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NEC Conference Max Installation and Operation Manual Part No. 800-157-250 February 2005 (Rev. Beta)

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Introduction

Thank you for purchasing the NEC Conference MaxTM expandable conferencing phone. Conference Max provides premium, full-duplex audio to small conference rooms as a single unit and to larger rooms as an expanded system. Up to four Conference Max units can be linked, expanding not only microphone coverage but loudspeaker coverage and control access as well. This creates even distribution of sound for a more natural communications experience.

Setting up the Conference Max conferencing phone is extremely easy and requires only three connections: power, telephone line and the base unit to the conferencing phone. And, the familiar keypad design ensures users will be comfortable using the phone, reducing the need for training and support.

- Expandable. Conference Max is ideal for conference rooms and provides complete microphone and loudspeaker coverage and easy access to controls.
- Superior Audio. The clear, full sound of the Conference Max facilitates more natural interaction among participants.
- One-Touch Conferencing. Single button access to a conferencing services operator who can connect an unlimited number of participants.
- Easy to Use. The intuitive, user friendly controls are simple to operate.

2 Conference Max — Introduction



Important safety information

Read the safety instructions before first use of this product. This conferencing phone is not designed for making emergency telephone calls when the power fails. Make alternative arrangements for access to emergency services.

- Read and understand all instructions and follow all warnings marked on the product.
- · Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- . Do not use this product near water, for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
- 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. Never push objects of any kind through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock.
- 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.
- · 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 in your location, consult your dealer or local power company.
- Do not overload wall outlets and extension cords as this can result in fire risk or electric shock.
- Never spill liquid of any kind on the product.
- To reduce the risk of electric shock, do not disassemble this product. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock during subsequent use.
- Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power supply cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the product.
 - c. If the product does not operate normally by following the operating instructions.
 - d. If the product has been dropped or damaged.
 - e. If the product exhibits a distinct change in performance.
- Avoid using a telephone during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use this product to report a gas leak in the vicinity of the leak.
- Do not use this product near intensive care medical equipment or by persons with pacemakers.
- This product can interfere with electrical equipment such as answering machines, TV sets, radios, computers and microwave ovens if placed too close.

Telephone wiring and jack information

To reduce the risk of fire or injury to persons, read and follow these instructions:

- Use caution when installing or modifying telephone lines.
- Never install telephone wiring during an electrical storm.
- Never install telephone jacks in wet locations unless jack is specifically designed for wet locations.
- · Never touch uninsulated telephone wires or terminals unless the telephone line is disconnected at the network interface.

Save these instructions

3 **Conference Max**— Introduction

Unpacking

Carefully place the conferencing pod and base unit on a level surface. Ensure you have received all items shown below.

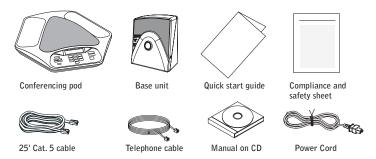


Figure 1. Conference Max parts

Note: NEC is not responsible for product damage incurred during shipment. You must make claims directly with the carrier. Inspect your shipment carefully for obvious signs of damage. If the shipment appears damaged, retain the original boxes and packing material for inspection by the carrier. Contact your carrier immediately.

> WARNING: TO PREVENT FIRE OR **ELECTRICAL SHOCK** HAZARD, DO NOT **EXPOSE THIS** PRODUCT TO RAIN OR MOISTURE.



TRIANGLE IS A

WARNING SIGN

DANGEROUS

VOLTAGE INSIDE

THE PRODUCT

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER HEAD WITHIN THE (OR BACK) NO USER SERVICEABLE PARTS INSIDE REFER SERVICING TO ALERTING YOU OF OUALIFIED SERVICE PERSONNEL.



WARNING SIGN ALERTING YOU OF **IMPORTANT** INSTRUCTIONS ACCOMPANYING THE PRODUCT.

