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This document uses Field Manager™ version v1.7.4.6 installed on Windows™ 7 for its examples. Some features may not be available on older Field Manager™ versions or may look different.

**Welcome**

Field Manager™ is a Windows™ based configuration utility for Eagle Research Corporation™ products. The software provides a straight-forward, easy to use group of functions to assist the user in setting up and configuring the field device, as well as viewing alarms, gathering data, reporting, charting, calibrating transducers and features a variety of other useful tools.

Field Manager™ is designed to run on Windows XP™, Windows Vista™, Windows 7™, Windows 8™, or Windows 10™ (x86 only) Operating system environment. Communication to the field device (RTU-remote terminal unit) is through an RS-232 serial cable, USB, TCP/IP or dial-up modem. A library of configuration databases simplifies the identification of standard device types in the field. The software matches the field RTU to a device type automatically and displays the appropriate set up forms for the user.

The Field Manager™ software provides application solutions for Natural Gas, Water/Waste Water, Environmental Protection, Steam, and Electrical applications. Industrial/Commercial Measurement, Pressure/Temperature Monitoring, Supervisory Control, and Odorization are a few of the systems that utilize the software.

Whether your concern is natural gas distribution, gas pipeline transmission or production, Field Manager™ provides the alarming, configuration, calibration, polling, charting, reporting, and exporting tool for field technicians. The Field Manager™ software can also be used in a READ ONLY mode.

- **Read/Write Field Manager™** – Supports the following functions: alarming, historical data polling, configuration, calibration, reporting, charting, editing labels and function keys, Virtual Keypad, Launch WinTX, Reset Audit Trail/Events, Receive Remote database, Send Profile Data, Send Remote Database and Setting the Remote Time.

- **Read Only Field Manager™** – Supports the following functions: alarming, historical data polling, reporting, charting, Receive Remote database. This version DOES NOT support configuration, calibration, editing labels and function keys, Virtual Keypad, Launch WinTX, Reset Audit Trail/Events, Send Profile Data, Send Remote Database, or Setting the Remote Time.
Using Field Manager™ with Vista™ Operating System

To use Field Manager™ on Vista™ Operating System you will first need to turn user access control off.

1. Go to Control Panel.

2. Double click on User Accounts.

3. Click on Turn User Account Control on or off.

4. Make sure the box is Unchecked.

5. After turning user access control off you will need to restart your computer for this to take effect.
Starting Field Manager™

1. Click on the Start button from the Windows taskbar.
2. Select Programs.
3. Select Field Manager™ program.
4. Select Field Manager™ application.

NOTE: YOU MAY ALSO CREATE A SHORTCUT TO FIELD MANAGER™ AND DOUBLE CLICK ON THE WINDOWS™ DESKTOP FIELD MANAGER™ ICO

5. The Enter Password box appears if a Launch Password is configured for Field Manager™. See the Security/Config Button for configuring a launch password for Field Manager™.

   • Enter the password in the Launch Password field.
   • Click OK to start Field Manager™ or Cancel to abort.

6. The Field Manager™ user interface appears

NOTE: SOME OF THE BUTTONS ARE DISABLED AND WILL ONLY BE ENABLED AFTER CONNECTING TO THE REMOTE UNIT.

   • The window title bar shows the Field Manager™ version.
   • Click the Connect button to establish communications with the remote unit and automatically identify the Site ID and Unit Type. The button will change to Disconnect upon successful communications.
   • Click the View/Config button to select and view Edit Form pages (tabs) information for a remote unit.
   • Click the Reports button to select and generate reports for the remote unit.
• Click the **Quick Charts** button to select and generate canned graphs for a remote unit. The user may select 24 Hour, 7 Day, or 31 Day charting.

• Click the **Tools** button to execute other utilities such as **Edit Labels/Function Keys**, **Change Site ID**, **Virtual Keypad**, **Launch WinTx**, **View Calibration Log**, **Edit Station Name**, **Reset Audit Trail/Event**, **Export Station(s)**, **Clear Calibration Reports**, **Send Remote dBase**, **Receive Firmware Version**, **Send Profile Data**, **Send Remote dBase**, **Set RTU Time**, **Audit Trail/Event Viewer**, **Import Station(s)**, **Edit RTU Voice Call List**, **Database Folder**, **Edit Station List**, **Multi-Copy Config Files**, **Units Changer**, **Configuration Item List**, **EE-PROM/Config Editor**, **Change Baud Rate**, and **Change Config Type**.

• Click the **Security / Config** button to apply a **Launch Password**, **Remote Access Password**, **Time Correction**, **Audit Trail/Events** and select a Default Modem (TAPI).

• Click the **Help/About** button for information on the Field Manager™ application and Eagle Research Corporations contact information.

• Click the **Exit** button to exit the Field Manager™ application.

### Field Manager™ User Interface

1. When connected to a remote unit, the window title bar shows the **Site ID**, **station name**, and the **unit type** in brackets. Click the **Disconnect** button to disconnect from the remote unit. The button will change to **Connect**. Click the **Connect** button to establish communications with the remote unit and automatically identify the Site ID and Unit Type.

2. Click the **Alarms** button to receive alarm information from the remote unit. Will also receive audit trail information if the **Enable Audit Trail/Events upload during poll** flag is set using the **Security/Config** button. A blinking Alarms button indicates new alarms.

3. Click the **Collect History** button to receive historical data, alarms, and Edit Form pages (tabs) information from the remote unit. Will also receive audit trail information if the **Enable Audit Trail/Events upload during poll** flag is set using the **Security/Config** button.

4. Click the **View/Config** button to receive Edit Form pages (tabs) information from the remote unit. The Edit Form pages (tabs) can then be used to configure the remote unit. Will also receive audit trail information if the **Enable Audit Trail/Events upload during poll** flag is set using the **Security/Config** button.
5. Click the **Calibrate** button to calibrate field transmitters/transducers connected to the remote unit. A Wizard steps you through the calibration process.

6. Click the **Reports** button to generate a report using the data collected from the remote unit.

7. Click the **Quick Charts** button to generate canned graphs for the station. The user may select 24 Hour, 7 Day, or 31 Day charting.

8. Click the **Circular Charts** button to generate a circular chart for the station. Note that Circular Charts is only available in Field Manager Plus™.

9. Click the **Tools** button to execute other utilities such as **Edit Labels/Function Keys**, **Change Site ID**, **Virtual Keypad**, **Launch WinTx**, **View Calibration Log**, **Edit Station Name**, **Reset Audit Trail/Event**, **Export Station(s)**, **Clear Calibration Reports**, **Receive Remote dBase**, **Receive Firmware Version**, **Send Profile Data**, **Send Remote dBase**, **Set RTU Time**, **Audit Trail/Event Viewer**, **Import Station(s)**, **Edit RTU Voice Call List**, **Database Folder**, **Edit Station List**, **Multi-Copy Config Files**, **Units Changer**, **Configuration Item List**, **EE-PROM/Config Editor**, **Change Baud Rate**, and **Change Config Type**.

10. Click the **Security / Config** button to apply a **Field Manager™ Launch Password**, **Remote Access Password**, **Calibration Password**, **Time Correction**, **Enable Audit Trail/Events upload during Poll**, **Set Default Poll Number Config**, **Default Modem (TAPI)**, and **select a Enable Modbus Switch**.

11. Click the **Help** button for information on the Field Manager™ application and Eagle Research Corporation Contact information.

12. Click the **Exit** button to exit the Field Manager™ application.

**Shutting Down Field Manager™**

The Field Manager™ User Interface can be shut down by using one of the following methods:

- Click the **Exit** button from the Field Manager™ User Interface window.

- Click the **X** button located in the upper right hand corner of the Field Manager™ User Interface.

- Click on the Field Manager™ Yokogawa logo in the upper left hand corner of the Field Manager™ User Interface and select **Close** from the pop-up menu.

1. Press **Alt F4** simultaneously from the computer keyboard.
Connect Button

The Connect button establishes communications with the unit and identifies the Site ID and Unit Type. This information along with the station name is displayed in the window title.

To connect to the unit:

1. Click the Connect button icon from the Field Manager™ User interface.

2. The Connect to Remote window appears.

3. Make the necessary changes and click the OK button to establish communications to the remote.

4. The Identify Remote box appears briefly.

5. The Site ID 1 window appears when connecting to a remote unit with Site ID 1 (factory default). Click Yes to change the Site ID. Click No to connect to the remote unit without changing the Site ID.

6. If you select Yes in step 5 above, the Change RTU Site ID window appears.
7. The current site ID is shown in the **Current Site ID** field. Enter or select the desired Site ID in the **Enter the New RTU Site ID** field and click **OK** to send the change to the remote unit. Click **Cancel** to abort the changed Site ID process. The acceptable Site ID range is between 2 and 59,999 inclusive.

8. The **Edit Station Information** box appears if you are connecting to the station for the first time. Enter the Station Name/Description and Phone Number, if applicable, and click **OK**.

![Edit Station Information](image1)

9. The **Date & Time Synchronization** window will appear if the remote unit's time differs from the specified time zone settings by more than 60 seconds.

![Date & Time Synchronization](image2)

10. Click on the **Change Time Zone** button to choose a different time than specified in the Date & Time Synchronization window.

![Change Time Zone](image3)

11. Click on the drop down box to choose a specific time zone. Click on the box to enable/disable automatically adjusting for Eastern Daylight Time.

12. Click **OK** to save the Time Zone settings.

13. Click **Yes** to correct the remote's time for the Time Zone selected or click **No** to leave the remote time as is.

14. The **Enter Station Name** box appears. This enables a station name to be programed into the remote

![Enter Station Name](image4)
15. If connecting to a unit with a master database that has not been loaded into Field Manager™ then the following box will appear. Take note of the unit type mentioned in the message. Call Yokogawa, (800) 524-7378, and ask for technical support. Technical support will ask for the unit type then email the zip file. Follow the instructions in the Import Station(s) section to load the master database.

