



**2.4GHz Digital Lifestyle Cordless Phone
with Mirror Display**

Model: LS328

**USER MANUAL
MANUAL DEL USUARIO
MANUAL DO UTILIZADOR
MANUEL DE L'UTILISATEUR**







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with Mirror Display
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IMPORTANT SAFETY INSTRUCTIONS

Some of the following information may not apply to your particular product; however, when using conference phone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. This product should not be used while you are in a bathtub, shower or pool. Immersion of the product in water could cause an electrical shock.
5. Slots and openings in the cabinet back or bottom are provided for ventilation, to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation unless proper ventilation is provided.
6. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
7. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
8. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
9. Never push objects of any kind into this product through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
10. To reduce the risk of electric shock, do not disassemble this product, but take it to a qualified serviceman when service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the telephone equipment is subsequently used.





11. Do not expose the product to extreme temperatures such as areas near a hot radiator, or stove, or in a hot car.
12. Do not place lighted candles, cigarettes, cigars, etc., on the telephone.
13. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
14. Never install or modify telephone wiring during a lightning storm.
15. Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
16. Use caution when installing or modifying telephone lines to prevent electrical shock and / or fire.
17. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - When the power supply cord or plug is damaged or frayed.
 - If the product has been exposed to rain or water.
 - If the product does not operate normally by following the operating instructions.
 - If the product's cabinet has been damaged.
 - If the product exhibits a distinct change in performance.
18. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
19. Do not use the telephone to report a gas leak in the vicinity of the leak.
20. Do not place this product on an unstable cart, stand or table. The product may fall, causing serious damage to the product.
21. Plug the adaptor to a socket-outlet which is near the equipment and is easily accessible.
22.  Risk of explosion if battery is replaced by an incorrect type, use only SANIK, 3SNAAA75H-S-JIF. Dispose of used batteries according to the instructions.
23. For servicing or replacement, you can purchase a suitable headset through service center or retailer shop ([see in www.oregonscientific.com](http://www.oregonscientific.com)).





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SAFETY TIPS

This product is designed to give you years of service if handled properly. Observe the following guidelines:

- Clean the unit with a damp cloth and mild detergent. Avoid dropping the unit or placing it in a high-traffic location.
- Never immerse the unit in water. This can cause electrical shock and damage the unit.
- Do not subject the Base Unit to extreme force, shock, or fluctuations in humidity.
- Do not tamper with the internal components.
- Do not mix new and old batteries or batteries of different types.
- Remove the batteries if storing this product for a long period of time.
- Do not scratch the LCD display.
- Do not make any changes or modifications to this product. Unauthorized changes may void your right to use this product.
- The technical specifications for this product and the contents of the user manual are subject to change without notice.

CAUTION

To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.

CAUTION



You must use a Class 2 power source that supplies 9V DC and delivers at least 400mA (9VAC 200mA). Its plug must fit the phone's DC IN 9V jack. The supplied adapter meets these specifications. Using an adapter that does not meet these specifications could damage the phone or the adapter.

Always connect the AC adapter to the phone before you connect it to AC power. When you finish, disconnect the adapter from AC power before you disconnect from the phone.

SAVE THESE INSTRUCTIONS





INTRODUCTION

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Thank you for selecting the Oregon Scientific™ 2.4GHz Digital Lifestyle Cordless Phone with Mirror Display as your product of choice.

The cordless phone provides the freedom to communicate from anywhere in your home. The powerful base unit gives you time, date, dual alarm, call information, phone charger, mirror, and rainbow-pattern screen display that can be changed to suit your mood.

When you unpack your phone, make sure you keep all the packing materials in a safe place, in case you later need to transport it or return it for servicing. In the box, you will find:

- Handset
- Rechargeable Handset Battery
- Base Unit
- AC / DC Adaptor for Base Unit
- Phone Line for Base Unit
- Wall Mount
- User Manual

The 2.4GHz Digital Lifestyle Cordless Phone with Mirror Display features:

- 14 Rainbow Patterns
- Mirror Mode
- Real Time Clock
- Dual Alarm with Snooze Function
- Graphic Handset Display
- Caller ID Display on Base Unit and Handset
- 50 Phonebook Records with Search and Edit Function
- 40 Caller ID Memory (24 Digits + 15 Characters)
- 10 Last Number Redial Records
- 10 Polyphonic Melodies plus 4 Standard Ring Tones
- Phonebook Access During a Conversation





- Handset Speakerphone
- Backlight on Display and Keypad
- Mute / Flash / Redial Functions
- Supports Multiple Handsets
- Intercom / Call Transfer / Conference Call Capability
- Multiple Language Display
- Wall Mountable
- Standby Time – 5 Days
- Talk Time – 7 Hours

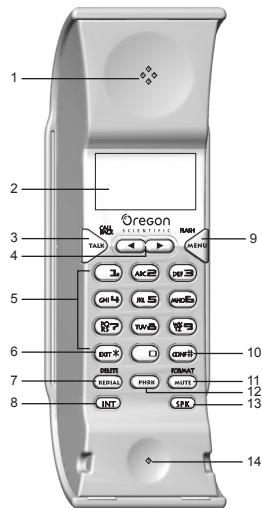
NOTE: Keep this manual handy as you use your new product. It contains practical step-by-step instructions, as well as technical specifications and warnings you should know.





