ViewPoint

Wireless Touch Panels

Instruction Manual

PRELIMINARY

ViewPoint Wireless Touch Panels and Accessories

panja

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Table of Contents

Introduction

Overview

The ViewPoint Wireless Touch Panels and ViewPoint NetWave Touch Panels are hand-held, liquid crystal display (LCD) panels that allow you to control devices remotely. Figure 1 shows some of the available ViewPoints.

Figure 1

ViewPoint touch panels

ViewPoint Models

There are four models of the ViewPoint touch panels:

- ViewPoint Color Wireless Touch Panel - (VPT-CP)
- ViewPoint Grayscale Wireless Touch Panel - (VPT-GS)
- ViewPoint Color NetWave Touch Panel - (VPN-CP)
- ViewPoint Grayscale NetWave Touch Panel - (VPN-GS)

The VPT panels are one-way infrared (IR) and radio frequency (RF) only. The VPN panels are two-way digital Spread Spectrum RF and one-way IR.

Features

Features for the ViewPoint touch panels include:

- All panels have 6-inch diagonal (153.9 mm), 320 x 240 (HV) pixel screens
- VPN-CP has a 256 color passive-matrix LCD screen
- VPN-GS has a 16-shade grayscale LCD screen
- Four external programmable push buttons
- Programmable firmware via programming port connection
- Programming port for uploading/downloading touch panel data
- Panel programming, pages, and drawings are uploaded and downloaded using TPDesign (Windows®) 16-bit or TPDesign3 (Windows) 32-bit touch panel design programs
- One-way RF or IR transmission (VPT-CP/VPT-GS only)
- Two-way digital spread spectrum RF or one-way OM (*other manufacturer's*) IR signaling (VPN-CP/VPN-GS only)
- Onboard battery-charging circuitry
- Supports Unicode® fonts for European and Far-Eastern character sets (no vertical or bi-directional fonts)
- Hand-held or desktop usage
- Battery life of 6 continuous hours with full back-lighting (VPT-CP/VPT-GS)
- Battery life of 4 continuous hours (VPN-CP/VPN-GS)

Note

TPDesign3 is used to convert G2 or lower panel pages into G3 firmware compatible pages.

Note

Buttons with Unicode fonts can only be created and edited within TPDesign3. Refer to the *TPDesign3 Touch Panel Program (Version 3.13 or higher)* instruction manual for detailed information. Characters for Middle Eastern languages such as Arabic are *not* supported within the Unicode fonts because they are bi-directional. Buttons with Unicode fonts can only be created and edited using the TPDesign3 Touch Panel Design Program.

Related Instruction Manuals

These instruction manuals contain additional information that relates to the ViewPoint touch panels.

- AXCESS Programming Language
- AXR-NWS NetWave Server
- Color Passive-Matrix LCD Mini-Touch Panel (Firmware version G3 or higher)
- TPDesign3 Touch Panel Program (Version 3.13 or higher)
- WAVE 2-Way Wireless Accessories and Adapters for Touch Panels

What's in this Manual

This manual contains the following sections:

- **Installation** Contains cabling, connections, and connector information.
- **Connections, Cleaning, and Charging** Describes how to connect, clean, and charge the ViewPoint panels.
- **Touch Panel Basics** Contains descriptions and illustration examples of touch panel pages.
- **Designing a Touch Panel Pages** Contains step-by-step instructions to create a touch panel page, button, joystick, bargraph, and set a page color/shade.
- **Program Reference** Describes touch panel operations, flowcharts, and button options.
- **Programming** Describes the programming commands that are used to program touch panel functions and generate feedback to an AXCESS® Central Controller.
- **Loading Infrared (IR) Files** Contains instructions for loading IR files in your ViewPoint touch panel.
- **Upgrading the Firmware** Explains how to connect the ViewPoint to your PC for ViewPoint firmware upgrade using SOFTROM.
- **Specifications** Describes the physical and operating characteristics of the touch panels.
- **Contacting Sales and Technical Support** Identifies contact information for technical support and technical publications, including phone numbers, e-mail addresses, and Internet locations.

What's New

Additions and revisions to this release of the manual include:

- Added and updated graphics.
- Added a section for Serial Commands to the Programming section.
- Added information about the VPN-CP/GS NetWave touch panels.
- Added information about the AXR-NWS NetWave Server.
- Added the ability to do ON-PANEL Send_Commands that are directly entered on the touch panel through the on-screen keyboard.

Note

These Send_Commands are entered manually into the firmware through the use of the on-screen keyboard.

- Added the Products Pics and Specidfications section.
- Added various Serial and Send_Commands to the Programming section.
- Added variable text on both bargraphs and joysticks.
- Added ViewPort Docking Station and instructions for creating an IR macro button.
- Removed the VPA-CHG FastCycle Battery Charger information.

Revisions are identified with vertical margin bars on the outside margin, as shown adjacent to this paragraph.

Product Pics and Specs

Overview

If you like pictures, then this section is a great place to start learning about the ViewPoint Touch Panels and its accessories. If you like low-level specifications, this section is written for you, too. In addition to the pictures, you'll find detailed descriptions about the rechargeable battery, docking station, and also complete specifications like product weights, dimensions, power ratings, etc.

ViewPoint Wireless Touch Panel

The ViewPoint Touch Panels (Figure 2) are hand-held, liquid crystal display (LCD) control devices that elegantly integrate graphical control, wireless convenience, and both desktop/hand-held operation. There are two series of panels; a Color-Passive series that features a six-inch LCD with 256 colors, and a Grayscale series that features a six-inch grayscale LCD with 16 shades of gray. Both come with direct access buttons on each side that can be used for channel up/down and volume up/down operations.

Figure 2

ViewPoint Touch Panel

The ViewPoint Touch Panels are now available with either one-way RF or two-way NetWave digital spread-spectrum wireless control.

ViewPoint Specifications

Figure 3 lists specifications for the ViewPoint models.

Figure 3

Specifications

Specifications	
Weight:	
VPT-CP/VPT-GS	1.8 lbs (0.8 kg) with battery, 1.6 lbs (0.7 kg) without battery
VPN-CP/VPN-GS	1.9 lbs (0.9 kg) with battery, 1.7 lbs (0.8 kg) without battery
Dimensions (HWD)	5.99" x 8.75" x 2.78" (153.6 mm x 224.4 mm x 71.3 mm)
Operating temperature	+50°F to +95°F (+10.0°C to +35.0°C)
Operating humidity	5% to 95% non-condensing
Operating Frequency:	
RF (VPT-CP/VPT-GS)	418 MHz standard (other frequencies available upon request)
RF (VPN-CP/VPN-GS)	2.4 GHz two-way digital spread spectrum
IR (VPT-CP/VPT-GS)	38 KHz or 455 KHz
IR (VPN-CP/VPN-GS)	38 KHz or 455 KHz
Enclosure	High impact molded, matte black crinkle finish
Power:	
VPA-BP	7.2 VDC NMH (nickel metal hydride) rechargeable battery
Power supply	12 VDC @ 1500 mA
Display:	
VPT-CP/VPN-CP	6" (153.9 mm) LCD (diagonal), 256 colors
VPT-GS/VPN-GS	6" (153.9 mm) LCD (diagonal), 16 gray shades
Connectors:	
External power	3/16" (6 mm) coax female power jack
Programming	1/8" (2.5 mm) three conductor female jack
Available memory:	
IR files	32 KB
Buttons	225 KB
Bitmaps	1245 KB
Icons	262 KB
Fonts	262 KB

ViewPoint specifications (Cont.)	
Assignable devices:	
VPT-CP/VPT-GS	
ViewPoint RF	Device 1
AMX IR	Device 1
IR other than AMX	Device 2, 3, and/or 4
VPN-CP/VPN-GS	
Device ID	0-255
Group ID	0-16
ViewPoint	Device 1, 2, 3, and/or 4
IR	Device 2, 3, and/or 4
Accessories:	
VPA-BP	ViewPoint Rechargeable Battery
Power supply	12 VDC, 1500 mA
Optional Accessories:	
VPA-BP	ViewPoint Rechargeable Battery
VPA-CHG	Fast-Cycle Battery Charger for VPA-BP
Power Supply	12 VDC, 1500 mA
AXR-RF	RF Receiver (VPT-CP/VPT-GS only)
AXR-NWS	NetWave Server (VPN-CP/VPN-GS only)

VPA-BP ViewPoint Rechargeable Battery

The ViewPoint Touch Panels use a VPA-BP rechargeable battery (Figure 4) that consists of six rechargeable Nickel Metal Hydride (NiMH) cells.

Figure 4

VPA-BP ViewPoint Rechargeable Battery

Battery Specifications

Figure 5 shows the specifications for the VPA-BP ViewPoint rechargeable battery.

Figure 5

Battery specifications

Battery specifications	
Battery voltage	7.2 VDC
Type	Rechargeable nickel metal hydride (NiMH)
Amp hour (Ah)	6-cell NiMH, 3.7 Ah minimum
Weight	11.7 oz (331.7 g)
Dimensions	5.34" x 2.02" x 0.69" (136 mm x 51 mm x 17.5 mm)

VPA-DS ViewPort Docking Station

The ViewPort Docking Station (Figure 6) includes a built-in battery charger and an angled desktop docking station to cradle your ViewPoint touch panel.

Figure 6

ViewPort Docking Station

ViewPort Docking Station Specifications

Figure 7 lists the specifications for the VPA-DS ViewPort Docking Station.

Figure 7

ViewPort specifications

ViewPort specifications	
Dimensions (HWD)	4.83" x 8.26" x 7.62" (122.7 mm x 209.8 mm x 193.4 mm)
Environmental operating range:	
Temperature	50 °F to 95 °F (10 °C to 35 °C)
Humidity	0% to 95% non-condensing
Power requirement	12 VDC at 1.5 amp
Indicators:	
Yellow LED	Indicates ViewPoint connected to ViewPort Docking Station
Green LED	Indicates spare battery is fully charged
Red LED	Indicates spare battery is charging
Options:	
Power supply	ViewPoint 12 VDC @ 1.5 amp power supply
Battery	VPA-BP ViewPoint Rechargeable Battery (NiMH, 7.2 VDC @ 3.7 Amp hours)

Connections, Cleaning, and Charging

Overview

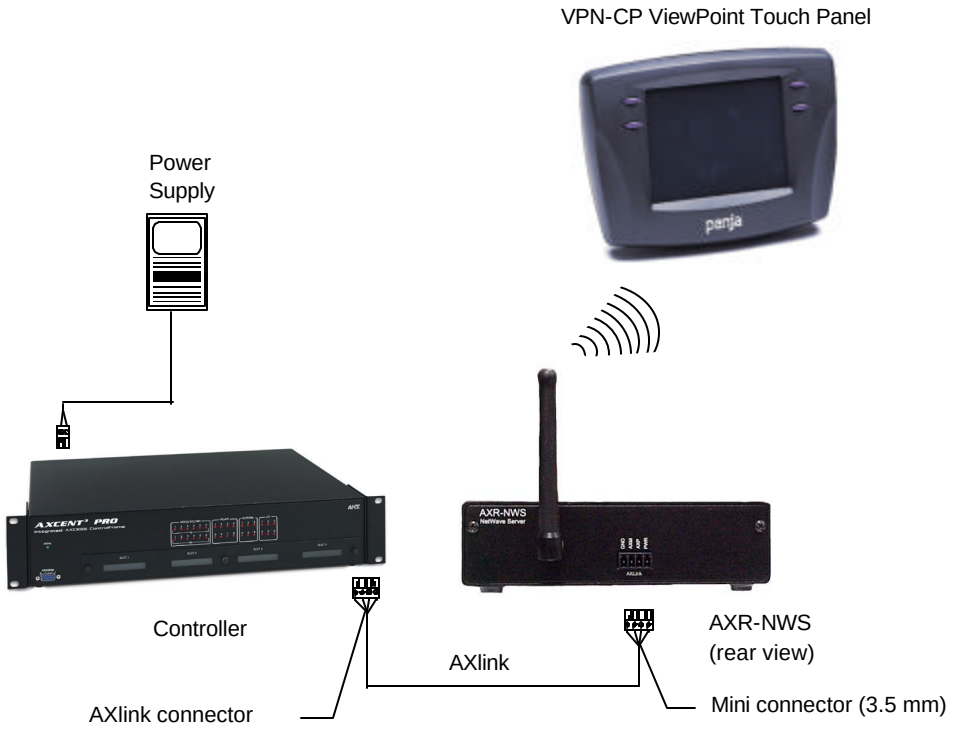
The ViewPoint Wireless Touch Panels do not require hardware installation. This section describes how to connect, clean, and charge the ViewPoint panels.

Application

Figure 8 illustrates a sample NetWave ViewPoint Touch Panel application.

Figure 8

Sample NetWave ViewPoint Touch Panel application

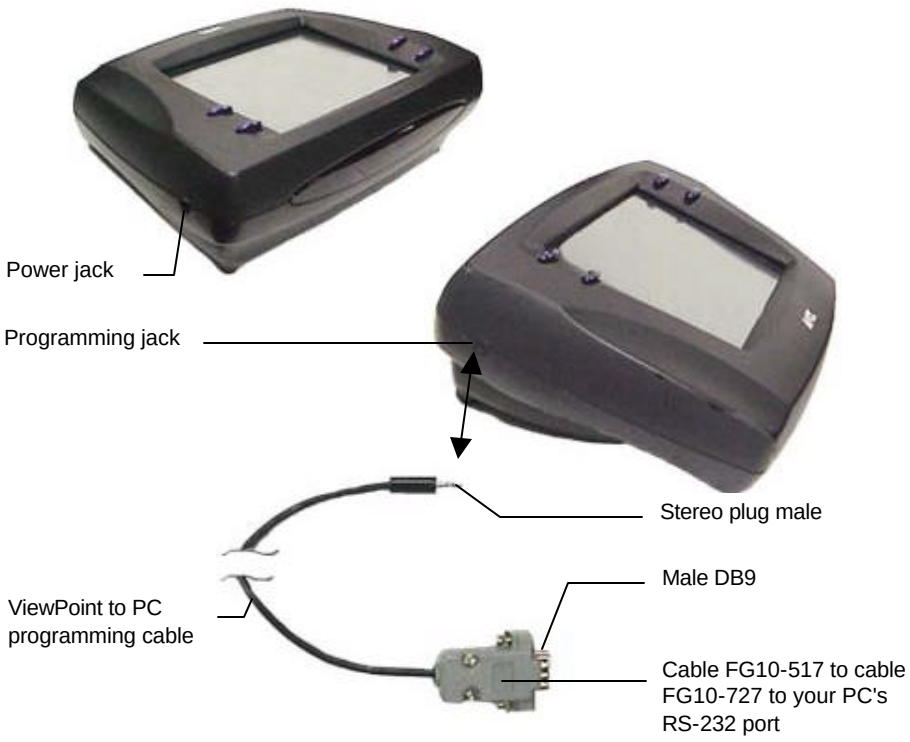


Connectors

All ViewPoints have two connectors, as shown in Figure 9. The power jack is for connecting an external 12 VDC power supply for ViewPoint operation and charging. The programming jack is a three-wire, 2.5 mm stereo jack. The required cable and power supply comes furnished with the ViewPoint.

Figure 9

ViewPoint connectors



Multiple ViewPoints in an Installation

Note

RF operating frequencies *cannot* be user-adjusted. Operating frequencies must be factory-set.

The ViewPoint transmits data via RF or IR. The VPT-CP and VPT-GS ViewPoint Wireless Touch Panels are shipped to operate on a standard frequency of 418 MHz RF and user-selectable 38 KHz or 455 KHz IR frequencies. The ViewPoints can be ordered for different RF operating frequencies that must be set when the unit is manufactured.

Note

The two-way ViewPoints do not support AMX IR codes (38 KHz and 455 KHz) but do support other manufacturers IR codes. The one-way ViewPoints support all IR codes.

The VPN-CP/VPN-GS operates on 2.4 GHz for two-way RF communications with the AXR-NWS NetWave Server. It also provides one-way IR using other manufacturers IR codes.

If you plan to use multiple one-way ViewPoints within the same locals, it is strongly recommended that each unit be ordered for operation on different RF frequencies. This will prevent erroneous data being received by the respective Controller.

Cleaning the Touch Overlay

You should clean the touch screen overlay after each day's use. Materials required are:

- Two clean, soft texture cotton cloths
- Spray bottle of cleaning solution consisting of 50% isopropyl alcohol and 50% water.

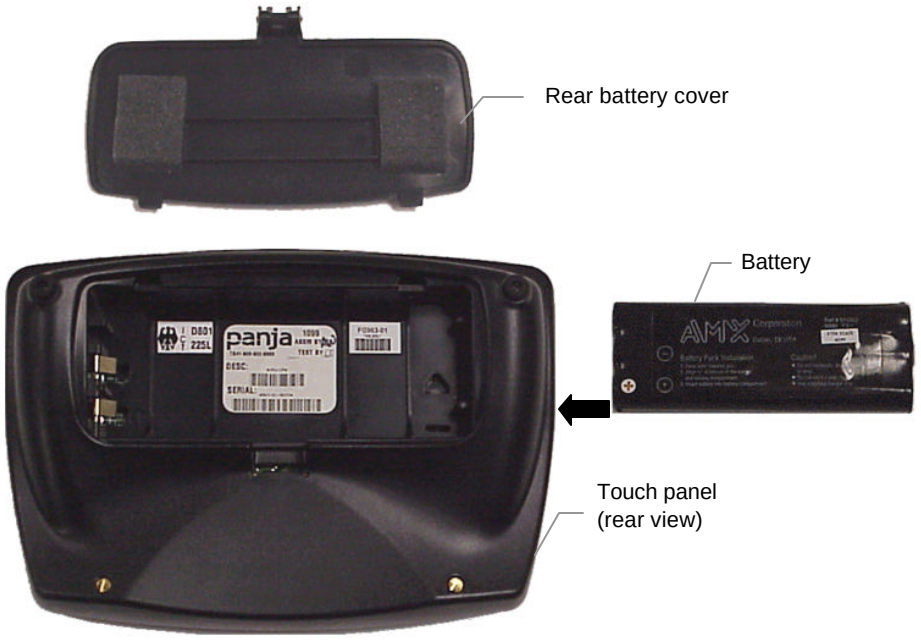
1. Turn the ViewPoint Off.
2. Spray a small amount of the cleaning solution onto one of the cloths.
3. Clean the touch panel overlay with the damp cloth.
4. Wipe the touch panel overlay with the dry cloth.

ViewPoint Rechargeable Battery

The ViewPoint requires use of a VPA-BP ViewPoint Rechargeable Battery. Figure 10 shows the VPA-BP and placement in the ViewPoint.

Figure 10

VPA-BP ViewPoint Rechargeable Battery placement



Power Supply

Note

A 220 VAC power supply is also available.

ViewPoints are furnished with a 12 VDC power supply that can supply power either directly to the ViewPoint touch panel or indirectly through the VPA-DS ViewPort Docking Station.

ViewPort Docking Station

The ViewPort Docking Station (Figure 11) provides a built-in battery charger and an angled desk docking station to cradle your ViewPoint touch panel. When a ViewPoint is placed in the docking station's cradle, the ViewPoint makes contact with the charging pins and power is supplied by the docking station.

When a touch panel is not cradled on the docking station, a battery can be charged when placed within the charging compartment. When a touch panel is cradled on the docking station, all power is fed to the touch panel. A battery that was charging is no longer supplied with power until the ViewPoint is removed from the docking station's cradle.

Figure 11

ViewPort Docking Station

Status LEDs (Figure 11) are located on the bottom front of the docking station. There are three LEDs; yellow indicates a ViewPoint connection to the docking station; red shows a battery being charged in the charging compartment; green indicates that the battery in the charging compartment is fully charged.

Battery Charging

Note

When inserting or removing a battery, insert or remove the battery slowly to avoid false indications on the LEDs.

When a ViewPoint touch panel is not cradled on the docking station, an optional extra battery can be placed in the charging compartment. The optional battery is fully charged in four hours when the optional power supply is plugged-in to the rear of the docking station (Figure 12). The ViewPort Docking Station provides trickle-charging of the battery inside the ViewPoint when the ViewPoint is cradled in the ViewPort. To begin charging of the either the extra battery or the rechargeable battery in the touch panel, connect the power supply to the power supply connector.

Figure 12

Rear view

Rear view

Battery charging directly through the ViewPoint

The rechargeable better can be power by connecting the 12 VDC power supply to the power jack on the side of the ViewPoint (Figure 9). When the battery is charged in this method, the ViewPoint defaults to a charging cycle of 20 hours, after which it stops charging the battery regardless of its power level. To completely charge the battery using the ViewPoint you must unplug the power supply from the power connector for one-minute and then allow the ViewPoint to check the power level of the battery and determine that it requires further charging (if any).

Note

The ViewPort docking station does not have a battery charge default time.

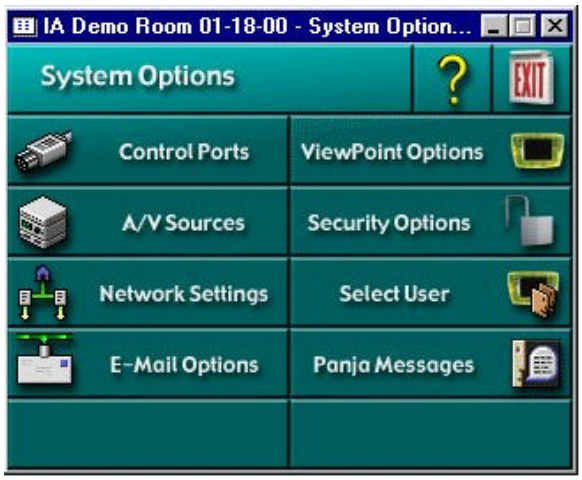
Touch Panel Basics

Overview

This section contains descriptions and illustration examples of touch panel pages (Figure 13), buttons, message bars, and keypads. You can use the TPDesign3 software program to create custom pages and download them to the touch panel. You can also use the ViewPoint VPXpress System Design/Programming Software.

