

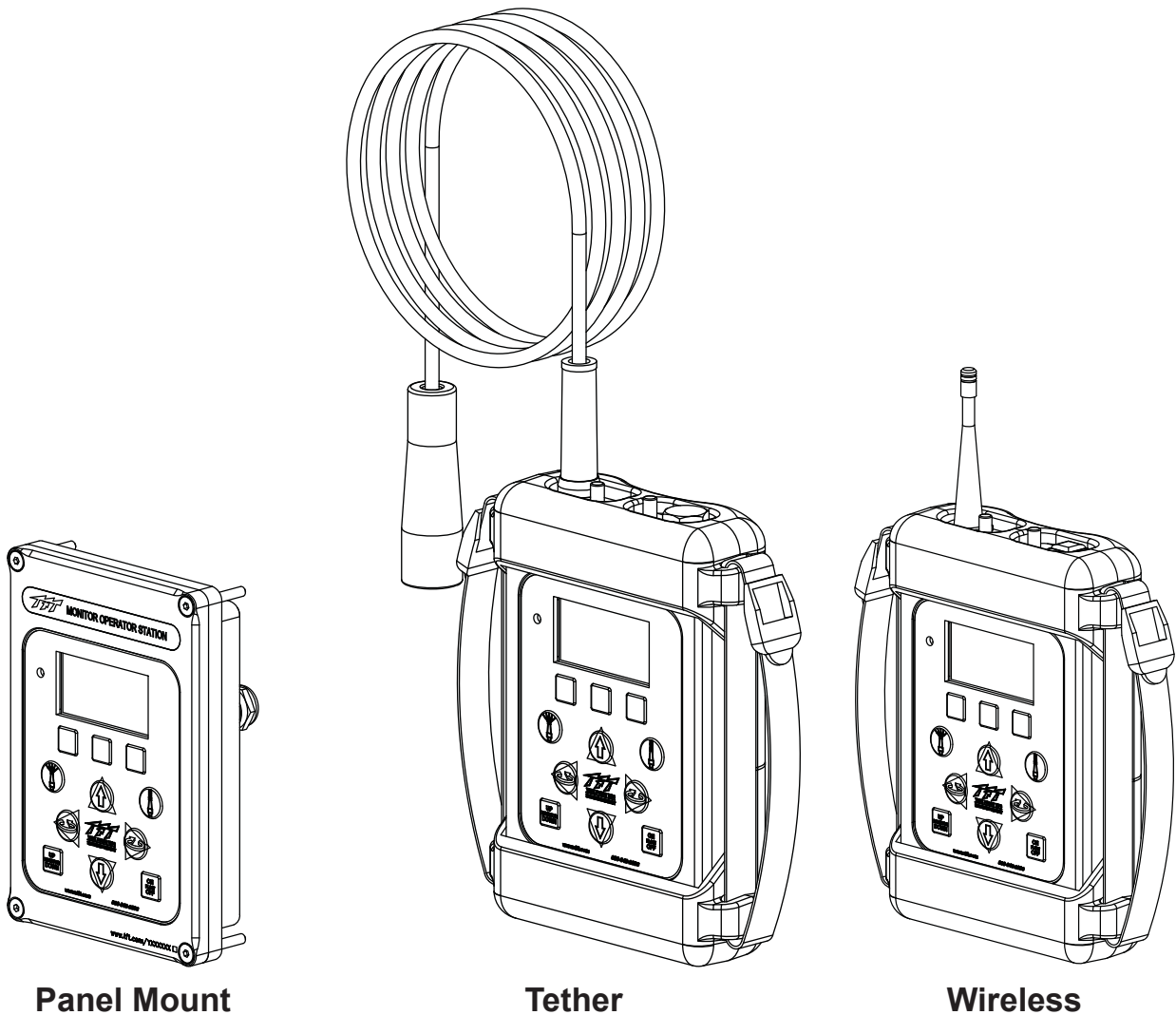


# MANUAL: Remote Operator Station with Display User's Guide

## INSTRUCTIONS FOR SETUP, SAFE OPERATION AND MAINTENANCE

This instruction manual covers the menu-driven software and display, and is intended for use with LIY-500 MANUAL FOR RC CONTROLS SUPPLEMENT. LIY-500 includes information for panel mounting, bracket installation, system status, notifications, and other related topics.

This Instruction Manual should be kept available to all operating and maintenance personnel.



Panel Mount

Tether





Wireless

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## 1.0 MEANING OF SAFETY SIGNAL WORDS

A safety related message is identified by a safety alert symbol and a signal word to indicate the level of risk involved with a particular hazard. Per ANSI standard Z535.6-2011, the definitions of the four signal words are as follows:

	<b>DANGER</b> indicates a hazardous situation which, if not avoided, will result in death or serious injury.
	<b>WARNING</b> indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	<b>CAUTION</b> indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury.
	<b>NOTICE</b> is used to address practices not related to physical injury.

## 2.0 SAFETY


	The RC monitor control boxes and motors are not rated as ignition proof, explosion proof, or intrinsically safe. Install in locations with adequate ventilation and no hazard of flammable vapor buildup.
	Disconnect power before installing or servicing the monitor to avoid electrical shock or injury from moving parts.
	Remote controlled equipment moves without warning placing nearby persons at risk of pinch points, loss of footing, or stream impact. Assume command of remote operation only after safe zones are established. Keep clear of powered equipment when the controls are energized.



**PERSONAL RESPONSIBILITY CODE**

The member companies of FEMSA that provide emergency response equipment and services want responders to know and understand the following:

1. Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
2. It is your responsibility to read and understand any user's instructions, including purpose and limitations, provided with any piece of equipment you may be called upon to use.
3. It is your responsibility to know that you have been properly trained in Firefighting and/or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
4. It is your responsibility to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
5. It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
6. Failure to follow these guidelines may result in death, burns or other severe injury.