![Error message](image1)

16. The Field Manager™ window title will display **Connected to Site XXXXX**. Where **XXXXX** is the Site ID or Remote Address of the field unit. You can then perform other functions such as Read Alarms, Collect Historical Data, View/Configure, Calibrate, Generate Reports, Chart Data, Use Other Tools/Utilities, and Setup Security and Configure Field Manager™.

![Field Manager window](image2)
Connect to Remote

The Connect to Remote window allows for configuring the Connection Type, Communications Port, Baud Rate, PhoneNumber, and IP Address of the remote unit.

- **Connection Type** – Select Direct for hard wire communications to the remote unit; such as serial or USB (Y-Flow™ units). Select Phone for telephone communications to the remote unit. The Phone Number field replaces the Baud Rate field when Phone is selected. Select TCP/IP for TCP/IP communications; such as Ethernet or Cell Phone. The Baud Rate field is replaced with IP Address: Port No field when TCP/IP is selected.

**NOTE:** IF USING USB A USB DRIVER WILL NEED TO BE LOADED.

- **Communications Port** – Direct only. This should always be set to the physical serial port of the computer, typically Port 1. Note that there is not a Port selection when Phone is selected. The software will automatically locate your modem. The Device Selection box appears if more than one modem is installed on the computer.

Select the modem to use for communications and click **OK**. Click **Cancel** to abort the modem selection and communications process. To change the modem to use for telephone communications, click the **Security/Config** button and select the modem from the **Default Modem (TAPI)** field.

- At the bottom of the Connect to Remote box is the **Select Site** button. By pressing this button a list of all existing stations within Field Manager™ will appear.
Select the remote station to communicate with and click OK. You may also double click the remote station. Click Cancel to abort selecting a remote unit. This can be helpful when connecting via TCP/IP or phone line so that the user does not have to manually type in the IP Address of phone number.

- **Baud Rate** - Direct only. This is the baud rate for direct hardwire communications to the remote. If the unit is equipped with an external display, plug the communication cable into the side of the box and view the baud rate on the display. The default baud rate(s) from the factory are 9600, 57600 and 115200 (E-Series™ Units). If directly connecting to the unit with USB a baud rate does not need to be specified. The modems will automatically handle the baud rate for phone communications.

- **Phone Number** – Phone only. Enter the telephone number of the remote device in this field. You can also select the station to connect with by pressing the Select Site button at the bottom.

**TCP/IP** – TCP/IP only. Enter the IP Address of the remote device you wish to communicate to. You can also select the station to connect with by pressing the selection button to the right of the Phone Number field. The Select Remote Unit window appears.

### Disconnect Button

The Disconnect button terminates communications with the unit.

To disconnect from the unit:

1. Click the Disconnect button from the Field Manager™ User interface.
2. The Disconnected from Remote window appears briefly.

3. Note that some buttons are disabled. This is the same state as when the Field Manager™ software first starts.
Alarms Button

The Alarms button interrogates the remote unit and checks for active alarms. It will also receive audit trail information if the Enable Audit Trail/Events upload during poll flag is set using the Security/Config button. A blinking Alarms button indicates active alarms.

NOTE: YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.

To check for alarms in the unit:

1. Click the Alarms button from the Field Manager™ User interface.
2. The Receiving Alarm Information box appears.

3. The alarm window appears with the active alarms.

• Blinking Alarms button indicates new alarms.
• Red alarms are new unacknowledged alarms.
• Green alarms are acknowledged alarms that are still active in the remote unit.

4. Click the Acknowledge Alarms button to acknowledge the alarms. The alarms will be removed from this window when acknowledged and the alarm is no longer active in the remote unit. The alarms will change color from red to green when acknowledged and the alarm is still active in the remote unit.
**Collect History Button**

The **Collect History** button receives the historical data from the remote unit. It also receives the Edit Form pages (tab) configured for the remote unit and will receive audit trail information if the **Enable Audit Trail/Events upload during poll** flag is set using the **Security/Config** button.

**NOTE:** YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.

To collect History data from the unit:

1. Click the **Collect History** button from the Field Manager™ User interface.

2. The **Receiving History Data** box appears and the historical data stored.

3. The information on the Edit Form Pages (tabs) will also be received. The **Receiving Data** box appears when the Edit Form information is being received.

4. You can now generate a report for the remote unit. You can also configure the unit using the Edit Form pages (tabs).

   - Click the **Receive Page** button to receive the current information configured on the active page (tab) only.
   - Click the **Receive All Pages** button to receive the current information for all pages (tabs).
   - Click the **Send All Changes** button to send all changes to the remote unit when made. Note that the Send All Changes button will turn red when changes are made.
• Click the Cancel Changes button to cancel any changes made. Note that the Send All Changes button will change from red back to its original color.

• Click the Print button to send the information on the active Edit Form page (tab) only to the printer. Note that only the information that is viewed will be printed. Consider making the Field Manager™ window full screen before printing.

• Click the Auto Update button to continuously update the Edit Forms while connected to the unit. When Auto Update has been enabled the button will turn to Stop Update. Press the Stop Update button to disable Auto Update.

**View/Config Button**

The View/Config button can be used to receive and/or view information using the Edit Form Pages (tab) for the remote unit. It will also receive audit trail information if the Enable Audit Trail/Events upload during poll flag is set using the Security/Config button. When connected to the unit, information can be read allowing the user to configure typical parameters and send to the remote unit.

To view information stored in the remote unit or configure the remote unit:

1. Click the View/Config button from the Field Manager™ User interface.

2. The Select Remote Unit window appears if you are not connected to a remote unit.

3. Select the station to view/config and click OK. You may also double click the station. Click Cancel to abort.

4. The Receiving Data box appears if you are connected to the unit.
5. The Edit Form pages (tabs) window refreshes with current information.

- Click the **Receive Page** button to receive the current information configured on the active page (tab) only.

- Click the **Receive All Pages** button to receive the current information for all pages (tabs).

- Click the **Send All Changes** button to send all changes to the remote unit when made. Note that the Send All Changes button will turn red when changes are made.

- Click the **Cancel Changes** button to cancel any changes made. Note that the Send All Changes button will change from red back to its original color.

- Click the **Print** button to send the information on the active Edit Form page (tab) only to the printer. Note that only the information that is viewed will be printed. Consider making the Field Manager™ window full screen before printing.

- Click the **Auto Update** button to continuously update the Edit Forms while connected to the unit. When Auto Update has been enabled the button will turn to **Stop Update**. Press the Stop Update button to disable Auto Update.

**Calibrate Button**

The **Calibrate** button can be used to calibrate field transmitters/transducers such as differential pressure, pressure, and temperature. It uses a Wizard that will step you through the calibration process.

**NOTE: YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

To calibrate a field transmitter/transducer connected to the remote unit

1. Click the **Calibrate** button from the Field Manager™ User interface.
2. The **User Name Entry** box appears. Enter your user name and click **OK** to start the wizard or **Cancel** to abort starting the wizard.

### Multipoint Calibration

1. If you click **OK** at the User Name Entry box the Maintenance Mode Configuration window appears. Follow the instructions and click **OK**.

2. The Please Select Item for Validation, Calibration or Tools window appears. You may choose to perform a Validation or a Calibration at this time. Select the item for validation from the Validation Item field.
3. The wizard reads the predefined setup for the item to validate/calibrate from the RTU and displays the information on the screen. The **Press To Start** window appears. The title of the window shows the fixed values (DP, Pressure, Temperature, and flow rate) that the RTU will use for calculations while in the calibrations mode. The status area at the bottom of the window displays “Waiting For Response from Remote… Received OK!” as the wizard continuously reads information from the RTU.

- Click the **Low Validation Point** field to change the low validation point if necessary.
- Click the **High Validation Point** field to change the high validation point if necessary.
- Click the **Number of Validation Points** field to change the number of validation points.
- Click the **Barometric Pressure** field to enter the barometric pressure when validating a pressure transmitter.
- Click the **Pressure Mode (Cal Display Only)** field to view the pressure validation/calibration in Gauge or Absolute pressure.

4. Select the parameter to calibrate and click **Press To Start Calibration**.
5. The ‘take calibration point’ window appears. The first item to calibrate is the Zero Adjust. Set the applied reference to the zero adjust value then click on the **Zero Adjust** button. Note that the item being calibrated will be highlighted yellow along the top of the window.

![Take Calibration Point Window]

6. The take calibration point window appears. Click on the **Take Point** button then click on the **Accept Point** button; hitting enter will work the same as clicking on each button.

**NOTE:** IF THE USER WISHES TO CHANGE THE APPLIED REFERENCE VALUE THEN CLICK ON THE **ADJUST APPLIED VALUE** BUTTON AND TYPE IN THE NEW VALUE. THIS CAN BE DONE WHILE TAKING EACH POINT.

7. The next value to take is Span. Adjust the applied reference to the Span value. Once the reference has been applied click on the **Span Adjust** button. Click on the **Take Point** button then click on the **Accept Point** button.

![Take Calibration Point Window]

8. Continue adjusting the applied reference and taking readings according to the **Applied Reference** value at each point until all values have been taken.

![Take Calibration Point Window]
9. Once all values have been taken click on the **Save Calibration** button. Once these values have been saved in the unit the window will go back to the main calibration view.

**Reports Button**

The **Reports** button can be used to generate reports for the data collected from the remote unit. It is a read-only wizard style access to data. A variety of standard gas-usage flow reports are provided.

To generate a report for a remote unit:

1. Click the **Reports** button from the Field Manager™ User interface.

2. The **Select Remote Unit** window appears if you are not connected to the remote unit. Select the station you want to generate a report for and click **OK**. You may also double click the station. Click **Cancel** to abort the reporting process.