Figure 13

Sample touch panel pages



TPDesign3 page example

VPXpress page example

Note

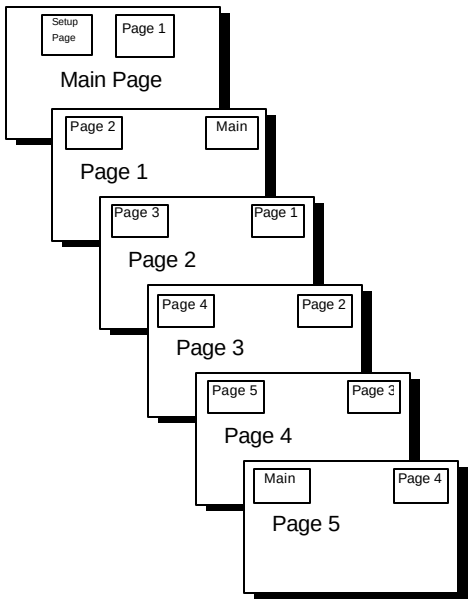
Refer to the *TPDesign3 Touch Panel Program (Version 3.13 or higher)* instruction manual for detailed touch panel design information or to the *ViewPoint VPXpress System Design/Programming Software* instruction manual.

Touch Panel Pages

You can download objects like buttons and drawings to a touch panel page. The number of objects depends on the type and quantity of external devices you want to control with the touch panel and Controller. When you create multiple pages, you must link them with buttons. Figure 14 shows how five touch panel pages are linked to the Main page. Note that each page contains one button that goes to the next page, and one that goes to the previous page.

Figure 14

Touch Panel pages with linked buttons



Standard Buttons

Standard buttons types are rectangles, rectangle variations, and other geometric shapes that you can create with the touch panel editor. Buttons are set with attributes, which means there is feedback for the Controller when you touch the button.

General Buttons

General buttons are part of the touch panel program and cannot be changed. You use general buttons to specify panel communication parameters and create or revise pages. Button examples include selection buttons, information buttons, adjustment buttons, and operation bars. Each type of General button is described in the following paragraphs.

Selection buttons

Selection buttons (Figure 15) appear on touch panel pages and set communication parameters.

Figure 15

Selection button example

Note

These button types are displayed in black and yellow to indicate that they are only for information and can't be changed.

Information buttons

Information buttons contain serial numbers and firmware version information. The properties of these buttons cannot be changed. Figure 16 shows the serial number information button in the Setup page.

Figure 16

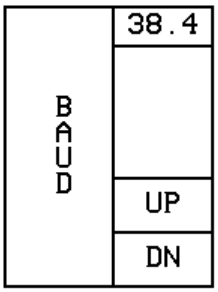
Information button example

Adjustment buttons

You can use the UP and DN buttons to set adjustment buttons. The adjustment button example in Figure 17 sets the baud rate for the connection from the touch panel to the computer. Refer to the *Connectors* subsection for more connection information.

Figure 17

Adjustment button example

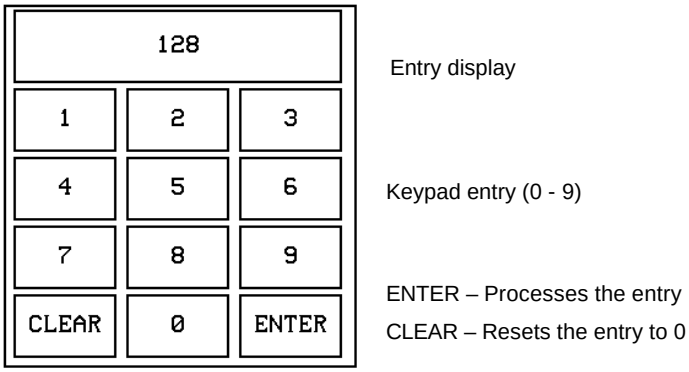


Keypad buttons

The keypad button opens a keypad (Figure 18) so you can enter a password or value assignment. All keypad buttons are interactive except for the entry display.

Figure 18

Keypad example



Decision buttons

Decision buttons (Figure 19) appear when an operation has two options and requires you to verify the action before it is performed.

Figure 19

Decision button example

Decision buttons appear when you exit the Editor bar, send or receive a drawing, designate a communication protocol, or make an operation error.

Status buttons

Status buttons (Figure 20) appear when you try to perform operations that do not function correctly.

Figure 20

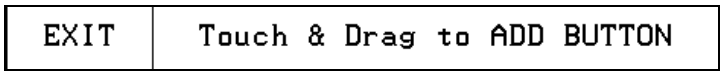
Status button example

Operation bars

Operation bars (Figure 21) appear in the place of the Editor bar after you have selected a button or page edit operation. The operation bar indicates which edit function is currently active. When an edit operation is selected, it remains active until you press EXIT on the operation bar.

Figure 21

Operation bar example

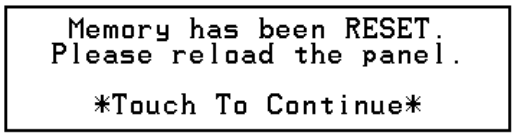


Touch to Continue buttons

Touch to Continue buttons (Figure 22) appear when an operation requires user acknowledgement. An example of an operation that requires user acknowledgement is resetting the factory defaults.

Figure 22

Touch to Continue button example



Designing Touch Panel Pages

Overview

These step-by-step instructions describe creating touch panel pages, buttons, joysticks, bargraphs, and setting page color attributes. For in-depth information on all the operations available on the touch panel, read through the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual to learn about all the operations and techniques you can use to design touch panel pages.

Note

These ViewPoints only provide one-way transmission and therefore do not have the two-way functionality necessary to support these features.

The VPT-CP and VPT-GS ViewPoint one-way models do not support bargraphs, joysticks, VGA, or video (video bargraphs and video joysticks). These functions are available on the EDIT dropdown menus and can be setup. However, the functions are not operational.

The VPN-CP and VPN-GS are two-way RF and support both bargraphs and joysticks.

Activating the Edit button

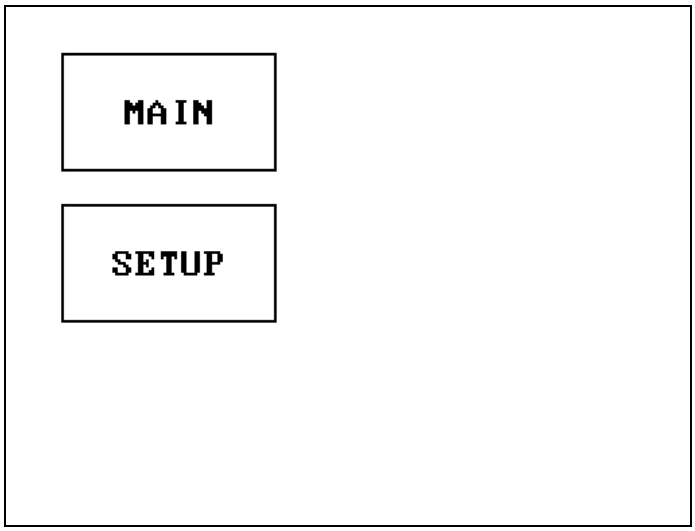
Note

If you have a pre-programmed panel, you may not see the Main page.

Before designing a touch panel page, activate the EDIT button that contains options to add and configure touch panels and buttons. When powering up the touch panel, the first page is the Main page shown in Figure 23. Refer to the *Edit button* and *Go to* subsections in the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual if the Main page does not appear.

Figure 23

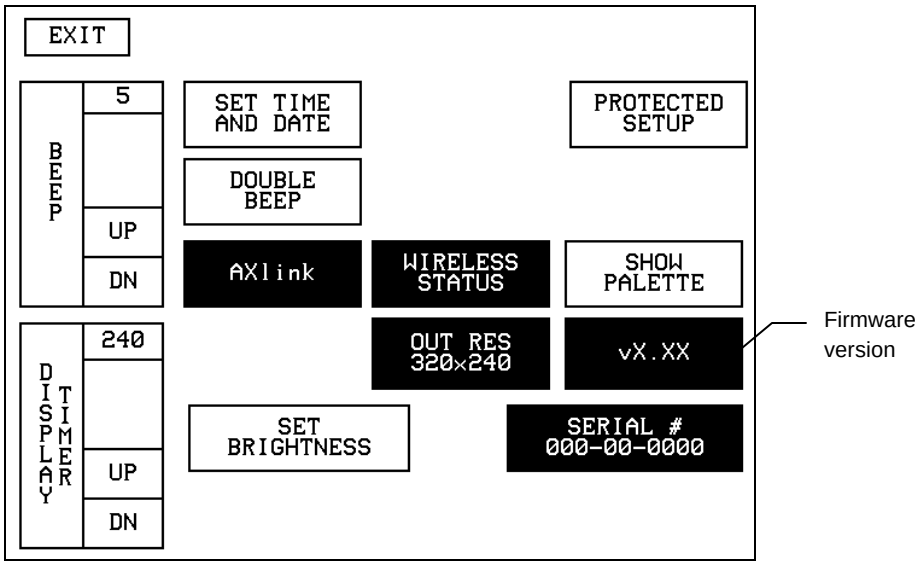
Main page



1. Press SETUP in the Main page to open the Setup page shown in Figure 24.

Figure 24

Setup page



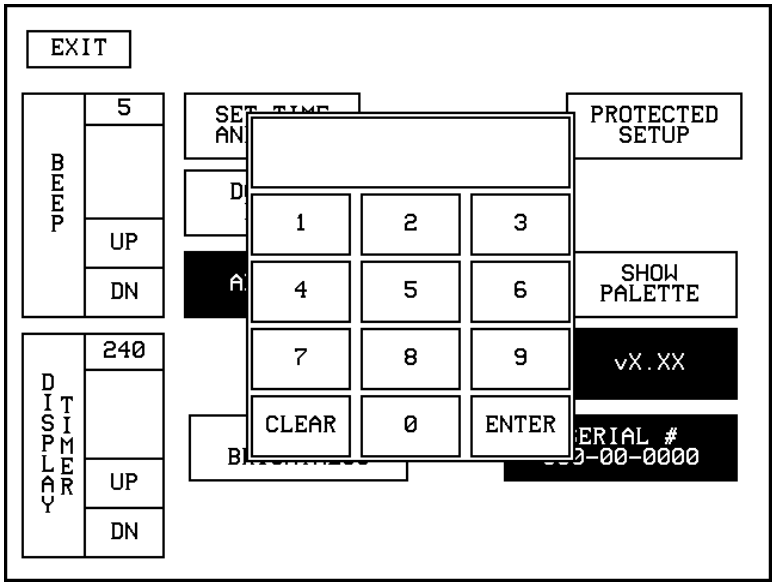
Note

Viewpoint touch panel information buttons are displayed with a black fill. These buttons can't be altered and are only used to display information. Examples of these are the AXlink, WIRELESS STATUS, OUTPUT RESOLUTION, vX.XX, and SERIAL # buttons.

2. Press PROTECTED SETUP to open the password keypad shown in Figure 25.

Figure 25

Setup page and password keypad



Note

If you press ENTER after typing in an incorrect password, you are immediately returned to the current page.

3. Enter **1988** in the keypad and press ENTER to open Protected Setup page (Figure 26). Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for information on changing the password. If you enter a wrong number, press CLEAR and re-enter the number.

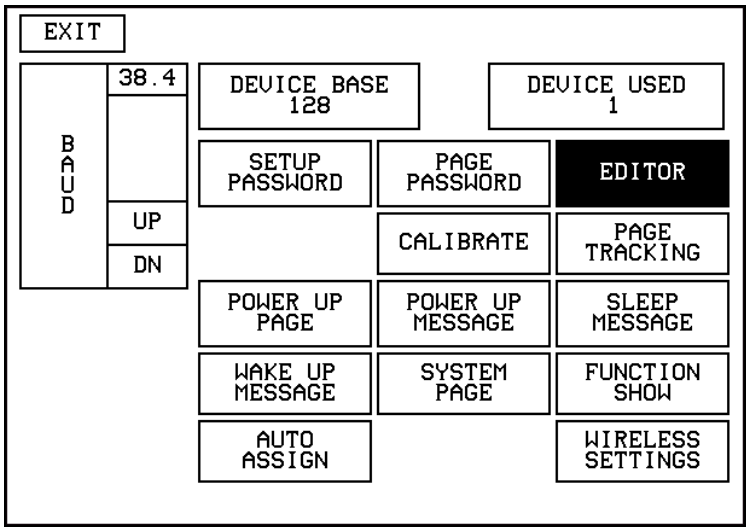


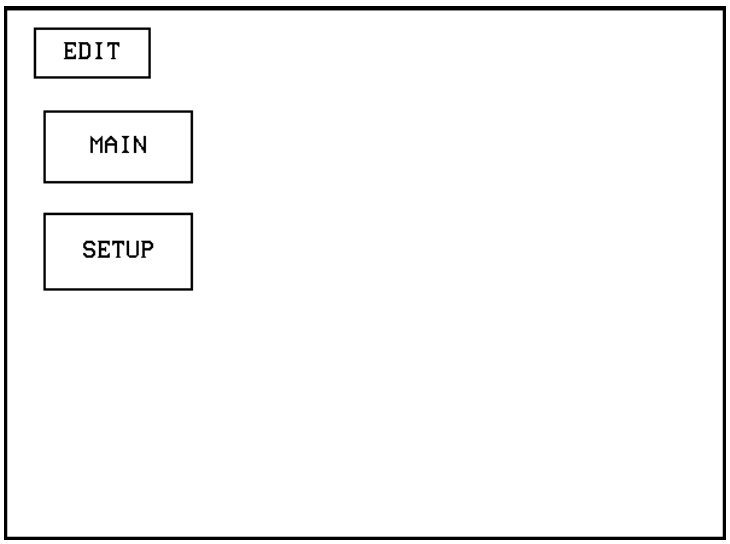
Figure 26

Protected Setup page with the active EDITOR button

4. Press EDITOR to enable the Edit mode. The EDITOR button is highlighted when enabled (Figure 26).
5. Press EXIT to close the Protected Setup page and return to the Setup page in the Edit mode.
6. Press EXIT again to return to the Main page. The EDIT button appears at the top of the Main page indicating that Edit mode is active (Figure 27).

Figure 27

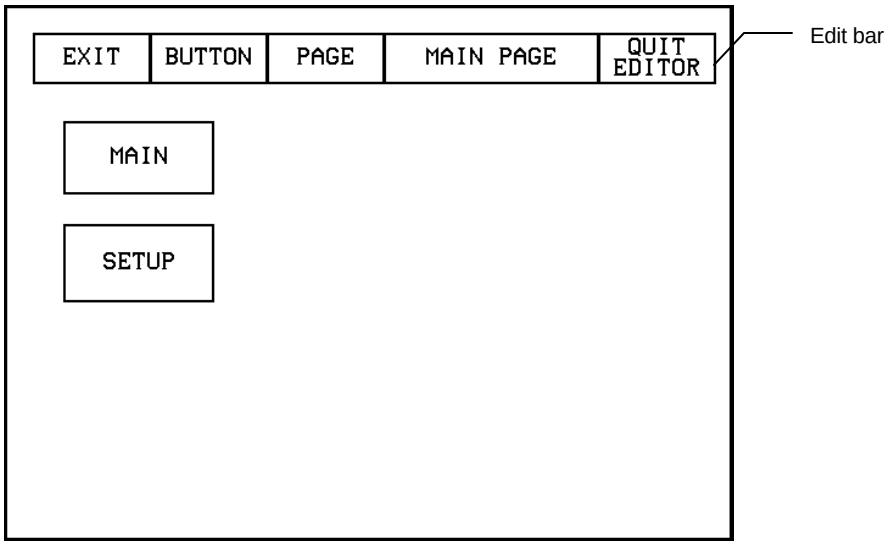
Main page with EDIT button



7. Press EDIT to open the Edit bar. BUTTON and PAGE in the Edit bar (Figure 28) are used to design and modify button and page settings.

Figure 28

Main page and Edit bar



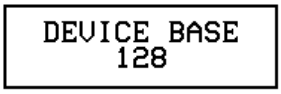
Setting the Device Base

Use the DEVICE BASE option in the Protected Setup page (Figure 26) to assign a base (starting) device address to the touch panel.

1. Press DEVICE BASE (Figure 29) to open the keypad.

Figure 29

DEVICE BASE button



Note

If four devices are used, and the base address is 128, then the AXB-TPI will use device addresses 128 - 144.

2. Enter the base address for the touch panel. The base address range is from 1 through 255. Standard device addresses begin at 128.
3. Press Enter to store the value into the touch panel memory.

Setting the Device Used

Use the DEVICE USED option in the Protected Setup page (Figure 26) to assign a value for the number of devices being controlled by the touch panel.

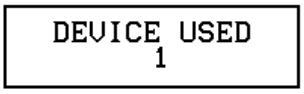
Note

If DEVICE USED is set to 4 and Base Device Number is 128, the Controller recognizes bus devices 128 -131.

1. Press DEVICE USED (Figure 30) to open the keypad and enter the panel's device number from 1 through 4. Each device number supports up to 255 programmable channel codes. The multiple device settings allow you to create up to four unique touch panel buttons and/or pages. This value is used to determine the current device being used by the panel.

Figure 30

DEVICE USED button



Note

The panel does not allow you to enter a DEVICE USED greater than 4.

2. Enter the number of devices being used by the touch panel. The device used range is from 1 through 4.
3. Press Enter to store the value into the touch panel memory.

Creating a Page

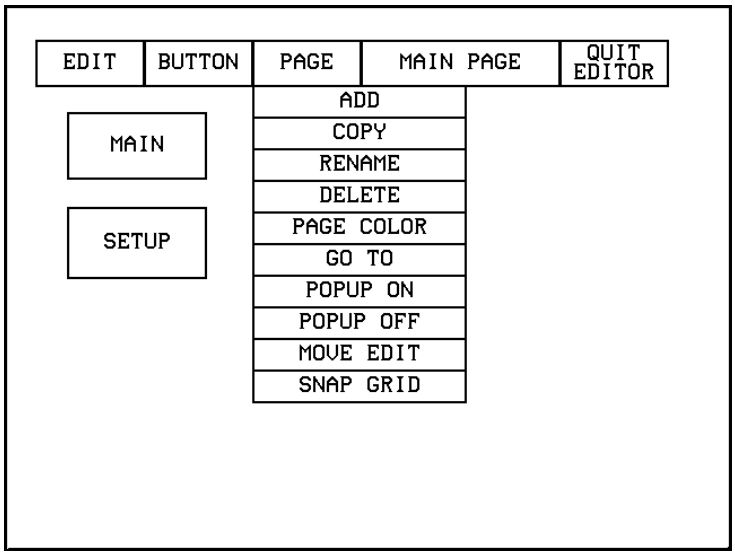
Use the PAGE menu in the Edit bar to create touch panel pages.

Adding a page

1. Press PAGE on the Edit bar to open the PAGE menu shown in Figure 31.

Figure 31

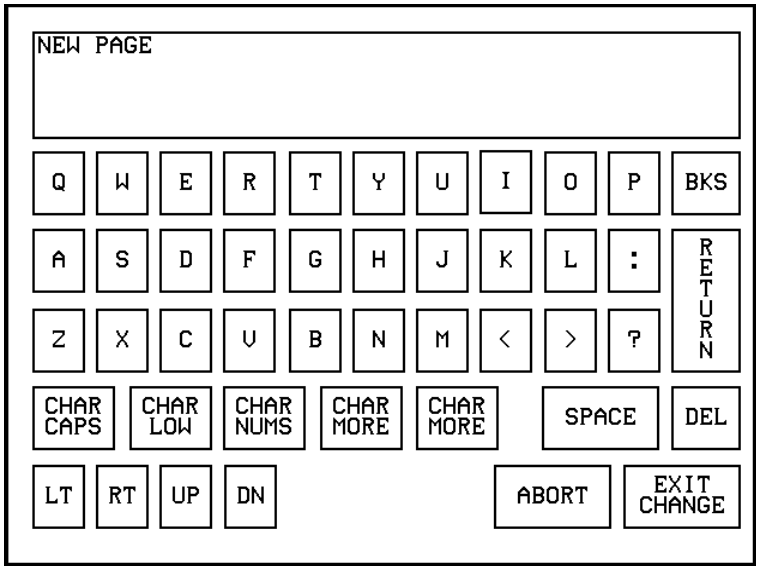
PAGE menu



2. Press ADD to open the keyboard.
3. Enter **NEW PAGE** using the keyboard (Figure 32). Page names can be up to 20 characters.

Figure 32

Keyboard



Note

Page naming does not allow you to change the font type, as is only available for buttons.

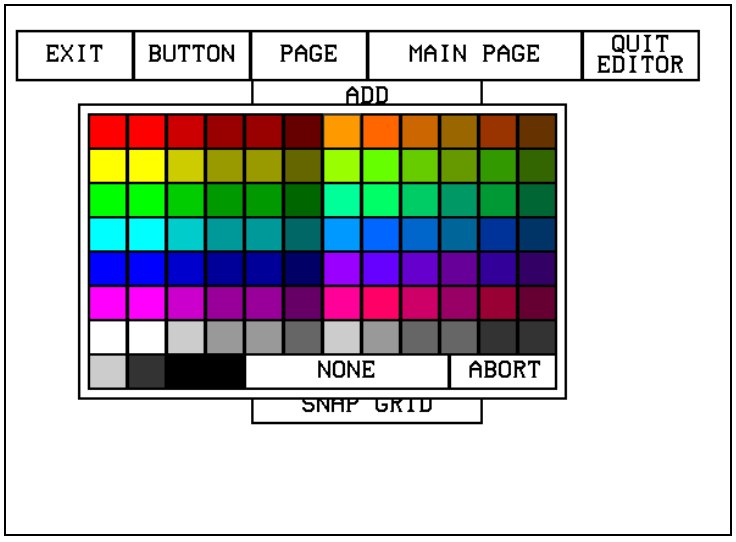
4. Press EXIT CHANGE to add **NEW PAGE** to touch panel memory, close the keyboard, and return to the new page.