KEY FEATURES

HANDSET – FRONT VIEW



1. Receiver

2. LCD Display

3. Talk / Callback key

- Press to begin and end a phone call.
- Press to callback a number.

4. Arrow keys

- Press to move up and down menu options.
- Press to increase or decrease the speaker volume.
- Press to browse Caller ID records.





5. Keypad

- Keypad 0-9, A-Z keys.
- Press the number to dial the call, or use for text input when editing the phonebook or caller identification.

6. Exit / * key

- Press to exit an operation and return to standby mode.
- Press to use * in text.

7. Redial / Delete key

- Press to browse redial list.
- Press to redial a phone number.
- Press to delete digits when dialing a phone number.

8. Intercom key (INT)

- Press to make an intercom call.
- Press to make a conference call.
- Press to transfer a call.

9. Menu / Flash key

- Press to access main menu.
- Press to confirm a selected option.
- Press to move from a current call, to call waiting.

10. CONF / # key

- Press to make a conference call.
- Press to use # in text.

11. Mute / Format key

- Press to mute the microphone during a call.
- Press to select the format you want to use for a phone number
 - no area code, with area code, with area and international code.

12. Phonebook (PHBK)

- Press to view the phonebook.

13. Speakerphone key (SPK)

- Press to turn the speakerphone on or off.

14. Microphone





BASE UNIT – FRONT VIEW

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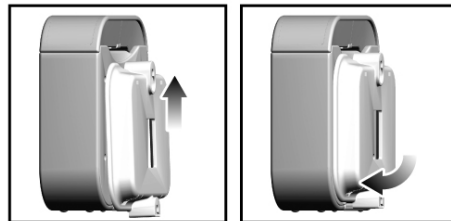


- 1. Handset in Handset Cradle
- 2. Rainbow Pattern
- 3. Menu key
- 4. Handset Battery Compartment
- 5. Screen Display with Mirror
- 6. Up and Down keys



BASE UNIT – WALL MOUNT

To use the base unit wall mount:



- 1. Thread the power and phone line cables through the rectangular hole on the wall mount. Then insert them into the sockets on the base unit.
- 2. Slide the two hooks at the top of the wall mount into the hook holes at the top of the base unit.





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3. Push the base of the wall mount towards the base unit so the two hooks at the bottom click and the wall mount feels securely locked in place.
4. Place a nail or hook where you want to position your base unit and simply hang the wall mount on it.

SAFETY AND CARE

SAFETY PRECAUTIONS

Please observe the following safety precautions when setting up and using this product.

- LCD panel – The LCD panel is made of glass, and may break if the unit is dropped.
- Heat sources – Keep the product away from heat sources, such as radiators, stoves, heaters, and other heat-generating products.
- Water and moisture – Do not use the product in or near water or in high moisture areas, such as a bathroom.



CARING FOR YOUR PRODUCT

To ensure you receive the maximum benefit from using this product, please observe the following guidelines.

- Do not clean any part of your phone with benzene, thinner or other solvent chemicals – this may cause permanent damage that is not covered by the guarantee. When necessary, clean it with a damp cloth.
- Keep your phone away from hot, humid conditions or strong sunlight.
- Every effort has been made to ensure the highest standards of reliability for your phone. However, if something does go wrong, please do not try to repair it yourself – consult your supplier.
- Do not use your phone outdoors in the rain, or handle it with wet hands – water can damage electrical equipment.
- Clean the unit with a damp cloth and mild detergent. Avoid dropping the unit or placing it in a high-traffic location.





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- Never immerse the unit in water. This can cause electrical shock and damage the unit.
- Do not subject the base unit to extreme force, shock, or fluctuations in humidity.
- Do not tamper with the internal components.
- Do not mix new and old batteries or batteries of different types.
- Remove the batteries if storing this product for a long period of time.
- Do not scratch the LCD display.
- Do not make any changes or modifications to this product. Unauthorized changes may void your right to use this product.

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CAUTION

- To avoid risk of fire or injury, do not attempt to charge non-rechargeable batteries.
- Replace only batteries with the same or equivalent type recommended by the manufacturer.
- Please dispose of old, defective batteries in an environmentally friendly manner in accordance with the relevant legislation.
- No naked flames, such as lighted candles, should be placed near the apparatus.
- **Never** use your phone in the open air during a thunderstorm – unplug the base unit from the phone line and the main socket when there are storms in your area.



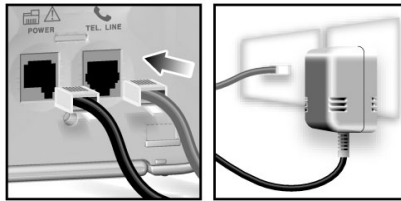


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GETTING STARTED

CONNECTING AC ADAPTOR / PHONE LINE

Connect the AC adaptor and phone line to the base unit and wall sockets as shown below.



Rest the handset in the handset cradle on the base unit to charge. Once plugged in, allow the handset to charge for 15 hours before using.



