

NEC

Caller ID Handsfree Business Telephone

AT-35

USER GUIDE



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NEC Business Solutions Ltd.

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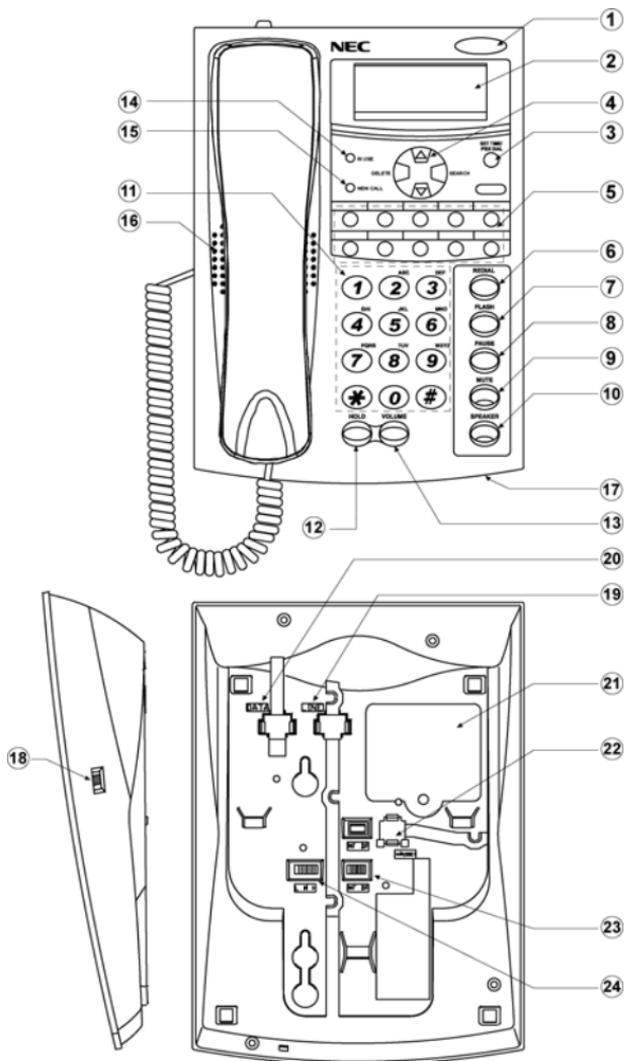
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IMPORTANT SAFETY INSTRUCTIONS

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, by doing the following:

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Do not use this product near water, for example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
4. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
5. Slots and openings in the cabinet and the 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 never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation unless proper ventilation is provided.
6. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire, electric shock, or damage to the product itself. Never spill liquid of any kind on the product.
7. To reduce the risk of electric shock, do not disassemble this product. The product should be taken to a qualified service agent if 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 product is subsequently used.
8. Avoid using a telephone during an electrical storm. There may be a remote risk of electric shock from lightning.
9. Do not use the telephone to report a gas leak in the vicinity of the leak.
10. Please keep this unit away from equipment that uses radio waves or microwaves, (e.g. a portable radio or microwave oven). These may cause improper operation.
- 11. The maximum level setting for the Receive Volume Control should only be used by hearing impaired individuals, otherwise hearing damage may occur.**