SEE MARKING ON BOTTOM / BACK OF PRODUCT

4 Conference Max — Getting Started

Getting Started

Connecting your conferencing phone

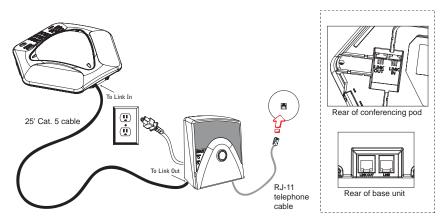


Figure 2. Connecting Conference Max

- Connect the Cat. 5 cable from the Link Out jack on the base unit to the Link In jack on the conferencing pod.
- 2. Connect the base unit to the telephone jack using the RJ-11 telephone cable.
- 3. Connect the base unit to the power cord and plug the power cord into an electrical outlet.

Connecting additional Conference Max phones

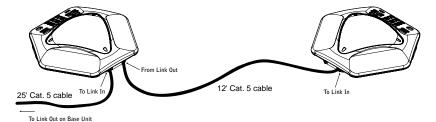


Figure 3. Connecting additional units

- Connect the 12' Cat. 5 cable to the Link Out jack on the first phone and the Link In jack on the second phone.
- 2. Continue linking up to three additional Conference Max phones in the same fashion. A total of four units may be connected.

Conference Max — Getting Started

Using your NEC Conference Max conferencing phone

To make a call

- 1. Press the ON/OFF key. You will hear a dial tone.
- 2. Dial the number as you would on a standard phone. The number appears on the LCD screen.



Figure 5. Dialing screen

L

Note: You can also predial the number while in Standby (inactive) mode and press the ON/OFF key to connect the call. Press and hold the pound key (#) to enter a pause in the dialing string.

To answer a call

Press the ON/OFF key.

When there is an incoming call, the phone rings and the LEDs on the phone and the phone icon on the LCD screen flash.



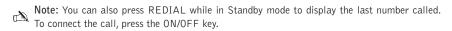
Figure 6. Incoming call

To end a call

Press the ON/OFF key. This will disconnect the call and return the phone to Standby mode.

To redial a number

- 1. Press the ON/OFF key. You will hear a dial tone.
- 2. Press REDIAL to dial the last number called.

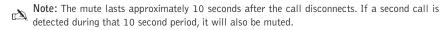


To adjust ringer volume

- While the phone is ringing, press VOLUME UP or VOLUME DOWN.
- While the phone is inactive, press VOLUME UP or VOLUME DOWN. The ringer melody will
 play once at the new level.

To temporarily mute ringer

 While the phone is ringing, press the star key (*) or the MUTE key. This mutes the ringer for the duration of the ring cycle. The ringer will not be muted on the next incoming call.



To mute the call

- While on a call, press MUTE to mute the microphones (loudspeakers are not muted).
- Press again to unmute.

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Conference Max — Getting Started

To access your conferencing services provider

• Press the CONFERENCE key. This feature must be programmed before use. See page 10.

To store a number in the phonebook

1. Enter the phone number you want to store while conferencing pod is in Standby mode.



Note: To add a pause to the phone number, press and hold the pound (#) key. To add a dash to the phone number, press and hold the 1 key. To add a space to the phone number, press and hold the star kev (*).

2. Press and hold the PHONEBOOK/EDIT key until the Phonebook and Program icons appear on the LCD screen.



Phonebook and Program icons



Figure 7. Adding Phonebook entries

- 3. Assign a Phonebook location (0-9) by pressing the corresponding number key.
- 4. Press PHONEBOOK again to save the entry. You will hear a confirmation tone.
- 5. To exit Phonebook Edit mode before saving the entry, press CLEAR.



Note: You can easily add the last number you dialed to the Phonebook. Simply press REDIAL to display the phone number and follow steps 2-5.

To make a call using the Phonebook

- 1. Press PHONEBOOK.
- 2. Press the number key (0-9) that corresponds with the speed dial location. The stored number will appear on the LCD screen.
- 3. Press ON/OFF to dial the number.



