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Firmware Upgrade Utility

for Compatible WTI Devices

User's Guide

wti western™ telematic inc.

1. Introduction

The WTI Firmware Upgrade Utility allows you to manage firmware updates for multiple WTI units from a single interface. The Firmware Upgrade Utility eliminates the need to individually access WTI units in order to install upgrades at each individual unit.

2. Installation

To install the Firmware Update Utility, proceed as follows:

1. **Obtain the Firmware Upgrade Utility Zip File:** A zip file that contains the program files and other documentation can be downloaded from WTI's FTP server, located at:

    ftp://wtiftp.wti.com/pub/TechSupport/Firmware/Upgrade_Utility/

2. **Extract Program Files:** Use your zip application to extract the installation file from the zip file downloaded in Step 1 above.

3. **Start the Installer Program:** Click on the icon for the Firmware Upgrade Utility installation file. During installation, the installer program will offer the option to either install the program in a default subdirectory of your Program Files folder, or install the program to a directory of your choice.

    Notes:
    - *The "Disk Cost" button can be used to install the program onto other available network drives and will also list the amount of free space available on those drives and the amount of space that will be required by the installed program.*

    - *The Firmware Upgrade Utility requires .NET Framework, Version 3.5. If your system does not include .NET Framework, Version 3.5, the Firmware Upgrade Utility installer will prompt you to download the Framework program.*

    - *The Firmware Upgrade Utility will not function with other versions of .NET Framework; your system must include Version 3.5 in order for the installation to proceed.*

    - *If you are prompted to install .NET Framework, Ver 3.5, you can either click on the "Yes" button to go directly to the download page, or exit from the Firmware Upgrade Utility installer program and obtain the .NET Framework program elsewhere.*

    In addtion to allowing you to select a directory location for the Firmware Upgrade Utility, the installer program will also prompt you to define user access rights for the program:

    a) **Everyone:** If this option is selected, the Firmware Upgrade Utility will be available to everyone who uses the computer where the program is installed.

    b) **Just Me:** If this option is selected, then only the user/account that installs the program will be allowed to use the Firmware Upgrade Utility (default.)

4. When the installation is complete, the installer program will display a message that indicates a successful installation.

3. Operation

After the installation is complete, you can then use the Firmware Update Utility to download and install updates for compatible WTI units, select basic configuration parameters for WTI devices, and control power switching and reboot functions on WTI Switched PDU products.

3.1. Updating Firmware:

To discover and update applicable WTI units, proceed as follows:

1. **Start the Firmware Update Utility:** Double click the WTI Firmware Update Utility icon.

2. **Options:** The Options menu provides access to functions that are used to retrieve the firmware update files, and allows access to two submenus:

   a) **Specifiy Firmware Location:** This item is used to either retrieve the firmware update file from the WTI server, or to load the firmware update from a local folder on your system:

      i. **From www.wti.com:** Retrieves the firmware update file from the WTI server.

      ii. **From Local Folder:** Specifies a folder on your local system that contains the firmware update file. Note that when the "Browse" button can also be used to select the appropriate folder on your system.

   b) **SSH Port:** Defines the SSH Port number that will be used when communicating with WTI devices. Note that the SSH Port Number entered here must match the SSH Port Number that has been assigned to applicable WTI devices.

3. **Upgrade:** This item is used to search for WTI units that will be upgraded, select desired units and initiate the upgrade process. The Upgrade option can be used to "Discover" a unit at a specific IP address, search a range of IP addresses or to load IP addresses for previously discovered units from a text file. All discovered units will be added to the "Confirm Units to Upgrade" menu.

   Note: *In order for the Firmware Update Utility to find the specified WTI units, SSH must first be enabled at each target unit.*

   a) **Enter IP Address:** This option is used to enter the IP address for a WTI device at a specific, known IP address. The "Enter IP Address" submenu offers the following options:

      i. **Unit IP:** This item allows you to key in the IP address for a specific WTI device that you wish to upgrade.

      ii. **WTI Device Manager:** After the Unit IP has been entered, this item can be used to upgrade all WTI devices that are currently being managed by the WTI Device Manager on the device at the target IP address.