LOCATION OF CONTROLS



LOCATION OF CONTROLS

- 1. Visual Ring Indicator/
Message Waiting Lamp**
Flashes to indicate an incoming call. May also indicate messages have been received on some PBX systems.
- 2. LCD Display**
- 3. SET TIME / PBX DIAL Key**
Used to enter clock setting mode and for Dialling behind a PBX.
- 4. Multi-function Key**
Provides the SEARCH, DELETE, UP and DOWN keys for Memory Dialling and reviewing Caller ID.
- 5. 10 One-Touch Keys**
10 One-Touch dial memory keys for fast redialling of numbers stored in the memory.
- 6. REDIAL Key**
Used for redialling the last number you dialled.
- 7. FLASH Key**
Used to disconnect the line and retrieve it, or to access special network functions.
- 8. PAUSE Key**
Used to provide the pause digit required by many PBX systems.
- 9. MUTE Key**
Temporarily switches off the handset and speakerphone microphone.
- 10. SPEAKER Key**
Enables you to make or answer a call, converse and hang-up without lifting the handset.
- 11. Dial Keys**
Dial keys on telephone keypad, including * and #.
- 12. HOLD Key**
Enables you to put your call on hold.
- 13. VOLUME Key**
Adjust the volume of the built-in speaker.
- 14. IN USE LED**
Used to indicate the telephone is in use.
- 15. NEW CALL LED**
Used to indicate the CLI number displayed on the LCD is a new call.
- 16. Speaker**
Enables you to monitor your call and to listen to the other party when using the speakerphone feature.
- 17. Microphone**
Picks up your voice when using the Speakerphone feature.
- 18. Handset Volume Control**
Adjusts the volume of the handset.
- 19. Line Socket**
Used to connect with your local telephone network.
- 20. Data Socket**
Used for the parallel connection of other analogue devices.
- 21. Battery Compartment**
Requires 3 AA batteries.
- 22. Handset Socket**
- 23. Dialling Mode Switch**
Sets the dialling mode of the telephone (DTMF or DP).
- 24. Ringing Volume Switch**
Sets the volume of the ringer.

INSTALLATION

Package Contents



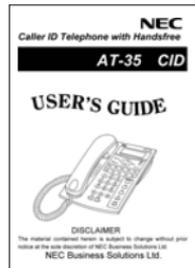
Handset



Handset Curly Cord



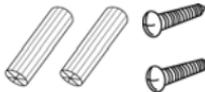
Telephone Base



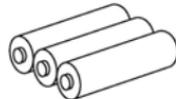
This User's Guide



Telephone Line Cord



Wall-Mount Screws and Anchors



Three AA Batteries
(For initial operation test)

Installing the Batteries

Install three high quality AA size Alkaline (LR6) or Manganese (R6,UM-3) batteries. We recommend the use of Alkaline batteries.

Battery life: - approx. ten (10) months using Alkaline batteries.
- approx. five (5) months using Manganese batteries.

Battery life may depend on operating conditions and ambient temperature. Three batteries are supplied for initial operation and testing. Please replace these for new batteries for continued operation.

1. Loosen the screw on the battery compartment cover.
2. Open the battery compartment cover.
3. Insert three 1.5v AA batteries.
4. Close the compartment cover and secure the screw.

INSTALLATION

IMPORTANT:

- Disconnect telephone line cord before removing battery cover to replace the batteries. Battery cover must be in place at all other times.
- Replace all batteries every six (6) months.
- When the low battery indicator appears on the LCD, replace all batteries immediately.
- To retain information stored in memory, replace batteries within one (1) minute.
- Use only new batteries of the specified size and type.
- Never mix new and old batteries.
- Use of alkaline batteries is recommended.
- Do not use nickel-cadmium batteries.

Battery Safety Precautions:

For your safety, please observe these precautions:

- Do not recharge, disassemble, mutilate, wet or incinerate batteries.
- Keep batteries out of reach of children.
- Use batteries of the same type; do not mix different type of batteries.
- Remove dead batteries from the telephone set immediately.

Connecting the Telephone

1. Connect one end of the handset cord with the short cord to the handset jack, connect the other end with the long cord to the HANDSET socket on the rear of the telephone.
2. Fit one end of the line cord to the LINE socket on the rear of telephone and the other end to your telephone network outlet.
3. Lay the handset cord in the groove on the bottom of the telephone.

For best speakerphone performance, avoid the following:

- Areas with high background noise. (The microphone might pick up these sounds and prevent the speakerphone from going into receiving mode when you finish talking.)
- Surfaces affected by vibration.
- Recessed areas such as in a corner, inside a cupboard, or next to a cabinet, which can generate an echo effect.

