

1. SPECIFICATIONS

Model		SFX-105KM
Circuit used		PSTN
Power source	Base station	AC 110 – 230 V, 50/60 Hz
	Cordless phone	DC 3.6 V special-purpose nickel-cadmium battery
Approximate power consumption		Idle: 8 W; fax transmission: 22 W; fax reception: 44 W; copying: 60 W
Cordless phone usage time		Idle only: about 200 hours; continuous use: about 8 hours
Full battery charge time		Power off: about 10 hours; power on: about 12 hours
Type		G3 desktop fax/telephone transceiver
Transmission speeds		9600/7200/4800/2400 bps
Transmission time		About 15 sec at standard resolution
Main scanning density		8 lines/mm
Sub scanning density		15.4 lines/mm (superfine), 7.7 lines/mm (fine), 3.85 lines/mm (standard)
Scanning method		Flat-bed by contact image sensor
Recording method		Flat-bed by thermal printing head
Document size		Maximum width 257 mm (B4 size), length 1.5 m
Maximum effective read-in width		B4: 252 mm A4: 208 mm
Recording method		Thermal recording
Recording paper size		Width 257 mm (B4) x length 30 m, width 216 mm (A4) x 30 m (25 m for high-grade thermal paper)
Answer function	Recording time	Maximum 15 min (total of greeting and recorded messages)
	Number of messages	Maximum of 60
	Greeting message	1
External dimensions	Base station	Width 299 mm x height 125 mm x depth 237 mm
	AC Adaptor	Width 75 mm x height 40 mm x depth 180 mm
	Cordless phone	Width 53 mm x height 170 mm (not including antenna) x depth 40 mm
	Charger	Width 78 mm x height 50 mm x depth 92 mm
Weight	Base station	3.2 kg
	AC Adaptor	420 g
	Cordless phone	203 g
	Charger	96 g
Operating temperature range		5°C – 35°C (41°F – 95°F)

2. INSTALLATION

Placement precautions

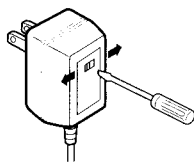
- Avoid placing the unit in humid or dusty places, or in places where it will be exposed to excessive heat (direct sunlight, heaters, etc.).
- Do not step on or set anything on the AC cord. **DAMAGE TO AC CORD IS A SAFETY RISK AND CAN CAUSE A FIRE.**
- Install the unit only on a stable surface.
- Do not connect the unit to the same AC outlet as appliances that generate large amount of interference (heaters with thermostats, appliances with motors, etc.). It is best to use a completely separate electrical outlet.
- Keep the unit away from water. If water accidentally enters the unit, unplug the AC power cord immediately. **DO NOT PLUG THE UNIT IN AGAIN.** Contact an authorized Sanyo service center or dealer.

Handling precaution

- Do not remove any parts that are held in place with screws. (The unit does not contain any user-serviceable items.)
- Maintain standard room temperature 5°C-35°C(41°F-95°F) during use. Do not subject the unit to shock or vibration. Do not move the unit while it is in use.
- A rapid increase in room temperature in cool weather can cause condensation to form inside the unit. If this happens, wait at least 15 minutes after turning the unit on before attempting to operate it. Failure to do so may result in paper jams and/or poor print quality.
- When cleaning the cover or operation panel of the unit, wipe gently using a damp cloth to which a small amount of a neutral detergent has been added. **NEVER USE SOLVENTS OR CHEMICALLY TREATED CLOTHS.**

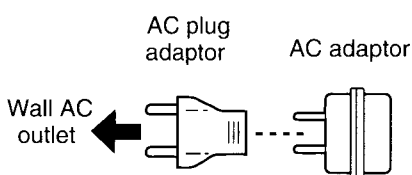
(1) Telephone line and AC power connections

AC ADAPTOR



Charger

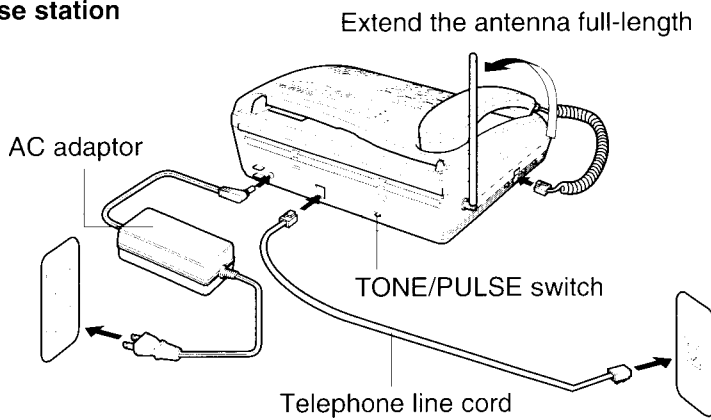
- 1** The SFX-105KM is capable of operating in the 110 – 127 V and 200 – 240 V ranges. The base station power source switches automatically to your local voltage. The remote charger does not adjust automatically, and must be adjusted to your local voltage prior to use.



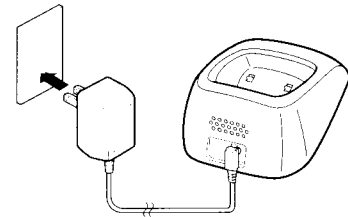
- 2** The two AC plug adaptors supplied with your unit can be used in different countries. If the adaptor does not fit into an AC wall outlet, attach the appropriate adaptor plug to it and then insert.

