



UMCS

Universal Maintenance & Control Software

Installation and User Manual

Document Number: 050-015-0013R01

This document describes the installation and operation of TASC Systems Universal Maintenance and Control Software product.

The software described in this document is subject to on going development and improvement. Consequently there may be minor discrepancies between the information in this document and the performance and design of the software.

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UMCS - Universal Maintenance and Control Software

Introduction

UMCS (Universal Maintenance and Control Software) is the common visual programming utility used to program, configure, store, maintain and monitor the operational characteristics across the following TASC products:

- sitePORTAL
- sitePORTAL lite

In this document generic reference is made to the sitePORTAL product. Except where specified, the reference is applicable to all sitePORTAL family products. Differences between each product where specified is noted.

UMCS provides an intuitive graphical user interface to the engineer/technician which simplifies the task of configuring the sitePORTAL. The engineer may set all site configuration detail including input contact alarm programming, analog voltage and temperature alarm points and message detail which will be sent to the NOCC sitePORTAL System Controller when there is an alarm situation. Configuration and programming detail may be saved to disk. Detail stored on disk may be later recalled and 'up-loaded' into a sitePORTAL module in the event that the module is being replaced in the field. This reduces downtime, shortens the MTTR and thereby increases the quality of service to the customer.

This section of the document specifically describes the operation, look and feel of UMCS V2.0 and later.

UMCS Requirements

The system requirements for UMCS are:

- 400MHz or higher Intel Pentium Processor or equivalent
- 64MB RAM
- 10MB free hard disk space
- Video Monitor of minimum resolution of 800 by 600 pixels
- Compact disc reader
- At least one free serial port
- A modem with 'AT-compatible' command set
- Windows 98, ME, Win-2000 or Windows™ XP operating system

Installing UMCS

UMCS is supplied on Compact Disc. Future versions of UMCS and updates to the user manuals, may be downloaded from the TASC Systems web site (www.tascsystems.com)

Insert the disc into the systems compact disc player. If the disc does not auto start, use Windows explorer to locate and activate the setup program on the disc. Follow the instructions shown on the screen. If you are upgrading an existing version of UMCS, the older version should be uninstalled before installing the new version.

Starting UMCS

Launch the UMCS program from the program folder that was created as part of the installation process.

UMCS maintains system preferences in the UMCS.DAT file. If no UMCS.DAT file is found during initial startup, UMCS will prompt to create a UMCS.DAT file with factory settings. This will be the case after the first installation.

UMCS main window

The main window has a conventional tool and menu bar. The main window is shown in Figure SU-1.

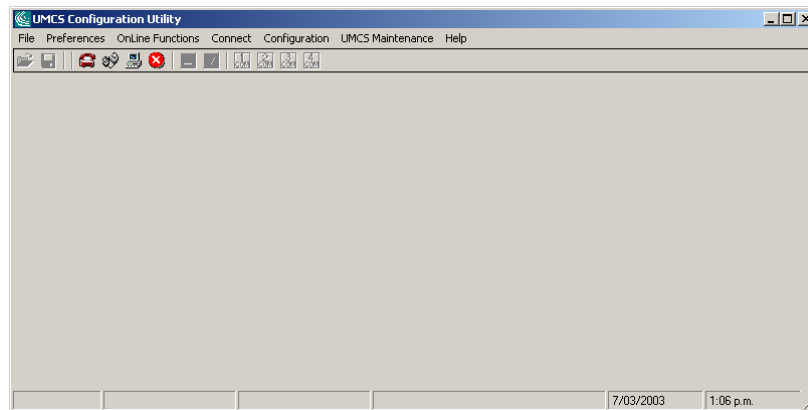
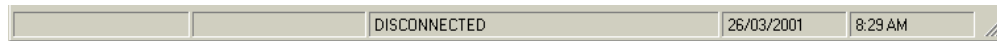


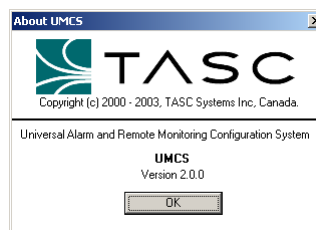
Figure SU-1 UMCS Main window

Status Bar

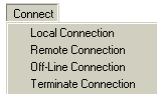


The UMCS status bar provides informative feedback such as the connection status between UMCS and sitePORTAL products. The third status panel shows the operational mode of UMCS. The last two right hand panels show the current PC date and time.

The UMCS Version may be displayed by clicking on the menu item Help|About UMCS. A typical version display panel is shown below.



Modes of Operation



UMCS provides four basic modes of operation – Disconnected, Off-line or Edit mode, Local mode, and Remote (dial-up) mode. When the UMCS program is launched it is in the 'disconnected' mode.

When UMCS is first launched, a number of the menu items and tools are disabled (grayed out). These items and tools do not become available until UMCS is on the Off-Line edit mode, the local (direct cable) mode or in the remote (modem) mode. The Advanced menu item is only accessible via a 'supervisor' access password and allows access to areas generally not required by the average user. Advanced programming functions are discussed at the end of this document.

Disconnected Mode

Figure SU-1 above shows a typical UMCS window after the program has launched. When UMCS is launched it is in the disconnected mode. The 'disconnected' mode allows limited access to UMCS functions. These are:

- Connection List Maintenance
- Advanced Password Maintenance
- Preferences
- Entrance to any of the other 'modes'

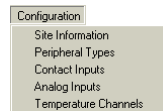
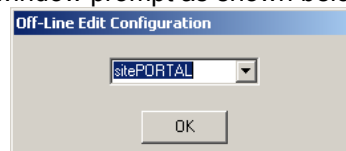


The UMCS toolbar provides 'one click' access method to any of the four modes.



Off-Line

The Off-Line mode provides an environment for a configuration to be built, edited and stored on the PC before actually connecting to the sitePORTAL module. The Off-Line mode allows a configuration(s) to be built without the sitePORTAL module being present. The off-line mode may be accessed via the main menu bar by selecting Connect - Off Line Connection or via the tool bar button shown left. To build an off-line configuration UMCS requires the product type to be specified, i.e sitePORTAL or sitePORTAL Lite. Select the product type from the drop down box in the window prompt as shown below.



When the Off Line mode is activated the sub menu items in the Configuration menu item are now enabled as shown to the left. In addition the file open and save tools are now enabled.

When the "Off-Line" editing mode is entered, UMCS uses an off-line 'blank template' to which a configuration may be built. The defaults for Off-Line edit mode are as follows:

- All site information fields 'blanked'.
- Factory default password.
- Preset disabled alarm captions.
- All contact input channels disabled.

All analog input channels disabled.
All temperature channels disabled.



LOCAL – Connection

The local mode is used when connecting directly to the sitePORTAL local serial port. The local connection mode allows the downloading of event logs, the monitoring of current system status and the acknowledging of alarms. The local mode allows configurations previously created in the Off-Line mode and stored on disk to be uploaded into the sitePORTAL module. When UMCS is connected to the sitePORTAL in this mode, the sitePORTAL module is taken out of the Alarm monitoring mode automatically. UMCS incorporates an automatic log out feature which allows the sitePORTAL module to re-enter alarm monitoring mode if UMCS senses no keyboard or mouse activity after a preset time. For further information on this feature, refer to the section Remote Connection – Auto Log Off.



To allow the sitePORTAL Lite Serial Port 1 to function as a local configuration port and to also function as a peripheral equipment 'passthrough' port, SW1-1 switch is used to determine whether the port operates in local or passthrough mode. When configuring sitePORTAL Lite from Serial Port 1 locally using UMCS, SW1-1 must be set to the off position and a cable connected between serial port 1 and the PC running UMCS. When the sitePORTAL Lite has been configured and this port is to now operate as a passthrough port to peripheral equipment, then the local cable should be removed and the peripheral equipment cable connected to Serial Port 1. SW1-1 must now be placed in the ON position (power does not need to be removed). To gain control of the local port (Serial Port 1) at a later time as a local configuration port, remove the peripheral equipment cable, place SW1-1 in the OFF position and connect a cable to Serial Port 1 and a PC running UMCS (power does not need to be removed).

When local mode is activated, the File menus and tools, Configuration sub items and On-Line sub menus are now enabled.



