# Panasonic
## Communication Systems Division
## Technical Advisory

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## Subject: External Modem Installation On KX-TVS75/100/200

**Document Number: KTVS2000002**

The Panasonic KX-TVS75/100/200 Voice Processing System can be programmed remotely by connecting a modem to the RS232/EIA port of the VPS. *It is advised that you have a good working knowledge of modems and the AT Command Sets.* It is important to remember that even though there are some basic standards for these modems, *each manufacturer may have a different method of making the same function work in their modem design. It is strongly advised that you consult with the manufacturer of the modem you choose should you experience trouble.*

Your Modem should be able to do the following:
- Ignore the Data Terminal Ready signal of the serial port (DTR Ignored).
- Disable flow control.
- Be able to set the DTR operating mode to asynchronous mode with no speed buffering of data (normal).
- Disable Data compression.
- Disable Response Messages.

You will need to consult your modem manual or contact the modem manufacturer's tech support department to construct the proper AT command string.

There are 2 ways to program the necessary AT command sets into the modem that will be attached to the KX-TVS75/100/200.

1.  By entering the AT commands directly into the external modem with a computer using standard communication software such as PCPLUS(c) or a Data Terminal. And then connecting the modem to the KX-TVS75/100/200 RS232 PORT.
2.  By entering the AT commands in the External Modem Setting program area of the KX-TVS200 (EMDM). And then dialing the code for Modem Initialization while in the TVS200 system manager's mailbox with the modem connected to the KX-TVS200 RS232 Port. THIS CAN BE DONE IN THE TVS200 ONLY !!!!!

## Installing a Modem on the 75/100/200

1.  Connect a Modem cable (straight through) from your computer to the Modem.

2.  Using communication software enter the modem AT command: The command you have constructed. REMEMBER!!!!! THE (0) MEANS THE NUMBER ZERO. You will not get a confirmation from the modem confirming your entry because one of the commands that you have entered instructs the modem not to return any result codes.

3.  Attach a "straight through " 25 to 25 pin modem cable from the modem to the RS232 port of TVS75/100/200. The TVS75/100/200 should now be ready to be programmed remotely.

## Installing a Modem on the KX-TVS200 ONLY!

Step #1: Choose choice number 3 after entering programming from the main programming menu Utility Command.

> 1. Program
> 2. System Reports
> 3. Utility Command
> 4. System Reset/Clear
> 5. Quick Setup

> SELECT ITEM AND PRESS RETURN-KEY

Step #2: From the Utility Prompt ($) Enter the command EMDM; the following will appear:

> Utility Command (Type 'HELP' for command list. )
> $ EMDM
> Current AT Commands for External Modem is as follows.
> Nothing
>
> Please enter command number you want to change.
> If you want to initialize all data, enter 0 :=1
> ===== Command No.1 =====
> Enter Comment (Max: 32 Characters) =>Modem 1
> Enter Command (Max:60 Characters) =>The command you have constructed.

Step #3: Choose Command No.1
  Enter a comment or name of the modem.
  Enter the AT Command you constructed. Remember that the (0) means the number zero!!!!

Step #4: Press the enter Key. The following will appear:

To send the AT commands,
1.  Conenct Modem and VPS using RS232C Straight Cable.
2.  Access System Manager Service and press 9 + Command No. during the Top Menu Ex.*999 + 91 (to send Command No.1).

Attach a 25 - 25 pin "straight through" modem cable from the RS232 port of the VPS to the modem. Place an intercom call to the Voice Mail System. When it answers dial #6*999, once you have entered the system managers mail box and the menu for the system managers mail box begins to play dial 91.You will hear a short tone then the mailbox menu will continue exit from the mail box.