

Liberation
SPECTRE
User's Guide





**CONGRATULATIONS ON YOUR PURCHASE OF THE LIBERATION SPECTRE
WIRELESS HEADSET WITH UNIVERSAL AMPLIFIER FROM NORTEL
NETWORKS.**

COMPATIBILITY INFORMATION

Your *SPECTRE* has been designed to work with most retail telephones and many office systems. Telephones that have the dial pad in the handset and certain GTE phones may not be compatible. If you have a question about compatibility with your telephone, please contact **1-800-4NORTEL**.

FCC REGISTRATION INFORMATION

This equipment complies with Part 68 of the FCC rules. On the bottom of the universal amplifier base unit is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment also complies with Part 15 of the FCC rules. Operation is subject to the following conditions: (1) This equipment may not cause harmful interference to other devices, and (2) External interference may cause adverse operation of this equipment.

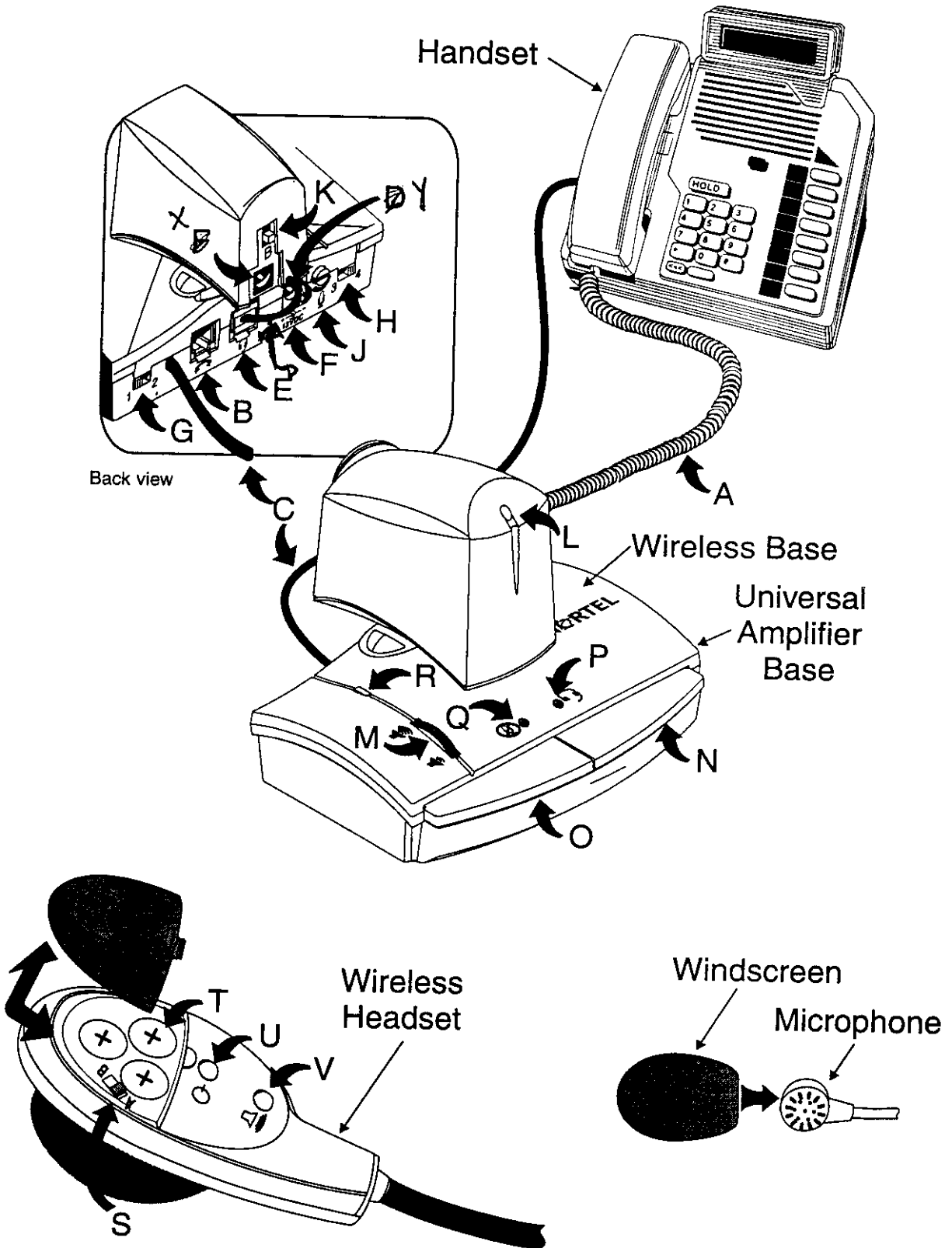
SETTING UP YOUR *SPECTRE*

NOTE: The letters in brackets refer to the letters shown in the illustrations.

