GAI-TRONICS®
A HUBBELL COMPANY

Telephone Management Application (TMA)
Installation Bulletin

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This manual covers TMA version 7.3.3 and newer.

Introduction

The GAI-Tronics **Telephone Management Application** (**TMA)** is used to monitor the activity and health of GAI-Tronics SMART Telephones. The reports and information provided by TMA can prove useful in reducing maintenance labor costs and greatly reduce liabilities typically associated with an emergency communication system.

TMA runs continuously on a dedicated personal computer and it uses one or more voice-mode modems to gather status information from each telephone at regular intervals. In addition, the System Manager uses TMA to remotely adjust the behavior of individual telephones. These adjustments are either sent to the telephone immediately or are held to be sent during the next scheduled health-check maintenance call.

TMA provides an at-a-glance view of the status of the telephones as well as customizable reporting in the form of scheduled printed reports, and reports generated on demand.

For questions about TMA, please contact:

Service Group
GAI- TRONICS®
3030 Kutztown Rd.
Reading, PA 19605 USA
800-492-1212 (8 a.m. to 5 p.m. EST)
610-777-1374 outside the USA

TMA Product Package

Upon receipt of a TMA product, inspect the contents of the carton to ensure the following items are included:

Table 1. TMA Product Packages

Item	Description	Model 12509-037 TMA Application Package	Model 12509-036 TMA Line Expansion Kit
44008-004	TMA DTMF Transceiver Unit	■	■
44306-7xx	CD-ROM	■	■
49186-005	Security Key	■	
61007-007	Cable Assembly, 4-conductor	■	■
61007-044	USB Cable	■	■

Component Descriptions

The TMA DTMF Transceiver is used to interface the PC running the TMA application and dedicated PABX telephone line. The DTMF Transceiver is a black plastic box with sloped sides measuring 5.50 L× 5.25 W × 1.75 D inches. The front of the unit has three LEDs and the rear has one USB type "B" jack, and one RJ11 jack.

The CD-ROM contains all the files to be installed on a PC that are required to run the TMA application and the TMA User Guide.

The USB Security Key provides the necessary hardware security for the Administrator account access to the TMA application. The USB Security Key has the appearance of a USB flash drive (or memory stick).

The USB cable is used to interconnect the PC running the TMA application with the DTMF Transceiver. The cable is equipped with a USB type "A" plug at one end for connection to a USB port at the PC, and a USB type "B" plug at the other end for connection to the DTMF Transceiver.

The telephone line cord is used to connect the DTMF Transceiver to a dedicated PABX telephone line. The telephone line cord is equipped with an RJ11 plug at each end and is approximately 7 feet in length.

System Requirements

The minimum system requirements for installing and running the TMA are:

- The GAI-Tronics TMA software

- System Manager (Host) PC equipped with the following:

  - Intel® Pentium™ or AMD® 32-bit or 64-bit Processor
  - Microsoft® Windows® XP, Windows® Vista or Windows® 7 operating system
  - RAM, hard disk space, and processor speed is dependent on the operating system's recommended requirements
  - CD-ROM Drive
  - One USB port for the security key
  - One USB port per TMA DTMF Transceiver
  - One printer port
  - One telephone line connection (PBX/PABX only*) per TMA DTMF Transceiver

*The No. 44008-004 DTMF Transceiver is not an FCC approved device. This prohibits connection to the "public network" without first being routed through a PBX/PABX telephone switch.

The host PC should be installed in a controlled environment such an office without extremes in temperature, humidity or dust.

The "System Manager" must be Microsoft Windows® literate and knowledgeable of the use of a computer, copying files, renaming files, etc.

Pentium™ is a trademark of Intel® Corporation.

Microsoft® is a registered trademark of Microsoft Corporation. Windows® XP, Windows® Vista and Windows® 7 are trademarks of Microsoft Corporation.

Windows® XP users: SP2 or above is required. Refer also to the Readme.txt file on the installation CD. To confirm the Service Pack installed, right click on the desktop icon My Computer, and select Properties. Examine the System description on the General tab, and confirm the Service Pack is listed.

Windows® Considerations

The TMA application is intended to run on a PC dedicated to the Telephone Management Application. Running other applications while TMA is active may affect the operation of TMA. To make optimum use of the Windows® taskbar while TMA is running Full Screen, activate the Windows® taskbar "Auto Hide" option.

NOTE 1: Having the Windows® taskbar at the top or bottom of the screen and set to 'Always on top,' and without the 'Auto Hide' option being active may block a portion of the TMA display.

NOTE 2: TMA is intended for use with the Windows® Regional setting set as either English (United States), or English (United Kingdom). Avoid using a 12-hour date format without an AM/PM setting.

Installing TMA

**To install TMA, you must be logged on with administrator rights.**

TMA and its components are contained on the provided CD-ROM. Please exit all other programs that are running before beginning the installation. To install TMA to your PC, perform the following steps:

NOTE 1: Do **not** insert the USB security key until instructed to do so. If TMA is already installed on the PC, uninstall the existing TMA application prior to starting this TMA installation.

NOTE 2: The installation examples shown on the following pages represent a Windows® XP installation, and may differ slightly in appearance to an installation on a PC running Windows® Vista or Windows® 7.

NOTE 3: Multi-Tech serial port modems (Models MT5656ZDXV and MT5600ZDXV) employed with older versions of TMA are compatible with this version of TMA.

