FMS-1655R
Installation Manual
Programmer's Guide
Version: 08.14.15

Triatek FMS-1655R
Remote Display

INSTALLATION MANUAL AND PROGRAMMER'S GUIDE

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Specifications

FMS-1655R Remote Display

Monitoring Capacity.....One FMS-1650/55 Room Pressure Controller
Interface Cable..... Belden 3107A, 22 AWG minimum
Protocol.....Triatek Proprietary (RS-485 interface)
Power (may be supplied by FMS-165x or by separate power supply)..... 18 to 32 Vdc

Touchscreen User Interface

LCD Size and Type..... 3.2" diagonal, transmissive
Resolution..... 240 pixels x 320 pixels, portrait mode
Viewing Area..... 50.60 mm x 66.80 mm
Color Depth..... 18-bit or 262K colors
Backlight Color.....White
Luminous Intensity..... min 2500 cd/m2

Mechanical

Mounting Options ..... Surface (Plastic), Flush (Brushed Stainless)
Mounting Dimensions (surface-mount).....3"W x 5"H x 1.13"D
Mounting Dimensions (flush-mount)..... 5"W x 8"H x ¾"D

Environmental

Operating Temperature..... 32° to 125° F

Operating

Operating Humidity ..... 10% - 95% RH, Non-condensing

Ordering Codes

Surface Mount model..... FMS1655R-S
Flush Mount model..... FMS1655R-F

INSTALLATION MANUAL

Introduction
The Triatek FMS-1655R Remote Display is used to remotely display any parameter monitored by the companion FMS-1655 Room Pressure Controller. The FMS-1655R is capable of monitoring and displaying parameters in any critical environment space including differential pressure, isolation mode, and alarm status. The FMS-1655R includes both visual and audible alarms independent of the alarms on the companion FMS-1655 controller.

Key features of the FMS-1655R include:

- Display in real-time any parameter monitored by the companion FMS-1655
- Expand visibility of the companion FMS-1655, allowing all six of its analog inputs to be viewed in real-time (AI-1 through AI-4, TI-1 & TI-2)
- Full-color touchscreen display with programmable options, adjustable LED backlighting
- Intuitive graphical user interface greatly simplifies setup and configuration of monitor
- Display background, action icons, and Safety Halo™ edge lighting update in real-time to indicate room status from anywhere within the monitored space
- Convenient *Status-only* mode eliminates all numerical values only indicating alarm status and current mode of isolation
- Audible and visual alarms independent of the companion FMS-1655
- Password protection (up to 10 entries)
- Protocol-independent solution; works seamlessly with BACnet® and N2® networks, along with stand-alone applications
- Simple installation with 4-conductor cable attached to nearest Triatek controller
- No separate power supply required

The FMS-1655R is equipped with a 3.2" diagonal full-color touchscreen display in portrait orientation (240 x 320 resolution).

The password-protected menu system is intuitive and simplifies the setup and configuration of the remote display.

The display incorporates bright background color changes to indicate up to five different statuses at the companion FMS-1655.

Green represents normal status whereby the monitored parameter is within defined normal operating limits. Yellow indicates that the monitored parameter has drifted outside of the normal operating limits, and is approaching the alarm region. Red indicates that the monitored parameter has encroached the critical region and is currently in alarm. Blue indicates that the monitored parameter is in neutral isolation mode. Cyan indicates that the companion FMS-1655 is currently in *Auto Clean* mode, and is being evacuated of all airborne contaminants.

See *Figure 1* for a sample screenshot of a FMS-1655R displaying the room temperature being monitored by the companion FMS-1655.

The user may set up multiple passwords to prevent unauthorized or casual access to the FMS-1655R configuration settings. Up to 10 passwords of up to eight digits may be stored.

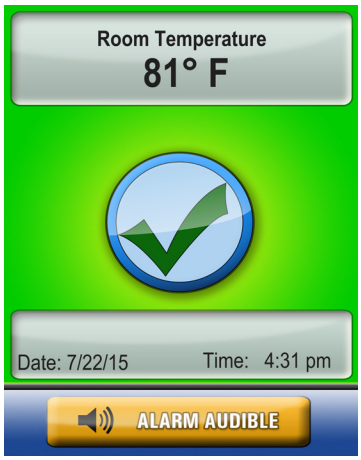


Fig 1. Sample screenshot

The FMS-1655R flush mount model offers an attractive stainless steel faceplate with an ultra-thin enclosure with an overall depth less than ½" which may be installed in any application where wall depth is either unknown or extremely limited.

New construction applications may take advantage of the included rough-in wall box, which may be installed during the early phases of the construction project. For retrofit applications not requiring electrical conduit terminations, the FMS-1655R may be installed using the included retrofit mounting bracket which significantly simplifies the installation process. The FMS-1655R is configured at the factory for *Standard View* mode, which most closely matches that of the companion FMS-1655. The user may at any time change the factory-default settings by following the procedures outlined in the *Quick Start Guide* on page 3.

Mounting Procedure: Flush Mount
The FMS-1655R flush mount model offers an attractive stainless steel faceplate with an ultra-thin enclosure (less than ¾" thick) that may be installed in any application where wall depth is either unknown or extremely limited. New construction applications can take advantage of the included wall box that may be installed during the rough-in phase. For retrofit applications not requiring electrical conduit termination, the unit may be installed using the retrofit mounting plate that simplifies the installation process.

1. The FMS-1655R flush mount model should be mounted in a location that provides convenient access so the display may be viewed with minimal glare and the touch screen is easily accessible to facilitate silencing the unit in the event of an alarm condition.

2. If this is a new construction project and the wall box has been installed, you may skip the next two steps. If this is a retrofit application and existing drywall is in place, then proceed with the next step to prepare the opening for the FMS-1655R flush mount model.