1. To activate the supplied zinc-air batteries (type 675EH), remove the tape from the batteries.
2. Install the three zinc-air batteries (T) into the wireless headset as shown in the figure.
3. Four self-adhesive rubber feet are included with your *SPECTRE*. Attach these rubber feet to the bottom of the universal amplifier base unit.
4. Install the windscreen onto the microphone as shown in the figure.
5. Unplug the telephone handset cord (A) from your telephone and insert it into the universal amplifier base unit jack (B).
NOTE: Some telephones have a jack designated for headsets and may require special programming to function properly. Consult your telephone manual.
6. Connect the cord (C) that extends from the back of the universal amplifier base unit to the handset jack on your telephone.
7. Insert the two pins on the foot of the wireless base unit into the holes in the top of the universal amplifier base unit.
8. Connect the short telephone cord (D) that extends from the back of the wireless base unit into the headset jack (E) on the universal amplifier base unit.
9. Connect the power cord (Y) into that extends from the back of the wireless base unit into the power jack (F) on the back of the universal amplifier base unit: connect the power supply plug into the power jack (X) on the back of the wireless base unit. Plug the power supply into a 110/120 VAC wall outlet.
10. Whenever you install new batteries, you will need to adjust the volume control (V) on the wireless headset. Press the headset on/off button (U) to activate the headset and lift the handset from the cradle to hear a dial tone. Press the headset volume control button (V) to cycle through the four volume settings and select the highest setting.
11. To adjust the volume of the outgoing sound, place a call and talk while adjusting the Microphone Transmit Gain control (J) until the person you are speaking with tells you that the best sound has been achieved. You may wish to switch from headset to handset and back again for comparison.

Liberation *SPECTRE*

Assembly and Operation



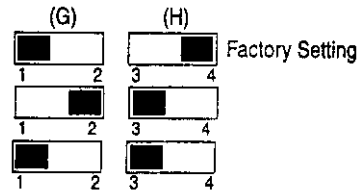
CONFIGURATION SWITCHES

Two configuration switches (G and H) located on the back of the universal amplifier base unit need to be adjusted to enable your *SPECTRE* to work with your telephone. Each switch has two settings. Set the switches to the correct configuration for your type of telephone.

Most Electronic single and multi-line phones

AT&T System 25, 75, 85 Merlin

Carbon "bell ring" phones



CHANNEL SELECTION SWITCHES

There are two switches that control selection of the wireless channels used by *SPECTRE*. One switch is located on the wireless base (R) and the other switch is located on the wireless headset (S). The wireless headset and the wireless base unit **MUST** both be set to the same channel (either 'A' or 'B') to operate correctly. In the event that you receive unwanted noise or interference on the chosen channel, you should change the wireless headset and wireless base unit to the other channel.

PRIVACY WARNING: The *SPECTRE* has been specifically designed for individual, desktop operation only. Use of a *SPECTRE* system within the operating range of another *SPECTRE* system, either intentionally or unintentionally, may result in interference or unexpected loss of call privacy.

OPERATION

The green indicator light (L) on the wireless base unit must be "on" for proper operation. This green indicator light turns "on" **ONLY** when:

- The universal amplifier is turned on
- The headset is turned on
- The headset is set to the same channel as the base
- The headset is within operating range of the wireless base

Adjusting the Headset: Your *SPECTRE* wireless headset can be used on either the right or left ear by rotating the earpiece housing. Extend the headband for the most comfortable fit over your head, then adjust the flexible boom to put the microphone 1/4" from your mouth.

Adjusting the Volume: After the initial set up of your headset volume, use the Receive Volume Control (M) to increase or decrease the volume.

NOTE: For some telephones to operate correctly, the handset cannot be permanently removed from the cradle. Consult your telephone manual for further details.

Receiving Calls: Press the handset/headset button (N) to turn "on" the red indicator light (Q). When the telephone rings, lift the handset from the cradle (off-hook). Press the headset on/off button (N) to activate the headset. You may now talk on your *SPECTRE* headset. Rotate the Receive Volume Control (O) to increase or decrease the volume. The on-line indicator (R) lights up when you are talking to a caller.

