I

1.0 05-04 New Product Release

1.1 06-04 Two-line wiring procedure added.

LIFE SUPPORT APPLICATIONS POLICY

VODAVI Technology, Inc.

products are not authorized for and should not be used within Life Support applications. Life Support systems are equipment intended to support or sustain life and whose failure to perform when properly used in accordance with instructions provided can be reasonably expected to result in significant personal injury or death.

VODAVI Technology, Inc. warranty is limited to replacement of defective components and does not cover injury to persons or property or other consequential damages.

WARNING: Handling the cord on this product will expose you to lead, a chemical known to the State of California to cause [cancer, and] birth defects or other reproductive harm. Wash hands after handling.

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set /2004

PRINTED IN THAILAND
Important Safety Instructions

When using your telephone equipment, basic safety precautions (including the following) should always be followed to reduce the risk of fire, electric shock, and injury to persons.

» Read and understand all instructions.

» Follow all warnings and instructions marked on the telephone.

» Do not use liquid cleaners or aerosol cleaners on the telephone; use a damp cloth for cleaning.

» Do not operate the telephone around water (i.e., near a bathtub, wash bowl, kitchen sink, laundry tub, swimming pool, or in a wet basement).

» Do not place this telephone on an unstable cart, stand, or table. The telephone may fall causing serious damage to the telephone.

» Slots and openings on the bottom of the telephone 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 telephone on the bed, sofa, rug, or other similar surface.

» Never push any objects into this telephone through slots as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never pour any liquids on the telephone.

» To reduce the risk of electric shock, do not disassemble this telephone. Take the telephone to a qualified serviceman when service or repair work is needed. Opening or removing covers may expose you to dangerous voltage or other risks. Incorrect reassembly can cause electric shock when the appliance is subsequently used.

» Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.

» Do not use the telephone to report a gas leak in the vicinity of the leak.

--- SAVE THESE INSTRUCTIONS ---
Product Information

All three 2800 models are FCC registered, and both hearing aid and American Disabilities Act (ADA) compliant.

Standard Features include handset volume button, data jack, message waiting light, redial button, flash button, desk mount, and ringer control switch. The STARPLUS 2800 telephones also come with a 5-year standard manufacturer's warranty.

Two-line Models also have programming capabilities and separate line-control functions. The following diagram shows where to locate the feature buttons and switches used to operate the 2800-series telephones.

<table>
<thead>
<tr>
<th>Feature Buttons</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAUSE REDIAL</td>
</tr>
<tr>
<td>VOICE</td>
</tr>
<tr>
<td>CONF</td>
</tr>
<tr>
<td>LN1, LN2</td>
</tr>
<tr>
<td>HOLD</td>
</tr>
<tr>
<td>MESSAGE</td>
</tr>
<tr>
<td>VODAVI</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Volume Ringer Switches</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUTE SPEAKER</td>
</tr>
<tr>
<td>RINGER</td>
</tr>
<tr>
<td>RINGER</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Jacks</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLASH</td>
</tr>
<tr>
<td>TONE/PULSE</td>
</tr>
<tr>
<td>LN2</td>
</tr>
<tr>
<td>LN1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
</tr>
<tr>
<td>ABC DE F</td>
</tr>
<tr>
<td>MNO JK LG HI</td>
</tr>
<tr>
<td>PQRS TUV WXY Z</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programming Buttons</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
<tr>
<td>456</td>
</tr>
<tr>
<td>789</td>
</tr>
<tr>
<td>0#*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hidden Programming Button</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL 2803</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fixed Programming Button</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL 2804</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programmable Programming Button</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL 2805</td>
</tr>
</tbody>
</table>
# 2800-Series Features

Use this feature/comparison chart to identify the functions that pertain to your telephone. (Model number located on bottom of telephone base.)

<table>
<thead>
<tr>
<th>Feature</th>
<th>2801</th>
<th>2802</th>
<th>2803</th>
</tr>
</thead>
<tbody>
<tr>
<td>A- Lead Connection</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Conference Button</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Data Jack</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Desk/Wall Mountable</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Flash Button</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Handset Volume</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Hidden Programming Button (hotel/motel only)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Hold Button</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Hold for Each Line</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Line In Use Indicator</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Low/High Ringer</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Low/High/Off Ringer</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Message Wait Lamp</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Mute Button</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Mute with LED</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Number Memory (redial function)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Pause Function</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Programmable Memory Dial Buttons</td>
<td>N</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Programmable Flash Time</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Redial Button</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Ring Indicator</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Speakerphone</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Speaker with LED</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Speaker Volume Control</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Tone/Pulse Selection</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Two Lines (distinctive ringing tones)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

*Wall Mount Kit, optional*
Telephone Specifications

The following product list shows the distinctive characteristics of the 2800-model telephones.

