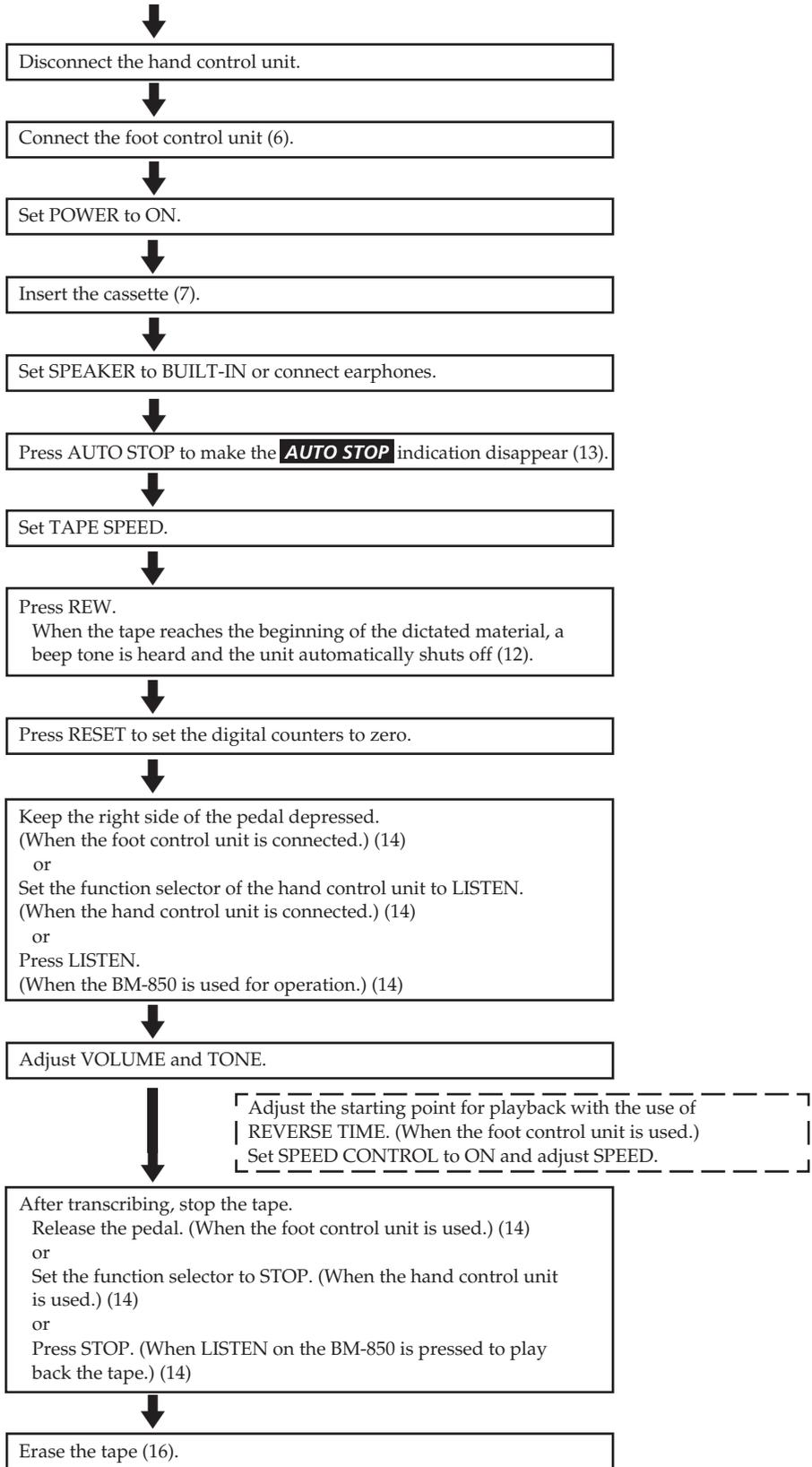


Set the function selector of the hand control unit to STOP.

Press the eject button to remove the cassette.

Hand the cassette to your secretary or transcriptionist.

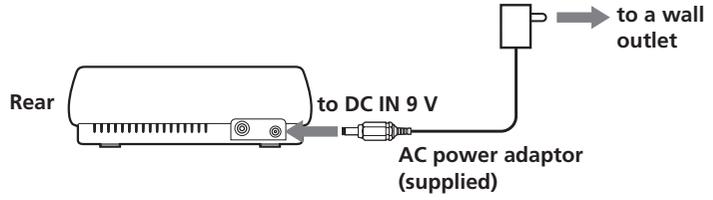
# Transcription (BM-850T)



# Power Connection

## Note on the AC power adaptor

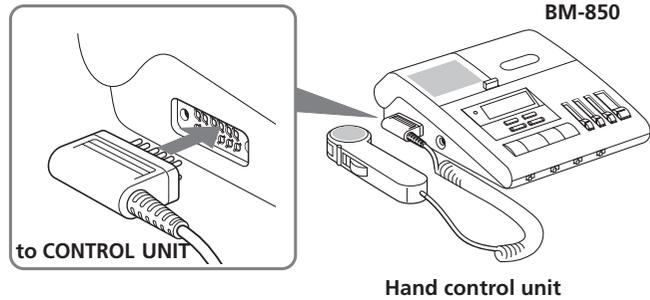
Use only the AC power adaptor supplied. Do not use any other AC power adaptor.



# Setting Up the Unit

## Connecting the Hand Control Unit (supplied with the BM-850D only)

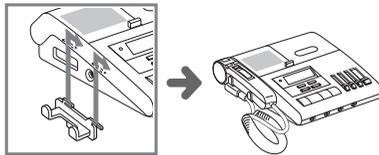
For operation, refer to "Dictation" on page 8.



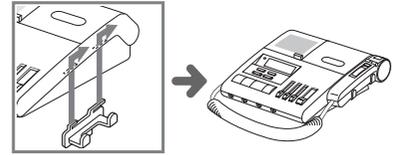
## Attaching the cradle

Attach the cradle to the left or right side of the unit. Place the hand control unit on the cradle while not in use. Insert the cradle into the slots and slide to secure it.