1. Place the CD-ROM in the PCs CD-ROM drive. If the "AutoRun" feature on your CD-ROM drive is enabled, the main installation screen should appear in approximately 20 seconds. If the installation does not start up automatically, it can be run from the Start menu. Click **Start** and then select **Run** from the Start menu. At the prompt type "X:\ Setup.exe." "X" represents the drive letter is associated with your CD-ROM drive, which may be something other than "X." When the installation begins, the following screen should appear:
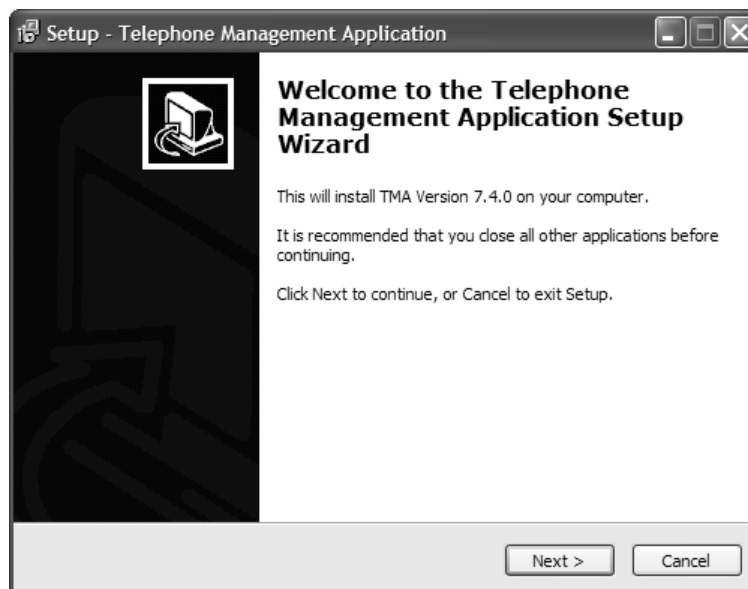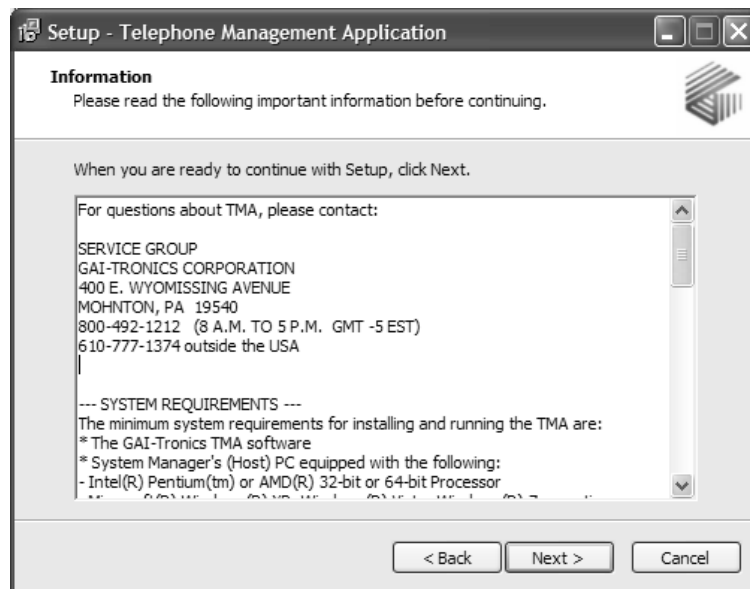

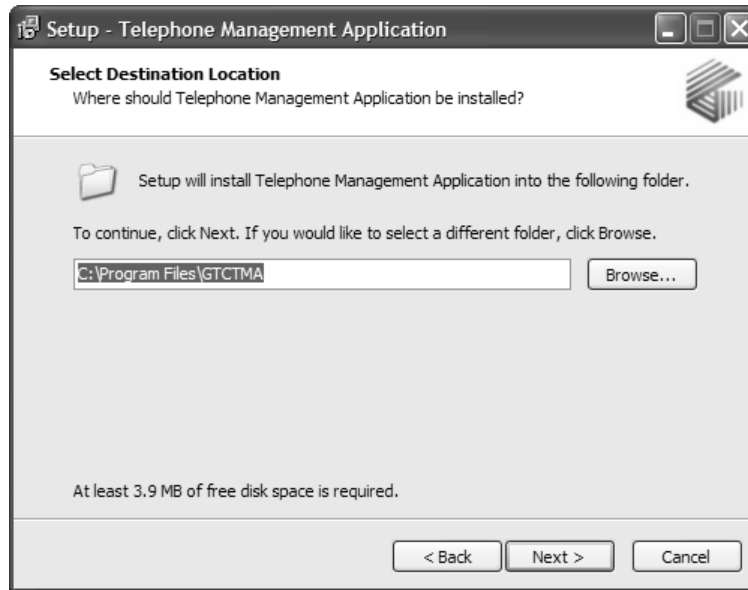2. Click **Next >** to continue.

3. The License Agreement window will appear. After reading the license agreement, select "I accept the agreement" and click **Next >** to continue.


4. Upon acceptance, an "Information" window will appear. Click **Next >** to continue.

5. The "Select Destination Location" window will appear. Click **Next >** to accept the default folder location.


6. The next window asks "Which components should be installed?" A typical installation requires all components to be installed. Ensure all check boxes are checked and click **Next >** to continue.
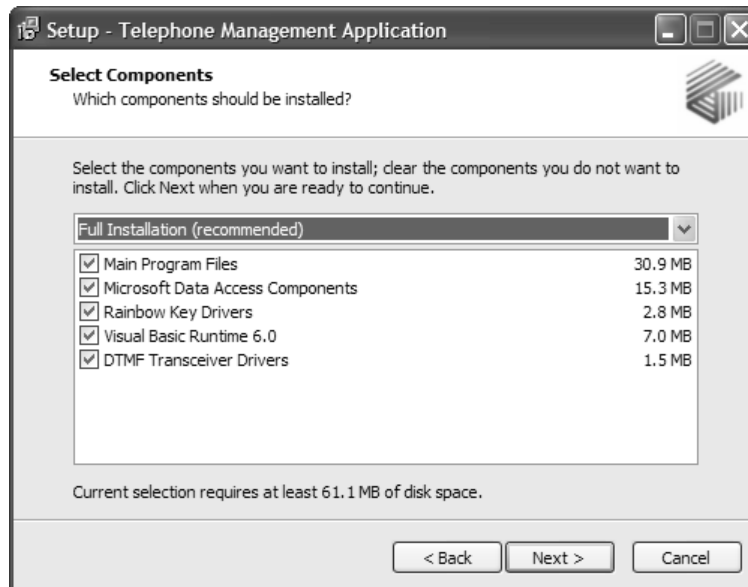
7. An installation summary is then presented. Click **Install** to continue.