CONNECTIONS

Base station



Remote charger



- 1 Insert the handset cord plug into the handset jack.
- 2 Insert one telephone cord plug into a wall telephone jack and the other plug into the base station's telephone line jack.
- 3 Insert the large AC adaptor plug into the DC jack at the rear of the base station, and the plug of the small AC adaptor into the DC jack at the rear of the charger unit.

CAUTION

Take care not to insert the charger's AC adaptor (the smaller AC adaptor) into the base station's DC jack. If you do so by mistake, the charger's AC adaptor will be damaged.

- 4 Plug both AC adaptors into wall outlets near their locations.
- 5 Extend the antenna full-length.
- 6 Set the dialing mode.

NOTE:

For about 30 seconds after AC adaptor connection the system will be initializing the answering machine settings. During this interval the answering system cannot be used. If you press any of the answering service-related buttons you will hear a series of beeps and see a display message asking you to wait "ONE MOMENT".

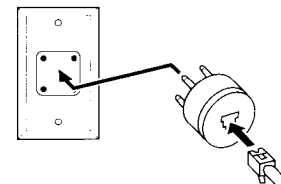
PHONE LINE CONNECTIONS

4-prong jack

If you have a 4-prong jack, use a 4-prong adaptor module (not supplied).

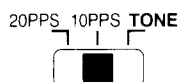
Party lines or public pay phones

Telephone companies do not allow installation of cordless phones for party lines and pay telephones because they will not operate correctly with these systems.



(2) Setting the dialing mode

Set the dialing mode to the correct position for your telephone line using the **TONE/PULSE** switch. The switch is initially factory-set to 10 PPS.



- If you are not sure which dialing system your telephone is using, contact your telephone company.

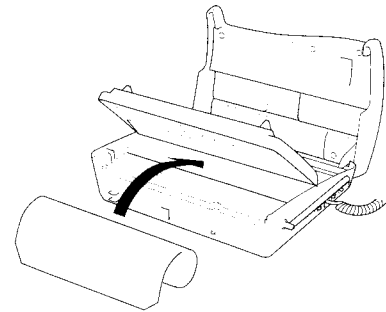
(3) Loading the recording paper

The SFX-105KM uses both ordinary thermal paper and high-grade thermal paper.

- 1** Open the recording paper bin.
 - (1) Set the handset aside.
 - (2) Open the operation panel.
 - (3) Press the cover open button.

- 2** Insert the recording paper roll.

Take up the slack, and watch the orientation of the paper roll (see illustration).

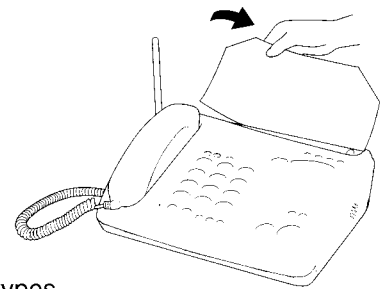


- 3** To close the paper bin cover, pull the end of the paper about 15 cm out.
 - Depress both ends of the cover until you hear a "click," indicating that it is locked in place.

- 4** Tear off the protruding end of the paper.

CAUTION

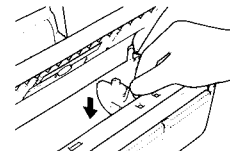
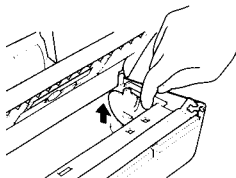
- When opening the paper bin and the operation panel, set aside the handset to prevent it from falling in.
- Use the recording paper roll supplied with your unit. When purchasing additional paper, refer to the following for Sanyo's recommended paper types.



The SFX-105KM uses recording paper of both 257 mm (B4 size) and 216 mm (A4 size) widths, 30 meter length (0.5 inch core).

Inserting 216 mm (A4 size) width paper

Looking from the rear, remove the right-hand partition plate. Move it to the 216 mm (A4 size) position.



RECORDING PAPER

A red line appears on the paper when it is nearly used up

There are about 2 m left at this stage. Replace with a new paper roll before the old is used up.

When the recording paper is used up

"CHECK PAPER" will appear in the display window.

When replacing paper

Copy something and confirm that the new paper roll is correctly installed.

(4) Installing batteries

Install batteries after the AC adaptor has been inserted into the wall outlet.

- 1 Open battery compartment cover.
- 2 Insert batteries (use five AA batteries.)
 - Align the positive and negative poles correctly.
 - The power supply lamp will light up if installation is correct.
- 3 Replace battery compartment cover.

MORE ABOUT BATTERIES

Battery operation

- In the event of a power outage, the batteries will preserve the recorded messages and greeting message.
- The preservation period is about 2 days (if manganese batteries are used).
- If the batteries are dead at the time of a power outage, all recorded messages and greeting message will be lost.

When to replace batteries

- When the batteries are dead the power supply lamp will flash.
- Install new batteries while in the power on mode, as noted above.

CAUTION

- When replacing batteries be sure to use 5 new ones of the same type. If you install a combination of new and old, or of different types, their life span will be shortened.

