



You must install and charge batteries before using the telephone.



For customer service or product information, visit our web site at **www.telephones.att.com** or call 1-800-222-3111.

Please also read Important Product Information Enclosed in product package. User Manual (Part 2)

2.4 GHz Cordless Telephone/Clock Radio E2120

with Caller ID & Call Waiting



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Quick reference guide

Handset



Press to scroll down in menus. Press when phone is not in use to display Caller ID information (see page 25). While entering names, press to move the cursor to the left.

Phone/Flash

Press to begin a call, then dial a number. During a call, press to receive an incoming call, if Call Waiting is activated (see page 10).

Mute/Delete

Press to mute microphone (see page 9). While reviewing call log, press and hold to clear Caller ID log (see page 25).

Speaker

Press to activate handset speakerphone. Press again to resume normal handset use (earpiece). See page 9.

Select/Menu

Press to display menu, or to select highlighted item from menu.



Press to scroll up in menus. Press when phone is idle to display phone directory entries (see page 22). While entering names, press to advance cursor.

Off/Clear

During a call, press to hang up. While using menus, press to cancel an operation, back up to the previous menu, or exit the menu display.

Redial/Pause

Press to view redial memory (see page 9). While entering numbers, press and hold to insert a dialing pause (see page 21).

Feature menu

> shows highlighted item



Feature Menu

Directory	See page 20
Call Log	See page 24
Ringer Volume	See page 12
Ringer Tone	See page 12
Key Tone	See page 12
Handset Name	See page 13
Language	See page 13
Clear Msg. Wait	See page 13
Dial Type	See page 13

Press O or O to scroll through menu items.

Press SELECT to select or modify a highlighted item.

Press OFF to cancel an operation, back up to the previous menu, or exit the menu display. Getting Started

Quick reference guide

Telephone Base

DISPLAY LIGHT SWITCH (On side of telephone base)



IN USE

On when handset is in use. Flashes when another phone is in use on the same line.

CHARGING

On when handset batteries are charging.

NEW MESSAGE

Flashes when you have new voice mail (requires voice mail service from your local telephone company).

HANDSET LOCATOR

Press to locate handset if lost (see page 11).

CLOCK RADIO CONTROLS

See pages 14-19.

Getting Started

Parts checklist

Remember to save your sales receipt and original packaging in case you ever need to ship your telephone for warranty service. Check to make sure the telephone package includes the following:



Before you begin

About Caller Identification

Caller ID with Call Waiting features in this telephone let you see who's calling before you answer the phone, even when you're on another call. These features require services provided by your local telephone company.

Contact your telephone service provider if:

- You have both Caller ID and Call Waiting, but as separate services (you may need combined service)
- You have only Caller ID service, or only Call Waiting service
- You don't subscribe to any Caller ID or Call Waiting services.

You can use this phone with regular Caller ID service, and you can use its other features without subscribing to either Caller ID or combined Caller ID with Call Waiting service. There may be fees for these services, and they may not be available in all areas.

Caller ID features will work only if both you and the caller are in areas offering Caller ID service, and if both telephone companies use compatible equipment.

See Caller ID Operation, beginning on page 24, for more details about how these features work.

Telephone operating range

This cordless telephone operates with the maximum power allowed by the Federal Communications Commission (FCC). Even so, this handset and base can communicate over only a certain distance — which can vary with the locations of the base and handset, the weather, and the construction of your home or office.

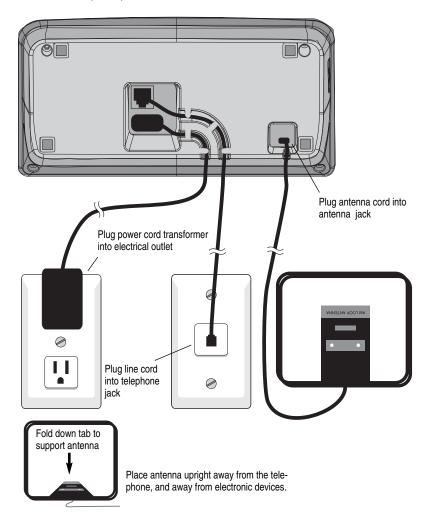
If you receive a call while you are out of range, the handset might not ring — or if it does ring, the call might not connect when you press **PHONE**. Move closer to the base, then press **PHONE** to answer the call.