Note: You can also press the ON/OFF button to get a dial tone before entering the Phonebook. This will cause the number to dial as soon as you select the speed dial location.

Conference Max — User Options

User Options

Call options

In addition to the basic phone operations described in the previous section, you can perform any of the following functions during a call: temporarily change to tone dialing, send a flash signal, display phone number and adjust speaker volume.

To temporarily enable tone dialing

If you have programmed the phone to use pulse dialing (see page 9), you may need to temporarily change to tone dialing during a call to access voicemail systems, enter passcodes or extensions. To temporarily change to tone dialing:

• Press the star (*) key. A special character appears on the LCD screen. All numbers entered after this character will use tone dialing. When the call is finished, the dialing mode will revert to pulse.



Note: When more than 18 characters are entered, a scroll button appears on the LCD display and the numbers scroll from right to left.

To send a Flash signal

If your telephone service includes call transfer, call waiting, or conference calling, you can use the Flash key. Refer to your local telephone service for details.

To display your local number during a call

• Press CLEAR. The phone number will appear. This feature must be programmed before use. See page 10.

To adjust loudspeaker volume

- Press the VOLUME UP key while on a call to increase volume.
- Press the VOLUME DOWN key while on a call to decrease volume.

To turn the ringer on/off

• While in standby, press and hold the star (*) key. The Ringer Off icon will illuminate when the ringer is turned off. The icon will not appear when the ringer is on.



Figure 8. Ringer Off icon.



Note: When the ringer is off, LEDs will still flash to indicate an incoming call.

8 Conference Max — User Options

Programming options

To allow for individual preferences and enhance ease of use, eight features can be programmed: ringer melody, dialing mode, flash duration, local phone number, speed dial for conferencing services, speed dial for service center, country setting and AGC/ALC. You may also restore factory defaults.

To change ringer melody

- 1. Press and hold the REDIAL/PROG key until the Program icon appears on the LCD screen.
- **-**≫
- 2. Press 1 to enter the Ringer Melody menu. There are five available melodies.

Figure 9. Programming options

- 3. Press REDIAL/PROG. The current melody selection flashes.
- 4. Press keys 1-5 to play the corresponding melody. The selected melody plays once.
- 5. Press REDIAL/PROG to save the selection. Press CLEAR to exit programming.

To change dialing mode

- 1. Press and hold the REDIAL/PROG key until the Program icon appears on the LCD screen.
- 2. Press 2 to enter the Dialing Mode menu. There are two dialing modes; tone and pulse. The current dialing mode is shown on the screen (T for tone, P for pulse).
- 3. Press REDIAL/PROG. The current mode flashes.
- 4. Press 1 to select tone or 2 to select pulse.
- 5. Press REDIAL/PROG to save the selection. Press CLEAR to exit.

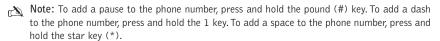
To change flash duration

- 1. Press and hold the REDIAL/PROG key until the Program icon appears on the LCD screen.
- 2. Press 3 to enter the Flash Duration menu. The current duration is shown in milliseconds. There are five duration settings: 600, 300, 150, 100 and 80.
- 3. Press REDIAL/PROG. The current duration flashes.
- 4. Press keys 1–5 to select a new duration setting.
- 5. Press REDIAL/PROG to save the selection. Press CLEAR to exit.

Conference Max — User Options

To program local phone number

- 1. Press and hold REDIAL/PROG until the Program icon appears on the LCD screen.
- 2. Press 4 to enter the user phone number menu.
- 3. Press REDIAL/PROG.
- 3. Enter the local phone number.



4. Press REDIAL/PROG to save the number. Press CLEAR to exit.



To program conferencing services number

- 1. Press and hold REDIAL/PROG until the Program icon appears on the LCD screen.
- 2. Press 5 to enter the Conference menu.
- 3. Press REDIAL/PROG.
- 4. Enter the phone number.
- Note: To add a pause to the phone number, press and hold the pound (#) key. To add a dash to the phone number, press and hold the 1 key. To add a space to the phone number, press and hold the star key (*).
- 5. Press REDIAL/PROG to save the number. Press CLEAR to exit.
- Note: If a number has already been programmed, use CLEAR to delete the old number before entering the new number.