(5) Charging the cordless phone battery pack

**Charge the handset before using the cordless phone for the first time.
Do not attempt to use it until after a full 12-hour charge.**

- 1 Place the cordless phone on the remote charger and charge its battery for 12 hours. (The handset is factory-equipped with a Ni-Cd battery pack.)
- 2 Press the **POWER** button to **ON** and ensure that the **BATT. CHECK** indicator stays dark. (It lights red when the battery pack needs charging.)

Thereafter, whenever the **BATT. CHECK** indicator shows, recharge the battery pack for 12 hours continuously.

NOTE:

- The battery pack can be recharged and reused many times.

Ascertaining the battery pack's remaining charge

- 1 While the cordless phone is in standby mode, press [*] and [#] for more than 2 seconds.
- 2 The **BATT. CHECK** indicator flashes alternately green and red three times, then for two seconds shows the remaining charge by the following codes:
 - GREEN**Fully charged
 - ORANGE**Partially charged
 - RED**Almost fully discharged

Maximizing battery pack life

The handset's battery pack is the Ni-Cd type, which must be completely discharged and recharged at regular intervals to assure the maximum possible lifespan. This cycle should take place approximately every three months. The pack will be completely discharged unless it is charged for several hours with the **BATT. CHECK** indicator lit up.

(6) Machine initial

1. Connect AC plug into AC outlet.

16 Jul. 10:00 00

2. Press **[MENU]** while **[SET]** key is being pressed and keep this condition one second.

1: INITIAL SET ?

3. Press **[SET]**.

ALL CLEAR ?

4. Press **[SET]** or **[MENU]**.

[SET] : Initialize all memories then goes to next mode "RAM CODE SET".

S-RAM check is also carried out at the same time.

[MENU] : Initialize individual memory.

In case of pressing **[MENU]**, follow the steps below.

2: RAM CODE SET ?

RAM CODE CLEAR ?

5. Press **[SET]** or **[MENU]**.

[SET] : Initialize RAM CODE DATA and goes to next item "A.D & S.D DATA".

[MENU] : Not initialize RAM CODE DATA, just goes to next item "A.D & S.D DATA".

A . D & S . D CLEAR ?

6. Press **[SET]** or **[MENU]**.

[SET] : Initialize A.D & S.D DATA and goes to next item "REPORT DATA"

[MENU] : Not initialize A.D & S.D DATA, just goes to next item "REPORT DATA".

REPORT DATA CLR?

7. Press **[SET]** or **[MENU]**.

[SET] : Initialize RERPORT DATA and goes to next item "all memories".

[MENU] : Not initialize RREPORT DATA, just goes to next item "all memories".

ALL CLEAR ?

8. Press **[STOP/C]** to finish Machine initial setting.

REMARKS

In case of S-RAM Error at step 4, alarm sounds continuously and the machine goes into "DEAD LOCK" condition ➔ Repair is required. (check S-RAM and its I/O signals)

(7) Machine programming

(7)-1 Registering your name and telephone number

- 1** Press **[MENU]**.
- 2** Press Dial Button. **[4]**
- 3** Press **[SET]**.
- 4** Press Dial Button **[2]**.
- 5** Press **[SET]** again.
- 6** Enter your name.
 - See page 16 for the input procedure.
 - You can input up to 24 characters.
- 7** After entering your name, press **[SET]**.
- 8** Enter your telephone number.
 - You can input up to 20 digits
 - To enter a hyphen (-) between digits, press **[SPEED]**.
- 9** After entering your telephone number, press **[SET]**.
→ A high-pitched tone indicates that your name and number have been registered.
- 10** Press **[STOP/C]** to complete the sequence.

If you make an error entering your number

Press **[STOP/C]** and re-enter the correct number.

By registering your name and telephone number

You can ensure that this information will appear in the header line of faxes you transmit. You can use feature switch No. 20 to toggle origination data **ON** or **OFF**. When using the **ON** setting, you can also choose the location of origination data, i.e., in the header area or in the text area of your fax message.

The factory defaults are **ON** and "header area."

NOTE:

- When using the text area setting the origination data are printed at the upper extreme of the text area, so there may be occasions when the data image does not appear. You can correct this situation by leaving about 10 mm of clear space at the top of your original document.

Before programming the dialing memory or your station name, you need to know how to enter names using the number buttons. The number buttons [2], [4], [5], [6], [8], [0], dial buttons [*] and [#] are used for name programming.

The characters are grouped as shown below:

Group 1	Group 2	Group 3
ABCDE	abcde	12345
FGHIJ	ghij	67890
KLMNO	klmno	. , ; •
PQRST	pqrst	+ - / & *
UVWXY	uvwxy	# ' " ()
Z	z	< > ! ? =



The LCD display window is divided into 2 sections: The registration area on the left shows the name being entered, and in the selection area on the right a set of 5 characters appears as you scroll up or down the display. Each section has a separate cursor.