If you move out of range during a phone conversation, you might hear noise or interference. To improve reception, move closer to the base.

If you move out of range without pressing OFF, your phone will be left "off the hook." To hang up properly, walk back toward the telephone base, periodically pressing OFF until the call is disconnected.

Telephone base installation

Install the telephone base as shown below. Choose a base location away from electronic equipment, such as personal computers, television sets or microwave ovens. Avoid excessive heat, cold, dust or moisture.



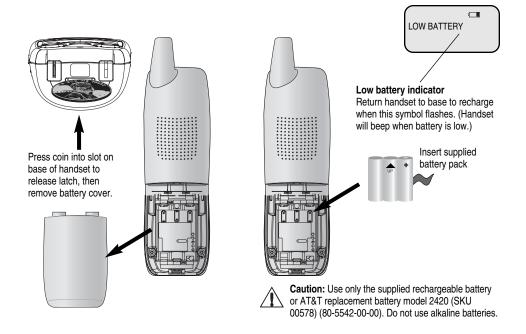
NOTE: Use only the power cord supplied with this product. If you need a replacement, call 1-800-222–3111.

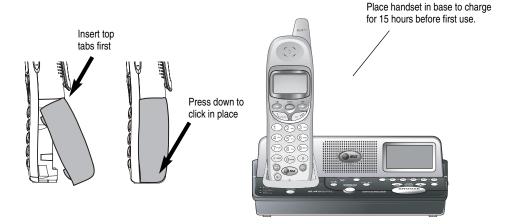
Be sure to use an electrical outlet not controlled by a wall switch.

Getting Started

Battery installation & charging

After installation, place the handset in the base and allow to charge for 15 hours before use. You can keep the battery charged by returning the handset to the base after each use. When the battery is fully depleted, a recharge takes about 15 hours.

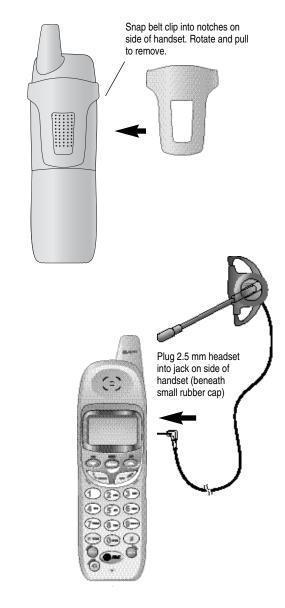


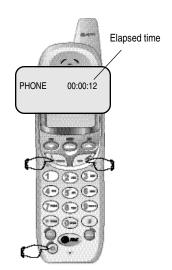


Belt clip & optional headset

Install belt clip as shown below if desired.

For hands-free telephone conversations, you can use any industry standard 2.5 mm headset (purchased separately). For best results use an AT&T 2.5 mm headset.











Basic operation

Making and answering calls

To answer an incoming call, press **PHONE** (or **SPEAKER**, or any dial pad key). To make a call, press **PHONE** or **SPEAKER**, then dial a number. Press **OFF** to hang up.

To preview numbers before dialing, enter numbers first, then press **PHONE** or **SPEAKER** to dial. Press **DELETE** or **CLEAR** at any time to make corrections as you are entering numbers.

The screen displays the elapsed time as you talk (in hours, minutes and seconds).

Hands-free speakerphone calls

To answer a call, press **SPEAKER**. To make a call, press **SPEAKER**, then dial a number. During a call you can press **SPEAKER** to toggle between hands-free speaker-phone and normal handset use. Press **OFF** to hang up.

Last number redial

Press **REDIAL** to display the most recent called number. Use the **OO** buttons to view up to 5 other recently called numbers. The handset will beep twice at the beginning or end of the list.

Press **PHONE** to redial any number as it is displayed. Press **DELETE** to delete the displayed number from the redial memory.

Mute

Press **MUTE** to silence the microphone. You will be able to hear, but your caller will not be able to hear you until you press **MUTE** again to resume speaking.



Options while on calls

Volume control

Press **VOLUME** buttons on the side of the handset to adjust listening volume. Each button press raises or lowers volume by one level.