Setting the page color

1. Press EDIT to open the Edit bar on the newly created page.
2. Press PAGE on the Edit bar to open the PAGE menu.
3. Press PAGE COLOR to open the color palette shown in Figure 33.

Figure 33

Color palette



Note

The VPT-CP and VPT-GS only display gray shades for this selection.

4. Select a page color from the palette. The page automatically changes to the new color.

Creating a Button

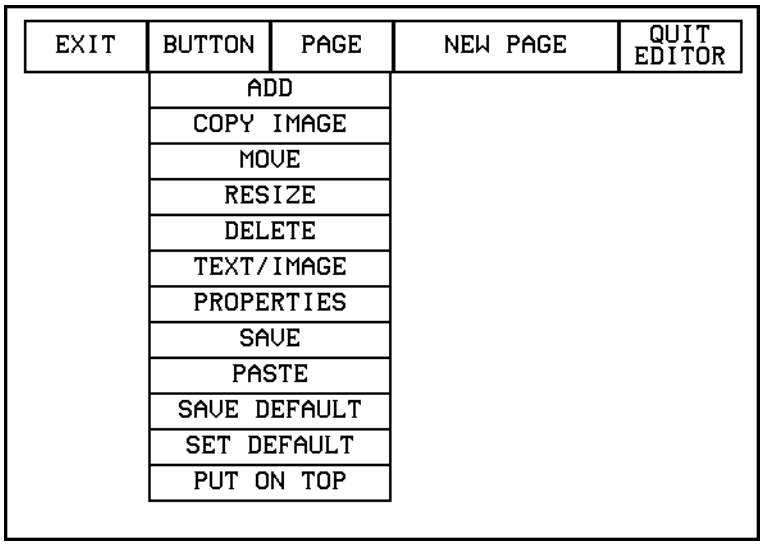
Use the BUTTON menu in the Edit bar to create touch panel buttons.

Adding a button

1. Press EDIT to open the Edit bar.
2. Press BUTTON on the Edit bar to open the BUTTON menu shown in Figure 34.

Figure 34

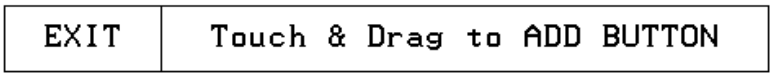
BUTTON menu



3. Press ADD to open the ADD BUTTON operation bar (Figure 35).

Figure 35

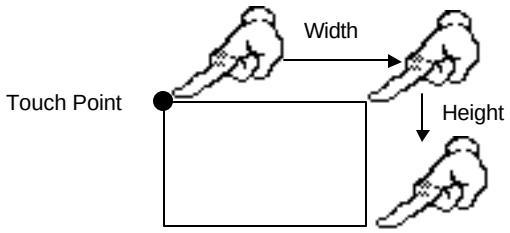
ADD BUTTON operation bar



4. Touch and drag your finger horizontally down the LCD screen to create the button as shown in Figure 36. The first touch point is the upper-left corner of the button.

Figure 36

Add a button example



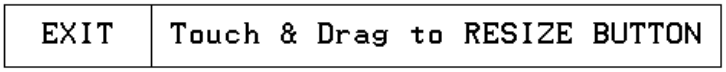
5. Release your finger from the panel to store the button dimensions into panel memory.
6. Press EXIT to close the Edit bar.

Resizing a button

1. Press EDIT to open the Edit bar.
2. Press BUTTON on the Edit bar to open the BUTTON menu.
3. Press RESIZE to open the RESIZE BUTTON operation bar (Figure 37).

Figure 37

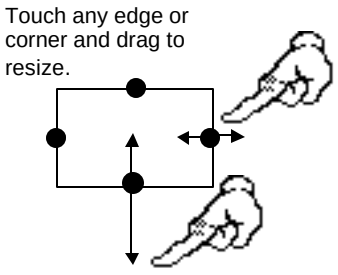
RESIZE BUTTON operation bar



4. Push the edge of the button, and drag your finger horizontally across the screen and down to resize the button (Figure 38).

Figure 38

Resizing a button



5. Release your finger from the panel to store the button dimensions into the panel memory.
6. Press EXIT in the Edit bar to exit the Resize mode.

Note

One-way ViewPoints do not support bargraphs, sliders, joysticks, VGA, or video.

Button Properties

Use the PROPERTIES option of the BUTTON menu in the Edit bar to set button borders, page flips, button colors for channel on and off conditions, and channel and variable text codes.

Note

The same steps apply to setting properties for external buttons.

Setting the button properties

1. Press EDIT to open the Edit.
2. Press BUTTON on the Edit bar to open the BUTTON menu options.
3. Press PROPERTIES to open the PROPERTIES operation bar shown in Figure 39.

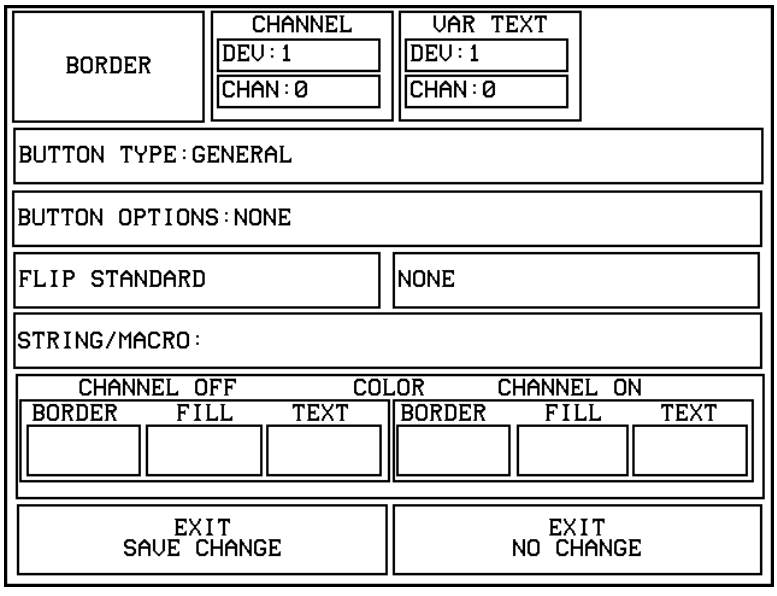
Figure 39

PROPERTIES message bar

4. Press the button you just added to open the Button Properties page shown in Figure 40. This page lists the properties for the active button.

Figure 40

Button Properties page



Note

The contents of the Button Properties page changes according to the type of button selected. The example shown here is for a GENERAL type button.

Note

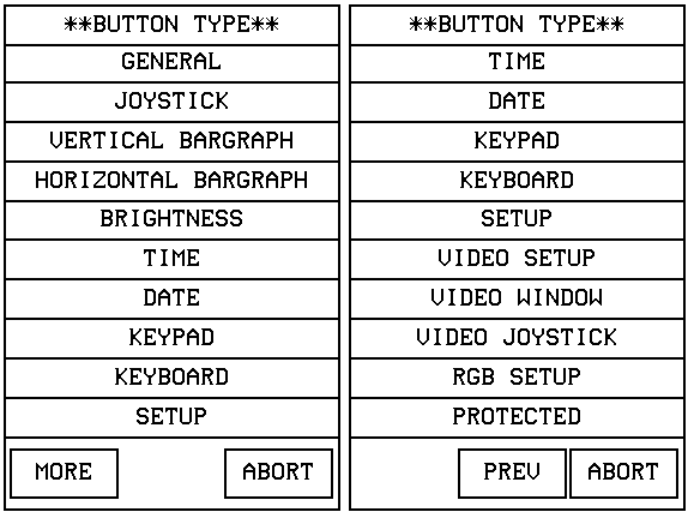
One-way ViewPoints do not support bargraphs, sliders, joysticks, VGA, or video.

Setting the button type

1. Press BUTTON TYPE in the Button Properties page. This opens the BUTTON TYPE menu, shown in Figure 41. Press MORE at the bottom of the first page of Button Types options to view the next page of options. Press PREV to view the first page.

Figure 41

Button Types menu



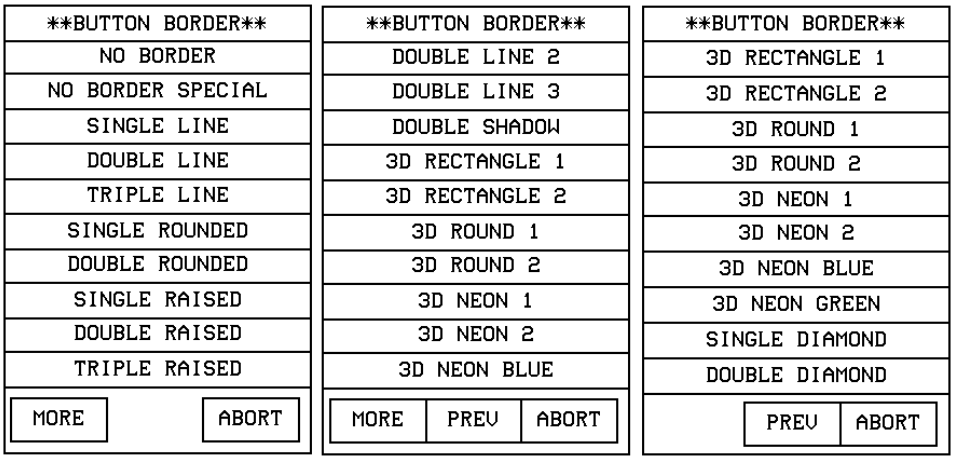
2. Select a button type for the selected button to open the associated Button Properties page for the selected button type. Each button type has its own Button Properties page with settings specific to the button type. For example, select GENERAL from the menu to set the selected button as a general button. This opens the GENERAL Button Properties page, shown in Figure 40.

Setting the button border

1. Press BORDER in the Button Properties page to open the BUTTON BORDER pages shown in Figure 42. These menu pages appear individually and can all be viewed using the MORE and PREV buttons.

Figure 42

BUTTON BORDER menu pages



2. Press 3D RECTANGLE 1 to set the button border to 3D RECTANGLE 1 style and return to the Button Properties page. The BORDER button in the Button Properties page changes to show the active border type. In this case, the button changes to the 3D-rectangle border.

Note

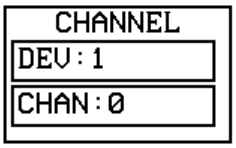
If DEVICE USED is set to 4 and Base Device Number is 128, the Controller recognizes bus devices 128 - 131.

Setting the channel code

The channel buttons that set the device and button channel codes for the touch panels are shown in Figure 43. Refer to the *ViewPoint Wireless Touch Panel – Program Reference instruction manual* for more information on DEV and CHAN.

Figure 43

CHANNEL code buttons



Note

The panel does not allow you to enter a device number greater than the DEVICE USED without first displaying a decision box. This box asks you to decide whether you accept the new selection or default to the previous value.

1. Press DEV to open the keypad and set the touch panel's device number.
2. Enter **1**, **2**, **3**, or **4** in the keypad. The programming software uses device codes 1 through 4 to identify the touch panel. Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed information. The ViewPoint has a four-device capability.
   a. For one-way ViewPoints (VPT touch panels), use device number 1 for AMX IR and RF. Use device numbers 2, 3, and 4 for other manufacturer's (OM) IR codes (at frequencies other than the supported 38 KHz and 455 KHz).

Note

If DEVICE USED is set to 4 and Base Device Number is 128, the Controller recognizes bus devices 128 - 131.

b. For two-way ViewPoints (VPN-CP/GS), device numbers 1 through 4 can be AMX RF. The AMX IR is not supported (38 KHz and 455 KHz) but other manufacturer's IR codes are supported by assigning ViewPoint device numbers 2, 3, and 4 for IR codes. Refer to the *AXR-NWS NetWave Server* instruction manual for more information on the number of controlled devices that can be configured to work through the VPN and be controlled by the AXR-NWS NetWave Server.

3. Press ENTER to store the device number into memory, close the keypad, and return to the Button Properties page.

Note

The channel code for non-active buttons is 0 and for active buttons is 1 through 255.

4. Press CHAN to open a keypad and enter a channel value of 1 through 255 in the keypad. The programming software uses the channel code number to identify the button and its' programmed operations.

5. Enter 1 through 255 in the keypad. The programming software uses the channel code number to identify the button and its operations.

6. Press ENTER to store the channel number in memory, close the keypad, and return to the Button Properties page.

Note

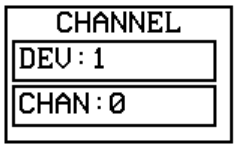
One-way ViewPoints do not support bargraphs, sliders, joysticks, VGA, or video.

Setting the variable text code

The variable text buttons that set the device and button channel codes for the touch panels are shown in Figure 44.

Figure 44

VAR TEXT code button



Note

The panel does not allow you to enter a device number greater than the DEVICE USED without first displaying a decision box. This box asks you to decide whether you accept the new selection or default to the previous value.

1. Press DEV to open a keypad and set the device number.

2. Enter **1**, **2**, **3**, or **4** in the keypad. The programming software uses device codes 1 through 4 to identify the touch panel. Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed information.

3. Press ENTER to store the device number in memory, close the keypad, and return to the Button Properties page.

4. Press CHAN to open a keypad and set the channel number.

Note

The channel codes for non-active buttons are 0, and active buttons is 1 through 255.

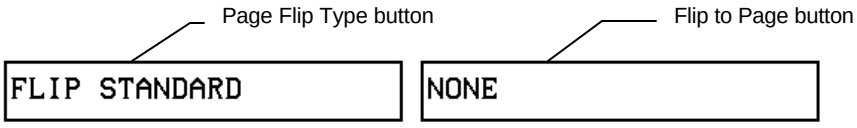
5. Enter a channel value of 1 through 255 in the keypad. The programming software uses the channel code number to identify the button and its operations.
6. Press ENTER to store the channel number into memory, close the keypad, and return to the Button Properties page.

Setting the page flip

1. Press the left PAGE FLIP box in the Button Properties page (Figure 45) to open the Page Flip Type list (Figure 46).

Figure 45

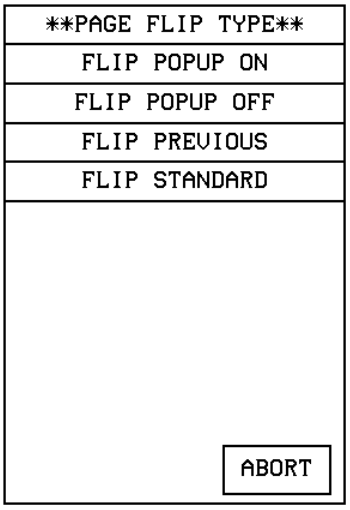
Page FLIP boxes



2. Press FLIP STANDARD to select a standard page flip.
3. Press the right PAGE FLIP box (Figure 45) to open the PAGE FLIP TYPE menu (Figure 46).

Figure 46

PAGE FLIP TYPE menu



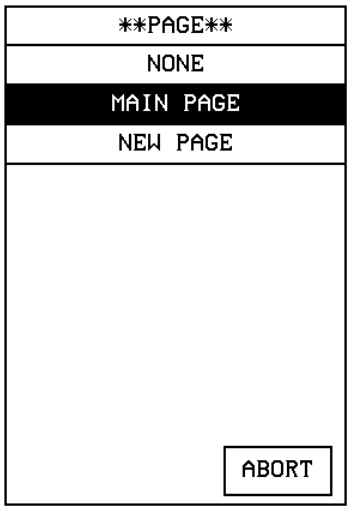
Note

When selecting FLIP PREVIOUS in the Page FLIP type button, the PAGE menu appears.

4. Press the right FLIP to Page to open a list of all the touch panel pages stored into memory. If the desired page is not present in the PAGE flip destination menu (Figure 47), check to verify that the page has been saved.

Figure 47

PAGE flip destination menu



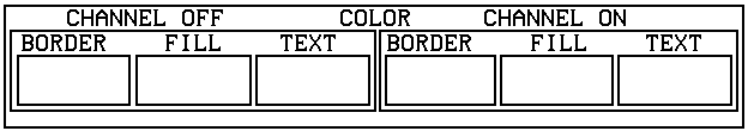
5. Press MAIN PAGE to set the page flip to the Main page.

Setting the button colors for channel-off conditions

1. Press the target button to open the Button Properties page.
2. Press BORDER (Figure 48) in the CHANNEL OFF subsection of the Button Properties page.

Figure 48

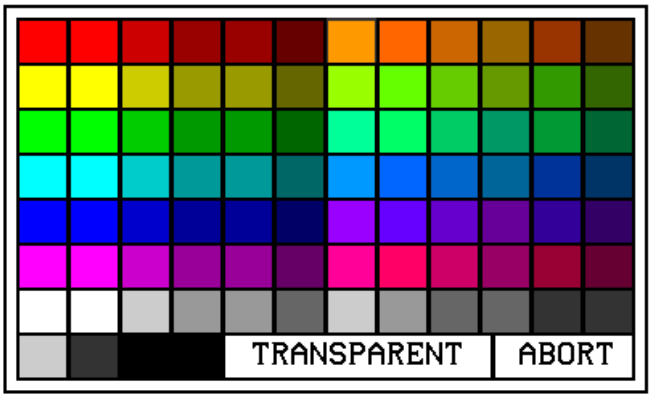
CHANNEL OFF/ON COLOR settings box



3. The color palette (Figure 49) appears.

Figure 49

Color palette



Note

The VPT-CP and VPT-GS only display gray shades for this selection.

4. Press black to set the border color.
5. Press the FILL button in the Button Properties page to open the color palette.
6. Press white to set the fill color.
7. Press the TEXT button to open the palette.
8. Press red to set the text color.
9. Press EXIT SAVE CHANGE in the Button Properties page to store the new button properties into memory and return to the current page.
10. Press EXIT on the PROPERTIES operation bar.

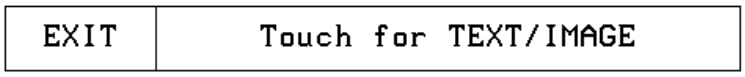
Adding text to a button

Use the BUTTON option in the Edit bar to add text to buttons, joysticks, and bargraphs.

1. Press EDIT to open the Edit bar.
2. Press BUTTON on the Edit bar to open the BUTTON menu.
3. Press TEXT/IMAGE to add text into the button. The TEXT/IMAGE operation bar shown in (Figure 50) appears.

Figure 50

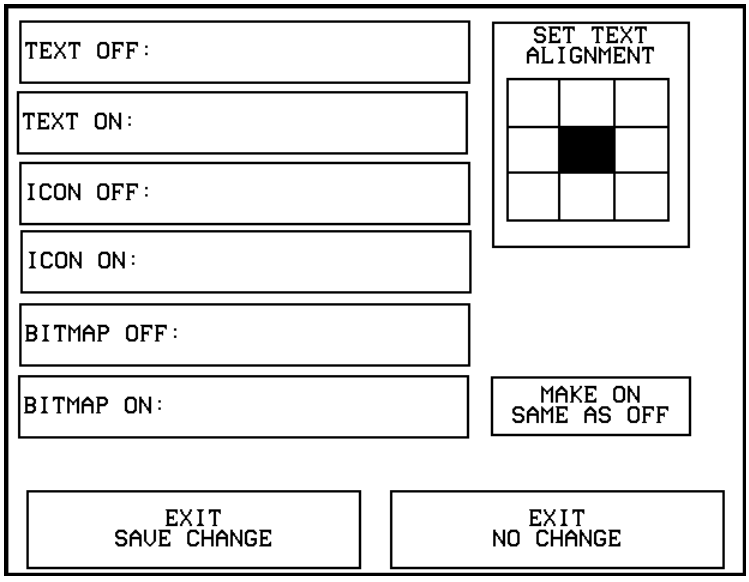
TEXT/IMAGE operation bar



4. Press the target button to open the Text/Image page shown in Figure 51.

Figure 51

Text/Image page



Note

The CHANGE FONT button only appears when changing the font of a function button and does not apply to popup pages.

Note

You can't create or edit buttons with Unicode fonts within the on-board editor. Any use of the TEXT/IMAGE button to alter or create Unicode font supported buttons must be done in TPDesign3 Touch Panel Design Program.

Note

One-way ViewPoints do not support bargraphs, sliders, joysticks, VGA, or video.

5. Press TEXT OFF to open the keyboard.
6. Enter **Main Page** in the keyboard. The text appears in the message box at the top of the keyboard. If you exceed the space in the button, the touch panel edits the message to fit in the space provided. Change the size of the button or reduce the font size to compensate.
7. Press EXIT CHANGE to close the keyboard and return to the Text/Image page.
8. Press MAKE ON SAME AS OFF to set the text for both TEXT ON and TEXT OFF states of the button.
9. Press EXIT SAVE CHANGE to close the Text/Image page and return to the Main page.
10. Press EXIT in the Edit bar to exit the Edit TEXT/IMAGE mode.