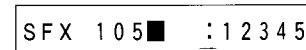
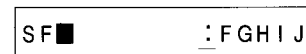


SELECTING A CHARACTER

- 1 Use number button [5] to select the desired character group.
The first line of the selected group appears each time number button [5] is pressed.
- 2 Use number buttons [2] or [8] to scroll up or down the display.
- 3 Use number buttons [4] or [6] to move cursor 2 to select a character.
- 4 Press [#] to enter the selected character into the registration section. Cursor 1 moves to the right.
- 5 Repeat steps 1 ~ 4 to complete writing a name.
 - To leave a blank space in a name, press number button [0]
 - To backspace cursor 1, press [*]
 - To advance cursor 1 to the right, press [#]

Example: To enter "SFX 105" into memory

- 1 **To write S:**
Press [8] to scroll up the display to the character group PQRST.
Press [6] to move cursor 2 over the S.
Press [#] to select and enter S.
Cursor 1 moves to the next position.
- 2 **To write F:**
Press [2] to scroll down the display to the character group FGHIJ.
Cursor 2 is already on the F.
Press [#] to select and enter F.
- 3 **To write X:**
Press [8] to scroll up the display to the character group UVWXYZ.
Press [6] to move cursor 2 over the X.
Press [#] to select and enter X.
- 4 **To leave a space:**
Press [0].
- 5 **To write 105:**
Press [5] to call up group 3.
Press [6] to select 1, then press [#].
Press [8] to scroll up the display to the number group 67890.
Press [6] to select 0, then press [#].
Press [2] to scroll down the display to the number group 12345.
Press [6] to select 5, then press [#].



- To correct an error, move cursor 1 over the incorrect character, press [0] to delete it, then write in the correct character.
- If the entry procedure is interrupted for more than one minute, the display returns to standby mode. To restart, begin again at step 1.

(7)-2 Auto dial and speed dial registration

You can register 2 autodial numbers in the base station and 10 Speed Dial numbers each in the base station and the cordless phone.

Base Station Autodial/Speed Dial Registration

- 1 Press **[MENU]**.
- 2 Press Dial Button **[2]**.
- 3 Press **[SET]**.
- 4 Press the code buttons for Auto Dial or Speed Dial.
 - Auto Dial: A or B
 - Speed Dial: 0 – 9 (use dialing buttons)
- 5 Press **[SET]**.
- 6 Enter your party's name.
 - You can enter up to 16 characters
 - See page 15, "Entering names"
- 7 Press **[SET]**.
- 8 Enter your party's telephone number.
 - You can enter up to 32 digits
 - To insert a hyphen ("-") press **[SPEED]**, to insert a pause (";") press **[REDIAL/P]**, and to insert a tone ("/") press **[*]**.
- 9 When entry is completed, press **[SET]**.
 - To continue with additional registrations, repeat steps 4 – 9 for each one.
- 10 When the operations are complete, press **[STOP/C]**.
 - You can call up the buttons for Step 4 by pressing **[MENU]**.
 - You should print out a confirmatory number list for your Auto Dial and Speed Dial entries.
 - If you make an error entering telephone numbers, press **[STOP/C]** and reenter them correctly.

Changing Registrations

- 1** Follow steps 1 – 5 above.
- 2** Press **[SET]**.
- 3** Enter a new name.
- 4** When name entry is complete, press **[SET]**.
- 5** Enter a new telephone number.
 - Press **[STOP/C]** to erase the old number and enter a new one.
- 6** When entry is completed press **[SET]**.
- 7** When the operation is over, press **[STOP/C]**.

Erasing Registrations

- 1** Follow steps 1 – 5 above.
- 2** Press **[MENU]**.
- 3** Press **[SET]**.
- 4** When the operation is over, press **[STOP/C]**.

Cordless phone speed dial registration

The cordless phone Speed Dial memory can store up to 10 frequently-called numbers. Each can have a maximum of 16 digits, including pauses.

REGISTERING A NUMBER

- 1** Press **[MEMO]**.
- 2** Dial the number you wish to register.
- 3** Press **[MEMO]**.
- 4** Press a dial number button in order to assign a number code (0 – 9). The system beeps, and the number is now registered. Make a note of the registered number on the index sheet provided with your unit.

THE INDEX SHEET

Enter on this sheet the names and other information for the numbers registered in the cordless phone's Speed Dial memory. Attach the sheet to the back of the handset for easy reference.

NOTE:

- To insert a 3-second pause between digits in a registered number (for example, after "9" to connect to an outside line in a PBX system), press **[REDIAL/P]** after the digit you wish the pause to follow.
- The cordless phone switches automatically to Standby mode after 10 seconds if no number is entered in step 2.

To erase a registered number

- 1** Press **[MEMO]** twice.
- 2** Press the index number (0 – 9) assigned to the number you wish to erase. A beep sounds and the number is erased.

(7)-3 Setting the date and time

1 Press [MENU].

2 Press dial button [4].

3 Press [SET] twice.

4 Input date and time with dial buttons.

- Use 4 digits for the date
Example: for 25 October, press [2] [5] [1] [0]
- Input last two digits of year.
Example: for 1997, press [9] and [7]
- Use the 24-hour system for the time
Example: for 12 o'clock noon, press [1] [2] [0] [0]

25 10.' 97 12:00

5 When input is completed, Press [SET].

- A long, high-pitched tone is sounded.
- The time count starts when [SET] is pressed.

2:STATION CODE ?

6 Press [STOP/C].

- * Calendar year does not appear.

