

# MARS Demo

(Rev 1.3)

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# 1. Installation

## 1.1 CD installation

Prior to installing MARS, ensure that all programs running within windows are terminated. Insert the disk into the CD drive, click the **Start** button, select **Run...** and browse the CD for “setup.exe”. Click **OK** and follow the installation instructions that follow.

## 1.2 Hard disk installation

Prior to installing MARS, ensure that all programs running within windows are terminated. If the MARS files are received on a media other than CD, simply copy all the files to a temporary directory, double-click “setup.exe” and follow the installation instructions that follow.

# 2. Preface

## 2.1 About MARS demo

This demo is designed to familiarise the user with the basics of MARS operation. All of the features are available except for modem access to a remote MARS site. For the demo version of the software, the modem command buttons are not operational.

## 2.2 MARS demo database

A database is provided with the demo software. If the user wishes to maintain the original contents of the database it must be saved under a different name or saved to a different directory prior to demo navigation (See “3.4.2 Saving the database”).

## 2.3 Support

If you have questions about this product, contact us as follows:

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# 3. MARS Graphical User Interface

## 3.1 Starting MARS

Start MARS by clicking **Start**, pointing to **Programs**, pointing to **evsl**, and clicking **Mars Demo**.

## 3.2 Interacting with MARS

MARS uses standard Windows<sup>TM</sup>-style menus and short-cut keys to execute commands.

### 3.2.1 MARS menu bar

The menu bar consists of three items:

- 1) File: Open, save and close database. Save site notes. Exit MARS

- 2) Tools: Manage database. Configure MARS. Select Options. Password administration.
- 3) Help: Currently selects “About MARS”.

### 3.2.2 Keyboard commands

There are only three keyboard commands. The **Enter** key allows some of the command buttons to be executed without clicking them with the mouse. **Ctrl S** saves the site notes of the currently selected site. **Ctrl O** opens a database file.

## 3.3 MARS PC set up

### 3.3.1 Password Administration

If either of the two passwords is unknown, you must clear the existing password(s) before entering new passwords (Note: The initial passwords for the demo version are set to “1234”). Selecting **Tools/Password Administration, Submitting the Product ID, Checking** the appropriate checkboxes and selecting **OK** clears the current passwords. Select **Close** to exit Password Administrator. (Note: The product ID for the demo version is “12345”).

### 3.3.2 Entering passwords

MARS is equipped with passwords to prevent unauthorised access at two levels. At the first level, the user password prevents unauthorised users from opening a database file. At the second level, the configuration password prevents unauthorised personnel from configuring MARS and managing the database. To change or enter new passwords, select **Tools/Options**. When the options window opens, click the **MARS Security** tab. If the old password is known, enter it. If the password has been cleared leave **Old password** blank. Enter the **New password** and **Confirm password**, then click **Save** and respond to the dialogues to save the new password(s).

### 3.3.3 Options

Selecting **Tools/Options** opens the options dialogue. The **General** and **Modem settings** tabs allow assignments of various MARS-diagnostic operating options. For convenience you may select a default database path for opening a database file. The modem port should match the port named in the modem dialogue in Windows settings. Clicking **Save** stores changes made to options.

## 3.4 MARS database

### 3.4.1 Opening the database

To open the database, select **File/Open database** (or Ctrl O). Alternately, select a file name in the “Recent Files” list. A dialogue opens, allowing you to enter the **User password**. Click **OK** and select **Mars\_Demo.mdb**. The status information of the first site within the first region is displayed. The name and path of the current database is displayed on the top status bar.

### 3.4.2 Saving the database

To save the current database with a different name, select **File/Save database As...** select a directory, type a file name and select **OK**. The name and path of the new file will be displayed on the status bar as well as in **Recent Files**.

### 3.4.3 Closing the database

Before opening another database, the current one must be closed. Select **File/Close database** to close the current database.

### 3.4.4 Archiving the database

Archiving the database allows you to save the current database as an “archive” file (the file extension will still be “mdb” to allow you to re-open it). If an archive folder has not been created you will be prompted to do so. After archiving the file, all but the two most recent status records of every site within the current database are deleted. The current, compacted database will be retained within the MARS diagnostic window.

### **3.5 MARS diagnostic**

#### **3.5.1 Features and layout**

The MARS diagnostic screen allows you to review the status records of a selected site. It is divided into several sections or frames, each of which graphically (some textually) displays the status of the currently selected record. The first page of the diagnostic screen reveals the status of MARS DC power, as many as eight AC/DC voltage modules (divided up as main and auxiliary voltage), eight temperature modules, and CATV/QAM channels 2 to 73. The date and time beneath the DC power status identifies the time at which a status record was received and recorded in the database. The second page displays the status of as many as nine condition sensors, CATV/QAM channels 74 to 125 and the MARS module battery condition.

