TOSHIBA STRATA DK SERIES Integration Notes for VoiceGate Voice Mail

VoiceGate Voice Mail will only function provided the following options are enabled in the Toshiba Strata DK phone system. The follow information applies to the extensions used for automated attendant /voice mail unless otherwise noted.

Program 10-1 - System assignments, Part one of three

Key/LED	LED On
07	Ring Transfer of CO lines Allowed
08	Alternate Point Answer
09	Exclusive Hold/Allowed
18 (R2)	Ring Detect Time - Normal
19	Conference/Allowed
20	Two CO Conference/Allowed

Program 10-2 - System Assignments, Part two of three

04	MW cancel from VM: RS232 or #64 + [DN]
06	VM ID Code DTMF signal 80 ms
11	No DTMF tone Return

Program 10-3 - System Assignments, Part three of three,   (For SMDI Integration)

    08 (R3)   Caller ID/ANI Number are sent out the SMDI ports

    09   Bellcore Standard 1985 Version (1 - space)

    10   SMDI - Station Number Digit length (HEX - 1)

    11   SMDI - Station Number Digit length (HEX - 2)

    12   SMDI - Station Number Digit length (HEX - 3)

    13   SMDI - Station Number Digit length (HEX - 4)

    14   SMDI - Bellcore Standard VM Interface, per LED 09

    15 (R4.15)   ON for MOH to caller or OFF for RBT to caller

    19   Speed Dial Entry Timeout - 3 minutes

Program 12 - System Assignments - Basic Timing

3	Pause Timing	1	1.5 sec.
4	Flash Timing	1	0.5 sec.
5	Pause After Flash	1	1.5 sec.
9	RRCS Inter-digital Release	2	2 sec.

Program 13 - Defining the Message Center

Enter the first voice mail port, enter the same number into Program *32 or Program *40 Distributed Hunt Group.

Program 15 - Assigning DP/DTMF, Tenant Service to Individual CO Lines

      0   CPC on AR VM Calls and voice calls

      3   AR Hold

      5   Tandem CO Line Connection with Station Dropout

Program 16 - Assign CO Line Group (Dial 9 or 801 - 816)

Turn ON each CO line in Dial 9 (00) so that the VoiceGate Voice Mail will have access for Message Notification.

Program 31 - Station Class of Service

      04   VM to VM Call Blocking

      05   VM Group 1

      15   Intouch Integration (A/D)

      16   Receive VM ID Code

      17   End/End Signal Receive (VM)

      18   Block Exec./Priv. Ovr.

      19   Toshiba VP (B No station)

      20   Toshiba VP (B + station No.)

Program *32 - RS-232 (SMDI or Toshiba Proprietary) Voice Mail Message Center Port

Enter the first Voice Mail port into this location

Program 33 - Station Hunting (Voice Calls Only)

   Program the first voice mail port to the second and the second to the third the third to the forth and the forth port back to the first.

<div align="center">OR USE</div>

Program *40 - Distributed Hunt Group Member Assignments   (Release - 3 and above)

   Enter each of the voice mail ports into an available Distributed Hunt Group in order.

Program 34 - Hold/Park recall Timing

   Set the time to 60 seconds

Program 35 -   Station Class of Service

   01 - LCD Display (for extensions)

   02 - LCD Type/ 32 - ON/ 12 - OFF (for extensions)

   03 - Message Waiting lamp Std. Telephones (for single line phones ONLY) -   see note

   04 - Message Waiting (RCV) (for extensions)   -   see note

   19 - Busy Station Ringing (for extensions, do not apply to AA/VM ports)

   20 - Busy Station Transfer (for VM ports ONLY)

Note:

Single line phone's message waiting lamps will function on a DK14, DK40i, and a DK424 provided that the single line phone message lamp is compatible with Toshiba method of activating a lamp.