### Left side

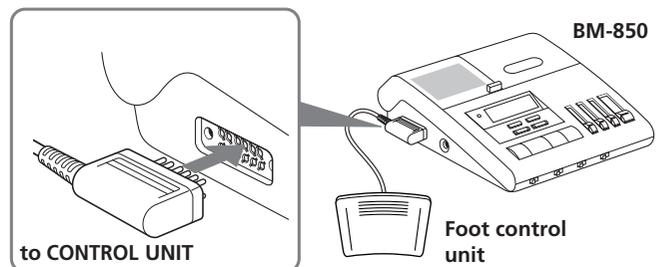


### Right side

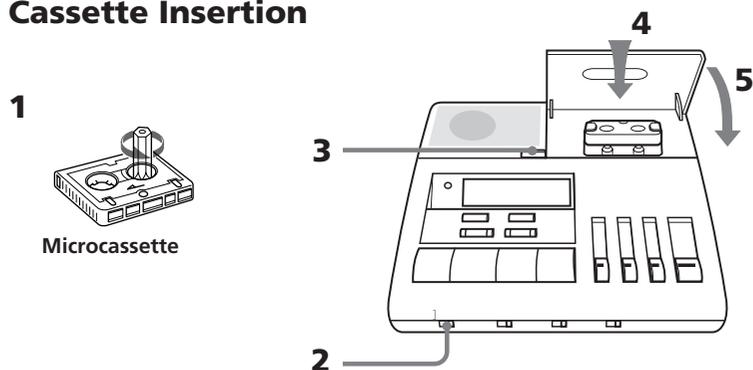


## Connecting the Foot Control Unit (supplied with the BM-850T only)

For operation, refer to "Transcription" on page 12.



## Cassette Insertion

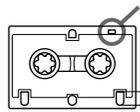


- 1** Take up any slack in the tape.
- 2** Set **POWER** to **ON**.
- 3** Press the eject button to open the cassette holder.
- 4** Insert a cassette into the cassette holder with the side to be recorded on or played back facing upward.  
Push the cassette into the holder completely.
- 5** Close the cassette holder.

### This unit uses only standard Microcassettes.

Non standard cassettes cannot be used because their "L" dimension (see illustration) is different.

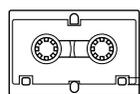
#### Standard



Only standard Microcassettes have a small indentation on side A.

L Approx. 5 mm

#### Non standard



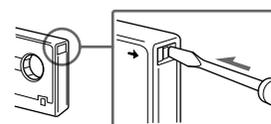
L Approx. 2.5 mm

### Notes on the Microcassette

#### To protect cassettes from accidental erasure

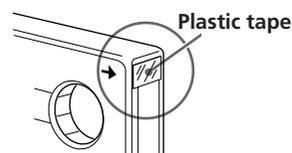
When a recording is made, the previous recording is automatically erased.  
To prevent erasure, break the cassette tabs.

Break out and remove the tab.



#### To reuse a cassette

To record on a cassette with removed tabs, cover each slot with a piece of plastic tape.

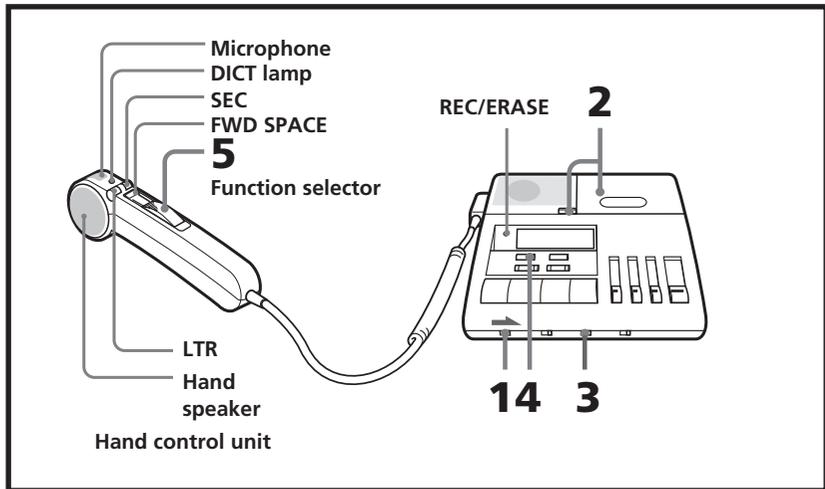


# Dictation

You need the BM-850D or, if your model is BM-850T, the hand control unit.

To use the unit as a dictating machine, connect the hand control unit.

For connection, see page 6.



## Tips for More Efficient Dictation

### Before you start dictation

- Organize your thoughts.
- Make notes or an outline of what you want to dictate.
- Check that the cassette is erased. (See page 16.)

### When you dictate

- Identify yourself. (Name, department, phone number)
- Indicate the type of dictation. (Memo, letter, etc.)
- Give transcribing instructions. (Type of stationery, number of copies and who they are for, envelopes, etc.)
- Specify distribution. (Names, addresses, etc.)

### During dictation

- Relax and speak clearly, at normal speed.
- Short sentences are best.
- Include punctuation.
- Spell difficult or unusual words.
- Correct your mistakes. (Review and redictate, or use SEC signal to alert the transcriptionist of changes or corrections.)
- At the end of each document, record an LTR signal.

### Note

Keep the hand control unit away from the BM-850 during recording. Otherwise, noise may be recorded.

**1** Set POWER to ON.

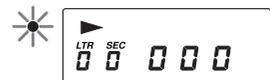
**2** Insert a cassette. (See page 7.)

**3** Set TAPE SPEED to the desired tape speed, 2.4 or 1.2 (cm/sec.).

**4** Press RESET to set the digital counters to zero.

**5** Set the function selector to DICT.

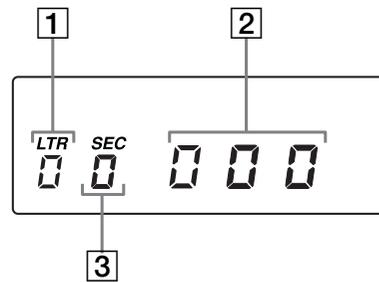
Recording starts. Speak into the microphone. ► appears on the display window. The DICT lamp on the hand control unit lights up and REC/ERASE lamp on the BM-850 blinks when the microphone picks up sound.



### To stop the tape

Set the function selector to STOP.

## Digital Counter While Dictating



- 1 The LTR (end of letter) counter: Reference for the number of the LTR signals recorded.
- 2 Tape counter: Numerical reference for recording and listening.
- 3 The SEC (special instructions to secretary) counter: Reference for the number of the SEC signals recorded.

### To set the digital counter to zero

We recommend that you press the RESET button before starting dictation. Keep the RESET button pressed for about one second to reset the LTR (document), SEC (special instruction) and tape counters to zero.