8. The "Installing" window reveals progress of the TMA components being installed on the PC, and may take a few minutes to complete.
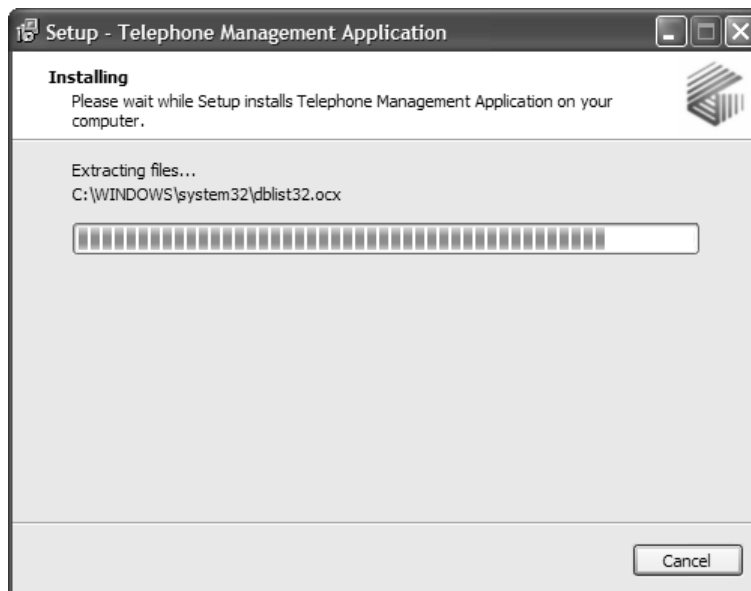
9. On a PC running Windows® XP, the next window will appear three times (one time for each driver to be installed). Click **Continue Anyway** each time.

10. On a PC running Windows® Vista or Windows® 7, the following security window will appear one time for the DTMF Transceiver Driver. Click **Install this driver software anyway** to continue.

11. On a PC running Windows® Vista or Windows® 7, the following security window will appear two times (once for the Bus/D2XX Driver, and once for the VCP Driver). Click **Install** to continue, each time the window appears.
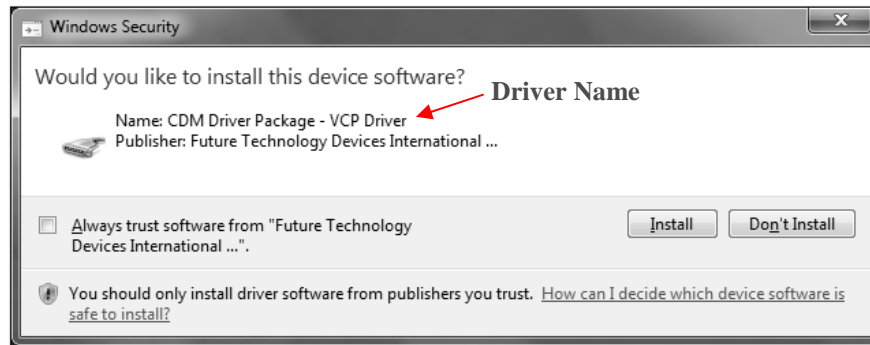
12. The next window indicates the TMA software installation is complete. Click **Finish** to exit the setup.

13. Upon conclusion of the installation process, the following icons should appear on the PC desktop.

TMA Desktop Icon   **Launch DTMF Desktop Icon**

14. With the TMA software installation complete, the TMA DTMF Transceiver must be connected to the PC and PBX/PABX extension telephone line using the USB cable and telephone line cord provided. Refer to Figure 1 below and the following guidelines for these connections:

- **USB connection** – Insert the large USB type "A" plug into a USB port at the PC, and the small USB type "B" plug into the USB jack at the rear of the TMA DTMF Transceiver.