3. Using the retrofit mounting plate (see *Figure 2*) as a template, trace the inner outline onto the drywall at the desired mounting location with a pencil or marker. Also mark the location of the two mounting holes on the drywall. Cut along the traced outline with a drywall knife or saw, taking care not to make the opening too large. Drill out the two holes to clear access to the mounting clip nuts. Remove the cut section of drywall and discard. Be sure to brush off any drywall dust or remnants from the inside surface of the opening to ensure proper adhesion of the retrofit mounting plate.

4. Remove the paper backing from the two adhesive strips on the retrofit mounting plate and insert it into the cut opening of the drywall. The retrofit plate should be oriented such that the corner notch is located at the lower left corner of the opening in the drywall, with the tabs bent towards you. Using the four tabs on the retrofit mounting plate as alignment guides, press the mounting plate onto the inside surface of the drywall opening firmly to ensure maximum adhesion.

Fig 2. Retrofit mounting plate

5. The electrical connections must be terminated before installing the stainless steel faceplate of the FMS-1655R. Run the 4-conductor, dual twisted pair, electrical connection from the nearest FMS-1650/55. Refer to the wiring diagram shown on page 7 for details.

6. Terminate the interface cable originating from the host controller at the 4-position and 3-position terminal blocks on the back side of the FMS-1655R display, ensuring proper electrical connections. Power connections should be terminated at +V and GND of the 4-position terminal block, and the subnet connections should be terminated at NETWK+ and NETWK- at the 3-position terminal block (see page 7). Do not apply power until the faceplate has been securely fastened to the wall.
7. With the electrical connections properly terminated, the stainless steel faceplate may be installed using the two flat head machine screws. For retrofit applications where the mounting plate has been affixed to the inside surface of the drywall, the two mounting screws thread into the clip nuts of the mounting plate. For those applications where the wall box has been installed, the two mounting screws fasten the faceplate directly.

8. With power applied, the FMS-1655R should display the offline status of four stations at the default subnet addresses.

Mounting Procedure: Surface Mount
The FMS-1655R surface mount model incorporates a low-profile display enclosure that may be mounted to any surface using wall anchors or the appropriate fastening hardware. For new construction applications, the FMS-1655R surface mount enclosure is designed to accommodate a standard single-gang (2x4) wall box.

This allows the wall box to be installed during the rough-in phase, and the appropriate electrical conduits to be installed as necessary. The FMS-1655R is configured at the factory for *Standard View* mode, which most closely matches that of the companion FMS-1655 display. The user may change the factory-default settings by following the procedures outlined in the *Quick Start Guide* (page 3) section of this manual.

The electrical connections to the FMS-1655R are made via convenient terminal block connectors as shown on page 7.

All wiring should conform to local regulations and to the National Electrical Code (NEC). Precautions must be taken to avoid running communications wiring in the same conduit as line voltage or other conductors that supply highly inductive loads such as generators, motors, solenoids, contactors, and other sources of induced noise. Use 22 AWG or larger for all electrical wiring terminations.

1. The FMS-1655R surface mount model should be mounted in a location that provides convenient access so the display may be viewed with minimal glare and the touch screen is easily accessible to facilitate silencing the unit in the event of an alarm condition.

2. Begin the mounting procedure by removing the surface mount enclosure cover from the Safety Halo™ backplate. Turn the set screw at the bottom of the enclosure **clockwise** until it has cleared the hole in the cover, thereby allowing it to be removed from the backplate. To re-secure the cover, turn the set screw **counter-clockwise** until is it flush with the cover.

3. If this is a new construction project and a single-gang wall box has been installed, you may skip the next step. If this is a retrofit application and existing drywall is in place, then proceed with the next step to prepare for the mounting of the FMS-1655R surface mount model.

4. There are two primary options for installing the FMS-1655R surface mount model in retrofit applications. The first option is to use two drywall anchors to mount the surface mount Safety Halo™ backplate. Using the backplate as a template for marking and drilling a ¾" hole at the center, bring the low-voltage wiring required for the FMS-1655R through the center hole at the backplate. The second option is to use an old-work low-voltage box or bracket as shown in *Figure 3*.

5. Once the surface mount Safety Halo™ backplate has been properly installed, the electrical connections should be terminated before installing the cover with the display. Run the 4-conductor, dual twisted pair, electrical connection from the nearest controller. Refer to the wiring diagram shown on page 7 for details.

6. Terminate the interface cable originating from the host controller at the 4-position and 3-position terminal blocks on the back side of the FMS-1655R display, ensuring proper electrical connections. Power connections should be terminated at +V and GND of the 4-position terminal block, and the subnet connections should be terminated at NETWK+ and NETWK- of the 3-position terminal block (see page 7).

Fig 3. Old work low-voltage box/bracket

7. With the electrical connections properly terminated, the surface mount enclosure cover may be installed by sliding the two tabs at the top of the inside edge into the two slots at the top of the Safety Halo™ backplate secured to the wall. Secure the FMS-1655R enclosure cover by turning the slotted set screw at the bottom of the backplate counter-clockwise, backing it out until it is flush with the cover.

Quick Start Guide

After the FMS-1655R has been properly installed, apply power to the companion FMS-1655 room controller. Upon power up, you will hear a quick beep at the FMS-1655R which indicates that the initialization sequence has been initiated.

The Safety Halo™ edge lighting will cycle through seven colors (red, green, blue, yellow, magenta, cyan, and white), followed by the three action icons shown in *Figure 4* that represent normal, caution, and alarm.

Next, the Triatek splash screen indicating the electronic serial number (ESN), firmware version numbers, and the current subnetwork address of the companion FMS-1655 will appear. This splash screen remains displayed for several seconds and then disappears to reveal the main display screen in the currently configured viewing mode.

The information shown on the splash screen may also be re-displayed at any time by selecting *About This FMS Remote Display* on the *Diagnostics* menu.