Program 37 - CO and Tie Line Ring Transfer (Camp-On) Recall Time

   Set the time to 60 seconds

Program 39 - Flexible Key Assignment Reference Guide

    RDL(# key) code   :496   (for DK 16e/40i/280/424) Electronic Phones ONLY
                            :96   (for DK 16/24/56/96)   Electronic Phones ONLY

    MW/FL   :499   (for DK 16e/40i/280/424) Electronic Phones ONLY
                            :99   (for DK 16/24/56/96)   Electronic Phones ONLY

    SDS (* key)   :497   (for DK 16e/40i/280/424)
                            :97   (for DK 16/24/56/96)

Program 76-1 - RSIU/RSIS/RMDS Port Assignment (R3)

        Port Number   = X   X = 1- 4

        Port Type   = 4   SMDI

Program 76-2 - RSIU/RSIS/RMDS Port Assignment (R3)

        Port Number   = X   X = 1- 4

        Transmission Rate   = 1200 bps

Note:
        The speed for the SMDI function in the VoiceGate Voice Mail software has been set for 1200 bps as a default, if a faster speed is required contact VoiceGate Corporation.

Wiring for SMDI interface

DB9 (female)	Signalling	Modular Jack			RSIU/RSIS/RMDS
2	RD	6	|	6	SG
3	TD	5	|	5	DCD
6	DSR	4	|	4	DTR
4	DTR	3	|	3	DSR
1	DCD	2	|	2	TD
5	SG	1	|	1	RD

DB25 (male)	Signalling	Modular Jack			RSIU/RSIS/RMDS
2	RD	6	|	6	SG
3	TD	5	|	5	DCD
6	DSR	4	|	4	DTR
20	DTR	3	|	3	DSR
8	DCD	2	|	2	TD
5	SG	1	|	1	RD

On the DB25 jumper pins 4 and 5 together.

If the VoiceGate Voice Mail and Toshiba phone system is not communicating, connect the SMDI cable to another computer that has TELIX, HYPER TERMINAL, PROCOMM or any terminal communication software. Set the communication parameters as follows:

Speed	= 1200 bps
Data word bits	= 7
Parity	= even
Stop bits	= 1

After configuring the software make a call to a valid extension and let it ring no answer to voice mail, when the call is answered the Toshiba phone system will sent a string of information if you do not get this information than either the Toshiba phone system is not programmed correctly for SMDI operation or the cable used is not correct.

Note:

The VoiceGate Voice Mail should not be further than 50 feet from the Toshiba phone system using 24 AWG wire.

Printed Circuit Boards

RSSU

       Card must be installed in the highest card slot of any cabinet (slot 16).

       In Program 03 the card type is 43.

       The RSSU card provides TTY or SMDI functions.

       The top jack marked TTY is used for SMDI, the lower jack is non functional.

       The speed of the card is preset for 1200 bps, 7, Even, 1.

       Do not use Program 76 for this card.

RSIU

       Card must be installed in slot 11 of the main cabinet.

       The RSIU will only work with Release 3 or greater.

       In Program 03 the card type is 49.

       In Program 76 set port one for SMDI (2).

       In Program 76 set the speed for 1200 bps (4).

Note:
       If the both of the above card are installed in the same phone system the RSSU must be used for SMDI and the RSIU for SMDR.

Programming Following Along ID

Whenever an extension is call forwarded (Busy/NoAnswer) to voice mail, certain digits will automatically be sent to the VoiceGate Voice Mail to direct the call to the appropriate voice mail box's personal greeting.

This is a one time setup for each extension that desires voice mail.

To program the extension to play the personal greeting message.

For DK 16/24/56/96 press INT + 656 + * + extension number + RDL

For single line extensions press INT + 656 + 900 + extension number + #
(Use above line for Windows NT, VoiceGate Voice Mail 2.21 and lower)

For single line extensions press INT + 656 + 9900 + extension number + #
(Use above line for VIP000 ver 2.30 and higher)

For DK 16e/40i/280/424 press INT + #656 + * + extension number + RDL

For single line extensions press INT + #656 + 900 + extension number + #
(Use above line for Windows NT, VoiceGate Voice Mail 2.21 and lower)

For single line extensions press INT + #656 + 9900 + extension number + #
(Use above line for VoiceGate Voice Mail ver 2.30 and higher)

For single line extensions press INT + #656 + 99000 + extension number + #
(Use above line for VoiceGate Voice Mail ver 2.30 and higher using four digit length. Contact VoiceGate for special software version)

Auto Station Logon

When an extension retrieves a message from the voice mail, certain digits will automatically be sent to the VoiceGate Voice Mail in order to access the mail box.