REMOTE – Connection

The remote connection mode is used to facilitate 'dial up' connections to remote sitePORTALS. These connection modes allow the downloading of event logs, the monitoring of current system status and the acknowledging of alarms by the technician. The remote connection modes allow configurations previously created in the Off-Line mode and stored on disk to be uploaded into the sitePORTAL module. When UMCS is connected to the sitePORTAL via 'dial up', the sitePORTAL module is taken out of the Alarm monitoring mode automatically.

UMCS incorporates an automatic log out feature which allows the sitePORTAL module to re-enter alarm monitoring mode if UMCS senses no keyboard or mouse activity after a preset time. For further information on this feature, refer to the section Remote Connection – Auto Log Off.

When the remote connection mode is activated, the File menus and tools, Configuration sub items and On-Line menus are now enabled. As the sitePORTAL module is capable of storing a great amount of configuration and site detail, an option exists under the remote preference menu item to selectively download data from the sitePORTAL module. With the auto-download option unchecked, only initial status information is downloaded from the sitePORTAL module. Downloading only occurs whenever the user access's a Configuration or On-Line menu item. This action may be overridden by enabling the Force Download check

box in the Remote Connection and Local Connection preferences, or it may be set for remote 'dial up' connections via the dialer window.

Communication Timer

The serial communication handling routines in sitePORTAL use buffer flush timers as part of the communication protocol between UMCS and sitePORTAL. If something interrupts the reception of a control packet and the Communication Timer expires, then the buffer is flushed and sitePORTAL awaits the next packet. The Communication Timer can be set to a value between 500 and 5000ms.

Interbyte Timer

Interbyte time is used to flush a stalled packet from the buffer. It specifies the maximum time that can exist between bytes in a packet.

Login Password

A password is required when connecting via the dial up mode. This is the password that will be sent and verified by the sitePORTAL module. It will also be recorded in sitePORTAL's access log. Note that Local port connections are not stored in the access log. UMCS prompts the user to supply a user name and password as shown in Figure SU-3 below.

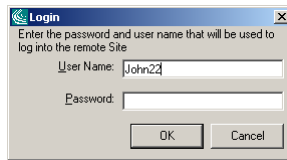


Figure SU-3 Password prompt

Remote Connection Window

When connecting via the remote mode, UMCS prompts with the Remote Connection 'dialer' window. A sample dialer window is shown in Figure SU-4. To call a site, Click on the site of interest and then click the dial button.

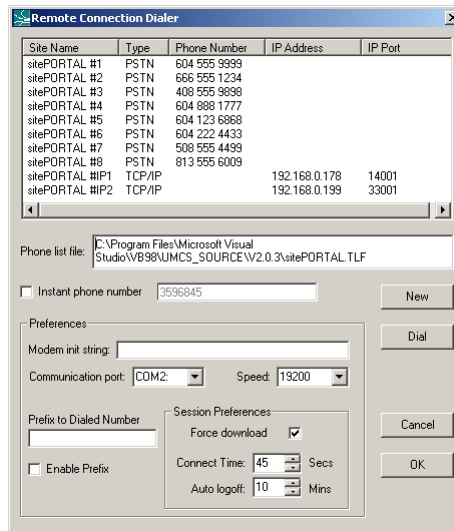


Figure SU-4 Dialer window

Like the Connection List File maintenance section discussed later in this document, the dialer window works with as many connection list files as you have created with the Connection List maintenance program. UMCS always displays the last accessed Connection list file. If you wish to use another file, click on the New button. A file open window is shown. Select the file you wish to use with the dialer.



When you have selected the site of interest, click on the dial button to start the call.

Instant phone number

The dialer window also allows the user to select an alternative phone number via the 'Instant' phone number box. If you wish to dial a number not listed in the Connection list file, click in the Instant phone number box and enter the number to dial in the adjacent text box. This overrides any selected entry in the list box.

Preferences Panel

The dialer window conveniently replicates the modem preferences information that can also be accessed via the menu item Preferences Modem Connection. The modem preferences panel provides access to the following settings:

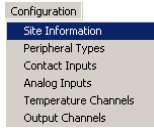
Modem init string	a user supplied modem specific initialization string.
Communication port	the pc's modem port.
Speed	the modems DTE speed.
Force download	enables/disables the auto-downloading of the targets configuration.
Connect time	the time after dialing before UMCS must see DCD from the modem or the call is terminated.
Auto logoff	the maximum time that UMCS can be idle before the user is logged out and the call terminated.
Prefix	enables/disables the dialed number prefix which may be added to the telephone database number.

For further information on preferences, refer to the section Setting the UMCS system preferences.

Configuring

The following section of this document describes how to configure the sitePORTAL module using the UMCS software.

Configuration - Site information



The site information window provides a 'template' for site related information. In the Off-Line Edit mode site information may be entered here and programmed into the sitePORTAL module at a later time. In the Local and Remote connection modes (once connected) this window will show the current sitePORTAL module programmed site related information. A typical Site Information entry window is shown in Figure OM-1 below.

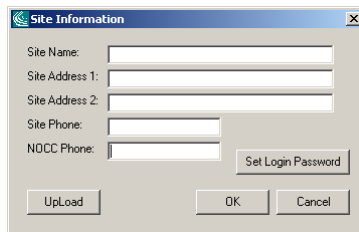
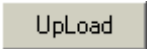


Figure OM-1 Site Information window



When UMCS is 'connected' via the LOCAL or REMOTE methods, the Up Load button is visible on all Configuration menu items. When one of the menu items is accessed and the Force Download box was unchecked in the Remote or Local connection preferences, UMCS downloads the data from sitePORTAL for the particular menu item. When the download is complete UMCS displays the Site Information window with the detail retrieved from the sitePORTAL module as shown in figure OM-1 above.

When the existing detail has been edited, click on the UpLoad button to up load the detail back into the sitePORTAL module, or click on the OK button to temporarily store the detail in PC memory for later upload using the **TOOLBAR UpLoad** button. Note that the Up Load button is not visible in the Site Information window when using the Off-Line edit mode.

Site Name:

This is the 'site name' of the sitePORTAL module. This name is returned to the NOCC in Field three of the NOCC Alarm report in the Alarm Reporting Function. To enable proper verification by the USC, this field must contain relevant data.

Site Address 1/2

These are optional fields and contain additional site information such as the 'civic' address where the sitePORTAL module is located. These fields are optional.

Site Phone No:

This is the phone number that is assigned to the sitePORTAL site. This is the number that the NOCC USC will dial to obtain the System Status. This is also the number that the UMCS will dial to perform maintenance and configuration programming when effecting a remote connection via UMCS. This number should also be entered into the Connection dialer list – refer to the section on *Connection List Maintenance*, later in this document.

Network Operations Control Center Phone No:

This is the phone number for the NOCC. This is the number that the sitePORTAL module will attempt to dial to 'transmit' an Alarm Report.

Set Site Password

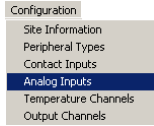
This is the password that will be verified by the sitePORTAL module whenever an incoming call is received by the sitePORTAL module. When the NOCC dials a sitePORTAL for a status inquiry or whenever UMCS access's a site this password must be supplied. When UMCS first switches to the off-line edit mode, this password is initialized to the default. If you wish to allocate another password, click on this button.

Table TOM-1 lists the field name, the length and legal character input for site information.

Field Name	Length	Notes
Site Name	30	general alphanumeric field
Site Phone No	16	valid characters are 0 to 9 <space> <backspace>
NOCC Phone No	16	valid characters are 0 to 9 <space> <backspace>
Site Address1	30	general alphanumeric field
Site Address2	30	general alphanumeric field
Peripheral 1	30	general alphanumeric field
Peripheral 2	30	general alphanumeric field
Peripheral 3	30	general alphanumeric field
Peripheral 4	30	general alphanumeric field

Table TOM-1 Site Information/Peripheral Type Fields

Configuration - Analog input channels



The Configuration sub menu Analog Inputs allows each of the analog inputs to be set to generate alarms when a voltage is above or below a trigger point. A caption may be associated with a particular event. This is the 'text' field that is sent to the NOCC whenever an alarm event is reported. The sitePORTAL and sitePORTAL Lite products have 8 analog input channels.