Fig 4. Action icons

Main Display Screen

All FMS-1655R units come shipped from the factory in *Standard View* mode (*Figure 1*). Information displayed on the main screen includes the following for FMS units:

- Name of monitored room (up to 25 characters)
- Current mode of isolation (positive, negative, neutral, or auto-clean)
- Current alarm status (normal, warning, or alarm)
- Current monitored parameter reading in selected engineering units
- Current local audible alarm status (enabled or disabled)

If the companion FMS-1655 is offline, the background color on the screen will be blue with the disabled action icon shown (*Figure 5*). Once the companion FMS-1655 comes back online, the background color, action icon, and Safety Halo™ edge lighting will update to represent the current alarm status of the monitored parameter. A green background with the green checkmark action icon *(Figure 6)* indicates that the monitored parameter is within normal operating range.

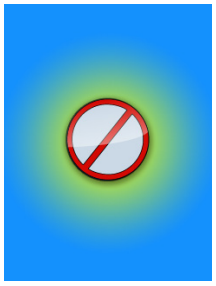


Fig 5. Disabled screen

Fig 6. Normal screen

A yellow background with the yellow exclamation point action icon (*Figure 7*) indicates that the monitored parameter has drifted outside of the allowable limits of the desired setpoint, and is in the caution or warning range. The yellow background is also used to indicate that a door is open at the companion FMS unit (if a door switch has been incorporated with the FMS).

A red background with the red exclamation point action icon (*Figure 8*) indicates that the monitored parameter has reached a critical condition and is outside of the allowable limits of the target setpoint. This visual indication is supplemented by an audible alarm to indicate that attention is required.

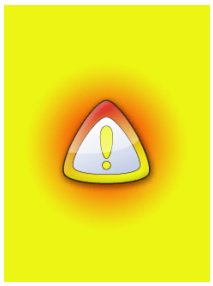


Fig 7. Warning screen

Fig 8. Alarm screen

The FMS-1655R incorporates a full-color touchscreen display and with an intuitive menu system that allows the user to quickly setup the remote display for immediate use.

Also incorporated in the FMS-1655R remote display are hotspots that provide quick access to in-depth station details, enable you to set the time and date, and audible alarm enable/disable functions.

Touching the screen anywhere other than one of the reserved hotspots invokes the menu system, unless one or more security passwords have been entered. If the companion FMS-1655 resides on a network with a time server, then the time and date will automatically be synchronized at the FMS-1655R through the companion FMS-1655.

Configuring FMS-1655R

Configuring the FMS-1655R settings can be accomplished in three simple steps:

1. Specify subnetwork address the companion FMS-1655 controller
2. Select viewing mode (*Standard View* or *Status-only View*)
3. Select individual parameter to be displayed

The FMS-1655R comes pre-configured for *Standard View* mode. If the specific application requires the remote display of a parameter other than the differential pressure reading, then the specific parameter to be displayed can be re-configured as described later in this section.

Specifying the Subnetwork Address
To specify the subnetwork address of the companion FMS-1655, select the *Monitor Setup* option on the *Unit Setup* menu (see *Figure 9*). Use the address slider to specify the subnetwork address of the companion FMS-1655.

Fig 9. Unit Setup menu

In addition to specifying the subnetwork address of the controller to be monitored, the *Viewing Mode* must also be selected.

There are two viewing mode options available: *Standard View* and *Status-only View*.

Standard View presents the normal single sensor viewing screen with the two simulated LCD windows at the top and bottom of the display. *Status-only View* presents the user with a clean view free of numeric values as shown in *Figure 10*.

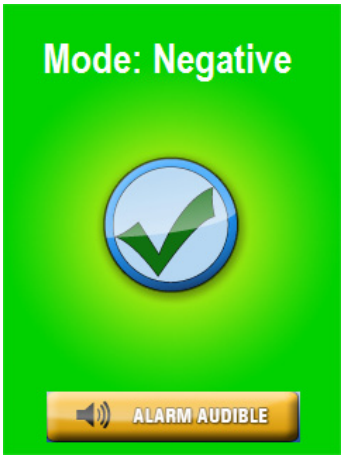


Fig 10. Status-only View

Selecting the Individual Parameter
The FMS-1655R is capable of monitoring any of the six parameters being monitored by the companion FMS-1655 controller (*Figure 11* shows the relative humidity being displayed on the FMS-1655R).

To select the parameter you would like displayed on the FMS-1655R, tap the displayed parameter in the upper LCD window (gray box) on the main display. Tapping this field invokes a details screen which includes all six of the analog input parameters currently being monitored at the companion FMS-1655.

To change which parameter is displayed on the main screen of the FMS-1655R, select the individual parameter on the details screen and tap the *OK* button.

Adding Password Security
The FMS-1655R menu system may be protected by adding as many as ten user-specified passwords to the system.

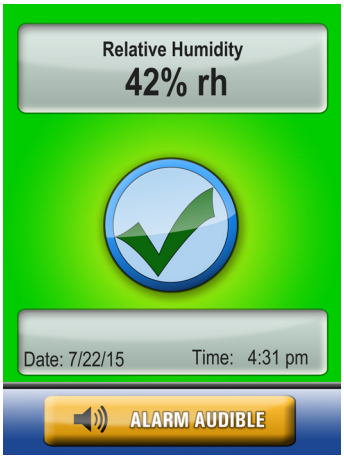


Fig. 11 Standard View

A password entry may be created by selecting the *Add Password* option on the *Password Setup* menu, which is accessible from the *System Setup* menu (see *Figures 12 and 13*).

The user is prompted to enter a minimum of four and up to eight digits. All password entries are stored in non-volatile memory, and are preserved while the unit is powered down. In the event that a password has been forgotten, there is a factory-default override password that will provide access to the user menu system. Please consult with the factory for more information regarding this password.