#### **3.5.2 Description of functions**

DC power to MARS is the power supplied to the MARS module itself. If the power to MARS is removed, a RED status will be displayed; otherwise GREEN if operating. Even though DC power may be removed, MARS will continue to operate within the limits of available on-board battery capacity (approximately 1 hour).

Main and auxiliary voltages refer to monitoring of other voltage sources. AC or DC voltage may be monitored. RED or GREEN status boxes indicate voltage monitoring enabled. GRAY status boxes indicate voltage-monitoring disabled.

Channel Status refers to monitoring the presence or absence of RF, video and audio for each channel. RED or GREEN status boxes indicate channel monitoring enabled. GRAY status boxes indicate channel monitoring disabled. A YELLOW audio status indicates that audio monitoring is inhibited for that channel (see “4.4.4 Modifying MARS configuration”).

Temperature refers to monitoring the actual temperature as well as the status. A RED status indicates that the temperature has increased beyond the trip point set in **MARS Configuration**. (Note: moving the cursor over the temperature text boxes reveals the trip points). RED or GREEN status boxes indicate temperature monitoring enabled. GRAY status boxes indicate temperature-monitoring disabled.

Condition refers to monitoring the condition of sensors connected to the condition sensor. RED or GREEN status boxes indicate condition monitoring enabled. GRAY status boxes indicate condition-monitoring disabled.

The battery status is monitored as a percent of maximum charge capacity. GREEN indicates that the battery is operating within normal range. A RED status

at the bottom of the battery indicator reveals a “shorted” battery. A RED status at the top of the battery indicator reveals an “open” battery.

### 3.5.3 Diagnostic navigation

MARS allows you to enter an unlimited number of region names and up to forty site names for each region. The regions and sites are displayed on the left side of the diagnostic screen. A region is selected by clicking the **Region** combo box. Selecting the region displays a list of sites in the **Site** list box. The most recent status record of the first site is displayed. Selecting a different site by clicking on the site name displays the most recent status record associated with that site.

Viewing other status records for the selected site is accomplished by clicking the **Next** or **Previous** command buttons (located above the temperature status frame). The current and maximum number of records associated with the selected site is displayed in the text box between these command buttons. Entering the record number and clicking Find Record displays that record.

Clicking the **Toggle Status Page** command button switches to page two. Clicking it again switches back to page 1.

Temperature is displayed in each of the eight temperature text boxes. By moving the cursor over each of the text boxes, temperature trip points appear in the **tool-tips** dialogue.

The **Site Fault Status** frame contains a command button to clear the fault status of the selected site. Clicking the **Clear Status** button changes a RED status to GREEN. If the currently selected site were the only site with a status indicator showing RED, then the region fault status would also turn GREEN.

Sites notes can be entered in the **Site Notes** text area for the selected site. Saving site notes is accomplished by selecting **File/Save Site notes**, or **Ctrl S** or selecting another site. Closing MARS will also save the site notes.

The **Modem Control** frame contains three command buttons. **Auto Answer** invokes the PC to wait for an incoming call. **Dial MARS** invokes the PC to dial the selected MARS site. **Disable** prevents the modem from answering calls.

## 4. MARS Module Set-up

### 4.1 Region Manager

Selecting Tools/Database-Manager/Region-Manager from the menu bar accesses the **Region Manager**. After entering the configuration password the region manger window is opened.

#### 4.1.1 Entering a new Region

To enter a new region name, type the name in the **Region** text box. The **Region Name** label colour changes to RED. Enter a **Supervisor** name. The associated label colour turns RED. Click **Save** to store the new region in the database. The new name also appears in the list box below. Select it to verify the supervisor name. Selecting **Cancel Changes** will return the data to the state before changes were made.

#### 4.1.2 Modifying a Region

To modify a region name, select the name from the list box. Modify the name in the text box and click **Update**. Modify the supervisor name in the same manner. Both label colours turn RED when changed. Selecting **Cancel Changes** will return the data to the state before changes were made.

### 4.2 Site Manager

Selecting Tools/Database-Manager/Site-Manager from the menu bar accesses the **Site Manager**. After entering the configuration password the site manger window is opened.