INSTALLING HANDSET BATTERIES



Your handset uses a 3.6V 750mAh Nickel Metal Hydride rechargeable battery, which will already be installed in your handset.

If you need to replace the handset battery, simply:

1. Slide the cover off.
2. Insert the rechargeable battery by putting the piece at the end of the wire into the bottom right of the battery indentation on the handset.
3. Slide the cover up so that it clicks firmly into place.






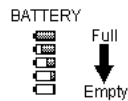
CHARGING HANDSET BATTERIES

Before using the handset, charge it for at least 15 hours. If you do not do this, the battery life will be reduced.

To charge the handset:

1. Place the handset in the base unit cradle with the keypad facing down.
2. The base charge symbol  will come on to indicate the handset is charging.

When the battery is fully charged, the handset battery indicator will show the battery full symbol in the top right of the LCD display.



NOTE: If you charge the battery for longer than the specified time or let it run too low, too often, you will reduce the battery life.

LOW BATTERY WARNING

When the battery is low and has only 15 minutes of talk time left, the handset will beep a warning tone and the LCD display will flash “**Low Battery**”, please:

- End the call as soon as possible.
- Don't use the Speakerphone Mode for conversation since this will further reduce the talk time.
- Put the handset back on the charger until the battery symbol returns to high level.

NOTE: Please note that when the handset battery is low, the backlight will not turn on.

HANDSET RECEPTION


Usually, a loss of reception means you are too far from the base unit, or there is interference between the two units. Make sure to:

- Stay within a range of 984 feet (300 meters) from the base unit while using the handset.









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- Avoid interference such as TV or other electrical appliances.

If your handset is out of range of the base unit, or the signal is interrupted due to electrical interference, the range symbol  starts flashing and the handset will return to Standby Mode.

IMPORTANT Due to radio interference in the environment, occasional loss of synchronization between the handset and base may occur for a very short duration. The base will very quickly change to another channel automatically to overcome the interference and restore synchronization.

HANDSET LCD SYMBOLS

SYMBOL	MEANING
	- Within range indicator - Flashing when out of range
	Ringer is set to off
	Line-in-use
	Missed call
	- Battery (5 levels) - Flashing when battery is low (level 1 )



ELECTRICAL SAFETY

Do not install the base unit near a sink, bath or shower, or anywhere else where it could get wet. Electrical equipment can cause serious injury if used while you are wet or standing in water.

- If the base unit ever falls into water, **do not** retrieve it until you have unplugged the power lead from the mains and the phone line plug from the phone socket; then pull it out by the unplugged cables.
- **Never** use your phone in the open air during a thunderstorm – unplug the base unit from the phone line and the main socket when there are storms in your area. Damage caused to your phone by lightning is not covered by the guarantee.





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BASIC FUNCTIONS

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MAKING A CALL

Using the **TALK** key:

1. Press **TALK** to get the dial tone, and dial the number. If you make a mistake, press **TALK** again to cancel the whole number.

OR

2. Dial the number then press **TALK**.

Using the Speakerphone (**SPK**) key:

1. Press **SPK** to get the dial tone, and dial the number.

OR

2. Dial the number then press **SPK**.

NOTE: If you are in Speakerphone Mode and you want to use the handset, press **TALK** to switch off the speakerphone.



ANSWERING A CALL



The handset will ring when there is an external call.

- Press **TALK**.

OR

- Press **SPK**. (This will enable the speakerphone function.)

NOTE If the handset is placed in the recharge cradle of the base unit when it is in Talk Mode, it will automatically enter the Standby Mode.

ENDING A CALL

- Press **TALK**.

OR

- Press **SPK** in Speakerphone Mode.

CALL WAITING

You will hear a call waiting tone:

- Press **FLASH** to switch from an existing call, to call waiting.





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MESSAGE WAITING

- “**Message Waiting**” will appear on the screen. Follow the voice message commands to enter your phone network operator’s message service.

ADJUSTING THE SPEAKER VOLUME

To adjust the speaker volume:

- Press **TALK**, then press the **ARROW KEYS** to adjust the speaker volume accordingly.

REDIALING A CALL

- Press **TALK**. Then press **REDIAL**.

REDIALING FROM THE LAST 10 NUMBERS

1. Press **REDIAL** to see your last call record.
2. Use the **ARROW KEYS** to select a number.
3. Press **TALK** to dial the number.

If you want to edit the phone number before redialing:

1. Press **REDIAL**.
2. Press **MENU**.
3. Use the **ARROW KEYS** to select “**Edit for Call**”, then press **MENU**.
4. Use **DELETE** and **0-9** keys to edit the number.
5. Press **TALK** to dial the number.

FAST REDIAL

When you make a call and hear the busy tone, press **REDIAL**. The phone will quickly redial the number within 3 seconds.

DELETING A REDIAL NUMBER

1. Press **REDIAL** to see your last call record.
2. Use the **ARROW KEYS** to select a number, then press **MENU**.





3. Select **"Delete Record"** to delete 1 number, or **"Delete All"** to delete all numbers.
4. Press **MENU**.
5. Select **"Yes"**, then press **MENU** to confirm.