Installation

Parts List

The 2800-Series Telephones come with all the parts you will need to operate your telephone. Verify that the items listed below have been included prior to starting the installation process.

- Vodavi 2800-Series Telephone
- Desk-Mount Telephone Base
- Handset
- Handset Cord - 9 ft
- Line Cord - 12 ft
- User Guide

Desk Telephone

To install your new telephone:

1. Plug one end of the handset cord into the handset, and plug the other end into the handset jack on the side of the telephone.
2. Set the B/Z Ringer switch.
3. Plug one end of the line cord into the LINE1 jack, and plug the other end into the wall jack.

On Two-Line Models

--- Either line jack may be used, LINE1 or LINE2.

Product Details

- Cabling Requirement -- 1 pair Minimum
- Message Waiting -- 70-90 VDC
- FCC Specifications -- Part 15, Subpart J, Class A, Part 68
- Operating Voltage -- 12 to 56 VDC
- Non-Polarity
- Flash Timing -- 100, 300, 600ms (Programmable)
- Registered Connector -- USOC RJ 11
- Footprint -- 8.75" x 6.25"
- Ringer Equivalence -- B/Z Switchable
- Handset -- Standard K Style, Hearing Aid Compatible
- Safety Standard -- NTRL/C
- Handset Cord Length -- 9 ft
- Signaling -- Standard 12 tone DTMF
- Line Cord Length -- 12 ft
- Weight -- 2.5 lbs
Installation

Wall Mount (optional)

If desired, any 2800 telephone can be converted to a wall mount unit. For easier mounting, the optional Wall Mount kit comes with a 9-in. line cord.

To install wall mount:

1. Detach one (1) of two plastic tabs located on the Wall Mount.
2. Remove the handset from the cradle; insert the tab into the slot below the hookswitch as shown...
3. Unplug existing line cord from telephone and wall jack.
4. Run the line cord provided through the rectangular opening of the Wall Mount and plug it into the line jack of the telephone.
5. Insert the “bottom” Wall Mount prongs into the slots on the “bottom” of the telephone base.
6. Gently press down on the Wall Mount until the prongs on the “top” snap into the slots on the “top” of the telephone base.
7. Plug the other end of the line cord into the wall jack.
8. Match the two “keyhole” slots on the Wall Mount with the lugs on the 630-A type jack, and slide the telephone into place.
9. Return the handset to the cradle; the telephone is ready to use.

Connections & Wiring

A-Lead

An A-Lead Connection is available on the 2801 & 2802 models. The connection is made via the LINE1 jack outer pairs as shown...
Installation

Data Jack

The data jack on the 2803 model is wired to LINE2 from the factory. To change from LINE2 to LINE1, perform these steps:

1. Remove the 4 screws on the bottom of the telephone, and separate the bottom housing from the upper housing.
2. Remove wire/plug from connector CN21 (L2) & place on CN11 (L1).
3. Reassemble the telephone, making sure all wires are plugged in.

Two-Line Connections

When connecting two phone lines to the 2803-model telephone, observe the following recommendations.

» If you utilize the LN1 connector to bring in Lines 1 and 2 in your installation, use a 4-pin (2 pair) line cord as shown .
   - green & red wires for Line1
   - yellow & black wires for Line2
   In this installation method, no connection should be made to the LN2 connector. (Failure to do so could result in a conference situation between Lines 1 and 2.)

» If you utilize both the LN1 and LN2 connectors in your installation, make sure that a 2-pin (1 pair) line cord is used.

Connecting a Modem to Your Telephone

This feature allows data transmission via the DATA jack on the telephone using a computer equipped with the modem function, or a modem connected by hard-wiring. Single-line models (2801 and 2802) use LINE1 for modem transmissions, two-line models (2803) use LINE2.

To connect a modem to your telephone:

1. Locate the DATA jack on the right-side of the telephone, and the telephone jack connection on the modem.
2. Connect a line cord to the jack on the modem; plug the other end of the cord into the DATA jack on the telephone (RJ11 connection).

The modem is now connected through your telephone on LINE1 or LINE2. Calls can be originated and passed on to the modem. Consult the instructions provided with your modem.

Two-Line Models (2803) --- LINE2 can be used for incoming & outgoing calls when modem is not in use.
Installation

Setting the Volume

The volume control is a switch located on the right side of the telephone. You may set
the ringer volume switch to HI, LO, or OFF. When the switch is moved to the OFF
position you will not hear ringing from that telephone. However, an extension
telephone using the same line will ring during an incoming call.