#### Note

- The numbers on the digital counter are memorized even when the POWER switch is set to STANDBY or a cassette is being removed.

## Convenient Functions

### To record LTR (letter) and SEC (secretary) signals

You can record electronic index signals on the tape while the unit is set in recording (dictation), telephone recording, stop or playback (with the hand control unit) mode.

LTR (letter=end of document) signal: Record at the end of each document.

SEC (secretary=special instructions to secretary) signal: Record before giving instructions to the secretary.

When the AUTO STOP function (see page 13) is activated (AUTO STOP: ON), the tape automatically stops at each index signal when it is rewound or rapidly advanced. Documents and instructions can be located without the user's having to listen to the entire tape.

- Before dictating, press RESET to reset the counters to zero.

*Continued on next page.*

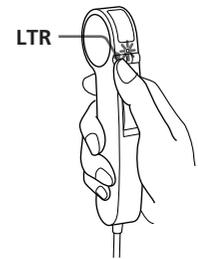
## Dictation (continued)

### Notes

- The LTR or the SEC signal should be recorded with the intervals of more than 6 seconds.
- Playback sound is muted when either the LTR or SEC button is pressed.
- If either the LTR or SEC button is pressed while turning on the SPEED CONTROL selector, the tape will run at normal tape speed.

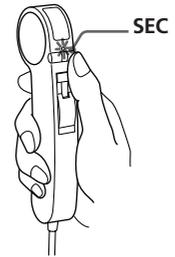
### To record the LTR signal

Press LTR on the hand control unit.  
Each time the button is pressed, the number on the LTR (document) counter increases by one and "LTR" flashes for about three seconds.



### To record the SEC signal

Press SEC on the hand control unit.  
Each time the button is pressed, the number on the SEC (special instruction) counter increases by one and "SEC" flashes for about three seconds.



Up to nine signals each can be recorded. If more than nine signals are recorded, "E" appears in the counter display.

### Recording time

Select the desired tape speed for recording with the use of the TAPE SPEED selector.

2.4 cm: For optimum sound (recommended for normal use)

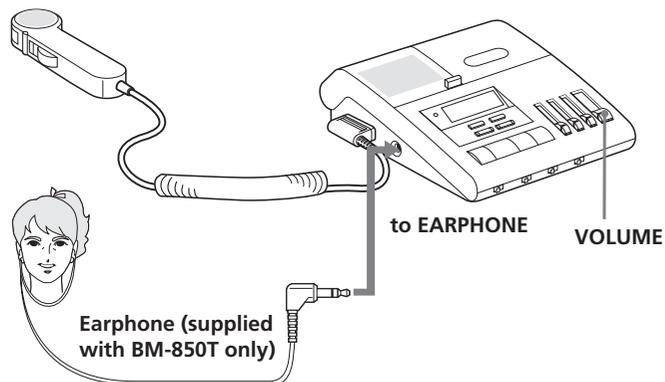
A 60-minute recording can be made using both sides of the MC-60BM Microcassette.

1.2 cm: For longer recording time

A 120-minute recording can be made using both sides of the MC-60BM Microcassette.

### Monitoring while dictating

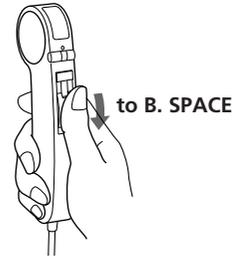
The recording can be monitored through earphones. Connect a Sony DE-45 or MDR-U10M earphones (not supplied) to the EARPHONE jack located on the left side of the unit. Adjust VOLUME if required.



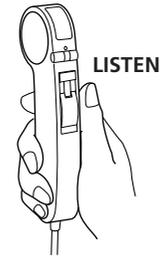
### Quick reviewing (playback)/correcting the dictated material

You can easily listen to the dictated material and correct it if required.

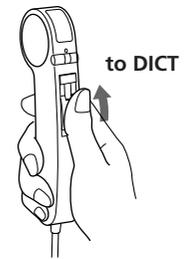
- 1** Keep the function selector of the hand control unit pressed down toward **B. SPACE** to rewind the tape.



- 2** Release the selector. Playback of the dictation begins.

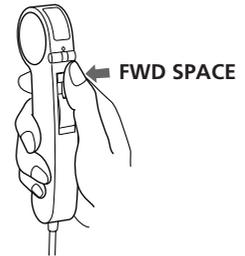


- 3** When the reviewing is completed, set the function selector to **DICT** to proceed with the dictation.



### For fast winding of the tape

Keep the **FWD SPACE** button of the hand control unit pressed until the desired portion is reached.



### When you have finished dictating

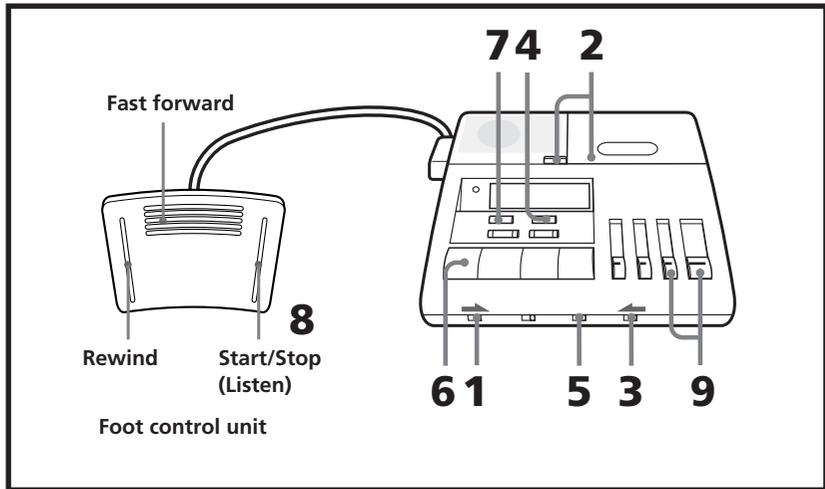
Hand the cassette to your secretary without rewinding the tape.

# Transcription

You need the BM-850T or, if your model is BM-850D the foot control unit.

To use the unit as a transcribing machine, connect the foot control unit.

For connection, see page 6.



## Tips on Transcription

- Before typing, check the number of LTR and SEC signals recorded on the cassette and review the contents using the AUTO STOP function.
- Erase the tape when transcription is finished.