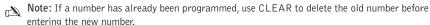
To program service center number

- 1. Press and hold the REDIAL/PROG key until the Program icon appears on the LCD screen.
- 2. Press 6 to enter the service center menu.
- 3. Press REDIAL/PROG.
- 4. Enter the number you want the 0 key to dial.



Note: To add a pause to the phone number, press and hold the pound (#) key. To add a dash to the phone number, press and hold the 1 key. To add a space to the phone number, press and hold the star key (*).

5. Press REDIAL/PROG to save the number. Press CLEAR to exit.



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Conference Max — User Options

To program country setting

- Press and hold the REDIAL/PROG key until the Program icon appears on the LCD screen.
- 2. Press 7 to enter the service center menu.
- 3. Press REDIAL/PROG.
- 4. Press the number key that corresponds with desired country.

1 = US/Canada/China/Japan/	4 = South Africa
Mexico/Singapore	5 = Brazil
2 = Europe CTR21	6 = New Zealand
3 = Australia	7 = South Korea

5. Press REDIAL/PROG to save the selection. Press CLEAR to exit.

To program the Automatic Gain Control (AGC)/ Automatic Level Control (ALC) settings

1. Press and hold the REDIAL/PROG key until the Program icon appears on the LCD screen.

2. Press **8** to enter the AGC/ALC menu. The current setting is displayed on the LCD screen.

Press REDIAL/PROG. The current setting flashes.

4. Enter the new setting. Refer to the table at right.

Press REDIAL/PROG to confirm selection. Press CLEAR to exit.

to exit.

Note: The default AGC/ALC setting is 1.

Setting	Speaker AGC	Microphone ALC
1	0n	On
2	On	Off
3	Off	On
4	Off	Off

To restore factory defaults

- Press and hold the REDIAL/PROG key until the Program icon appears on the LCD screen.
- 2. Press and hold the 9 key. The number 8 appears across the LCD screen.
- 3. Press REDIAL/PROG to confirm selection. Press CLEAR to exit.

Note: The feature will not reset the country setting. It will maintain the user-defined country setting.

Conference Max — Maintenance

Tones and alerts

Tone/Alert	Description	
Confirmation	A tone will play upon successful programming entry.	
Reject	A tone will play if you attempt to do any of the following: • enter an invalid programming entry • use a speed dial key that has not been programmed (One-Touch Conferencing or service center) • enter a 45th digit when predialing • enter a 17th digit for user phone number • enter a 31st digit for speed dial key (One-Touch Conferencing or service center)	

Maintenance

Caring for your Conference Max

- Follow all warnings and instructions marked on your Conference Max.
- Unplug base unit and conferencing pod from the wall outlet before cleaning.
- Do not use liquid or aerosol cleaners. Use a damp cloth moistened with water to clean the
 outside of your conferencing pod or base unit and power supply.



Electrical considerations

• Use only the power adapter that comes with your conferencing phone.

Troubleshooting

If you are having trouble with your Conference Max, it might be improperly set up or other equipment might be malfunctioning. To begin, check for the following or consult the chart on the next page:

- The Conference Max base unit is plugged into the proper volt electrical outlet and its power light is on.
- · Make sure cables are securely connected.
- The equipment the other party is using is comparable in quality to your Conference Max
 conferencing phone and is working properly. While the Conference Max works with speakerphones, cell phones, handsets or installed conferencing systems, the quality of the conference will be impacted if the party you are conferencing with has poor
 quality equipment.