#### 4.2.1 Entering a new Site

To enter a new site name, type the name in the **Site** text box. The **Site Name** label colour changes to RED. Associate the new site with a region by selecting the region name from the adjacent list box. Without any further entries, selecting the **Save** command button creates a new site. If a new site was created without any information in the other text fields, then these fields can be filled. If the new site was created from an existing site then the new site will retain the old site's data. The data for the new site can then be altered and saved at will. To associate service labels with CATV or QAM channels, temperature, voltage, condition and switch simply select the channel or module number and then select the label you wish to associate with it. After associating all labels, click **Save**. Selecting **Cancel Changes** will return the data to the state before changes were made.

#### 4.2.2 Modifying a Site

To modify any field within a selected site, change the field or fields and then click **Update**. Selecting **Cancel Changes** will return the data to the state before changes were made.

### 4.3 Labels Manager

Selecting Tools/Database-Manager/Labels-Manager from the menu bar accesses the **Labels Manager**. After entering the configuration password the labels manger window is opened.

#### 4.3.1 Entering new Labels

To enter a new label, type the label name in any or all of the label text boxes, and then click **Save** to store the new information. Selecting **Cancel Changes** will return the data to the state before changes were made.

#### 4.3.2 Modifying Labels

To modify any label, change the text within the label field(s) and then click **Update**. Selecting **Cancel Changes** will return the data to the state before changes were made.

### 4.4 MARS configuration

Selecting Tools/MARS-Configuration from the menu bar accesses the configuration window. After entering the configuration password the **MARS Configuration** window is opened.

#### 4.4.1 Features and layout

The configuration screen allows you to select the functions that you want enabled for monitoring or control. There are three pages of configuration available to the user. The first page is the **MARS Module -- Channel monitoring**

**configuration.** The second page is **MARS Module -- QAM configuration.** The third page is **MARS Power Bar configuration.** Each page is divided into sections or frames, which graphically display the configuration of functions for each site. The **Region** and **Site** frames allow you to select a site for configuration. Within the first page, the **MARS Module -- Channel monitoring configuration** frame contains controls to enable/disable CATV channel functions. The **Sensors** and **Temperature trip** frames allow you to enable/disable and configure MARS sensors. The **Operational** and **RVA Inhibit** frames allow for textual parameter entries. The **Legend** frame contains a field with the serial number of the module in the selected site. Within the second page, the **MARS Module -- QAM configuration** contains controls to enable/disable QAM channel functions. The **Operational** frame allows the user to set the QAM threshold level. Within the third page, the **MARS Power Bar configuration** provides the user with the ability to enable/disable each of eight outlets for up to eight power bars. Each outlet can also be cycled (power removed and then applied within a designated time). The cycle time is also user configurable from 1 to 255 seconds. Any selected outlet for cycling will be deselected after a data is sent to the specified site. Each power bar can be globally enabled or disabled by clicking the check box for each power bar.

#### 4.4.2 Description and operation of functions

GRAY coloured buttons indicate that a function (channels, temperature, voltage and condition sensors) is not enabled for monitoring. To enable a channel click the **En** button associated with the channel (CATV and QAM). When selected the button will turn GREEN. Notice that the **RVA and Aud** buttons also turn GREEN. The RVA (RF, video and audio) and Aud (audio) buttons are used to inhibit MARS from monitoring these functions. When RVA is clicked (RED), MARS will stop monitoring the selected channels between the **Start** and **Stop** times entered in the **RVA Inhibit** frame at the bottom right corner of the configuration screen. When Aud is clicked (RED), MARS never monitors audio for the selected channels. Clicking the buttons for voltage, condition and temperature enable the corresponding module for monitoring when the button is GREEN.

Within the **Operational** frame, entering a value between 1 and 255 sets the MARS RF threshold (CATV and QAM). Entering a value between 1 and 255 sets the maximum number of phone calls per day. Entering a value between 1 and 6 sets the audio delay—a lull in audio may occur between channel changes and a change in programs, thus the requirement to prevent premature audio faults. The two check boxes below audio delay are used to enable or disable a site. Writing a site code to the MARS enables the site for monitoring functions and permits MARS to dial a remote PC. The **RVA Inhibit** frame allows you to set a time window in which MARS is not permitted to monitor RF, video and audio. An example of this may occur between 1:00 A.M and 5:45 A.M when some programming is turned off for the night.

#### 4.4.3 Configuration controls

When MARS is configured as described in 4.4.2 the **Save** and **Cancel Changes** command buttons are enabled. Clicking Save stores the changes to the selected

site. Clicking Cancel restores the previous configuration. The **Next Page** button selects **CATV**, **QAM** and **Power Bar** screens for user configuration.