For DK 16/24/56/96 press INT + 657 + # + extension number + RDL

For DK 16e/40i/280/424 press INT + #657 + # + extension number + RDL

For single line extension there is no auto station logon

Retrieving Messages if the message waiting lamp on.

For DK16/24/56/96 press the INT and MW/FL button.

For DK16e/40i/280/424 press the Msg button

Call Forwarding Extensions to Voice Mail (DK 16/24/56/96)

To set CALL FORWARD - ALL CALLS

       Press INT + 601 + NNN + SPD + 08-60 + RDL   (or CFAC + NNN + CFAC)

       Press INT + 601 + NNN + * #   Analog set

To set CALL FORWARD - BUSY

       Press INT + 602 + NNN + SPD + 08-60 + RDL   (or CFB+ NNN + CFB)

       Press INT + 602 + NNN + * #   Analog set

To set CALL FORWARD - NO ANSWER

       Press INT + 603 + NNN + SPD + 08-60 + RDL   (or CFNA + NNN + CFNA)

       Press INT + 603 + NNN + * #   Analog set

To set CALL FORWARD - BUSY/NO ANSWER

       Press INT + 604 + NNN + SPD + 08-60 + RDL   (or CFB/NA + NNN + CFB/NA)

       Press INT + 604 + NNN + * #   Analog set

To Cancel CALL FORWARD

          Press INT + 601 + SPKR   or   CFAC + SPKR
          Press INT + 602 + SPKR   or   CFB + SPKR
          Press INT + 603 + SPKR   or   CFNA + SPKR
          Press INT + 604 + SPKR   or   CFB/NA + SPKR

NOTES:
      * NNN = The voice mail extension or the hunt group number (900).

      * The following are available only on Release 2 or greater.

            CALL FORWARD - BUSY
            CALL FORWARD - NO ANSWER
            CALL FORWARD - BUSY/NO ANSWER

Call Forwarding Extensions to Voice Mail (DK 16e/40i/280/424)

To set CALL FORWARD - ALL CALLS

      Press INT + #601 + NNN + SPKR + 08-60 + RDL   (or CFAC + NNN + CFAC)

To set CALL FORWARD - BUSY

      Press INT + #602 + NNN + SPKR + 08-60 + RDL   (or CFB+ NNN + CFB)

To set CALL FORWARD - NO ANSWER

      Press INT + #603 + NNN + SPKR + 08-60 + RDL   (or CFNA + NNN + CFNA)

To set CALL FORWARD - BUSY/NO ANSWER

      Press INT + #604 + NNN + SPKR + 08-60 + RDL   (or CFB/NA + NNN + CFB/NA)

To Cancel CALL FORWARD

            Press INT + #601 + SPKR   or   CFAC + SPKR
            Press INT + #602 + SPKR   or   CFB + SPKR
            Press INT + #603 + SPKR   or   CFNA + SPKR
            Press INT + #604 + SPKR   or   CFB/NA + SPKR

NOTES:

      * NNN = The extension number that you are programming.

      * The following are available only on Release 2 or greater.

            CALL FORWARD - BUSY
            CALL FORWARD - NO ANSWER
            CALL FORWARD - BUSY/NO ANSWER

The **VoiceGate Voice Mail V 3.00** should be programmed with a value for the following:

User SetUp section (Class of Service - Screen 2 of 2)

        Call Transfer Mode (0-BNA, 1-BSY, 2-BX) : 2
        Overhead Page Dial Code   : &,39
                                            (DK16e/40i/280/424 - &,#39)

Program SetUp section

Screen 1 of 5

User Id Number	(2-4 Digits)	: 3
User Extension	(2-4 Digits)	: 3
System Outdialing Number		: 9
Fax Outdialing Number		: 9
Call Transfer Dial code		: &,X
Call Busy/NoAns Dial Code		: &,
Call Connect Dial Code		: BLANK
Call Disconnect Dial code		: d lower case
Call Hold Dial Code		: &,
Call Retrieve Dial Code		: &,
Call Screen Dial Code		: &,

Screen 2 of 5

Busy Return Dial Code	: BLANK
Reorder Dial Code	: BLANK
Busy On Hold Duration	: 10
Page On Hold Duration	: 10
Message Waiting Lamp On Dial Code	: ,63X, (for DK16e/40i/280/424 - ,#63X,)
Message Waiting Lamp Off Dial Code	: ,64X, (for DK16e/40i/280/424 - ,#64X,)
Call Redir Mode (0-Hold, 1-Rls)	: 0
Redirect Transfer Dial Code	: &,
Redirect Busy/NoAns Dial Code	: &,
Redirect Connect Dial Code	: &,
Modem Line Number	: 0