3. The **Report Generator** window appears.

4. Choose the report to generate. The **Choose Report Template** window shows a list of the reports in the system.
5. Set the report interval. Click on the **Last Day, Current Month, or Prev. Month** buttons to choose a predefined setting or click on the **Start Time** or **Stop Time** field and enter in the start time or stop time. The Input History Time and Date window appears.

![Input History Time and Date](image)

6. Click in the date field to set the start date. A calendar appears allowing you to select the start date. You can click on the left or right arrows to move through the calendar month by month. The red mark around the day signifies the current date.

![Calendar](image)

7. Use the up and down arrow keys to set the start time and click **ok**.

8. Click in the **Stop Time** field to set the stop time. Click the Get Report button at the bottom of the window to generate the report. The Report Generator viewer appears.

![Report Generator Viewer](image)

9. Click the **First** button to view the first page of the report.

10. Click the **Previous** button to view the previous page of the report.
11. Click the **Next** button to view the next page of the report.

12. Click the **Last** button to view the last page of the report.

13. Click the **Print** button to print the report.

14. The Report Viewer can be closed using one of the following methods:
   - Click the **X** button located in the upper right hand corner of the window.
   - Click on the **Close** button in the upper right hand corner of the window.

15. The Report Generator can be closed using one of the following method:
   - Click the **X** button located in the upper right hand corner of the window.
   - Click on the Eagle logo in the upper left hand corner of the window and select **Close** from the pop-up menu.
   - Press **Alt F4** simultaneously from the computer keyboard.

### Quick Charts Button

The **Quick Charts** button can be used to view 24 hour, 7 day, and 31 day data charts. Up to four different items (pens) can be graphed.

To generate a quick chart for a remote unit:

1. Click the **Quick Charts** button from the Field Manager™ User interface.

2. The **Select Remote Unit** window appears if you are not connected to a remote unit. Select the station you want to generate a chart for and click **OK**. You may also double click the station. Click **Cancel** to abort.

3. The **Select Chart Type** window appears. Click the appropriate button to select the type of graph to generate.
4. The **Chart** window appears.

You can **Zoom** and **Scroll** the chart. Use the left mouse button for zooming and the right mouse button for scrolling.

- To zoom in an area, create a window from the upper left corner to the lower right corner around the area.
- To zoom out to the original position, create a window from right to left.
- To scroll, hold down the right mouse button and move.
- Click the **Print** button to print the chart. The chart prints to the default printer.
- Click the **Setup** button to configure the chart. The **Configure Chart** window appears.
• Click the **Config Pen** button to configure the pen. Note that the enable box must be checked to allow pen configuration. The **Configure Pen** window appears.

![Configure Pen Window]

• Click the **Data Source** button to choose the desired history item to graph

• Select the pen color of the item selected for the graph

• Select the **Axis Position**; Left Edge, Right Edge or Custom. If custom is selected then a custom Position Percentage box will appear for the percentage to be entered in.

• Select the **Axis Scale Mode**; Auto Scaled or Fixed Limits. If Fixed Limits is selected then Scale Maximum and Scale Minimum boxes will appear for the limits to be entered.

• Click the **Adjust Scale** up or down arrow to adjust the scale of the chart. Note that the enable box must be checked to adjust the scale.

• Click the **Adjust Offset** up or down arrow to adjust the offset of the chart. Note that the enable box must be checked to adjust the offset.

### Circular Charts Button

The **Circular Chart** utility displays daily or hourly data on a traditional circular chart grid. By simulating this display method the data can be easily interoperated by those who are more familiar with paper charts than line graphs.

**NOTE:** **THIS FEATURE IS ONLY AVAILABLE IN FIELD MANAGER PLUS™.**

The Tools button can be used to execute other utilities such as **Edit Labels/Function Keys**, **Change Site ID**, **Virtual Keypad**, **Launch WinTx**, **View Calibration Log**, **Edit Station Name/PH#**, **Reset Audit Trail/Event**, **Export Station(s)**, **Clear Calibration Reports**, **Receive Remote dBase**, **Receive Firmware Version**, **Send Profile Data**, **Send Remote dBase**, **Set RTU Time**, **Audit Trail/Event Viewer**, **Import Station(s)**, **Edit RTU Voice Call List**, **Database Folder**, **Edit Station List**, **Multi-Copy Config Files**, **Units Changer**, **Configuration Item List**, **EEPROM/Config Editor**, **Change Baud Rate**, and **Change Config Type**.
To execute one of the above utility:

1. Click the **Tools** button from the Field Manager™ User interface.

2. The Field Manager™ Tools menu appears.

3. Click the desired button to execute the utility. Note that some items will require connecting or disconnecting from the unit.

### Security/Config Button

The **Security / Config** button can be used to apply a **Launch Password** and **Remote Access Password** to the application. It can also be used to enable or disable Time Correction in the remote units and receiving **Audit Trail/Events**.

To configure the Field Manager™ application:

1. Click the **Security / Config** button from the Field Manager™ User interface.
2. The Configuration window appears.

![Configuration Window]

3. Enter a Field Manager™ Launch Password if desired which will be required when starting the application. Once a password has been entered, this password will be required each time Field Manager™ is launched.

4. Enter a Remote Access Password which will be required for Field Manager™ to communicate with the unit if configured in the remote unit. If a password has been entered in the Remote Access Password field then this password must be entered in before Field Manager™ will communicate with the unit.

5. Enter a Calibration Password which will be required when you calibrate the remote unit. If a password has been entered in the Calibration Password field then this password will be required before calibrating a unit.

6. Check the Enable Remote Time Checking/Correction box to allow Field Manager™ to synchronize the computer clock with the remote units. You can then enter the Time Correction Threshold in seconds which is the amount of seconds that the remote units' time can differ from the computer clock before the time will be synchronized. The default Time Correction Threshold is 60 seconds. This operation affects all remote units.

7. Check the Force Unique Site ID’s box to force all remote units to have unique site ID's.

8. Check the Enable Audit Trail/Events upload during Poll box to allow uploading Audit Trail/Events information during polls.

9. Check the Enable HexAscii Protocol Optimizations box to enable optimizations when communicating HexAscii.

10. Check the Automatically Receive History Data box to automatically receive history data when connecting to a unit.

11. Check the Only Receive Edit Form Tab Data When Clicked box to enable manually receiving the edit forms. If this box is checked then the edit forms will not update by clicking on View/Config. In this mode the Receive Page or Receive All Pages button must be clicked on to receive the edit forms.
12. Click on the Default Poll Number Config button to configure the polls for a specific unit type. This feature is only used for XA-Series™ Products.

- To configure which poll(s) to issue select the master database type and press OK.

- To create a new poll type click on Add New Type and type in a name for the poll and click OK.

- Choose the desired poll numbers and press OK.

- To select a poll type for a specific unit click on Default Poll Number Config under Security/Config and select the desired unit. Note that polls must be configured for the master database type of the unit, being used, as shown in the example above.
• Select the poll type and press OK.

13. Select the modem to use for phone communications in the **Default Modem (TAPI)** field. Field Manager™ will use this modem for phone communications and will not prompt for a modem selection.

14. To configure the Internal Field Manager™ Modem click on the **Internal Field Manager™ Modem Driver Setup** button. Use this to configure the Communications Port, Default Baud Rate, Modem String and Modem Initialization String.

15. Some databases have edit forms that have been configured for different access levels. This allows the edit forms to hide more advanced tabs from users who don’t need to see them or shouldn’t be allowed to access them. This feature requires Talon™ to configure the edit forms and can cause the edit forms to take longer to load. To change edit form access level click on the drop down box next to **Edit Form Access Level** and choose the desired setting.

16. Check the **Enable Modbus Switch** box to automatically disable Modbus communications to allow for HexAscii communications.

17. Click on the **Default Modbus Configuration** button to configure Modbus communications. This allows the user to select the mode, parity settings and register types. Click **OK** to save changes or click **Cancel** to abort.

18. Click **OK** to save the configuration settings or **Cancel** to abort.
Help Button

The Help/About button will show the Field Manager™ version along with Eagle Research Corporation’s contact information.

![Help Button Image]

Edit Labels/Function Keys

The Edit Labels/Function Keys button can be used to manipulate the labels and function keys stored in the remote unit. There are two different Edit Labels/Function Keys editor; a basic label editor and an extended label editor. The configuration in the RTU determines which label editor is displayed. Newer configurations will typically use the extended label editor.

**NOTE:** YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.

**Basic Label Editor:**
To edit the labels and/or function keys:

1. Click the **Tools** button ![Tools Button] from the Field Manager™ User interface.

2. Click the **Edit Labels/FKeys** button.
3. The **Edit Labels/Function keys** window appears.

- Click the **Receive Labels** button to receive the labels from the remote device and store them in Field Manager™.

- Click the **Receive Function Keys** button to receive the function keys from the remote device and store them in Field Manager™.

- Click the **Send Labels** button to send labels or any changes to the labels down to the unit.

- Click the **Send Function Keys** button to send the function keys or any changes to the function keys down to the unit.

- Click the **Print** button to print the existing labels and function keys.

- Click the **Save Locally** button to save any changes locally in Field Manager™ without sending them to the unit.

- The **Pointer column** is the PPSSII of the item within the database to be associated with the label.

- The **Text** is what will be displayed for the label.

- The **Digits Before** and **Digits After** are used to format the number value associated with the label.

<table>
<thead>
<tr>
<th>Digits Before</th>
<th>Digits After</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>15</td>
<td>Special case to combine two parameters and display 8 digits</td>
</tr>
<tr>
<td>0</td>
<td>Y</td>
<td>Y specifies the number of digits after the decimal</td>
</tr>
<tr>
<td>X</td>
<td>0</td>
<td>X specifies the number of digits before the decimal</td>
</tr>
<tr>
<td>0</td>
<td>15</td>
<td>Default Display</td>
</tr>
</tbody>
</table>

- Click on the **Display** box to enable the Label to show up on the display.

