



**STARPLUS™
2800-Series
Telephones**

User Guide

Issue	Release Date	Description
1.0	05-04	New Product Release
1.1	06-04	Two-line wiring procedure added.

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VODAM 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 of a 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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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 bath tub, 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. This telephone should never be placed near or over a radiator or heat register. This telephone should not be placed in a built-in installation unless proper ventilation is provided.
- 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.

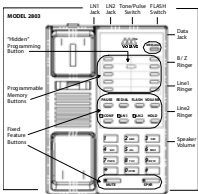
— SAVE THESE INSTRUCTIONS —

Product Information

All three 2800 models are FCC registered, and both hearing aid and American Disability 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.



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.)

Feature	2801	2802	2803
A-lead Connection	+	+	
Conference Button			+
Data Jack	+	+	+
Desk/Wall Mountable*	+	+	+
Flash Button	+	+	+
Handset Volume	+	+	+
Hidden Programming Button (wall/mote/only)			+
Hold Button		+	+
Hold for Each Line			+
Line In Use Indicator		+	+
Low/High Ringer			+
Low/High/Off Ringer	+	+	
Message Wait Lamp	+	+	+
Mute Button		+	+
Mute with LED		+	+
Number Memory (redial function)	1	1	1
Pause Function		+	+
Programmable Memory Dial Buttons		10	10
Programmable Flash Time	+	+	+
Redial Button	+	+	+
Ring Indicator			+
Speakerphone		+	+
Speaker with LED		+	+
Speaker Volume Control		+	+
Tone/Pulse Selection	+	+	+
Two Lines (distinctive ring tone)			+

*Wall Mount Kit, optional

Telephone Specifications

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

Product Detail	
Cabling Requirement – 1 pair Minimum	Message Waiting – 70-80VDC
FCC Specifications – Part 15, Subpart J, Class A, Part 68	Operating Voltage – 12 to 56 VDC Non Polarity
Flash Timing – 180, 300, 600ms (Programmable)	Registered Connector – USOC RJ 11
Footprint – 8.75" x 6.25"	ringer Equivalence – 8/2 Switchable
Handset – Standard K Style, Hearing Aid Compatible	Safety Standard – NRTL/C
Handset Cord Length – 9 ft	Signaling – Standard 12 tone DTMF
Line Cord Length – 12 ft	Weight – 2.5 lbs.

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 $\frac{1}{2}$ Ringer switch.
3. Plug one end of the line cord into the LINE1 jack, and plug the other end into the wall jack.

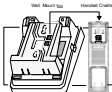
On Two-Line Models — Either line jack may be used, LINE1 or LINE2.

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.



Tab will hold handset securely when telephone is used as wall mount.

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 ... ➡



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.



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

Setting the Volume

Ringer Volume Switch

This switch is 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 hospitality model does not have an OFF position, the volume can only be changed to HI or LO.

B/Z -Type Ringer

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.



The MSG light and the Line In Use (LUI) LEDs will not operate when set in the "B" ringer mode.

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.

Operation

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.

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.
 > For 2803 model ... remove overlay to access **STORE** button.
3. Dial the number you want to store into memory.
(The choices are: 0-9, *, #, **PAUSE**, or **FLASH**).
 > For 2802 model ... use **REDIAL** button for **Pause** function.
4. Press one of the ten Speed Dial buttons where you want to store that telephone number.
 To enter "multiple" memory locations ... press the hookswitch and repeat Steps 2 through 4 for each number you want to store.
5. When finished, hang up the handset.



A "dial tone" will be heard while performing this operation.

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.

Conferencing (2803 model)

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 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.



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

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.

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	<ul style="list-style-type: none"> ➤ 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.

REGULATORY INFORMATION

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 Ringing 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 RJ11 type jack. The telephones are registered to operate in Central Office (CO), private-branch exchange (PBX), 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.

Ringing 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 equipment on and off, try to correct the interference by one or more of the following measures:

- Reorient or relocate receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is connected.
- 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:

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for use in wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- 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.



Water is Cleaner, Better

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