In the off-line edit mode channels are enabled and programmed. In the Local and Remote connection modes this window will show the currently assigned channel configuration of the sitePORTAL module. Figure OM-4 below, shows a typical analog channel window.

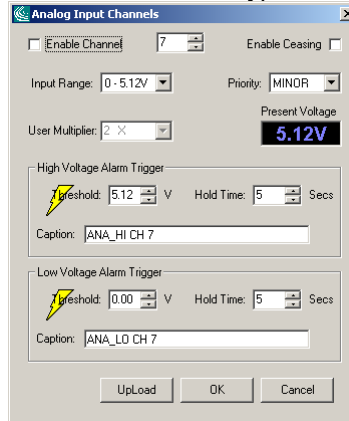


Figure OM-4 Analog input alarm window

Channel Selection

When the window is first opened UMCS shows the current settings for Analog Input Channel one (1). The channel number is shown in the 'up/down control'. Clicking on the up/down control will increase/decrease the channel number and the window will reflect the setting for that channel shown in the up/down control.

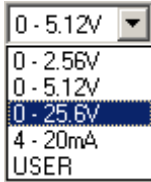
If this window is accessed in the off-line edit mode, the product type that was selected at entry, will determine the maximum channel selection. If this window is accessed in one of the on-line modes, the product type that was returned to UMCS by the product will determine the maximum channel selection. The current input voltage based on the stored configuration is shown in the 'meter' under Present Voltage. This is a static value and is only updated each time the channel spin wheel is changed.

Enabling a channel to generate alarms

The channel may be enabled to generate alarms by checking the Enable Channel check box.

Enabling a channel to generate ceasing reports

Any analog channel may be enabled to generate alarm ceasing reports by clicking the Enable Ceasing box. Ceasing reports are transmitted to the NOCC only when the channel voltage returns to below or above the set points and the alarm has been previously registered with the NOCC. If a channel has an associated hold timer and the timer is still running (alarm not yet registered with the NOCC) and the channel voltage returns to below or above the set points, then no report will be issued.



Input Range Select

In conjunction with the sitePORTAL jumpers, this sets the input channel analog range. The sitePORTAL module has a total of four programmable voltage ranges and four user programmed ranges. Select one of the ranges that will encompass the voltage input for the channel.

To select a user range, first select USER in the Input range drop down box. The User multiplier drop box will now be enabled. Select one of the user multiplier ranges from this box as shown left.



Each of the range multipliers is based on a 5.12V voltage reference. The channels jumpers must be set to the 5.12V setting. For each of the multipliers the user must supply a voltage divider resistor network as described in the section under Interfacing.

Note that whenever the range control or user multiplier is changed, the maximum voltage settings are updated to reflect that of the new range.

High Voltage Alarm Trigger

This control represents the high voltage point as selected by the Input Range Select control that will trigger the analog alarm timer to start a possible alarm sequence. A voltage above this value

High Hold Time

High Hold Time is the time that the input voltage value must remain above the threshold voltage value before triggering an alarm. The value may range between 1 and 120 seconds. The user may click in the box and enter a value directly.

Caption

A 'text caption' may be associated with an event. Click in the Caption text box to enter a caption for this event.



In the off-line edit mode, UMCS pre-fills each caption field with an "un-initialized caption string". If a during programming a user enables a channel to generate an alarm but forgets to enter a recognizable caption, then the sitePORTAL module will report as part of the NOCC Alarm Reporting Function that string. This prevents enabled channels reporting null caption fields to the NOCC.

The un-initialized caption for all analog input channels (high) is: ANA_HI CH X (where X = the channel number)

Low Voltage Alarm Trigger

When the voltage falls below this value and the channel is enabled will trigger the analog alarm timer to start a possible alarm sequence.

Low Hold Time

Low Hold Time is the time that the input voltage value must remain below the threshold voltage value before triggering an alarm. The value may range between 1 and 120 seconds. The user may click in the box and enter a value directly.

Caption

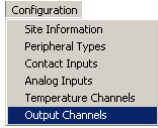
A 'text caption' may be associated with an event. Click in the Caption text box to enter a caption for this event.

The un-initialized caption for all analog input channels (low) is: ANA_LO CH X
(where X = the channel number)



Note: When power is applied to sitePORTAL, there is a 30 second delay before alarm gathering is performed. This delay is used to allow other peripheral equipment time to stabilize.

Configuration - Output channels



The sitePORTAL Series II and sitePORTAL Lite have eight 'open collector' output channels. The sitePORTAL series I does not have any output channels. The output configuration specifies the rest output state for an output channel. A typical output channel configuration window is shown in Figure OM-6 below.

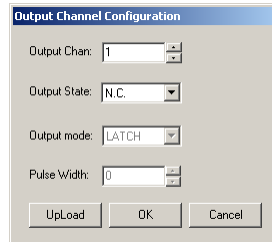
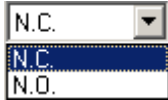


Figure OM-6 Output Channel Configuration window

Channel Selection

When the window is first opened UMCS shows the current settings for Output Channel one (1). The channel number is shown in the 'up/down control'. Clicking on the up/down control will increase/decrease the channel number and the window will reflect the setting for that channel shown in the up/down control.

Output State



This is the rest or normal state of the output. The output may be configured to be Normally Closed or Normally Open. The Normally closed state is when the output field effect transistor (FET) is turned on. In this state the FET will sink current to ground. The Normally open state is when the output field effect transistor (FET) is turned off. In this state the FET will NOT sink current to ground.

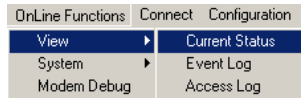
Output Mode/Pulse Width

In this release of the sitePORTAL product this control is disabled.

On Line Functions

On-Line functions are only available when UMCS is connected in one of the on-line modes; i.e. Local or Remote. All previously discussed screens and windows reflect the currently assigned configuration of the sitePORTAL and may be used to view or modify the current configuration. When connected either locally or via modem, the following additional On-Line functions are enabled in UMCS.

Viewing the sitePORTAL Current Status



The View Current Status window shows the present sitePORTAL module status. Figure OL-1 shows a typical status window. Note that the information shown in this panel will vary depending on the target product.

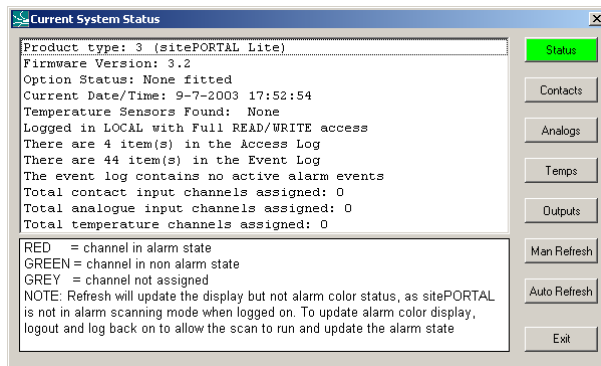


Figure OL-1 Current Status

The main status window is an informative window and shows the following information:

MDP (MCP) Firmware: This shows the version of firmware for the sitePORTAL dual processor product. If UMCS is connected to a sitePORTAL series II or sitePORTAL Lite product, MCP firmware will not be shown as these products are single processor products. Instead a single firmware revision number will be shown. Some sitePORTAL products may be fitted with several options. These are detected if present and shown – for instance no temperature sensors are connected.

The sitePORTAL date and time is shown in addition to the Read/Write access available at this login.

Note that if you login (connect) to the local port when there is a valid login on the modem port you will be restricted to READ access of the sitePORTAL only. The same is true if the connection (login) is made via the modem port when a connection is present on the local port. In essence the first login locks the other port from WRITE access.

Two lines show the number of entries in the event and access logs and if there are any 'active' alarm entries in the event log. Lastly the status window shows the number of channels assigned to generate alarms.

Contacts

Showing the current Contact status

Clicking on the Contacts button will display the current input contacts window. Click on the Refresh button to update the display. Figure OL-2 below shows a typical contact channels display. The contacts display shows the real time condition of the input contacts. The contacts channel status window shows disabled channels in grey. Channels that are enabled and are in the alarm condition are show in RED. Channels that are enabled and not in the alarm condition are show in GREEN.