Fig. 12 Password Setup

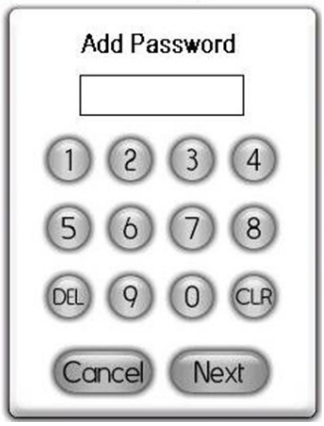


Fig 13 . Adding a password

Changing Display Settings

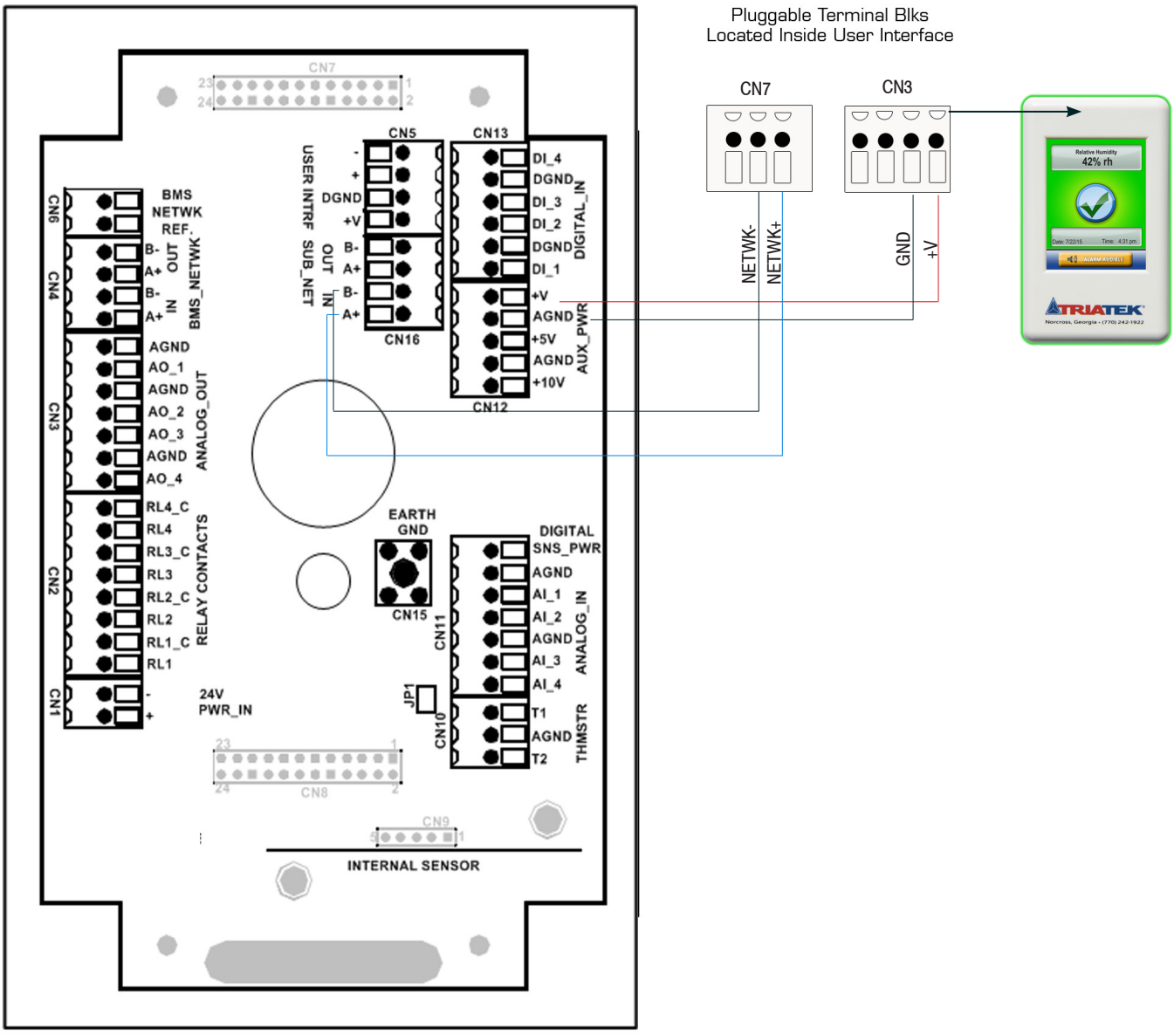
The FMS-1655R display screen may be customized using the options on the *Display Setup* menu. The settings for the Safety Halo™ feature may be enabled or disabled at the *Safety Halo™* option on the *Display Setup* menu. Settings include normal intensity, auto-dim intensity, and duration.

The auto-dim feature of the Safety Halo™ function allows the FMS-1655R to go to a reduced intensity level (or even turn off completely) between specified hours each day. The display brightness may be adjusted by selecting Display Setup >> Set Brightness. The specified brightness setting is stored in non-volatile memory and remains in effect through a power cycle.

The time and date, which are only displayed while *Standard View* mode is selected, may be adjusted either by using the hotspots on the main display, or by selecting Display Setup >> Set Time & Date. The FMS-1655R is also designed to request time and date settings periodically from the companion FMS-1655, assuming it resides on a network that has a time server available. This ensures that the time and date are accurate on the FMS-1655R main display.