Adding an icon to a button

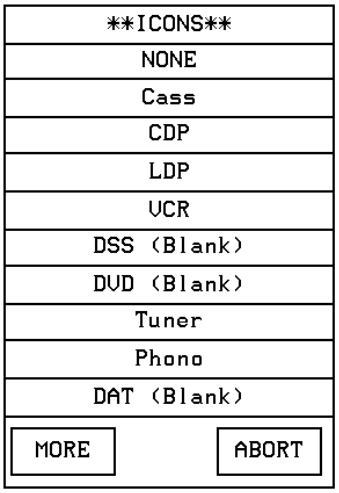
Use the BUTTON option in the Edit bar to add icons to buttons, joysticks, bargraphs, and video windows. Refer to the *Using TPDesign3 to Download Bitmaps, Icons, and Fonts* subsection of the *ViewPoint Wireless Touch Panels – Program Reference* instruction manual for more information on importing icons into your touch panel.

1. Press EDIT to open the Edit bar.
2. Press BUTTON on the Edit bar to open the BUTTON menu.

3. Press TEXT/IMAGE to add text to the button. The TEXT/IMAGE operation bar appears.
4. Press the target button to open the Text/Image page.
5. Press ICON OFF to set the icon for the OFF state of the selected button. This opens the ICONS menu (Figure 52), that contains a list of all the icons currently available to the project.

Figure 52

ICONS menu example



6. Select an icon from the menu. This sets the icon for the selected button's Off state.
7. On the Text/Image page, press MAKE ON SAME AS OFF to set the icon for both On and Off states of the button.
8. Press EXIT SAVE CHANGE to set the button text and close the Text/Image page and return to the NEW page.
9. Press EXIT in the Edit bar to exit the Edit Text/Image mode and close the Edit bar.

Adding a bitmap to a button

Note

One-way ViewPoints do not support bargraphs, sliders, joysticks, VGA, or video.

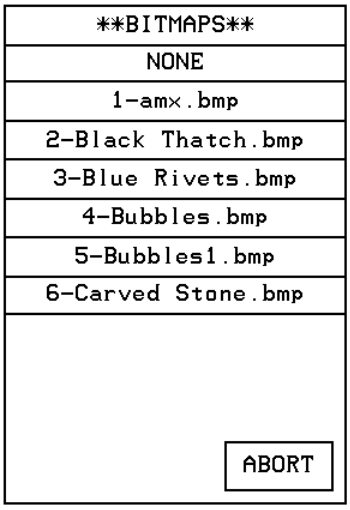
Use the BUTTON option in the Edit bar to add bitmaps to buttons, joysticks, bargraphs, and video windows. Refer to the *Using TPDesign3 to Download Bitmaps, Icons, and Fonts* subsection of the *ViewPoint Wireless Touch Panels – Program Reference* instruction manual for more information on importing bitmaps into your touch panel.

1. Press EDIT to open the Edit bar.
2. Press BUTTON on the Edit bar to open the BUTTON menu.

3. Press TEXT/IMAGE to add text to the button. The TEXT/IMAGE operation bar shown in Figure 50 appears.
4. Press the button to open the Text/Image page shown in Figure 51.
5. Press BITMAP OFF to set the bitmap for the OFF state of the selected button. This opens the BITMAPS menu. The BITMAPS menu contains a list of all the bitmaps currently available to the project. An example BITMAPS menu is shown in Figure 53.

Figure 53

BITMAPS menu example



6. Select a bitmap from the menu. This sets the bitmap for the selected button's Off state.
7. On the Text/Image page, press MAKE ON SAME AS OFF to set the bitmap for both On and Off states of the button.
8. Press EXIT SAVE CHANGE to set the button text and close the Text/Image page and return to the NEW page.
9. Press EXIT in the Edit bar to exit the Edit Text/Image mode and close the Edit bar.

Using TPDesign3 to Download Bitmaps, Icons, and Fonts

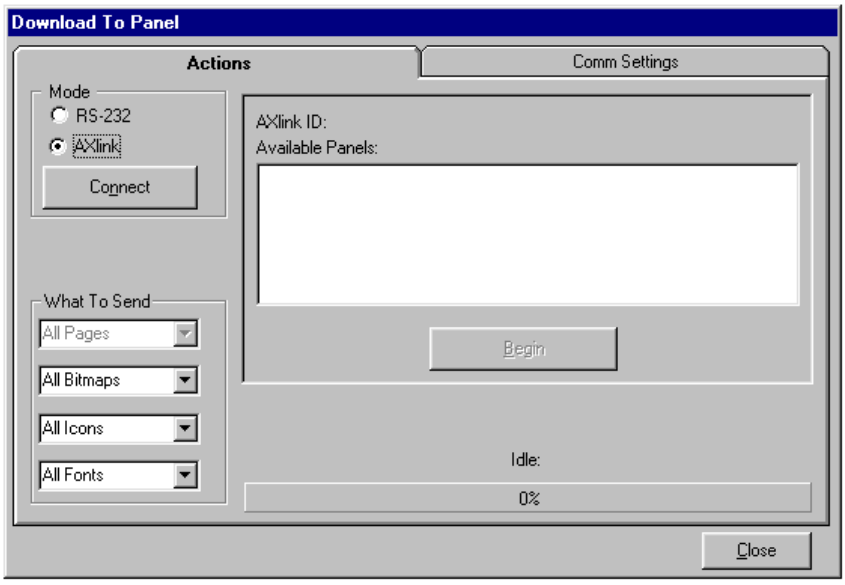
TPDesign3 allows you to import bitmaps, icons, and fonts into your touch panel from an existing touch panel program. Use the Download to Panel button to download a project file.

To download bitmaps, icons and/or fonts from an existing TPDesign3 project file:

1. Launch the TPDesign3 software program and open a project file that contains the desired bitmaps, icons, and fonts.
2. Select File from the menu bar to open the File menu.
3. In the File menu, click on Download to Panel, this opens the Download to Panel-Actions tab shown in Figure 54. Use this tab to set the communication mode and select which elements of the project file you want to download to the touch panel.

Figure 54

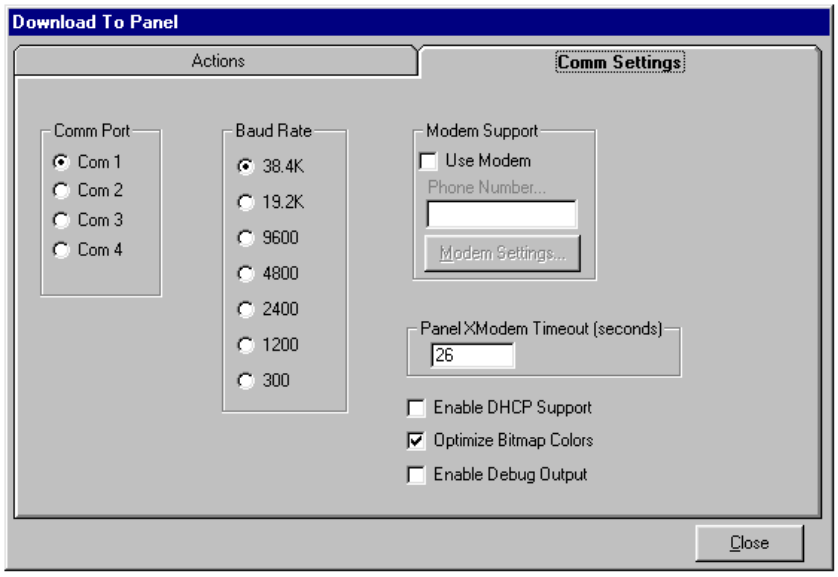
Sample Download To Panel dialog box: Actions tab



4. In the What To Send area, select one or more of the available options (Bitmaps, Icons, Fonts).
5. Select the mode of communication with the touch panel.
6. Click on the Comm Settings tab shown in Figure 55. Use this tab to set the communications port, baud rate, and other communication settings.

Figure 55

Download to Panel dialog box: Comm Settings tab



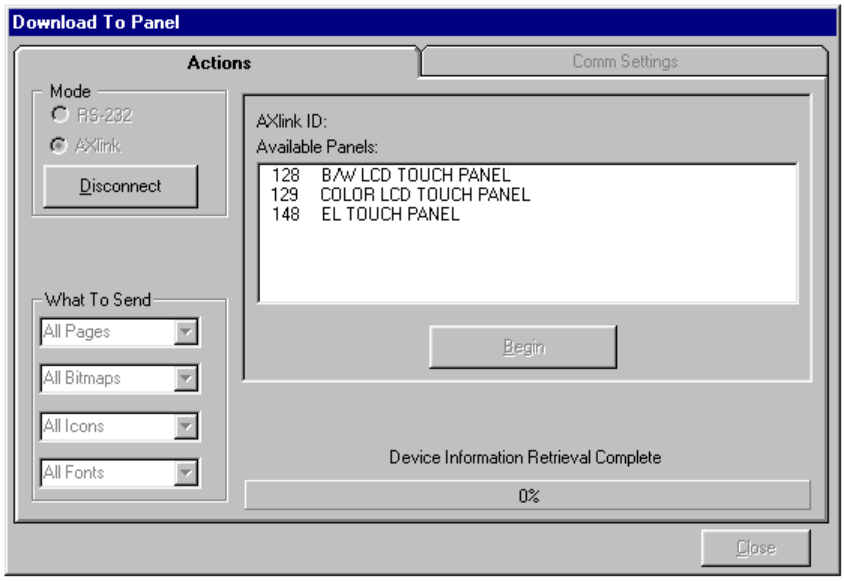
Note

The Comm Settings tab is the second tab in the Download To Panel dialog that opens.

7. Click the Actions tab once you are done configuring the parameters for communication with the touch panel.
8. Select the Mode of communication (AXlink or RS-232).
9. After clicking on Connect, the AXlink window opens, as shown in Figure 56. The AXlink window displays the AXlink ID and Available Panels fields.

Figure 56

Sample Download To Panel dialog box with AXlink window



10. The AXlink ID field displays the selected AXlink address. The Available Panels field the device addresses that are available.

11. Once you have selected which elements to download, and set the communications mode and AXlink device settings, click Begin to begin downloading the project file into the AXB-TPI. The bargraph at the bottom of the Download To Panel dialog box indicates the progress (in percent) of the download.

12. After completing the download, cut, copy and paste buttons as needed. The bitmaps, icons and fonts that were downloaded are now accessible via the BITMAPS, ICONS and FONTS menus.

Button Properties for External Pushbuttons

Note

Although these pushbuttons don't appear on-screen, their functionality can be set just as any other button on the touch panel. Refer to the *Button Properties* subsection for further information on the Properties' page features.

External pushbuttons are configurable with features similar to on-screen buttons. Refer to *Creating a Button*, *Button Properties*, and *Properties Page – External Buttons* for detailed information. Use the PROPERTIES operation bar to assign properties to external pushbuttons. The BUTTON options and VARIABLE TEXT features within the Properties page does not appear. Although the Border and Color sections of this page appear, they are of no use to external pushbuttons since they do not appear on-screen.

Creating an IR Macro Button

Note

New functionality gives you the ability to do on-panel Send_Commands using the Keyboard.

Creating an IR macro button allows you to control multiple devices with a single touch panel button. You are only limited by touch panel IR memory (16 Kb). The following steps provide an example of creating an IR macro button controlling a television, VCR, and a satellite tuner. Syntax for a macro command is (refer to the *Programming* section for more information):

The IR macro button performs the following processes when pushed.

- Turn On a Television and set the audio volume.
- Turn On a VCR and select TV.
- Turn On a satellite receiver.

Pulse command

Figure 57 shows a sample pulse command format and description of the variables.

Figure 57

Sample Pulse command format and variable description

- **Sample Format**:

```
$P <device number> <channel number> <time pulse on>
<time delay after pulse><CR>
```

- **Variables:**

<device number>: This number represents an AXlink device that is associated with 255 channels. The device number must be 2, 3, or 4.

<channel number>: This number represents one of 255 particular control functions associated with a device. The channel number must lie within the range of 1 and 255. For example, a button programmed on a touch panel with device 3, channel number 15 would be directly associated with the IR code programmed at device 3, channel 15. When that button is pressed, the touch panel transmits the IR code programmed at device 3, channel 15.

<time pulse on>: This parameter represents the length of time that the pulse remains On. This number is a time in tenths of seconds. For example, to keep the IR pulse on for 1 second, the required parameter is 10. The largest number for this parameter is 65535 or approximately 109 minutes.

<time delay after pulse>: This parameter represents the length of time between pulses. This number is a time in tenths of seconds. For example, to add a delay between pulses for 10 seconds, the required parameter is 100. The largest number for this parameter is 65535 or approximately 109 minutes.

<CR>: This character indicates the end of the statement (carriage return is pressing the RETURN key on the touch panel keyboard).

- **Example**:

```
$P 3 15 10 100<CR>
```

This command transmits the IR code at device 3, channel 15 for 1 second. Then, the macro pauses 10 seconds before executing the next command or before finishing the macro if no other commands exist.

Wait command

The wait command is used as a delay between pulses. This command should be used sparingly because the final parameter of the pulse command contains a delay between instructions. Usually, this command is necessary for the case where a time delay is desired before starting any IR pulse sequences.

Figure 58 shows a sample pulse command format and description of the variables.

Figure 58

Sample Pulse command format and variable description

- **Sample Format**: `$W <time delay before pulse><CR>`
- **Variables:**

  <time delay before pulse>: This parameter represents the length of time between pulses. This number is a time in tenths of seconds. For example, to add a delay between pulses for 100 seconds, the required parameter is 1000. The largest number for this parameter is 65535 or approximately 109 minutes.

  <CR>: This character indicates the end of the statement (carriage return is pressing the RETURN key on the touch panel keyboard).

- **Example**: `$W 455<CR>`

This command waits 45.5 seconds before executing the next macro command.

Before you create an IR macro button, make sure that you have your equipment IR files loaded into the ViewPoint. Refer to the *Loading an IR File* subsection for more information. Load the IR files in the order of satellite IR first, VCR IR second, and TV IR file last. This loading order places the satellite file as ViewPoint device 4, the VCR as device 3, and the TV as device 2.

Figure 59 lists the IR code numbers and functions for most devices.

Figure 59

IR codes and functions

IR codes and functions

IR code #	Television	VCR	Satellite
1-8			
9	Power		Power
10	0	Input select	0
11	1		1
12	2		2
13	3		3
14	4		4
15	5		5
16	6		6
17	7		7
18	8		8
19	9		9
21			Enter
22	Channel up ∧		Channel up ∧
23	Channel down ∨		Channel down ∨
24	Volume ∨	Main volume ∧	Volume up ∧
25	Volume ^	Main Volume	Volume down ∨
26	Mute	Rcvr mute	Mute
27		Main power on	
28		Main power off	
29	TV/Video	VCR1 tv/vcr	
30		TV	
31		VCR1	Sat
32		VCR2	
33		ld	
34		Tape	Audio
35		DCC	
36		CD	
37		Tuner am/fm	
38			
39		Aux	
45			Chan sel

1. Create a button and label it **Video Start**.
2. Select EDIT, BUTTON, PROPERTIES.
3. In the PROPERTIES dialog, select BUTTON TYPE, and then select GENERAL.
4. In the BUTTON OPTIONS field, select NONE.
5. In the CHANNEL dialog, set DEV to 1 and CHAN to 0.
6. In the STRING field enter the following using the keyboard:

```
$P 2 9 5 1 <CR>
$P 2 24 5 1 <CR>
$P 3 27 5 1 <CR>
$P 4 9 5 1 <CR>
```

Note

You must select the CHAR NUMS button on the Keyboard in order to enter the adjacent text. There is a space between the different sets of numbers and between the last number and the <CR>.

7. Press EXIT CHANGE, EXIT SAVE CHANGE, and then EXIT.

What happens when the example macro executes

Using the example in step 6, the following occurs when the macro is executed.

- **$P 2 9 5 1** An IR push is sent to device 2 (TV) on channel 9 (Power on) for a period of 5 tenths of a second and a one tenth of a second pause. The <CR> indicates an end to the command string.
- **$P 2 24 5 1** An IR push is sent to device 2 (TV) on channel 24 (increase volume) for a period of 5 tenths of a second and a one tenth of a second pause. The <CR> indicates an end to the command string. This command is repeated for one more command string.
- **$P 3 27 5 1** An IR push is sent to device 3 (VCR) on channel 27 (Main power on) for period of 5 tenths of a second and a one tenth of a second pause. The <CR> indicates an end to the command string.
- **$P 4 9 5 1** An IR push is sent to device 4 (satellite receiver) on channel 9 (Power) for period of 5 tenths of a second and a one tenth of a second pause. The <CR> indicates an end to the command string.

While the macro is executing, a Touch to Continue button example (Figure 60) is shown on the touch panel screen.

Figure 60

Touch to Continue button example

If the screen is touched to cancel macro execution, all touch panel activity stops until another button press occurs.

Note

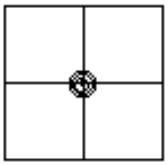
Joysticks only function on VPN-CP/VPN-GS touch panels.

Creating a Joystick

You can create a joystick with the BUTTON TYPE operation bar in the Button Properties page. Joysticks (Figure 61) are vertical and horizontal direction controllers you can use for camera operations such as pan and tilt.

Figure 61

Joystick



Before you start, make sure to connect the touch panel system to your Controller. Otherwise, the joystick may not work properly. Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for more information.

Adding a joystick to a page

Note

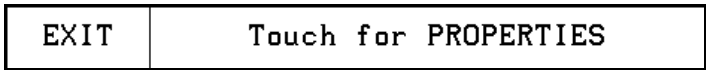
Joysticks only function on VPN-CP/VPN-GS touch panels.

Create a new button using the ADD operation bar in the BUTTON menu as described in the *Creating a Button* subsection.

1. Press BUTTON on the Edit bar to open the Button menu.
2. Press PROPERTIES to open the PROPERTIES operation bar shown in Figure 62.

Figure 62

PROPERTIES operation bar

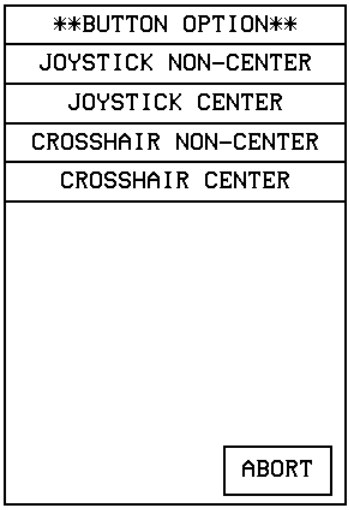


3. Press the target button to open the Button Properties page for the selected button.
4. Press BUTTON TYPE to open the BUTTON TYPE menu.

5. Press JOYSTICK to set the target button as a joystick.
6. Press BUTTON OPTIONS on the Button Properties page to open the BUTTON OPTION menu for Joysticks shown in Figure 63.

Figure 63

BUTTON OPTION menu for Joysticks



7. Press CROSSHAIR CENTER to set a crosshair in the center of the joystick button and return to the Button Properties page.
8. Press EXIT SAVE CHANGE to return to the Main page.
9. Press EXIT to exit from the PROPERTIES operation bar.

Setting the joystick properties

Note

Joysticks only function on VPN-CP/VPN-GS touch panels.

1. Press EDIT, BUTTON, and the PROPERTIES operation bar.
2. Press the target button to open the Button Properties page.
3. Press BUTTON TYPE to open the BUTTON TYPE menu (Figure 41).

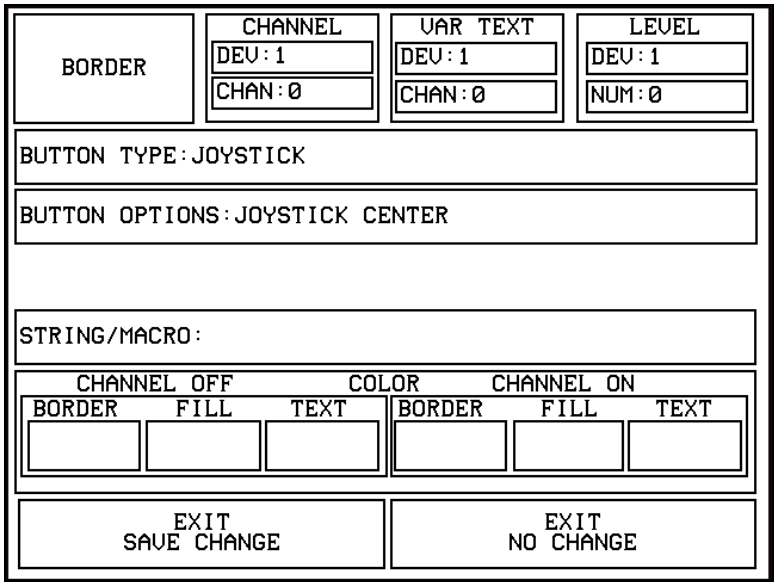
Note

One-way ViewPoint touch panels do not support variable text.

4. Press JOYSTICK in the BUTTON TYPE menu to open the Button Properties page shown in Figure 64.

Figure 64

Button Properties page for Joysticks



Note

If you followed the instructions for *Adding a joystick to a page* subsection, this button's Properties page appears.

Note

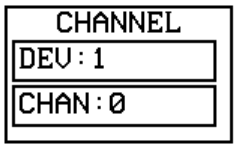
If DEVICE USED is set to 4 and Base Device Number is 128, the Controller recognizes bus devices 128 -131.

Setting the channel code

The channel buttons that set the device and button channel codes for the touch panels are shown in Figure 65.

Figure 65

CHANNEL code buttons



Note

The panel does not allow you to enter a device number greater than the DEVICE USED without first displaying a decision box. This box asks you to decide whether you accept the new selection or default to the previous value.

Note

The channel code for non-active buttons is 0 and for active buttons is 1 through 255.

1. Press DEV to open a keypad and set the joystick's device number.
2. Enter **1**, **2**, **3**, or **4** in the keypad. The device number specifies the device number that the selected channel's feedback displays.
3. Press ENTER to store the device number into memory, close the keypad, and return to the Button Properties page.
4. Press CHAN to open the keypad and enter a channel value of 1 through 255 in the keypad. The programming software uses the channel code number to identify the button and its' programmed operations.
5. Press ENTER to store the channel number in memory, close the keypad, and return to the Button Properties page.