SAVING DIALED NUMBERS INTO MEMORY

The handset will automatically save the last 10 numbers you dialed. To save dialed numbers into your Phonebook:

1. Press **REDIAL**. (The last number is listed).
2. Use the **ARROW KEYS** to select a phone number, then press **MENU**.
3. Select **"Save Phonebook"** to save number, then press **MENU**.
"SAVED" will appear on the screen to confirm the action.

PHONEBOOK

- The phone can store 50 phone numbers in the phonebook of up to 24 digits.
- The name of the phone number can be stored with a maximum of 15 characters.



STORING NUMBERS IN THE PHONEBOOK

1. Press **PHBK**.
2. Press **MENU**.
3. Use the **ARROW KEYS** to select **"Add Record"**, then press **MENU**.
4. The handset display shows **"<Enter name>"** and **"<Enter number>"**.
5. Enter the name (see key guide below) and then press **MENU**.
6. Enter the number and then press **MENU** to confirm.
7. The handset will beep twice indicating that the record has been stored.

NOTE: If only a phone number and no name is input, then the record can still be saved.

KEYS TO USE

When entering a name, "B" will be entered by pressing the "2" key once, followed by pressing "2" again within 1 second. If pressed beyond 1 second, "A" is entered and the second press of "2" will give the entry of "AA".





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The list of characters is shown below:

	CAPITAL LETTERS	SMALL LETTERS
1	SPACE 1 _ - + = ^ ~ . , ; : ? !	SPACE 1 _ - + = ^ ~ . , ; : ? !
2	ABC2Ä/EAÄÄÄÄÇ	abc2äæäääääç
3	DEF3ÉÉÉÉÐ	def3èéèèð
4	GHI4ÍÍÍÍ	ghi4íííí
5	JKL5	jkl5
6	MNO6ÖØÒÓÕÖÑ	mno6öøóóõöñ
7	PQRS7	pqrs7
8	TUV8ÚÚÚÚ	tuv8úúúú
9	WXYZ9ÝÞ	wxyz9ýþ
0	0 * # \$ % & / \ () [] < >	0 * # \$ % & / \ () [] < >
*	Press when editing a name to return to Standby Mode. Press when editing a number to get "*".	
#	Press to change between capital and small letters.	



DELETING NUMBERS FROM PHONEBOOK

To delete 1 record:

1. Press **PHBK**.
2. Use the **ARROW KEYS** to select the number you want to remove, then press **MENU**.
3. Select **"Delete Record"** and then press **MENU**.
4. When asked to confirm the deletion, select **"Yes"**.
5. Press **MENU** to remove the number.
6. The handset will beep twice indicating that the record has been deleted.

To delete all records:

1. Press **PHBK**, then press **MENU**.
2. Use the **ARROW KEYS** to select **"Delete All"** and press **MENU**.
3. When asked to confirm the deletion, select **"Yes"**.
4. The handset will beep twice indicating that the record has been deleted.





EDITING NUMBERS IN THE PHONEBOOK

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1. Press **PHBK**.
2. Use the **ARROW KEYS** to select the number you want to edit, then press **MENU**.
3. Select "**Edit Record**" and then press **MENU**.
4. Edit the name if needed, then press **MENU**.
5. Edit the phone number if needed, then press **MENU**.
6. You will hear a double beep from the handset indicating that the task is complete.

CALLING NUMBERS FROM PHONEBOOK

1. Press **PHBK** while on an active call.
2. Use the **ARROW KEYS** to select a number, then press **MENU** to dial the number.

QUICK BROWSING OF PHONEBOOK

1. Press **PHBK**.
2. Use the **ARROW KEYS** to select a phonebook entry, or press the key with the 1st letter of the person's name you are looking for. E.g. Press key 7, 4 times to get quick access to a name beginning with 'S'.
3. Press **TALK** to dial.

NOTE: You can use the Phonebook function while on an active call.

CALLER ID DISPLAY

If you have subscribed to this service from your phone network operator, the caller's phone number will be shown on the handset and base unit display when there is an incoming call. The phone can store the Caller ID's of up to 40 different call numbers.

NOTE: If the caller's phone number was stored in the phonebook, the associated name will be displayed with the phone number.





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Each entry in the caller list has the:

- Caller number (up to 24 digits).
- Caller name (up to 15 characters) if this is stored in the phonebook or supplied from the phone network.
- Date and time of the call.
- Number of calls made to this number (up to 40).

VIEWING CALLER ID RECORDS

1. When the phone is in Standby Mode use the **ARROW KEYS** to browse through Caller ID records.
2. If you need to edit the phone number before making the call press **MENU**.
3. Use the **ARROW KEYS** to select “**Edit for Call**”.
4. Use the **DELETE** and **0-9** keys to edit the number.
5. Press **TALK** to dial the number.

NOTE: If “**NO CALLS**” appears on the screen then no records are stored in the Caller ID memory.

SAVING CALLER ID RECORDS IN PHONEBOOK

When you have a Caller ID record on your screen:

1. Press **MENU**, then use the **ARROW KEYS** to select “**Save Phonebook**”.
2. Press **MENU**. “**SAVED**” will appear on the screen to confirm the action.

NOTE: When the Caller ID memory is full, it will automatically delete your 1st Caller ID record.