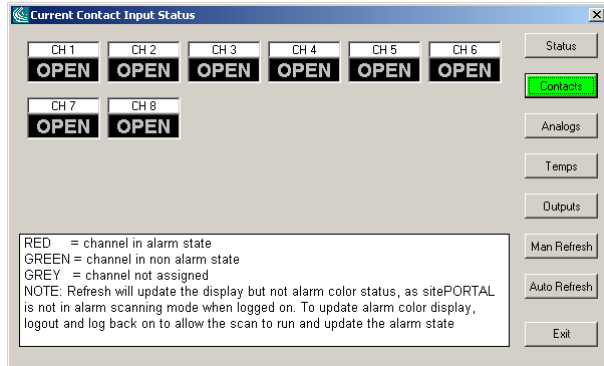


Figure OL-2 Contact channel status window

Hovering the mouse over the meter channel number will show the assigned caption for this channel as a 'tool tip' as shown below.



Refresh

Refreshing the sitePORTAL Status window

The refresh button updates the status display while on-line. Clicking on the refresh button updates the current status values.

Analogs

Showing the current Analog channels

Clicking the Analog button shows the current analog channel voltage values whether enabled to generate alarms or not. Click on the Refresh button to update the analog display. Figure OL-3 below shows a typical analog channels display.

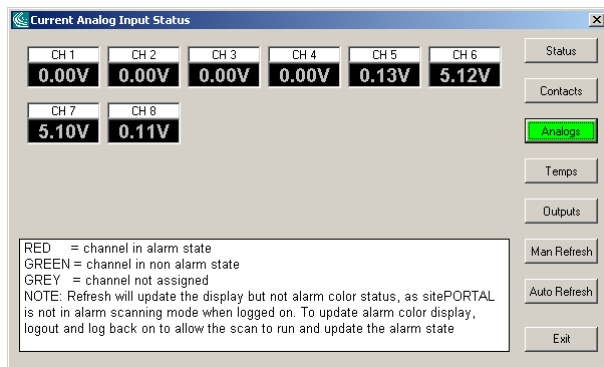


Figure OL-3 Analog channel status window

Note the first time you click on Analogs, UMCS down loads the captions for each of the channels enabled or not. These are used to display the caption tool tips. The analog channel

status window shows disabled channels in grey. Channels that are enabled and are in an alarm condition are show in RED. Channels that are enabled, and not in the alarm condition, are show in GREEN. Hovering the mouse over the meter channel number will show the assigned caption for this channel as a 'tool tip'.



If the mouse is hovered above the actual meter itself, the current analog range assigned for this channel will be shown.



Temps

Showing the current Temperatures

Clicking on the Temps button will display the current temperature channels window. Click on the Refresh button to update the Temperature display. Figure OL-4 below shows a typical analog channels display.

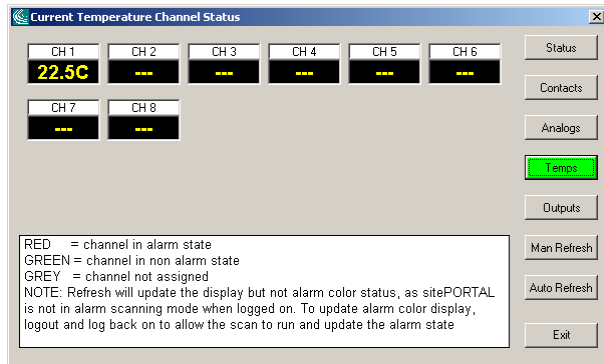


Figure OL-3 Temperature channel status display

Note the first time you click on Temperatures, UMCS down loads the captions for each of the channels enabled or not. These are used to display the caption tool tips. Channels with no sensors fitted are shown as ---. Hovering the mouse over the meter channel number will show the assigned caption for this channel as a 'tool tip'.





Showing the output channels

Clicking on the Outputs button will display the current temperature channels window. This button is not visible in sitePORTAL Series I products. Figure OL-5 below shows a typical analog channels display.

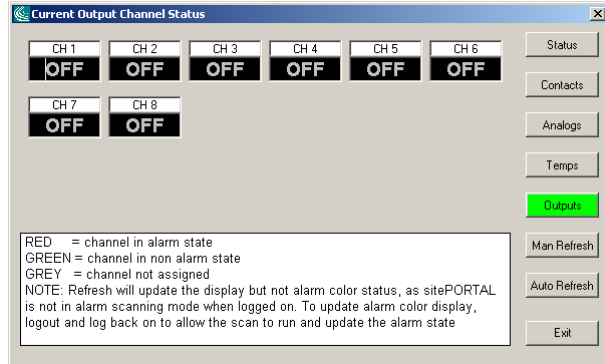


Figure OL-5 Output channel status display

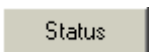
Controlling an output channel

If the mouse is hovered over one of the meter displays and clicked, the output channel will toggle to the opposite state. If the channel was OFF it will change to the ON state etc.



Refresh

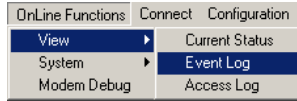
By default the status window is launched with manual refresh control. Each click of the Man Refresh button will update the meter display. To enable auto refresh with updates at approximately one second intervals, click on the Auto Refresh button.



Current Status

To return to the main status window click on the Status button.

Viewing the sitePORTAL event log



sitePORTAL stores a record of all “events” in an event log. The event log is circular and once filled to capacity, over-writes the oldest entries. sitePORTAL Lite stores up to 60 events in the event log.

Events may be alarms or other events that do not necessarily constitute an alarm, i.e. events like defaulting the NVR, Power up CRC database failures etc. A typical event log is shown in figure OL-5 below.

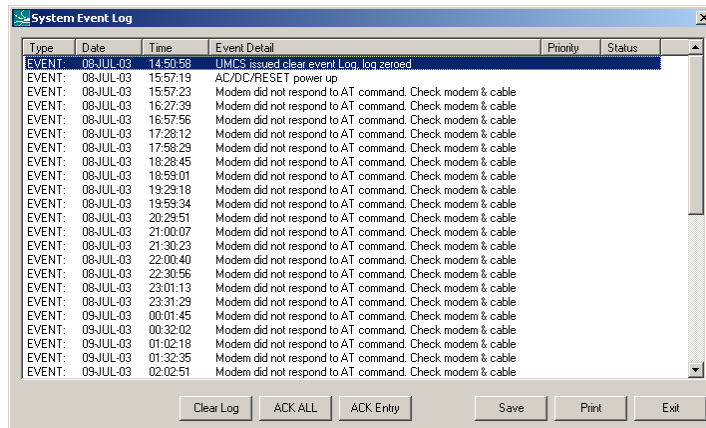


Figure OL-5 Event Log window

The event log window shows the type of event, the date and time the event occurred and a short description of the event. There are two fundamental types of events that are displayed in the event log window. These are:

- EVENT: non-alarm events.
- ALARM: alarm events that have not been cleared.

Depending on the product type, the following events and alarm information may be shown in the event log.

- ALARM Contact Ch: (1-18), Caption, Priority
- ALARM Analog Low Ch: (1-16), Caption, Priority
- ALARM Analog Hi Ch: (1-16), Caption, Priority
- ALARM Temp Lo Ch: (1-8), Caption, Priority
- ALARM Temp Hi Ch: (1-8), Caption, Priority

- ALARM Contact Ch: (1-18), Caption, CEASING
- ALARM Analog Low Ch: (1-16), Caption, CEASING
- ALARM Analog Hi Ch: (1-16), Caption, CEASING
- ALARM Temp Lo Ch: (1-8), Caption, CEASING
- ALARM Temp Hi Ch: (1-8), Caption, CEASING

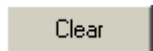
- AC Line Low
- AC failure

AC Restored
 Flash uploaded
 Login attempt failed
 No NOCC Phone #, cannot report alarm (this event is only written once after power up or after the log has been cleared)
 Modem issued No Carrier during alarm report function
 Modem issued Error during alarm report function
 Modem issued No Dial Tone during alarm report function
 Modem issued Busy during alarm report function
 Modem issued No Answer during alarm report function
 Modem did not respond during attempted AT command
 Modem did not respond during heartbeat function
 NOCC did not ACK report after 'Alarm Attempts'
 AC/DC/RESET Power up
 UMCS issued clear all, variables defaulted
 Power Up NVR Clear Jumper/switch - all variables defaulted
 UMCS issued clear Access Log, log zeroed
 UMCS issued clear Event Log, log zeroed
 Powerup CRC failure, battery charger area zeroed
 Powerup CRC failure, call control area zeroed
 Powerup CRC failure, temperature area zeroed
 Powerup CRC failure, analog area zeroed
 Powerup CRC failure, contact area zeroed
 Powerup CRC failure, peripheral area zeroed
 Powerup CRC failure, site area zeroed
 Powerup CRC failure, access log zeroed
 Powerup CRC failure, event log zeroed
 Watchdog timer reset system