Note

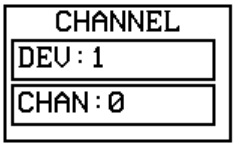
One-way ViewPoint touch panels do not support variable text.

Setting the variable text code

The variable text buttons that set the device and button channel codes for the touch panels are shown in Figure 66.

Figure 66

VAR TEXT code button



Note

The panel does not allow you to enter a device number greater than the DEVICE USED without first displaying a decision box. This box asks you to decide whether you accept the new selection or default to the previous value.

1. Press DEV to open a keypad and set the device number.
2. Enter **1**, **2**, **3**, or **4** in the keypad. The programming software uses device codes 1 through 4 to identify the touch panel. Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed information.
3. Press ENTER to store the device number in memory, close the keypad, and return to the Button Properties page.
4. Press CHAN to open a keypad and set the channel number.

Note

The channel codes for non-active buttons are 0, and active buttons is 1 through 255.

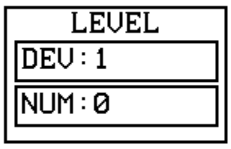
5. Enter a channel value of 1 through 255 in the keypad. The programming software uses the channel code number to identify the button and its operations.
6. Press ENTER to store the channel number into memory, close the keypad, and return to the Button Properties page.

Setting the level code

The level buttons that set the device and number codes for the touch panels are shown in Figure 67.

Figure 67

LEVEL code buttons



Note

The panel does not allow you to enter a device number greater than the DEVICE USED without first displaying a decision box. This box asks you to decide whether you accept the new selection or default to the previous value.

1. Press DEV to open a keypad and set the device number.
2. Enter **1**, **2**, **3**, or **4** in the keypad. The programming software uses device codes 1 through 4 to identify the touch panel. Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed information.
3. Press ENTER to store the level device number in memory, close the keypad, and return to the Button Properties page.
4. Press NUM to open a keypad and set the level number assigned to the device.
5. Enter **1** in the keypad.
6. Each device can have from 1 through 8 levels except for joysticks where the range is from 1 through 7.

Note

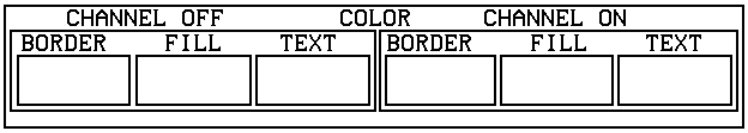
Joysticks actually use two level numbers. The first is for the X-axis and the second is for the Y-axis. You only need to specify the first level.

Setting the joystick colors/shades for channel-off conditions

1. Press the target button to open the Button Properties page.
2. Press BORDER (Figure 68) in the CHANNEL OFF COLOR section of the Button Properties page.

Figure 68

CHANNEL OFF/ON COLOR settings box



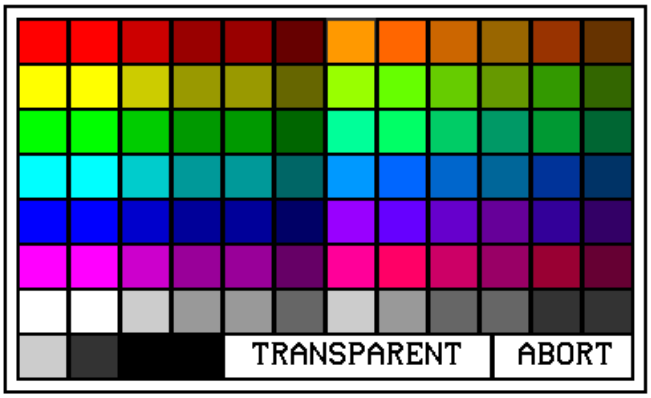
Note

Joysticks only function on VPN-CP/VPN-GS touch panels.

3. The color palette (Figure 69) appears.

Figure 69

Color palette



Note

The VPT-GS and VPN-GS only display gray shades for selection.

4. Press black to set the border color.

5. Press the FILL button in the Button Properties page to open the color palette.
6. Press white to set the fill color.
7. Press the TEXT button to open the palette.
8. Press red to set the text color.
9. Press EXIT SAVE CHANGE in the Button Properties page to store the new button properties into memory and return to the current page.
10. Press EXIT on the PROPERTIES operation bar.

Note

Joysticks actually use two level numbers. The first is for the X-axis and the second is for the Y-axis. You only need to specify the first level.

Creating a Bargraph

Note

Bargraphs only function on VPN-CP/VPN-GS touch panels.

Bargraphs (Figure 70) are level monitors and adjustable level controls. These levels can be configured to monitor audio outputs, lighting levels, and adjust audio or light levels. Before you start, make sure to connect the touch panel to your Controller; otherwise, the bargraph may not work properly. Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed information.

Figure 70

Bargraph

Adding a bargraph to a page

Note

Bargraphs only function on VPN-CP/VPN-GS touch panels.

1. Press EDIT to open the Edit bar.
2. Create a new button using the ADD operation bar in the BUTTON menu.
3. Press BUTTON in the Edit bar to open the BUTTON menu.
4. Press PROPERTIES in the BUTTON menu to open the PROPERTIES operation bar shown in Figure 71.

Figure 71

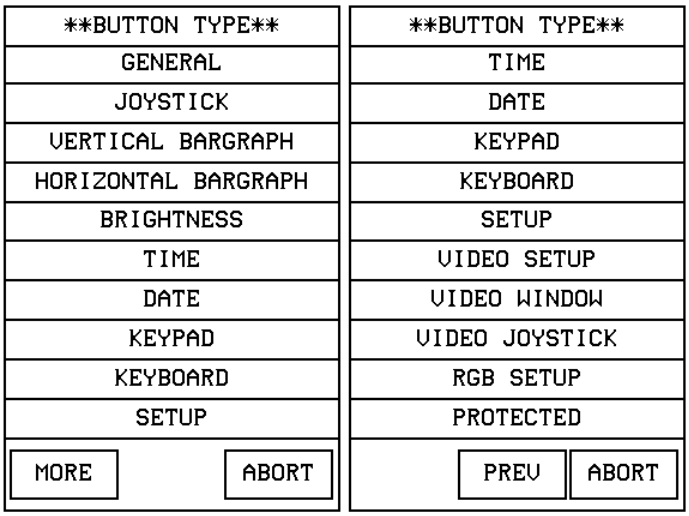
PROPERTIES operation bar

5. Press the target button to open the Button Properties page.

6. Press BUTTON TYPE to open the BUTTON TYPE menus shown in Figure 72.

Figure 72

BUTTON TYPE menus



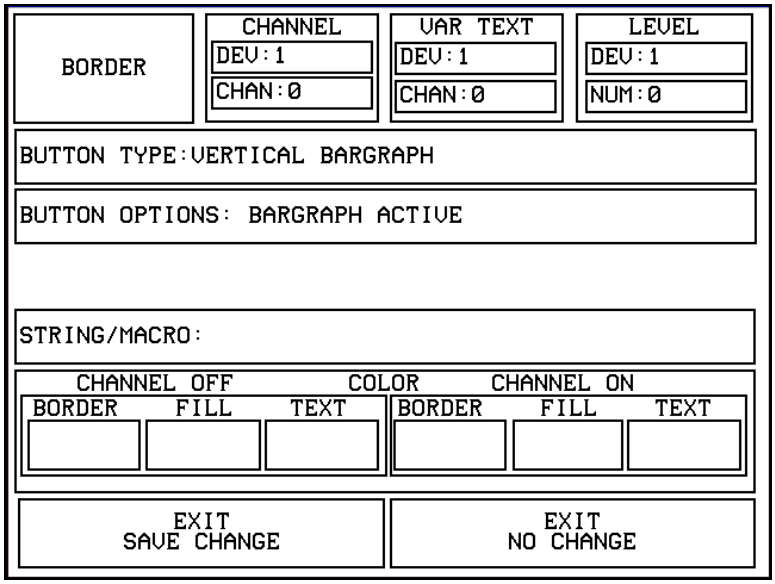
Note

One-way ViewPoint touch panels do not support variable text.

7. Select VERTICAL BARGRAPH to open the Button Properties page for Vertical Bargraphs shown in Figure 73.

Figure 73

Button Properties page for Vertical Bargraphs



Setting the bargraph properties

Use the Button Properties page for Vertical Bargraphs shown in Figure 73 to set channel, level, and button colors.

Note

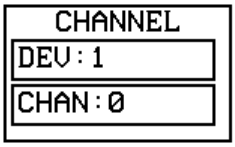
Bargraphs only function on VPN-CP/VPN-GS touch panels.

Setting the channel code

The channel buttons that set the device and button channel codes for the touch panels are shown in Figure 74.

Figure 74

Bargraph CHANNEL code buttons



Note

The panel does not allow you to enter a device number greater than the DEVICE USED without first displaying a decision box. This box asks you to decide whether you accept the new selection or default to the previous value.

1. Press DEV to open the keypad and set the device number.
2. Enter **1**, **2**, **3**, or **4** in the keypad. The programming software uses device codes 1 through 4 to identify the touch panel. the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed information.
3. Press ENTER to store the device number into memory, close the keypad, and return to the Button Properties page.
4. Press CHAN to open a keypad and enter a channel value of 1 through 255 in the keypad. The programming software uses the channel code number to identify the button and its' operations.
5. Press ENTER to store the channel number into memory, close the keypad, and return to the Button Properties page.

Note

The channel code for non-active buttons is 0 and for active buttons is 1 through 255.

Setting the variable text code

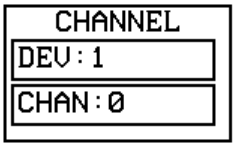
Note

One-way ViewPoint touch panels do not support variable text.

The variable text buttons that set the device and button channel codes for the touch panels are shown in Figure 75.

Figure 75

VAR TEXT code button



Note

The panel does not allow you to enter a device number greater than the DEVICE USED without first displaying a decision box. This box asks you to decide whether you accept the new selection or default to the previous value.

1. Press DEV to open a keypad and set the device number.
2. Enter **1**, **2**, **3**, or **4** in the keypad. The programming software uses device codes 1 through 4 to identify the touch panel. Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed information.
3. Press ENTER to store the device number in memory, close the keypad, and return to the Button Properties page.
4. Press CHAN to open a keypad and set the channel number.
5. Enter a channel value of 1 through 255 in the keypad. The programming software uses the channel code number to identify the button and its operations.
6. Press ENTER to store the channel number into memory, close the keypad, and return to the Button Properties page.

Note

The channel codes for non-active buttons are 0, and active buttons is 1 through 255.

Setting the level code

The level buttons that set the device and number codes for the touch panels are shown in Figure 76.

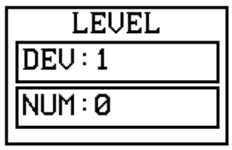


Figure 76

LEVEL code buttons

Note

The panel does not allow you to enter a device number greater than the DEVICE USED without first displaying a decision box. This box asks you to decide whether you accept the new selection or default to the previous value.

1. Press DEV to open a keypad and set the device number.
2. Enter **1**, **2**, **3**, or **4** in the keypad. The programming software uses device codes 1 through 4 to identify the touch panel. Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed information.
3. Press ENTER to store the level device number into memory, close the keypad, and return to the Button Properties page.
4. Press NUM to open a keypad and set the level number assigned to the device.
5. Enter **1** in the keypad.
6. Press ENTER to store the level number into memory, close the keypad, and return to the Button Properties page.
7. Press EXIT SAVE CHANGE, then EXIT to return to the New page with the EDIT button.

Note

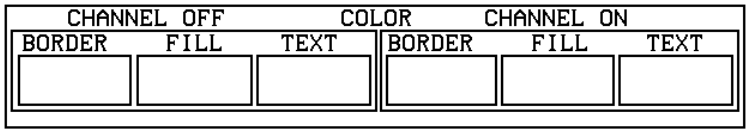
Bargraphs only function on VPN-CP/VPN-GS touch panels.

Setting the bargraph colors/shades for channel-off conditions

1. Press the target button to open the Button Properties page.
2. Press BORDER (Figure 68) in the CHANNEL OFF COLOR section of the Button Properties page.

Figure 77

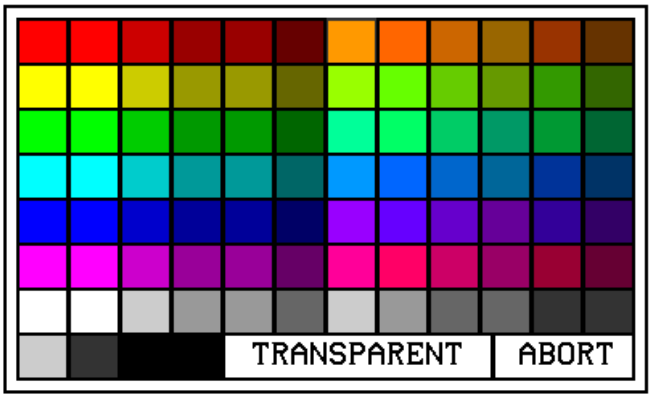
CHANNEL OFF/ON COLOR settings box



3. The color palette (Figure 78) appears.

Figure 78

Color palette



Note

The VPT-GS and VPN-GS only display gray shades for selection.

4. Press black to set the border color.
5. Press the FILL button in the Button Properties page to open the color palette.
6. Press white to set the fill color.
7. Press the TEXT button to open the palette.
8. Press red to set the text color.
9. Press EXIT SAVE CHANGE in the Button Properties page to store the new button properties into memory and return to the current page.
10. Press EXIT on the PROPERTIES operation bar.

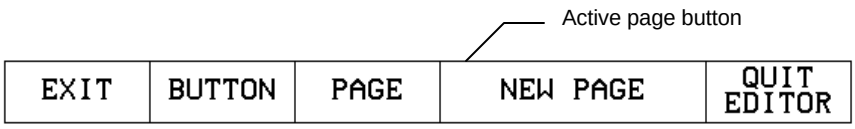
Linking the New Page to the Main Page

Use the Attributes page to link buttons to pages. This operation requires changing the button text and setting a page flip. Refer to *Adding a page*, *Creating a Button*, *Goto,* and *Setting the page flip* subsections of the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed information.

1. Open the Edit bar, press the active page button shown in Figure 79.

Figure 79

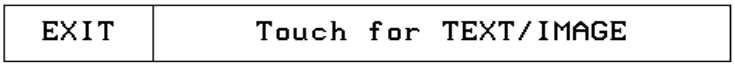
Edit bar with active page button



2. Press MAIN PAGE from the PAGE GOTO menu.
3. Press EDIT to open the Edit bar.
4. Press BUTTON on the Edit bar to open the BUTTON menu.
5. Press TEXT/IMAGE to change the Main page button text. The TEXT/IMAGE operation bar (Figure 80) appears.

Figure 80

TEXT/IMAGE operation bar

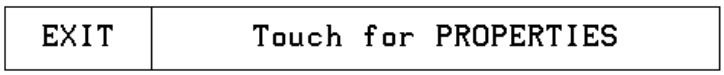


6. Press the MAIN button to open the Text/Image page.
7. Press TEXT OFF to open the keyboard and delete **MAIN**.
8. Enter **NEW PAGE.** The text appears in the keyboard window.
9. Press EXIT CHANGE to close the keyboard and return to the Text/Image page.
10. Press MAKE ON SAME AS OFF to set the text for the button's TEXT ON and TEXT OFF states.
11. Press EXIT SAVE CHANGE to close the Text/Image page and return to the Main page.
12. Press EXIT to exit the TEXT/IMAGE mode.
13. Press EDIT to open the Edit bar.
14. Press BUTTON to open the BUTTON OPTIONS menu.

15. Press PROPERTIES in the BUTTON OPTIONS menu to open the PROPERTIES operation bar shown in Figure 81.

Figure 81

PROPERTIES operation bar

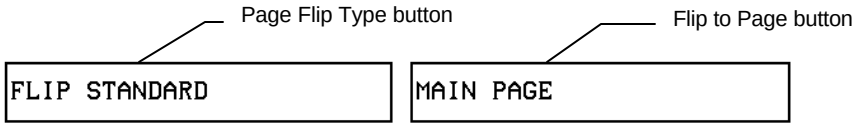


16. Press the NEW PAGE button to open the Button Properties page.

17. Press the page FLIP buttons (Figure 82) to set the page flip properties for the button.

Figure 82

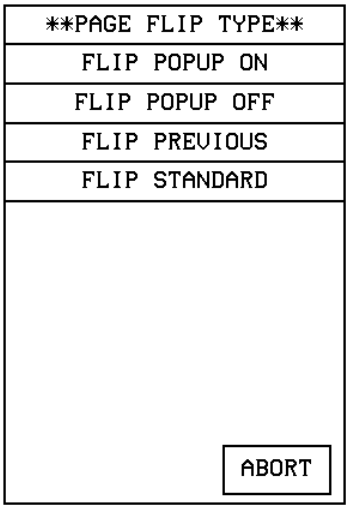
Page FLIP buttons



18. Press the left Flip Type box in the Button Properties page to open the PAGE FLIP TYPE menu (Figure 83).

Figure 83

PAGE FLIP TYPE menu

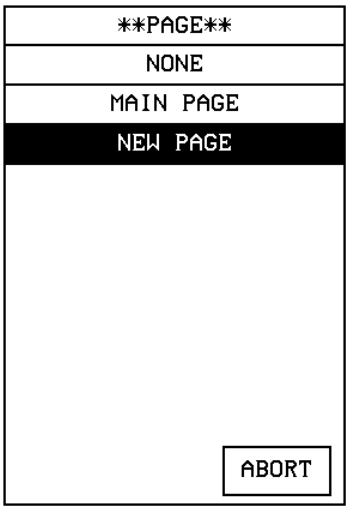


19. Press FLIP STANDARD to select a standard page flip and return to the Button Properties page.

20. Press the right Page Flip box to set the destination page (Figure 84).

Figure 84

PAGE menu



21. Press NEW PAGE to set the page flip and return to the Button Properties page.

22. Press EXIT SAVE CHANGE to save changes, close the Button Properties page, and return to the Main page.

23. Press EXIT on the PROPERTIES operation bar to close the Edit bar.

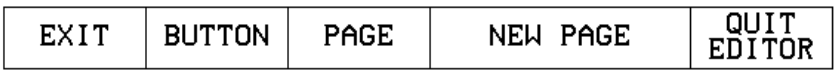
Exiting Edit Mode

This subsection describes exiting the EDIT mode once you finish designing touch panel pages.

1. Press EXIT to close the Edit bar (Figure 85).

Figure 85

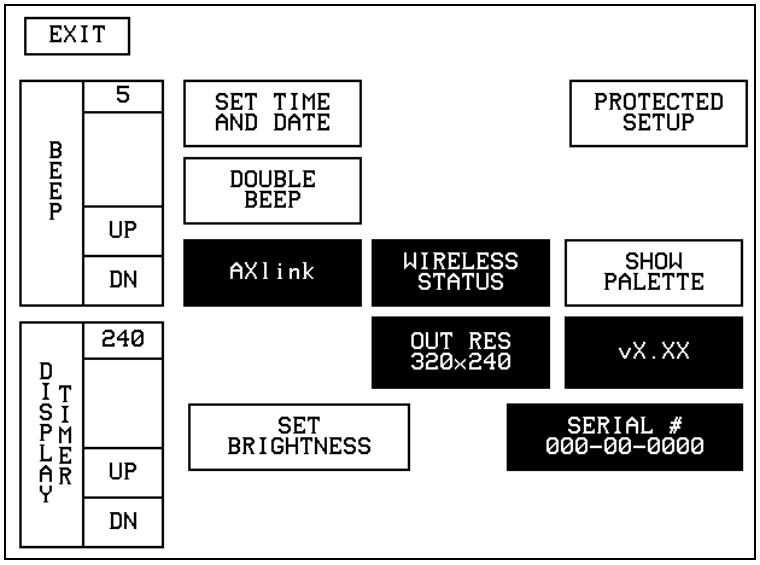
Edit bar



2. Press SETUP to open the Setup page shown in Figure 86.

Figure 86

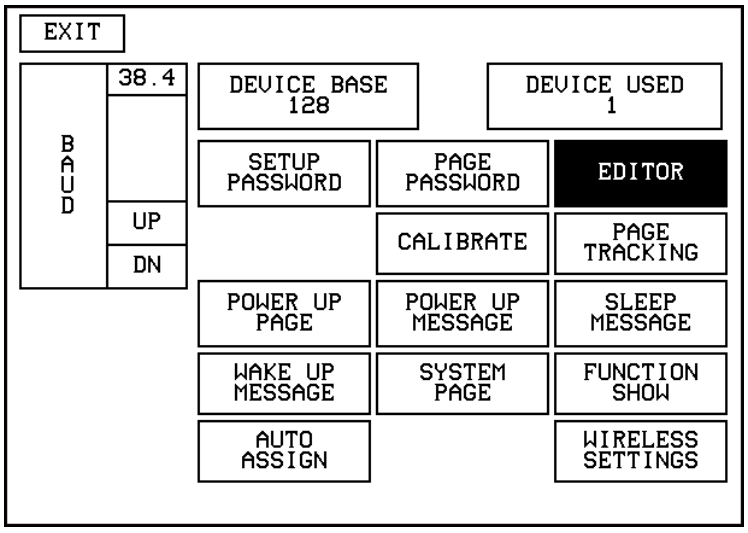
Setup page



3. Press PROTECTED SETUP to open the Protected Setup page shown in Figure 87.

Figure 87

Protected Setup page



4. Press EDITOR to toggle EDIT mode Off.

5. Press EXIT to close the Protected Setup page and return to the Setup page (Figure 86).

6. Press EXIT to close the Setup page and return to the Main page.

Another method of exiting the EDIT mode is to use the QUIT EDITOR button on the Edit bar. Refer to the *Edit Bar – Quit Editor option* subsection of the *ViewPoint Wireless Touch Panels – Program Reference* instruction manual for detailed information on exiting the EDIT mode using this method.