FORMATTING CALLER ID NUMBERS

1. Use the **ARROW KEYS** to select a phone number in the Caller ID memory, then press the **FORMAT** key.
2. The number you selected can now be formatted by pressing **FORMAT** to get the format you prefer.
3. When the format is selected, press **TALK** to dial the number.





DELETING CALLER ID RECORDS

To delete 1 record:

1. Press the **ARROW KEYS** while in Standby Mode and select the number you want to delete. Then, press **MENU**.
2. Select **"Delete Record"**, then press **MENU**.
3. Select **"Yes"**, then press **MENU** to confirm.

To delete all records:


1. Press the **ARROW KEYS** while in Standby Mode. Then, press **MENU**.
2. Select **"Delete All"**, then press **MENU**.
3. Select **"Yes"**, then press **MENU** to confirm.

NO CALLER ID

If a caller has withheld their Caller ID name and / or number, one of the following messages will appear on your screen:

- **"Blocked Number"**
- **"Unknown Number"**
- **"Blocked Name"**
- **"Unknown Name"**
- **"Unknown Caller"**
- **"Blocked Call"**

MISSED CALLS

If you miss a call, the handset will display this symbol . When you view the Caller ID of your missed calls the following notifications will appear on the screen:

- **"NEW"** – This is the first missed call from this particular Caller ID.
- **"REPT"** – This is not the first missed call from this particular Caller ID.

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DURING A CALL

USING THE MUTE FUNCTION

To mute the handset:

- Press **MUTE**.
- Press **MUTE** again to un-mute the handset and return to the normal mode.

NOTE: If the phone is muted, you cannot dial any digits until the mute key is released.

USING THE SPEAKERPHONE

During a call:

- Press **SPK** to turn the speakerphone on.
- Press **SPK** again to end the call, or press **TALK** to turn the speaker phone off and use the handset again.

HANDSET SETTING

IMPORTANT

- If you press the **TALK** key you will enter Talk Mode.
- If you press the **MENU** key you will enter Menu Mode.
- You cannot enter the Menu Mode when the phone is in Talk Mode. To exit the Talk Mode press **TALK**.
- When you have completed a setting 2 beeps will sound to indicate that the task is complete.
- To leave a setting at any time and return to Standby Mode, press **EXIT**.

SETTING THE RING TONE

You have a choice of 10 polyphonic melodies and 4 tones for incoming calls. To select a ring tone:

1. Press **MENU**, then use the **ARROW KEYS** to select "**Handset Setting**".
2. Press **MENU**.





3. Select **"Ringtone"**, then press **MENU**.
 4. Select the melody or tone you prefer, then press **MENU** to confirm.
- NOTE:** If the ring volume is turned off, you will not hear the ring melody while adjusting the ring tone.



SETTING THE RING TONE VOLUME

1. Press **MENU**, then use the **ARROW KEYS** to select **"Ringer Volume"**.
2. Press **MENU**, then use the **ARROW KEYS** to increase or decrease the volume.
3. Press **MENU** to confirm.

SETTING THE DISPLAY LANGUAGE

To change language:

1. Press **MENU**, use the **ARROW KEYS** to select **"Handset Setting"**, then press **MENU**.
2. Select **"Language"**, then press **MENU**.
3. Select the language you want, then press **MENU** to confirm.

NOTE: The default language for the handset display is English. You can also change the language to French, Spanish and Portuguese.

SETTING THE DIAL MODE

In order to provide compatibility with other phone systems, your phone can be set to either Pulse dialing (same as rotary dial phones), or Tone dialing (DTMF).

To set the Dial Mode:

1. Press **MENU**, then use the **ARROW KEYS** to select **"Handset Setting"**.
2. Press **MENU**.
3. Select **"Dialing"**, then press **MENU**.
4. Select either **"Tone"** or **"Pulse"** mode, then press **MENU** to confirm.

SETTING THE TIME / DATE FORMAT

1. Press **MENU**, then use the **ARROW KEYS** to select **"Handset Setting"**.





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2. Press **MENU**.
3. Select "**Time & Date**", then press **MENU**.
4. Select either "**Time Format**" or "**Date Format**", then press **MENU**.
5. Then select your chosen format and press **MENU** to confirm.

SETTING THE AREA CODE

1. Press **MENU**, then use the **ARROW KEYS** to select "**Handset Setting**".
2. Press **MENU**.
3. Select "**Area Code**", then press **MENU**.
4. Enter your 3-digit area code, then press **MENU** to confirm.

CONFERENCE CALL

You can have a conference conversation with an external call party and 2 internal calling parties.

1. First establish the call with the external party by either making an external call or answering an incoming call.
2. Press **INT** to make an intercom call to another handset. The external party will be on hold.
3. The internal party answers your intercom call by pressing **TALK**.
4. Then you press **CONF** and hold for about 2 seconds (you will hear a confirmation key tone).
5. Then the external party, the other internal party and you can talk together.

OR

A second internal party can join in on a call between an internal and external party by simply pressing **TALK**.

NOTE: You cannot have an intercom conversation between a handset and the base unit.

