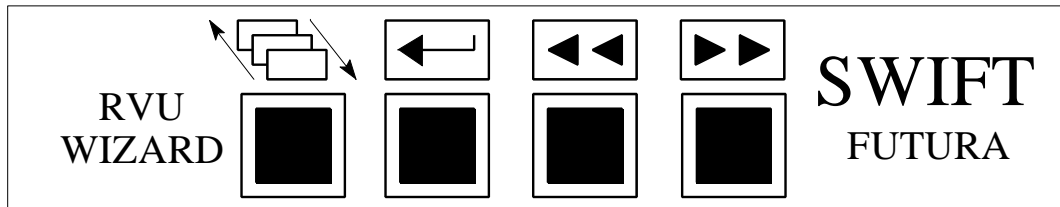


# USING THE SWIFT FUTURA REMOTE VIDEO UNIT



**NOTE: This document only applies to RVUs version 6 and above!**

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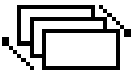
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## 1. INTRODUCTION

This document will provide the user with a complete understanding on the operation of the SWIFT Futura Remote Video Unit (RVU). By using the four push buttons on the front panel of the RVU, a variety of functions can be performed. These functions include setting hall calls and car calls, error tracking, and error analysis. This makes the RVU an invaluable tool for troubleshooting and diagnostics.

The RVU communicates to the group controller (SPU) on the Car To Group bus (CTG). The RVU can be wired to any controller in the bank. Once connected, it is possible to view information from all of the cars in that particular bank. If the controller the RVU is wired to loses power, the RVU will reestablish communication with another controller in the bank in about twenty seconds.

There are two main screens displayed by the RVU; the group screen, which shows all of the elevators in the bank as well as their position and movement, and the car diagnostic screen, which provides detailed information on the status of the car being viewed. Depending on which screen is being viewed, the push buttons can be used to perform different tasks. Throughout the remainder of this document, the push buttons will be referred to as:



**Rotate Screen**



**Enter**



**Scroll Left**



**Scroll Right**

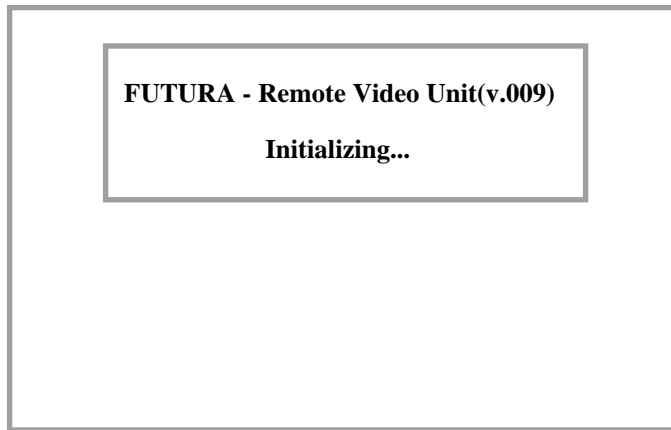
It is recommended that the user become familiar with these buttons and their names. A full description on the use of the push buttons and the functions they perform will be provided in the following pages.



## 2. INITIALIZATION AND COMMUNICATION SETUP

Before powering up the RVU, consult the wiring diagram. Remember, when wiring the RVU, the transmit and receive lines are swapped with the SPU (i.e., T<sub>x</sub>- on the RVU is wired to R<sub>x</sub>- on the SPU). Once proper wiring is confirmed, connect the VGA monitor to the RVU and power on the monitor and RVU.

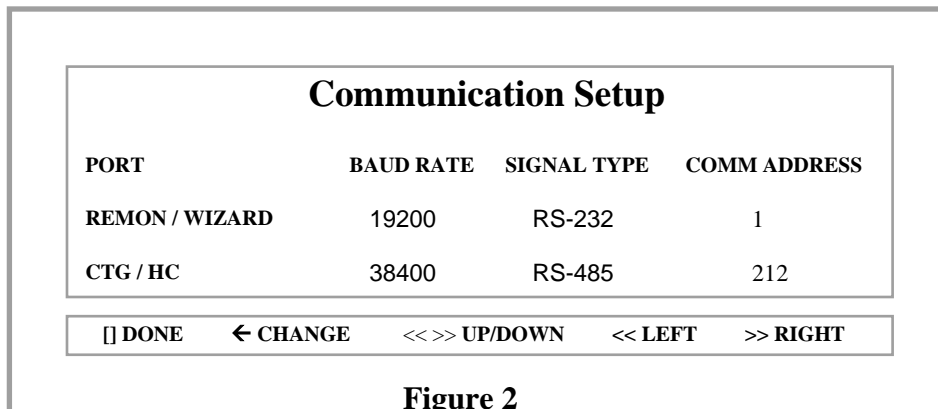
After a few seconds, the following screen will appear:



**Figure 1**

If the EMIS feature was purchased, the screen will display “Remote Video Unit & EMIS”.

When this screen appears, the user has approximately three seconds to access the communication setup menu. To enter communication setup, press the rotate screen button as soon as the initialization screen appears. The following screen will appear:



**Figure 2**

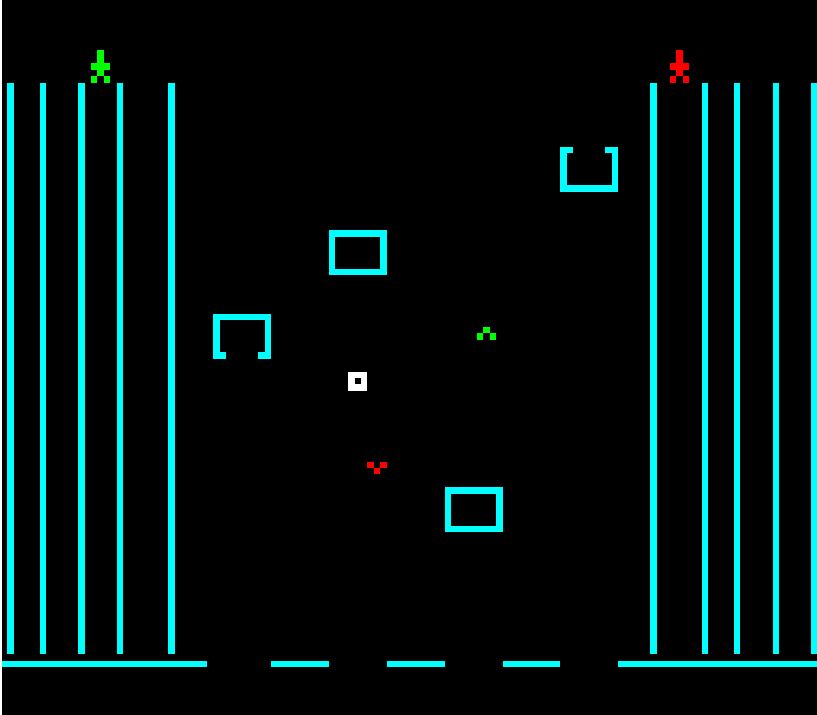
The default settings are shown above. The only time it will be necessary to change any settings is if a Remote Monitoring System is being used. If any changes need to be made and the message “Unable To Setup Comm” appears on the screen, disconnect the connector from the CTG/HC port on the back of the RVU.

If using line drivers to communicate to a Remote Monitor PC, the comm setting for the Remon/Wizard port will need to be changed. Press the scroll right button until the signal type for the Remon/Wizard port is highlighted. Next press the enter button to change the value from RS-232 to RS-485. Once this value has been changed press the rotate screen button (DONE). The RVU will reset and the change will take place. Reconnect the CTG/HC port after the RVU resets.

The menu can also be used to set up extended RVUs. In this configuration, more than one RVU can be connected to the same group on the same bus. One RVU, the master, will communicate to the SPU at address 212. Any other RVUs, or extended RVUs, connected to this group must use comm address 213. To switch to the CTG/HC parameters, press both the scroll left and right buttons simultaneously. Highlight the comm address parameter. Press the enter button to switch the address to 213. Press the rotate screen button and the RVU will reset. Extended RVUs can only access the group screen, not diagnostic screens.

### 3. THE GROUP SCREEN

After the RVU initializes successfully, the group screen, or motor room screen, will be displayed. A sample group screen is shown below:



**Figure 3**

Note that the CEC job # is shown in the upper left corner of the screen. The left side of the display represents the wait time and estimated time of arrival for UP calls. DOWN call information is displayed on the right side of the screen.