INSTALLATION

Connecting an Additional Device

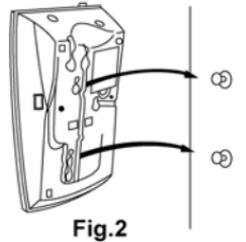
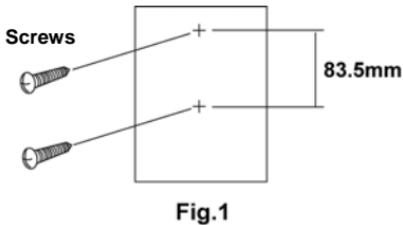
An additional analogue device, such as an answering machine, facsimile machine or PC modem can be connected in parallel with this telephone.

Connect one end of the line cord to the DATA socket on the rear of the telephone and the other end to the LINE socket on the additional device.

Wall Mounting

This telephone set can be mounted on a wall with two screws (included).

1. Mark off the correct positions for the screws, 83.5mm apart vertically opposed before drilling the wall as shown in Fig.1.
2. Install the screws into the wall.
3. Mount the telephone on the wall so that the screw heads insert into the slots on the underside of the telephone set as shown in Fig.2.



If you wish to temporarily place the handset down during a conversation, hook the handset onto the top of the telephone set as shown in Fig.3.



INITIAL SETUP

Selecting the Dialling Mode

Set the dialling mode switch to either DP (Pulse) or MF (Tone) to select the signalling type. The correct mode depends on the requirements of the PBX to which the telephone is connected.

Setting the LCD Contrast

There are 5 display contrast settings.

1. Ensure the phone is idle.
2. Press VOLUME repeatedly to set the desired LCD contrast.



Selecting the Ringing Volume

Select from three ringing volume levels using the Ringing Volume Switch, L (low), M (mid), or H (high).

Selecting the Ringing Tone

There are 3 ringing tones to choose from – low, mid and high pitch.

1. Ensure the phone is idle.
2. Dial * 1 *.
3. Dial 1 (low), 2 (mid) or 3 (high). (Default setting is 1.)
4. Dial #.

The selected ringing tone will play for approximately 2 seconds.

Setting the Clock

This telephone is equipped with a 24 hour clock. The clock is shown on the display while the phone is idle. To set the clock, follow the steps below.

1. Ensure the phone is idle.
2. Hold the SET TIME button for approx. 2 seconds until the year appears flashing on the display.
3. Advance up or down to the correct year by pressing the Δ or ∇ keys.
4. Press the SET TIME button to set the year and advance to the Month.
5. Repeat this process to set the Month, Date, Hour and Minute.

INITIAL SETUP

Setting the Flash Time

The correct hookflash timing depends on the requirements of the PBX to which the telephone is connected.

1. Ensure the phone is idle.
2. Dial * 4 1 *.
3. Dial 00 to 06 to select from the following list of hookflash timings.
 - 00: 95ms
 - 01: 100ms (Default)
 - 02: 120ms
 - 03: 180ms
 - 04: 270ms
 - 05: 300ms
 - 06: 600ms
4. Dial #.

Setting the PBX DIAL Code

When installed as a PBX extension, a trunk access code is often required to precede external numbers that are dialed. The PBX DIAL key can automatically insert the PBX trunk access code at the front of a dialed number, when dialling from a One-Touch key, the IN List (Caller ID), or when Preview Dialling.

The PBX trunk access code may differ from site to site, according to how the PBX is configured. To set the PBX DIAL code, follow the steps below.

To change the PBX DIAL code:

1. Ensure the phone is idle.
2. Dial * 0 *.
3. Dial the PBX trunk access code 0 to 9. (Default=not assigned.)
4. Dial #.

To clear the PBX DIAL code:

1. Ensure the phone is idle.
2. Dial * 0 * #.

BASIC OPERATION

Making a Call using the Handset

1. Pick up the handset and wait for dial tone.
2. Dial the number you require.
3. Replace the handset when you finish the call.

Or, to preview the dialled number:

1. Dial the number you require (while on-hook).
2. You may press the DELETE key to erase dialled digits one at a time.
3. When you have finished dialling, pick up the handset.
4. Replace the handset when you have finished the call.

⇒ Adjust the volume if needed using the Handset Volume Control Switch.

Making a Call using Speakerphone

By using the SPEAKER key, you can make and receive calls without picking up the handset. The speakerphone works in similar way to a two-way radio; both parties cannot talk at the same time.