OPERATING THE BASE UNIT

IMPORTANT

- When you have completed a setting, 2 beeps will sound to indicate that the task is complete.





- To exit menu options, scroll through the options using the **ARROW KEYS** and select **“Exit”**, then press **MENU** to confirm.



PAGING THE HANDSETS

This feature is very useful if you can't remember where you put your handset.

- To look for your handset, press the **PAGE** button in the cradle of the base unit.
- To stop the paging, press any key once.

SETTING THE BASE UNIT TIME

1. Press **MENU**, then use the **ARROW KEYS** to select **“SET TIME & DATE”**.
2. Press **MENU**.
3. Select **“SET TIME”**, then press **MENU**.
4. The hour digits will flash. Use the **ARROW KEYS** to change the hourly time.
5. Press **MENU** to make the minute digits flash. Use the **ARROW KEYS** to change the minutes.
6. Press **MENU** to make the AM / PM option flash. Select AM / PM, then press **MENU** to set the time. (When using the 24 hour clock you will not be asked to select AM / PM.)



SETTING THE BASE UNIT TIME FORMAT

1. Follow steps 1 and 2 above, then select **“TIME FORMAT”** and press **MENU**.
2. Select **“12 or 24 Hour Format”** and press **MENU** to confirm.

SETTING THE BASE UNIT DATE

1. Press **MENU**, then use the **ARROW KEYS** to select **“SET TIME & DATE”**, then press **MENU**.
2. Select **“SET DATE”** and press **MENU**.
3. Use the **ARROW KEYS** to scroll through the numbers and the **MENU** key to move between the days, months and years.





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SETTING THE BASE UNIT DATE FORMAT

1. Follow steps 1 and 2 above, then select **"DATE FORMAT"** and press **MENU**.
2. Select **"dd/mm/yy"** or **"mm/dd/yy"** and press **MENU** to confirm.

SETTING THE BASE UNIT ALARM

1. Press **MENU**, then use the **ARROW KEYS** to select **"ALARMS"**.
2. Press **MENU**.
3. Select **"Alarm 1"** or **"Alarm 2"**, then press **MENU**. (A tick will appear next to a previously enabled alarm.)
4. Select **"Yes"** and press **MENU**.
5. Use the **ARROW KEYS** to set the time of the alarm and **MENU** to select hours or minutes. (If you are using a 12-hour clock format you will need to select AM or PM using the arrow keys.)
6. When the time is set, press **MENU** and **"Alarm Tone"** options will appear.
7. Select 1 of the 4 available tones, then press **MENU**. A tick will appear next to your selected tone and the phone will go to Standby Mode.

NOTE: If your clock is in 24-hour format, you will not be required to select AM / PM at step 5.

NOTE: Your base unit has 2 daily crescendo alarms. If both are set, the alarms will sound daily at the set time.

SNOOZE / TURNING THE ALARM OFF

Once an alarm sounds, you may:

1. Press the base unit **MENU** or **ARROW KEYS** lightly and the alarm will snooze for 8 minutes.

OR

2. Press and hold **MENU** to stop the alarm.

NOTE: If no key is pressed for 2 minutes the alarm will turn itself off.

SETTING THE BASE UNIT LANGUAGE

To change language:





1. Press **MENU**, then use the **ARROW KEYS** to select "**LANGUAGE**".
2. Press **MENU**.
3. Select the language you want, then press **MENU** to confirm.



NOTE: The default language for the base unit display is English. You can also change the language to French, Spanish and Portuguese.

CALL LOG

To view the total number of calls and new calls received:

1. Press **MENU**, then use the **ARROW KEYS** to select "**CALL LOG**".
2. Press **MENU**.

OR

Press the **ARROW KEYS** when in Standby Mode.

DELETE CALLER ID RECORDS

To delete all Caller ID records:

1. Press **MENU**, then use the **ARROW KEYS** to select "**ERASE ALL CID**", then press **MENU**.
2. Select "**Yes**" or "**No**", then press **MENU**.



SPECIAL FEATURES

SETTING THE RAINBOW PATTERN ON / OFF

You can set the rainbow pattern in 4 different states and choose from 14 different patterns:

1. Press **MENU**, then use the **ARROW KEYS** to select "**SET RAINBOW**".
2. Press **MENU**.
3. Select the state you wish the rainbow pattern to feature in, press **MENU**.
4. Use the **ARROW KEYS** to preview and select a pattern. Once you have the arrow next to the option you wish to select, press **MENU**.
5. A tick will appear next to your selected tone and the phone will go to Standby Mode.
6. You will hear a double beep indicating that the task is complete.





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To turn the rainbow pattern off, follow steps 1-4 above but select **“OFF”** instead of a pattern at step 4.

NOTE: When the phone is in Talk Mode, the rainbow pattern will turn off.

SETTING THE BASE UNIT TO MIRROR MODE

To use the base unit as a mirror:

1. Make sure the base unit is in Standby Mode, then press **MENU** for 3 seconds.
2. The display will say, **“Going to off for 1 minute”** and will then turn off for 1 minute.
3. After 1 minute the display will return to normal Standby Mode, or you can press any key to exit Mirror Mode.