Acknowledging an alarm

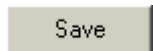


Normally the NOCC USC will acknowledge an alarm report. However if additional alarms have been logged during the interval that the sitePORTAL reports alarms to the NOCC and the time the technician logged into the sitePORTAL, the technician may ACK an individual alarm or all of the alarms via this window. Prior to this the alarm status will show as ACTIVE in the STATUS column. To ACK an alarm, highlight the alarm by clicking on it. Now click the ACK button. To ACK all alarms, click the ACK ALL button. UMCS sends an alarm acknowledge to the sitePORTAL module canceling any active alarm in the sitePORTAL module itself and therefore preventing the sitePORTAL from dialing the NOCC USC to report the alarm. The STATUS column now shows ACK'D.



Clearing the event log

When all ACTIVE alarms have been acknowledged in the log, the log may be cleared. This is useful when monitoring a situation where it is desired to start with a clear log to record as many events as possible during the situation. The user is prompted to confirm this action. Note that a log cannot be cleared while there are un-acknowledged (ACTIVE) alarms present.



Saving an event log to disk

The event log may be saved to disk for later review and prior to clearing the log. Clicking on the Save button allows the Event log to be saved to disk. The user is prompted for a filename as shown in Figure OL-6 below. All saved log files have the .LOG file extension.

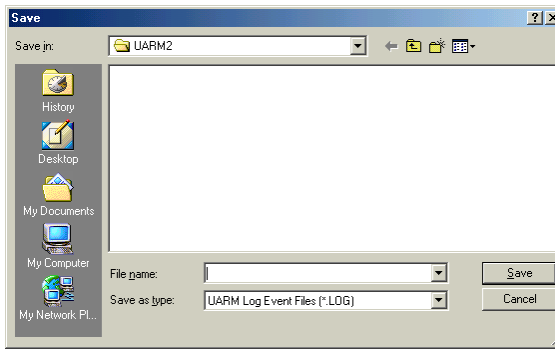


Figure OL-6 Save log file window

Print

Printing the event log

A copy of the event log may be sent to a printer. An example event log is shown below.

```

sitePORTAL Event Log for site: CARTEL TEST P004
Monday, March 26, 2001, 09:47 AM
EVT: 23-MAR-2001 11:02:12 Power Up NVR Clear Jumper - all variables defaulted
EVT: 23-MAR-2001 11:02:22 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 14:26:08 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 14:27:53 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 15:52:46 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 15:55:17 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 15:56:55 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:01:19 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:01:32 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:02:26 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:06:51 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:22:02 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:23:32 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:29:55 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:31:13 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:32:38 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 16:34:20 Modem did not respond during attempted AT command
EVT: 23-MAR-2001 17:07:53 Modem did not respond during attempted AT command
EVT: 26-MAR-2001 09:01:26 Modem did not respond during attempted AT command
EVT: 26-MAR-2001 09:08:25 Modem did not respond during attempted AT command
ALM: 26-MAR-2001 09:09:03 ALARM Analog Low Ch:01 ANA_LO CH 1, MINOR ACK'D
EVT: 26-MAR-2001 09:09:03 No NOCC Phone #, cannot report alarm

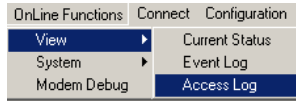
```

Clear

Clearing the event log

Clicking on the Clear button will clear the event log. The user is prompted to confirm this action. Not that a log cannot be cleared while there are un-acknowledged alarms present.

Viewing the access log



The access log records all dial up connections to the sitePORTAL. A typical access log is shown below in figure OL-7. The access log records the type of access, the date and time of access, the users logon name, whether the access was valid and the duration of the login. If there is a current access in progress (not yet terminated) it is shown as ---. All attempts to login that fail are recorded as invalid connections.

Note that access or connections to the local port are not recorded in the access log.

The screenshot shows a window titled 'Access Log' with a table of connection records. The table has six columns: Type, Date, Time, User Name, Valid, and Duration. There are four rows of data, all with 'DIALUP' as the Type and 'LOCAL' as the User Name. The first row is highlighted in blue.

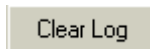
Type	Date	Time	User Name	Valid	Duration
DIALUP	08-JUL-03	14:44:59	LOCAL	YES	00:15
DIALUP	08-JUL-03	14:47:49	LOCAL	YES	00:07
DIALUP	08-JUL-03	14:49:40	LOCAL	YES	01:23
DIALUP	08-JUL-03	14:51:38	LOCAL	YES	00:50

At the bottom of the window, there are three buttons: 'Print', 'Clear Log', and 'Exit'.

Figure OL-7 Access log window

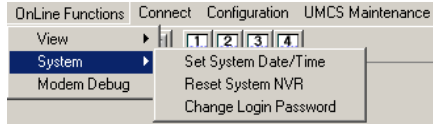


The Access Log may be printed by clicking on the Print button.



To clear the Access Log, click on the Clear button

Setting the sitePORTAL date and time



The sitePORTAL real time clock is setup by clicking on the System Date and Time sub menu. When the date and time window is first opened, it shows the sitePORTAL modules present date and time.

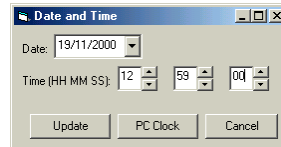
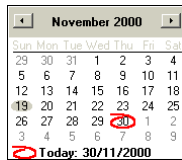
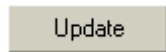


Figure OL-8 Date and time window

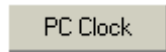


To set a different date, click on the date button. A drop down calendar is shown -like the one on the left. Set the date by clicking on the left or right arrows to advance the month and or by clicking directly on a day.

To set a different time click on the up/down controls (HH MM SS)



Clicking on the Update button will update the sitePORTAL module Real Time Clock with the time shown in the window.

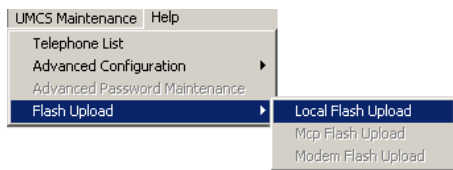


Clicking on the PC Clock button will update the sitePORTAL module date and time with that of the PC.

Flash Uploading

All sitePORTAL products are flash based microprocessor designs allowing the upgrading of firmware either via direct cable connection between a PC running UMCS and the local serial port or remotely via dial up modem.

The sitePORTAL Series 2 and sitePORTAL Lite products contain a single processor with flash memory. When instructed, it may be necessary to upload new flash firmware. The following describes the process for re-loading the firmware for the sitePORTAL Series 2, and sitePORTAL Lite products. These products contain two serial ports (Local and modem). Flash loading can be done from either port, that is locally via direct cable connection to Serial Port 1 or remotely via dial up modem connected to Serial Port 2.



Local Flash Upload

Local Flash Upload refers to loading new firmware via the LOCAL serial port. This can be done while logged onto the sitePORTAL product or without previous logon. If not already done, connect a data cable between the PC com port and the LOCAL serial port ('LOCAL' Port on sitePORTAL Series2 and 'Serial Port 1' on sitePORTAL Lite). Select UMCS Maintenance|Flash Upload|Local Flash Upload from the menu.

UMCS prompts with the Open Flash file window as shown in Figure SP-1. The 'Files of type' will be dependent on the product type connected. The "files of type" shown in the example figure AD-6 are for the sitePORTAL Lite product. Other Files of type may be sitePORTAL Series II.