Fire and Emergency Manufactures and Service Association  
 P.O. Box 147, Lynnfield, MA 01940 • www.FEMSA.org

### 3.0 BASIC OPERATION

The Operator Station control pad on Remote Monitor Operator Stations with Display allows for all basic movement functionality to be immediately accessed. Monitor movement in the horizontal and vertical direction, nozzle shaper position, and basic system Auxiliary commands for RC Extend-A-Gun and Valve Under Monitor all have an individual button associated with them.

The figure below shows the control pad used on all Remote Monitor Operator Stations with Display and the functionality assigned to each button

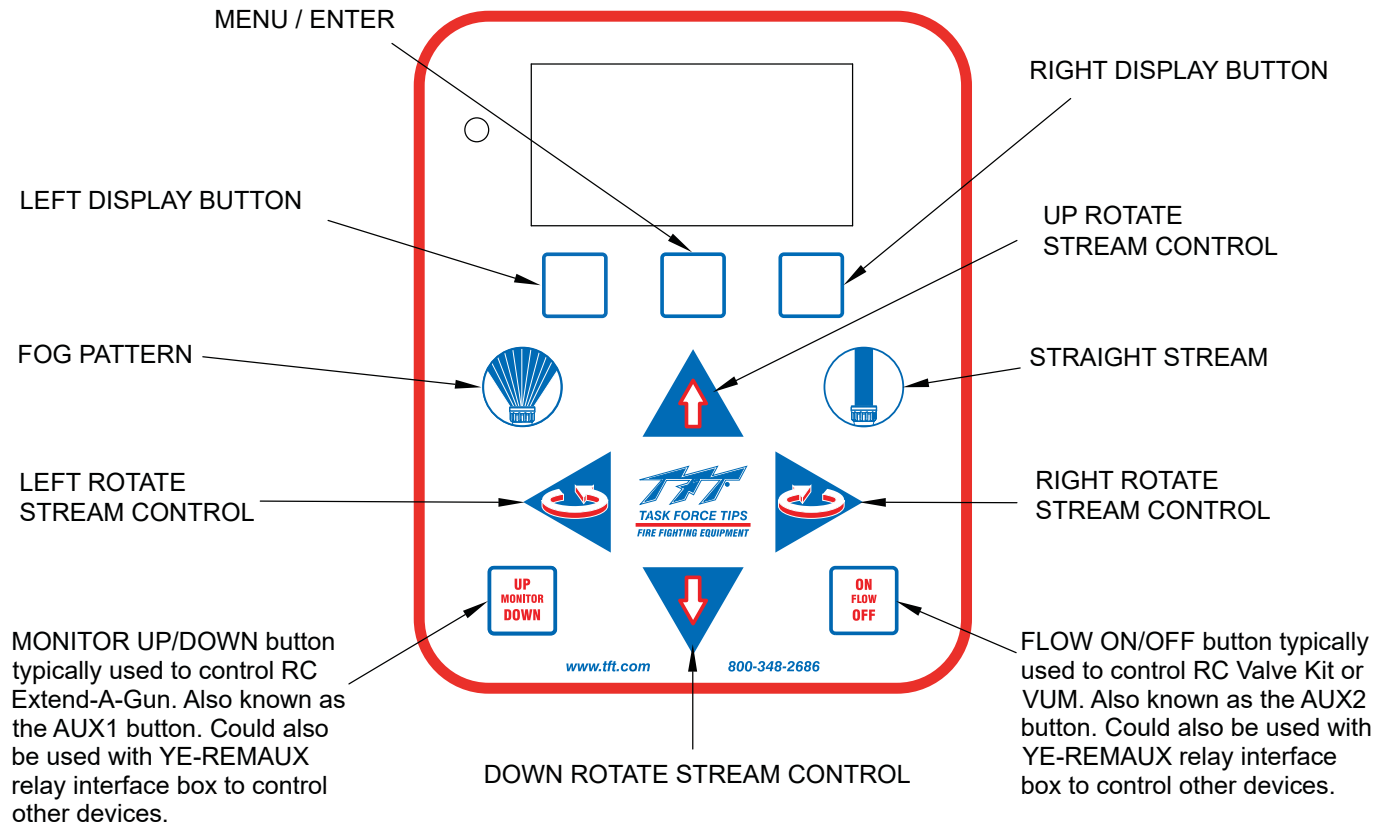


Figure 3.0  
Operator Station with Display Control Pad

### 4.0 DISPLAY OPERATION

#### 4.1 DISPLAY AREAS

The overall graphic display is divided into 3 separate areas. These three areas are completely independent from each other, and information is constantly updated based on user input and feedback from a TFT monitor system. The three areas are defined as the System Status Area, System Parameter Display Area, and the Display Button Identification Area. The figure below illustrates how the display is divided.



Figure 4.1  
Graphic Display Area Divisions

### 4.1.1 SYSTEM STATUS AREA

The System Status is for the display of 2 brief system operation parameters. By default, these parameters are configured to display the monitor movement speed setting and the communication link status between the unit and the monitor system. Additionally, this area is also used to display important messages to the user about the operating state of the system as well as important device information. Refer to section 4.4 for more detailed information about the System Status Area.

### 4.1.2 SYSTEM PARAMETER DISPLAY AREA

The System Parameter Display Area displays specific detailed system information based on user selections. By default, this area is allocated to display the position of the monitor's horizontal and vertical axis. Refer to section 4.3 for more detailed information about the System Parameter Display Area.