USING MULTIPLE HANDSETS

Your base unit can synchronize with up to 2 handsets. If you have multiple handsets registered with the base, 2 handsets can make intercom calls.

INTERCOM CALLING BETWEEN HANDSETS

1. Press **INT** on your handset.
2. Type in the number of the handset (1-2) that you want to reach.
3. The paged handset will ring. The display of the paged handset will show **“INT CALL”**.

NOTE: To cancel the intercom call, press **TALK**.

ANSWERING INTERCOM CALLS

1. Press **TALK** to answer an intercom call.
2. Press **TALK** again to end the intercom call.

CALL WAITING

If an external call comes in during an intercom conversation, you will hear a call waiting tone.

1. To end an intercom call, press **TALK**.
2. The external line will ring. Press **TALK** again to answer the external call.





CALL TRANSFER BETWEEN HANDSETS



You can transfer an external call from one handset to another.

1. During an external phone conversation, press **INT**. Your caller will be put on hold.
2. Type in the handset number (1-2) to which you want the call transferred.
3. The paged handset will ring and “**INT CALL**” will appear on the display.
4. To answer the call on the paged handset, press **TALK**.
5. Press **TALK** on the paging handset to transfer the call.

NOTE: If the other handset does not answer, press **INT** to end the intercom call and get back to the external line. Pressing **TALK** will end both the intercom call and the external call.

REGISTERING HANDSETS TO BASE UNIT



The handset and base unit are factory pre-registered with each other. Therefore, the unit should be in full working order out of the box.

When you purchase an additional handset, you have to register it to the base unit in order to make and answer calls.

You can register up to 1 more handsets to make and answer calls via the same base unit. Handsets are numbered 1 to 2.

To register a new handset:

1. On the handset, press **MENU**.
2. Use the **ARROW KEYS** to select “**Handset Setting**”, then press **MENU**.
3. Select “**Registration**”, then press **MENU**.
4. Select “**Yes**”, then press **MENU**.
5. You will see the message: “**REGISTERING**”. Press and hold the **PAGE** key on the cradle of the base unit.
6. When the registration is complete “**OK**” will appear on the screen.

NOTE: The base unit will then send a signal to the handset registering the handset to the base unit. Once the Registration function has been completed, the handset will return to Standby Mode.





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DE-REGISTERING HANDSETS

To de-register a handset from the Base Unit:

1. On the handset, press **MENU**.
2. Use the **ARROW KEYS** to select “**Handset Setting**”, then press **MENU**.
3. Select “**Remove HS**”, then press **MENU**.
4. Use the **ARROW KEYS** to select handset number, then press **MENU**.
5. Select “**Yes**”, then press **MENU** to confirm the de-registration.

NOTE: You cannot de-register the handset you are using.

RESETTING YOUR SYSTEM

If you need to reset your system, you will lose any information you have stored and all settings will return to their default settings.

To reset your system to the default settings:

1. Press **MENU**, then use the **ARROW KEYS** to select “**Handset Setting**”.
2. Press **MENU**.
3. Select “**Set Default**”, then press **MENU**.
4. When prompted, select “**Yes**”. You will then hear the double beep to indicate the default settings have been restored.

Your default settings are:

Language:	English
INT melody:	Melody 1
Handset name:	Handset
Ring volume:	3
Dial mode:	Tone
Battery indicator:	On
Ear volume:	1
Area Code:	None
Range indicator:	On
Phonebook:	Empty
CID list:	Empty
Redial list:	Empty





TROUBLESHOOTING

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If your phone is not working correctly, check the points here before returning it for repair. Whatever the problem, you should first check that:

- You have installed the base unit correctly, and it is plugged into the phone line and the main power socket.
- The main power is switched on at the socket.
- You have installed the batteries into the handset.

If the problem persists, please contact your local stockist.

Never attempt any repairs or adjustments yourself – you could make the problem worse and invalidate your guarantee.

HANDSET / BASE UNIT

Problems with making and answering calls:

“I cannot make or answer calls.”

- Try moving the handset closer to the base unit.
- If this doesn't work, try a different position for the base unit – perhaps higher up if possible.
- The battery charge level may be low – place the handset in the charging cradle of the base unit to recharge the battery.
- Switch off the power at the main socket, wait a few seconds and then switch the power back on, this may solve the problem.

“When I press keys on my handset, digits appear on the display but I cannot make an outside call.”

- Try moving the handset closer to the base unit.
- If this doesn't work, try a different position for the base unit. Make sure it is not near any electrical equipment, such as another phone, TV, radio, washing machine, fridge, etc. If possible, position the base unit higher up.
- If any other handsets are registered to the same base unit, make sure they are not already on a call – if they are you will see **EXIT** on your own handset.
- You may need to change the dial type setting to Pulse dialing if your local phone exchange does not support Tone dialing.





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“My call was cut off when I went out of range of the base unit. Now I cannot use my handset.”

- Please move the handset closer to the base unit.

“I hear a tone while I am using my handset, and the battery symbol on the display is “empty.”

- The battery needs to be recharged. Put the handset into the charger; it will take up to 15 hours to be fully charged.

“I’ve tried recharging the batteries, but I still get a warning that it is not charged.”

- The batteries probably need to be replaced.