When you change the volume level, the new setting becomes the default. The new volume level will be applied each time you use the handset, speakerphone or headset.

Call waiting

If you have Call Waiting service, you will hear a beep if someone calls while you are already on a call. Press **FLASH** to put your current call on hold and take the new call. You can press **FLASH** at any time to switch back and forth between calls.

Ring silencing

Press **OFF** or **MUTE** while the phone is ringing to silence the ringer.

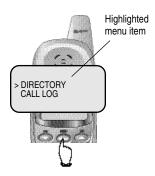
Temporary tone dialing

If you have dial pulse (rotary) service, you can switch to touch tone dialing during a call by pressing . This can be useful if you need to send tone signals for access to answering systems or long-distance services.



Handset locator

If you misplace the handset, press **HANDSET LOCATOR** at the base. The handset will beep for 60 seconds to help you locate it. To stop the beeping, press **PHONE**, **SPEAKER**, or any dial pad button at the handset, or press **HANDSET LOCATOR** at the base.



Handset settings

At the feature menu you can change settings to customize how the telephone works.

Press **MENU**, then use the **O O** buttons to scroll to the feature you want to change. As you scroll through the menu, the top menu item is always highlighted with a > character. Press **SELECT** to select the highlighted item.

Press **OFF** at any time to cancel an operation, back up to the previous menu, or exit the menu display.



OUTSIDE TONE

Ringer volume

At this menu you can set a default ring volume level (1-6), or turn the ringer off. Use the buttons to hear an example of each volume level, then press **SELECT** to select the one you prefer.



This feature allows you to choose one of 10 ringing tones. Use the buttons to hear an example of each ringer tone, then press **SELECT** to select the one you prefer.



Key tone

The handset is factory programmed to beep at each keypress. Use the **OO** buttons to select **ON** or **OFF**, then press **SELECT** to save your preference.

Handset settings

HANDSET NAME AT&T_

Handset name

At this menu you can customize the name that appears on the handset screen when the phone is idle. Press **DELETE** to erase letters, then replace them with a name of your preference, up to 16 characters long (see page 21 to enter letters). Press **SELECT** to confirm.

LANGUAGE ENGLISH

Language

At this menu you can select the language used in all menus and screen displays. Use the buttons to select English, Spanish or French, then press **SELECT** to save your preference.

TURN INDICATOR OFF?

Clear msg. wait

If you subscribe to voice mail services provided by your local telephone company, you will be alerted by a light on the base and a text message on the handset when new messages are waiting. At this menu you can turn off the light and handset alerts.

At the **TURN INDICATOR OFF?** prompt, press **SELECT** to turn off the Message Waiting light and handset alerts.

DIAL TYPE TONE

Dial Type

At this menu you can choose Tone or Pulse dialing. The factory default setting is **TONE**. Change this to **PULSE** only if you do not have touch-tone dialing service.

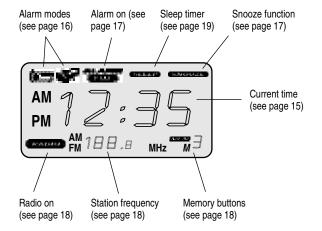
Use the **O O** buttons to select **TONE** or **PULSE**, then press **SELECT** to save your preference.



Clock Radio Operation

The built-in clock radio with wakeup alarm includes the following features:

- · Large, bright current time display
- Full spectrum AM/FM station tuning
- Dual-function station tuning (manual or auto-search)
- One-touch tuning for up to 10 stations (5 AM, 5 FM)
- Dual-function wakeup alarm (radio or buzzer)
- Sleep timer (auto-shutoff after 10 to 90 minutes)



Display light switch



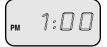
Use the switch on the side of the phone to illuminate the screen. The light can be set to high, low or off.

1 SET CLOCK



Press and hold until time blinks.

2 PHOUR



Press to select correct hour (press and hold to advance quickly)

3 MIN



Press to select correct minute (press and hold to advance quickly)

4 SET CLOCK



Press to set clock to displayed time.

Clock Radio Operation

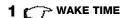
To set the clock

You should set the clock so the alarm function can awaken you at the correct time of day.

Press and hold **SET CLOCK** until the display begins blinking, then follow the steps at left to set the clock.