**1** Set POWER to ON.

**2** Insert a cassette. (See page 7.)

**3** Set SPEAKER to BUILT-IN.

**4** Set AUTO STOP to make **AUTO STOP** disappear (AUTO STOP function is off). (See page 13.)

**5** Set TAPE SPEED to the same tape speed as that used for recording (dictation).

**6** Press REW to rewind the tape.  
When the tape is completely rewound, a beep is heard and the unit automatically shuts off.

**7** Press RESET to set the digital counters to zero.

**8** Keep the right side of the foot control unit pedal depressed to listen to the tape.

**9** Adjust VOLUME and TONE.

## To stop the tape

Release the pedal.

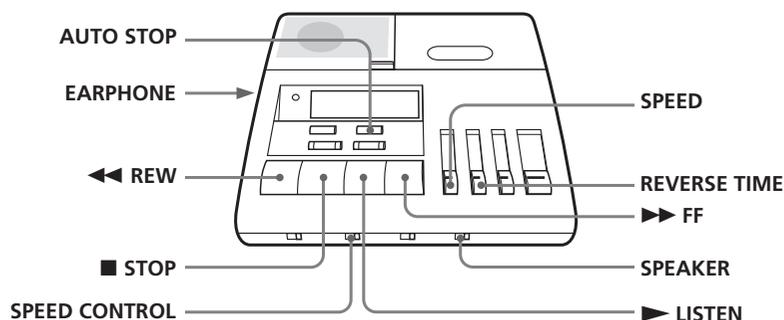
### To rewind the tape

Keep the left side of the foot control unit pedal depressed.

### To rapidly advance the tape

Keep the center top of the foot control unit pedal depressed.

## Convenient Functions



### Note

- The tape does not stop at the LTR or SEC signal even if the AUTO STOP function is on while the FF or REW button is continuously pressed.

### Notes

- E-INDEX signal of the Sony conventional models BM-577 and so on corresponds to the LTR signal of the model BM-850.
- LTR/SEC signals and E-INDEX signal do not correspond to the cue signals used for consumer type tape recorder.

### AUTO STOP function

With the AUTO STOP function, recorded documents and instructions can be located without the user's having to listen to the entire tape.

This function activates only in rewind or fast forward mode.

When the **AUTO STOP** button is pressed, **AUTO STOP** appears on the display window and the tape automatically stops at each electronic index signal previously recorded on the tape. (See "To record LTR and SEC signals" on page 9.)

- **When the LTR signal is detected**, the LTR document counter number increases or decreases, "LTR" blinks for approximately 3 seconds, and a beep tone is heard. The tape stops automatically.
- **When the SEC signal is detected**, the special instruction counter number increases or decreases, "SEC" blinks for approximately 3 seconds, and a beep tone is heard. The tape stops automatically.

When the **AUTO STOP** function is off, the numbers on the LTR (document) and SEC (special instruction) counters increase or decrease and "LTR" or "SEC" blinks when an LTR or SEC signal is detected, but the tape does not stop.

### Controlling the speed

Set the SPEED CONTROL switch\* to ON to adjust the speed only by the SPEED control. The tape can be played back at higher or lower speed than normal.

When the SPEED CONTROL switch is set to OFF, the tape moves at the normal speed regardless of the position of the SPEED control.

\* Tape speed can be changed in the range of about -10% to +50% with the use of the SPEED control.

*Continued on next page.*

## Transcription (continued)

### Note

If the LTR or SEC signal is detected while the tape is being rewound with this function, the length of the reverse time may be longer than the setting you have selected.

### Auto backspace function

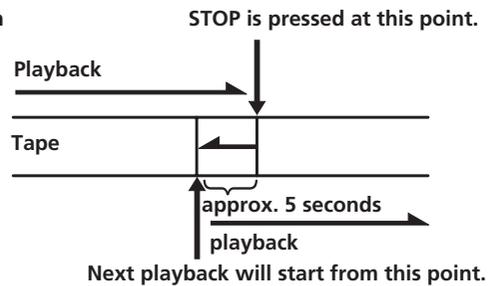
This control operates only when the foot control unit is connected. With the use of the REVERSE TIME control, the tape is rewound a little each time it is stopped. Then, the last few recorded words can be reviewed when you resume listening. Adjust the REVERSE TIME control to determine the length of tape to be rewound.

At "9" position, the tape is rewound so that the dictated material can be reviewed for about 5 seconds\*. At "0" position, the tape stops without being rewound at all.

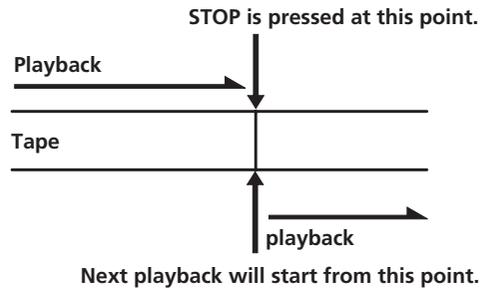
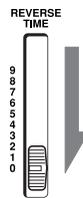
Set the REVERSE TIME control to the desired position and keep the right side of the pedal depressed to listen to the tape.

\* Measured at some point near the middle of the tape. The reverse time will vary in accordance with the remaining length of the tape.

#### REVERSE TIME : at "9" position



#### REVERSE TIME : at "0" position



### Notes

- When the button is pressed while detecting the index signal during playback, the switching time of the operation modes may be delayed.
- When a cassette which was not recorded using a Sony Professional Dictating Machine (BM-531, 560, 570, 577, 820, 880, 890, etc.) is played back or wound rapidly (in fast forward or rewind mode), the switching time of the operation modes may be delayed. In this case, set the unit to the Electronic "Index OFF" mode. (See page 15.)

### Tape transport operation

To	BM-850	Hand control unit	Foot control unit
Rewind	Press ◀◀ REW.	Keep the function selector pressed down toward B.SPACE.	Keep the left side of the pedal depressed.
Stop	Press ■ STOP.	Set the function selector to STOP.	Release the pedal.
Listen	Press ▶▶ LISTEN.	Set the function selector to LISTEN.	Keep the right side of the pedal depressed.
Fast forward	Press ▶▶▶ FF.	Keep the FWD SPACE button pressed.	Keep the top center of the pedal depressed.

### Private listening

Connect a Sony DE-45 or MDR-U10M earphones (not supplied) to the EARPHONE jack.