   Note: *In order to use the WTI Device Manager Option, HTTPS communication must be enabled on all WTI units that will receive the upgrade.*

    iii.   **Username:** The username for the account that will be used to access command functions on the specified unit(s). Note that this username/ account must be previously defined on the target unit(s).

    iv.   **Password:** The password for the account that will be used to access command functions on the specified unit(s).

    v.   **Slipstream Only Upgrade:** Select this option if you are only updating the WTI Device Manager (DMU) firmware.

b) **Discover by Range:** This option is used to specify a range of IP address, that the Firmware Upgrade Utility will then search for applicable WTI devices. The "Discover by Range" submenu offers the following options:

    i.   **Start IP:** The beginning of the IP address range to be searched.

    ii.   **End IP:** The end of the IP address range to be searched.

    iii.   **Username:** The username for the account that will be used to access command functions on the specified unit(s). Note that this username/ account must be previously defined on the target unit(s).

    iv.   **Password:** The password for the account that will be used to access command functions on the specified unit(s).

    v.   **Slipstream Only Upgrade:** Select this option if you are only updating the WTI Device Manager (DMU) firmware.

c) **Import IP List:** This option is used to load IP addresses for previously discovered units from a text file that was created using the "Export to File" Option. The Import IP List submenu offers the following options:

    i.   **Import File:** Import File: This item is used to enter the filepath and filename for the IP List file. Note that the "Browse" button can also be used to search for the appropriate file/folder on your system.

    ii.   **Username:** The username for the account that will be used to access command functions on the specified unit(s). Note that this username/ account must be previously defined on the target unit(s).

    iii.   **Password:** The password for the account that will be used to access command functions on the specified unit(s).

    iv.   **Slipstream Only Upgrade:** Select this option if you are only updating the WTI Device Manager (DMU) firmware.

After using one of the options described above to specify the desired WTI units, click on the "Continue" button. The program will pause briefly while searching for the units and then return the "Confirm Units to Upgrade" menu.

4. **Confirming Units to Upgrade:** After the Firmware Upgrade Utility discovers the specified WTI units, the "Confirm Units to Upgade" menu will be displayed. This screen lists the following information for each discovered unit:

- IP Address
- Site I.D. Message (if defined)
- Unit Type (Model Number)
- Phone Number
- Current Version (Currently Installed Firmware Version)
- Available Version (Firmware Version of Latest Upgrade)

The Confirm Units to Upgrade menu will also offer the following options:

a) **Upgrade Selected Units:** Check the box next to each unit that you wish to update, and then click the "Upgrade Units" button.

Note: *The upgrade procedure will require approximately fifteen minutes for each selected unit. Do not power-cycle the selected units while the upgrade procedure is in process.*

b) **Save Unit List:** If you want to save the list of units currently displayed by the "Confirm Units to Upgrade" screen, click on the "Export to File" button. The Firmware Upgrade Utility will prompt you to enter a file name and location, and then save the currently displayed list to a text file.

Note: *When the list of units is exported, this allows you to use the "Import File" option to quickly load the same list of units for future upgrade operations.*

c) **Successful Upgrade:** When each selected upgrade is complete, the "Confirm Units to Upgrade" screen will display a message that indicates if the upgrade was successful.

3.2. Changing Configuration Parameters

To define basic configuration parameters on discovered WTI units, proceed as follows:

1. **Discover Units to be Configured:** The "Configure Units" item is used to search for WTI units that will be configured, select desired units and initiate the configuration process. The Configuration Parameters option can be used to search a range of IP addresses or to load IP addresses for previously discovered units from a text file. All discovered units will be added to the "Confirm Units to Configure" menu.