25 Oct. 12:00 00

If you make an input error

Pressing [✖], [#] moves cursor to the position of the error, where the correct data can be input directly.
[✖] moves cursor to the left, [#] moves it to the right.

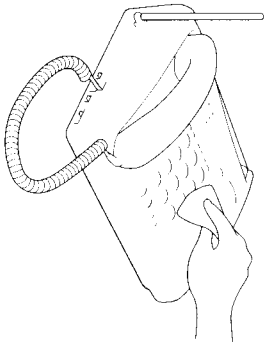
3. PERIODICAL INSPECTION AND MAINTENANCE

3-1. Cleaning the Base Station

•Wipe the unit with a soft cloth. Where dirt or stains are particularly bad wet the cloth with water, wring it out thoroughly and wipe until clean.

CAUTION

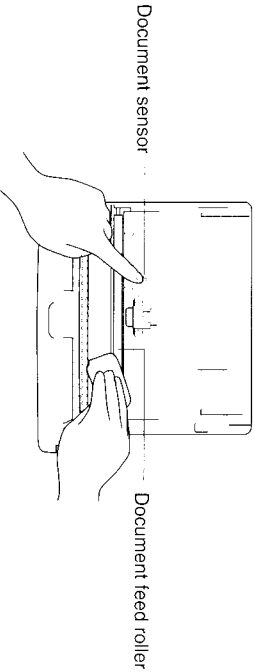
•Never use benzene, thinner, alcohol, oil or any kind, cosmetics or neutral detergents; these will damage the surface finish.



3-2. Cleaning the Document Feed Roller

When your tax recipients' recording paper images become dark and messy.

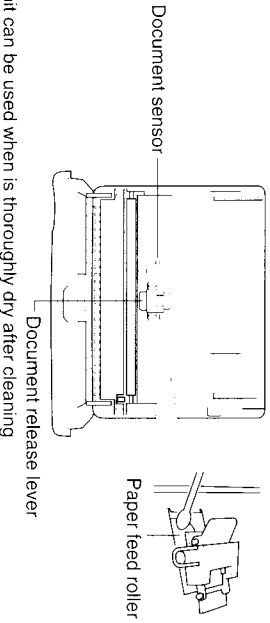
- 1 Lift your operation panel cover.
 - 2 While holding down the document sensor, wipe the document feed roller with a damp cloth.
- When the document sensor is pressed the feed roller can be rotated.



3-3. Cleaning the Automatic Paper Feed Roller

When original documents become difficult to insert

- 1 Lift the operation panel cover and raise the automatic paper feed release lever.
 - 2 While pressing the document sensor, wipe the paper feed roller with a cotton swab.
- When the document sensor is pressed the feed roller can be rotated.



•The unit can be used when is thoroughly dry after cleaning

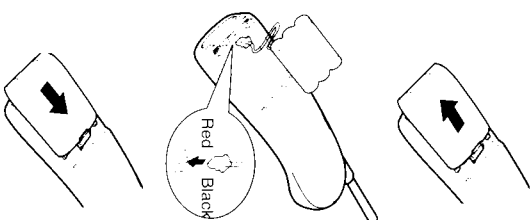
3-4. Replacing the battery pack

If you find that the time between required full battery charges is growing shorter, it may be time to replace your Sanyo battery pack. Using a pack other than the Sanyo NTL-4 may result in equipment malfunction.

- 1 Switch the **POWER** button to **OFF**.
- 2 Remove the battery compartment cover.
- 3 Disconnect the battery pack.
- 4 Plug in the new battery pack wires, matching red and black colors as indicated, and place the pack in the compartment.
- 5 Replace the cover by sliding it up over the pack until it is firmly in place.
- 6 Switch the **POWER** button to **ON**. Charge the new pack for a full 12 hours before using the handset.

CAUTION

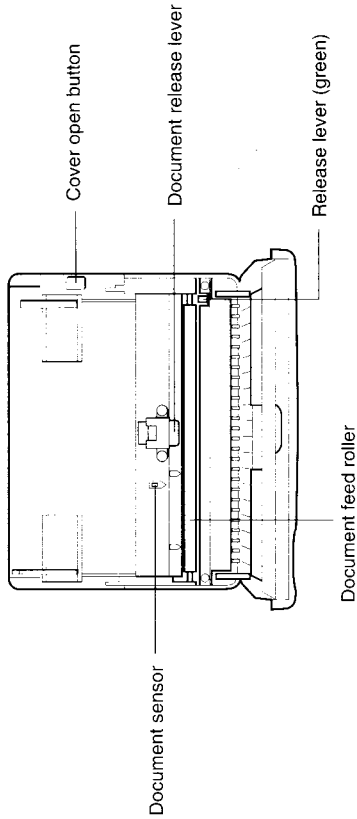
The replacement battery pack part designation is Sanyo NTL-4. Use of other packs can cause serious damage or malfunctions, and your warranty could be invalidated.