While setting the clock, you can press **HOUR** or **MIN** to advance by I digit, or hold down the buttons to advance more quickly.

NOTE: If electrical power is lost for more than 15 minutes, the time display will change to 12:00 and you will have to reset the clock.





Press and hold until time blinks.

2 PHOUR



Press to select wakeup hour (press and hold to advance quickly)

3 MIN



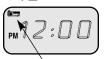
Press to select wakeup minute (press and hold to advance quickly)

4 WAKE TIME



Press to set wakeup time to displayed time.

5 WAKE MODE



Press repeatedly to select wake mode (radio, buzzer, or alarm off).



Awake to radio



Awake to buzzer

No icon = Alarm off.

Clock Radio Operation

To set the wakeup alarm

To set the wakeup time

To set the alarm clock, press and hold **WAKE TIME** until the display begins blinking, then follow the steps at left to set your desired wakeup time.

While setting the wakeup time, you can press **HOUR** or **MIN** to advance by I digit, or hold down the buttons to advance more quickly.

You can press the **WAKE TIME** button at any time to check your programmed wakeup time.

To select wakeup alarm type

Press the **WAKE MODE** button to choose whether you want to be awakened by the radio or the build-in buzzer.

Each time you press **WAKE MODE** a different icon will appear to indicate your choice, as shown at left. When no icon appears the alarm is turned off, and you will not be awakened.

NOTE: If you set the wake mode to <u>Radio</u>, make sure the radio is tuned to a station with a strong signal, and the volume is set high enough to awaken you (see page 18).

NOTE: If electrical power is lost for more than 15 minutes, the wakeup time will change to 12:00 and you will have to reset it.



1 SNOOZE



Press to silence for 8 minutes.



2 ALARM OFF



Press to turn off alarm. Icon shows alarm remains set to wake you at your designated wake time tomorrow.

Clock Radio Operation

To turn off the wakeup alarm

To use the Snooze Alarm

Press the **SNOOZE** button to turn off the alarm for 8 minutes. During the 8-minute snooze period, the <u>Snooze</u> icon will blink on the display. After 8 minutes, the alarm will again alert you.

You can press the **SNOOZE** button as often as desired during a period of 59 minutes. After 59 minutes have elapsed, the alarm will turn off automatically.

To turn off the wakeup alarm

When the wakeup alarm is activated, you can turn it off by pressing the **ALARM OFF** button.

When you turn off the alarm, the clock remains set to awaken you at the same time on the following day (unless you press the **WAKE MODE** button again to change the wake mode, or turn off the alarm).

Each time you press **WAKE MODE** a different icon will appear to indicate your choice, as shown at left. When no icon appears the alarm is turned off, and you will not be awakened.





Press to turn radio on or off.

2 AM/FM



Press to select AM or FM band.

3 TUNE +/-



Press to change frequency. Hold to search for stations.



Use wheel on side of base to adjust radio volume.

1 MEMORY



Tune station, then press **MEMORY**.

2 🦳 M3



Press memory button (M1, M2, etc.)

3 MEMORY



Press **memory** again to save.

Clock Radio Operation

Using the radio

Basic radio functions

Press **RADIO ON/OFF** to turn the radio on or off. Press **AM/FM** to select a frequency band.

Each time you turn on the radio it automatically tunes to the last station selected.

Manual tuning

In either AM or FM mode, press the **TUNE** buttons repeatedly to select a specific frequency. **TUNE** + increases the frequency; **TUNE** — decreases the frequency.

Station searching

<u>Press and hold</u> either **TUNE** button to automatically search for stations. When a strong signal is found, the radio remains tuned to that station. To continue searching, press and hold either **TUNE** button again.

Radio memory buttons

Memory buttons allow you to tune up to 10 favorite stations with one button press. Each memory button can store one AM station and one FM station.

Tune to any station, then follow the steps at left to store it in a memory button (M1 through M5). After the station is programmed, you can tune to it directly by pressing a memory button.

NOTE: If electrical power is lost for more than 15 minutes, memory will be lost and buttons M1 through M5 will have to be reprogrammed.



Tune station, then press **SLEEP.**

2 SLEEP



Press repeatedly to select time.

3



Clock displays current time. Radio will turn off when timer expires.