   Note: *In order for the Firmware Update Utility to find the specified WTI units, SSH must first be enabled at each target unit.*

   a) **Discover by Range:** This option is used to specify a range of IP address, that the Firmware Upgrade Utility will then search for applicable WTI devices. The "Discover by Range" submenu offers the following options:

   i. **Start IP:** The beginning of the IP address range to be searched.

   ii. **End IP:** The end of the IP address range to be searched.

   iii. **Username:** The username for the account that will be used to access command functions on the specified unit(s). Note that this username/account must be previously defined on the target unit(s).

   iv. **Password:** The password for the account that will be used to access command functions on the specified unit(s).

   v. **Callback Number:** If desired, this item can be used to define the callback number for the acount name entered at the Username prompt above.

   vi. **Temperature Calibration:** If desired, this item can be used to calibrate the temperature reading for the WTI product as described in the WTI user's guide.

   vii. **XML File:** This item can be used to upload previously saved parameters to the WTI device. WTI devices offer the option to save configuration parameters to an XML format file. If desired, this saved parameters file can then be uploaded to other WTI devices that will be similiarly configured. Note that the XML File item offers the option to exclude System Parameters, Port Parameters and/or Plug Parameters from configuration.

   After entering the desired parameters, click on the Continue button to find WTI units within the defined IP range. After a brief pause while the Firmware Upgrade Utility searches for applicable WTI units, the Confirm Units to Configure screen will be displayed, listing the discovered units and offering the option to select desired units to be configured or save the list of discovered units via the "Export to File" option.

   ### Notes:
   - *To configure a unit listed on the Confirm Units to Configure screen, make certain that the box next to the listing for the desired unit(s) is checked.*
   - *When the list of discovered units is saved via the Export to File Option, this allows the list to be quickly reloaded for future firmware upgrades, configuration activities and/or power switching activities.*
   - *In order to reduce the risk of corrupting unit configuration, it is recommended to only use the configuration function to configure one type/model of WTI unit at a time.*

b) **Import IP List:** This option is used to load IP addresses for previously discovered units from a text file that was created using the "Export to File" Option. The Import IP List submenu offers the following options:

   i. **Import File:** Import File: This item is used to enter the filepath and filename for the IP List file. Note that the "Browse" button can also be used to search for the appropriate file/folder on your system.

   ii. **Username:** The username for the account that will be used to access command functions on the specified unit(s). Note that this username/ account must be previously defined on the target unit(s).

   iii. **Password:** The password for the account that will be used to access command functions on the specified unit(s).

   v. **Callback Number:** If desired, this item can be used to define the callback number for the acount name entered at the Username prompt above.

   vi. **Temperature Calibration:** If desired, this item can be used to calibrate the temperature reading for the WTI product as described in the WTI user's guide.

   vii. **XML File:** This item can be used to upload previously saved parameters to the WTI device. WTI devices offer the option to save configuration parameters to an XML format file. If desired, this saved parameters file can then be uploaded to other WTI devices that will be similiarly configured. Note that the XML File item offers the option to exclude System Parameters, Port Parameters and/or Plug Parameters from configuration.

After entering the desired parameters, click on the Continue button to find the WTI units indicated by the IP List file. After a brief pause while the Firmware Upgrade Utility retrieves information from the listed units, the Confirm Units to Configure screen will be displayed, displaying the units indicated in the IP List File and offering the option to select desired units to be configured or save the list of discovered units via the "Export to File" option.

Notes:

- *To configure a unit listed on the Confirm Units to Configure screen, make certain that the box next to the listing for the desired unit(s) is checked.*

- *When the list of discovered units is saved via the Export to File Option, this allows the list to be quickly reloaded for future firmware upgrades, configuration activities and/or power switching activities.*

- *In order to reduce the risk of corrupting unit configuration, it is recommended to only use the configuration option to configure one type/model of WTI unit at a time.*

3.3. Power Control

To use the Firmware Upgrade Utility to control power switching and reboot functions on a WTI switched PDU or Hybrid Console + Power product, proceed as follows:

1. **Discover Units to Control:** The "Power Control" item is used to search for WTI units that will be controlled, select desired units and select power switching options. The Power Control option can be used to search a range of IP addresses or to load IP addresses for previously discovered units from a text file. All discovered units will be added to the "Confirm Units to Control" menu.