“The handset does not ring when a call comes in.”

- Check that you have not set the ringing volume to “Off” (see section **Setting the Ring Tone Volume**).

“The Caller Display function is not working.”

- Please check if you have subscribed to the Caller Display service with your network provider.

“The Caller Display function is working but the Caller’s Name from the phonebook is not displayed even if the same phone number calls in.”

- You need to store the full phone number including the STD code into your phonebook memory.

“I have tried several times to press the TALK key but I cannot make a call.”

- Your phone may not be registered. See section **Registering Handset to Base Unit**.

“The Within Range Symbol is flashing on the handset display.”

- Due to radio interference in the environment, occasional loss of synchronization between the handset and base unit may have occurred for a very short period. The base unit will quickly change to another channel automatically to overcome the interference and restore the synchronization. You can also move the handset near the base unit to reduce the interference.






MULTI-HANDBSET USE

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“I’m having problems registering a new handset.”

- Unplug and plug in again the main power cord of the base unit to activate the registration procedure.
- Make sure you have selected a base number that is not already assigned, and ensure you choose from the base numbers that are not flashing.
- The base unit may have already registered all 2 handsets. You need to de-register (delete) one of them before registering a new handset.
- If you are replacing a faulty handset, make sure you have de-registered the faulty one before registering the new one.

“I cannot make a call.”

- Only one outside call and one intercom call can take place at once. Make sure no other handset user is already on a call.
- Please check if another handset has engaged the line already. If this is the case you will see  on your handset.



WARNING

- The contents of this manual and technical specification are subject to change without notice.
- Due to printing limitations, pictures and displays showed in this manual may be slightly different from the real one.
- The contents of this manual may not be reproduced without the permission of the manufacturer.
- In case a Ni-Cadmium rechargeable battery is used, the draining of its contents should be done in accordance to the law re: special waste material.





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SPECIFICATIONS

TYPE	DESCRIPTION
Standard	Worldwide Digital Cordless Telecommunication (WDCT)
Frequency range	2.4GHz ISM
Channel bandwidth	1.729MHz
Modulation	GFSK
Communication range	Up to 984 feet (300 meters) in open space
Base power supply	120V / 60Hz
Handset power supply	1 rechargeable battery, NiMH 750mAh
Handset battery charging time	15 hours
Operating time	Standby: Approximately 5 days
	Talk: Approximately 7 hours
Operating temperature	0°C to 45°C
Storage temperature	-20°C to 60°C



Weight Dimension

Handset: 89g (without battery)

Handset: 142 x 46 x 28mm (L x W x D)

ABOUT OREGON SCIENTIFIC

Visit our website (www.oregonscientific.com) to learn more about Oregon Scientific products such as digital cameras; MP3 players; children's electronic learning products and games; projection clocks; health and fitness gear; weather stations; and digital and conference phones. The website also includes contact information for our customer care department in case you need to reach us, as well as frequently asked questions and customer downloads.

We hope you will find all the information you need on our website, however if you'd like to contact the Oregon Scientific Customer Care





department directly, please visit:
www2.oregonscientific.com/service/support

OR

Call 949-608-2848 in the US.

For international enquiries, please visit:
<http://www2.oregonscientific.com/about/international/default.asp>



FCC STATEMENT

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.

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.

This product meets the applicable Industry Canada technical specifications.

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 into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.





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CONSUMER INFORMATION

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US:KT5W400BLS328. If requested, this number must be provided to the telephone company.

An applicable certification jacks Universal Service Order Codes (USOC) for the equipment is provided (i.e., RJ11C) in the packaging with each piece of approved terminal equipment. The mounting of the approval unit in the final assembly must be made so that the approved unit is isolated from exposure to any hazardous voltages within the assembly. Adequate separation and restraint of cable and cords have provided

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. [For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:KT5W400BLS328. The digits represented by 0.0B are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.]

If this equipment LS328 causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.





The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.



Should you experience trouble with this equipment, please contact Oregon Scientific www2.oregonscientific.com/service/support or call 949-608-2848 for repair or warranty information. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

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

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.



NOTICE: If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this [equipment ID] does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.



NOTICE: According to telephone company reports, AC electrical surges, typically resulting from lightning strikes, are very destructive to telephone equipment connected to AC power sources. To minimize damage from these types of surges, a surge arrester is recommended.

CAUTION: To maintain compliance with the FCC's RF exposure guidelines place the base unit at least 20cm from nearby persons.

This equipment is hearing aid compatible.





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DECLARATION OF CONFORMITY

The information below is not to be used as contact for support or sales. Please call our customer service number (listed on our website at www.oregonscientific.com, or on the warranty card for this product) for all inquiries instead.

We

Name: Oregon Scientific, Inc.
Address: 19861 SW 95th Place,
Tualatin, Oregon 97062 USA

declare that the product

Product No.: LS328
Product Name: 2.4GHz Digital Lifestyle Cordless Phone with
Mirror Display
Manufacturer: IDT Technology Limited
Address: Block C, 9/F, Kaiser Estate,
Phase 1, 41 Man Yue St.,
Hung Hom, Kowloon, Hong Kong

is in conformity with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.





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