

INSTALLATION/OPERATION - continued

1.6.7. Phone Directory:

The directory feature is used for retrieving and searching the stored names and numbers, and storing the names and numbers in the memory. A name can be up to 12 characters and a number can be up to 20 digits.

The following section shows the various possible displays in the directory.

1.6.7.1. Dialing a number from the directory

The names and number are stored in up to 10 memory location from 0 to 9. During scrolling in the directory, the location number (0~9) is shown.

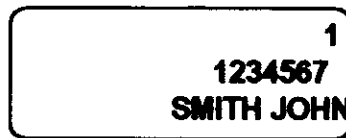
- Press <MEMO> key to access the directory in standby.



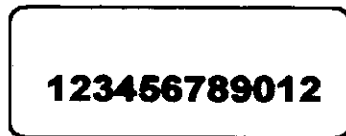
- Press key of desired memory location (0 through 9), or press (^) or (v) key - existing number and name will be displayed.

If no sensing keys such as <REDIAL/PAUSE>, <MUTE/PGM> key is pressed, error beeps will sound but no action will be taken.

If <FLASH/Callback> key is pressed, unit returns to the stand by mode with error beeps.

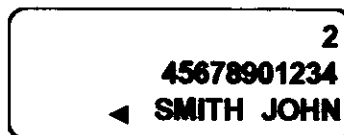


If content in the location 1 is only numbers, the display only shows the numbers.



If the number has more than 12 digits, the number will be scrolled to left side.

For example Dial no : 12345678901234
 Name : SMITH JOHN
 Memory Location : No 2



Press (*) or (#) key, the display show the next numbers

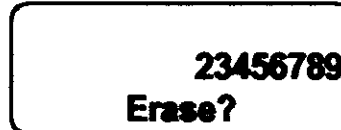


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1.6.7.2. Deleting

To delete a location in the directory

- Press <ERASE> key when the display shows a number and name in the directory. The LCD will display "ERASE ?".



- Press <ERASE> key again to confirm deletion. The LCD will display "EMPTY"



To delete all records.

- Press and hold the <ERASE> key for 3 seconds while reviewing the records. The display shows message prompt to confirm deletion.

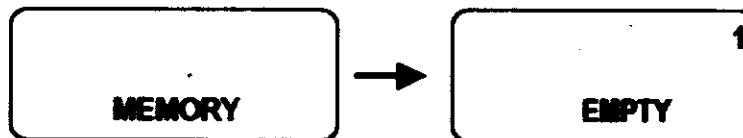


- Press <ERASE> key, the call record has been deleted.

After the deletion of a single or all records, a beep tone will be generated for record deletion indicator.

1.6.7.3. Store new entry

- Press <MEMO> key to access the directory in standby.
- Press key of desired memory location (0~9),



To enter a name, press <MEMO> key.



- The name can be from 1 to 12 characters in length.

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- 1. To enter alphabetic characters - use the numbers on the keypad.

For example, to enter the letter "A", press the <2> once. To enter the letter "B", press the same key twice. To enter the letter "C", press the same key three times. Refer to Table 1 in the 1.6.7.4

- 2. To insert a space between the name, press the "< " or">" cursor key, then a cursor will move to the next character.

ENTER NAME
JR S

- 3. If the 12 characters are over entered, the error tone will sound.

ENTER NAME
JR SMITH JOH

>> If incorrect entered name and numbers, the modified name and Number. <<

Press the < ERASE> Key

ENTER NAME
SMITH JOHN



ENTER NAME
SMITH JOHN

ENTER NUMBER
1234567892234



ENTER NUMBER
123456789 1234

- 4. To move to the number field – Press <MEMO> key again.

ENTER NUMBER
234567

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5. Enter a number. The number can have up to 20 digits.