Clock Radio Operation

Setting the sleep timer

The sleep timer allows you to set the radio to turn off automatically after a specified period of time.

Tune to the station you want, then follow the steps at left to set the sleep timer. Each time you press **SLEEP**, the play time is reduced by 10 minutes. You can set the radio to play from 10 to 90 minutes before it is automatically turned off.

You can press the **SLEEP** button at any time to see how much time remains before the radio is turned off.

To turn off the radio manually at any time, press **RADIO ON/OFF**. The radio is immediately turned off and the sleep timer is automatically cancelled.

To cancel the sleep timer and leave the radio on, press **SNOOZE**. The "sleep" icon will disappear and the radio will remain on until you turn it off manually.

NOTE: If electrical power is lost for more than 15 minutes, the sleep timer will automatically reset to 90 minutes.



Memory capacity

The phone directory can store up to 50 entries. Each entry can contain a number up to 32 digits, and a name up to 16 letters long. A convenient search feature can help you find and dial numbers quickly (see page 22).

Timeouts and error messages

If you pause for too long while making an entry, the procedure will time out and you will have to begin again.

If all memory locations are in use, the screen will display "Directory is full." You will not be able to store a new number until you delete an existing one.



New phone directory entries

To create a new phone directory entry

Press **MENU** twice to select **DIRECTORY**. Press **O** to highlight **STORE**. Press **SELECT**, then enter the telephone number when prompted.

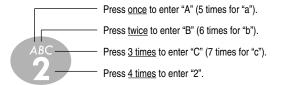
Use the dial pad to enter up to 32 digits, then press **SELECT.** You will be notified if the number is already in your phone directory.

To insert a number from your redial list, press **REDIAL**, then **O O** to find the number, then press **SELECT.**

- Press **DELETE** to erase numbers if you make a mistake.
- Press and hold **PAUSE** to enter a 3-second dialing pause.

To enter a name

Press dial pad buttons once for the first letter, twice for the second, three times for the third. Continue for lower-case letters or numerals.



The cursor moves to the right when you press another dial pad button or the button. Press to move the cursor to the left. Press to enter a space, or press twice to enter "1".

- Press **DELETE** to erase letters if you make a mistake.
- Press repeatedly to enter an asterisk (*), question mark (?), exclamation point (!), slash (/) or parentheses.
- Press # repeatedly to enter a pound sign (#), apostrophe ('), comma (,) hyphen (-), period (.), or ampersand (&).

Storing the entry

Press **SELECT** to store your new phone directory entry. To change it later, see page 23.



Phone directory search

Press **DIR** to display the first listing in the phone directory. You can then use the up/down arrows to browse through the directory, or search to find a specific entry. Press **OFF** at any time to exit the directory.

To browse through the directory

To browse, press or to scroll through all entries one by one. Entries will be displayed alphabetically by the first letter in the name.

To search by name

When any entry is displayed, you can press a dial pad button to display the first name beginning with a letter associated with that key.

Press dial pad buttons once for the first letter, twice for the second, three times for the third, as shown on the previous page.

For example, press **5** (JKL) once to find Jennifer, twice to find Kevin, or three times to find Linda.

To call a displayed number

When you find the entry you want, press **PHONE** (or **SPEAKER**) to dial. Or press **SELECT** to modify the entry (see next page).

Viewing long numbers

The screen can display only 16 digits at a time. To view numbers longer than this, press or to display the remaining digits.



To dial, change or delete entries

To dial a number

When any phone directory entry is displayed, press **PHONE** (or **SPEAKER**) to dial the displayed number.

To delete an entry

When any phone directory entry is displayed, press **DELETE** to delete the displayed entry from the phone directory. Once deleted, an entry cannot be recovered.

To change a listing

When any phone directory entry is displayed, press **SELECT** to modify the entry. (See page 21 for help in modifying the name or number.)

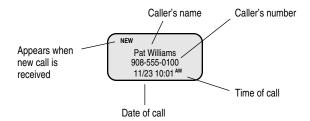
Change the number as needed, then press **SELECT**. Change the name as needed, then press **SELECT** to save the modified entry.



Caller ID Logs

How Caller ID works

If you subscribe to Caller ID service provided by your local phone company, information about each caller will be displayed after the first ring.