- **PABX telephone connection** – Insert one end of the telephone line cord into the RJ11 jack at the rear of the TMA DTMF Transceiver, and the other end into a dedicated PABX jack at the wall.
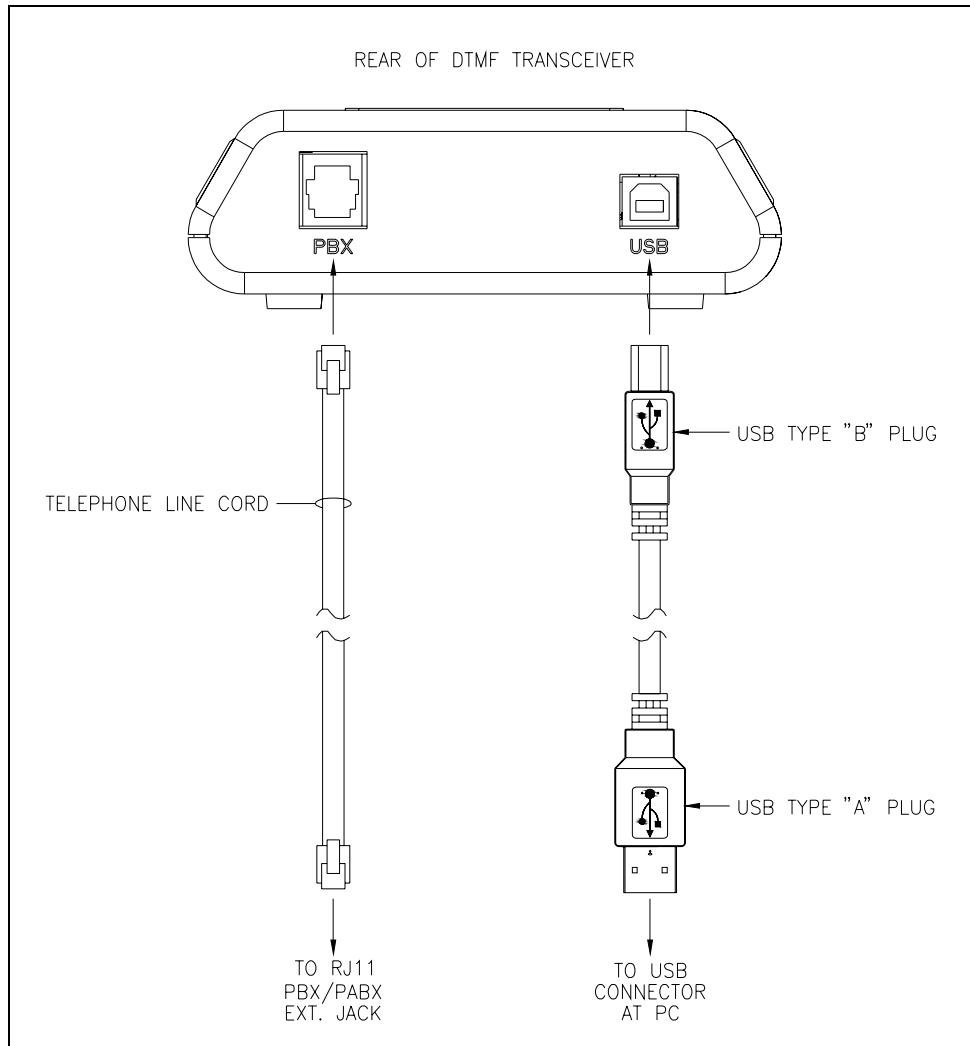

Figure 1. TMA DTMF Transceiver Connections

15. After the USB and telephone cables are connected, the TMA DTMF Transceiver OH/PWR LED should begin to flash on and off to indicate the unit is receiving power via the USB connection.

16. Insert the USB security key into an available USB port at the PC.

TMA DTMF Transceiver

The TMA DTMF Transceiver interfaces the PC running the TMA software to the telephone line. A front view of the TMA DTMF Transceiver and a description of the LED indicators are provided below:
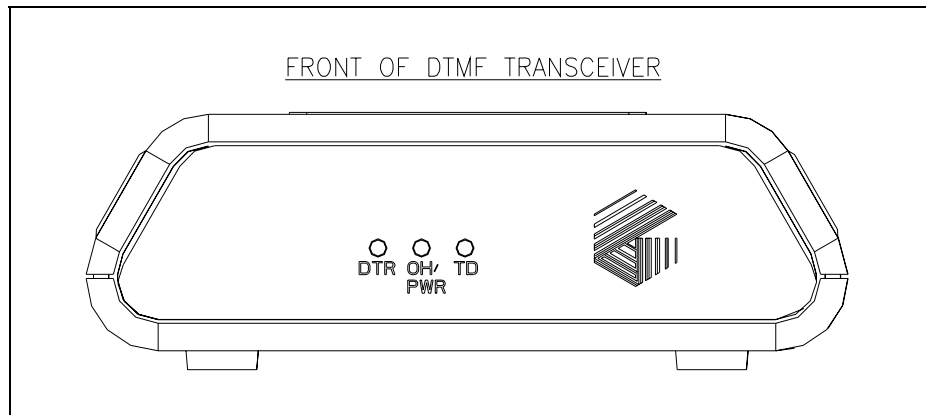

Figure 2. TMA DTMF Transceiver Front View

Table 2. TMA DTMF Transceiver Status Indicators

| LED	Status	Description
DTR	On	The SPI application is running on the PC and is connected to the TMA DTMF Transceiver.
	Off	The SPI application is no longer running on the PC and is disconnected from the TMA DTMF Transceiver.
OH/PWR	Flashing	The TMA DTMF Transceiver is receiving power via the USB connection to the PC.
	On	The TMA DTMF Transceiver is off-hook and connected to the phone line.
	Off	The TMA DTMF Transceiver is on-hook. If the DTR LED is also off, the DTMF Transceiver is not powered.
TD	Blinking	Data is being transmitted to the PC.
	Off	No data is being transmitted to the PC.

Found New Hardware Wizard (Windows® XP only)

Upon connecting the GTC DTMF Transceiver to the PC, a "Found New Hardware Wizard" window will appear on a PC running Windows® XP, as shown below.

1. The initial screen is for Windows® Update to search for the software. Select the **No, not this time** radio button and click **Next >** to continue.

2. The window shown below is to install the USB Serial Converter. Select the **Install the software automatically (Recommended)** radio button and click **Next >** to continue.
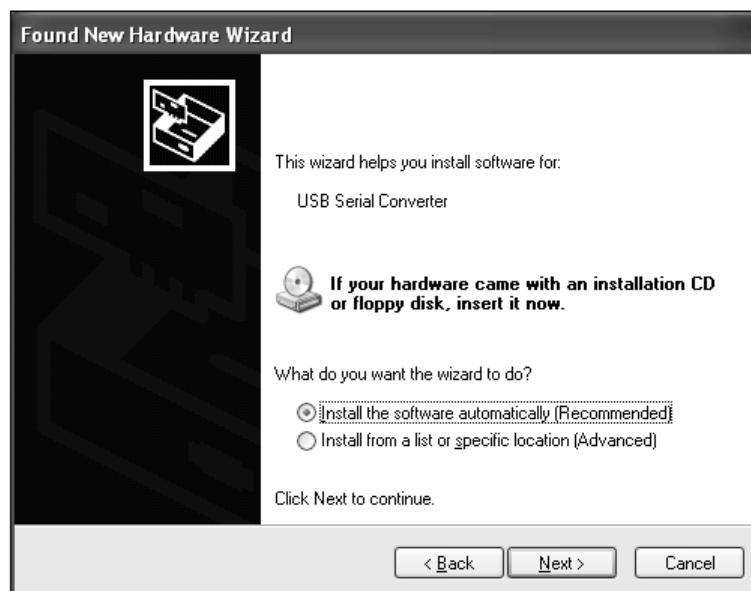
3. The following warning will appear for installation of the USB Serial Converter driver. Click
    Continue Anyway to continue.