### 4.1.3 DISPLAY BUTTON IDENTIFICATION AREA

The Display Button Identification Area defines the functionality of the 3 unlabeled buttons that are located just underneath the graphic display on the Control Pad. This area expands the functionality of the Operator Station by redefining the button functionality and indicating to the user the new functionality of each button based on MENU selections. Refer to section 4.2 for more information on the Display Button Identification Area as well as how to use the DISPLAY BUTTONS in conjunction with this display area.

## 4.2 DISPLAY BUTTONS

The Operator Station will automatically recall the last functions displayed in the System Parameter Area when powering up. There is no need to save any settings to maintain user preferences. For example, if the unit was changed to display the VUM position and then powered down, the next time the unit powers up it will again show the VUM position.

Operator Stations with Display have 3 buttons on the operator station control pad that are unlabeled. These 3 buttons have their functionality defined by the lower section of the display screen. The text immediately above each button indicates what the functionality is. The figure below shows a basic screen along with the DISPLAY BUTTONS.

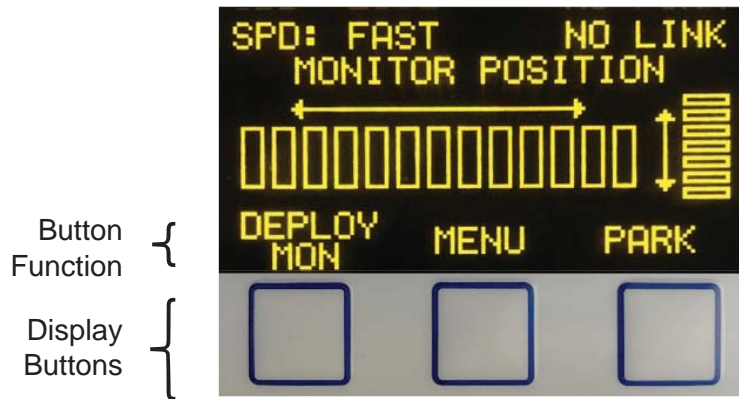


Figure 4.2a  
Display Buttons and Display Driven Identification

The most common function definition for the middle, DISPLAY BUTTON, "MENU", cycles through the different DISPLAY BUTTON menus continuously. If the user does not press any of the display buttons for a period of 10 seconds then the command menu along with the Button Function display area will automatically go back to the default button configuration.

Pressing either the LEFT DISPLAY or RIGHT DISPLAY BUTTON will initiate the command shown directly above that button. If, for example, the Button Function area has DEPLOY displayed directly above the LEFT DISPLAY BUTTON, then pressing the LEFT DISPLAY BUTTON will initiate the Monitor Deploy feature. Figure 4.2b illustrates how to command the monitor to begin the PARK program.

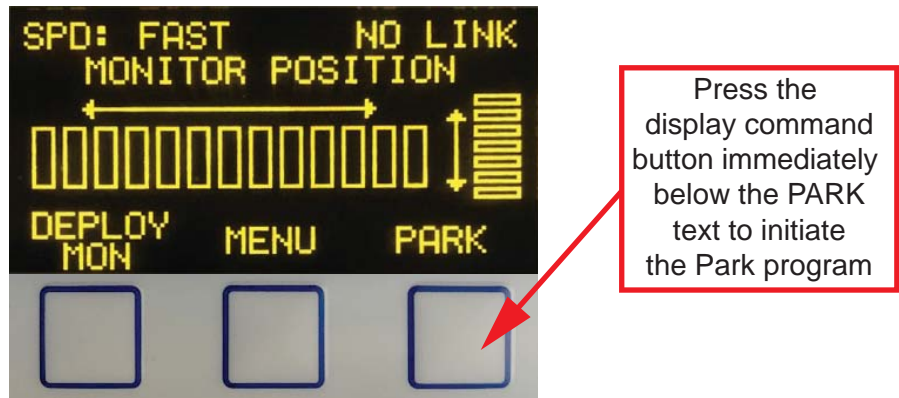


Figure 4.2b  
Display Button Function

Listed below are all the available DISPLAY BUTTON options:

- MENU: Command Menu cycle.
- DEPLOY: RC Monitor DEPLOY routine command.
- PARK: RC monitor PARK routine/program command.
- OSC: RC monitor OSCILLATE routine/program
- MON SPEED: Alter RC monitor travel speed command.
- MON DISP: Change System Parameter Area to RC monitor position.
- RAISE XGUN: Extend RC XGUN command
- VALVE DISP: Change System Parameter Area to VUM position.
- MON SELECT: Change System Parameter Area to currently selected RC monitor control group name.
- WATER DISP: If enabled, display of pressure and flow information change System Parameter Area to Fire Research Insight flow meter display.
- VOLT DISP: Change System Parameter Area to unit voltage and light level sensor display.

### 4.3 SYSTEM PARAMETER DISPLAY

The System Parameter Display area displays detailed specific system information that is able to be selected from options that are built into the menu system. Changing the parameter display is accomplished by pressing and releasing the DISPLAY MENU SELECT/ENTER button until the parameter of interest is shown above either the LEFT or RIGHT DISPLAY BUTTON and then pressing that button.

The parameter display options that can be selected from the display buttons by cycling through the menu options are as follows:

MON DISP: Monitor position display of currently controlled RC monitor.

VALVE DISP: Position display of currently controlled RC VUM.

MON SELECT: Display of the name the currently controlled RC monitor group.

WATER DISP: If Enabled will display of pressure and flow information from Fire Research Insight CAN based flow meter. The unit must be communicating through a J1939 CAN communication bus for this functionality to work.

VOLT DISP: Display of unit supply voltage and ambient light sensor, used by TFT service personnel to assist in troubleshooting.