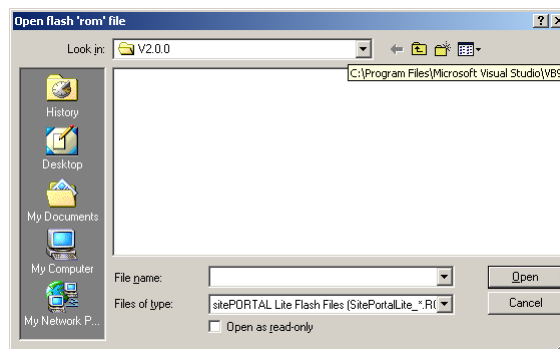


Figure SP-1 Open Flash File window

Select the flash load file and click the Open button. UMCS prompts to confirm the flash upload with the message shown in figure SP-2.

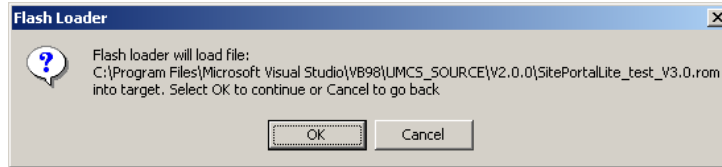


Figure SP-2 Flash upload confirm message

Selecting OK will proceed to uploading the flash code. The flash load progress bar as shown in figure SP-3 below will be shown.

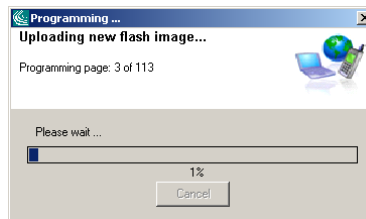


Figure SP-3 Flash load progress bar

During flash loading the red and green indicators will flash alternately on all sitePORTAL products apart from the sitePORTAL Series I. When the flash load is complete, the sitePORTAL is restarted, the red and green indicators will flash alternately again for 5 seconds before the green indicator flashes at one second intervals.

Modem Flash Upload

Modem Flash Upload refers to loading new firmware via the modem serial port. This can only be done while logged onto the sitePORTAL via modem. The menu items UMCS Maintenance\Flash Upload will now only show Modem Flash upload. Select this option and carry out the same file select procedure as for Local Flash Upload.

Other warning or informative messages

During flash loading a number of checks are carried out to prevent loading an incorrect image into the wrong product type. The following message boxes may be displayed.

Bootstrap Detected

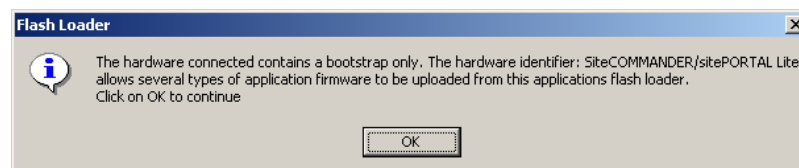


Figure SP-4 Bootstrap detected message box

This message box is shown if UMCS has detected a target running the bootstrap loader code. This means there is no valid application code present in the target. Normally when an application is present in the target, the application code returns product and application information to the UMCS software. This information is used to determine which type(s) of flash load files are acceptable. All products contain boot loader code, which is executed at start up. This message could be caused if for some reason a previous flash load was aborted, due to timeout or the data cable was removed during flash upload. This can also occur if the modem connection was lost due to line conditions during a flash upload. Both

sitePORTAL series II and sitePORTAL Lite can have alternate application code programmed (firmware). This message is more likely to be preceded by the message shown below in figure SP-5.

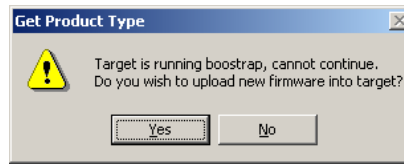


Figure SP-5 Bootstrap detected (variant) message box

The message in figure SP-5 will be shown if the user selected to log onto the sitePORTAL via the tool bar or via the menu system. If the user selects YES, the message shown in SP-4 is displayed as an informative message. The message in figure SP-4 will be shown directly if the user selected UMCS Maintenance|Flash Upload|Local Flash Upload from the menu system.

The flash file open window will have two possible file types in the Files of type dropdown box. An example of this is shown in figure SP-6 below.

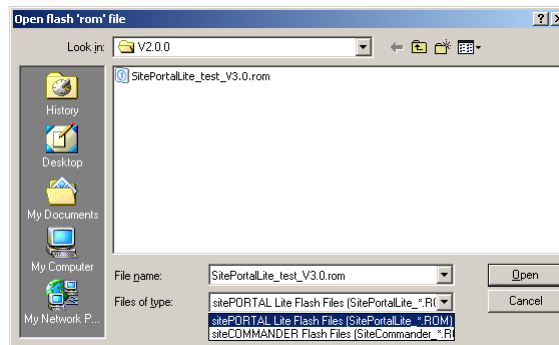


Figure SP-6 Files of type

Be sure to select the sitePORTAL type in this window. Do not select any other type as it may render the product temporarily inoperative with the UMCS software.

LED Indicators

Each of the sitePORTAL products has three light emitting diode indicators (green, amber and red) mounted directly on the PCB.

Startup

During power up sitePORTAL Series II and sitePORTAL Lite display an alternate flashing of the green and red indicators for 5 seconds during the 'bootstrap' process. This is normal.

Power Up - Red Led Flashing – Slow for 5 seconds

Indicates that one or more areas of the NVR failed the CRC check and these area(s) have been reset to factory values. The Red led indicator is flashed five times. Subsequent viewing of the event log will show which area failed.

Power Up - Red Led Flashing - Fast

After power is applied to the sitePORTAL, a number of basic hardware checks are performed to ensure that the hardware is free from defect or failure. When the firmware detects a failure in a number of tested areas, it will loop continuously flashing the red led at a fast rate. The error number is outputted on the remaining amber and green leds as follows.

Both amber and green off	I2C Bus fault on PCB
Amber on	Real Time Clock fault – clock is incapacitated
Green on	Reserved
Both amber and green on	MCP processor fault. In sitePORTAL I product only. MCP is not responding or is incorrectly programmed

Power Up - All Leds Flashing

If the Reset NVR Jumper (J19) on the sitePORTAL Series I is in the 'reset' position during power up, sitePORTAL will reset all variables to that of the factory settings. All indicators (Green, Amber & Red) will flash together indicating that the variables have been reset. This event is recorded in the event log. The jumper should be placed into the 'NORM' position to continue and restore normal operation. Power need not be removed. Note: All indicators will continue to flash until the jumper is placed back into the 'NORM' position and no communication with sitePORTAL will be possible until this is done. This is to prevent the technician from inadvertently leaving the jumper in the 'RESET' position.

If the Reset NVR switch (SW1-4) on the sitePORTAL Series II and sitePORTAL Lite products is in the 'reset' position (ON) during power up, sitePORTAL will reset all variables to that of the factory settings. All indicators (Green, Amber & Red) will flash together indicating that the variables have been reset. This event is recorded in the event log. The switch must be placed into the 'OFF' position to continue and restore normal operation. Power need not be removed. Note: All indicators will continue to flash until the switch is placed back into the 'OFF' position and no communication with sitePORTAL will be possible until this is done. This is to prevent the technician from inadvertently leaving the switch in the 'ON' position.

Normal Operating - Green Led Flashing

The green indicator flashes at approximately one second intervals showing that the sitePORTAL is executing the firmware normally.

Normal Operating – Red Led Flashing

Whenever an alarm condition exists then the red indicator will flash until all alarm conditions are cleared. Note that the led will still flash after an acknowledgement from the NOCC USC. If the channel in alarm condition subsequently ceases then and if there are no other alarms current, the led will be extinguished.

Normal Operating – Steady Amber Led

The amber indicator is illuminated whenever a session is active, i.e. a device is logged into sitePORTAL.

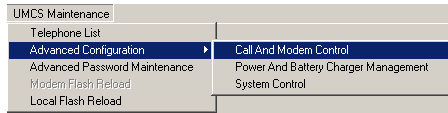
Normal Operating – Amber Led Flashing Slow

Whenever one of the pass-through modes has been 'primed' and the application has not yet called back, then the amber indicator will flash slowly.

Normal Operating – Amber Led Flashing Fast

Whenever one of the pass-through modes has been selected and the application has called back and the mode is active, then the amber indicator will flash at a fast rate until the session is terminated.

Advanced Programming



There are three windows that provide access to the advanced system parameters area.