4. Click **Finish** to complete the USB Serial Converter driver installation.

NOTE: When the USB Serial Converter driver installation is complete, a "Found New Hardware Wizard" window will appear two more times for the "USB Serial Port" driver and "GTC DTMF Transceiver" driver installations (a total of three times). Follow steps 1 through 4 in this section to install the "USB Serial Port" and "GTC DTMF Transceiver" drivers. All windows for the driver installations have the same appearance except for the driver name in various windows, as indicated above.

Voice Line Selector Configuration

After TMA is installed and one or more modems are installed, restart the PC to allow Windows to re-sequence the Telephone Application Programming Interface (TAPI) line assignments. This restart is required after connecting an additional modem to the PC.

As part of the TMA installation, the **Voice Line Selector** component application has been installed. This tool must be used to designate how many modems and SMART Phone Interface (SPI) applications will be in use, and which TAPI lines will be served by the SPI applications. Ensure the Administrator hardware security key is connected to an enabled USB port on the PC.

To configure the system, run **Voice Line Selector** by selecting it from the Windows Start menu. The path is **Start** > **All Programs** > **Voice Line Selector**.

NOTE: If additional TMA DTMF Transceivers will be employed, it may be prudent to create and place a shortcut on the desktop for convenience.

Upon clicking on the Voice Line Selector icon, the following window should appear:
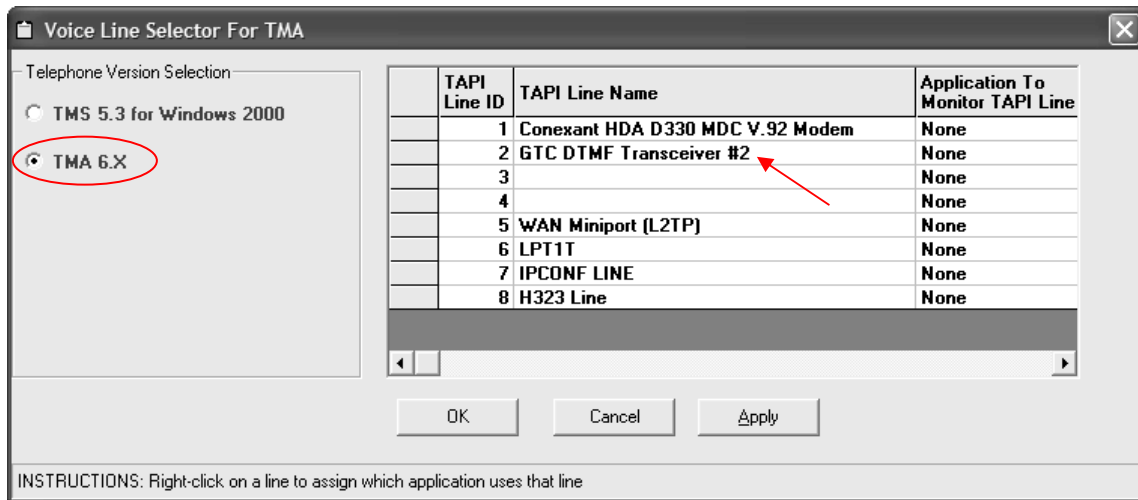
NOTE: Contents of the Voice Line Selector window may differ slightly depending upon PC hardware configuration.

In the Voice Line Selector window, perform the following steps:

1. Ensure the **TMA 6.X** (or **7.X**) radio button option is selected in the "Telephone Version Selection" block, on the left side.

2. Ensure there is an entry for the GTC DTMF Transceiver installed in the system in the "TAPI Line Name" list. The example above shows one GTC DTMF Transceiver installed to have an SPI started.

3. Right-click on the **Application To Monitor TAPI Line** column for the line that shows a GTC DTMF Transceiver. The following pop-up menu will appear:
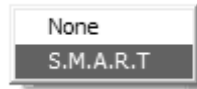
4. Select the **S.M.A.R.T.** option in the "Application To Monitor TAPI Line" column for the TMA DTMF Transceiver, as shown below.
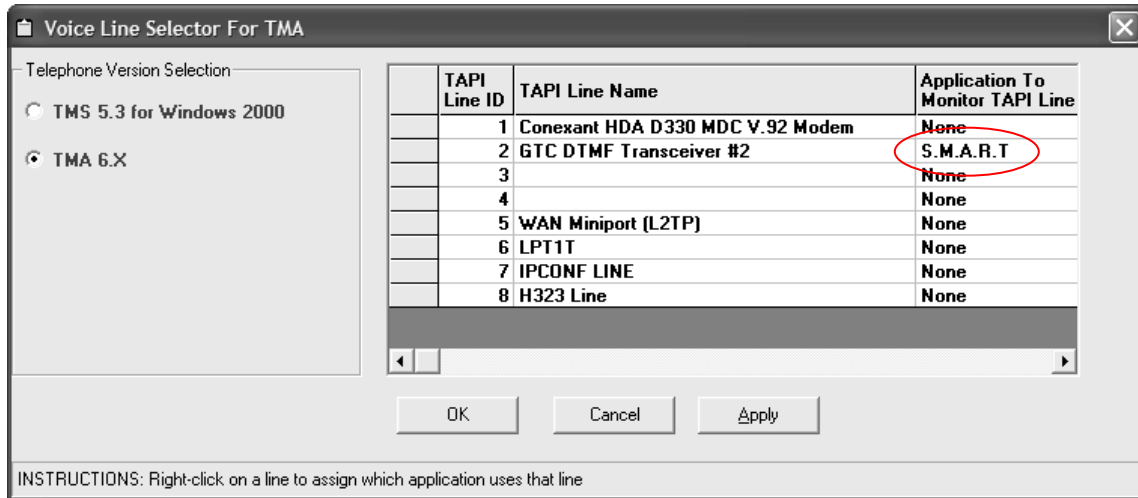
5. Click **OK** to save the settings.