Two-Line Models

- The 2803 telephone has two volume switches, one for each line. This hospital model
does not have an OFF position, the volume can only be changed to HI or LO.

B/Z Ringing

The B/Z Ringer switch is located on the right side of the telephone near
the Ringer Volume switches. This switch should be set to “B” for residential
use, and “Z” for business/hospitality applications.

Handset Volume

Each 2800-model telephone has a volume button that allows you to
increase or decrease the handset volume while on an active call. The
settings are: Normal and High.

Speakerphone Volume Switch

Speakerphone models (2802 & 2803) are equipped with a sliding volume
switch to adjust the speakerphone volume. Slide the switch toward you
for lower volume, or away from you for higher volume.

Accessing the Directory Card

Frequently dialed numbers may be recorded on the Directory Card. For
models with speed dial memory, the card can be used to record the
telephone numbers stored in One-Touch speed dial memory.

To remove the card:

1. Insert a paper clip in the hole at the top of the vinyl overlay
covering the card.
2. Lift the overlay and remove the card.

The MSG light and the Line In Use (LIU) LEDs will not operate when set
in the “B” ring mode.
**Two-Line Models**

If you have a 2803-model telephone, press the appropriate LINE button before lifting the handset, or press the SPKR button. The green LIU indicator on your telephone will then illuminate, as well as any extension telephones with LIU indicators. Each LINE button has two indicators:

- The green indicator illuminates when the line is in use.
- The red indicator illuminates when the line is placed on Hold, or to show an incoming call.

**Single-Line Models**

The HOLD button serves as the LIU indicator. The LED will be green when you lift the handset, or press the SPKR button. The LED will be red when a call is waiting to be answered.

**Message Waiting Indicator**

If you have a telephone messaging service, the MSG lamp will illuminate to indicate a message is waiting. Information regarding availability and operation may be obtained through your service.

**Two-Line Models (2803)**

The MSG lamp will illuminate on LINE1 only.

**Flash**

The Flash feature will allow you to access features available through Custom Calling services. Flashes may be stored in the telephone memory. Press the FLASH button while on a call to generate a flash.

**Last Number Redial**

The last number dialed from the telephone will be stored when you hang up. LNR memory can store a telephone number up to 32-digits in length. To access the last number dialed from your telephone (2802/2803):

1. Lift the handset, or press the SPKR button.
2. Press the REDIAL button, the number will automatically dial out.

To dial the last number called from your telephone (2803):

1. Press a LINE button.
2. Lift the handset, or press the SPKR button.
3. Press the REDIAL button, the number will automatically dial out.
Changing from Handset to Speakerphone (2802 & 2803)

While using the handset:
1. Press the SPKR button.
2. Hang up the handset, the SPKR indicator will light.

While using the speakerphone:
Lift the handset, the SPKR indicator will turn off.

Mute (2802 & 2803 models)
To mute your voice while on a call:
1. Press the MUTE button, the red Mute indicator will illuminate.
2. Press any key to resume conversation; Mute indicator will turn off.
The Mute feature will automatically disengage when changing from handset to speaker.

Hold (2802 model)
To place a call on hold:
1. Press the HOLD button, the LIU indicator will illuminate red.
2. Hang up the handset.

To retrieve a call from hold:
» If you have already hung up the handset, lift the handset or press the SPKR button on your telephone.
» If the handset is not hung up, press the HOLD button to resume conversation. The LIU indicator will illuminate green.

Hold (2803 model)
To place a call on hold:
Press the HOLD button, the Line indicator will change to red for that line.
To retrieve a call from hold:
Lift the handset, or press the SPKR button on your telephone or an extension telephone.
If the call was placed on HOLD without hanging up the handset:
press the hookswitch to recover the call and resume your conversation.
Operation 9
Memory Dialing (2802 and 2803 models)

Ten frequently dialed telephone numbers can be stored in the telephone memory. A number stored in memory can be accessed with one-touch of a Speed Dial button.

Memory Retention Time
Typically, the numbers you choose to store will remain in memory until they are overwritten with a new number.

Model 2802
--- If the telephone is "unplugged" from an active telephone line, stored numbers will only stay in memory for 24 hours.

Model 2803
-- The two-line model contains a lithium battery that allows stored numbers to be retained indefinitely, or until changed.

To store a telephone number in memory:
1. Lift the handset, or press the SPKR button.
2. Then press the STORE button.
3. Dial the number you want to store into memory.
4. Press one of the ten Speed Dial buttons where you want to store that telephone number.
   - For 2803 model… remove overlay to access STORE button.
5. When finished, hang up the handset.