As an example, to change the System Parameter Area Display from the default setting of showing monitor position to showing valve position starting from the default reconfigurable button menu, use the following steps:

1. Repeatedly Press the MENU BUTTON until the VALVE DISP option is shown above one of the DISPLAY buttons.

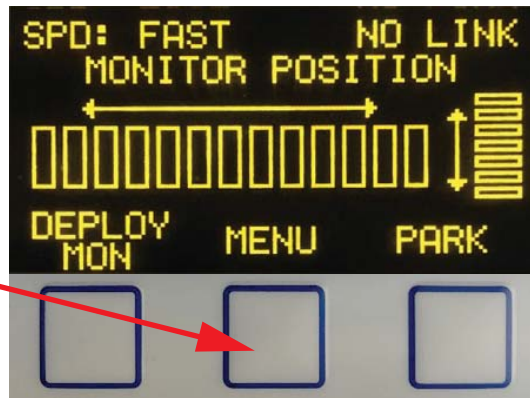


Figure 4.3a

System Parameter Change Step 1

2. Press the DISPLAY BUTTON that is located just below the VALVE DISP text on the display screen.

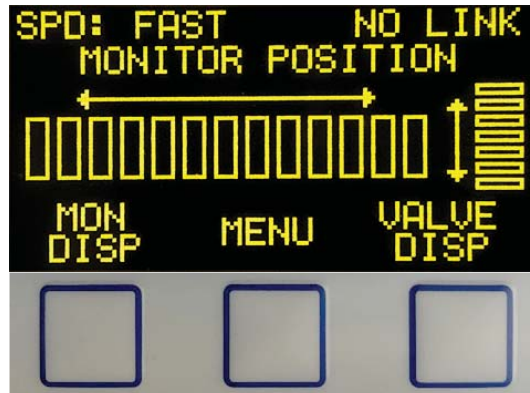


Figure 4.3b

System Parameter Change Step 2

3. The System Parameter Display Area is now configured to show VUM valve position.



Figure 4.3c

System Parameter Change Step 3

## 4.4 SYSTEM STATUS AND NOTIFICATIONS

### 4.4.1 SYSTEM STATUS

Under normal operating conditions, the top text line of the display shows 2 system operating status parameters. As an example, the default settings show the speed selection for monitor movement and the communication link status between the Remote Operator Station and the monitor system.

Using Figure 4.1 as an example, the text “SPD: FAST” in the left section of the System Status Area indicates that the monitor is configured to move in the fast, ramp-up speed. The text in the right section of the System Status Area, “LINKED”, indicates that there is an active link with a TFT monitor system.

The system parameter display options are listed below:

- Multiple Monitor Control group numerical selection value.
- RC monitor communication link status.
- RC Extend-A-Gun position status.
- RC VUM position.
- RC monitor movement speed selection.

Refer to section 5.2 for information on configuring the System Status Area display parameters.

## 4.4.2 NOTIFICATIONS

At times, there will be important system status information that will need to be displayed. In these instances the System Status information will cycle between displaying the current status of the two system parameters, and important messages to the user. Below is a list of notifications that could, at times, appear in the System Status Area.

**MONITOR OSCILLATING:** Indicates that the TFT RC monitor is in the process of performing its Oscillate program.

**OSC PROGRAM:** Indicates that the TFT RC monitor is currently in an Oscillate Program Mode.

**OSC POSITION STORED:** Indicates that the TFT RC monitor that is in Oscillate Program Mode has successfully stored a new position.

**MONITOR PARKING:** Indicates that the TFT RC monitor is in the process of performing its Park Pattern.

**MONITOR PARKED:** Indicates that the TFT RC monitor is currently in its Park position.

**PARK PROGRAM:** Indicates that the TFT RC monitor is currently in Park Program Mode.

**PARK POSITION STORED:** Indicates that the RC monitor that is in Park Program Mode has successfully stored a new Park position.

**LOW BATTERY:** Indicates that the unit's supply voltage is below a low voltage threshold. In the case of a wireless version, it is time to replace the batteries.

**COMMUNICATION ERROR:** Indicates that a command sent to a TFT monitor failed to be received correctly. This could be due to a wireless unit being used out of range, or a communication wiring issue.

**NO RADIO INSTALLED:** On wireless versions, a radio is required to communicate with a TFT RC monitor system. If no radio is detected in the unit, this message will alert the user of a radio problem and TFT's service/tech support department should be contacted.

**INCOMPATIBLE RADIO:** Wireless versions require specific wireless radios to communicate with TFT RC monitor systems. In the event the unit does not recognize the radio that is installed it will report this message to the user. TFT's service/tech support department should be contacted to determine the cause of this message.

**EEPROM FAILURE:** All versions of the Operator Station store configuration information and current display settings in memory. In the event that the unit is unable to save or restore the configuration information, this message will be displayed to the user. Contact TFT's service/tech support department if this message is ever displayed.

Figure 4.4.2 shows an example as to how important notifications are displayed in the System Status Area. In this example, the Operator Station is indicating to the user that the monitor is currently in its parked position.



Figure 4.4.2  
System Notification Example

## 5.0 DEVICE CONFIGURATION

There is a separate menu for Configuration Mode that is used to alter the configuration of the operator station. Configuration Mode controls the information that is displayed in the System Status Area, multiple monitor control settings, as well as LEARNING the ID Code from a particular monitor to wireless versions of the Operator Station.

### 5.1 CONFIGURATION MODE

The Configuration Menu is entered by pressing and holding the MENU BUTTON for 5 seconds. The System Parameter Display Area will change to indicate that the operator station is now in what is known as Configuration Mode as shown in Figure 5.1.



Figure 5.1  
Configuration Mode

By default, the device will exit Configuration Mode after 10 seconds of inactivity. Alternatively, it is possible to exit Configuration Mode by cycling through the available menu options, in the same fashion the standard menus are cycled using the center display command button, until the EXIT option is displayed and pressing the corresponding DISPLAY BUTTON.