Call Connect Msg   (0 - Dis, 1 - Ena)   : 0
System Power Down Day   (0-6)   : 1
System Power Down Time   (0-23) : 2
Max Non Silence During Play   : 20
Max Non Silence During Record   : 0
Max Silence During Record   : 20
Max Entry Error Retry   : 3
Max Timeout Retry   : 3
Fax Detection   (0 - Dis, 1 - Ena) : 0
Dial Tone Detection (0 - Dis, 1 - Ena) : 0
PBX pert Tone Table (0 - Dis, 1 - Ena) : 0
SMDI   (0 - Dis, 1 - Ena) : 0

Screen 4 of 5

Frequency Of The First Tone   (Hz)   : 697
Max. deviation From Freq 1   (Hz)   : 50
Frequency Of The Second Tone   (Hz)   : 1633
Max. deviation from Freq 2   (Hz)   : 50
The Tone On Time   (10ms) : 0
Max. Deviation From On Time   (10ms) : 0
The Tone Off Time   (10ms) : 0
Max. Deviation From Off Time   (10ms) : 0
# of Times The Signal Must Repeat   : 0

(CONNECT TONE)

Screen 5 of 5

Frequency Of The First Tone (Hz)   : 9999
Max. deviation From Freq 1   (Hz)   : 0
Frequency Of The Second Tone   (Hz)   : 9999
Max. deviation from Freq 2   (Hz)   : 0
The Tone On Time   (10ms) : 9999
Max. Deviation From On Time   (10ms) : 0
The Tone Off Time   (10ms) : 9999
Max. Deviation From Off Time   (10ms) : 0
# of Times The Signal Must Repeat   : 9

(DISCONNECT TONE)

Company SetUp section

<u>Screen 1 of 7</u>

Define as required.

<u>Screen 2 of 7</u>

Message Waiting Lamp Line Number: Last voice mail port
Message Notification Line Number: Second last voice mail port

Define all other lines as required.

<u>Screen 3 of 7</u>

Voice Mail Port Ext. (1-9999):   First voice mail port extension number.

Define all other lines as required.

NOTE: The extension number used for the VoiceGate Voice Mail **MUST** be in numeric consecutive order. If the extensions are on different station cards that is acceptable, but renumber all the extensions with numbers in consecutive order.

<u>Screen 2 of 7</u>

Define as required

<u>Screen 3 of 7</u>

Define as required.

<u>Screen 4 of 7</u>

Define as required.

<u>Screen 5 of 7</u>

Define as required.

System SetUp

```
Flash On-Hook Time (&)      (10ms): 50
Dialout Pause Time   (,)    (10ms): 150
DTMF Interdigit Delay       (10ms): 10
Off  Hook Delay             (10ms): 15
Ring On Time                       (10ms): 3
Ring Off  Time              (10ms): 5
```

Channel Setup

The values in the channel setup section of the voice mail system should not be changed unless a VoiceGate technician instructs you to do so.

Screen 1 of 6

```
Company Greeting Message      (1-4)                 : 1
Number Of Rings To Answer          (1-99)              : 1
DTMF Interruption Time        (10 ms)          : 3
DTMF Event Edge               (1-Trail, 2-Lead)  : 2
Connect Edge                  (1-Lead, 2-Trail   : 1
Intercept Mode Flag           (1-8)             : 5
Call Analysis Delay           (10 ms)           : 25
Ring No Answer Time           (10 ms)           : 1000
Max Inter-ring delay          (10 ms)           : 800
No Ringback Timeout Delay     (10 ms)           : 4000
Dial Tone Waiting Time        (10 ms)           : 300
Dial Tone Duration            (10 ms)           : 100
```

Screen 2 of 6

```
Frequency Of The First Tone  (Hz)   : 350
Max. deviation From Freq 1        (Hz)   : 50
Frequency Of The Second Tone      (Hz)   : 440
Max. deviation from Freq 2        (Hz)   : 50
Length Of Time The Tone Is On     (10ms) : 0
Max. Deviation From On Time       (10ms) : 0
Length Of time The Tone Is Off    (10ms) : 0
Max. Deviation From Off Time      (10ms) : 0
No. of Times The Signal Must Repeat     : 0
```