- Click the **Close** button to close the Edit Labels/Function Keys editor.

- To **Edit** a Label
  - Double click the label in the Text column.
  - Enter the new label. The normal editing technique applies here.

- To **Move** a label from one location to another
  - Left click to select and highlight the label you wish to move.
  - Click the **Up** or **Down** arrow buttons to move the label to the desired location.
• To **Remove** a Label or Function Key
  - Left click to select and highlight the label or function key you wish to remove.
  - Click the **Remove** button to remove the label or function key from the list.

• To **Save Changes** made to the labels and/or function keys.
  - Click **Save Changes** once all the labels and/or function keys are edited and ready to be sent to the remote unit.
  - The **Save Changes Locally** window appears. Click **Yes** to save the changes in Field Manager™ software or **No** to abort saving the changes.

![Image of the Save Changes Locally window]

• The **Send Changes to Remote** box appears. Click **Yes** to send the changes to the remote or **No** to abort sending changes to the remote.

![Image of the Send Changes to Remote window]

---

**Extended Label Editor**

To edit the labels and/or function keys:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **Edit Labels/FKeys** button.

3. The **Edit Labels/Function** keys window appears.

![Image of the Edit Labels/Function window]

---
4. To easily edit a label/function key go to Tools and select **Show Individual Label Editor**

5. From this screen edit PPSSII, Function Key, Inside LCD Label and 4-Line LCD Label. Click on the X to save and return to the main Extended Label Editor.

![Extended Label Editor](image)

6. Changes can also be made within the main Extended Labels window along with more configurations.

![Extended Labels Editor](image)

- Click the **Remove** button to remove a label
- Use the blue arrow keys to move a label up and down in the list.
- Click the **Export to File** button to save the Extended Labels
- Click the **Receive All Ext Labels** button to receive the labels from the remote device and store them in Field Manager™.
- Click the **Send All Ext Labels** button to send labels or any changes down to the unit.
- Click the **Save Changes Only** button to save the changes locally and not send them to the unit.
- Click the **Close** button to exit out of the Extended Labels Editor.
Idx – The Idx is the Label number. Up to 200 labels can be listed

PPSSII – PPSSII is the Process Section Item that the label is pointed to in the database. Double click in the PPSSII column to select the desired PPSSII or click twice slowly in the PPSSII column and type in the PPSSII.

Function Key – Each number on the key pad can be configured so that when it is pressed a specific value item will appear on the display. To set the function key, click on the appropriate function key box. This will bring up a dropdown box. Using the dropdown box select the desired function key. Up to 10 function keys can be set; F0 – F9.

InSide LCD Text – This is the text that will appear on the inside display if installed.

InSide LCD Units Pointer – This pointer is used in conjunction with the InSide LCD Text and InSide LCD Units mode. This is the PPSSII of the item to be displayed.

InSide LCD Units Mode – This item is used in conjunction with the InSide LCD Text and InSide LCD Units Pointer. The mode configures what is going to be display based upon which mode is selected. For example if CompassDir is selected then the value located at the pointer will be converted to a direction instead of a numerical value.

Digits Before Decimal and Digits After Decimal – These two items are used to format the number value associated with each label.

<table>
<thead>
<tr>
<th>Digits Before</th>
<th>Digits After</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>15</td>
<td>Special case to combine two parameters and display 8 digits</td>
</tr>
<tr>
<td>0</td>
<td>Y</td>
<td>Y specifies the number of digits after the decimal</td>
</tr>
<tr>
<td>X</td>
<td>0</td>
<td>X specifies the number of digits before the decimal</td>
</tr>
<tr>
<td>0</td>
<td>15</td>
<td>Default Display</td>
</tr>
</tbody>
</table>

Display Mode – The display mode can be set as Normal or Combine With Previous Item for Millions – for future implementation

Short List Visible – If the box is checked then that item will be displayed when scrolling with the magnet.

Auto Scroll Visible – If the box is checked then that item will be displayed when auto scroll is turned on.

Outside LCD Prefix – This is the notation for what will be shown on the outside display. Note that this is only used for 4-line displays.
**Outside LCD Prefix Units Pointer** – This pointer is used in conjunction with the Outside LCD Prefix and Outside LCD Prefix Units Mode. This is the PPSSII of the item to be displayed.

**Outside LCD Prefix Units Mode** – This item is used in conjunction with the Outside LCD Prefix and Outside LCD Prefix Units Pointer. The mode configures what is going to be displayed based upon which mode is selected. For example if CompassDir is selected then the value located at the pointer will be converted to a direction instead of a numerical value.

**Outside LCD Suffix** – This is the notation for what will be shown on the outside display. Note that this is only used for 4-line displays.

**Outside LCD Suffix Units Pointer** – This pointer is used in conjunction with the Outside LCD Suffix and Outside LCD Suffix Units Mode. This is the PPSSII of the item to be displayed.

**Outside LCD Suffix Units Mode** – This item is used in conjunction with the Outside LCD Suffix and Outside LCD Suffix Units Pointer. The mode configures what is going to be displayed based upon which mode is selected. For example if CompassDir is selected then the value located at the pointer will be converted to a direction instead of a numerical value.

**Voice Text** – This is for use with the TTS Modem. When calling into a unit this is the text that will be read back.

**Voice Text Units Pointer** – This pointer is used in conjunction with Voice Text and Voice Text Units Mode. This is the PPSSII value of the item to be read back from the TTS Modem.

**Voice Text Units Mode** – This item is used in conjunction with the Voice Text and Voice Text Units Pointer. The mode configures what value will be read back based upon which mode is selected. For example if CompassDir is selected then the value located at the pointer will be converted to a direction instead of a numerical value.

**4-Line LCD Label** – This is the text that will appear on the 4-line display if installed.

**4-Line LCD Label Units Pointer** – This pointer is used in conjunction with the 4-Line LCD Label and 4-Line LCD Units Mode. This is the PPSSII of the item to be displayed.

**4-Line LCD Label Units Mode** – This item is used in conjunction with the 4-Line LCD Label and 4-Line LCD Units Pointer. The mode configures what is going to be displayed based upon which mode is selected. For example if CompassDir is selected then the value located at the pointer will be converted to a direction instead of a numerical value.

**Aux Label 2** – Storage location for dial out IP Address for an XA32/5™ or E3 unit.

**Aux Label 2 Units Pointer** – Pointer Value – Not Yet Implemented

**Aux Label 2 Units Mode** – Mode – Not Yet Implemented

### Change Site ID

The **Change Site ID** button can be used to change the Site ID or Remote Address of the remote unit.

**NOTE:** **YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

To change the site ID of the remote unit:

1. Click the **Tools** button from the Field Manager™ User interface.
2. Click the **Change Site ID button**.

3. The **Change RTU Site ID** window appears.

![Change RTU Site ID window](image)

4. The current site ID is shown in the **Current Site ID** field. Enter or select the desired Site ID in the **Enter the New RTU Site ID** field and click **OK** to send the change to the remote unit. Click **Cancel** to abort the change Site ID process. The acceptable Site ID range is between 2 and 59999 inclusive. A Site ID of 1 is the factory default.

**Virtual Keypad**

The **Virtual Keypad** button can be used to execute the virtual keypad option. It simulates the keypad and display in the field device. It may be used to perform any function, which is normally performed from the keypad of the field device.

**NOTE: YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

To start virtual keypad:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Select the **Virtual Keypad** button. The **Virtual Keypad** window appears.

![Virtual Keypad window](image)

3. The area showing **Case Temperature** at the top of the window shows what is displayed at the field device when equipped with the keypad/display option. The buttons just below Case Temperature area perform the exact same functions as the buttons on the actual keypad.

4. The Virtual Keypad application can be closed using one of the following methods:
   - Click **Close** at the bottom right hand corner of the window.
• Click the X button located in the upper right hand corner of the Virtual Keypad window.

• Click on the Yokogawa logo in the upper left hand corner of the Virtual Keypad window and select Close from the pop-up menu.

• Press Alt F4 simultaneously from the computer keyboard.

Listed below are the different functions that can be performed from the keypad or Virtual Keypad.

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conf</td>
<td>This key allows the user to going <strong>configuration</strong> mode. From configuration mode the user is able to view and edit different items within the database.</td>
</tr>
<tr>
<td>Jump</td>
<td>The <strong>Jump</strong> key allows the user to quickly navigate throughout the database or system settings. Simply type the PP-SS-II when in configuration mode or the system address when in the system settings menu.</td>
</tr>
<tr>
<td>Ent</td>
<td>Press <strong>Enter</strong> to accept an item after it has been edited or to accept an action</td>
</tr>
<tr>
<td>Esc</td>
<td>Use the <strong>Escape</strong> key to exit out of menus</td>
</tr>
<tr>
<td>Edit</td>
<td>Use the <strong>Edit</strong> key to edit a value</td>
</tr>
<tr>
<td>Alrm</td>
<td>The <strong>Alarm</strong> key allows the user to view any active or unacknowledged alarms</td>
</tr>
<tr>
<td>cal</td>
<td>Press the cal key to do a zero and span <strong>calibration</strong> from the keypad</td>
</tr>
<tr>
<td>Zero</td>
<td>When in calibration mode, press the <strong>zero</strong> key to take the zero point.</td>
</tr>
<tr>
<td>span</td>
<td>When in calibration mode, press the <strong>span</strong> key to take the span point.</td>
</tr>
<tr>
<td>Yokogawa</td>
<td>Press the <strong>Function Key</strong> to perform other commands such as entering into the System Configuration settings.</td>
</tr>
<tr>
<td>Logo</td>
<td></td>
</tr>
<tr>
<td>↓↑→←</td>
<td>The arrow keys allow the user to scroll through the display parameter list. Use the ← key to backspace when typing numbers in.</td>
</tr>
<tr>
<td>0-9</td>
<td>The number keys 0-9 can be preset as function keys to view previously assigned parameters. Also use the number keys when editing values or jumping to a specific location within the database or hardware settings</td>
</tr>
<tr>
<td>.</td>
<td>This key allows the user to enter in a decimal number</td>
</tr>
<tr>
<td>+/-</td>
<td>The +/- key allows the user to enter in a positive and negative value.</td>
</tr>
</tbody>
</table>

By pressing config then the Yokogawa Logo the user can bring up a menu for special function options. The user can use the arrow keys to scroll through the functions then press enter to select the desired function. The following table shows the different functions.