The available device Configuration Mode options are listed below:

- STATUS LEFT: Changes the system parameter that is displayed in the left section of the System Status Area. New selection is permanently stored and will be maintained on system power-down and power-up.
- STATUS RIGHT: Changes the system parameter that is displayed in the right section of the System Status Area. New selection is permanently stored and will be maintained on system power-down and power-up.
- RFID LEARN: Wireless versions of the Operator Station have to LEARN an ID code from a wireless TFT RC monitor, this will begin the execution of the RFID LEARN routine.
- RFID VALUE: Displays the current RFID value
- WATER DISP: This controls whether the water pressure & flow screen is displayed
- VALVE TYPE: Select valve type between RC VUM and TFT Gateable Ball Valve
  - TFT gateable ball valve control only available on wired version of Operator Stations (Tether or Panel Mount)
  - When TFT gateable ball valve is selected, pressing Flow ON/OFF button will change display to show VALVE GATE POS. Valve position can be changed using INC / DEC display buttons.
- VUM MODE: Change RC VUM motor direction, Auto/Man operating mode, or AUTO close on PARK feature
  - Only available on wired version of Operator Stations (Tether or Panel Mount).
  - Pressing Display Button that is located below VUM option text will toggle between the two options.
- VALVE DISP: This controls whether the valve position screen is displayed
- MULTI CONFIG: The Remote Monitor Operator Station with Display is capable of controlling up to ten (10) different TFT RC monitors individually. This will allow the unit to be configured for the number of monitors in the system and to apply easily identifiable names to each monitor control group.
- MENU TO: This controls the number of seconds for the menu timeout.
- SOFT VER: Displays the current software version for the unit.
- EXIT: Exits the Configuration Menu.



## 5.2 SYSTEM STATUS AREA CONFIGURATION

The 2 System Status Area parameters can be configured by selecting either the STATUS LEFT or STATUS RIGHT options from the Configuration Menu. After selecting either option it is then possible to cycle through the list of parameters to show by using the PREV and NEXT display buttons.

Use the following steps, as an example, to change the left system status parameter to display the position status of a TFT RC Extend-A-Gun.

1. Press and hold the MENU button for 5 seconds to enter the configuration menu. Release the button once the Configuration Menu is displayed.



Figure 5.2a  
System Status Area Change Step 1

2. Press and release the DISPLAY BUTTON that has the text "STATUS LEFT" located immediately above it to select a new parameter.

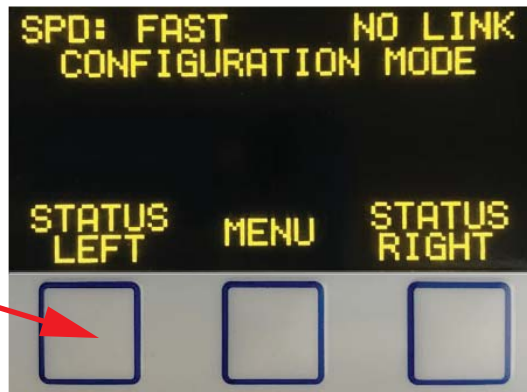


Figure 5.2b  
System Status Area Change Step 2

3. Continually press the NEXT DISPLAY BUTTON above it until the text "XGUN STATUS" is displayed in the System Parameter Display Area.

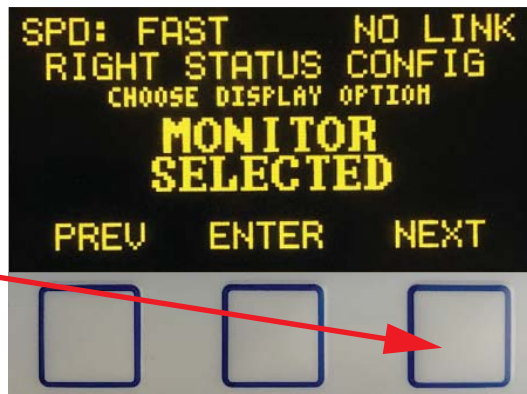


Figure 5.2c  
System Status Area Change Step 3

- Press and release the ENTER BUTTON, which now has the text "ENTER" located just above it to change the parameter display option.

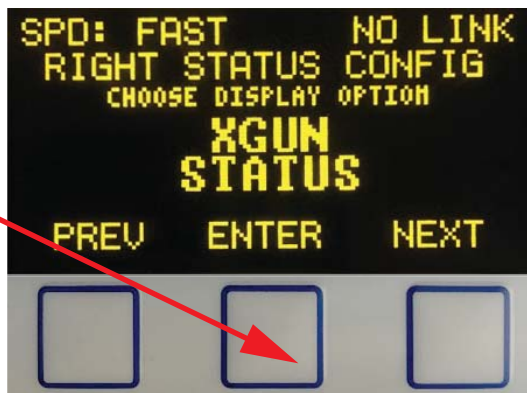


Figure 5.2d  
System Status Area Change Step 4

- Press and release the DISPLAY MENU button until the command option "EXIT" is displayed above one of the DISPLAY BUTTONS and press that button.

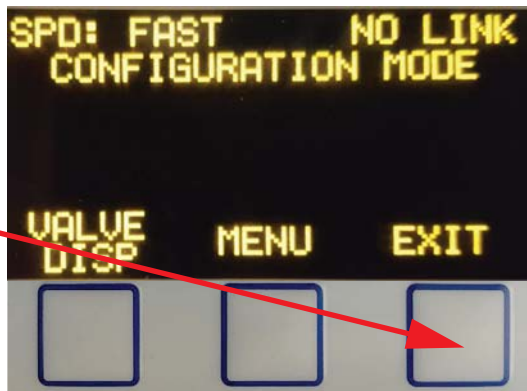


Figure 5.2e  
System Status Area Change Step 5

- The left portion of the System Status Area now displays the position status of a TFT RC Extend-A-Gun.