(DIAL TONE)

```
Frequency Of The First Tone          (Hz)    : 500
Max. deviation From Freq 1           (Hz)    : 200
Frequency Of The Second Tone         (Hz)    : 0
Max. deviation from Freq 2           (Hz)    : 0
Length Of Time The Tone Is On        (10ms) : 55
Max. Deviation From On Time          (10ms) : 40
Length Of time The Tone Is Off       (10ms) : 55
Max. Deviation From Off Time         (10ms) : 40
# of Times The Signal Must Repeat            : 0
```

(SINGLE BUSY TONE)

```
Frequency Of The First Tone          (Hz)    : 480
Max. deviation From Freq 1           (Hz)    : 60
Frequency Of The Second Tone         (Hz)    : 620
Max. deviation from Freq 2           (Hz)    : 60
Length Of Time The Tone Is On        (10ms) : 50
Max. Deviation From On Time          (10ms) : 5
Length Of time The Tone Is Off       (10ms) : 50
Max. Deviation From Off Time         (10ms) : 5
No. of Times The Signal Must Repeat          : 0
```

(DOUBLE BUSY TONE)

```
Frequency Of The First Tone          (Hz)    : 438
Max. deviation From Freq 1           (Hz)    : 138
Frequency Of The Second Tone         (Hz)    : 0
Max. deviation from Freq 2           (Hz)    : 0
Length Of Time The Tone Is On        (10ms) : 130
Max. Deviation From On Time          (10ms) : 105
Length Of time The Tone Is Off       (10ms) : 580
Max. Deviation From Off Time         (10ms) : 415
No. of Times The Signal Must Repeat          : 0
```

(SINGLE RINGBACK)

Frequency Of The First Tone   (Hz)   : 438
Max. deviation From Freq 1   (Hz)   : 138
Frequency Of The Second Tone   (Hz)   : 438
Max. deviation from Freq 2   (Hz)   : 138
Length Of Time The Tone Is On   (10ms) : 130
Max. Deviation From On Time   (10ms) : 105
Length Of time The Tone Is Off   (10ms) : 580
Max. Deviation From Off Time   (10ms) : 415
No. of Times The Signal Must Repeat   : 0

(DOUBLE RINGBACK)

The **VoiceGate Voice Mail Windows NT V1.0** should be programmed with a value for the following:

User SetUp section (Class of Service - Screen 2 of 2)

Call Transfer Mode (0-BNA, 1-BSY, 2-BX) : 2
Overhead Page Dial Code   : &,39
                                       (DK16e/40i/280/424 - &,#39)

Program SetUp section

Screen 1 of 3

User Id Number (2-4 Digits)	: 3
User Extension (2-4 Digits)	: 3
System Outdialing Number	: 9
Fax Outdialing Number	: 9
Call Transfer Dial code	: &,X
Call Busy/NoAns Dial Code	: &,
Call Connect Dial Code	: BLANK
Call Disconnect Dial code	: d lower case
Call Hold Dial Code	: &,
Call Retrieve Dial Code	: &,
Call Screen Dial Code	: &,
Busy Return Dial Code	: BLANK
Reorder Dial Code	: BLANK
Busy On Hold Duration	: 10
Page On Hold Duration	: 10
Message Waiting Lamp On Dial Code	: ,63X, (for DK16e/40i/280/424 - ,#63X,)

Message Waiting Lamp Off Dial Code		: ,64X,	(for DK16e/40i/280/424 - #64X,)
Call Redir Mode	(0-Hold, 1-Rls)	: 0	
Redirect Transfer Dial Code		: &,	
Redirect Busy/NoAns Dial Code		: &,	
Redirect Connect Dial Code		: &,	
Modem Line Number		: 0	
Call Connect Msg	(0 - Dis, 1 - Ena)	: 0	
System Power Down Day	(0-6)	: 1	
System Power Down Time	(0-23)	: 2	
Max Non Silence During Play		: 20	
Max Non Silence During Record		: 0	
Max Silence During Record		: 20	
Max Entry Error Retry		: 3	
Max Timeout Retry		: 3	
Fax Detection	(0 - Dis, 1 - Ena)	: 0	
Dial Tone Detection	(0 - Dis, 1 - Ena)	: 0	
PBX pert Tone Table	(0 - Dis, 1 - Ena)	: 0	