NOTE: To have the GTC DTMF Transceiver(s) appear near the top of the list as shown, re-start the PC.

Launch DTMF

With the TMA application installed, one or more compatible TMA DTMF Transceivers connected to the PC, and the Voice Line Selector used to choose the TAPI lines for SMART phone communication, the TMA PC is configured to have the SPI component applications started by the Launch DTMF component of TMA. To do this, double click on the **Launch DTMF** icon (shown below) on the desktop. After a few seconds, confirm that a telephone icon (also shown below) appears in the taskbar notification area for each TMA DTMF Transceiver connected to the PC.


Launch DTMF Desktop Icon   **SPI Telephone Icon in Taskbar Notification Area**

NOTE: Launch DTMF is configured to start automatically every time the PC is rebooted. Thus, in normal usage, there is no need to re-start the Launch DTMF component application, as described above.

Double-click the telephone icon in the taskbar notification area to display the SPI Call Status window shown below.
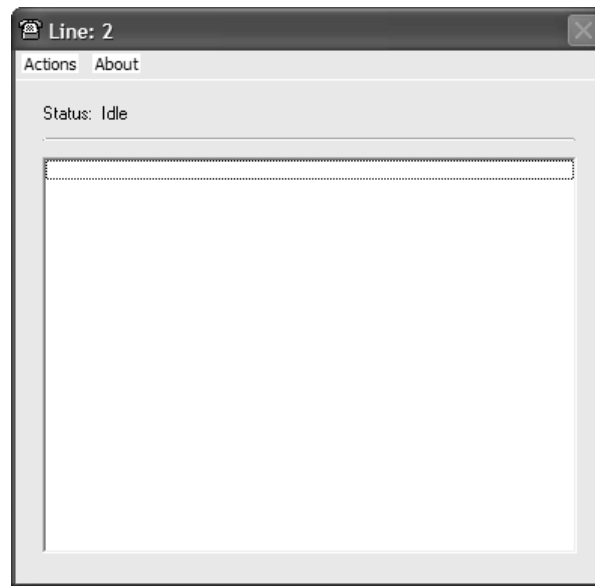
The SPI Call Status window allows the progress of a maintenance call with a SMART phone to be viewed. Please note that the SPI call status window may be visible, or hidden; in either case, the SPI can run normally, processing calls at the request of the main TMA application.

Helpful Tips

It may be more convenient to have the main TMA application running in a window (not full screen), and simultaneously have the SPI Call Status window visible on the Windows® desktop.

Using Multiple DTMF Transceivers

TMA allows multiple lines (up to eight) to be monitored simultaneously, which is useful in larger systems with hundreds of phones or when daily updates are needed.

Equipment Required

Since most PCs are typically equipped with two to four USB ports, a powered USB 2.0 hub must be added. Powered USB 2.0 hubs are available with four to eight ports. In addition to the powered USB 2.0 hub, a Model 12509-036 TMA Expansion Kit is required. (See Table 1 for kit components.)

Refer to Figure 3 for typical interconnection of a system utilizing four lines to monitor the telephones.