From this screen, the push buttons can be used to perform various functions. The first button is used to rotate the screen from the group display to the car diagnostic screen. Pressing this button once from the group screen will display the diagnostic screen for car one. To see the next car, simply press the rotate screen button again. It is possible to scroll directly to a desired car's diagnostic screen without scrolling through all of them. By pressing the scroll left button or the scroll right button, a specific car number can be highlighted at the top of the screen. Once the desired car is highlighted, press the rotate screen button to scroll directly to that car's diagnostic screen.

The functions available from the group screen include setting hall and car calls, changing the appearance of the group screen, and hiding the ETA and wait times. To access the list of functions available from the group screen, press the enter button. The command

'Hall Call' will appear at the bottom of the screen. To scroll through the available commands, press the scroll left or scroll right buttons.

### ***3.1. Setting a Hall Call from the Group Screen***

Once the command 'Hall Call' appears at the bottom of the screen, press the enter key. The option 'Set Up Call' will appear to the right. To select 'Set Down Call' press the scroll right button. Pressing the scroll right button again will bring up the 'Exit' option. Once the desired function is selected (up call, down call, or exit) press the enter key. If an up or down call was selected, the command 'Select Floor' will appear. Use the scroll left and scroll right buttons to set the desired floor and press the enter key. The call will be set at that floor and the commands will clear from the bottom of the screen. The user also has the option to exit from the 'Select Floor' option. If 'Exit' is selected, all the commands will clear from the bottom of the screen and no calls will be set.

### ***3.2. Setting a Car Call from the Group Screen***

In order to set a car call, the user must first select a car. To do this, press the scroll right or scroll left button until the desired car is highlighted. Then press the enter key once, select the option 'Car Call', and press enter. The option 'Set Car Call' will appear to the right. The user can also select the option 'Exit' from here. To set a call, select 'Set Car Call' and press enter. The command 'Select Floor' will appear to the right. Use the scroll left and right buttons to select the desired floor and press enter. The call will be set at that floor and the commands will clear from the bottom of the screen.

### ***3.3. Canceling Car Calls from the Group Screen***

This option can only be selected if a car call has been set for the highlighted car. Press the enter key, select 'Car Call', and press enter. The option 'Set Car Call' will appear. Press the scroll right button once and the command 'Cancel Car Call' will appear. Press enter to activate this command. This cancels **ALL** of the car calls for that car. This option will only be displayed for SPU versions 17 and above.

### ***3.4. Changing the Appearance of the Group Screen***

This option allows the user to select different preset colors for the group screen, to toggle between the extended and standard motor room screens, and to hide/show the ETA and wait times. Press the enter key once, select the option 'Group Screen', and press enter. The command 'Extended Group Screen' will appear. Pressing enter will switch the display to the extended group screen. The purpose of the extended group screen is to display the car's position and hall and car call assignments for jobs in which the total number of floors can't be displayed on one screen. The cars are



displayed at the top of the screen, showing their position, door status, direction, and service status. The floor numbers are listed in columns with hall call assignments next to the floor number. A number representing the car assigned to that call is displayed to the upper right of the hall call. Separate columns are used for each car to represent car calls. The car call will appear under the appropriate car number at the floor for which the call is set. Hall and car calls can also be set from this screen using the same procedures as the standard motor room screen. To return to the standard motor screen, press the enter key, select 'Group Screen', and select the option 'Single Group Screen'.

Selecting the option 'Hide ETA & Wait Time' from the standard motor room screen will cause the ETA and wait time columns to disappear from the display. Also, the service type and job number will not be displayed. The next time this option appears, it will read 'Show ETA & Wait Time'. Press enter to return to the original display. If you do not wish to select this option, use the scroll right button to select 'Select Preset Colors' or 'Exit'. If 'Select Preset Colors' is chosen, the command 'Preset Color 1' appears. There are 10 preset color options. Use the scroll left and right buttons to choose a preset color and press enter. The screen will change colors and the commands will clear from the bottom of the screen.