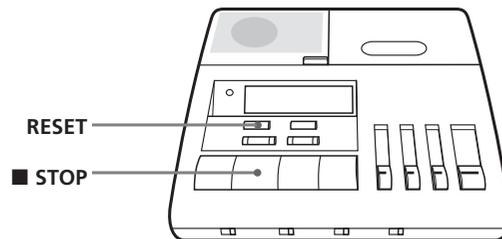
The sound will be heard through the earphones and speaker sound will be disconnected.

### Selecting the speaker

You can listen to the dictated material through the built-in speaker or the speaker on the hand control unit by switching the SPEAKER selector to BUILT-IN or HAND.

## Transcribing a Cassette Recorded with a Dictator Other Than Sony's

If you transcribe a cassette which was not recorded using a Sony Professional Dictating Machine, set the unit to the Electronic "Index OFF" mode.



### Notes

- In the Electronic "Index OFF" mode
  - the LTR or the SEC signal is not recorded even if you press the LTR or SEC button.
  - the AUTO STOP function does not work even if the AUTO STOP button is pressed.
- If you play back in the Electronic "Index ON" mode and the cassette was not recorded using a Sony Professional Dictating Machine (BM-531, 560, 570, 577, 820, 880, 890 etc.), neither the operation buttons, the LTR and SEC counters nor the auto backspace function will work correctly.

**In the tape stop mode, keep both RESET and STOP pressed for more than 2 seconds.**

Only the tape counter is displayed and the number is reset to "000". The unit is in the Electronic "Index OFF" mode.

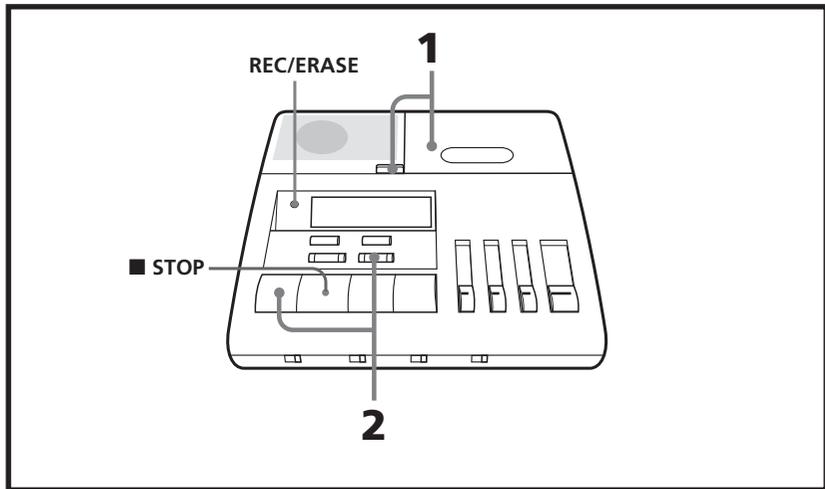


### To return the unit to the Electronic "Index ON" mode

Change the mode by following the procedure above.

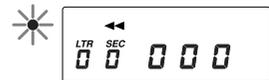
# Erasing

The recording can be erased rapidly.



- 1 Insert the cassette with the side to be erased up.** (See page 7.)  
Be sure not to rewind the tape after transcribing. The end portion of the dictated material to be erased should be positioned at the recording head.

- 2 Keep ERASE pressed and then press ◀◀ REW.**  
The REC/ERASE lamp lights up and ◀◀ appears on the display window.  
The portion of the tape being rewound is erased.



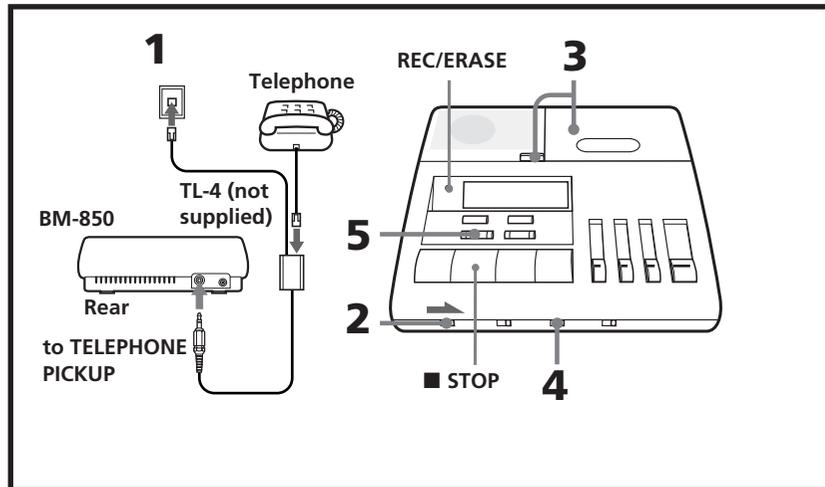
### To stop the tape

Press ■ STOP.

# Telephone Recording

To record telephone conversation, connect the optional TL-4 telephone recording adaptor\* to the TELEPHONE PICKUP jack. For further details, refer to the instruction manual of the telephone recording adaptor.

\* The TL-4 cannot be used on some telephones.



## At the beginning of telephone recording

LTR signal is automatically recorded for about 3 seconds and the telephone recording begins at the same time. While the LTR signal is being recorded (for about 3 seconds), the unit cannot be stopped even though the STOP button is pressed.

## During telephone recording

Only the LTR, SEC and STOP buttons are operative.

## Note

If the TEL REC button is pressed when the telephone recording adaptor, etc. is not connected, the beep tone will be heard and the recording will not start.

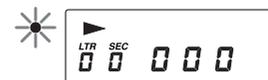
**1** Connect the TL-4 (not supplied) to the unit.

**2** Set POWER to ON.

**3** Insert a cassette. (See page 7.)

**4** Set TAPE SPEED to the desired tape speed.

**5** Keep TEL REC pressed for more than a second. Telephone recording begins. REC/ERASE lamp blinks and ► appears on the display window.