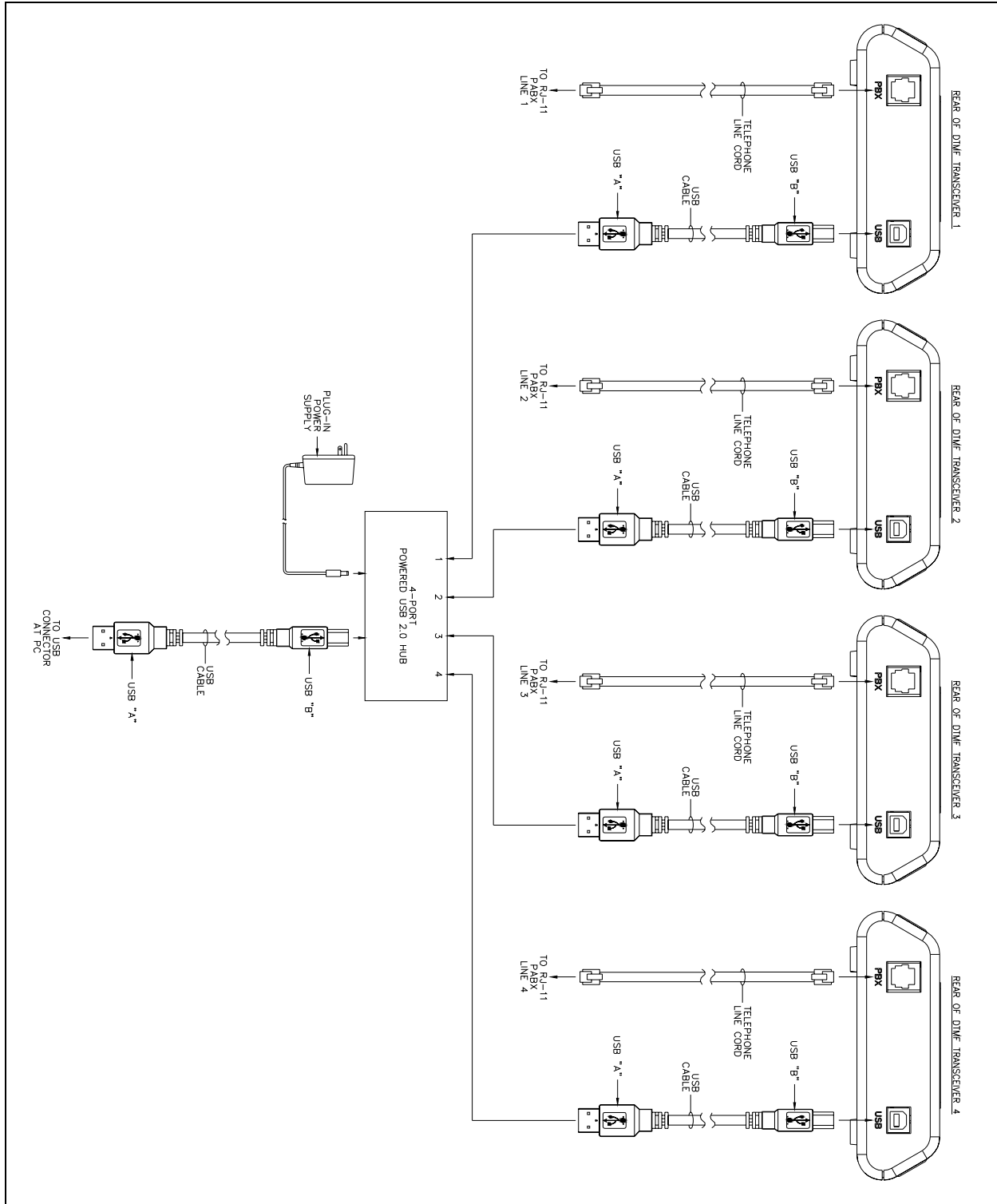Figure 3 below is a diagram showing connections for a four line monitoring system.

Figure 3. Typical Four-Line Monitoring Detail

For the GTC DTMF Transceivers added to the system, re-open the Voice Line Selector window and right-click in the **Application To Monitor TAPI Line** column for each line showing an added GTC DTMF Transceiver. The following pop-up menu will appear for each selection:

Select the **S.M.A.R.T.** option for each added DTMF Transceiver until the word S.M.A.R.T. appears in the "Application To Monitor TAPI Line" column, and then Click **OK** to save the settings, close all applications and re-start the PC.

When the PC is re-started and the Voice Line Selector window is re-opened, all GTC DTMF Transceivers will appear as shown below.
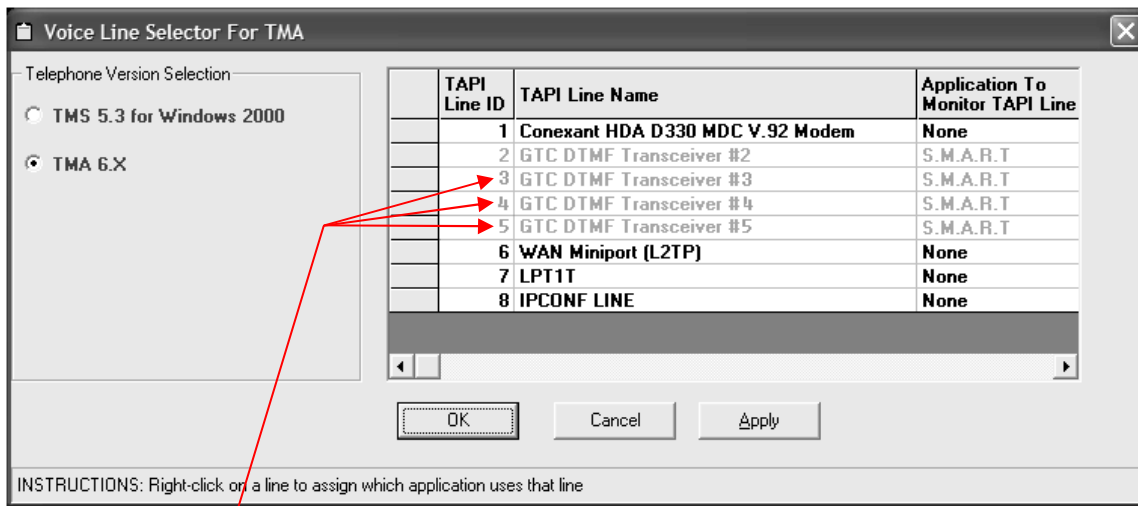

Added Transceivers

Starting TMA

After the TMA software has been installed, and the hardware security key has been inserted into a USB port, and at least one telephone icon appears in the Windows taskbar notification area, TMA can be restarted. To start TMA, double click the desktop TMA icon with the GAI-Tronics logo (shown below) or start the application via the Windows Start menu. The path is **Start > All Programs > TMA**.

TMA Desktop Icon

When TMA is initially started after installation, it will display a "No Current Database" dialog box over the startup splash screen, which indicates TMA was not able to open the most recently used telephone database. This is due to a database name not being defined for this new TMA installation.