To dial a telephone number stored in memory:
1. Lift the handset, or press the SPKR button.
2. Press the Speed Dial button where you stored the number.
   - A "dial tone" will be heard while performing this operation.
To initiate a conference call:
1. Press a LINE button and dial the first party's telephone number.
2. When the first party answers, advise them that a conference call is being established and press the HOLD button. The green Line indicator will extinguish, and the Hold indicator will illuminate red for that line.
3. Press the other LINE button; dial the second party's telephone number.
4. When the second party answers, advise them of the conference call and then press the CONF button. The first call will be released from Hold and you will be able to converse with both parties at the same time. The red Conference LED illuminates steady, and the green LEDs for both lines will remain lit.

If the second party's line is busy:
Press the first LINE button to return to the first party. The first party is released from Hold; resume your conversation.

To terminate a conference call:
1. Hang up the handset, or press the SPKR button if in SPKR mode. Both Line indicators will extinguish.
2. Press the CONF button in order to terminate this function.

To talk with only one party from the conference:
1. Press the LINE button for the desired conversation. The red Conference LED will extinguish; Line LED will light steady for selected line; the other line will be disconnected.
2. Resume the conversation.

To end a conference, placing both lines on Hold:
Press the HOLD button. The red Conference LED will extinguish, and the LIU LEDs will light steady red. Both first and second parties are placed on Hold.

If the CONF button is not pressed after you hang up, both lines will be accessed simultaneously the next time the telephone is used.
Programming

The Tone/Pulse & Flash Timing settings may be changed by moving their respective "recessed" switches located at the top of a 2800-telephone.

Tone/Pulse
Move the switch to the desired position: "T" or "P"

Flash Timing
Slide the switch to one of these settings: 100, 300, or 600 ms

Troubleshooting Guide
If this telephone does not work properly, try the following suggestions.

Condition Suggestion
No Dial Tone » Check all cables to make sure that all connections are secure and not damaged.
» Check the hookswitch. Does it fully extend when the handset is lifted from the cradle?
» Check to make sure the telephone is not on Hold.
» Unplug the telephone and connect it to another modular jack. If it still does not work, and other telephones in your home are working, the problem is with this telephone.

Telephone does not dial out
Check the dial mode in the programming area.
Is it set to tone, which may not be compatible with your local dialing service?

Telephone does not ring
Are you using too many telephones on one line? The total REN of all telephones on the same line should not be greater than the maximum REN for your calling area. (Refer to the FCC Registration Information.)

Incoming and outgoing voice volume is low
Are other telephones off hook at the same time? If so, this is a normal condition. The volume level drops when additional telephones are used at the same time.

Speakerphone does not work
If the other person cannot hear you, make sure the MUTE light is off.

Difficulty storing numbers in memory
Make sure you are pressing the correct sequence of buttons for storing memory.
FCC Part 68 Compliance

These telephones are hearing-aid compatible and comply with Part 68 of the Federal Communications Commission (FCC) rules. On the bottom of the telephone is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN) for the telephone. If requested, this information must be provided to the telephone company.

Installation

The modular telephone outlet or jack to which the telephone must be connected is a Universal Service Order Code (USOC) RJ11C or RJ11W. For modem interface purposes on two-line models, the connection may be made using a USOC RJ14 type jack. The telephones are registered to operate in Central Office (CO), private branch exchange (PABX), key system and Centrex applications. The telephones cannot be used on telephone company-provided coin service. Connection to Party Line Service is subject to state tariffs.

Ringer Equivalence Number

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 5. 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 determine maximum REN for calling area.

Incidence of Harm

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 isn’t practical, the telephone company will notify you 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.

Telephone Company Rights

The telephone company may make modifications in its communications 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 the necessary changes to maintain uninterrupted service.

FCC Part 15 Compliance

These telephones have 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 may generate, use, and/or radiate radio frequency, and if not installed and used in accordance with the instructions, may cause some interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, try to correct the interference by one or more of the following measures:

1. Reorient or relocate receiving antenna.
2. Increase the separation between the equipment and the receiver.
3. Connect equipment to an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for assistance.

Changes or modifications not expressly approved can void the user's authority to operate the equipment.

UL Compliance

These telephones comply with UL 1459, second edition requirements and bear the NRTL/C label denoting compliance. For your own protection, observe the following:

1. Never install telephone wiring during a lightning storm.
2. Never install telephone jacks in wet locations unless the jack is specifically designed for use in wet locations.
3. Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
4. Use every caution when installing or modifying telephone lines.

WARRANTY INFORMATION

If you experience any trouble with the telephone, please contact your servicing agent/distributor for repair and/or warranty information.