   Note: *In order for the Firmware Update Utility to find the specified WTI units, SSH must first be enabled at each target unit.*

   a) **Discover by Range:** This option is used to specify a range of IP address, that the Firmware Upgrade Utility will then search for applicable WTI devices. The "Discover by Range" submenu offers the following options:

      i. **Start IP:** The beginning of the IP address range to be searched.

      ii. **End IP:** The end of the IP address range to be searched.

      iii. **Username:** The username for the account that will be used to access command functions on the specified unit(s). Note that this username/ account must be previously defined on the target unit(s).

      iv. **Password:** The password for the account that will be used to access command functions on the specified unit(s).

      v. **Controllable Plugs:** This item lists plugs one through 16, and provides a dropdown menu for each plug that can be used to select "No Action," "On," "Off," or "Reboot" actions for each plug. Note that in addition to the individual plug action dropdown menus, there is also a dropdown menu that can be used to apply switching and reboot actions to all plugs.

After entering the power switching and/or reboot actions, click on the Continue button to find the WTI units indicated by the IP File list. After a brief pause while the Firmware Upgrade Utility searches for applicable WTI units, the Confirm Units to Control screen will be displayed, listing the discovered units and offering the option to select desired units to be switched or save the list of discovered units via the "Export to File" option.

Notes:

- *To switch or reboot a unit listed on the Confirm Units to Conrol screen, make certain that the box next to the listing for the desired unit(s) is checked.*

- *When the list of discovered units is saved via the Export to File Option, this allows the list to be quickly reloaded for future firmware upgrades, configuration activities and/or power switching activities.*

b) **Import IP List:** This option is used to load IP addresses for previously discovered units from a text file that was created using the "Export to File" Option. The Import IP List submenu offers the following options:

  i. **Import File:** Import File: This item is used to enter the filepath and filename for the IP List file. Note that the "Browse" button can also be used to search for the appropriate file/folder on your system.

  ii. **Username:** The username for the account that will be used to access command functions on the specified unit(s). Note that this username/ account must be previously defined on the target unit(s).

  iii. **Password:** The password for the account that will be used to access command functions on the specified unit(s).

  v. **Controllable Plugs:** This item lists plugs one through 16, and provides a dropdown menu for each plug that can be used to select "No Action," "On," "Off," or "Reboot" actions for each plug. Note that in addition to the individual plug action dropdown menus, there is also a dropdown menu that can be used to apply switching and reboot actions to all plugs.

After entering the power switching and/or reboot actions, click on the Continue button to find the WTI units within the defined IP range. After a brief pause while the Firmware Upgrade Utility searches for applicable WTI units, the Confirm Units to Control screen will be displayed, listing the discovered units and offering the option to select desired units to be switched or save the list of discovered units via the "Export to File" option.

Notes:

- *To switch or reboot a unit listed on the Confirm Units to Control screen, make certain that the box next to the listing for the desired unit(s) is checked.*

- *When the list of discovered units is saved via the Export to File Option, this allows the list to be quickly reloaded for future firmware upgrades, configuration activities and/or power switching activities.*

Appendix A.   Customer Service

Customer Service hours are from 8:00 AM to 5:00 PM, PST, Monday through Friday. When calling, please be prepared to give the name and make of the unit, its serial number and a description of its symptoms. If the unit should need to be returned for factory repair it must be accompanied by a Return Authorization number from Customer Service.

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Local Phone: (949) 586-9950
Toll Free Service Line: 1-888-280-7227
Service Fax: (949) 583-9514

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