Configuring Display Module Settings		
Options Dipswitch (S1) – *internal use only*		
1. Amulet Chip Mode Selection:	OFF = Programming Mode	ON = Run Mode
2. Touchscreen Calibration Mode:	OFF = Force calibration	ON = Auto calibration
3. *Reserved*		
4. *Reserved*		
Options Dipswitch (S2) – *internal use only*		
1. Mode Select:	OFF = FMS/HMS1655R	ON = Reserved
2. Test Mode:	OFF = Inactive	ON = Active
3. FMS/HMS Mode:	OFF = FMS1655R	ON = HMS1655R
4: Operational Mode	OFF = Demo Mode	ON = Run Mode
Pushbutton Switch (SW1)	Reset Button	
Pushbutton Switch (SW2)	*Reserved*	

Wiring FMS-1655R to Nearest Triatek Controller



Notes

Introduction
This section details all of the available capabilities in the FMS-1655R, and should be used to access more detailed information regarding the menu options:

- Overview
- Main Setup Menu
- Unit Setup
- System Setup
- Display Setup
- Diagnostics

The touchscreen user interface of the FMS-1655R is designed to facilitate the initial setup and configuration, diagnosis, and troubleshooting during the installation process. Each menu screen is limited to four options, thereby simplifying navigation through the menu system. Context-sensitive help is available at most menu screens and is accessed simply by touching the menu title on any particular screen (see *Figure 14*).

To exit from any *Help* screen, simply touch the display anywhere. Multi-page menu screens have navigation buttons at the bottom of each screen that allow the user to move forward or backward, and include a convenient *Exit* button on the last screen to quickly exit the menu system and return to the main display.

To preserve the security of the configuration settings, up to 10 passwords may be programmed to prevent unauthorized access to the system configuration settings. To further prevent unauthorized access, the FMS-1655R user menu system incorporates automatic time-out periods based on the screen currently being displayed.

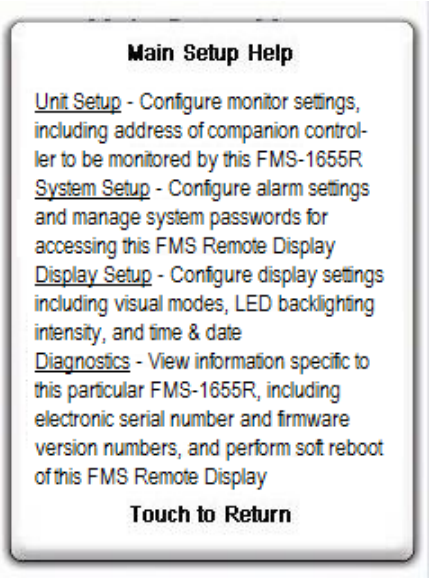


Fig. 14 Main Setup Help

Menu screens time-out after 90 seconds of inactivity, while configuration screens automatically time-out after 60 seconds. This prevents unauthorized access to the user menu system should a unit be inadvertently left unattended at one of the configuration screens.

Main Setup Menu
All of the configuration screens that allow the settings of the FMS-1655R to be configured for a specific application originate from the top level of the user interface menu system, the *Main Setup Menu* as shown in *Figure 15*.

The *Main Setup Menu* includes four options which provide support for 1) configuring the settings specific to the unit as a remote display, 2) managing the system security passwords, 3) configuring the display-specific settings, and 4) using the diagnostics and troubleshooting resources.

Fig. 15 Main Setup Menu

The majority of the configuration settings are available through the *Unit Setup* option on the *Main Setup* menu. Options available on the *System Setup* menu option include support for managing the security passwords. The *Display Setup* menu option provides support for configuring all of the display-specific settings integrated within the FMS-1655R.

The FMS-1655R can simultaneously display in real-time the selected monitored parameter, operating mode (if applicable), alarm status, and its associated name. The *Diagnostics* menu option provides information specific to the FMS-1655R.

More information on each of these four menu options is available in the following sections. The next section covers the two options available on the *Unit Setup* menu.

Unit Setup

The FMS-1655R is capable of displaying any of the six parameters being monitored by the companion FMS-1655. The *Unit Setup* menu shown in *Figure 16* provides support for 1) specifying the subnetwork address of the companion FMS-1655 and the viewing mode, and 2) configuring the audible alarm settings, including the starting and ending hours for the *Alarm Quiet Period*.

Fig 16. Unit Setup

The *Monitor Setup* option allows the user to specify the subnetwork addresses of the accompanying companion FMS-1655. The *Audible Alert* option provides support for configuring the settings associated with the alarm facility integrated in the FMS-1655R.

Configuring Monitor Settings

The *Monitor Setup* option on the *Unit Setup* menu invokes the configuration screen, which allows the user to specify the subnetwork address of the companion FMS-1655 room controller and select the *Viewing Mode* option: *Standard View* or *Status-only View*. *Standard View* mode presents the usual main display that is shown on an FMS-1655 controller. *Status-only View* presents the view shown in *Figure 17*, with no numeric values, and only background color to indicate the current status of the companion FMS-1655.

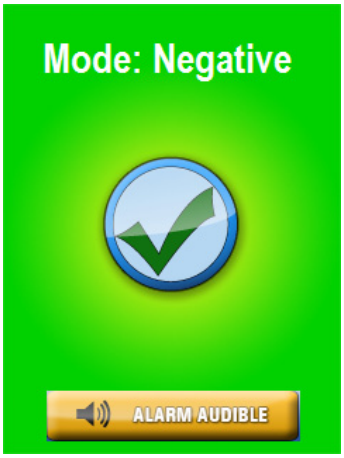


Fig. 17 Select Monitor Mode

Tapping *Finish* at the *Monitor Setup* configuration screen stores that subnetwork address of the companion FMS-1655 and begins the polling process immediately.

Configuring Audible Alert Settings

The *Audible Alert* option on the *Unit Setup* menu provides support for configuring the settings associated with the audible alarming capabilities of the FMS-1655R, and invokes the configuration screen shown in *Figure 18* when selected.

At this screen, the user may specify the operating mode for the alarm buzzer, *Audible Mode* or *Silent Mode*. Selecting *Audible Mode* allows the user to specify a *Delay Time* in seconds or minutes, which defines the period of time the audible alarm activation will be delayed when alarm status occurs.