Screen 3 of 3   - TONE

		Connect	Disconnect
Frequency Of The First Tone	(Hz)	: 697	9999
Max. deviation From Freq 1	(Hz)	: 50	0
Frequency Of The Second Tone	(Hz)	: 1633	9999
Max. deviation from Freq 2	(Hz)	: 50	0
The Tone On Time	(10ms)	: 0	9999
Max. Deviation From On Time	(10ms)	: 0	0
The Tone Off Time	(10ms)	: 0	9999
Max. Deviation From Off Time	(10ms)	: 0	0
No. of Times The Signal Must Repeat		: 0	9

Company SetUp section

<u>Screen 1 of 3</u>

       Message Waiting Lamp Line Number: Last voice mail port

       Define all other lines as required.

<u>Screen 2 of 3</u>

       Message Notification Line Number: Second last voice mail port
       Voice Mail Port Ext. (1-9999):   First voice mail port extension number.

       Define all other lines as required.

NOTE: The extension number used for the VoiceGate Voice Mail **MUST** be in numeric consecutive order. If the extensions are on different station cards that is acceptable, but renumber all the extensions with numbers in consecutive order.

<u>System SetUp</u>

       Flash On-Hook Time (&)   (10ms): 50
       Dialout Pause Time   (,)   (10ms): 150
       DTMF Interdigit Delay   (10ms): 10
       Off Hook Delay   (10ms): 15
       Ring On Time   (10ms): 3
       Ring Off Time   (10ms): 5

Channel Setup

The values in the channel setup section of the voice mail system should not be changed unless a VoiceGate technician instructs you to do so.

Screen 1 of 4

Company Greeting Message	(1-4)	: 1
Number Of Rings To Answer	(1-99)	: 1
DTMF Interruption Time	(10 ms)	: 3
DTMF Event Edge	(1-Trail, 2-Lead)	: 2
Connect Edge	(1-Lead, 2-Trail	: 1
Intercept Mode Flag	(1-8)	: 5
Call Analysis Delay	(10 ms)	: 25
Ring No Answer Time	(10 ms)	: 1000
Max Inter-ring delay	(10 ms)	: 800
No Ringback Timeout Delay	(10 ms)	: 4000
Dial Tone Waiting Time	(10 ms)	: 300
Dial Tone Duration	(10 ms)	: 100

Screen 2 of 4   - DIALTONE

Frequency Of The First Tone	(Hz)	: 350
Max. deviation From Freq 1	(Hz)	: 50
Frequency Of The Second Tone	(Hz)	: 440
Max. deviation from Freq 2	(Hz)	: 50
Length Of Time The Tone Is On	(10ms)	: 0
Max. Deviation From On Time	(10ms)	: 0
Length Of time The Tone Is Off	(10ms)	: 0
Max. Deviation From Off Time	(10ms)	: 0
No. of Times The Signal Must Repeat		: 0

Screen 3 of 4 - SINGLE BUSY TONE

		Single	Double
Frequency Of The First Tone	(Hz) :	500	480
Max. deviation From Freq 1	(Hz) :	200	60
Frequency Of The Second Tone	(Hz) :	0	620
Max. deviation from Freq 2	(Hz) :	0	60
Length Of Time The Tone Is On	(10ms) :	55	50
Max. Deviation From On Time	(10ms) :	40	5
Length Of time The Tone Is Off	(10ms) :	55	50
Max. Deviation From Off Time	(10ms) :	40	5
No. of Times The Signal Must Repeat	:	0	0

Screen 4 of 4   - RING BACK

		Single	Double
Frequency Of The First Tone	(Hz) :	438	438
Max. deviation From Freq 1	(Hz) :	138	138
Frequency Of The Second Tone	(Hz) :	0	438
Max. deviation from Freq 2	(Hz) :	0	138
Length Of Time The Tone Is On	(10ms) :	130	130
Max. Deviation From On Time	(10ms) :	105	105
Length Of time The Tone Is Off	(10ms) :	580	580
Max. Deviation From Off Time	(10ms) :	415	415
No. of Times The Signal Must Repeat	:	0	0