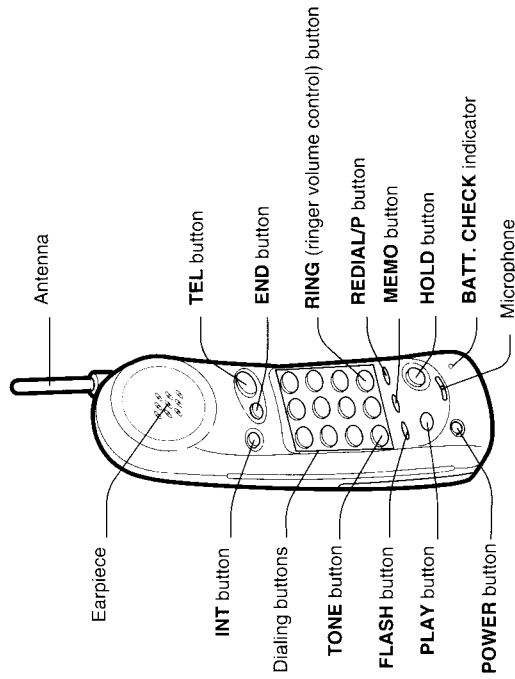
4. OUTLINE

(1) Part names and functions

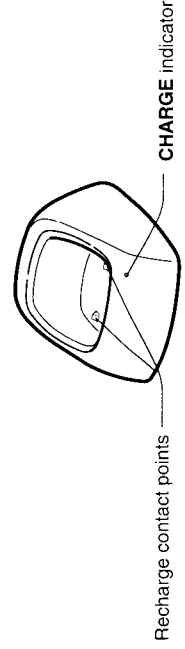
Inside View of Base Station



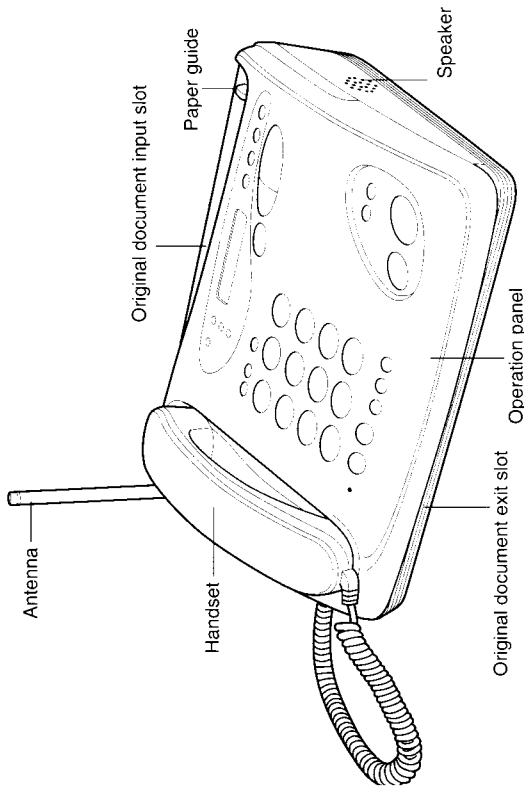
Cordless Phone



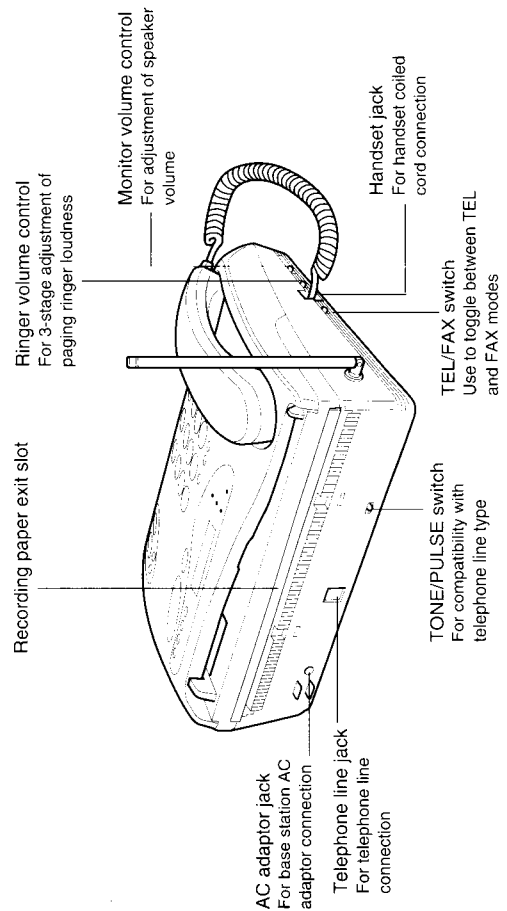
Remort Charger



Front View of Base Station

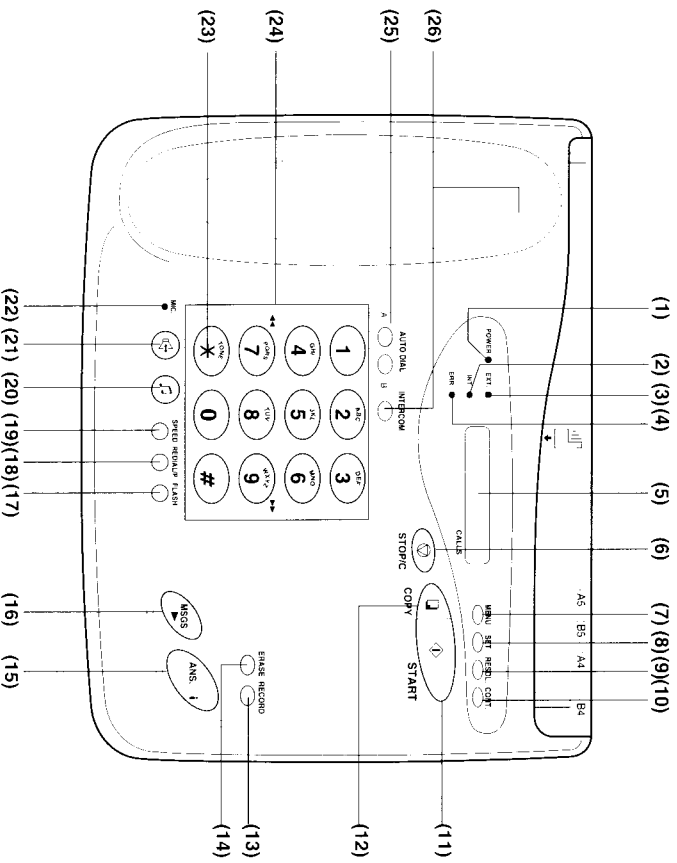


Rear View and Left Side of Base Station



Base Station Operation Panel Parts

- (1) Power supply lamp (POWER)**
Lights up when power supply is connected. Flashes when batteries are not installed or when batteries are dead.
- (2) Intercom line lamp (INT.)**
Lights up when extension/cordless phone is being used. Flashes for paging function.
- (3) External line lamp (EXT.)**
Lights up when outside telephone line is in use. Flashes for hold or paging functions.
- (4) Error lamp (ERR.)**
Lights up when normal fax transmission could not be accomplished.
- (5) Display**
Shows number of recorded messages.
Shows date, time, the other party's name and telephone number, the status of various operations, etc.
- (6) STOP/C button**
- Use to cancel copying or fax receiving/transmission
 - Use to return the display to the date and time.
- (7) MENU button**
Use when selecting functions

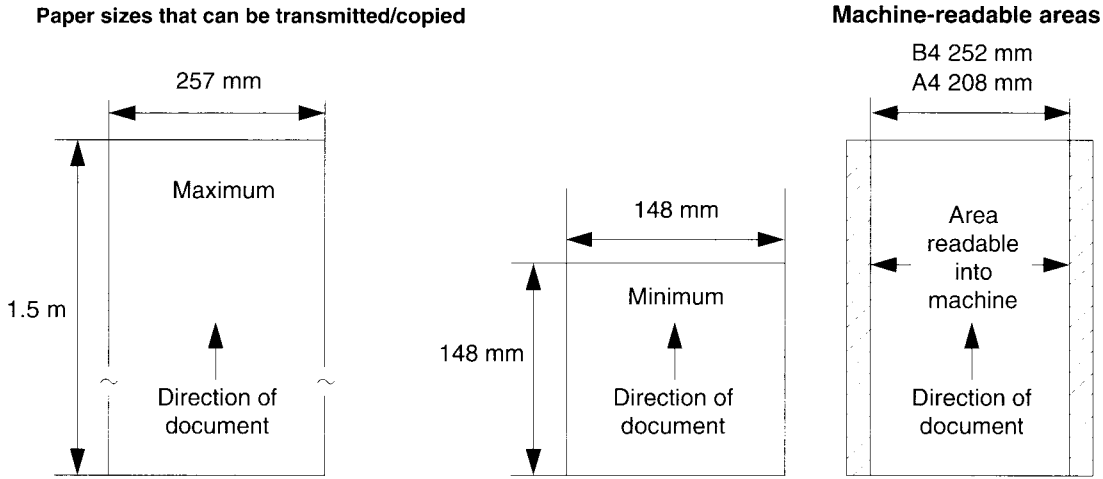


- (8) SET button**
Use when setting and registering functions
- (9) RESOL. button (Resolution)**
Use when selecting mode suitable for original document character size
- (10) CONT. button (contrast)**
Use when selecting mode suitable for original document's darkness and for photographs, catalogs, etc.