All three items are disabled in the disconnected mode. The menu items are available when in any of the other modes (off-line, local or remote). Access to the advanced section is via advanced password. UMCS prompts to enter the advanced password as shown in Figure AD-1. When sitePORTAL and UMCS is first shipped the password is the same as the system password.

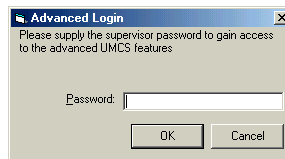


Figure AD-1 Advanced login

Call & Modem Control

The Call and Modem Control window provides access to the parameters that sitePORTAL will use when handling a login sequence, how sitePORTAL will monitor the peripheral pass through mode and control the site modem.

Figure AD-2, below, shows a typical call and modem control window.

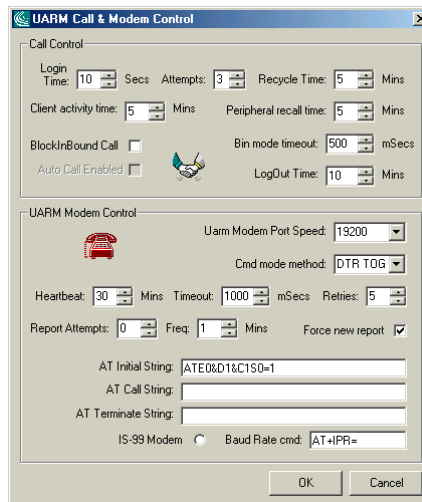


Figure AD-2 Call and modem control window

Call Control Parameters

LoginTime

This is the time (expressed in seconds) that the sitePORTAL module will use to ensure a secure login (session time). If a successful login is not obtained within this time, sitePORTAL will 'hang up' the modem and revert to monitor mode, blocking further login attempts for the time set via the Recycle control. Any calls received during this time will simply go unanswered by sitePORTAL.

Attempts

This is the number of login attempts that may be made per 'session'. A session is the time from answering an incoming call until the call is terminated by either the sitePORTAL or UMCS. If this count is exceeded, sitePORTAL will 'hang up' the modem and revert to monitor mode, blocking further login attempts for the time set via the Recycle control.

Recycle Time

This is the time, expressed in minutes, that the sitePORTAL will block further login attempts whenever the Login time has expired or the Attempt count has been exceeded.

Client Activity Time

This is the time, expressed in minutes that the sitePORTAL module will use to detect no activity between clients in Peripheral Access Mode. If no activity is detected for the period exceeding this setting, then the sitePORTAL module will hang the modem up and return to Monitor Mode.

Peripheral Recall Time

This is the time, expressed in minutes, that the sitePORTAL module will wait before returning to Monitor Mode when no application has called back after a request to enter Peripheral Access Mode.

BlockInboundCall

This is a flag. The sitePORTAL module may be set to block all inbound calls until it has successfully completed an alarm report call to the NOCC. In bound calls are blocked whenever this box is clicked.

AutoCallEnabled

This is a flag that enables Automatic the Automatic Callback function. Your phone number must be included in the sitePORTAL Callback Numbers list stored in the sitePORTAL Lite, otherwise sitePORTAL will be able to call you back.

This feature is currently not implemented and is grayed out in the window.

Bin mode timeout

This is the time that sitePORTAL will wait if there is an interruption during a binary packet transfer between UMCS and sitePORTAL before dumping the entire packet. This prevents an interrupted packet from being left in the command buffer. The buffer is cleared if this timer expires.

LogOut Time

This is the time that sitePORTAL will wait after a session has been initiated on the local or modem ports and no activity has been detected before logging the user out. If the session was initiated via the modem port the modem is 'hung up' and the sitePORTAL returns to monitoring mode. If the session was initiated on the local port the user is logged out and the sitePORTAL returns to monitoring mode.

sitePORTAL Modem Control Parameters

sitePORTAL Modem Port Speed

This is the common baud rate that sitePORTAL will use, when communicating with the user supplied modem. sitePORTAL supports the following baud rates: 2400, 4800, 9600, 19200, 28800, 38400, 57600, 76800 and 115,200 baud. For further information on the impact of this setting, refer to the section below on Peripheral equipment & Modems.

Cmd mode method

UMCS also contains a field called Cmd mode method. To cater for modems that may use another command set, sitePORTAL must be aware of which method the modem will use. The Command mode method box has two choices (DTR TOG and ESC SEQ). These choices are explained in further detail below in the explanation for Command mode method.

Note that if you wish to use the escape sequence method then you must ensure that the S2 register contains a valid escape character (many modems default this to decimal 43 which is the ascii character +). sitePORTAL will use the character that has been programmed into S-register 2.

sitePORTAL relies on the modems DCD 'indicator' and the '&C1' command which tells the modem to output DCD true should be included in this field. Modems which cannot or do not signal DCD in this way are not compatible with the sitePORTAL product.

This string is also pre-initialized with what are considered to be basic modem commands by the sitePORTAL whenever the NVR jumper is installed or via UMCS when resetting to factory defaults. i.e.

```
ATE0&D1&C1S0=1
```

(no echo, use DTR line to toggle modem into command mode & DCD true, auto answer after 1 ring)

If the modem you are using does not support these basic commands then it is highly likely it is not suitable for use in the alarm-reporting environment. If your modem supports the command but requires a different AT command then you should substitute it in the above string as the string is blindly outputted to the modem as sitePORTAL cannot check the validity of the string.

Heartbeat

This is the time in minutes (5 – 255) that sitePORTAL will send the 'AT' commands contain in the AT Initial string (initialization) to the external modem when the system is idle. The AT Heartbeat function is designed to accommodate the situation where the user removes the external modem without removing power from the sitePORTAL system (Normally sitePORTAL sends the AT Initial string after power up to detect the presence of the modem). If subsequently, a new modem is placed back into operation it is possible that the auto-baud

function (DTE) of the modem will not be satisfied. This is only an issue for incoming calls to sitePORTAL and does not effect an alarm report attempt (dial out). Consider; A number of modern modems do not have the ability to fix and store the DTE baud rate – but simply rely on the fact that the DTE will issue an AT command which is used to ‘auto-baud’ the DTE speed. This may be sufficient for the average PC and modem application but is not foolproof enough for a remote stand-alone application such as will be used with the sitePORTAL Lite. The sitePORTAL must answer an incoming call and would be prevented from doing so if the baud rate between the modem (DTE) and the sitePORTAL is not set correctly. The AT heartbeat function attempts to address this issue by providing a sequence which allows the modems ‘auto-baud’ function to be satisfied.

Timeout

This is the time in 100 millisecond intervals that sitePORTAL will wait after issuing an ‘AT’ modem command before it expects a response. If it does not receive a response and the timer times out, then sitePORTAL will attempt the command again by the number of times set in the Retries control.

Retries

This is the number of times the sitePORTAL will retry the modem command before terminating the modem dialog and deeming that there is no modem present.

Report Attempts

This is the number of times the sitePORTAL will attempt an alarm report to the NOCC before giving up this report. The Report Attempts may be set between 0 and 255. When the Report Attempts is set to 0, the sitePORTAL will continuously attempt to call the NOCC when there are unacknowledged alarms present. The time between attempts is set via the Freq control.

Freq (or interval)

This is the time between alarm report attempts (interval) when sitePORTAL has not successfully completed an alarm report attempt.

Force new report

Normally sitePORTAL will queue any new (additional) alarm events when there are existing alarm events if a previous alarm report failed. The time sitePORTAL waits queuing the alarms is taken from the Freq control mentioned above. If the Force new report button is clicked, sitePORTAL will call out and attempt an alarm report irrespective of the Alarm Attempt and Alarm Frequency settings.

The Force New Report, Freq and Alarm Attempts controls allow the user to balance the alarm load to the NOCC. This is particularly important when there are many sitePORTALS in the field.

AT Initial string



This is a mandatory user supplied initialization string.

To allow sitePORTAL to work with the greatest range of cellular and 'landline' modems, the user must specify a number of basic modem operating configurations within this field. At least one method of commanding the modem into command from data mode must be supplied. The choices are DTR Toggle or escape sequences (+++). The preferred mode is DTR toggle.

The DTR toggle to command mode is usually effected by the '&D1' (AT) command. If your modem uses some other 'AT' command to achieve this then you should enter that command in the AT Initial string box.