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Settings</td>
<td>System Settings allows the user to configure certain hardware functions such as communication ports baud rates. For more information on the System Settings and navigating through them, see the System Settings section in the E3 manual for more information.</td>
</tr>
<tr>
<td>Diagnostics</td>
<td>Diagnostics is used to access Diagnostics Mode. The display shows the processes executing. While in Diagnostics mode press the conf key to view each communication port. Press the conf key again to scroll through the different ports. This allows the user to view the baud rate for each port and communication protocol. Press number 9 for IP Address information. Press zero or Esc to exit Diagnostics mode.</td>
</tr>
<tr>
<td>System Info</td>
<td>System Info is used to view Firmware version, Unit Serial Number, Runtime, Number Processes and Free Data Bytes within the unit</td>
</tr>
</tbody>
</table>
### User Extras

<table>
<thead>
<tr>
<th>User Extras</th>
<th>User Extras is used to toggle the keypad beeps, setting up the four line display.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Reset</td>
<td>Unit Reset brings up the menu to Reboot the unit, Initialize the settings and clear the database. Note that passwords are required to perform these operations.</td>
</tr>
<tr>
<td>Factory Testing</td>
<td>Factory Testing is used to test the Display and keypad.</td>
</tr>
</tbody>
</table>

### Launch WinTx

The **Launch WinTx** button will launch an external communication application called WinTx. WinTx can be used for troubleshooting a remote or upgrading a remote’s firmware. The use of WinTx should be left to experienced users.

**NOTE: YOU MUST BE DISCONNECTED FROM THE UNIT TO PERFORM THIS TASK. SEE THE DISCONNECT BUTTON FOR MORE INFORMATION.**

To launch the WinTx utility:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Select the **Launch WinTx** button. The **WinTx** window appears.

3. Click on the **Communications** menu to perform communications tasks such as **COM Port Setup**, **Flash RTU Firmware**, **Initialize CDPD** and **Cellular CSC** modems.

### View Calibration Log

The **View Calibration Log** button can be used to view information on the calibration and validation of field transmitters such as differential pressure, pressure and temperature.

**NOTE: YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

To view the calibration log:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **View Calibration Log** button.
3. The Select Calibration Log File window appears.

![Select Calibration Log File Window](image)

4. Select the file to view and click **Open**. You may also double click the file to open.

5. The **Select Date Range for Audit Events to View** box appears. Enter in the desired date range or check the **Select All Dates** box and press **OK**.

![Select Date Range for Audit Events to View](image)

6. Notepad opens and shows the calibration information for the station.

![Calibration Information in Notepad](image)

---

**Edit Station Name / Phone Number**

The **Edit Station Name/PH#** button can be used to change the name of a station and phone number. The Station Name description is used for reporting and information purposes.

**Note:** You must be connected to the unit to perform this task. See the Connect Button for more information.

To change the station name or station phone number:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **Edit Station Name/PH#** button.
3. The **Edit Station Information** box appears

4. Enter the new name and/or phone number and click **OK**.

**Reset Audit Trail/Events**

The **Reset Audit Trail/Events** button can be used to reset the Audit Trail/Events stored in the unit.

**NOTE: YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

To reset the audit trail/events in the remote unit:

1. Click the **Tools** button from the Field Manager™ User interface.
2. Click the **Reset Audit Trail/Events** button.
3. The **Reset Audit Trail** confirmation box appears.

4. Click **Yes** to reset the remote audit trail/events or **No** to abort.

**Export Stations**

The **Export Station(s)** button can be used to manually export stations from Field Manager™ to other Talon™ family of products. A single zip file of the selected stations is created. The zip and unzip capability is built into Field Manager™ and does not require any external zip programs such as WinZip.

**Note:** You must be disconnected from the unit to perform this task. See the Disconnect Button for more information.

To export a station or multiple stations:

1. Click the **Tools** button from the Field Manager™ User interface.
2. Click the **Export Station(s)** button.
3. The **Export Station Wizard** appears. Read and follow the instructions from the wizard. Click Next to select the stations to export.

![Image of Export Station Wizard](image1)

4. The **Select Stations to Export** window appears. Check the box for the station you wish to export. Multiple stations can be selected. You can also right click in the left window and select **Select All** to export all stations or **Deselect All** to remove all selected stations. Click the **Next** button once you have selected the stations to export.

![Image of Select Stations to Export window](image2)

5. The **Export Filename** window appears. Enter the file name in the provided field. The default filename and location is `c:\Field Manager\Stations\Masters.zip`. You can also click the **Select** button to select the location and/or name of the file to export. Click **Next** to start the export process.

![Image of Specify Output File Name](image3)
6. The **Export Information** window appears. The window shows the stations and reports that are being exported along with the zip file that is created. The process completes when the **Export Completed Ok** text is displayed in the Information window and the **Finished** button is enabled. Click the **Finished** button to close the Wizard and return to the Tools menu.

![Exporting Stations](image)

**Clear Calibration Reports**

The **Clear Calibration Reports** button can be used to clear all of the calibration records out of the calibration file.

**NOTE: YOU CAN BE CONNECTED OR DISCONNECTED TO PERFORM THIS TASK.**

To clear the calibration report:

1. Click the **Tools** button ![Tools](image) from the Field Manager™ User interface.

2. Click the **Clear Calibration Reports** button.

![Clear Calibration Reports](image)

Select **Yes** to clear the calibration reports or select **No** to cancel and return to the Tools menu.

**Receive Remote dBase**

The **Receive Remote dBase** button will receive all the Processes from the remote device thus updating the real-time database in the software. This data is useful if the data export feature is used. It allows Talon™ to update the real-time data if it finds newer data in the Field Manager™ export file than what it currently has in its own database.

**Note:** You must be connected to the unit to perform this task. See the Connect Button for more information.

To receive the remote unit database:

1. Click the **Tools** button ![Tools](image) from the Field Manager™ User interface.
2. Click the **Receive Remote dBase** button.

3. The **Receiving Remote Database**… box appears. This operation will take a few minutes.

![Receiving Remote Database](image)

4. The operation completes when the information box disappears.

**Receive Firmware Version**

The **Receive Firmware Version** button allows the user to receive firmware version information from the remote unit.

**NOTE:** YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.

To receive the firmware version from the remote unit

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **Receive Firmware** Version button.

3. The **Firmware Version** box appears with the firmware version information.

![Firmware Version](image)

4. Click **OK** to return to the Tools menu.
Send Profile Data

The **Send Profile Data** button can be used to send new pressure transducer profile data to the remote. This operation should only be performed when a pressure transducer is replaced in the remote. Loading data that isn’t matched to the transducer WILL adversely affect the accuracy of the corrector.

**NOTE:** YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION. IF NOT CONNECTED TO A UNIT THE SEND PROFILE DATA BUTTON WILL CHANGE TO READ PROFILES. FROM THE PROFILE BUTTON PROFILES CAN BE DOWNLOAD TO FIELD MANAGER™. IF A PROFILE IS NOT AVAILABLE FROM THE DOWNLOAD LIST THEN YOU MUST RECEIVE THE PROFILED DATA FILES FROM THE FACTORY FOR THIS OPERATION. PRESSURE PROFILE WILL NORMALLY HAVE FILE EXTENSION .XST AND DIFFERENTIAL PRESSURE PROFILE .XDP. THE FILE IS TYPICALLY OF THE FORM E000XXXX.XYY WHERE; XXXX IS THE PROFILE SERIAL NUMBER AND YY IS THE DESIGNATOR FOR PRESSURE OR DIFFERENTIAL PRESSURE (E0001009.XST FOR EXAMPLE). THE FILE CAN BE STORED IN ANY LOCATION. HOWEVER, THE FIELD MANAGER™ DEFAULT DIRECTORY IS FIELDMANAGER\STATIONS.

To send profile data to the remote unit:

1. Click the Tools button from the Field Manager™ User interface.
2. Click the Send Profile Data button.
3. The Transducer Profile Wizard window appears. Follow the instructions and click Next.

4. The **Profile Selection** window appears. Select the item you wish to send the profile data for and click Next.
5. The **Profile Information** window appears. Click **Next** to select the profile data to send to the remote unit.

6. The **Select Profile File** window appears. Pressure Profiles will normally have file extension .XST and Differential Pressure Profiles .XDP. Type the profile number in the search bar or scroll down to locate the proper pressure profile. If the profile needed is not found in the list then click on the Download Latest button. Note: to download the latest pressure profiles you must be connected to the internet. If the pressure profile is saved on the local computer then click on the Browse button and navigate to the desired pressure profile. Once the pressure profile has been selected click on **OK**.
7. The **Computer/RTU Connection** window appears. Verify that the RTU is connected to the correct serial port and click **Next** to initiate communications with the remote unit.

8. The **Reading Profile Information** window appears during communications.

9. The **Transducer Scale Information** window appears. Click **Next** to send the profile data to the remote unit.
10. The **Sending and Verifying Profile Data** window appears during communications.

11. The Profile Completion window appears. Click Finish to close the profile wizard.

---

**Send Remote dBase**

The **Send Remote dBase** button can be used to completely send a database to a remote unit. If the remote currently has a database then the site ID used to send a new database must match the remote's existing site ID.