1. Press EXIT to open the Edit bar shown in Figure 85.
2. Press the QUIT EDITOR button to open the Quit the On-Board Editor decision button.
3. If you select YES, the current page appears without the Edit bar.

Programming

Overview

Note

There are no programming differences between the VPT-CP and VPT-GS.

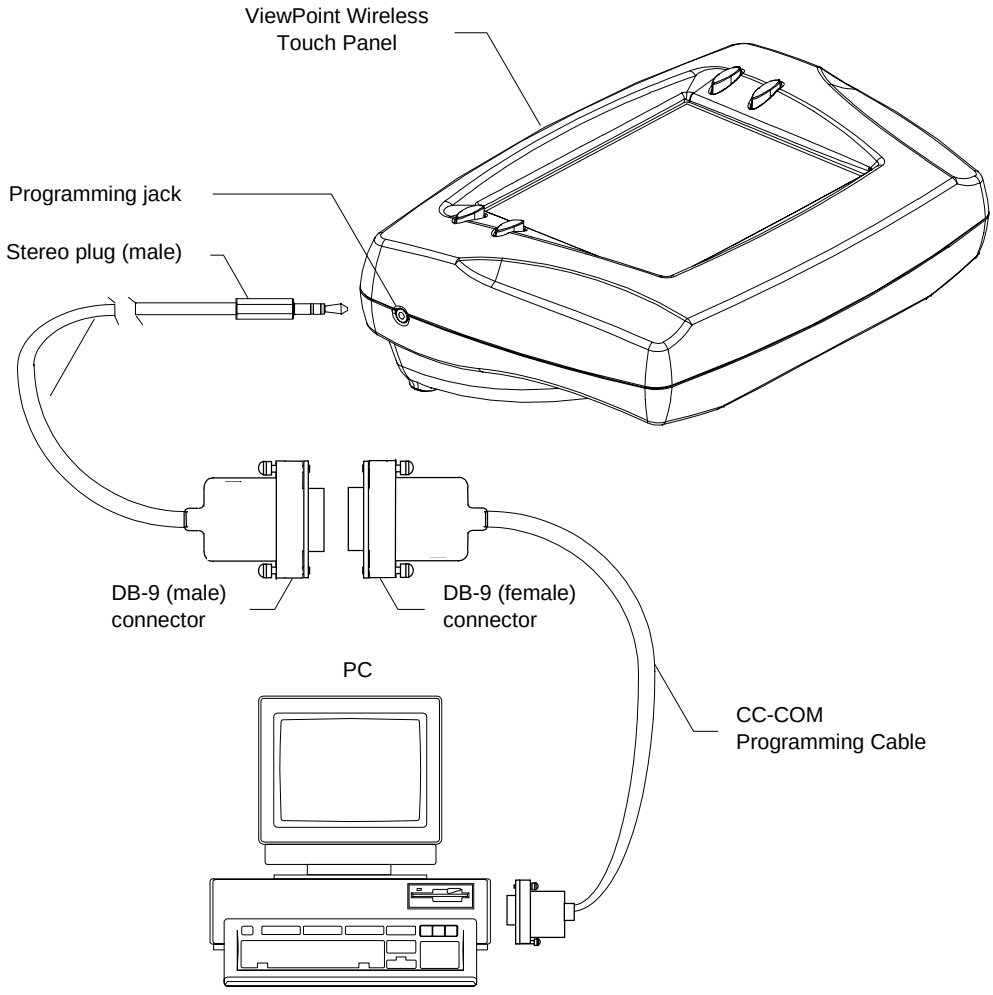
This section outlines how to connect your PC to the ViewPoint for programming the ViewPoint. Also, programming commands for the new G3 software is included.

PC to ViewPoint Connections

Figure 88 shows the connections required for connecting the ViewPoint to your PC.

Figure 88

Connecting the ViewPoint to your PC



Programming the ViewPoint

You can program the ViewPoint to perform a wide variety of operations using Send_Commands and variable text commands. Use the commands described in this section along with the *AXCESS Programming Language* instruction manual to program the ViewPoint.

Programming Changes

The programming language may need to be modified to conform to those ranges and variables set in the new version 3.xx firmware.

The following describes those version 2.xx features that have either been modified or are no longer supported within the new version 3.xx firmware:

- **E - Timer** The elapsed timer feature is not supported by the version 3.xx. firmware. Program code can be written to simulate this feature.
- **ICONS features** Some features within the Icons drop-down menu in the version 2.xx firmware, such as the E-Timer, 16 and 32 Char Term, are also not supported in version 3.xx.
- **SEND_COMMANDs** Figure 89 is a list of some commands that need to be adapted to conform with the new parameters and enhanced functionality present in the version 3.xx firmware.

Figure 89

Affected Send_Commands

Command	Description
!C	Sets the border, font, and text in one command
!F	Shorthand version of 'FONT' command
!I	Shorthand version of 'ICON' command
CBON	Sets the ON feedback border color to the specified color
CBOFF	Sets the OFF feedback border color to the specified color
FONT	Changes the font size (or style) of the text in a specific button
ICON	Changes border style of a specific button

All other Color and Variable text Send_Commands are listed in this section. They should be checked to verify that they comply with version 3.xx parameters and functionality.

Serial Commands

Figure 90 lists the Serial Commands you can use with the ViewPoint Touch Panels. These commands are case insensitive.

Figure 90

Serial Commands

Serial Commands

Command	Description
"?PAR"	Return panel parameters to the PC terminal These include: Firmware version, Device number, Mouse type, Output resolution, Number of devices, cursor enable, Brightness, and Contrast. Example: "?PAR" Requests the information.
"'CALIBRATE'"	Start touch panel calibration. Example: SEND_COMMAND TP,"'CALIBRATE'" Starts the calibration sequence mode on the touch panel.
"CHECK CAL"	Enter the calibration test mode. Example: "CHECK CAL" Starts the calibration check mode on the touch panel.
"ECHO ON"	Turn On character echo. Example: "ECHO ON" The character echo is sent back to the computer.
"ECHO OFF"	Turn Off character echo. Example: "ECHO OFF" The character echo is not sent back to the computer.

Serial Commands (Cont.)

Command	Description
"HELLO"	Verify that the serial communication. Example: "HELLO" If the communication is active and working, the response would be “How are you doing?”.
LZAP!	Clear all low-level memory and erase IR codes. Example: LZAP! Clears all IR codes from the panel.
"SETUP"	Go to the Setup page. Example: "SETUP" Flips the touch panel to the Setup page.
"VER"	Restore current version. Example: "VER" This returns the current version of the main firmware.
"ZAP!"	Clear all memory and erase buttons, pages, drawings, and symbols. Example: "ZAP!" Clears all memory and erases all buttons, pages, drawings, and symbols.

Note

Commands such as LZAP! and ZAP! Can be used as both Serial Commands and Send_Commands.

System Send_Commands

System Send_Commands (Figure 91) are stored in the Controller and direct the touch panel to perform various operations.

Figure 91

System Send_Commands

System Send_Commands	
Command	**Description**
"'ABEEP'"	Output one panel beep even if the Beep value is set to 0 in the Setup page. Example: `SEND_COMMAND TP,"'ABEEP'"` Beeps the panel.
"'ADBEEP'"	Output a double-beep even if the double beep value is set to 0 in the Setup page. Example: `SEND_COMMAND TP,"'ADBEEP'"` Double-beeps the panel.
"'AKEYB-<text string>'"	Open the touch panel keyboard and initialize the text string entry. The keyboard string is set to null during power-up and is stored until power-down. text string = 0 - 59 characters Example: `SEND_COMMAND TP,"'AKEYB-TOUCH HERE'"` Opens the touch panel keyboard with TOUCH HERE in the display.
"'AKEYP-<number string>'"	Open the touch panel keypad and initialize the number string entry. The keypad string is set to null during power-up and is stored until power-down. number string = 0 - 9999 Example: `SEND_COMMAND TP,"'AKEYP-1988'"` Opens the touch panel keypad with 1988 in the display.

System Send_Commands (Cont.)	
Command	**Description**
"'AKEYR'"	Close the touch panel keyboard or keypad opened with the 'AKEYB', 'AKEYP', or 'PKEYP' commands. Example: SEND_COMMAND TP,"'AKEYR'" Closes the keyboard or keypad opened using the 'AKEYB', 'AKEYP', or 'PKEYP' commands.
"'BEEP'"	Output one beep. The Beep button in the Protected Setup page must be set from 1 through 10 for this command. Example: SEND_COMMAND TP,"'BEEP'" Beeps the panel if the Beep button is not set to 0.
"'BRIT-<level>'"	Adjust brightness of display. The brightness range is 1 (minimum) to 5 (maximum). level = 1 - 5 Example: SEND_COMMAND TP,"'BRIT-5'" Sets to highest brightness level.
"'CONT-<level>'"	Adjust brightness of display. The brightness range is 1 (minimum) to 12 (maximum). level = 1 - 12 Example: SEND_COMMAND TP,"'CONT-12'" Sets to highest brightness level.
"'CLOCK <mm-dd-yy> <hh:mm:ss>'"	Set the time and date. mm = 01 - 12, dd = 01 - 31, yy = 00 - 99 hh = 00 - 23, mm = 00 - 59, ss = 00 - 59 Example: SEND_COMMAND TP,"'CLOCK 02-08-98 19:16:00' Sets the touch panel's date to February 8, 1998, and time to 7:16 p.m.

System Send_Commands (Cont.)

Command	Description
"'DBEEP'"	Output a double-beep. This command works only if the Double Beep value in the Protected Setup page is set to ON. Example: SEND_COMMAND TP,"'DBEEP'" Double-beeps the panel.
LZAP!	Clear all low-level memory and erase IR codes. Example: SEND_COMMAND TP, LZAP! Clears all IR codes from the panel.
"'PAGE-<page name>'"	Flip to page with specified page name. page name = 1 - 50 ASCII characters Example: SEND_COMMAND TP,"'PAGE-MAIN PAGE'" Flips the touch panel to the page named MAIN PAGE.
"'PKEYP-<number string>'"	Display asterisks (*) for keypad entries. number string = 0 - 9999 Example: SEND_COMMAND TP,"'PKEYP-1988'" Displays the touch panel keypad with **** instead of 1988.
"'PPOF - <page name>'"	Close a specific popup page. page name = 1 - 50 ASCII characters Example: SEND_COMMAND TP,"'PPOFF-Popup Page 1'" Closes Popup Page 1.

Note

Commands such as LAZP! and ZAP! Can be used as both Serial Commands and Send_Commands.

System Send_Commands (Cont.)	
Command	**Description**
`"'PPON - <page name>'"`	Open a specific popup page. page name = 1 - 50 ASCII characters Example: `SEND_COMMAND TP,"'PPON-Popup Page 1'"` Opens Popup Page 1.
`"'QBEEP'"`	Stop all beeps, including "'ABEEP"', "'ADBEEP"' and AXlink beeps. Example: `SEND_COMMAND TP, 'QBEEP'` Stops *all* beeps.
`"'RESET'"`	Clear panel status (same as power up). Data stored in memory is not cleared. Example: `SEND_COMMAND TP,"'RESET'"` Resets the touch panel.
`"'SLEEP'"`	Force the touch panel to screen-saver mode. Example: `SEND_COMMAND TP,"'SLEEP'"` Activates the screen-saver mode.
`"'TPAGEOFF'"`	Deactivates page tracking. Example: `SEND_COMMAND TP,"'TPAGEOFF'"` Deactivate the page tracking option.

System Send_Commands (Cont.)

Command	Description

"'TPAGEON'"	Activate page tracking.
	Example:
	SEND_COMMAND TP,'TPAGEON'
	DEFINE_DEVICE
	TP1 = 128 (*AMX Touch Panel*)
	TP2 = 129 (*AMX Touch Panel*)
	DEFINE_VARIABLE
	TP1_BUFFER[100] (*Buffer for TP1*)
	TP2_BUFFER[100] (*Buffer for TP2*)
	TRASH[50] (*For Parsing Above*)
	DEFINE_START
	CREATE_BUFFER TP1,TP1_BUFFER
	CREATE_BUFFER TP2,TP2_BUFFER
	SEND_COMMAND TP1,'TPAGEON'
	SEND_COMMAND TP2,'TPAGEON'
	DEFINE_PROGRAM
	(***** PAGE TRACKING ROUTINE ***************)
	IF(LENGTH_STRING(TP1_BUFFER))
	{
	IF(FIND_STRING(TP1_BUFFER,'PAGE-',1))
	{

System Send_Commands (Cont.)

Command	Description

```
    TRASH=REMOVE_STRING(TP1_BUFFER,'PAGE-',1)
    SEND_COMMAND TP2,"'PAGE-', TP1_BUFFER"
    CLEAR_BUFFER TP1_BUFFER
   }
   IF((FIND_STRING(TP1_BUFFER,'PPON-',1)
    OR(FIND_STRING(TP1_BUFFER',(PPOF-',1)))
   {
    SEND_COMMAND TP2,TP1_BUFFER
    CLEAR_BUFFER TP1_BUFFER
   }
}
IF (LENGTH_STRING(TP2_BUFFER))
{
   IF(FIND_STRING(TP2_BUFFER,'PAGE-',1))
   {
    TRASH=REMOVE_STRING(TP2_BUFFER,'PAGE-',1)
    SEND_COMMAND TP1,"'PAGE-', TP2_BUFFER"
    CLEAR_BUFFER TP2_BUFFER
   }
   IF((FIND_STRING(TP1_BUFFER,'PPON-',1)
    OR(FIND_STRING(TP1_BUFFER',(PPOF-',1)))
   {
    SEND_COMMAND TP1,TP2_BUFFER
    CLEAR_BUFFER TP2_BUFFER
    }
}
(*****************************************
```

In this program, the command string is sent to the Controller in the 'PAGE-(page name)' or 'PPON/PPOF-(page name)' format. The string can be captured in the buffer for one panel and sent to the other panel.

If panels are combined using the `DEFINE_COMBINE` statement, the routine needs to be written only once, and the command is sent back to the same panel.

```
*********************************************)
(***** END OF PAGE TRACKING ROUTINE
****************)
```

System Send_Commands (Cont.)	
Command	**Description**
"'WAKE'"	Deactivate screen-saver mode and reset sleep timer. Example: `SEND_COMMAND TP,"'WAKE'"` Deactivates the touch panel screen-saver mode and resets the sleep timer.
"'XMTO <number>'"	Set the new network communication delay for the panel and SOFTROM. number = 4 - 30 ASCII characters Example: `SEND_COMMAND TP,"'XMTO 5'"` Sets the new delay time to 5 seconds.
"'XMRT <number>'"	Set the new network communication retry value for the panel and SOFTROM. number = 1 - 15 ASCII characters Example: `SEND_COMMAND TP,"'XMRT 9'"` Sets the number of retries to 9.
"'ZAP!'"	Clear all memory and erase buttons, pages, drawings, and symbols. Example: `SEND_COMMAND TP,"'ZAP!'"` Clears all memory and erases all buttons, pages, drawings, and symbols.

Warning

You should only use the ZAP! command to erase all the stored data in the touch panel. The data cannot be recovered after it is erased.

Gray Scale and Programming Numbers

Gray scale shades for the VPT-GS are obtained by using color programming numbers 72-86. These numbers correspond to the basic 16 shades of gray.

Colors/Shades of Gray and Programming Numbers

The colors and their programming numbers are listed in Figure 92, and can be used to set the colors on buttons, sliders, gauges, and pages. The lowest color number represents the lightest color-specific display, and the highest number represents the darkest display. For example, the color number 0 is light red, and 5 is dark red.

Figure 92

Colors and programming numbers

Colors and programming numbers

Color	No.	Color	No.
Red	0 - 5	Purple	54 - 59
Orange	6 - 11	Magenta	60 - 65
Yellow	12 - 17	Pink	66 - 71
Lime	18 - 23	White	72 - 77
Green	24 - 29	Gray	78 - 83
Aqua	30 - 35	More Gray	84 - 86
Cyan	36 - 41	Black	87
Royal	42 - 47	Transparent	255
Blue	48 - 53		

Font Styles and Programming Numbers

Figure 93 lists the font styles and their numbers you can use to program the text fonts on buttons, sliders, gauges, and pages. The programming numbers are assigned consecutively when they are downloaded to the touch panel. For more information on variable fonts, see the *Setting the variable text code* subsection.

Figure 93

Font styles and programming numbers

Font styles and programming numbers

No.	Font styles	No.	Font styles
1	Extra small	5	Extra large
2	Small	6	Hollow medium
3	Medium	8	Hollow extra large
4	Large	32-255	Variable fonts

Note

You must import variable text fonts into a TPDesign3 project file, and download the project file containing the fonts to the Touch Panel. The variable fonts are assigned programming numbers by the Touch Panel during the download process.

Border Styles and Programming Numbers

Figure 94 lists border styles and their numbers you can use to program borders on buttons, sliders, and gauges.

Figure 94

Border styles and programming numbers

Border styles and programming numbers

No.	Border styles	No.	Border styles
0	No border	11	Double shadow
1	No border special	20	3-dimensional rectangle 1
2	Single line	21	3-dimensional rectangle 2
3	Double line	22	3-dimensional round 1
4	Triple line	23	3-dimensional round 2
5	Single rounded	24	3-dimensional neon 1
6	Double rounded	25	3-dimensional neon 2
7	Single raised	26	3-dimensional neon blue
8	Double raised	27	3-dimensional neon green
9	Triple raised	40	Single diamond
10	Double-line two single	41	Double diamond

Shorthand Send Commands

Figure 95 lists the shorthand Send_Commands you can use with the VPT-CP Touch Panels. The shorthand command data is 1-byte, non-ASCII format except for pages, passwords, text, and bitmap names.

Figure 95

Shorthand Send_Commands

Shorthand Send_Commands

Command	Description
"'@CBF',<variable text address>,<color_ number>"	Set the OFF feedback border color to the specified color only if the specified background color is not the same as the current color. variable text address = 1 - 255 color number = see Figure 92 Example: SEND_COMMAND TP,"'@CBF',1,0" Sets the OFF feedback border color to Red for the variable text button 1.

Note

Shorthand commands were designed by Panja to streamline receiving, processing, and transmitting control system data. The shorthand commands operate control equipment just like the standard Send_Commands still used in a wide variety of Panja products, but they are simply smaller byte-for-byte, and thus processed more efficiently.

Shorthand Send_Commands (Cont.)

Command	Description
"'@CBN',<variable text address>,<color_ number>"	Set the ON feedback border color to the specified color only if the specified background color is not the same as the current color. variable text address = 1 - 255 color number = see Figure 92 Example: SEND_COMMAND TP,"'@CBN',2,78" Sets the ON feedback border color to Gray for variable text button 2.
"'@CFF',<variable text address>,<color_ number>"	Set the OFF feedback fill color to the specified color only if the specified background color is not the same as the current color. variable text address = 1 - 255 color number = see Figure 92 Example: SEND_COMMAND TP,"'@CFF',1,72" Sets the OFF feedback fill color to White for variable text button 1.
"'@CFN',<variable text address>,<color_ number>"	Set the ON feedback fill color to the specified color only if the specified background color is not the same as the current color. variable text address = 1 - 255 color number = see Figure 92 Example: SEND_COMMAND TP,"'@CFN ,1,30" Sets the ON feedback fill color to Aqua for variable text button 1.

Shorthand Send_Commands (Cont.)	
Command	**Description**
"'@CPG',<color_number>,'<page name>'"	Set the page with specified page name background color to the specified color only if the specified background color is not the same as the current color. color number = see Figure 92 page name = 1 - 50 ASCII characters Example: `SEND_COMMAND TP,"'@CPG',87,'Main Page'"` Sets the page title to Main Page, and the color to Black.
"'@CPP',<color_number>,'<pop-up page name>'"	Set the page with specified page name background color to the specified color only if the specified background color is not the same as the current color. color number = see Figure 92 pop-up page name = 1 - 50 ASCII characters Example: `SEND_COMMAND TP,"'@CPP',54,'Audio Page'"` Sets the popup page title to Audio Page, and the color to Purple.
"'@CTF',<variable text address>,<color_number>"	Set the OFF feedback text color to the specified color only if the specified background color is not the same as the current color. variable text address = 1 - 255 color number = see Figure 92 Example: `SEND_COMMAND TP,"'@CTF',1,48"` Sets the OFF feedback text color to Blue for variable text button 1.

Shorthand Send_Commands (Cont.)

