

# Panasonic DBS 824, 40, 72, or 96 Version 3.1 or above

# Integration Notes

#### OVERVIEW

Install a Panasonic AEC single-line telephone device card, an MFR-4 receiver card, and an SLT ring generator unit in the DBS KSU. Program the Panasonic DBS to support the voice processing system (VPS). Test the DBS system programming and connect the VPS. individual stations for call forwarding.

#### CONFIGURATION SUPPORT

Automated attendant/voice mail with call forwarding (release transfer) Applications:

Voice mail only (no transfer)

Message notification: Through message waiting lamps

> Off: ,\*5X# On: ,\*4X#

Call forwarding: Supported

Message access Supported

Operator's console: 100 (Default) Positive disconnect: Not provided

#### **KSU HARDWARE NEEDED**

Note: The Panasonic KSU must be equipped with central processing card CPC-B or later. A CPC-A card is not compatible with VPS. Contact the manufacturer for details. One AEC (Analog Extension Card) single-line telephone device card configured with the number of ports needed for VPS. Panasonic part #VB-43621.

One MFR-4 DTMF receiver card (4 receivers), Panasonic part #VB-43430 or one MFR-8 DTMF receiver card (8 receivers), Panasonic part #VB-43431. Note: If the DBS has more than 12 singleline ports in addition to the VPS ports, use an MFR-8 card for a 2- or 4-port VPS, as well. One SLT Ringer Box to generate ringing for single-line telephones. Panasonic part #VB-2089P.

#### CONNECTING CABLES NEEDED

One 25-pair cable with a female amphenol connector to connect the AEC card to the DBS main distribution frame (MDF). One RJ-14C modular lack and 4-conductor cord for each VPS port. One Panasonic Attendant Display telephone for programming the DBS system.

#### INSTALLING THE HARDWARE

Install the AEC and MFR cards and the SLT Ringer Box according to the manufacturer's instructions.

Connect the 25-pair from connector CN12-CN14 on the KSU to the main distribution frame (MDF).

#### PROGRAMMING THE TELEPHONE SYSTEM

Connect the Attendant Display telephone to DBS ports 1 or 2.

To start programming:

Press the ON/OFF key. Press the PROG key.

Press##

Program DBS system control settings as follows: System Program Setting, FF1-2#-1# Data Block In SLT Flash Control, set address 11# to 1#. Extension Calling Mode Set address 15# to 1# (voice call)



Voice Mail Busy Tone Mode

Set address 21# to 1#. This will return a busy signal to the VPS.

System Timer Setting Mode

For FF1-3#-14#, set SLT ON HOOK DETECTION TIMER to 2#. Define a switch hook flash as 200-1000ms, and a disconnect as greater than 1000ms.

For FF1-3#-19#, set the CALL FORWARD NO ANSWER TIMER to 4# (20 seconds) or higher. This timer must be set for at least two ring cycles more than the number of rings the VPS waits for an supervised type transfer.

**Extension Mode** 

For FF3-(XX)#-2#, where XX is equal to each VPS port number, set to 10# (Voice Mail [with AEC] Manual Set).

Ring (Incoming Ring Assignment) Mode

FF4-1#-(XX)#-(TT)#-(0 or 1)#, DAYTIME INCOMING OUTSIDE LINE CALL SETTING TABLE, where XX is the first VPS port number and TT is the TRUNK number. While the DBS system is in Day Service, enter 1 to set the outside trunk lines to ring to the first VPS port. Program this setting only for each outside line to be answered by the VPS.

FF4-2#-(XX)#-(TT)#-(0 or 1)#, NIGHTTIME INCOMING OUTSIDE LINE CALL SETTING TABLE, where XX is the VPS port number and TT is the TRUNK number. While the DBS system is in Night Service enter 1 to set the outside trunk lines to ring to the first VPS port. Program this setting only for each outside line to be answered by the VPS.

FF4-3#(N)#1, HUNTING GROUP MODE TYPE, where N is the hunt group number of the VPS ports, enter 0# for TERMINAL hunting.

FF4-3#-N#-(3-10)#-(XX)#, HUNTING GROUP N MEMBER TABLE (where N is hunt group number), program the VPS ports into a hunt group using XX to specify the VPS extension numbers. Enter the operator as the last extension in the VPS terminal hunt group. With this set, when all VPS ports are busy, calls will be overflowed to the operator.

The hunt group number you choose here will be the code used to dial the VPS in-house.

NOTE: In order for the TERMINAL HUNTING to work properly, set an empty analog station port as the first extension position and pilot extension for a TERMINAL Hunt group. Place a 2W 450-OHM resistor across the tip and ring of this pilot extension to busy it out. This procedure is subject to a future modification on the CPC-B unit (per PANASONIC DBS Technical Information dated April 5, 1991).

## CONNECTING AND TESTING THE SINGLE-LINE PORTS AND THE VPS

Follow the wiring instructions given in the VPS installation guide to cross-connect the Panasonic single-line ports to RJ-14C jacks. Use a single-line phone to complete any KSU port tests given in the guide. These tests insure that both the single-line ports and the Panasonic system programming are working properly. After you test the single-line ports, follow the VPS installation guide to connect and test the VPS.

#### PROGRAMMING INDIVIDUAL STATIONS

Follow-Along ID

Each station must be initialized for "follow along ID." This lets the DBS system send DTMF tones that identify which station has forwarded a particular call. Program each station as follows:

Press the [ON/OFF] key. Wait for a continuous tone from the speaker.

Press the [PROG] key.

Press the [AUTO] key.

Dial "#" then the station extension number.

Press the [HOLD] key to store the number.

Press the [ON/OFF] key.

# **CALL FORWARDING\***

The Panasonic DBS supports three types of call forwarding. For the VPS however, call forwarding on no answer is recommended. To program call forwarding:



Press the [ON/OFF] key. Wait for a continuous tone from the speaker.

Dial 721 plus the in-house extension number for the VPS.

Press the [ON/OFF] button.

To cancel call forwarding from a subscriber's station:

Press the [ON/OFF] key. Dial 72.

Press the [ON/OFF] key again.

# **MESSAGE ACCESS\***

To program a speed-dial key on a station for easy message access:

Lift handset and press the [PROG] key.

Press the speed-dial button.

Dial the in-house extension number for the VPS.

Press the [REDIAL] key to enter a pause.

Dial "\*" followed by the station extension number. Replace the handset.

\*If you have a newer Panasonic DBS the programming steps for Call Forwarding and Message Access need to be performed from a display phone as follows.

# **CALL FORWARDING**

Press the [ON/OFF] key. Wait for a continuous tone from the speaker.

Press the [PROG] button.

Press the [AUTO] button.

Press \* followed by the extension number of your VM hunt group.

Press # followed by the extension number of the phone you're programming.

Press the [HOLD] button to save.

# **MESSAGE ACCESS**

Press the [PROG] button.

Press the programmable button that will be your message retrieval button.

Press the \* button.

Enter the extension number of the phone you're programming..

Press the [HOLD] button..

## **Transfer to Voice Mail Button**

ON/OFF

**PROG** 

Select Button

CONF

**AUTO** 

Voice Mail Pilot Number

# Key

Hold

Operation: While on a call press this button then the mailbox number you wish to transfer the caller to.