**NOTE: YOU MUST BE DISCONNECTED FROM THE UNIT TO PERFORM THIS TASK. SEE THE DISCONNECT BUTTON FOR MORE INFORMATION.**

This operation will completely wipe out any historical data contained within the remote.

To send the remote a new database:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the Send **Remote dBase** button.
3. The **Send Database to Remote** window appears.

![Send Database to Remote window](image)

- **Select Unit Type to Copy and Send** – Select the master database in the left window to copy and send to the remote unit.

- **Station Name** – Enter a name for the station.

- **Target Site ID** – Select or enter the station ID for the remote unit. The Target Site ID must match the remote unit site ID to perform this operation.

- **Connection Type** – Select Direct for hard wire communications to the remote unit. Select Phone for telephone communications to the remote unit. The Phone Number field replaces the Baud Rate field when Phone is selected.

- **Communications Port** – Direct only. This should always be set to the physical port of the computer. Note that there is not a selection when Phone is selected. The software will automatically locate your modem.

- **Baud Rate** - Direct only. This is the baud rate for direct hardwire communications to the remote. The default baud rate from the factory is 9600. The modems will automatically handle the baud rate for phone communications.

- **Phone Number** – Phone only. Enter the telephone number of the remote device in this field.

- **IP AddrPort No** – TCP/IP connection. Enter the IP address of the remote device in this field.

- **Modbus Switch** – Check this box to automatically disable Modbus communications to allow for HexAscii communications.

- **Protocol Optimizations** – enables optimizations when communicating HexAscii.

- **Send Existing Station** – check this box if sending an existing station to a different unit. Once this box is checked select the desired station in the list above.

- Click **Send** to establish communications with the remote unit and send a new database.

- Click **Cancel** to abort sending the remote unit a new database.
4. Make the necessary changes and click the **Send** button to send a new database to the remote unit.

5. The confirmation prompt window appears. Click **Yes** to delete the entire RTU database and send a new one from Field Manager™ or click **No** to abort and not send the database to the unit.

6. If a station with the assigned Site ID exists, a box will appear with the option to overwrite the data. Click **Yes** to overwrite the existing station data and continue with the download or **No** to abort overwriting the existing data.

7. The **Downloading Remote Database**… box appears. This operation will take a few minutes.

8. The operation completes when the **Downloading Remote Database** window disappears. You can now connect to the unit and perform other tasks. See the Connect Button for more information.

### Set Remote Time

The **Set Remote Time** button can be used to synchronize the remote unit’s clock with the computer clock.

**NOTE:** **YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK.** **SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

This option is independent of any other settings and will synchronize the remote unit’s clock with the computer clock regardless of the current date/time. Care should then be taken to ensure that the computer clock is accurate.

To synchronize the remote units’ clock with the computer clock

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **Set Remote Time** button.
3. From this window select the desired Time Zone then click OK.

**Audit Trail/Event Viewer**

The **Audit Trail/Event Viewer** button can be used to view the Audit Trail/Events for the remote unit. You can run the Audit Trail/Event Viewer with the unit connected or disconnected.

To view the remote audit trail/events:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **Audit Trail/Event Viewer** button.

3. If you are connected to the unit the **Select Date Range For Audit Events** window appears. Select the desired date range and click **OK**.

4. The **Audit Trail/Event Viewer** (Notepad) appears with the audit trail information.
5. The Select Remote Unit window appears if you are not connected to a unit. Click the station for which you wish to view the audit trail/events and click OK. You may also double click the station.

6. Next the Select Date Range For Audit Events To View window appears. Select the desired date range and click OK.

7. The Audit Trail/Event Viewer (Notepad) appears with the audit trail information.
The Audit Trail/Events consist of the following:

- Whether the information was changed by the Host or at the RTU.
- The Date/time when the item was changed
- The PPSSII of the item that was changed
- The Old Value of the item that was changed
- The New Value that the item was changed to

**Import Stations**

The **Import Station(s)** button can be used to add stations to Field Manager™. The zip and unzip capability is built into Field Manager™ and does not require any external zip programs such as WinZip.

**Note:** You must be disconnected from the unit to perform this task. See the Disconnect Button for more information.

To export a station or multiple stations

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **Import Station(s)** button.

3. The **Import Station Wizard** appears. Read and follow the instructions from the wizard. Click **Next** to select the stations to import.

4. The **Specify Input File Name** window appears. Enter the file name in the provided field. The default filename and location is c:\Field Manager\Stations\Masters.zip. You can also click the **Select** button to set the location and/or name of the file to import.
5. Click **Next** to select the stations to import.

6. The **Select Stations to Import** window appears. Check the box for the stations you wish to import. Multiple stations can be selected. You can also right click in the left window and select **Select All** to import all stations or **Deselect All** to remove all selected stations. Click **Next** once you have selected the stations to start the import process.

7. The **Import Information** window appears. The window shows the stations and reports that are being imported. The process completes when the **Import Completed Ok** text is displayed in the Information window and the **Finished** button is enabled. Click the **Finished** button to close the Wizard and return to the Tools menu.

---

**Edit RTU Voice Call List**

The **Edit RTU Voice Call** List is for users with a TTS modem installed in their unit. In the Voice Call List the user can edit who this unit will call, the phone number, password, and call sequence.

**NOTE: YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click on the **Edit RTU Voice Call** List button.

3. Click on the **Receive Complete Call** List button to receive the current call list settings.
4. To add or edit a person to call click in the desired box in the **Person To Call** column and type in the persons name.

5. To add or edit a phone number click in the desired box in the **Telephone Number** column and type in the proper phone number.

6. Click on the **Enabled** box to enable the TTS to call that person.

7. Under the **Password** column you can change the password that the user must enter when receiving a call.

8. To select the **Call Type** click on the desired box you wish to change and a drop down menu will appear with the options of Modem, Voice, and Pager.

9. The user can also specify which Alarm List they will be called out on by clicking on the desired box.

10. To remove an entry, select the entry you wish to remove then click on the remove button,

11. Click on the **Send Complete Call List** button to send the call list to the RTU or click on **Save Changes Only** to save call list and not send them down to the RTU.

12. Click on the **Close** button to exit Edit RTU Voice Call List.

### Database Folder

The **Database Folder** button is used to set the directory where Field Manager™ will store and retrieve stations and databases. **WARNING:** Modifying the database folder can cause the system to stop working if configured incorrectly.

**NOTE:** **THIS ACTION CAN BE PERFORMED WHILE CONNECTED OR DISCONNECTED FROM A UNIT.**

To edit the Database Folder:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **Database Folder** button. A warning message will appear. Click **Yes** to continue or **No** to cancel.
3. The Folder Settings window appears. In this window click on the button to navigate to the desired root location for Field Manager™.

![Folder Settings Window]

4. Navigate to the desired location then press OK. Note that this folder must have a Stations folder.

![Select Folder Window]

5. Click on the Save button to save the new location.

### Edit Station List

The Station List is made up of all the stations in your Field Manager™ stations folder. Each item shows the Site ID, Station Name, Unit Type, Connection Type, Phone Number (if applicable), Comm Port, Baud Rate, Modbus setting, HexAscii Optimization and HexAscii Options.

**NOTE:** YOU MUST BE DISCONNECTED FROM THE UNIT TO PERFORM THIS TASK. SEE THE DISCONNECT BUTTON FOR MORE INFORMATION.

To Edit Station List:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **Edit Station** List button.
3. The **Station List Configuration** Window appears.

4. To Add or Edit a station click on the **Add** Button or the **Edit** Button.

5. The **Add/Edit Multidrop** Unit window will appear. Edit or add any of the values you wish then click OK.

6. To remove a station from the Station list, select the station you wish to remove and click on the **Remove** button. You will be asked if you are sure that you want to delete that station, select **YES** to delete the station and **NO** to cancel.
7. To view the RTU database details, select the desired station to view. Click on Options in the upper left corner of the window and select View RTU Database Details. This will bring up a Word document with a list of all Processes, Sections and Items within the database.

Multi-Copy Config Files

The Multi-Copy Configuration Files is used to copy configuration data files from one station (typically a master) to multiple stations of the same type.

NOTE: YOU MUST BE DISCONNECTED FROM THE UNIT TO PERFORM THIS TASK. SEE THE DISCONNECT BUTTON FOR MORE INFORMATION.

1. Click the Tools button from the Field Manager™ User interface.

2. Click the Multi-Copy Config Files button.

3. The Multi-Copy Configuration Files Wizard window appears. Read and follow the instructions from the wizard. Click Next to select the stations to copy.
4. Select the files you wish to copy, Edit Form Configuration File (ef.dat) and/or Quick Chart Configuration File (chart.ini). Click Next to continue.

5. Select the station you want to copy the data files from. Click Next to continue.

6. The next window brings up a list of all the stations with the master database that were selected in the previous step. Select the station you wish to copy the data files to. Click Next to copy the files.
7. The window will now show Copying files and when it is completed. Click **Finished** to close the window.

![Mult-Copy Configuration Files](image)

**Units Changer**

The Units Changer Wizard assists the user in changing the engineering units on values like pressure, temperature, volume, etc., in an XARTU™ series product. – This feature is for future implementations.

**Configuration Item List**

The **Configuration Item List** button allows you to create or change a group of items.

**NOTE: YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

To View or Edit a Configuration Item List:

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click the **Configuration Item List** button.

![Configuration Item List](image)

3. A window will appear with a drop down box. Click on the drop down box to select the Configuration List you wish to view or edit.
4. Click on the **View/Edit** button and the Configuration Item List window appears.

![Configuration Item List Window]

5. Click on the **Receive** button to receive the data from the RTU.

![Receive Data]

6. To Edit an item in the Configuration Items list double click on the item you wish to change then type in the desired value.