ENTER NUMBER
1234567890

If the number has more than 12 digits, the number will be scrolled to left side.
For example. The number is *1234567890*#12345678

ENTER NUMBER
◀ *0* #1234578

If no sensing keys such as <FLASH/Callback>, <MUTE/PGM> are pressed, there will no action.

6. Press <MEMO> after entering and editing has been finished.
and will return stand-by mode.

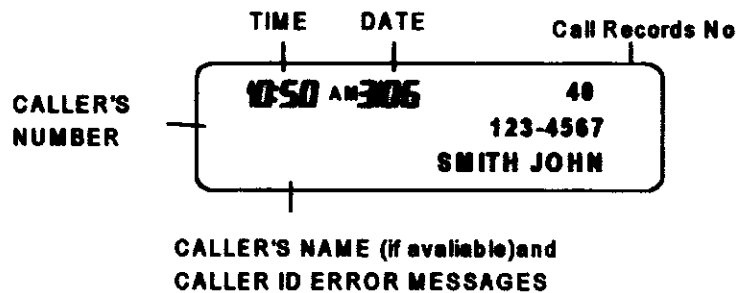
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1.6.8. CALLER ID FEATURES & FUNCTIONS

When caller ID is enabled and the telephone receives a call, it logs information about the call into a call record. A call record can contain information such as the time, date of the call, the caller's number, and the caller's name (if the telephone company provides that service).

The 43-3519 can hold up to 40 call records at one time, referred to as the call list. When the call list is full, the next call record causes the oldest call record to be deleted to make room for the new record. For example, if there are 40 call records in the call list, and the 40th person calls, the oldest call (#1) is erased to leave room for the incoming call (#41).

Remark : "/CALL" was deleted on working sample. Then, the wording "Call Record No" is not necessary.



The call list contains the following information :

- Date and time - the date and time when the last call for this entry was received.
- Caller ID information - The name and number of the caller as delivered by telephone company. If no caller ID information is received, This field will display UNKNOWN NAME
- UNKNOWN NAME If the caller ID information is Private error, this field will display "Private No." See section CID Prompt Message.

1.6.8.1. CALLER ID Receiving

- The 43-3519 has the capacity to store 40 CID records, which consist of callers Name with up to 12 characters maximum, phone number up to 20 digits with 1+ area code, and the Date and Time.
- If the CID information is in the Multi-message format and contains the name information, the name will be displayed in the format that as it is received.
- After all the information is received, it decodes and displays the calling number (see section Area code entry for area code information), date / time and name (if available). The time will be converted to and displayed in the 12 hour format.

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1.6.8.2. 43-3519 Key Assignments Table

The following table describes the key sequences for character entry.

Dial keys \	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th
1	1								
2	A	B	C	a	b	c	2		
3	D	E	F	D	e	f	3		
4	G	H	I	g	h	i	4		
5	J	K	L	J	k	l	5		
6	M	N	O	m	n	o	6		
7	P	Q	R	S	p	q	r	s	7
8	T	U	V	t	u	v	8		
9	W	X	Y	Z	w	x	y	z	9
0	*	#	-	&	()	space		0
*	Cursor for Right								
#	Cursor for Left								

Table 1 key presses

1.6.8.3. Reviewing the call record

The CID function will be provided by the request of customer and it will be set in the factory.

The caller ID holds the 40 call records. The user can use the arrow-keys to scroll between the 40 call records.

1.6.8.3.1. Viewing Call Record:

In standby, display will show number of all CIDs in the CID records.

Pressing "v" or "^" key, CID review key action will scroll CID forward or backward.

if the phone has received the new calls, the message "New : 20" and "Total Message : Total : 20" will display.

Total : 20 New : 20

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1.6.8.3.2. Key sequence

Pressing "v" or "^", the caller's list is started from a last received call

10:50 AM '98	03
	823-1222
	SMITH JOHN

or the oldest call.

- Press "^" to review the oldest call or press "v" to review the newest call. When they scroll past the first record or the very last record, the "End of list" message appears.