Figure 5.2f  
System Status Area Change Step 6

The available parameters for display in the System Status Area are described below:

**MONITOR SELECTED:** Displays the numerical value of the TFT RC monitor group that is currently being controlled. Refer to section 6.0 for more information about Multiple Monitor Control.

**COMM LINK:** Displays the communication link status between the unit and the TFT RC monitor system.

**XGUN STATUS:** Displays the current position status of a TFT RC Extend-A-Gun. Displayed values are "XG UP", "XG DOWN", "XG MOVING", or "NO XGUN" to indicate that there is no TFT RC Extend-A-Gun installed or sensed in the system.

**VALVE STATUS:** Displays the current position status of a TFT RC VUM. Display values are "VLV OPEN", "VLV CLOSED", "VLV MOVING", or "VLV STOP" to indicate that the valve is stopped at an intermediate position between fully open and fully closed.

**MONITOR SPEED:** Displays the current setting of TFT RC monitor movement speed. Displayed values are "SPD: FAST", "SPD: SLOW", or "SPD: CHNG" to indicate a movement speed change request has been sent to the monitor.

### 5.3 WIRELESS OPERATOR STATION AND MONITOR PAIRING

Wireless versions of the Operator Station need to have the RFID code from the monitor taught to it. Below is a step-by-step guide on how to put the unit in a mode to LEARN the RFID code from the monitor.

Refer to LIY-500, Section 4.6.3, for information on how to put the monitor into TEACH mode.

1. Press and hold the MENU BUTTON for 5 seconds to enter the configuration menu. Release the button once the Configuration Menu is displayed.



Figure 5.3a  
ID Code Pairing Step 1

2. Continually press and release the MENU until "RFID LEARN" is one of the available options and press and release the corresponding DISPLAY button below the option.

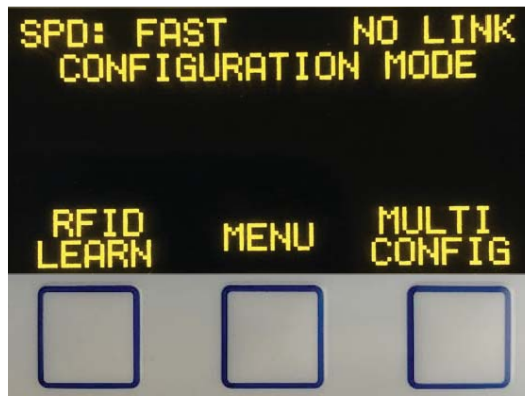


Figure 5.3b  
ID Code Pairing Step 2

3. After setting the default ID code, it will then wait to receive the new code from the monitor.



Figure 5.3c  
ID Code Pairing Step 3

5. After receiving the new code from the monitor the unit will then configure the radio and store the new ID code in memory. The unit will then show that the new ID code has been learned and indicate that the update was successful.



Figure 5.3d  
ID Code Pairing Step 5

7. Press and release the MENU button until the option "EXIT" is displayed above one of the DISPLAY BUTTONS and press and release that button.

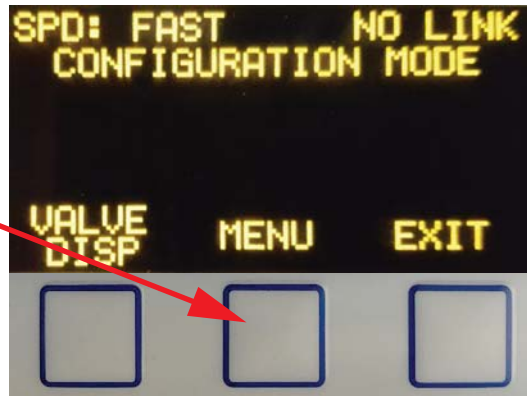


Figure 5.3e  
ID Code Pairing Step 7

**Note:** If the unit fails to properly acquire the ID code from the monitor and program the ID code into the unit, repeat the process of TEACHING/LEARNING the ID code.

#### 5.4 MULTIPLE MONITOR CONTROL CONFIGURATION

TFT RC monitors and the RC accessories directly associated with the monitor are defined as a Monitor Group. As an example, a single TFT RC monitor group could consist of a TFT RC Monitor, a TFT RC Extend-A-Gun, and a TFT RC Valve Kit. These items collectively would make up a RC Monitor Group. The control of multiple groupings of TFT RC monitors and their directly related RC accessories is what is called Multiple Monitor Control.

**Note:** Only 1 monitor is capable of being assigned to a Monitor Group for independent control.

The Operator Station can be configured to control up to 10 monitor groups from a single controller. Also, the device can be configured to control just a single monitor, but have the monitor communication group changed to work in conjunction with a multiple monitor control system.

Additionally, the device allows a name to be given to each monitor communication group, making it easier to identify which monitor the controller is configured to control as opposed to memorizing a numerical group number for each monitor. Names are selected from a pre-defined list of choices that are programmed into the unit.

**Note:** Refer to LIY-500, Section 4.7.6, for information on how to configure TFT RC monitors for multiple monitor control.

Following is a step-by-step example of configuring the Operator Station to communicate with 2 monitors:

1. Press and hold the MENU button for 5 seconds to enter the configuration menu. Release the button once the Configuration Menu is displayed.