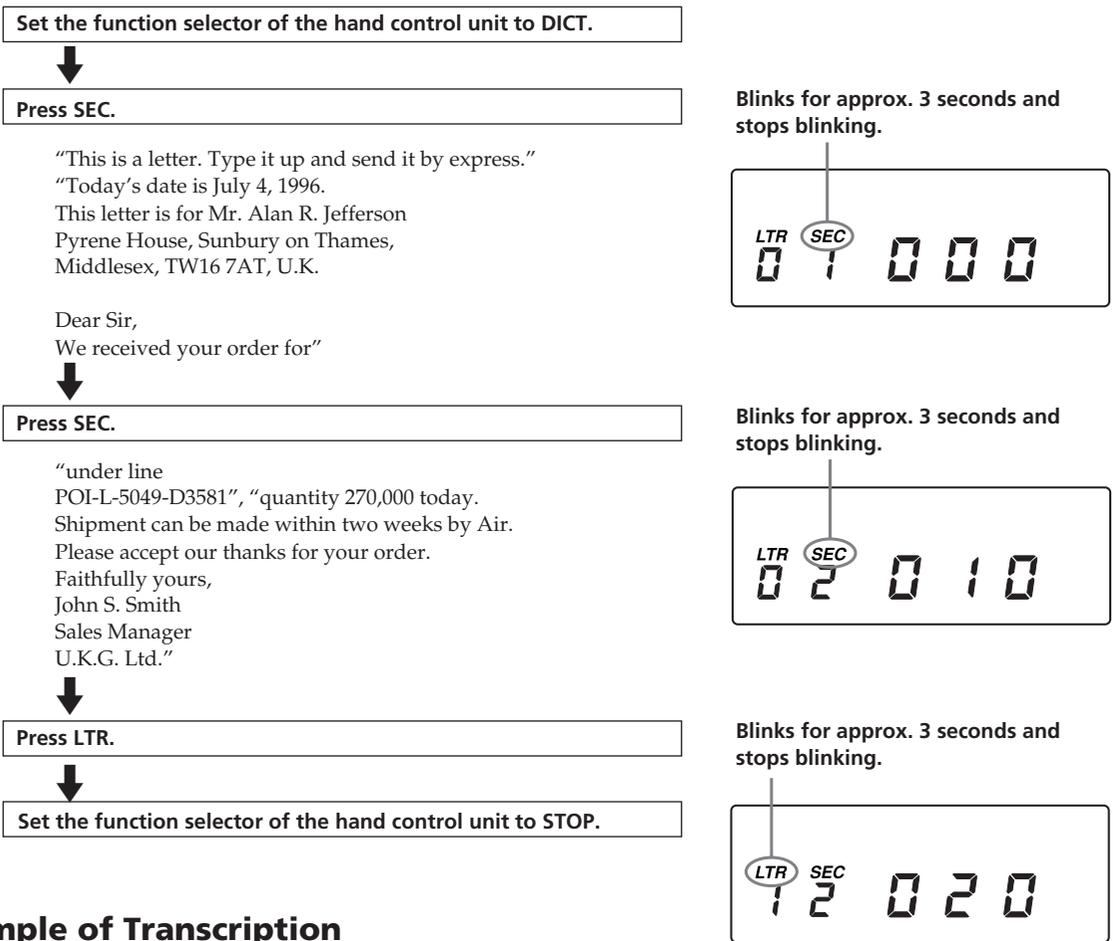


## To stop the tape

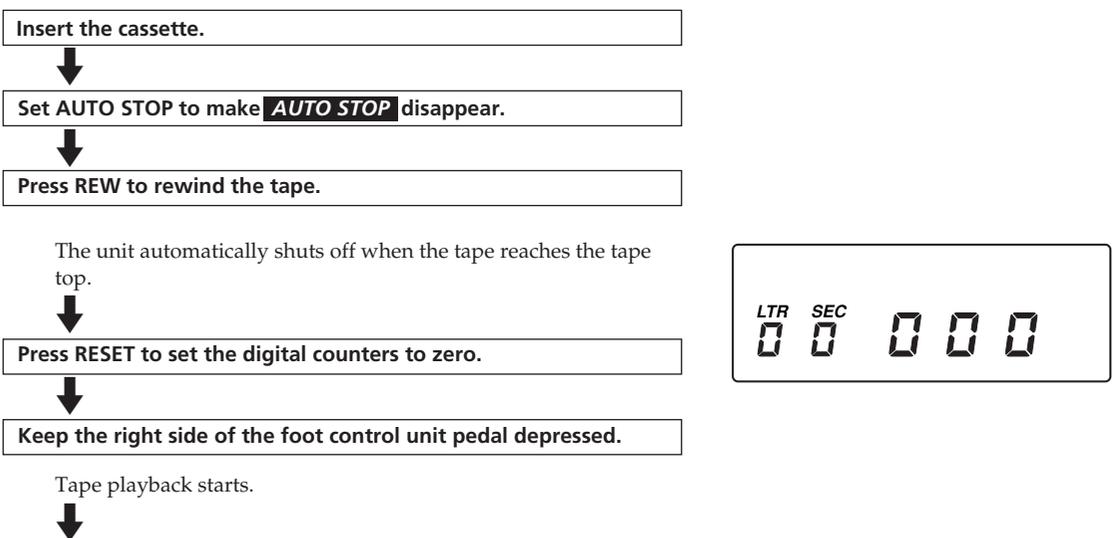
Press ■ STOP.

# Example of Dictation and Transcription

## Example of Dictation



## Example of Transcription





Mr. Alan R. Jefferson  
 Pyrene House, Sunbury on Thames,  
 Middlesex, TW 16 7AT, U.K.

Dear Sir,  
 We received your order for POI-L-5049-D3581, quantity  
 270,000 today. Shipment can be made within two weeks  
 by Air.

Please accept our thanks for your order.

Faithfully yours,

John S. Smith  
 Sales Manager  
 U.K.G.Ltd.

JSS/hh

Blinks for approx. 3 seconds and  
 stops blinking.



July 4, 1996

Blinks for about 3 seconds and  
 then stops blinking.



Blinks for approx. 3 seconds  
 and stops blinking.



Stop the tape when the transcription is finished.

If desired, keep ERASE pressed and then, press ◀◀ REW to  
 erase the cassette.

---

## Troubleshooting Guide

Should any problem occur, conduct the following simple tests to determine whether or not servicing is required. If the problem persists after you have conducted these tests, consult the nearest Sony Dictation Systems dealer.

### **The unit does not operate.**

- The AC power adaptor is not plugged into a wall outlet.
- The POWER switch is set to STANDBY.

### **No sound from the built-in speaker**

- The SPEAKER selector is set to HAND.
- The VOLUME control is set in the MIN position.
- An earphone is plugged in.
- The cassette is not inserted properly.

### **The tape speed is too fast or too slow.**

- The TAPE SPEED selector is set incorrectly.
- The SPEED control is set incorrectly.
- The SPEED CONTROL switch is set to ON.