Information about the last 50 incoming calls is stored in your call log. You can review the call log to find out who has called, return the call without dialing, or copy the caller's name and number into your phone directory.

When the call log is full, the oldest entry is deleted to make room for new incoming call information.

If you answer a call before the information appears on the screen, it will not be saved in your call log.

About names

Names of callers will be displayed only if this information is provided by your local telephone company.

If the telephone number of the person calling matches a number in your phone directory, the name that appears on screen will match the name as you entered it into your phone directory.

(Example: If "Christine Smith" calls, her name will appear as "Chris" if this is how you entered it into your phone directory.)



Caller ID Logs

To review your call log

To review your call log

Press **CID** to review your call log. The most recent call is displayed first. Use the arrow buttons to scroll through the list as shown at left.

To return a call

Press **PHONE** (or **SPEAKER**) to call the number as it is displayed.

To change the number before dialing, press # repeatedly to see a list of dialing options (you can choose to dial with or without the area code), then press **PHONE** (or **SPEAKER**) to place the call.

Other options

- Press **DELETE** to delete this entry from your call log.
- Press and hold DELETE to delete all entries from your call log. When asked to confirm, press SELECT to clear your call log of all entries, or OFF to exit and leave all call log entries intact.
- Press SELECT to copy this entry into your phone directory. If the name or number are not provided, you will be prompted to enter them.

Screen icons, indicator lights & tones

Handset screen icons & alert tones



Screen icons



Speakerphone in use.



Ringer off.



Battery charging (animated display).

Low battery (flashing); place handset in base to recharge.

MUTE

Microphone is muted.

NEW

W New calls (press CID to review call log).

Alert tones

Happy tone

Programming command completed successfully.

2 beeps

Programming error (or last record in list displayed).

Indicator lights

IN USE

On when handset is in use. Flashes when another phone is in use on the same line.

CHARGING

On when handset battery is charging.

NEW MESSAGE

Flashes when you have new voice mail (requires voice mail service from your local telephone company).

SPEAKER

On when speakerphone is in use.

DODO DODO

SNOOZE

On when snooze alarm is activated.

In case of difficulty

If you have difficulty with your phone, please try the suggestions below. For Customer Service, visit our web site at **www.telephones.att.com**, or call 1-800-222-3111.

Telephone does not work at all

- Make sure batteries are installed and charged correctly (see page 7).
- Make sure the AC adapter is plugged into an outlet not controlled by a wall switch.
- Make sure the telephone line cord is plugged firmly into the base unit and the modular jack.
- If you have dial-pulse telephone service, make sure the dial mode is set to Pulse (see page 13).
- If these suggestions do not work, unplug the base, remove and reinsert the batteries, then place the handset in the base to re-initialize.

Phone does not ring

- · Make sure the ringer is on (see page 12).
- Make sure the telephone line cord and AC adapter are plugged in properly (see page 6).
- · Move the handset closer to the base.
- You might have too many extension phones on your telephone line to allow all of them to ring. Try unplugging some of them.

If you hear noise or interference during a call

- You may be out of range. Move closer to the base.
- Appliances plugged into the same circuit as the base can cause interference. Try moving the appliance or base to another outlet.
- The layout of your home or office might be limiting the operating range. Try moving the base to another location, preferably on an upper floor.
- If the buttons don't work, try placing the handset in the base for at least 15 seconds.
- Disconnect the base from the modular jack and plug in a corded telephone. If calls are still not clear, the problem is probably in your wiring or local service. Call your local telephone service company.

Technical specifications

RF Frequency Band (Handset to Base)	2401.056 MHz — 2482.272 MHz
RF Frequency Band (Base to Handset)	2401.056 MHz — 2482.272 MHz
Channels	95
Channel Spacing	864 KHz
Output Power	20 dBm
Sensitivity	-96 dBm
Modulation	GFSK
Operating Temperature	32°F — 122°F 0°C — 50°C
Base Unit Voltage (AC Voltage, 60Hz)	96 — 130 Vrms
Base Unit Voltage (AC Adapter Output)	9V DC @700 mA
Handset Voltage	3.2 — 4.7V DC @700 mAh
Handset Battery	AT&T model 2420 (80-5542-00-00) 3.6V DC @700 mAh

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