

Subject: Integration of IVR-Voice mail
with Telrad SBU5 Switches

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Programming the Telephone system

Introduction

This document explains very briefly how to configure the Telrad Release SBU5 of the DIGITAL KEY BX system programming. There are two main steps to accomplish this task.

- 1) Hardware setup
- 2) Software setup

This memorandum is used as a complement with the following manuals which are included with the Telrad Release SBU5 switch and PEC software :

- Installation Manual
- Administration Forms Manual
- Operating Instruction Manual
- Insight IVR System Manual

Hardware setup

The DIGITAL family of Telrad systems supports the following telephone types:

- Telrad digital telephones
- Any Single line analog telephones
- Telrad analog key electronic telephones

The DIGITAL system requires a MPD (Main Processing Card) card. Depending on the use, this system can support other types of cards such as SHD, SLT etc.

With the system as following we have the MPD (Main Processing Card) card, EHD (Digital telephone set card with four ports), and SHD (Four port Single Line Telephone card with OPX capabilities) card.

System Checklist

Before installing make sure that you have the following material:

- System cards (MPD, SHD, SLD...);
- Memory Module (requires for MPD card);
- Power Supply and Power cable;
- Amphenol cable (Male) and Harmonica;
- Outside lines;
- Extension numbers;
- Digital telephone sets;
- Single Line Telephones;
- A RS232 port (9-pin) to a Modular plug RJ45 wire (correct pin configuration);
- External equipment Voice Mail system;
- Telrad Software floppy (Default configuration file, Executable Digital Key BX file, Installation file);
- Personal computer (PC or IBM);

Before proceeding with the installation of the DIGITAL KEY BX system it is necessary to open the system cabinet. (Please refer to Installation Manual section 4)

- Insert the power supply in the cabinet;
- Install the Memory Module on the MPD card (Installation Manual section 6);
- Install cards in the appropriate slots (for example MPD card in slot #1, EHD card in slot #5, SHD card in slot #6...);
- Put the amphenol cable and the Harmonica in the appropriate cards and different digital sets, also make the connection between your MPD card (RJ45) and your computer (RS232).

To make this cable see page 8-18 of your Installation Manual.

Now you can turn on the Telrad switch and start programming on your computer .

Software setup

Telrad software floppy contains 3 files:

- INSTALL.EXE
- DKEYBX.BAT
- DEFAULT.CFG

Make a directory called TELRAD and copy these files in. Then run **Install.exe** program. Then type **DKEYBX**.

The first screen appears, select option **2** “Connect to system directly”

The system asks you to enter a COM port, and the baud rate, enter the COM port which is enabled on your computer (generally **COM1**) and the Baud rate **4800**;

On the second screen select option **1** “On-line programming Menu”;

System asks you a password, just press **enter**;

On this screen Choose option **1** again “on-line programmer”;

Then enter the file, named **DEFAULT.CFG**;

Choose **OC-On line Configuration** by pressing **Enter** then **OL On Line Configuration**, you have to define the place (Which slot) and the specification (Which kind of board MPD, SHD, EHD)for each board.

Example : If the MPD card is set in slot #1, EHD card is set in slot #5 and SHD in slot #6 you should have the following:

MPD	-	-	-	ELD	SLD
-----	---	---	---	-----	-----

Cabinet 1

Note: ELD and EHD cards are the Executive Line Circuit cards. ELD is 8 port and EHD is 4 port
SLD and SHD cards are the Single Line Circuit cards. SLD is 8 port and SHD is 4 port.

In order to define the D Ns on each card highlight the corresponding card and press **F9**. For specific configurations please refer to the Administration Forms Manual.

Define the extension numbers you wish to have and type of station each should be.

For example : You have to define on your ELD card 4 Extensions which are :

- 20 for Attendant
- 21 for a Executive digital display
- 22 for a Standard digital display
- 23 for a Basic station

Do the following step:

Highlight ELD in the cabinet 1 and press **F9** you must define Bus Numbers (DN), the Station Specification (Refer Administration Forms Manual) ATT for Attendant, EX2 for Executive, SD2 for Standard and BA2 for basic and the Audio Path (S for Single and D for Dual). For more information, refer to Administration Forms Manual section 3A.

You must have the following :

	BUS	DN	STATION	PATH
BUS #1	S	20	ATT	S
BUS #2	S	21	EX2	D
BUS #3	S	22	SD2	D
BUS #4	S	23	BA2	S

Exit by pressing **Esc**, now your system knows these extension numbers.

The procedure is the same for SLD card except that you have to define your extension (DN) type (**O** for Off Premise Extension-OPX, **L** for Local- On Premise Extension, **V** for Voice Store and Forward-VSF, and **A** for Announcer).

As an example if you need to put a voice mail system and a single line you should have:

DN	TYPE
31	V
32	V
33	V
34	L

The extension 31-32-33 are set to be used as a Voice Mail ports and 34 is used as a Local station. You can also set a Hunt group, for this go to **IF** "Station Group Features" and **HN** "Hunt Groups". For example you want to set the extension 32 and 33 in the Hunt group. for this do the following steps :

Highlight "Station Group Features" press **Enter** than go to "Hunt Groups" press **Enter** and make a Hunt 30 (for example) give it a *Name* (any 16 characters) and specify the *Hunt TYPE SER* for Serial, **CIR** for Circular and **UCD** for Uniform Call Distribution. Press **Esc** to come back in the Programming Screens Menu.

Integrating IVR Voice-Mail application with the System

For integrating an IVR Voice-Mail application in the system you have to set the codes which you wish to use with your Voice Mail system. For this do the following :

Select **SP-System Parameters** by pressing **Enter**, then select **VS-Voice Store & Forward** and press **Enter**.

Change the section *Store Message Code* by highlighting it, you may have :

Store Message Code : -----> - Retrieve Message Code : -----> #

Sen an Answer Digit : -----> Y

Press **Esc** to come back in the Programming Screens Menu and then press **F5** to Save and Load. At this point your switch is ready to be used.

In order to make the system functional you have to load the Voice mail - IVR application and configure it.

For configuring (Voice Mail- IVR application) please refer to **PEC Insight IVR manual**.

NOTE : The message light on string is : 1,xxx,&.763Q where xxx is the extension number
The message light off string is : #763,xxxQ where xxx is the extension number

Make the necessary connections between stations and Voice -Mail board, and make calls in.
As a example : Dial 30 you should be in your Voice-Mail system.

Dial 121, you should be able to hearing rings on your display station.

Tested Features

The following tasks were tested with success by IVR integration and SBU5 Telrad Switch:

- Answer between analog ports
- Disconnecting (if hangup or loop drop)
- Blind transferring
- Supervised transferring
- Call forward to voice mail
- Call forward to a station
- Call forward busy
- Call forward No Answer
- Message waiting light on
- Message waiting light off
- Notification by pager
- All other features of voice mail available with VoiceSaver and Insight IVR