Command	Description
"'@CTN',<variable text address>,<color_ number>"	Set the ON feedback text color to the specified color only if the specified background color is not the same as the current color. variable text address = 1 - 255 color number = see Figure 92 Example: `SEND_COMMAND TP,"'@CTN ,1,72"` Sets the ON feedback text color to White for variable text button 1.
"'@IDF'"	Query the touch panel to return a string with the MS-DOS filename of the touch panel. Example: `SEND_COMMAND TP,"'@IDF'"` The touch panel returns its MS-DOS file name in a string.
"'@IDP'"	Query the touch panel to return a string with the TPDesign3 project name. Example: `SEND_COMMAND TP,"'@IDP'"` The touch panel returns a string that contains its TPDesign3 project name.
"'@ILEV <joystick axis to invert'"	Invert the joystick axis. Example: `SEND_COMMAND TP,"'@ILEV 3'"` Invert the joystick axis to move the origin to another corner. • Normal G3 Joystick (origin: top left) 0 • Invert Horizontal Axis (origin: top right) 1 • Invert Vertical Axis (origin: bottom left) 2 • Invert Both Axes (origin: bottom right) 3

Shorthand Send_Commands (Cont.)	
Command	**Description**
"'@PPA-<page name>'"	Remove all popup pages from a specified page. If no page is specified, the current page is used. Example: `SEND_COMMAND TP,"'@PPA-Main Page'"` If there were several popup pages on 'MAIN PAGE' that are active, sending the previous command would remove them all from 'MAIN PAGE'.
"'@PPF-<popup page name>;<page name>'"	Deactivate a popup page on a touch panel page. If a page name is empty the current page is used. If a pop-up page is part of a group, the whole group is deactivated. popup page name = target popup page name page name = target touch panel page name Example: `SEND_COMMAND TP,"'@PPF-Laser Disc 2 Transport Control;Laser Disc Control Page'"` Deactivates the Laser Disc 2 Transport Control popup page on the Laser Disc Control Page.
"'@PPK-<popup page name>'"	Deactivate a popup page on *all* touch panel pages. If a pop-up page is part of a group, the whole group is deactivated. popup page name = target popup page name page name = target Touch Panel page name Example: `SEND_COMMAND TP,"'@PPK-Laser Disc 2 Transport Control'"` Deactivates the Laser Disc 2 Transport Control popup page on *all* touch panel pages.

Shorthand Send_Commands (Cont.)

Command	Description
"'@PPN-<popup page name>;<page name>'"	Activate a popup page on a touch panel page. If a page name is empty the current page is used. popup page name = Popup page name page name = Page name Example: `SEND_COMMAND TP,"'@PPN-Laser Disc 2 Transport Control;Laser Disc Control Page'"` Activates the Laser Disc 2 Transport Control popup page on the Laser Disc Control Page.
"'@PPX-<popup page>'"	Remove all popup pages from all pages in a panel. The group that needs to be turned Off must contain the popup page given. Example: `SEND_COMMAND TP,"'@PPX-POP VCR2'"` The popup page 'POP VCR' must be in a popup group. If so, then any popup page in that group becomes turned Off on all pages.
"'@PWD-<page flip password>'"	Set the password for the Page Flip on the touch panel. page flip password = 0 through 9999 Example: `SEND_COMMAND TP,"'@PWD-1988'"` Sets the page flip password to 1988.
"'@RDW'"	Redraw the current screen. Example: `SEND_COMMAND TP,"'@RDW'"` Sends a message to the touch panel to redraw the screen.

Shorthand Send_Commands (Cont.)	
Command	**Description**
"'@SSL-<string>'"	Change the Sleep string sent to the Controller when the touch panel activates sleep mode. string = alphanumeric characters Example: `SEND_COMMAND TP,"'@SSL-Touch Panel Deacti-vated'"` Sends Touch Panel Deactivated to the Controller.
"'@SST-<string>'"	Change the Startup string sent to the Controller when the touch panel powers up. string = alphanumeric characters Example: `SEND_COMMAND TP,"'@SST-Touch Panel Power On'"` Sends touch panel Power On to the Controller when the touch panel powers up.
"'@SWK-<string>'"	Change the Wakeup string sent to the Controller when the touch panel is activated. string = alphanumeric characters Example: `SEND_COMMAND TP,"'@SWK-Touch Panel Activated'"` Sends Touch Panel Activated to the Controller.

Color/Gray Scale Send_Commands

Use the color Send_Commands (Figure 96) to set the colors for text, buttons, and pages. Use the same command for setting gray scale values only change the color number value to reflect the gray scale (72-86) value.

Figure 96

Color Send_Commands

Color Send_Commands

Command	Description
"'CALL<variable text address>-<data>'"	Set the colors for a variable text button. See Figure 92 for color numbers. variable text address = 1 - 255 data = 6 color number series for: FILL COLOR ON FILL COLOR OFF BORDER COLOR ON BORDER COLOR OFF TEXT COLOR ON TEXT COLOR OFF Example: SEND_COMMAND TP,"'CALL1-1 3 0 0 72 74'" Sets variable text button 1 to: FILL COLOR ON = Red one shade from brightest FILL COLOR OFF = Red three shades from brightest BORDER COLOR ON = Red brightest BORDER COLOR OFF = Red brightest TEXT COLOR ON = White brightest TEXT COLOR OFF = White two shades from brightest

Note

You must use the variable text assignments to change button colors.

Color Send_Commands (Cont.)	
Command	**Description**
"'CBOFF<variable text address>-<color _number>'"	Set the OFF feedback border color to the specified color. variable text address = 1 - 255 color number = see Figure 92 Example: `SEND_COMMAND TP,"'CBOFF1-0'"` Sets the OFF feedback border color to Red for the variable text button 1.
"'CBON<variable text address>-<color _number>'"	Set the ON feedback border color to the specified color. variable text address = 1 - 255 color number = see Figure 92 Example: `SEND_COMMAND TP,"'CBON1-48'"` Sets the ON feedback border color to Blue for variable text button 1.
"'CFOFF<variable text address>-<color _number>'"	Set the OFF feedback fill color to the specified color. variable text address = 1 - 255 color number = see Figure 92 Example: `SEND_COMMAND TP,"'CFOFF1-72'"` Sets the OFF feedback fill color to White for variable text button 1.
"'CFON<variable text address>-<color _number>'"	Set the ON feedback fill color to the specified color. variable text address = 1 - 255 color number = see Figure 92 Example: `SEND_COMMAND TP,"'CFON1-48'"` Sets the ON feedback fill color to Blue for variable text button 1.

Color Send_Commands (Cont.)

Command	Description
"'CPAGE<color_number>-<page name>'"	Set the background page color to the specified color. color number = see Figure 92 page name = 1 - 50 ASCII characters Example: SEND_COMMAND TP,"'CPAGE48-MAIN PAGE'" Sets the background color on the MAIN PAGE to Blue.
"'CTOFF<variable text address>-<color _number>'"	Set the OFF feedback text color to the specified color. variable text address = 1 - 255 color number = see Figure 92 Example: SEND_COMMAND TP,"'CTOFF1-48'" Sets the OFF feedback text color to Blue for variable text button 1.
"'CTON<variable text address>-<color _number>'"	Set the ON feedback text color to the specified color. variable text address = 1 - 255 color number = see Figure 92 Example: SEND_COMMAND TP,"'CTON1-72'" Sets the ON feedback text color to White for variable text button 1.

Note

Page names are case-sensitive.

Variable Text Send_Commands

Use variable text Send_Commands (Figure 97) to set the borders, fonts, and text.

Figure 97

Variable text Send_Commands

Variable text Send_Commands

Command	Description
"'!B',<variable text address 1-255>, <ON/OFF 0-1>"	Set a specific button to on or off. variable text address = 1 - 255 ON = 0 and OFF = 1 Example: SEND_COMMAND TP,"'!B',128, 1" Sets button 128 off.
"'BTOF,<variable text address>'"	Set a specific button's active state to Off. variable text address = 1 - 255 Example: SEND_COMMAND TP,"'BTOF',255'" Sets the state for button 255 to Off.
"'BTON',<variable text address>'"	Set a specific button's active state to On. variable text address = 1 - 255 Example: SEND_COMMAND TP,"'BTON',128" Sets the state for button 128 to On.

Variable text Send_Commands (Cont.)	
Command	**Description**
"'!C',<variable text address>,<border style>,<font size>,'<new button text>'"	Set the border, font, and text in one command. variable text address = 1 - 255 border style = See Figure 94 font size = See Figure 93 button text = Enter button text to appear on button Example: SEND_COMMAND TP,"'!C',1,6,6,'VCR PLAY'" Sets the variable text button one title to VCR PLAY using a hollow medium font, and changes the border attribute to double rounded.
"'!F',<variable text address>,'<font size>'"	Shorthand version of 'FONT' command. variable text address = 1 - 255 font size = See Figure 93 Example: SEND_COMMAND TP,"'!F',1,6" Changes variable text button one font to hollow medium.
"'FONT,<variable text address>-<font size>'"	Change the font size (or style) of the text in a specific button. variable text address = 1 - 255 font size = See Figure 93 Example: SEND_COMMAND TP,"'FONT,1-6'" Changes variable text button one font to hollow medium.
"'!I',<variable text address>,'<border style>'"	Shorthand version of 'ICON' command. variable text address = 1 - 255 border style = See Figure 94 Example: SEND_COMMAND TP,"'!I',1,'6'" Changes the variable text button one border style to double rounded.

Variable text Send_Commands (Cont.)

Command	Description
"'ICON,<variable text address>-<border style>'"	Change the border style of a specific button. variable text address = 1 - 255 border style = See Figure 94 Example: SEND_COMMAND TP,"'ICON,25-6'" Changes the variable text button 25 border style to double-rounded.
"'!T',<variable text address>,'<new button text>'"	Shorthand version of 'TEXT' command. variable text address = 1 - 255 new button text = 1 - 60 characters Example: SEND_COMMAND TP,"'!T',1,'VCR PLAY'" Changes the variable text button one title to VCR PLAY.
"'TEXT,<variable text address>-<new button text>'"	Enter text on a button. Use the | character to display text on multiple lines. variable text address = 1 - 255 button text = Enter button text to appear on button Example: SEND_COMMAND TP,"'TEXT2-VCR|PLAY'" Sets the VCR and PLAY text on variable button 2. The | character places VCR above PLAY on the button.

Shorthand Variable Text Commands

Figure 98 lists the shorthand variable text commands you can use with the touch panel. The shorthand command data is one-byte, non- ASCII format except for pages, passwords, text, and bitmap names.

Figure 98

Shorthand variable text commands

Note

Shorthand commands were created by Panja designers to streamline receiving, processing, and transmitting Controller data. The short-hand commands operate Control Equipment just like the standard Send_Commands still used in a wide variety of Panja products, but they are simply smaller byte-for-byte, and thus processed more efficiently.

Shorthand variable text commands

Command	Description
"'@BMF',<variable text address>,'<attribute data>'"	Set multiple attributes to a button, slider, or gauge. This command allows you to program up to 12 attributes on one command line. variable text address = 1 - 255 optional data = See below Optional data: '%B',<border styles> = See Figure 94 '%F',<font styles> = See Figure 93 '%T',<button text > = ASCII characters (empty is clear) '%P',<bitmap> = Bitmap filename (empty is clear) '%I',<icon> = 1 - 255 (icon numbers are assigned in TPDesign3 project file) '%J',<text alignment> = 1 - 9 as shown the following alignment chart 1 2 3 4 5 6 7 8 9 '%C1',<on-state fill color> = See Figure 92 for color numbers '%C2',<off-state fill color> = See Figure 92 for color numbers '%C3',<on-state border color> = See Figure 92 for color numbers

System Send_Commands (Cont.)	
Command	**Description**
	'%C4',<off-state border color> = See Figure 92 for color numbers '%C5',<on-state text color> = See Figure 92 for color numbers '%C6',<off-state text color> = See Figure 92 for color numbers Example: `SEND_COMMAND TP,"'@BMF',255,'%T POWER |ON '%B',4',%C1',72'"` Sets the text on button 255 to POWER ON (appears on two lines), adds a triple-line border, and sets the On-state color to White.
`"'@BMP',<variable text address>,'<bitmap>'"`	Add a bitmap file to a button. The bitmap files are imported into the TPDesign3 software program, and their numbers are assigned by the touch panel during the download process. variable text address = 1 - 255 bitmap = Bitmap Example: `SEND_COMMAND TP, "'@BMP',85,'Bitmap1'"` Adds the Bitmap1 file to button 85.
`"'@BOR',<variable text address>,<border style>"`	Set the border style on a button. variable text address = 1 - 255 border style = See Figure 94 Example: `SEND_COMMAND TP, "'@BOR',65 ,11"` Sets the border style to Double shadow on button 65.
`"'@ENA',<variable text address>,<button state on/off>"`	Set a specific button's active state to On or Off. variable text address = 1 - 255 1 = button Off 0 = button On Example: `SEND_COMMAND TP,"'@ENA',128,1"` Sets the state for button 128 on.

System Send_Commands (Cont.)

Command	Description
"'@FON',<variable text address>,<font style>"	Set the text font on a button. variable text address = 1 - 255 font style = See Figure 93 Example: SEND_COMMAND TP, "'@FON',56,32" Sets the text on button 56 to variable font style 32.
"'@ICO',<variable text address>,<icon>"	Assign an icon to a button. The icon files are imported into the TPDesign3 software program, and their numbers are assigned by the touch panel during the download process. variable text address = 1 - 255 icon file number = 1 - 255 Example: SEND_COMMAND TP,'"'@ICO',16,12" Adds icon 12 on button 16.
"'@JUS',<variable text address>,<text alignment>"	Set the text alignment on a button. variable text address = 1 - 255 text alignment = 1 - 9 as shown in the following alignment chart 1 2 3 4 5 6 7 8 9 Example: SEND_COMMAND TP, "'@JUS',9,5" Centers the text on button 9.
"'@SHO',<variable text address>,<button on/off>"	Set a specific button to on or off. variable text address = 1 - 255 0 = button Off 1 = button On Example: SEND_COMMAND TP,"'@SHO',128,0" Sets button 128 off.

System Send_Commands (Cont.)	
Command	**Description**
"'@TXT',<variable text address>,'<text>'"	Add text on a button. Use the | character to display text on multiple lines. variable text address = 1 - 255 button text = Enter button text to appear on button Example: SEND_COMMAND TP,"'@TXT',2,'VCR|PLAY'" Sets the VCR and PLAY text on variable button 2. The | character places VCR above PLAY on the button.
"'@UNI',<variable text address>,'<text>'"	Add Unicode text on a button. variable text address = 1 - 255 button text = Enter button text to appear on button Example: SEND_COMMAND TP,"'@UNI',2,'(Foreign Text)'" Sets the Foreign Text on variable button 2. The | character places VCR above PLAY on the button.

Note

Characters for Middle Eastern languages such as Arabic are *not* supported within the Unicode fonts because they are bi-directional. Buttons with Unicode fonts can only be created and edited using TPDesign3 Touch Panel Design Program.

Buttons String Commands

Figure 99 lists string commands you can assign to buttons using the Touch Panel editor. You select the PROPERTIES option in the Edit bar, press the target button, and enter the string command with the Touch Panel keyboard. Then, the string command is sent to the control system when you press the button. Refer to the *ViewPoint Wireless Touch Panels - Program Reference* instruction manual for detailed editing information.

Figure 99

Buttons string commands

Buttons string commands

Command	Description
"'$ID<group ID>'"	Set the WAV-PK group ID number on VPN panels. group ID = 0 (Off) - 15 Example: $ID 15 Sets the touch panel button group ID to 15.
"'$SC<device offset, "'send command>'""	Send an internal Send_Command. Example: $SC 3,"'TEXT2-This is variable text on variable text button 2'" This sends the string to variable text button 2 on the panels' device 3. Note that you cannot perform ASCII-number conversions within the commands.
"'$SL'"	Activate sleep mode on the touch panel. Example: $SL Activates sleep mode on the touch panel.
"'$ST<sleep timeout>'"	Set the idle time to activate sleep mode for a touch panel in 1-minute increments. When the touch panel's input time matches the sleep time, the panel goes to sleep. sleep timeout = 1 (Off) - 120 minutes Example: $ST 5 Sets the touch panel's sleep time to 5 minutes.

Button IR Macro Commands

Only one macro can run at a time and the panel becomes "locked" for the duration of the macro. A message appears in the center of the touch panel signifying that a macro is executing and does not disappear until the completion of the macro. In addition, the touch panel must be pointed at the IR receivers during the entire macro execution cycle. Otherwise, some transmitted IR signals from the touch panel may not reach the receiver.

An unsupported feature, at this time, is the mixture of other strings within IR macro string blocks. However, other string types may occur before and after the macro blocks as long as the strings are separated from the macro block with a <CR> and the macro command exists at the beginning of the line.

The two commands are identified and defined in Figure 100.

Figure 100

Macro Commands

Macro Commands

Command	Description
"'$P <dn> <cn> <tpo> <tpd><CR>'"	Execute an IR macro pulse located at device#, channel#, for an “on” time in tenths of a second, and a wait time in tenths of a second before executing the next command. dn = device number 2, 3, or 4 cn = channel number 1 - 255 tpo = time pulse on in tenths of a second (max. 65535) tdp = time delay after pulse in tenths of a second (max. 65535) <CR> = end of statement (Enter key pressed) Example "'$P 3 15 10 100<CR>'" Transmit the IR code at device 3, channel 15 for 1 second. Then, the macro pauses 10 seconds before executing the next command or before finishing the macro if no other commands exist.
"'$W <tdbp><CR>'"	Used as a delay between pulses tdbp = time delay before pulse in tenths of a second (max.65535) <cr> = end of statement (Enter key pressed) Example: "'$W 455<CR>'" This command causes the panel to wait 45.5 seconds before executing the next macro command.

Loading Infrared (IR) Files

Overview

Note

IR files can be loaded into the ViewPoint touch panels when used as stand-alone units. If the ViewPoint is loaded with a VPXpress program, you should not load IR files for stand-alone operation.

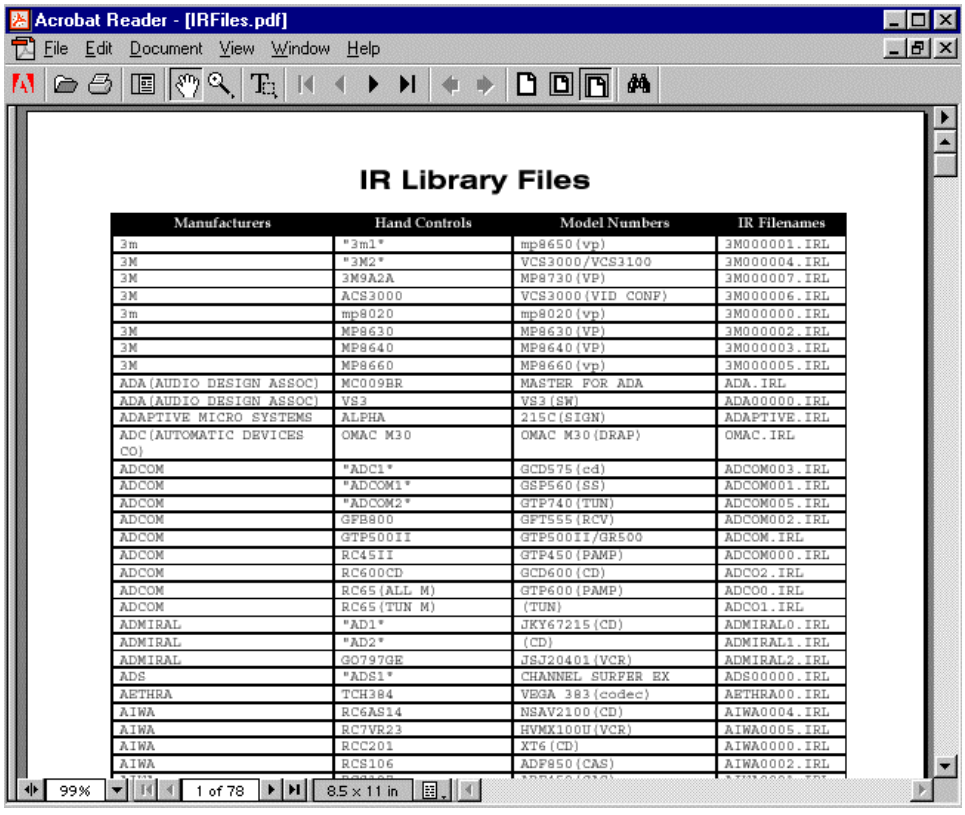
This section provides instructions for loading IR files in your ViewPoint touch panel using IRLIB. The ViewPoint has 32 KB of memory specifically for IR file storage. To load IR files, you need a copy of the AMX Control Disk CD-ROM containing Panja's IRLIB files or access to the Panja Bulletin Board on the Internet.

IRLIBX

The IRLIB files (Figure 101) are the library files that Panja has constructed to program IR control devices. You will find the listing of IR files on your AMX Control Disc. The listing is in .PDF format and you require an installed copy of Adobe Acrobat to read the listing.