### **The tape stops in the rewind or fast forward mode and the alarm sounds.**

- The AUTO STOP switch is activated and a tape with electronic index signal recorded is used.
- The entire tape has been wound.

### **Recording functions (Dict, Erase, Telephone recording, LTR, SEC) do not activate.**

- The tape is completely rewound.
- The cassette tabs have been removed.

### **The hand control unit or the foot control unit does not operate.**

- The plug is not connected to the CONTROL UNIT connector firmly.
- The BM-850 is operated with the tape operation buttons on the BM-850. Press STOP and proceed with the operation on the hand control unit or the foot control unit.

### **Sound drop-outs, loss of high frequency sounds, or excessive noise**

- The heads are dirty. See "Maintenance".

### **Erasing is unsatisfactory.**

- The erase head is dirty. See "Maintenance".

### **The LTR or SEC signal can not be recorded.**

- The unit is in the Electronic "Index OFF" mode. (See page 15).

### **The LTR or SEC counter is not indicated.**

- The unit is in the Electronic "Index OFF" mode. (See page 15).

### **The LTR or SEC counter does not work correctly.**

#### **The reverse time of the auto backspace function is not correct.**

- A cassette which was not recorded using a Sony Professional Dictating Machine (BM-531, 560, 570, 577, 820, 880, 890 etc.) is played back in the Electronic "Index ON" mode. (See page 15.)
- The reverse time of the auto backspace function may become longer when the LTR or SEC signal is detected on the tape.

#### **The switching time of the operation modes (STOP, LISTEN, FF or REW) is delayed.**

- A cassette which was not recorded using a Sony Professional Dictating Machine (BM-531, 560, 570, 577, 820, 880, 890 etc.) is played back in the Electronic "Index ON" mode. (See page 15).
- When a button is pressed while detecting electronic index signal during playback.

# Alarm System

An alarm sounds and an indication appears on the display window in the following situations.

Alarm system	Situation	To release alarm system
When you press a button. → A beep is heard and  blinks.	<ul style="list-style-type: none"> <li>• No cassette is inserted.</li> <li>• The cassette's safety tabs have been removed.</li> </ul>	First, release the button, then <ul style="list-style-type: none"> <li>• Insert a cassette.</li> <li>• Insert a new cassette or cover the safety slot.</li> </ul>
The unit shuts off. → A long beep is heard and  blinks.	<ul style="list-style-type: none"> <li>• End of tape</li> <li>• The tape is torn.</li> </ul>	<ul style="list-style-type: none"> <li>• Rewind the tape.</li> <li>• Insert a new cassette.</li> </ul>
→ "E" appears.	<ul style="list-style-type: none"> <li>• The number of LTR or SEC signal exceeds 9.</li> </ul>	<ul style="list-style-type: none"> <li>• Do not press LTR or SEC button more than 9 times.</li> </ul>
The unit shuts off. → A short beep is heard and "LTR" or "SEC" blinks.	<ul style="list-style-type: none"> <li>• Either LTR or SEC are detected while the tape is wound rapidly (in fast forward or rewind mode) and the AUTO STOP function is on.</li> </ul>	<ul style="list-style-type: none"> <li>• "LTR" or "SEC" stops blinking and lights up automatically when about 3 seconds have passed.</li> </ul>
When you press a button. → A beep is heard.	<ul style="list-style-type: none"> <li>• When you press the TEL REC button except in the stop mode.</li> <li>• When you put the hand control unit in the dictating mode during the FF, REW, ERASE or TEL REC mode.</li> </ul>	<ul style="list-style-type: none"> <li>• To stop alarm sound, release the TEL REC button, or put the hand control unit in the stop mode.</li> <li>• To start recording, put the BM-850 in the stop mode first and then start recording.</li> </ul>
When you press a button. → Short beeps are heard.	<ul style="list-style-type: none"> <li>• When you press the TEL REC button though telephone recording adaptor, etc. is not connected to the TELEPHONE PICKUP jack properly.</li> </ul>	<ul style="list-style-type: none"> <li>• Connect it properly.</li> </ul>

## Specifications

### Tape

**MICROCASSETTE**<sup>™</sup> (normal position type)

### Recording system

4-track 2-channel monaural  
(L channel for electronic index signals, R channel for sound signals)

### Tape speed

2.4 cm/s ( $1\frac{5}{16}$  in./s), 1.2 cm/s ( $1\frac{5}{32}$  in./s)

### Fast winding time

Approx. 1 min. 50 sec. (2.4 cm/s) with Sony microcassette MC-60BM

### Frequency response

200 – 4,000 Hz (at 1.2 cm/s)  
200 – 6,000 Hz (at 2.4 cm/s)

### Speaker

Approx. 5.7 cm ( $2\frac{1}{4}$  inches) dia.

### Power output

350 mW (at 10% distortion)

### Input

TELEPHONE PICKUP (minijack)  
Sensitivity 0.2 mV  
Input impedance 10 kilohms

### Output

EARPHONE (minijack)  
for 8 – 300-ohm earphones

### CONTROL UNIT connector

for hand control unit or foot control unit

### Power requirements

9 V DC  
DC IN 9 V jack accepts the supplied AC power adaptor for use on 120 V AC, 60 Hz

### Power consumption

14 W (with the supplied AC power adaptor)

### Dimensions

Approx. 200 x 70.5 x 245 mm (w/h/d) ( $7\frac{7}{8}$  x  $2\frac{7}{8}$  x  $9\frac{3}{4}$  inches)  
including projecting parts and controls

### Mass

Approx. 1.2 kg (2 lb 11 oz)

### Accessories supplied

AC power adaptor (1)  
Hand control unit (1, BM-850D only)  
Cradle for the hand control unit (1, BM-850D only)  
Foot control unit (1, BM-850T only)  
Earphone (1, BM-850T only)

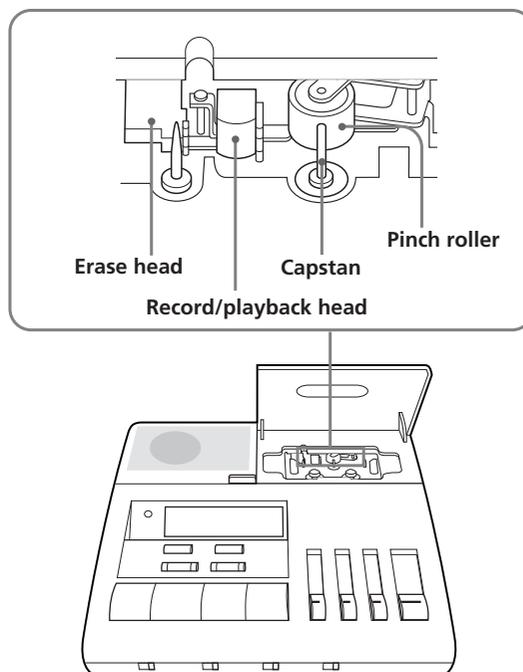
Design and specifications are subject to change without notice.