END OF LIST

- Press "FLASH" key to exit from the CID reviewing when the display shows "End of list". After completing the record review operation, if "v" or "^" key is not pressed within 20 seconds, the display will automatically exit to standby. The new call indicator will be disappeared from the LCD and the message waiting indicator will turn off.
- Press <MEMO> button to store the number displayed on the CID record.
- Press <Talk> to dial the number displayed on the CID record and the dialed number shall be shown immediately.

98231222
TALK

1.6.8.4. Deleting a information from the caller's list

While reviewing the caller's list, press <ERASE> key to delete the CID records either a single or all records.

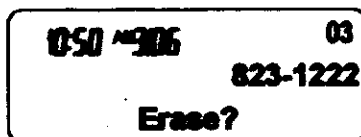
1.6.8.4.1.1. Display pre-condition

10:50 AM '98	03
	823-1222
	SMITH JOHN

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1.6.8.4.1.2. Key sequence**To delete a single record.**

- Press <ERASE> key while reviewing the record.
The display shows message prompt to confirm deletion.



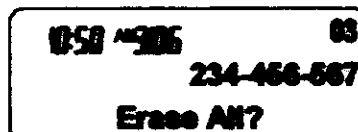
050 1906 03
823-1222
Erase?

- Press <ERASE> key once again, then the next record will be displayed.

To delete all records.

- Press and hold the <ERASE> for 3 seconds while reviewing the records.

The display shows message prompt to confirm deletion.



050 1906 03
234-456-567
Erase All?

- Press <ERASE> again, to delete all records.

After the deletion of a single or all records, a short beep tone will be generated

INSTALLATION/OPERATION - continued**1.6.8.5. Formatting Long Distance —**

User may need to add the area code or 1 + area code to some number in order to dial them.

- Press "v" or "^" to select the record.

0:50	^306	03
		123-7678
		SMITH JOHN

- 1) Press "Dial 3" to add the local area code (123-456-789).

0:50	^306	03
		123-456-789
		SMITH JOHN

- 2) Press "Dial 1" to add 1 for long distance call (1-123-456-789).

0:50	^306	03
		1-123-456-789
		SMITH JOHN

- 3) Press <TALK> key to dial the number on the LCD

1.6.8.6. Call Waiting Feature

If there is a new incoming call while they are on an existing call, Subscribers to Call Waiting service will be alerted. Call waiting information of the new calling party is will also be displayed before a decision is made to answer. The call waiting information is displayed until next operation and saved to memory.

When the caller ID information appears in the display,

Press <FLASH> to answer the waited call, the CID information will be cleared in display.

0:02	15
TALK	

When finished, Pressing <FLASH> again will return to the original connection.

INSTALLATION/OPERATION - continued

1.6.8.7. CID prompt messages

Users receive other information and status messages in addition to call record information.

- If the checksum sent with the data packet does not equal the decoded data then the transmission has been corrupted and the data will not be saved. The call counter will not be incremented, and the display will show the following:

Data Error

- If the area of the calling party is not served by Caller ID, the Unavailable comment will be displayed when an Out of Area code "O" is sent by the exchange. The date / time of the call will be shown and the call counter incremented. Following message will be displayed:

2:30 PM 3/06
Unknown Name

- If the calling party has blocked their number from being transmitted, the Private comment will be displayed when a Private "P" is sent by the exchange. The date / time of the call will be shown and the call counter incremented. Following message will be displayed:

2:30 PM 3/06
Private Name

- In review mode, indicates the end of the call list.

End of List

- If caller ID data is not transmitted, or if the telephone is answered before the caller ID data sent, the cleared display is replaced with the "No data" message.

NO DATA

INSTALLATION/OPERATION - continued

1.6.8.8. Special Features:

1.6.8.8.1. Area Code Setting:

- 10 digit CID phone # is displayed on the LCD.
- <"DIAL 1"> key is used to add "1" for long distance call.
- <"DIAL 3"> is used to delete area code.