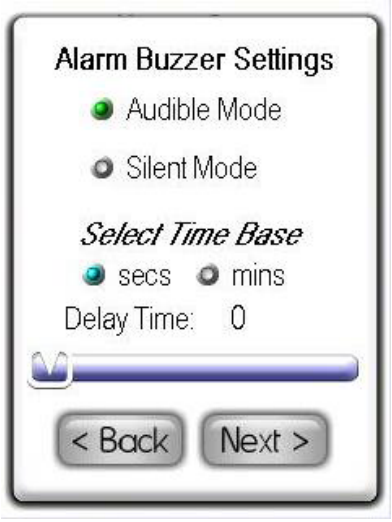


Fig. 18 Alarm Buzzer Settings

Selecting *Audible Mode* on the *Alarm Buzzer Settings* screen also allows an *Alarm Quiet Period* to be defined, during which the audible alarm will be muted whenever an alarm condition occurs at the companion FMS-1655.

Tapping the *Next* button invokes the *Alarm Quiet Period* screen as shown in *Figure 19*. At this screen, the starting and ending hour may be specified which defines the alarm buzzer muted period.

Fig. 19 Alarm Quiet Period

There are three alarm status conditions, each represented by a distinct background color and action icon on the display as shown in *Figure 20*.

Fig. 20 Action icons

There are also two additional action icons that represent *Neutral* and *Auto-clean* mode at the companion FMS-1655 controller.

Normal status indicates that the monitored parameter is within its normal operating range and is indicated by a green background and a green checkmark action icon. The Safety Halo™ status indicator, if enabled, will illuminate in green to indicate the *Normal* status.

Warning status indicates that the monitored parameter has drifted outside of its normal operating range, but has not yet exceeded the alarm setpoints. This condition is indicated by a yellow background and a yellow exclamation point action icon. The Safety Halo™ status indicator, if enabled, will flash slowly in yellow to indicate the warning or caution status. This *Warning* status is also used to indicate that a monitored door associated with the differential pressure input at an FMS-1655 is open.

Alarm status indication that the monitored parameter has exceeded the defined alarm limits and is in need of attention. This critical condition is indicated by a red background and a red exclamation point action icon. The Safety Halo™ status indicator, if enabled, will flash quickly in red to indicate the *Alarm* status.

A blue background indicates that *Neutral* isolation mode is selected at the companion FMS-1655. This mode is indicated by an action icon represented as a red circle with a line through its center. The Safety Halo™ status indicator, if enabled, will illuminate in blue to indicate the *Neutral* isolation mode.

When *Auto-clean* mode at the companion FMS-1655 is enabled, the FMS-1655R indicates the status by a cyan background and a simulated fan as the action icon. The Safety Halo™ status indicator, if enabled, will flash slowly in cyan to indicate that *Auto-clean* mode is active at the companion FMS-1655. The next section discusses the option available on the *System Setup* menu.

System Setup

To preserve the integrity of the configuration settings stored in the non-volatile memory of the FMS-1655R, a system security password management facility has been incorporated with a capacity of ten unique passwords. The *System Setup* menu shown in *Figure 21* provides support for managing system security passwords.

Fig. 21 System Setup

Managing System Security Passwords
The FMS-1655R incorporates a system security password facility to prevent unauthorized access to the system menus and configuration settings, and may store up to 10 unique password entries. The *Password Setup* option on the *System Setup* menu allows the user to manage the system passwords, including options for adding and deleting entries (see *Figure 22*).

Fig. 22 Password Setup

Adding New Passwords
To add a new password entry, select the *Add Password* option from the *Password Setup* menu. At the *Add Password* entry screen shown in *Figure 23*, enter at least four and up to eight digits. If the entry is unique, tapping the *Finish* button stores the password to non-volatile memory. If the entry is invalid or not unique, the warning buzzer will sound briefly, and the password entry screen will reset to accept a new entry.

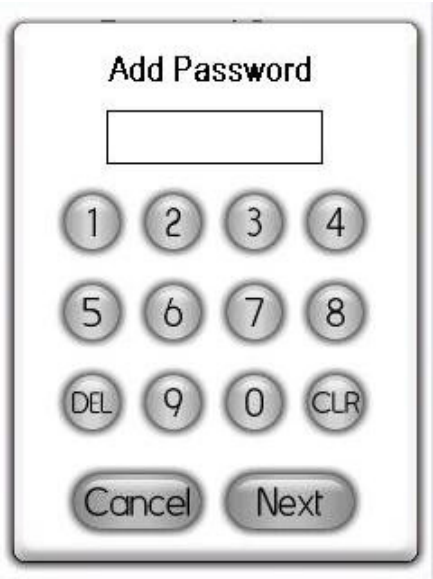


Fig. 23 Adding a Password

Deleting an Existing Password
To delete an existing password entry, the password to be deleted must be used to enter the user menu system. Select the *Delete Password* option from the *Password Setup* menu, and tap *OK* to confirm that you want to delete the existing password entry.

Purging All Passwords
In the event a previously entered password is forgotten, the user may purge all password entries at any time using the *Purge All* option.

Display Setup
The *Display Setup* menu provides support for configuring all of the display settings on the FMS-1655R. This includes configuring the Safety Halo™ settings, selecting the display viewing mode, adjusting the display brightness, and setting the system time and date.

Configuring the Safety Halo™
The Safety Halo™ option on the *Display Setup* menus allows you to configure the settings for the Safety Halo™ bezel, including the *Nightly Auto-Dim* feature. This feature allows the Safety Halo™ to automatically reduce its brightness to the specified percentage at the specified *Starting Hour*, and return to normal brightness at the specified *Ending Hour*.

To configure the Safety Halo™, select the Safety Halo™ option from the *Display Setup* menu, which invokes the *Safety Halo™ Settings* configuration screen. The Safety Halo™ feature may be enabled or disabled by selecting the corresponding radio button. If enabled, the normal intensity level may be varied between one and 100 percent. This is the intensity of the Safety Halo™ bezel during normal operating hours if *Nightly Auto-Dim* is enabled, or continuously otherwise.