AT Call string

This is an optional user supplied string that will be sent to the modem prior to an alarm call out by the sitePORTAL. If the modem you will use with sitePORTAL requires some special sequence for dialing then it should be supplied here. If your modem or network does not require this then leave this field blank. Note: if the command is an AT style command then you must supply the whole command, i.e. Atxyz.

AT Terminate string

This is an optional user supplied string that will be sent to the modem after hanging up the modem. Some modems operating in the cellular environment require sequences to be sent to the network (IWF) at the call termination.

If the modem you will use or your network requires some special sequence after call termination then it should be supplied here. If your modem or network does not require this then leave this field blank. Note: if the command is an AT style command then you must supply the whole command, i.e. Atxyz.

IS-99 Modem / Baud Rate cmd

When the peripheral equipment baud rates do not match that of the common modem baud rate then sitePORTAL offers a mechanism where this can be accommodated. For instance, some of the peripheral equipment that sitePORTAL will interface with may not operate at the same speed of that which it is desired. For example if one piece of equipment can operate at only 2400 baud then all peripheral equipment would have to be operated at 2400 baud. In addition the common sitePORTAL modem speed would also have to be set to 2400baud. This obviously penalizes all peripherals and sitePORTAL by reducing the overall operating speed of the serial links.

This is the command that sitePORTAL will use when setting the modem DTE speed when connecting to peripherals in pass-through mode. If the modem can handle dynamic auto-baud, then leave the check button 'unchecked'. The Baud Rate cmd field will be grayed out and sitePORTAL will use the simple 'AT' method of changing the baud rate. This is the default state.

If the modem is an IS-99 compatible and requires a special command then you should check the IS-99 button and specify the command in the Baud Rate cmd field, e.g. AT+IPR=. Do not add the baud rate, as this may be different for each peripheral port. The actual baud rate is set in the peripheral window. Note: if the command is an AT style command then you must supply the whole command, i.e. AT+IPR=.

Peripheral equipment & Modems

This section deals with the facilities that are incorporated in the sitePORTAL product to handle issues that arise when connecting to various 'land-line' and cellular modem equipment and the peripheral pass-through mode of sitePORTAL Lite.

Selecting a Modem

A modem must have a minimum feature set for use with sitePORTAL Lite. The modem must be able to support the following commands:

- ATS0=x Commands – sitePORTAL uses the S0 register (rings until answer)
- ATE0 Command – sitePORTAL disables command echo from the modem
- AT&D1 Command – sitePORTAL uses this to transition the modem from data to command mode
- AT&C1 Command – sitePORTAL uses this to ensure that DCD from the modem follows the connected DCD

Peripheral Equipment

sitePORTAL does not incorporate a UART device for each of the peripheral ports. Instead sitePORTAL multiplexes the peripheral ports to the modem interface. This is done to ensure that any buffering issues associate with UART buffering, do not interfere with the application software that must access the peripheral devices in pass-through mode. A simple graphic of this is shown below in Figure AD-3.

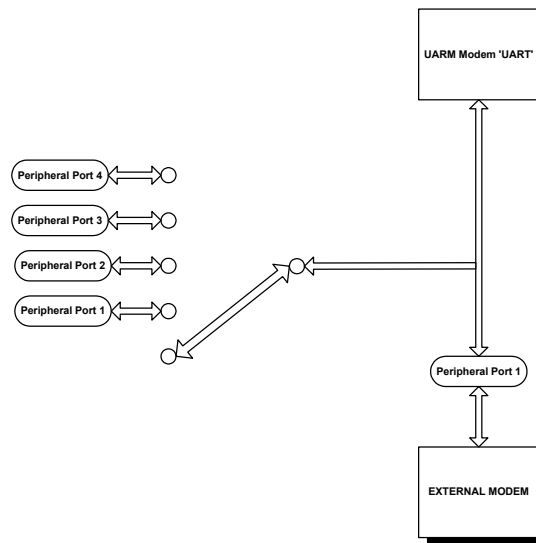


Figure AD-3 Block diagram of peripheral ports and modem port relationship

When sitePORTAL is 'switched' into pass-through mode, the sitePORTAL processor no longer controls the modem via the modem port. The modem port itself is routed directly to the peripheral port selected prior to entering pass-through mode. (sitePORTAL does however continue to monitor for activity of the receive data line).

This is shown below in Figure AD-4

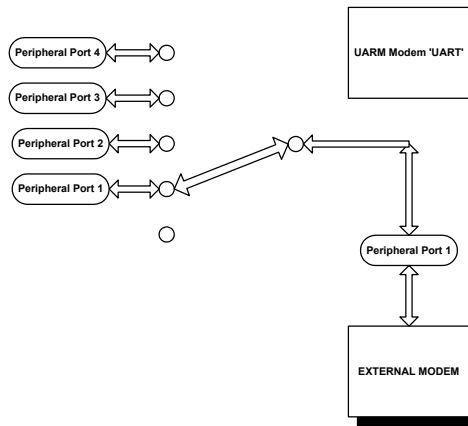


Figure AD-4 Block diagram of peripheral port 1 in pass-through mode

In some installations it may not be possible to program the peripheral equipment to operate at a desired baud rate. For example, if one of the peripherals can only operate at 4800 baud while all others can be operated at any baud rate, then the user has no alternative but to choose 4800 as the baud rate for all peripheral equipment including the common modem speed. This may cause timing problems with the peripheral equipment application software and will impact the overall operation of sitePORTAL Lite.

A mechanism has been developed to allow each of the peripherals to operate on a different modem baud rate to that chosen by the user in the Call & Modem Control window. The mechanism takes advantage of the fact that the DTE speed of the modem can be controlled or changed dynamically. Many 'land line' modems auto-baud dynamically – that is, while in command mode, new 'AT' commands may be sent to the modem at a new baud rate - the auto-baud facility allows the modem to detect the change in baud rate and adjust its baud rate automatically. sitePORTAL can control these modems simply by changing the sitePORTAL modem 'UART' board rate to a new value and issuing the 'AT' command to the modem. The modem DTE speed is now at the new baud rate.

When using cellular modems that adhere to the IS-99 specification, the modem has to be sent a specific command to change the baud rate, e.g AT+IPR=9600.

When a peripheral pass through mode is selected and UMCS has logged out of the session, sitePORTAL sets a flag indicating that the next modem connection is a pass through connection. If sitePORTAL is operating with at AT command set based modem (i.e. non IS-99) then sitePORTAL now sets the new baud rate for the port concerned by ensuring the modem is in command mode, changing the sitePORTAL UART baud rate for the modem port and issuing a simple AT to the modem thus setting a new DTE speed. When the peripheral equipments application software calls back and the port is connected to the modem, then the DTE speed will match that set in the peripheral setup window (shown in Figure AD-5).

If sitePORTAL is operating with an IS-99 command set based cellular modem, then sitePORTAL now sets the new baud rate for the port concerned by ensuring the modem is in command mode, issuing the command that you enter in this field, i.e. AT+IPR= and copying the baud rate chosen in the peripheral setup window (Figure AD-5) for the port chosen by the user when the peripheral pass through button was clicked. For example if 9600 was the chosen baud rate for port 'n' then AT+IPR=9600 is sent to the modem. sitePORTAL now changes its modem port UART speed to 9600 to match the new baud rate.

When the peripheral equipments application software calls back and the port is connected to the modem, then the DTE speed will match that set in the peripheral setup window.

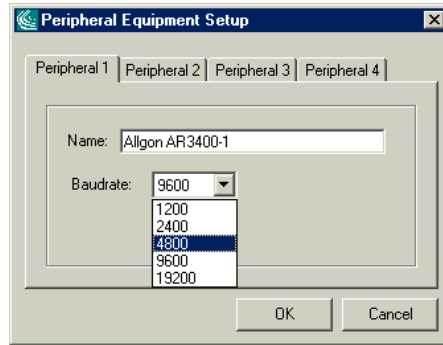


Figure AD-5 Call and modem control window

When the pass through session is completed and sitePORTAL returns to normal alarm monitoring mode sitePORTAL will reverse the baud rate process and set the modem and modem port back to that chosen as the common modem baud rate as chosen in the Call and Modem Control Window (shown in Figure AD-2).