Read the dialog box, and then select **OK** to dismiss it. The TMA window will now contain empty panels, and pull-down menu selections for FILE, EDIT, VIEW, etc., as shown below.
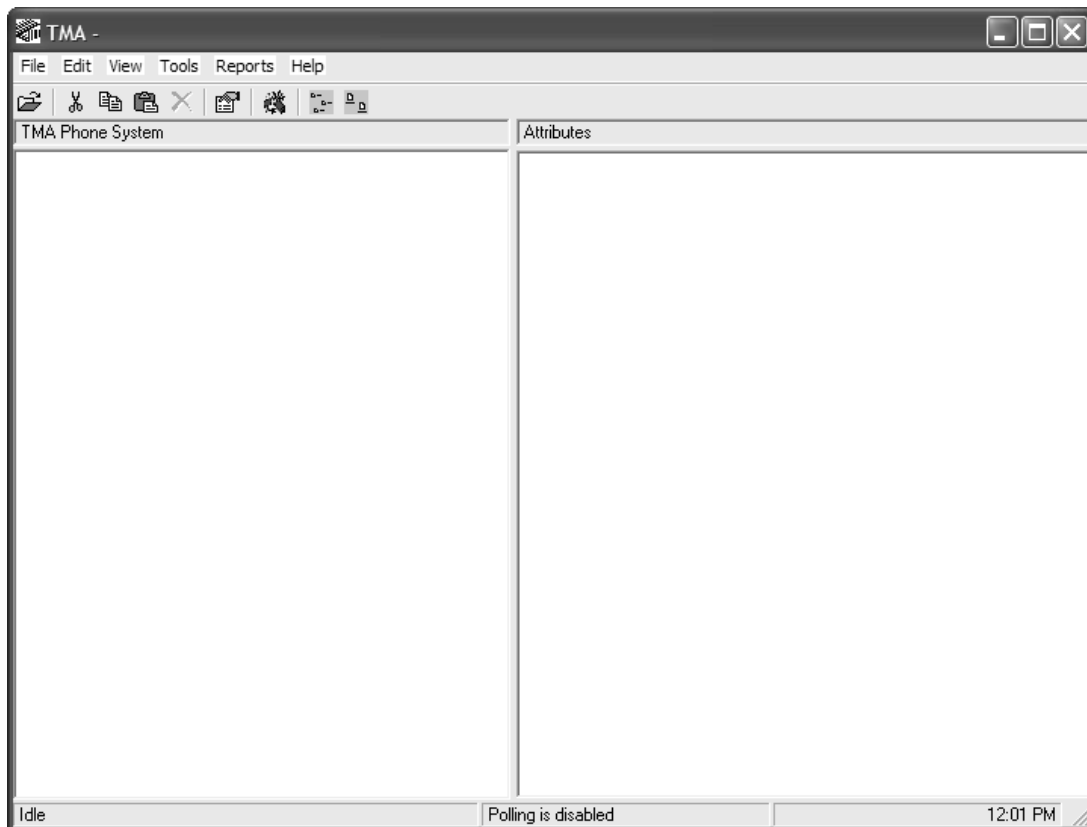
Select **Help** from the menu, then **TMA Help** to display the online manual. Go to the "Starting TMA" section of the manual for further instructions for creating and building the TMA database, and how to use TMA to maintain the GAI-Tronic telephones on site.

Warranty

Equipment. GAI-Tronics warrants for a period of one (1) year from the date of shipment, that any GAI-Tronics equipment supplied hereunder shall be free of defects in material and workmanship, shall comply with the then-current product specifications and product literature, and if applicable, shall be fit for the purpose specified in the agreed-upon quotation or proposal document. If (a) Seller's goods prove to be defective in workmanship and/or material under normal and proper usage, or unfit for the purpose specified and agreed upon, and (b) Buyer's claim is made within the warranty period set forth above, Buyer may return such goods to GAI-Tronics' nearest depot repair facility, freight prepaid, at which time they will be repaired or replaced, at Seller's option, without charge to Buyer. Repair or replacement shall be Buyer's sole and exclusive remedy. The warranty period on any repaired or replacement equipment shall be the greater of the ninety (90) day repair warranty or one (1) year from the date the original equipment was shipped. In no event shall GAI-Tronics warranty obligations with respect to equipment exceed 100% of the total cost of the equipment supplied hereunder. Buyer may also be entitled to the manufacturer's warranty on any third-party goods supplied by GAI-Tronics hereunder. The applicability of any such third-party warranty will be determined by GAI-Tronics.

Services. Any services GAI-Tronics provides hereunder, whether directly or through subcontractors, shall be performed in accordance with the standard of care with which such services are normally provided in the industry. If the services fail to meet the applicable industry standard, GAI-Tronics will re-perform such services at no cost to buyer to correct said deficiency to Company's satisfaction provided any and all issues are identified prior to the demobilization of the Contractor's personnel from the work site. Re-performance of services shall be Buyer's sole and exclusive remedy, and in no event shall GAI-Tronics warranty obligations with respect to services exceed 100% of the total cost of the services provided hereunder.

Warranty Periods. Every claim by Buyer alleging a defect in the goods and/or services provided hereunder shall be deemed waived unless such claim is made in writing within the applicable warranty periods as set forth above. Provided, however, that if the defect complained of is latent and not discoverable within the above warranty periods, every claim arising on account of such latent defect shall be deemed waived unless it is made in writing within a reasonable time after such latent defect is or should have been discovered by Buyer.

Limitations / Exclusions. The warranties herein shall not apply to, and GAI-Tronics shall not be responsible for, any damage to the goods or failure of the services supplied hereunder, to the extent caused by Buyer's neglect, failure to follow operational and maintenance procedures provided with the equipment, or the use of technicians not specifically authorized by GAI-Tronics to maintain or service the equipment. THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES AND REMEDIES, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Return Policy

If the equipment requires service, contact your Regional Service Center for a return authorization number (RA#). Equipment should be shipped prepaid to GAI-Tronics with a return authorization number and a purchase order number. If the equipment is under warranty, repairs or a replacement will be made in accordance with the warranty policy set forth above. Please include a written explanation of all defects to assist our technicians in their troubleshooting efforts.

Call 800-492-1212 (inside the USA) or 610-777-1374 (outside the USA) for help identifying the Regional Service Center closest to you.