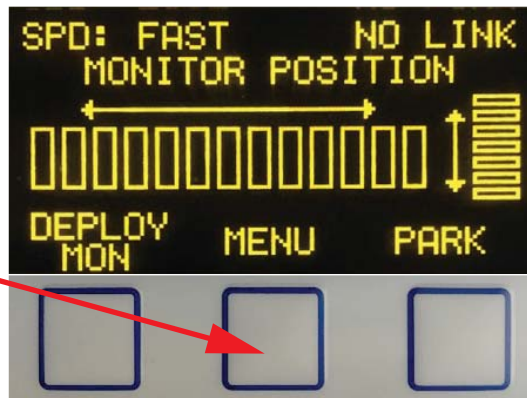


Figure 5.4a  
Group Control Configuration Step 1

2. Repeatedly press and release MENU until "MULTI CONFIG" is one of the available options and press and release the corresponding DISPLAY BUTTON.

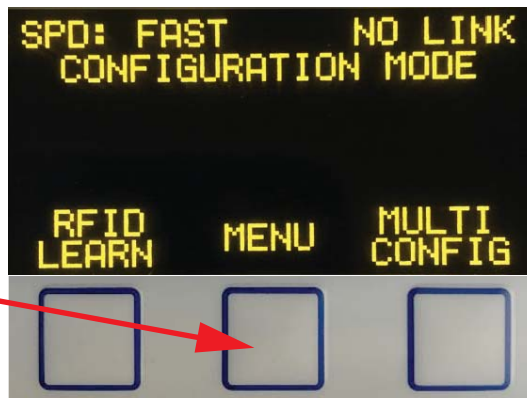


Figure 5.4b  
Group Control Configuration Step 2

3. Press and release the RIGHT DISPLAY button to increase the number of monitors to control until the number 2 is displayed in the System Parameter Display Area. Press and release the ENTER button.

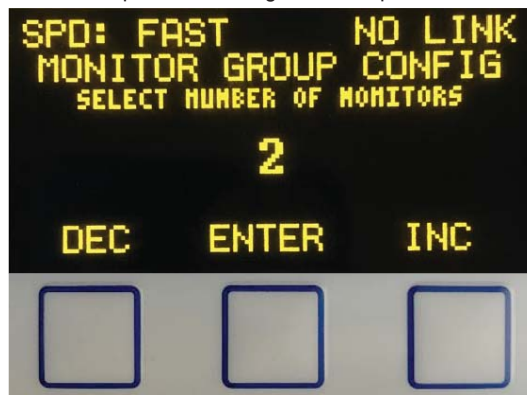


Figure 5.4c  
Group Control Configuration Step 3

4. Cycle through the list of name options for the first group using the PREV & NEXT BUTTONS. Press and release the ENTER button to select the name.

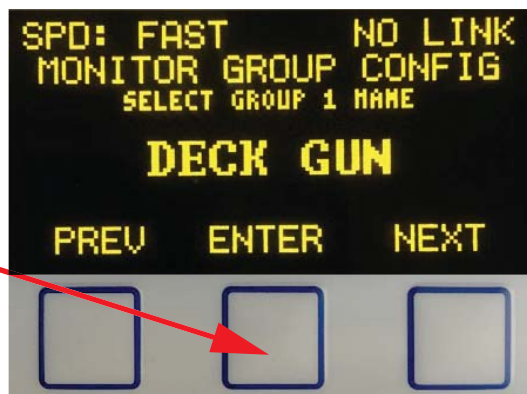


Figure 5.4d  
Group Control Configuration Step 4

- Repeat the same process of cycling through the list of available name options. Press and release the ENTER BUTTON to select the name displayed in the System Parameter Display Area.

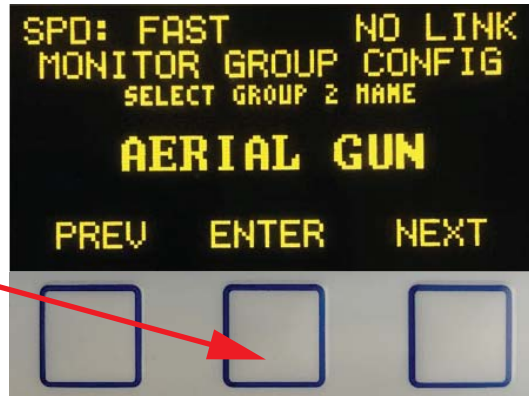


Figure 5.4e  
Group Control Configuration Step 5

- Press and release the MENU BUTTON until the command option "EXIT" is displayed above one of the DISPLAY BUTTONS. Press and release that button.

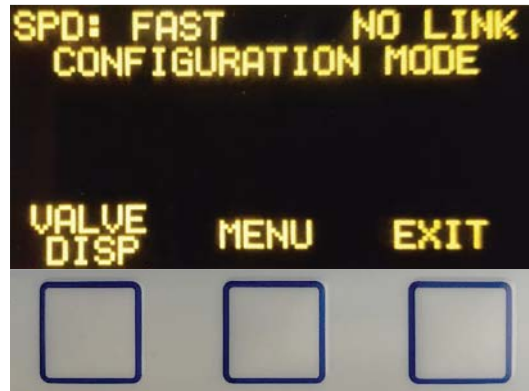


Figure 5.4f  
Group Control Configuration Step 6

- The unit is now configured to control multiple monitors. The default menu now changes to the Monitor Group Selection menu.

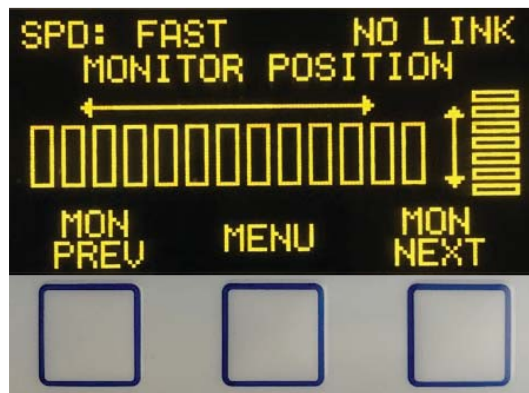


Figure 5.4g  
Group Control Configuration Step 7

} Monitor Group Selection Menu.