Conference Max — Maintenance

If you hear	It could be that	Try this
No dial tone	Base unit is not connected to telephone jack.	Connect the base unit to the telephone jack using the supplied telephone cable.
	You are not using an analog phone line.	Check that you are using an analog phone line. Consult your IT department for help.
Static or noise	You have a bad telephone connection.	Place the call again to see if another line provides a better connection.
	You have a bad telephone line.	Plug a working phone into the phone jack. If the line is still noisy, call your telephone company.
	The other party's room is too noisy.	Ask the other party to turn off noisy equipment.
Calls can come in, but you can't dial out.	The dialing mode (tone or pulse) is set incorrectly for your service.	See page 10 for instructions on changing the dialing mode.
Poor audio	The equipment on the far end is of lesser quality.	The equipment should be upgraded. Participants can try sitting closer to equipment and eliminate background noises.

Conference Max — Appendix 13

Appendix

Specifications

DIMENSIONS (W x D x H)

Phone section: 10.5" x 10.5" x 3" (26.7 cm x 26.7 cm x 7.6 cm) Base unit: 4.25" x 5.5" x 2.5" (10.8 cm x 14 cm x 6.4 cm)

WEIGHT

Phone section: 2.7 lb (1.2 kg)
Base unit: .6 lb (0.27 kg)
Shipping: 10 lb (4.5 kg)

ENVIRONMENTAL

Operating Temperature: 0–50° C
(32–122° F)
Storage temperature: 5–70° C
(41–158° F)
Operating Humidity: 15 to 80%
Storage humidity: 10 to 90%

POWER

Base unit: Auto-adjusting power module; 100-240VAC; 50/60 Hz

TELEPHONE CONNECTION

Analog PBX or PSTN line RJ-11C/CA11A, -12dBm nominal

KEYPAD

Alphanumeric standard keypad

LOUDSPEAKER VOLUME

90 dBspl A weighted @ 1 ft Bandwidth: 200Hz - 3.3kHz

RECORD OUTPUT

jack Impedance: <1000 ohm Bandwidth: 200Hz-3.3kHz Dynamic Range: 60dB THD <.01%

Connector: 2.5 mm mono audio

ECHO CANCELLATION

Tail Time: 128 mS x 3

NOISE CANCELLATION

Dynamic noise cancellation

CERTIFICATIONS

FCC Part 15/ICES-003 Class A FCC Part 68/IC CS-03 CE UL, C-UL Certified

WARRANTY

2 Years

MODELS

Conference Max*

*Call your sales representative for part numbers

Conference Max — Appendix

Compliance

FCC Part 15/ICES-003 Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules and Industry Canada ICES-003. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by NEC could void the equipment warranty.

FCC Part 68 Compliance

US:FBIMT01B910158015 Ringer Equivalence Number (REN): 0.1B(ac)

This equipment complies with Part 68 of FCC Rules and Technical Requirements for Telephone Terminal Equipment published by ACTA. The marking on the base unit of this equipment contains, among other information, the US number and ringer Equivalence Number (REN) for this equipment. If requested, this information must be provided to your telephone company.

The REN is used to determine the quantity of devices, which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to obtain the maximum RENs for the calling area.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice is not 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 for you to make the necessary modifications in order to maintain uninterrupted service.

Notice

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.

If you experience problems with this equipment, contact your NEC Dealer for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved.

No user serviceable parts are contained in this product. If damage or malfunction occurs, contact your NEC Dealer.

This equipment cannot be used on telephone company provided coin service. Connection to Party Line Service is subject to state tariffs.

Conference Max — Appendix 15

IC Compliance

IC: 1970A-158015

Ringer Equivalence Number (REN): 0.1B(ac)

Notice

The term "IC" before the certification/registration number signifies that Industry of Canada technical specifications were met.

This certification means that the equipment meets certain telecommunications network protective operational and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

The REN is used to determine the quantity of devices, which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to obtain the maximum RENs for the calling area.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the companies inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by NEC Communications. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

European Compliance

This equipment has been approved in accordance with Council Directive 1999/5/EC "Radio Equipment and Telecommunications Equipment"

See the enclosed Declaration of Conformity (DOC) that is enclosed with the equipment for full details. Compliance of the equipment with the Directive is attested by the application of the CE mark on the equipment.