1. Press the SPEAKER key and wait for dial tone.
2. Dial the number you require.
3. Once answered, converse in the normal way. Be sure to speak clearly toward the microphone (located under the front edge of the phone).
4. To end the call, press the SPEAKER key.

Or, to preview the dialled number:

1. Dial the number you require (while on-hook).
2. You may press the DELETE key to erase dialled digits one at a time.
3. When you have finished dialling, press the SPEAKER key.
4. Once answered, converse in the normal way. Be sure to speak clearly toward the microphone (located under the front edge of the phone).
5. To end the call, press the SPEAKER key.

⇒ Adjust the speaker volume if needed by pressing the VOLUME key.

BASIC OPERATION

Receiving a Call using the Handset

1. Pick up the handset when the phone rings.
2. Converse with your caller.
3. Replace the handset when you finish the call.

⇒ Adjust the volume if needed using the Handset Volume Control Switch.

Receiving a Call using Speakerphone

1. Press the SPEAKER key when the phone rings.
2. Converse with your caller.
3. To end the call, press the SPEAKER key.

⇒ Adjust the speaker volume if needed by pressing the VOLUME key.

Switching between Handset and Speakerphone

You can switch between speakerphone and handset while dialling a number, waiting for answer, or at anytime during a call.

To change from Handset to Speakerphone:

1. Press the SPEAKER Key.
2. Replace the handset.

To change from Speakerphone to Handset.

1. Pick up the handset.

FEATURES

FLASH Key

The FLASH key works the same as the hook switch of the phone. When the FLASH key is pressed during a conversation, it may terminate the call or place the call on hold and you will hear dial tone allowing you to dial the next phone number. The FLASH key may also provide access to special facilities such as call waiting and conference calls. Actual operation will depend on the specific PBX to which you are connected.

To activate, press the FLASH key.

PAUSE Key

The PAUSE key is used to insert a 3.6 second pause between digits during dialling. For automatic dialling (One-Touch Dial / Redial), the pause may be needed in the dialling sequence to wait for the sound of a dial tone or a computer tone (such as computer activated operations like banking and voice mail). A pause can be programmed into any memory location.

To activate, press the PAUSE key when required during dialling. You may press the PAUSE key multiple times for a longer pause.

Last Number Redial

The last telephone number dialled (up to 32 digits) can be redialled automatically by pressing the REDIAL key.

1. Pick up the handset (or press the SPEAKER key).
2. Press the REDIAL key.

You can re-dial the same telephone number as many times as required. However, once you dial another number, the previous number is erased. (Only the last number you dial will be stored under the REDIAL key).

FEATURES

Memory Redial

The last 30 telephone numbers dialed (up to 21 digits each) are stored in the Outgoing Call Memory. To dial from the Outgoing Call Memory:

1. Press the SEARCH key until the OUT icon is shown on the display.
2. Advance up or down to the phone number you wish to dial by pressing the ▽ or △ keys.
3. When the desired phone number is displayed, press the PBX DIAL key, SPEAKER key, or lift the handset. Dialling starts automatically.
4. Press the DELETE key to remove the displayed number from the list.

Microphone Mute

The MUTE key switches off the handset and Speakerphone microphones, so you can hear the other party, but they cannot hear you.

To Mute the call so that the outside party cannot hear you:

1. Press the MUTE key. The MUTE key LED will light up.

To cancel Mute and resume normal conversation:

1. Press the MUTE key. The MUTE LED will go out.

Message Waiting Lamp

Some PBX systems offer a visual message waiting system. The message waiting lamp is turned on when there is a message left for you and flashes while the phone is ringing to indicate an incoming call.

FEATURES

Temporarily Switching Pulse to Tone Dialling

If your telephone set is connected to a Pulse dialling mode network, this feature allows you to temporarily switch to Tone dialling to access Tone operated services; e.g. answering machines, telephone banking, etc.

1. Dial the number of the service you wish to use and wait for answer.
2. Dial * to switch to Tone dialling.
3. When you hang up, the phone automatically returns to Pulse dialling.