## 5.5 MENU TIMEOUT CONFIGURATION

The unit allows users to vary the amount of time for the standard menus to timeout and return to the default DISPLAY COMMAND and MENU/ENTER button configuration. The default setting is 10 seconds. Users can configure the menu to timeout from a minimum of 5 seconds, up to a maximum of 20 seconds.

**NOTE: The menu timeout does not control the amount of time that the unit will wait before automatically exiting the configuration menu. That time is limited to 10 seconds to prevent accidental reconfiguration of the unit.**

## 5.6 DEMO MODE

The unit has a "Demonstration Mode" that helps give a visualization of all the features that are available on the unit. The DEMO MODE can be enabled/disabled from inside the SOFT VER menu. Changing the mode results in resetting the unit. On Wireless versions this will require turning the unit back on with the POWER BUTTON to resume operation. Once DEMO MODE is turned on, it stays configured that way until this menu is entered again and turned off. **Monitor controls are completely disabled in this mode so use caution, it is not recommended for units that are in service.**

## 5.7 RESETING FACTORY DEFAULTS

Once a unit has been configured, a factory default restore may be desired. To perform this action ensure the unit is powered down. Press and hold the Fog Pattern button and Flow On/Off button while switching the power on. Release the two buttons when the factory default message appears to complete the process.

## 6.0 MULTIPLE MONITOR CONTROL

Remote Monitor Operator Stations with Displays that are configured for multiple monitor control have a different top-level default menu from standard systems. It is essential that users are able to quickly switch control from one monitor to the next without having to cycle through menus. Therefore, the Monitor Control Group Selection commands are the first, and default button configuration on units configured for multiple monitor control. The standard controller top-level default menus can be found by pressing the MENU BUTTON.



Figure 6.0  
Multiple Monitor Configured Device Default Menu

### 6.1 MULTIPLE MONITOR GROUP SELECTION CHANGE

Changing the selection of Monitor Groups is performed by pressing and releasing the MON PREV and mon NEXT buttons. Pressing either of the buttons will continuously cycle through the different monitor control groups configured to be controlled with the operator station.

There is a parameter associated with the System Parameter Display area that displays the name of the monitor group that is currently being controlled. Alternatively, if another system parameter is being displayed, such as the currently controlled group's monitor position, selecting a new control group will automatically display the Monitor Group parameter temporarily to alert the user of the group the operator station is now controlling.

### 6.2 MULTIPLE MONITOR POSITION DISPLAY

Units configured for multiple monitor control are capable of displaying position display data for all RC monitor control groups that it is configured to control. The display shows the position data for only the current monitor selected.

### 6.3 LAST MONITOR CONTROLLED ON POWER-UP

The unit will automatically resume control of the TFT RC monitor control group that was last controlled on power-up. There is no need to save the configuration for future use, this is automatically done by the unit.

## 7.0 MAINTENANCE

Inspect controllers at least quarterly to verify that functions are operational and controls are free from damage or corrosion. Check battery level of wireless controller and replace as necessary.

Service Test monitors at least annually insuring functions of all controllers are operational. Maintain records of the controller as part of the monitor records.



**Any controller found to be malfunctioning is unsafe for use and must have the problem corrected before use or being placed back into service. Operating with a failed controller is a misuse of this equipment.**

## 8.0 WARRANTY

Task Force Tips LLC, 3701 Innovation Way, Valparaiso, IN 46383-9327 USA ("TFT") warrants to the original purchaser all versions of its Remote Monitor Operator Station with Display (Panel Mount, Tether & Wireless) ("equipment"), and to anyone to whom it is transferred, that the equipment shall be free from defects in material and workmanship during the five (5) year period from the date of purchase.

TFT's obligation under this warranty is specifically limited to replacing or repairing the equipment (or its parts) which are shown by TFT's examination to be in a defective condition attributable to TFT. To qualify for this limited warranty, the claimant must return the equipment to TFT, at 3701 Innovation Way, Valparaiso, IN 46383-9327 USA, within a reasonable time after discovery of the defect. TFT will examine the equipment. If TFT determines that there is a defect attributable to it, it will correct the problem within a reasonable time. If the equipment is covered by this limited warranty, TFT will assume the expenses of repair.

If any defect attributable to TFT under this limited warranty cannot be reasonably cured by repair or replacement, TFT may elect to refund the purchase price of the equipment, less reasonable depreciation, in complete discharge of its obligations under this limited warranty. If TFT makes this election, claimant shall return the equipment to TFT free and clear of any liens and encumbrances.

This is a limited warranty. The original purchaser of the equipment, any person to whom it is transferred, and any person who is an intended or unintended beneficiary of the equipment, shall not be entitled to recover from TFT any consequential or incidental damages for injury to person and/or property resulting from any defective equipment manufactured or assembled by TFT. It is agreed and understood that the price stated for the equipment is in part consideration for limiting TFT's liability. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above may not apply to you.

TFT shall have no obligation under this limited warranty if the equipment is, or has been, misused or neglected (including failure to provide reasonable maintenance) or if there have been accidents to the equipment or if it has been repaired or altered by someone else.

**THIS IS A LIMITED EXPRESS WARRANTY ONLY. TFT EXPRESSLY DISCLAIMS WITH RESPECT TO THE EQUIPMENT ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. THERE IS NO WARRANTY OF ANY NATURE MADE BY TFT BEYOND THAT STATED IN THE DOCUMENT.**

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.