## **4. THE CAR DIAGNOSTIC SCREEN**

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To access a car diagnostic screen, press the rotate screen button from the group screen. To scroll to the next car, press the rotate screen button again. Pressing the rotate screen button from the last car in the group will return the user to the group screen. To return to the group screen without scrolling through all of the cars, press and hold in the rotate screen button for two seconds and then release it. This will return the user to the group screen, regardless of which car diagnostic screen was being displayed.

There are eight SMI blocks displayed on a car diagnostic screen. To rotate the SMI blocks, press either the scroll left or scroll right button. This will rearrange the blocks and allow the user to see any remaining SMI blocks. Only eight blocks can be displayed at one time.

As with the group screen, pressing the enter key will bring up an options menu. This menu will appear in the middle of the screen. The available commands are 'Set Car Call', 'Arm/Trigger', 'Error Codes', 'Reset Errors', and 'Exit'. In addition, if any car calls have been set for this car, the option 'Cancel Car Call' will appear. The option 'Error Codes' will only appear for SPU version 17 and above and only when the car being viewed has any faults listed. Use the scroll left and right buttons to select the desired option and press enter to activate it.

#### ***4.1. Setting a Car Call from the Diagnostic Screen***

After selecting the 'Car Call' option, the command 'Set Car Call' will appear to the right. Press enter. The command 'Set Floor' will appear. Again, use the scroll left and right buttons to select a desired floor and press enter to set the call.

#### ***4.2. Canceling Car Calls from the Diagnostic Screen***

This option can only be selected if a car call has been set for the car being viewed. Press the enter key, select 'Cancel Car Call', and press enter. Press enter to activate this command. This cancels **ALL** of the car calls for that car. This option will only be displayed for SPU versions 17 and above.

#### ***4.3. Triggering for Errors***

After selecting the option 'Arm/Trigger', the user has the option to 'Trigger Now' or 'Arm For Error'. Selecting 'Trigger Now' will result in the screen turning red and the enter button flashing. The total number of frames and the current frame will be displayed. To scroll through these frames, press and hold in the rotate screen button and press the scroll left and right buttons. For more trigger options press the enter key and select 'Arm/Trigger'. The options 'Set Frame Increment', 'Jump Frame', 'Jump To Current Frame', 'Play Backward', 'Play Forward', 'Reset', and 'Exit'. Selecting 'Exit' will exit from this menu and leave the RVU in trigger mode. To exit trigger mode, select 'Reset'.

The RVU can also be set to trigger only for certain errors. Select 'Arm/Trigger', press enter, then scroll to the option 'Arm For Error' and press enter. The error and its error code will appear to the right. Use the scroll buttons to select the error desired for the RVU to trigger on and press enter. When the error occurs, the screen will appear with a red frame and the enter key will flash. Press the scroll left button once (while holding in the rotate screen button) to find where the error occurred. Scroll left will then show the frames before the error, and scroll right will show the frames after the error.

#### **4.4. Viewing Error Information**

Select the option 'Error Codes' from the diagnostic screen menu and press enter. The screen will turn blue and the message "DOWNLOADING CONTROLLER FAULTS Please Wait..." will appear. After a few seconds, the Fault List screen will appear. Along the left hand side of the screen, there is a menu and directions on how to use the push buttons. The lower left hand corner displays the number of pages to view or the number of bytes.

The first screen to be displayed is the fault list. This list displays the faults (by corresponding error code) in the order they occurred. Also listed with each fault is the number of times the fault occurred, the floor the car was on, and so on. Use the scroll left and right buttons to view the other pages of information.

To switch to the Description list, press both of the scroll buttons simultaneously. This will bring up a list of all of the error codes and their description. The descriptions are in the same order as the Fault List.

Pressing both scroll buttons again will bring up the Details screen. This is a visual representation of the car's status when the error occurred. Information such as the door status, motor field status, and brake status can be viewed. Each fault has three pages of information. The pages can be scrolled through using the scroll left and right buttons.

To see the List Description screen, press both scroll buttons. This will bring up a list of all of the acronyms used in the fault list (i.e. DMD, demand velocity). Each acronym is shown with a brief description. The control status words are also explained in detail. It is recommended that the user scroll through this list and become familiar with the information it contains.

To exit the error diagnostics, press the enter key. The car diagnostic screen will be displayed.

**4.5. Resetting Errors**

Select 'Reset Errors' and press enter from the diagnostic screen menu. This will clear all of the faults on the diagnostic screen.