### Optional accessories

Hand control unit HU-80  
Foot control unit FS-85  
Earphone DE-45  
Headphones MDR-U10M  
Telephone recording adaptor TL-4  
Telephone pickup TP-15  
Message coupler TL-2  
Cleaning kit KK-31

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed information about the optional accessories.

## Maintenance



### Cleaning the heads

To produce optimum sound, clean the tape heads after every 10 hours of use.

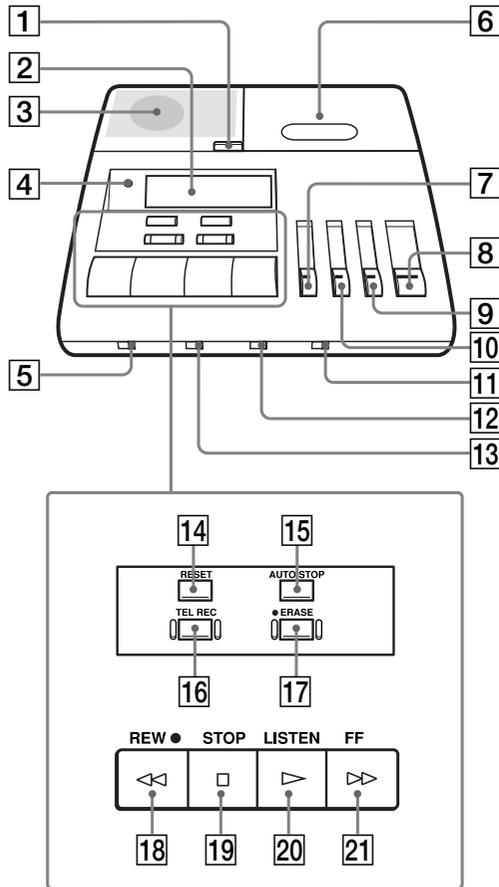
First, disconnect the AC power adaptor. Press EJECT to open the cassette compartment lid. Moisten a cotton swab or a soft cloth with alcohol, and wipe the parts shown on the left.

### Cleaning the cabinet

Clean the cabinet with a soft cloth slightly moistened with a mild detergent solution. Never use strong solvents, such as thinner or benzine, since they may damage the finish.

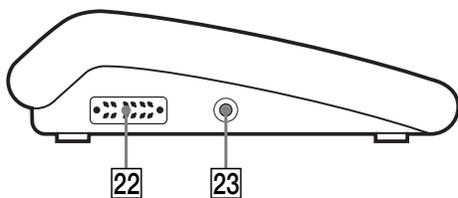
# Location and Function of Controls

For details, refer to the pages indicated in ( ).



- 1 Eject button  
Press to eject the cassette.
- 2 Display window (Back cover)
- 3 Built-in speaker
- 4 REC (record)/ERASE lamp (8, 16)
- 5 POWER switch
- 6 Cassette holder
- 7 SPEED control (13)
- 8 VOLUME control
- 9 TONE control
- 10 REVERSE TIME control (14)
- 11 SPEAKER selector (15)
- 12 TAPE SPEED selector (12)
- 13 SPEED CONTROL switch (13)
- 14 RESET button (9)
- 15 AUTO STOP button (13)
- 16 TEL REC (telephone recording) button (17)
- 17 ● ERASE button (16)
- 18 ◀◀ REW (rewind)
- 19 ■ STOP
- 20 ▶▶ LISTEN
- 21 ▶▶▶ FF (fast forward)

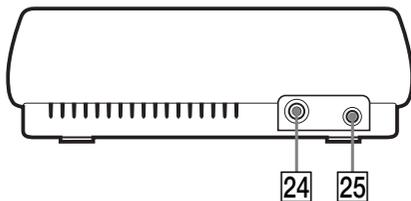
## Left side



## Left side

- 22 CONTROL UNIT connector (6)
- 23 EARPHONE jack (10, 15)

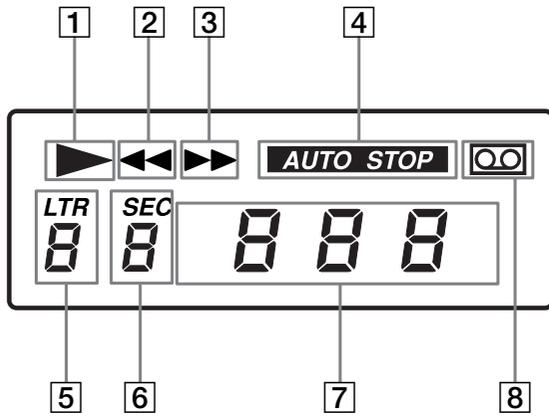
## Rear



## Rear

- 24 TELEPHONE PICKUP jack (17)
- 25 DC IN 9 V (6)

## Display Window



### Notes

- It may be difficult to read the liquid crystal counter display due to the watching angle.
- If you play back a cassette which was not recorded using a Sony Professional Dictating Machine, set the unit to the Electronic "Index OFF" mode (see page 15).

- 1** ► indicator  
Displayed while the tape is being transported in the forward direction.
- 2** ◀◀ (rewind) indicator  
Displayed while the cassette is being rewound.
- 3** ▶▶ (fast forward) indicator  
Displayed while the tape is advanced rapidly.
- 4** AUTO STOP indicator  
Displayed when the AUTO STOP button is pressed (AUTO STOP function is on).
- 5** LTR (letter) counter  
End of letter counter  
Displays the number of end-of-letter signals (i.e. the number of documents) recorded.
- 6** SEC (secretary) counter  
Special instructions for secretary counter  
Displays the number of special-instructions-for-secretary signals recorded.
- 7** Tape counter
- 8** ◻◻ (cassette) indicator  
Normally this indicator is not displayed. However, the indicator blinks in the following cases:
- One of the TEL REC, LTR, SEC and ERASE buttons is pressed or the function selector is set to DICT when no cassette is inserted or when the cassette's safety tabs have been removed.
  - A tape reaches the end.
  - A tape is torn while being rewound.