1.6.8.8.2. Call Back: Refer to Paragraph 1.6.8.2.2.

1.6.8.8.3. CID data transfer to Memory: CID shall be saved into memory as follows:

- CID is displayed on the LCD.
- Press <MEMO> key.
- Enter the memory location to save.
- Press <MEMO> key to save the CID data.
- Sound a confirmation tone.

INSTALLATION/OPERATION - continued

2. ELECTRICAL SPECIFICATION**2.1 CHANNEL TABLE:**

Channel	Frequency [MHz]	Channel	Frequency [MHz]
1	2404.8	21	2440.8
2	2406.6	22	2442.6
3	2408.4	23	2444.4
4	2410.2	24	2446.2
5	2412.0	25	2448.0
6	2413.8	26	2449.8
7	2415.6	27	2451.6
8	2417.4	28	2453.4
9	2419.2	29	2455.2
10	2421.0	30	2457.0
11	2422.8	31	2458.8
12	2424.6	32	2460.6
13	2426.4	33	2462.4
14	2428.2	34	2464.2
15	2430.0	35	2466.0
16	2431.8	36	2467.8
17	2433.6	37	2469.6
18	2435.4	38	2471.4
19	2437.2	39	2473.2
20	2439.0	40	2475.0

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3. LINE INTERFACE

3.1 Battery Requirements

3.1.1. The unit must be fully charged within 12 hours from the fully discharged condition at 120 VAC with phone line disconnected. There shall be every precaution in charging circuit design to extend the battery life and reduce adverse battery capacity memory effect of Ni-HM.

The external contacts, on the handset used for recharging the battery, must be protected, such that when shorted together the battery is not discharge

3.2 Flash Timing:

Shall be 600 msec \pm 10 %.

3.3 DTMF AND PULSE DIALING

DTMF LEVEL : HIGH - 4 \pm 2 dBm
LOW - 6 \pm 2 dBm

PULSE : 10 PPS
MARK RATIO : 40

3.4 DIAL PULSE MUTE

The speaker output due to pulse dialing shall be less than 72 dB SPL \pm 12 dB..

3.5 Ring Sensitivity: Shall meet the RS Spec.

3.6 ON-HOOK DC AND AC CHARACTERISTICS: SHALL MEET THE RS SPEC.

3.7 OFF- HOOK CHARACTERISTICS: SHALL MEET THE RS SPEC.

3.8 CALLER ID:

The unit shall be capable of receiving and processing all Single and Multiple Type Caller ID on-hook (CID) and off-hook (SCMD) messages as described in the referenced documents. Range and bounds testing shall be performed on the received data and out of bounds data shall be ignored or modified by the firmware so as to be displayed and stored in an acceptable format.

The unit shall have the ability to receive, decode, display, and store Calling Number Delivery and/or Calling name Delivery data transmitted by the local Central Office. The unit shall support Single Data Message and Multiple Data Message formats. All Caller ID functions must operate without regard to whether the Ringer is ON or OFF.

INSTALLATION/OPERATION - continued

3.8.1 Type 1 FAMILY CPE**3.8.2 Type 2 FAMILY CPE**

Subscribers to Call Waiting service will be alerted that there is a new incoming call while they are on an existing call. Who the new calling party is will also be displayed before a decision is made to answer. The call waiting information is displayed for the same time period as On-hook message display time (Type 1 CID service) and saved to memory.

It requires transmitting a DTMF "D" ACK in response to a CAS alerting signal. It is capable of detecting the CAS and transmitting the ACK at variable duration after the CAS. The ACK signal triggers the switch to send FSK data. The near end user now has the option to press *FLASH* to answer the waited call. When finished, pressing *FLASH* again will return to the original connection.