7. Click on the **Send** button to send changes to the RTU.

![Sending Data]
8. To add or remove items to or from the configuration list click on the Advanced button.

![Configuration Item List](image)

9. To remove an item from the Configuration List, click on the item you wish to remove then click on the right arrow button.

10. To add an item to the Configuration List, click on the item under the Available Configuration Items list then click on the left arrow button.

11. After making the changes click on the Save button.

12. Click the Close button to exit out of the Configuration Item List.

To create a new Configuration Item list:

1. Click the Tools button from the Field Manager™ User interface.

2. Click the Configuration Item List button.

![Configuration Item List](image)
3. Click on the **New** button.

![New button](image)

4. A box will appear, enter the file name for the new Configuration Item List.

5. Click **OK**.

![Configuration Item List window](image)

6. A Configuration Item List window appears.

7. On the right is a list of the Available Configuration Items.

8. Select which item you wish to add to the list then click on the arrow button `<`.

9. To remove an item from the list, select that item then click on the right arrow button `>`.

10. After the list is complete click on the **Save** button.

11. To send the list to the RTU click on the **Send** button.

![Sending Data](image)

12. To exit Configuration Item List click on the Close button.
EEPROM/Configuration

The EEPROM Editor is used to edit the EEPROM settings in the RTU. **CAUTION** must be taken when using the EEPROM editor, Changing EEPROM settings can change primary functions such as baud rate used for communications with Field Manager™.

**Note:** You must be connected to the unit to perform this task. See the Connect Button for more information.

1. Click the **Tools** button from the Field Manager™ User interface.

2. Click on the **EEPROM/Config Editor** Button.

3. The **EEPROM Editor** will appear in Basic Mode

![EEPROM Editor Basic Mode](image)

4. To Reset EEPROM settings back to Default click on the Reset **Unit EEPROM to Default** button.

5. A window will pop up asking if you are sure you want to set the EEPROM back to default, click yes if you want to proceed and click **no** to escape.

![Confirmation Dialog](image)

6. Click on the **Advanced Mode** button to go into EEPROM Editor Advanced Mode.
7. Click the **Read from RTU** button to read current EEPROM settings. You must do this step before changing any settings.

8. All EEPROM settings in bold are settings that have been changed from the default value.

9. To load the EEPROM settings from a file click on the **Load From File** button.

10. A window will open up, navigate to the EEPROM file you wish to load and click **ok**.

11. To save the EEPROM settings click on the **Save to File** button.

12. A window will open, navigate to the directory you wish to save the file to and enter in a file name then click on the **Save** button.

13. To close the EEPROM Editor click on the **close** button at the lower right hand corner of the window or click on the “**X**” in the upper right hand corner of the window.

**Change Baud Rate**

The Change Baud Rate function is used to change the baud rate for communication port 1 on the RTU. This would normally be the baud rate when talking direct RS232 using the MS connector on the side of the RTU. The default setting is 115200.

**NOTE: YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

1. Click the **Tools** button from the Field Manager™ User interface.
2. Click on the Change Baud Rate button.

![Change RTU Baud Rate]

3. Click on the dropdown box and select the desired baud rate. Once the desired baud rate is selected, click the OK button to change the baud rate in the RTU. Click Cancel to exit without changing the baud rate.

**Change Config Type**

The Change Config Type button allows the user to easily change the configuration in the RTU.

**NOTE: YOU MUST BE CONNECTED TO THE UNIT TO PERFORM THIS TASK. SEE THE CONNECT BUTTON FOR MORE INFORMATION.**

1. Click the Tools button from the Field Manager™ User interface.

2. Click on the Change Config Type button.

![Select Configuration]

3. Check the box next to the desired configuration. Press Select to send the configuration to the RTU.
A

Account Number  A character label placed in the account field and used for billing purposes.

Address  The number associated with the location where a specific piece of data is stored in computer memory.

AGA  American Gas Association. An industry trade organization of utilities and companies involved in the production and distribution of natural gas.

Alarm  A Talon™ state used to alert a user to the fact that a certain measured value has been exceeded; a certain event has occurred; or an equipment condition has become active.

Analog Value  A numeric quantity measured from a continuously variable stream of quantities that may take on an infinite variety of values.

Annunciation  The association of an audible tone or visible display with the performance of an action, arrival of a state, or activation of an alarm.

Audit Trail  Records kept by a computer program indicating the history of data gathered into a database.

B

Bar  A unit of pressure approximately equivalent to one atmosphere or 14.7 pounds per square inch.

Baud Rate  How many bits per second a modem can send or receive data.

BTU—British Thermal Unit  A unit of heat or energy. The amount of heat needed to raise the temperature of a pound of water one Fahrenheit degree.

Buffer  A holding area for data to be read or processed at a later time.

C

Calculated Value  A value that is not actually measured. It is calculated from measured values using a predetermined algorithm.

Cathodic Protection  A collection of measures taken to protect pipe and other metals from corrosion as areas of the pipe begin to conduct electricity.

Check Box  A small square in a Windows application dialog box that turns an option on or off.

Click  The action of pressing and releasing a button on a computer mouse.

Command Button  The raised buttons in a Windows application dialog box that cause the labeled action when clicked.

Corrected Flow  The value of flow volume after adjustment.

D

Data Bit  The number of Data Bits to use during serial communications (RS232 Protocol Driver Parameter).

Dead band  Two values above and below the actual value, which may trigger an alarm. These values allow the alarm to retain its current state without cycling on and off because values are creeping outside a small measurement interval. The permissible interval is the dead band.

Demand Threshold  The value for consumption through a metering device above, which a certain action may be taken.
**Device**  A piece of measurement or control hardware, usually remotely located, that communicates with the Talon™ system. Devices are often meters, flow correctors, transducers, or recorders.

**Device Driver**  The computer instructions which allow Talon™ to communicate with a specific device.

**Device History**  The set of values recorded by a named device over a specified period of time.

**Device Point**  A single, distinct, measurable unit within a device. A device may be able to take many simultaneous measurements. Each measurement is a point. Points have values.

**Dialog Box**  An on-screen window whose purpose is to prompt the computer operator to enter information or select values and parameters associated with a particular portion of a Windows™ application.

**Driver**  A piece of software written for a specific device which allows Talon™ to communicate with the equipment and issue instructions and/or retrieve data.

**Drop Down List**  An item in a Windows™ dialog box which looks like a text box with a down arrow at the right edge. When the arrow is clicked a list of choices appears allowing the user to select rather than type values.

**Digital Value**  A value stored in a memory location which was measured at a discrete moment in time and usually not part of a continuous analog stream of data.

**Drag and Drop**  The process whereby a mouse button is clicked over data or text and held down while the mouse is moved thereby picking up and dropping data into another location.

**Dual Run**  An RTU set up to record information from two meters.

**E**

**Edit Box**  A rectangular area in a Windows™ dialog box in which text can be entered and then edited.

**Electronic Flow Corrector**  An electronic device used to adjust the flow of material at a metering station when the data history and audit trail information are not available.

**Electronic Pressure Recorder**  An electronic device containing pressure transducers used to remotely monitor the pressure at a given location.

**Event**  An event is a change of state either in the host or remote computer or the relationship between the two. Each communication between a computer and a remote station is an event.

**Event Log**  A record of all communications that have taken place between stations involved in the polling process.

**Event Viewer**  A Talon™ application that displays a list of events in a window sorted by columns for all events associated with a predefined set of parameters.

**F**

**Flow**  The amount of material which passes a fixed point in a distribution system and which is often measured by a meter.

**Frame**  A portion of a Windows dialog box which encloses controls and boxes that have a common function.

**G**

**GIS—Geographical Information System**  A computer application designed to display information in a format, which is based on maps and location.

**GIS Information**  The information in a GIS database.

**GPS**  Global Positioning System
Handshaking  The exchange of signals between two computers to exchange communications protocol information and ensure that data transmission is proceeding successfully.

History  A collection of data values gathered over time, which represent the sequence of values associated with the same point over a specified period of time.

History Viewer  The Talon™ application used to view the sequence of data values associated with a point.

Icon  A small graphic used to represent a menu command, tool, or a programming construct. Clicking an icon will often cause the action associated with that icon to be executed.

Insertion Point  A blinking vertical line that appears in a text box or edit box when the mouse cursor is moved there. It marks the point at which the next typed character will be placed.

Interval Timing  The polling of a device that takes place after a specified interval of time has elapsed and is usually repeated after the same amount of time has elapsed.

Kilowatt  One thousand watts. A watt is a unit of power equivalent to one volt pushing one amp of current.

Kilowatt/Hour  The amount of power delivered by one kilowatt delivered for one hour.

Limit  A value above or below which a certain action will be taken or condition will be set.

Load Balancing  The process of speeding up or slowing down the flow of a substance through a controlled point in the delivery system so as to spread the demand evenly over a number of delivery points.

Macro  A named and stored sequence of actions or commands that can be activated with a few keystrokes or mouse clicks. The user is spared from having to continuously repeat long series of commands.

Master Device  A device whose parameters are roughly equivalent to another device. The master device properties can be used in part to set up other devices that operate in a similar manner.

Master Stations  A set of pre-configured devices to be used as templates to help construct a Talon™ system.

Message Box  A non-movable, non-sizable window that provides error messages and/or warnings.

Meter  A device, which a utility uses to measure certain parameters associated with the delivery of its products. Gas, liquids, and electricity are the most commonly metered substances.

Millibar  A unit of pressure equivalent to one one-thousandth of a bar.

MMS—Manufacturing Message Specification  A communications protocol developed by the International Standards Organization to standardize communications between manufacturing equipment and devices.

Multi-Drop  A network setup in which multiple devices communicate to the host via the same connection.

Numeric Point  A point whose stored values will be numbers and not strings.
Odorant  A chemical having a distinct odor which is added to natural gas and other odorless gases. It allows leaks to be more easily detected.