Call Hold

A call in progress may be placed on hold at the telephone by pressing the HOLD key. It may also be possible to place the call on hold at the PBX system by pressing the FLASH key. When the HOLD key is pressed, the call remains on the telephone, during which time both parties hear the hold melody until the call is retrieved.

Selecting the Hold Melody:

There are 2 different melodies for the HOLD function. To select the desired melody, follow the procedure below.

1. Ensure the phone is idle.
2. Dial * 5 *.
3. Dial 0 or 1 to select the desired melody. (Default = 0.)
4. Dial #.

Placing a Call on Hold:

1. With a conversation in progress on the phone.
2. Press the HOLD key.
3. If using the handset, you may put the handset back in the cradle.
4. To converse with the caller again, pick up the handset (or press the SPEAKER key).

FEATURES

One-Touch Dialling

This telephone set is equipped with 10 one-touch dial memory keys for programming your most frequently dialled telephone numbers. You can store up to 21 digits in each one-touch key. When using this telephone as a PBX extension, you may need to include a Trunk Access Code followed by a pause to gain an access to an outside line.

Index Label:

Surrounding the one-touch keys is an index label. When numbers are entered into the one-touch keys, remove the plastic cover and make a note against each key to remind you which number is stored in the memory.

To Store a Number under a One-Touch Key:

1. Ensure the phone is idle.
2. Dial the number you want to store (up to 21 digits).
This may include digits 0~9, *, # and Pause.
3. Press and hold the one-touch key (1-10) for approx. 2 seconds, until you see "SAVE" shown on the display.

To Change the Number under a One-Touch Key:

You can change a stored number by simply following the storage procedure above. The new number will overwrite the previously stored number.

To Dial the Number under a One-Touch Key:

1. Press SPEAKER (or pick up the handset).
2. Press the desired one-touch key.
3. The stored number is automatically dialled out.

To Preview the Number before Dialling:

1. Press first the desired one-touch key. The stored number is displayed.
2. Press SPEAKER, PBX DIAL, or pick up the handset.
3. The stored number is automatically dialled out.

FEATURES

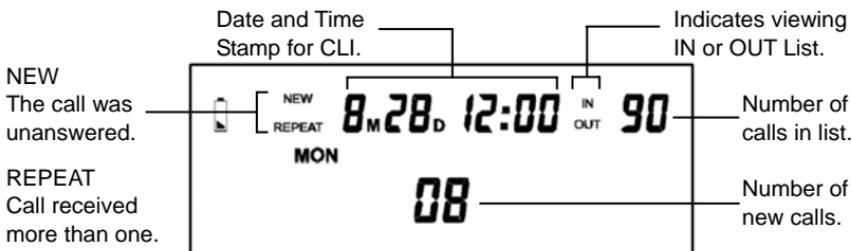
Caller ID (CLI)

This telephone set will display Caller ID (CLI) information received with incoming calls. The last 90 Caller ID numbers received are automatically stored in CLI memory (up to 21 digits each). The numbers stored in CLI memory may be reviewed, deleted, or dialled back if desired.

When a new call received with CLI goes unanswered, the NEW CALL light will flash. The number of new (unanswered) calls received with CLI is indicated on the bottom row of the display. Note that the oldest call in the list occupies position 01 and new calls are stored at the end of the list.

When CLI is restricted by the caller, "NO CLI" is displayed.

For international and payphone calls, "OUT OF AREA" is displayed.



To Review the CLI Memory:

1. Press the SEARCH key until the "IN" icon is shown on the display.
2. Advance up or down to review received CLI numbers by pressing the Δ or ∇ keys. To view the most recent NEW CALL, press the ∇ key.
3. Press the DELETE key to remove the displayed number from the list.

To Dial Back from the CLI Memory:

1. Press the SEARCH key until the "IN" icon is shown on the display.
2. Advance up or down to the phone number you wish to dial by pressing the ∇ or Δ key.
3. When the required phone number is displayed, press the PBX DIAL key, SPEAKER key, or lift the handset. The number is automatically dialled.