During CAS transmission far end voice will be muted by the service but the CAS needs to be detected by the unit with the possibility of voice, noise or music present at near end. It then must mute near end voice path so that the ACK can be transmitted that it is ready for FSK data. It must then detect, decode and display the data. Finally it must restore the voice path.

CARE AND MAINTENANCE

Your RadioShack 43-3519 Headset Telephone with Caller ID, Call Waiting is an example of superior design and craftsmanship. The following suggestions will help you care for your Telephone Headset so you can enjoy it for years.

1. Keep the headset and amplifier dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.
2. Handle the headset and amplifier gently and carefully. Dropping it can damage circuit boards and cases and can cause the headset to work improperly.
3. Use and store the Telephone Headset only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.
4. Keep the telephone Headset away from dust and dirt, which can cause premature wear of parts.
5. Wipe the headset and amplifier with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the them.

Modifying or tampering with the Telephone Headset's internal components can cause a malfunction and might invalidate its warranty. If your Telephone Headset is not performing as it should, take it to your local RadioShack store for assistance. If the trouble is affecting the telephone lines, the phone company can ask you to disconnect your Telephone Headset until you have resolved the problem.

REPLACING THE BATTERY PACK

If you follow the instructions in "Connecting and charging the Battery Pack" on Page 7, the battery pack does not hold a charge for more than 2 hours after an overnight charge, replace it with a new 3.6V, 600mAh battery pack with a connector that fits the socket in the battery compartment. You can order a replacement battery pack through your local RadioShack store.

Install the new battery pack as described below, then charge it for about 24 hours.

1. Press down and slide off the battery pack compartment cover.
2. Lift the old battery pack out of the compartment, then install the new battery pack with the label facing down.
3. Replace the cover.

Cautions:

- You must use a replacement battery pack of the same size and type.
- Do not dispose of the battery pack in a fire because it might explode.
- Do not open or mutilate the battery pack.
- Be careful not to short the battery pack by touching the connector's, such as rings, bracelets, and keys. The battery pack or conductor might overheat and burn.

CARE AND MAINTENANCE - continued

If you have trouble replacing the battery pack, take the phone to your local RadioShack store for assistance.

Important:

This product contains a rechargeable nickel-cadmium battery pack. At the end of the battery pack's useful life, it must be recycled or disposed of properly. Contact your local, county, or state hazardous waste management authorities for information on recycling or disposal programs in your area.

LIGHTNING

Your telephone has built-in lightning protection to reduce the risk of damage from surges in telephone line and power line current. However, lightning striking the telephone or power lines can damage your telephone.

Lightning damage is not common. Nevertheless, if you live in an area that has severe electrical storms, we suggest that you unplug your phone during storms to reduce the possibility of damage.

FCC REQUIREMENTS

This equipment complies with Part 68 of the FCC Rules. On the bottom or back of this equipment is a label that contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. Upon request, you must provide this information to your telephone company.

The USOC number of the registration jack for the equipment is RJ11C.

A FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant. See Installation Instructions for details.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5).

If your telephone equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. If advanced notice isn't practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, disconnect this equipment from the network until you are sure the equipment is not malfunctioning

This equipment may not be used on coin service provided by the telephone company.

Connection to party lines is subject to state tariffs.

This equipment if it uses a telephone handset is hearing aid compatible

Please follow instructions for repairing if any (e.g. battery replacement section), otherwise do not alternate or repair any parts of device except specified.

WARNING : Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment in to an outlet on a circuit different from that to which the receiver is needed.

Consult the dealer or experienced radio/TV technical for help.

FCC REQUIREMENTS - continued

RF SAFETY INFORMATION

Important : To maintain compliance with the FCC' s exposure guidelines, please read the following specific operating instruction.

Base

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Handset

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

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. Privacy of communications may not be ensured when using this phone.

LIMITED ONE-YEAR WARRANTY

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for one(1) year from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, 200 Taylor Street, 6th Floor, Fort Worth, TX76102