Open System Standards  A set of published hardware and software standards designed to allow the integration of hardware and software and to discourage proprietary systems which make interoperability difficult.

OSI  Open Systems International. An international standard use to transfer information from one computer to another. It defines seven layers at which decisions are to be made, physical, link, network, transport, session, presentation, and application layers.

Packet Radio  A fast, efficient, error free radio system which sends and receives information between a computer and remote transceiver in discrete bundles called packets through a Terminal Node Controller (TNC).

Pager  A small wearable electronic device which can be activated by radio signals and display a message or a phone number to the wearer.

Parameters  The individual specification of properties and conditions associated with a Talon™ construct.

PID Control  Proportion Integral Differential Control. General technique used to control some processes.

Point  An electronic location inside an RTU which has a value associated with the measurement of a quantity or the state of a predefined condition.

Pointer  A type of item within a process that contains the address, i.e., PPSSII (cf.), of another item within the RTU. Pointers are used to tell a process where to get the values required for the process to function properly.

Point Display  A Talon™ display window that contains the information about the points associated with a measuring device.

Point Shadow  Shortcut to the device point.

Point-to-Point Protocol (PPP)  A communications protocol that allows a computer to connect to the Internet through a dial-in connection retaining most of the benefits of a direct connection. It features error detection, data compression, and other elements of modern communication protocols.

Point-to-Point Radio  A narrow cast radio system usually microwave based and operating at a frequency from 1 to 40 gigahertz that is designed to send a signal between two discrete points. Signals are not widely broadcast but are narrowly focused.

Poll  A poll is a request to retrieve a previously defined set of data values from a particular device using a specified protocol.

Poll Configuration  The process of setting the parameters to be used in conducting a poll.

Poll Data  Poll data form the basis (content) of a poll. They describe the data to be retrieved from the measurement device, as well as the data management of the information retrieved. Poll data may be single device points, or device histories.

Pop-up Menu  A list of items which when clicked pops up in a small window overlaid atop the main application. It allows a user to choose additional items or submenu items from a list in the window.

Port  A device for connecting a computer to one of its components, such as a printer or a modem. It is also a location associated with the communication between devices.

PPSSII  An acronym for the address of a particular item within an RTU. PP is the process number; SS the section number; and II the item number.
**Process**  A collection of data items within an RTU dedicated to a specific task. Processes are configured in the form of a list. The RTU will execute the processes in the order that they are configured, in order to perform the required tasks. Processes are linked together within the RTU to give the RTU its particular functionality. Examples of processes are analog, input, AGA-7, calculation, and history storage.

**Protocol**  A standard way of regulating the transmission of data between computers. In Talon™ a protocol is a list of commands that determine how one device will communicate with another.

**Protocol Driver**  A software program which enacts a protocol.

**Pull Down Menu**  A list of commands or options that can be drawn down like a window shade from a menu item in an application window that lists additional sub choices associated with that item.

**Pulse**  A peak in the signal level that is detected and counted by metering equipment.

**Pulse Accumulator/Transmitter**  An electronic device which provides instant access to remote flow data.

**Radio Button**  A Windows dialog box item which when chosen excludes all other choices, much like the preset mechanical buttons on old car radios.

**Recursive**  A definition or process which is self-referencing or circular in its definition or operation.

**Roll Time**  The RTU's point of reference for the beginning of each day. For example, if a utility uses 10 AM as the start of each delivery day, the roll time within the RTU needs to be set to 10 AM.

**RS-232**  An Electronic Industries Association standard for serial communications between devices usually involving the serial ports of a computer or peripheral device.

**RS-422**  An Electronic Industries Association standard designed to supplant RS-232 because it supports higher data rates and has greater immunity to electrical interference.

**RTU**  Remote Terminal Unit. An industrial computer used for data acquisition and control.

**SCADA—Supervisory Control and Data Acquisition**  A method by which data can be retrieved from the field and stored for later analysis. Control decisions can also be made by a SCADA system.

**Scheduler**  A server which is used for storing and controlling scheduling information.

**Scroll Bar**  A vertical or horizontal bar positioned along the right edge or bottom of an applications window when more information is present than can be displayed. The bar is used to sequentially scroll through the window using the mouse.

**Section**  Within the RTU processes, the items are grouped into blocks of items based upon function. The groups of items are called sections.

**Server**  A computer that distributes data and resources to users (clients) on a network.

**Site ID**  A number between 1 and 65535 used to identify a field device. It must be a unique identifier for each station and is the access code to communicate with the device. This item is stored in the field device.

**SLIP**  Serial Line Internet Protocol. A protocol that allows a computer to connect to the Internet through a dial-in connection yet still retaining most of the benefits of a direct connection.

**Software Calibration**  The ability to adjust and calibrate delivery and metering equipment under software control.
**Spinner**  An applications control consisting of two arrows which can be used under mouse control to increment or decrement the value stored in the associated field in a Talon™ dialog box.

**SQL**  **Structured Query Language.** A language which has evolved into a standard mechanism for retrieving and organizing information stored in a database.

**Station Number**  A character label placed in the account field and used for billing purposes.

**String**  A sequence of characters, usually alphanumeric, which may contain numerals and punctuation. It is usually treated in a non-numeric way by the application program.

**T**

**Table**  The database construct used to organize various subsets of data into a list which shares a common attribute with the other data in the list.

**Tab**  The labeled area of a form which contains the actual dialog boxes. The tabs resemble the index tabs usually seen on binders and card files.

**Task**  An action to be taken as part of a poll.

**TCP/IP**  **Transfer Control Protocol/Internet Protocol**  A set of communication protocols, developed by the United States Department of Defense, which allows dissimilar computers to share information over a network.

**Transducer**  A device for converting one quantity into another quantity. Some examples are pressure into an electrical signal, an electrical signal into sound, or light into an electrical signal.

**Text Box**  The area in a dialog box where textual information may be entered or displayed.

**Tool Bar**  A part of the GUI (Graphic User Interface) that gives the quick access to commonly used functions.

**TOU**  **Time of Use.** The amount of time a certain substance has been flowing through a meter and is being consumed by the customer.

**Trend**  A tendency which exhibits itself when historical data is analyzed or displayed in graphical form.

**U**

**User Interface**  The Windows application and Graphical User Interface (GUI) by which the user interacts with the Talon™ system.

**V**

**Value**  The numeric quantity or alphanumeric string associated with a point, label, or variable.

**Viewer**  A Talon™ application designed to display information, such as alarms, events, etc., in an easily readable form.

**Virtual Keypad**  A Computer simulated keyboard.

**Volume Correction**  The ability to adjust the volume of substance being metered and delivered through a utility's supply lines.

**W**

**WAN**  **Wide Area Network**  A set of widely separated computers connected together. The Internet is an example of a Wide Area Network.
This section provides quick information on performing the different tasks in Field Manager™.

**How to connect to a RTU**
Click **Connect**>select connection type and baud rate>**OK**

**How to disconnect from a RTU**
Click **Disconnect**

**How to view Communications Eavesdrop Display window**
Hold down Ctrl + E

**How to update a master configuration in Field Manager™**
Click **Tools**>**Import Stations**>follow instructions in wizard

**How to delete sites from Field Manager™**
Click **Tools**>**Edit Station List**>select station>**Remove**

**How to change the site ID of a station in Field Manager™**
Click **Connect**>**Tools**>**Change Site ID**>enter the new site ID>click **OK**

**How to set the date and time in the RTU**
Click **Connect**>**Tools**>**Set Remote Time**>select how to synchronize the computer time>**Set RTU Time**

**How to calibrate a transmitter/transducer**
Click **Connect**>**Calibrate**>enter user name>click **OK** and follow instruction in wizard

**How to view the calibration log**
Click **Tools**>**View Calibration Log**>select the log file to view

**How to collect Histories or perform a download**
Click **Connect**>**Collect History**

**How to view alarms**
Click **Connect**>**Alarms**

**How to configure a RTU**
Click **Connect**>**View/Config**

**How to generate reports for a station**
Click **Connect**>**Reports**>choose report>enter start time>enter stop time>**Get Report**
Click **Disconnect**>**Reports**>select remote unit>choose report>enter start time>enter stop time>**Get Report**

**How to generate quick charts for a station**
Click **Connect**>**Quick Charts**>select chart type
Click **Disconnect**>**Quick Charts**>select Remote unit>select chart type

**How to edit labels and functions keys for an RTU**
Click **Connect**>**Edit Labels/FKeys**

**How to receive the RTU database**
Click **Connect**>**Tools**>**Receive Remote dBase**

**How to send profile data for a transmitter/transducer**
Click **Connect**>**Tools**>**Send Profile Data**>follow instructions in wizard
How to edit a station name  
Click Connect>Tools>Edit Station Name/Ph#>enter the new station name>click OK  
Click Disconnect>Tools>Edit Station Name/Ph#>select remote unit>enter the new station name>click OK

How to import stations into Field Manager™  
Click Disconnect>Tools>Import Station(s)>follow instructions in wizard

How to export stations from Field Manager™  
Click Disconnect>Tools>Import Station(s)>follow instructions in wizard

How to edit the RTU Voice Call List  
Click Connect>Tools>Edit RTU Voice Call List

How to multi copy files (Edit Form, quick charts etc.)  
Click Disconnect>Tools>Multi-Copy Config Files>follow instructions in wizard

How to start the EEPROM/Config Editor  
Click Connect>Tools>EEPROM/Config Editor

How to start the Virtual Keypad  
Click Connect>Tools>Virtual Keypad

How to send a new database to the RTU  
Click Disconnect>Tools>Send Remote dBase

How to reset the Audit Trail in the RTU  
Click Connect>Tools>Reset Audit Rail/Events

How to view the Audit Trail information for a station  
Click Connect>Tools>Audit Trail/Event Viewer>select the start date and end date>OK