- (11) START button**
Use when sending or receiving a fax
- (12) COPY button**
- Use when copying
 - Use when printing memo paper
- (13) RECORD button**
Use when recording your answerphone greeting
- (14) ERASE button**
To erase recorded messages from callers
- (15) ANSWER button (lamp)**
For setting the answerphone mode
Lamp comes on when answerphone mode is set
- (16) MSGS button (Message) (lamp)**
For replaying recorded messages
Flashes when messages have been recorded
- (17) FLASH button**
When using the Call Waiting and other services
- (18) REDIAL/P button**
- Use when redialing the same number
 - Use when inserting a pause when dialing an overseas number
- (19) SPEED DIAL button**
Use for frequently-called numbers
- (20) Hold button**
Generates a melody for the party placed on hold
- (21) Speakerphone button**
For hands-free conversations (lights up during conversations)
- (22) Microphone (MIC.)**
For use in hands-free conversations and recording greeting messages
- (23) TONE button**
For producing a tone signal temporarily
- (24) Dial buttons**
For number dialing and data input
- (25) AUTO DIAL button**
- For hands-free autodialing
 - Fax transmission using autodial
- (26) INTERCOM button**
Cordless phone paging

(2) Operation panel

(3) Original documents

Original document size and limits of machine readability



* Document sizes other than these may be transmitted if their contents are zoomed up or down by a photocopy machine and the copies used as originals.