To configure the Safety Halo™ to reduce in brightness intensity during evening hours or otherwise, select the *Nightly Auto-Dim* radio button and adjust the *Dimmed Level* between zero percent and 100 percent. To turn off the Safety Halo™ during the *Nightly Auto-Dim* period, set the dimmed level to zero percent. Tap the *Next* button to proceed to the next *Safety Halo™ Settings* screen where the starting and ending hours of the *Dimmed Period* may be specified.

For example, to configure the Safety Halo™ feature to reduce in brightness intensity to the dimmed level between 7:00 pm and 6:00 am every day, set the *Starting Hour* to 19 and the *Ending Hour* to 6. In this example, the Safety Halo™ will reduce in intensity at 7:00 pm every night, and return to normal intensity at

Selecting Display Mode
The *Display Mode* option on the *Display Setup* menu allows the subnetwork address of the companion FMS-1655 to be specified, and the viewing mode of the remote display to be configured.

Use the slider to specify the address of the companion FMS-1655, and then touch the radio button corresponding to the desired viewing mode. To eliminate all numeric values from the main display and only represent the status of the companion FMS-1655, select *Status-only View* mode. Otherwise, select *Standard View* mode and touch the *Finish* button to save the new settings to non-volatile memory.

Selecting Display Brightness
Selecting the *Set Brightness* option on the *Display Setup* menu invokes the *Set Backlighting Level* configuration screen as shown in *Figure 24*.

To increase the brightness of the display, move the slider to the right. Moving the slider to the left reduces the brightness down to a minimum level that remains visible. Tapping the *OK* button stores the new brightness setting to non-volatile memory, which allows the display to return to this brightness level even if a power loss is experienced.

Setting System Time and Date
The FMS-1655R is designed to synchronize its local time and date with the network-resident controller it is monitoring, thereby allowing the time-based features to operate accurately. These include the *Alarm Buzzer Quiet Period*, and the *Safety Halo™ Auto-Dim Period*. Selecting this option invokes the time configuration screen as shown in *Figure 25*. The colon between the hours and minutes automatically appears while entering the time. Similarly, the forward slash appears between the month, day and year automatically while entering the date.

Fig. 24 Display Setup

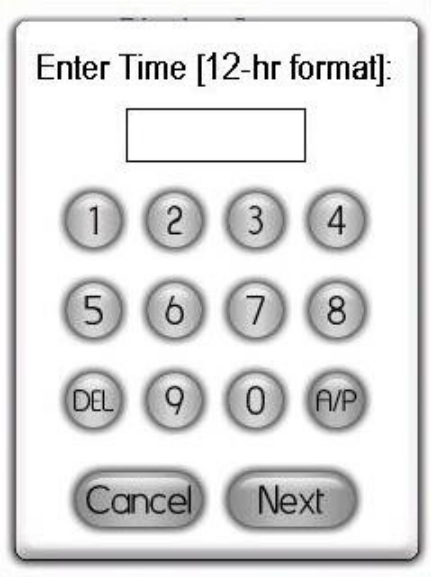


Fig. 25 Entering the Time

After entering the digits for the current time, touch the *A/P* button to specify am or pm, and then touch the *Next* button to enter the date. The date entry should be in the U.S. format as shown in *Figure 26*.

For convenience, the time and date may also be entered directly from the main screen (*Standard View* mode only) by touching the time and date fields, respectively. Tapping each invokes the appropriate configuration screen without requiring the user to enter the menu system.

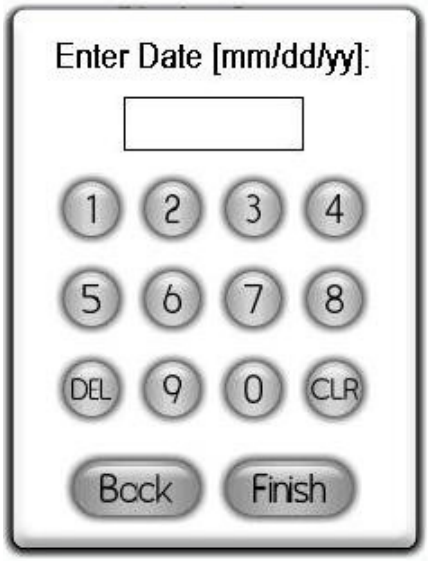


Fig. 26 Entering the Date

Diagnostics
The *Diagnostics* menu provides support for displaying information specific to this particular FMS-1655R unit, as well as convenient method of executing a soft reboot.

Selecting the *About This FMS Remote Display* option from the *Diagnostics* menu

invokes the information splash screen shown in *Figure 27*, including the electronic serial number, firmware version numbers, and the subnetwork address of the companion FMS-1655.

If you have general questions regarding the FMS-1655R or need technical assistance during installation, this screen lists the phone number to Triatek's Tech Support line.

You will need the information included on the *About This FMS Remote Display* screen to identify the specific details pertaining to your unit.