Making Calls: Press the handset/headset button (P) to turn "on" the red indicator light (P). Lift the telephone handset from the cradle. Dial normally. To end a call, hang up the telephone handset.

Returning to Handset Use: To use your telephone handset, press the headset/headset button (N) to turn "off" the red indicator light (P) and use the telephone as you would normally.

Muting Calls: The mute button (O) allows you to turn off the *SPECTRE* microphone. When the red mute indicator light (Q) is "on" you will still be able to hear your caller, but they will not be able to hear you. To turn the mute off, press the mute button again so that the red mute indicator light (Q) is "off."

In-Range/Out-of-Range Operation: The typical operating range of your *SPECTRE* is between one and a half and eight feet distance between the wireless headset and the wireless base unit. When

you reach the limits of the operating range, you may experience noise. The wireless headset will automatically mute the audio if the noise level becomes excessive and you will hear a dual-tone out-of-range signal at four second intervals. To restore normal audio and resume conversation, move the headset back within the operating range.

If the wireless headset has been out of operating range for more than 30 seconds, it will automatically shut off and the green indicator light (L) located on the wireless base will be "off." Move the headset back within operating range and press the headset on/off button (U) to restore operation. (If a call was in progress when the headset automatically shut off and the caller has not hung up, you may continue the conversation.)

TROUBLESHOOTING TIPS

NOTE: The letters in brackets refer to the letters in the illustrations on the other side of this guide.

If your *SPECTRE* is not operating properly, check the following:

1. Review the set-up steps to ensure that your *SPECTRE* is hooked-up correctly.
2. Try adjusting the volume control (M) on the universal amplifier base unit, *SPECTRE* headset and on your telephone.
3. Make sure that the red mute indicator light (Q) is "off."
4. Make sure that the green indicator light (L) located on the wireless base is "on."
5. Make sure that the batteries (T) are properly installed in the wireless headset.
6. Check the configuration switches (G and H) to ensure that your *SPECTRE* has been properly configured to work with your model of telephone.
7. If you experience excessive noise levels within the normal operating range, try the alternate channel selection.
8. The headset batteries need to be replaced when you hear the dual-tone low battery signal at one minute intervals in the wireless headset.
9. If you are still unable to get your *SPECTRE* working correctly, call 1-800-4NORTEL for assistance.

PRODUCT REPAIR

Batteries: Use three non-rechargeable, zinc-air, hearing aid batteries, type 675EH

NOTE: The expected life of these zinc-air batteries is as follows:

- under normal operation: 50 to 60 hrs
- activated (tape removed), but not in use: 2 to 3 months
- unactivated (tape is not removed): one year

Power Supply: Use only units with a UL Class 2 approved transformer, rated at 12 VDC, 200 mA

Technical Assistance/Repair Service: Call 1-800-4NORTEL

NORTEL
NETWORKS™

Intertek Testing Services

TestMark Laboratories

Evaluation For: TELEX COMMUNICATIONS

Product: Liberation SPECTRE (Wireless Telephone Headset)

3/4/99

LETTER OF AGENCY



Telex Communications, Inc.

03/04/1999 18:07

9782659308

ITS BOXBOROUGH

PAGE 01

9600 Aldrich Avenue South

Minneapolis, Minnesota 55420 USA

Telephone 612-884-4051

Fax 612-884-0043

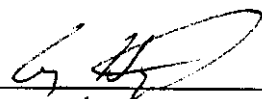
Letter of Agency

I appoint Intertek Testing Services NA Inc. to act on our behalf in front of the Federal Communications Commission with respect to all matters relating to certification of equipment under Part 15 of the FCC Rules until further notice.

I further certify that no party (as defined in 1.2002 of CFR 47, 1995) to this application, including myself, is subject to denial of federal benefits, that includes FCC benefints, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C., 853A.

Equipment:

Dated this 21 day of March, 1999



Signature

Greg Neiburg Director Engineering

Name/Title

TELEX COMMUNICATIONS

Company

612-887-5580

Telephone

Intertek Testing Services

TestMark Laboratories

Evaluation For: TELEX COMMUNICATIONS

Product: Liberation SPECTRE (Wireless Telephone Headset)

3/4/99

FORM 731

Intertek Testing Services

TestMark Laboratories

Evaluation For: TELEX COMMUNICATIONS

Product: Liberation SPECTRE (Wireless Telephone Headset)

3/4/99

FORM 159