* The shaded areas are not transmitted.

Effective thickness

	1 original sheet	multiple sheets
thickness (per sheet)	0.05 - 0.15 mm (0.002" - 0.006")	0.08 - 0.13 mm (0.003" - 0.005")

Automatic reduction

When your document is larger than the recording paper size of the recipient's fax machine, SFX-105KM automatically reduces your document's size to match the recipient's recording paper size, then transmit. For automatic reduction, set feature switch No. 19 to ON or OFF. The factory default setting is ON.

If you cannot transmit or copy the document "as is"

Copy these types of documents in a photocopy machine and use the copies as originals:

- wrinkled or folded documents
- torn documents
- carbon copies or carbon-backed paper
- strongly-curved paper
- photographs, printing paper and other coated papers
- very thin (less than 0.05 mm) or very thick (more than 0.15 mm) paper.

5. MECHANICAL OUTLINE

5-1. Transmission Mechanism

When, in Fig. 5-1, the document is inserted, the S1 sensor detects the document and the transmission motor starts to rotate. Subsequently, the automatic document feed (ADF) roller rotates and the document is fed to the position of the platen roller (start position of scanning document) and is stopped. The automatic document feed roller also works for the separation of the document when multiple documents are inserted.

When [START] or [COPY] button is pressed here, the transmission motor rotates again and the document is fed forward scanning by CIS.

The S2 sensor works for detecting the document size, B4 or A4.

5-2. Reception Mechanism

As shown in Fig.5-1, the recording paper is pressed in between platen roller and thermal head. The platen roller is rotated by the receiving motor. Subsequently, the recording paper is fed. After printing, the dotted line (as a cutting mark) is printed on the recording paper.

There are two sensors on the printing (recording) mechanism.

One is for detecting recording paper itself and the other is detecting its size. When the recording paper is exhausted, "CHECK PAPER" appears on LCD. Also, incoming fax is automatically adjusted to the recording paper size.

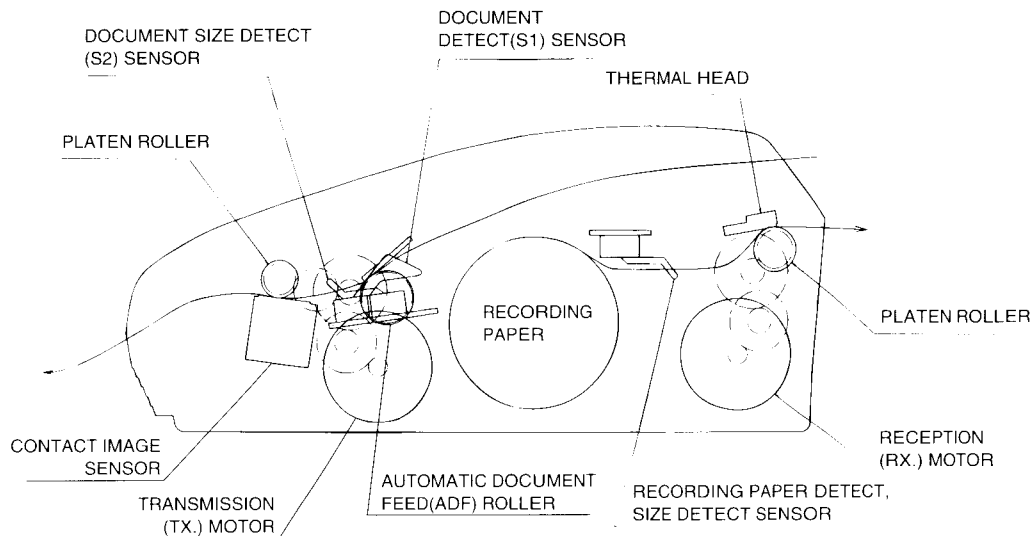


Fig. 5-1

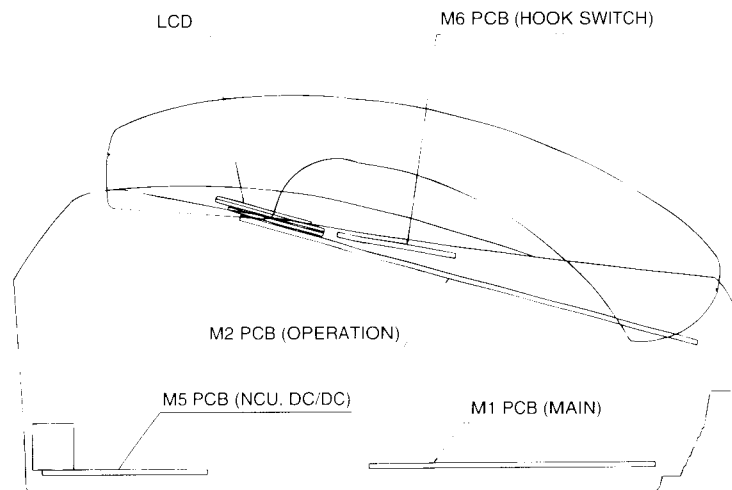


Fig. 5-2