Fig. 27 Splash Screen

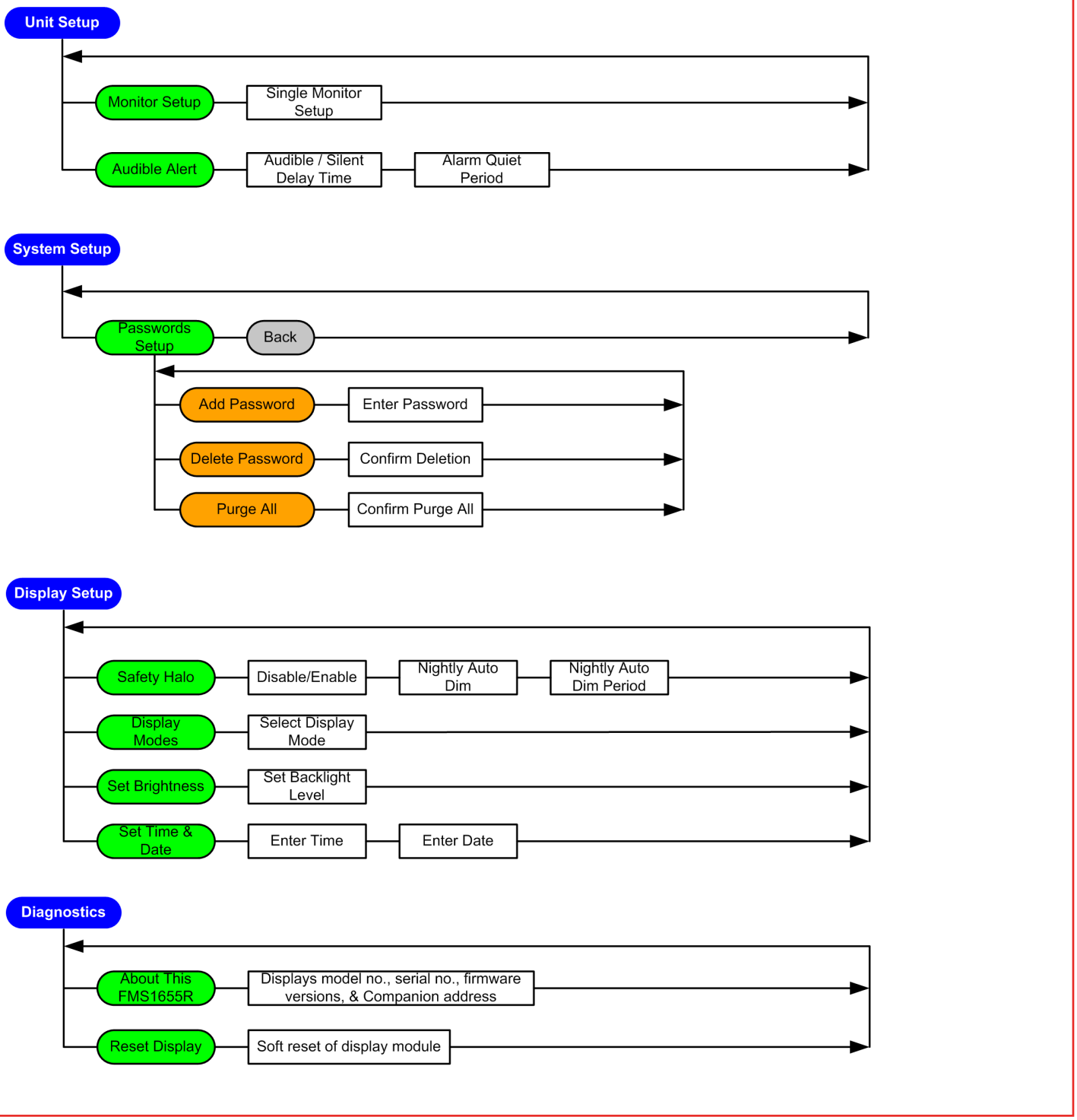
Resetting the FMS-1655R

The *Reset Monitor* option on the *Diagnostics* menu allows the user to perform a soft reboot of the remote display and completely re-initialize the unit.

This option may be useful during the installation process when changes have been made to the network parameters (subnetwork address). Selecting this option invokes the warning message as shown in *Figure 28*, informing the user that the FMS-1655R will be reset when the *OK* button is tapped to confirm the request.

Fig. 28 Diagnostics

User Menu Flow Diagram



FMS-1655R
Installation Manual
Programmer's Guide
Version: 08.14.15

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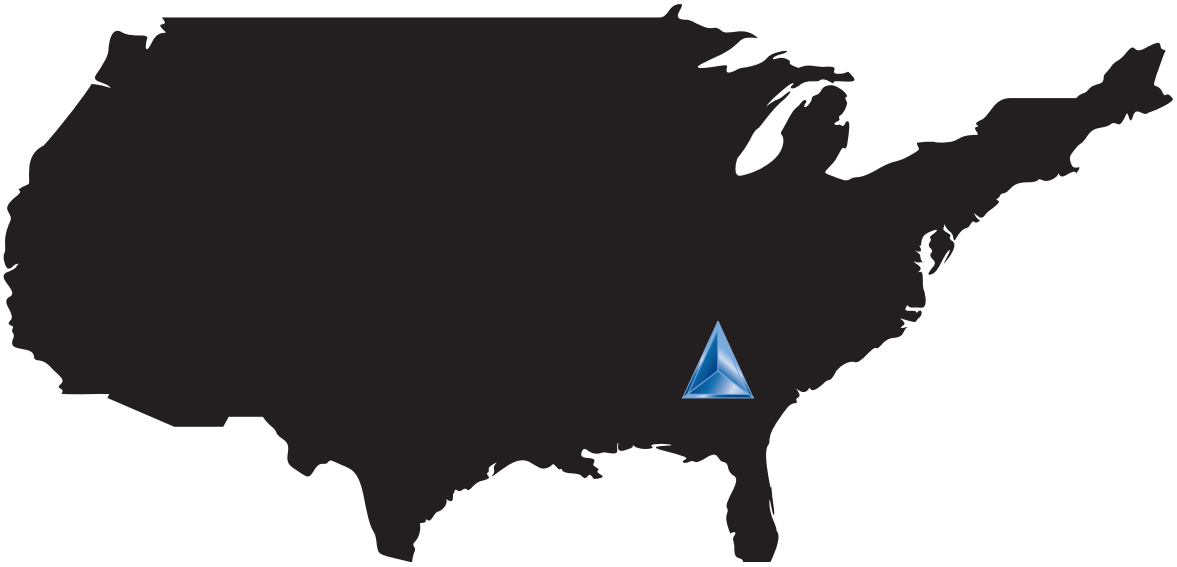

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