TROUBLESHOOTING

Troubleshooting Guide

Problem	Solution
No dial tone / Will not dial out	<ul style="list-style-type: none">• Check that the hookswitch is not depressed.• Check that the line cord is connected.• Make sure the SPEAKER key LED is lit (if using speakerphone).• Ensure that the Dialling Mode Switch is set to the correct position.• Unplug the phone, wait 30 seconds, then plug the phone back in.
Phone does not ring	<ul style="list-style-type: none">• Disconnect any additional devices connected to the DATA port.• Ensure there are no other devices connected to the same line.
Cannot be heard by the other party	<ul style="list-style-type: none">• Confirm phone cord and handset curly cord are securely plugged in.• Make sure MUTE key LED is off.
Cannot use one-touch dialling	<ul style="list-style-type: none">• Make sure that a number has been correctly stored under the one-touch key.• A row of “-“ indicates an empty one-touch key.
No display on LCD while phone is idle	<ul style="list-style-type: none">• Check that batteries are fitted and that they are in good condition.

Care and Maintenance

To keep your telephone set working well and looking good, follow these few simple guidelines.

- Avoid putting the telephone near heating appliances and devices that generate electrical noise.
- The telephone should not be exposed directly to sunlight or moisture.
- Avoid dropping the handset and other rough treatment.
- Clean the telephone using a soft cloth moistened with a mild cleaning solution. Remove all traces of the cleaner with a damp cloth.
- Never use cleaners containing alcohol, strong cleaners that may corrode plastic, or abrasive powders, as this may damage the finish.

SPECIFICATIONS

Caller ID receiver	FSK (type I) or DTMF
Caller ID information	CLI number with date and time stamp
Caller ID review, delete, dial back	Yes
Caller ID storage	90 (21 digits)
Last number redial storage	30 (21 digits)
Last number redial key	Yes (32 digits)
One-touch key memories	10 (21 digits each)
Date and time display	Yes (24 hour)
Call duration timer	Yes
Music on hold with selectable tones	Yes (2 melodies)
DTMF and Decadic dialling	Yes (DP/MF switch)
Selectable hook flash timing	95/100/120/180/300/600ms (default=100ms)
Pause key	Yes (3.6 sec)
Mute key (handset and handsfree)	Yes (with LED indication)
Message waiting lamp	Yes
Visual ring indicator	Yes
In-use indication	Yes
New call indication	Yes (LED and LCD)
Repeat call indication	Yes
Speakerphone (Handsfree)	Yes (half duplex)
Speakerphone receive volume control	Yes (8 levels)
Handset receive volume control	Yes (slide switch, 3 levels)
Adjustable ring volume	Yes (3 levels)
Adjustable ring tone	Yes (3 pitches)
Data port (parallel connection)	Yes
Battery for memory backup	3 x AA batteries
Low battery indication	Yes
Automatic insertion of trunk access code	Yes (selectable 0-9)
Adjustable LCD contrast	Yes (5 levels)
Wall mountable	Yes (in-built)
Telephone line interface	2-wire analogue centre pair

QUICK REFERENCE

Feature Access Codes

Operation: Dial Access Code + Option Code + #

Feature	Access Code	Option Code
Ring Tone	* 1 *	1: Low Tone 2: Mid Tone (default) 3: High Tone
Hold Tone	* 5 *	0: Tone 1 (default) 1: Tone 2
PBX Trunk Access Code	* 0 *	0-9 (default = 0)
Hook Flash Timing	* 41 *	00: 95ms 01: 100ms (default) 02: 120ms 03: 180ms 04: 270ms 05: 300ms 06: 600ms
Reset CLI Receiving Mode (FSK or DTMF)	* *	Mode set automatically upon first call with CLI

Operations

Feature	Operation	Telephone State
LCD Contrast	Press VOLUME	Idle
Handsfree Volume	Press VOLUME	Off Hook Handsfree
Handset Volume	Handset Volume Control Switch	
Mute Speakerphone	Press MUTE	Off Hook Handsfree
Mute Handset	Press MUTE	Off Hook Handset
Place Call On Hold	Press HOLD	Off Hook
Retrieve Call From Hold	Press SPEAKER	On Hold