Figure 101

IRLIB file listings



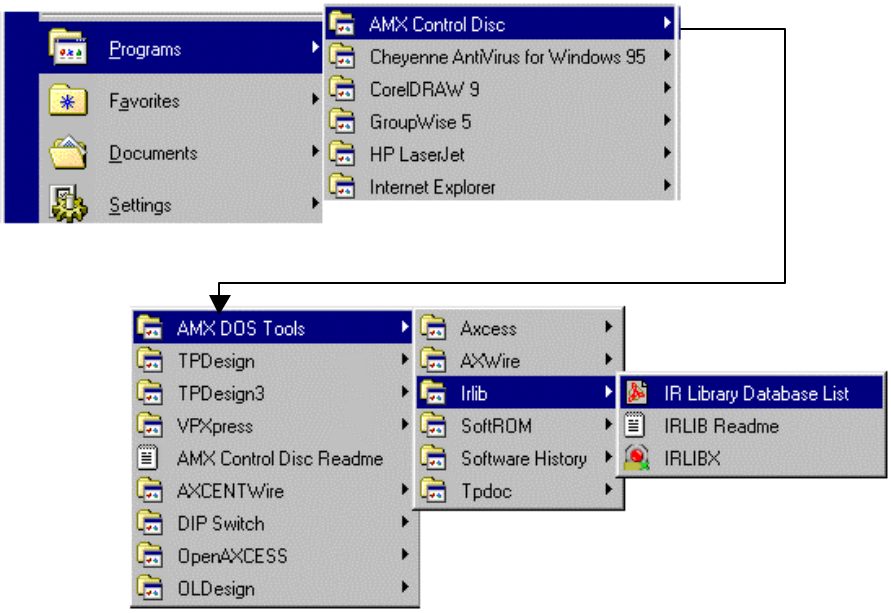
Manufacturers	Hand Controls	Model Numbers	IR Filenames
3m	"3m1"	mp8650(vp)	3M000001.IRL
3M	"3M2"	VCS3000/VCS3100	3M000004.IRL
3M	3M9A2A	MP8730(VP)	3M000007.IRL
3M	ACS3000	VCS3000(VID CONF)	3M000006.IRL
3m	mp8020	mp8020(vp)	3M000000.IRL
3M	MP8630	MP8630(VP)	3M000002.IRL
3M	MP8640	MP8640(VP)	3M000003.IRL
3M	MP8660	MP8660(vp)	3M000005.IRL
ADA(AUDIO DESIGN ASSOC)	MC009BR	MASTER FOR ADA	ADA.IRL
ADA(AUDIO DESIGN ASSOC)	VS3	VS3(SW)	ADA00000.IRL
ADAPTIVE MICRO SYSTEMS	ALPHA	215C(SIGN)	ADAPTIVE.IRL
ADC(AUTOMATIC DEVICES CO)	OMAC M30	OMAC M30(DRAP)	OMAC.IRL
ADCOM	"ADC1"	GCD575(cd)	ADCOM003.IRL
ADCOM	"ADCOM1"	GSP560(SS)	ADCOM001.IRL
ADCOM	"ADCOM2"	GTP740(TUN)	ADCOM005.IRL
ADCOM	GFB800	GFT555(RCV)	ADCOM002.IRL
ADCOM	GTP500II	GTP500II/GR500	ADCOM.IRL
ADCOM	RC45II	GTP450(PAMP)	ADCOM000.IRL
ADCOM	RC600CD	GCD600(CD)	ADCO2.IRL
ADCOM	RC65(ALL M)	GTP600(PAMP)	ADCO0.IRL
ADCOM	RC65(TUN M)	(TUN)	ADCO1.IRL
ADMIRAL	"AD1"	JKY67215(CD)	ADMIRAL0.IRL
ADMIRAL	"AD2"	(CD)	ADMIRAL1.IRL
ADMIRAL	GO797GE	JSJ20401(VCR)	ADMIRAL2.IRL
ADS	"ADS1"	CHANNEL SURFER EX	ADS00000.IRL
AETHRA	TCH384	VEGA 383(codec)	AETHRA00.IRL
AIWA	RC6AS14	NSAV2100(CD)	AIWA0004.IRL
AIWA	RC7VR23	HVMX100U(VCR)	AIWA0005.IRL
AIWA	RCC201	XT6(CD)	AIWA0000.IRL
AIWA	RCS106	ADF850(CAS)	AIWA0002.IRL

To use the IRLIB Files listing:

1. Choose Start, then Programs and follow the pathway shown in Figure 102.

Figure 102

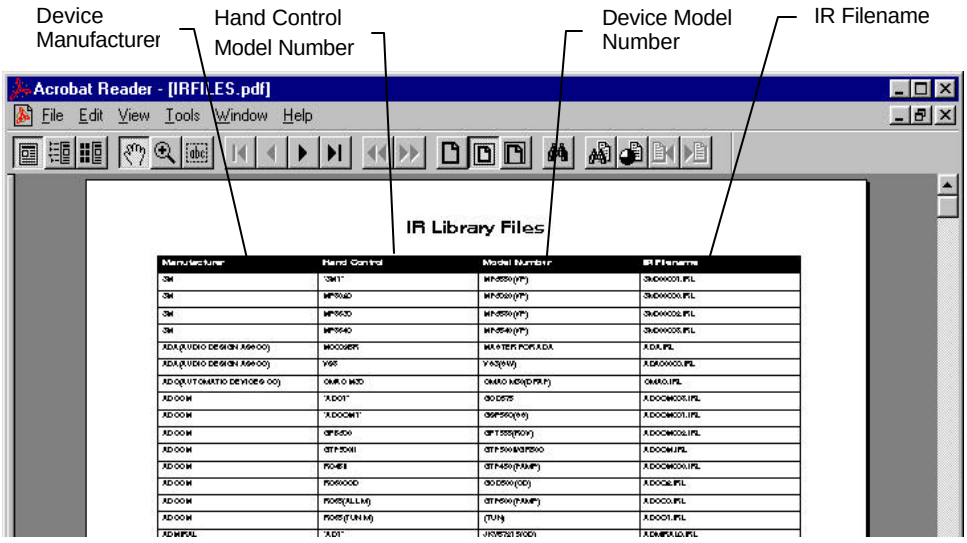
Pathway to IR Library Database List



2. Click IR Library Database List to open the IRLIB infrared library program PDF. The Adobe Acrobat Reader then launch itself and open the PDF file (Figure 103).

Figure 103

IR Library Files listing



3. Scan through the listing and select the manufacturer and model number of the device you want to control. Make note of the data provided.

Note

IR files can be loaded into the ViewPoint touch panels when used as stand-alone units. If the ViewPoint is loaded with a VPXpress program, you should not load IR files for stand-alone operation.

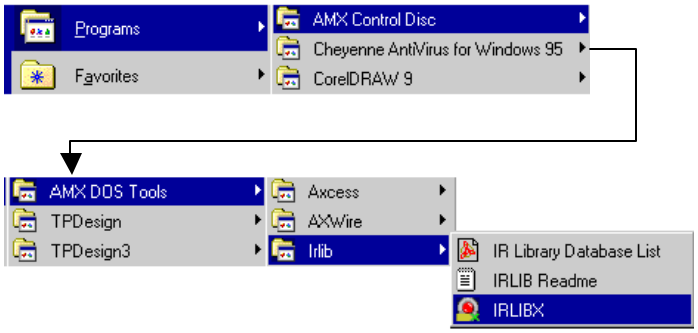
Loading an IR File

The following steps guide you through the process of loading an IR file into a ViewPoint touch panel. To aid you, a Sony DVD Player (Model DVPC600D) is used as an example.

1. Select Start/Programs from the Windows Main menu taskbar and follow the pathway shown in Figure 104.

Figure 104

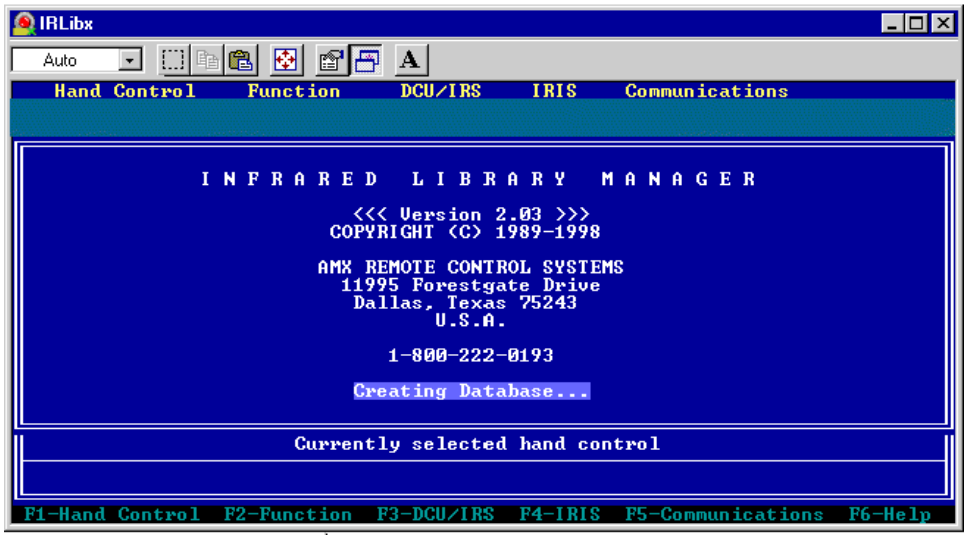
Pathway to open IRLIB



2. Click IRLIBX to open the IRLIB infrared library program.
3. Pres **Alt**+ **ENTER** to view the IRLIB program in a smaller window on your Windows Desktop. IRLIB opens and Figure 105 is shown.

Figure 105

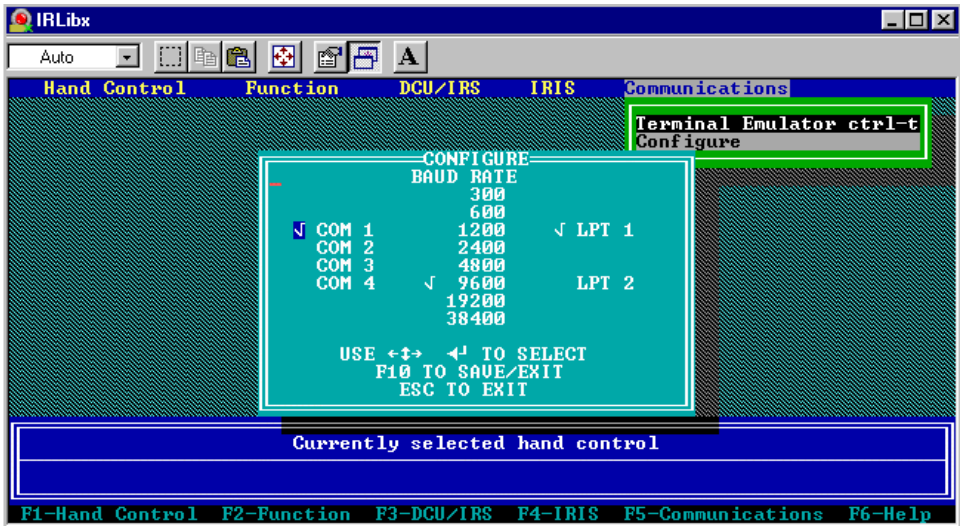
IRLIB screen



4. After the Database has been created, press F5 and select Configure. Figure 106 appears.

Figure 106

Communications settings



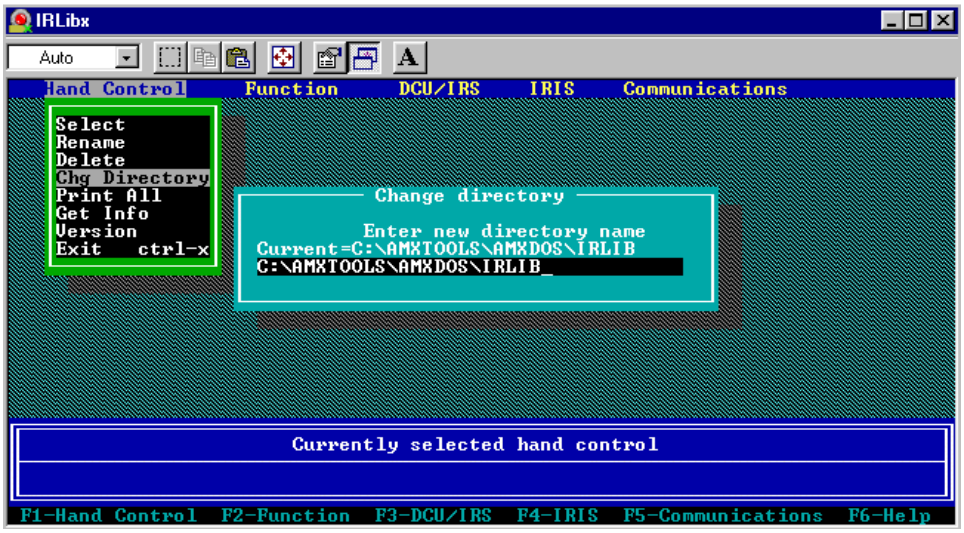
Note

Make sure that the ViewPoint touch panel is set to the same Baud rate as your computer.

5. Select your computer's Com port and baud rate that you wish to communicate with the ViewPoint touch panel.
6. Then, press F10.
7. When the Communications screen has disappeared, press F1 on your computer keyboard. Use the up/down arrow keys and select Change Directory. The dialog in Figure 107 appears.

Figure 107

Change Directory dialog



8. Enter the directory path and name for the location of the IRLIB files on your computer.

9. Press ENTER on your keyboard. The IRLIB program locates the IRLIB directory and compiles a database of all IR files available.

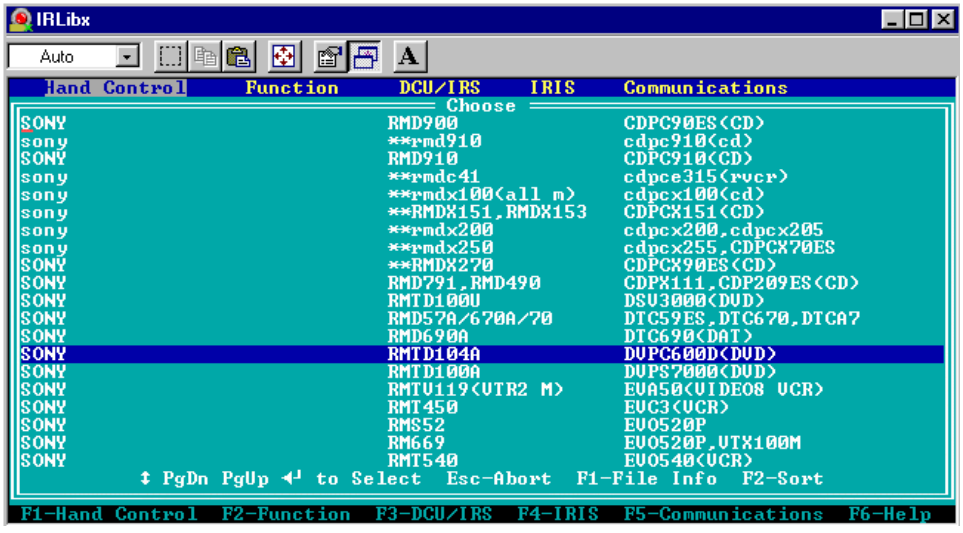
10. After the Creating Database dialog in Figure 108 disappears, press F1 and choose Select using the up/down arrow keys and the IR database is shown (Figure 109).

Figure 108

Creating Database

Figure 109

IRLIB Database

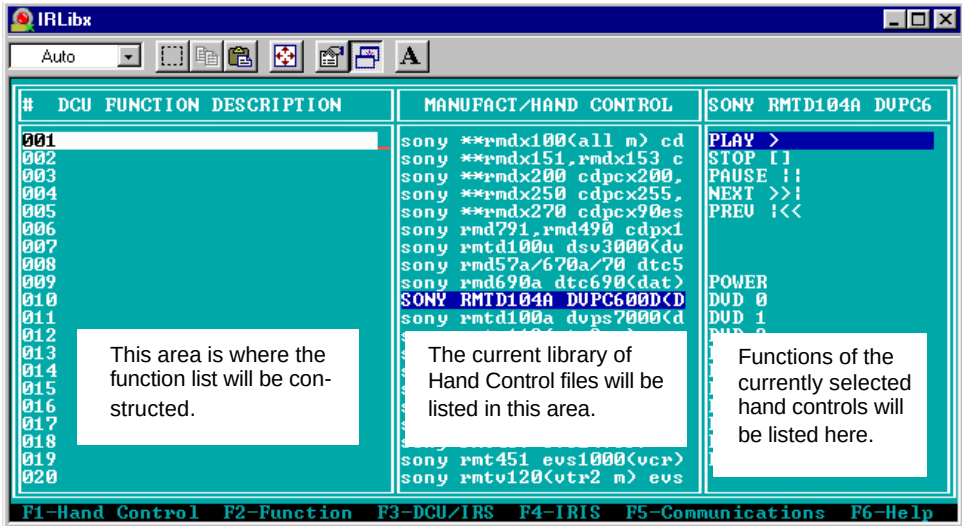


11. Locate the Manufacturer and model in the database and press ENTER on your keyboard. You then see a dialog that says the computer is loading your IRL file.

12. Once the IR file has loaded into your computer and the loading dialog disappears, press `F3`. Click Modify and press ENTER. The Modify dialog appears (Figure 110).

Figure 110

Modify dialog screen



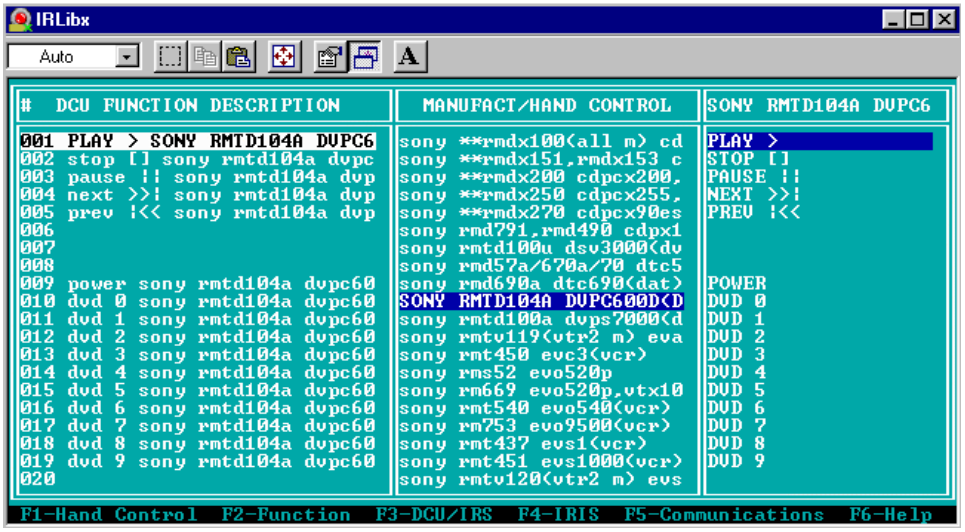
Note

The IR file loading is the file you identified for your equipment.

13. Enter **Alt D** and then **Alt C**. You have cleared the DCU Function Description and have copied the Sony RMT 104A<DVP> IR settings into the DCU Function column (Figure 111).

Figure 111

IR commands loaded into DCU



14. Press ESC on your keyboard (exits the Modify dialog) and press F3 (shows menu selections for DCU/IRS). Select PROGRAM and press ENTER on your keyboard. The IR file is downloaded to your touch panel.

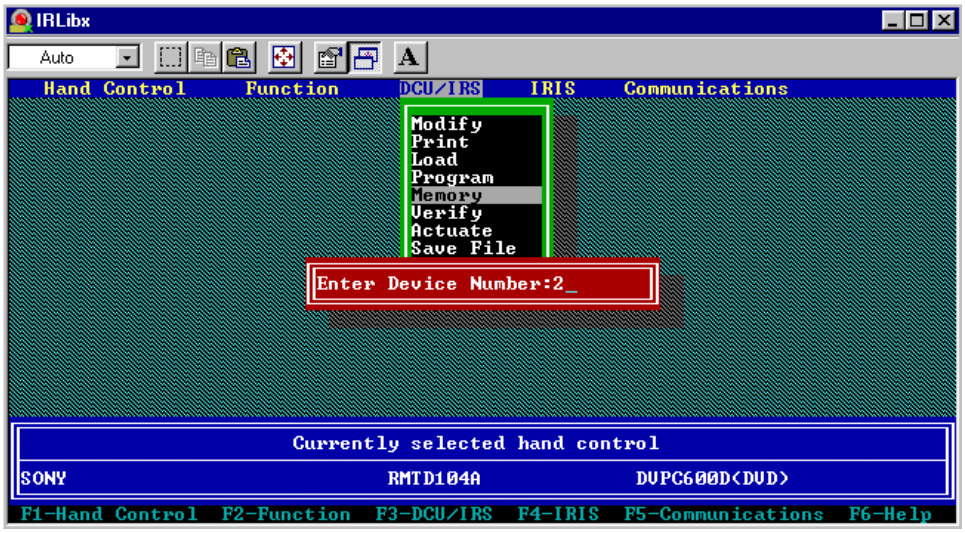
IR Memory Check

To verify the amount of memory available for IR files, when using IRLIB:

1. Press F4 and select Memory from the drop-down menu. The dialog in Figure 112 appears.

Figure 112

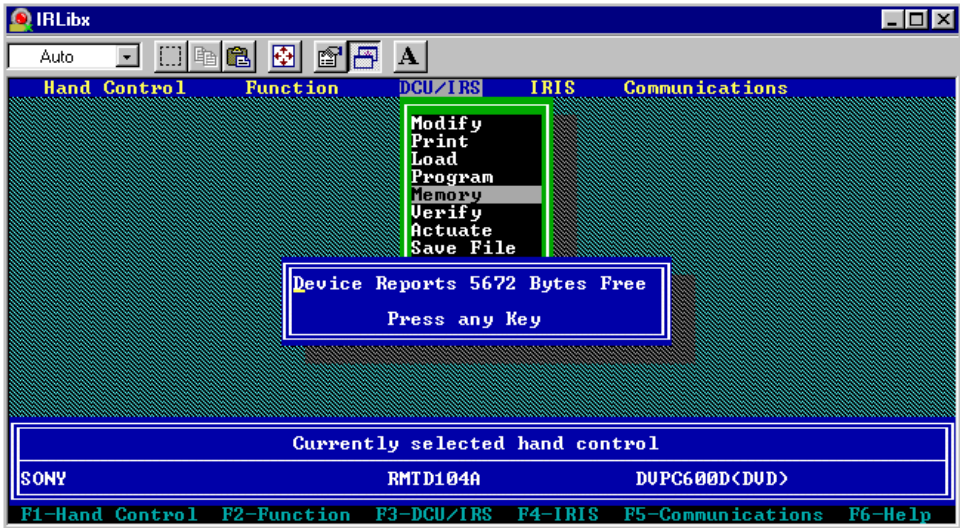
Enter Device Number



2. Enter the device number (**2**, **3**, or **4**) and press ENTER.
3. The IRLIB program queries the ViewPoint and you then see a memory dialog similar to Figure 113.

Figure 113

Device reports



Upgrading the Firmware

Overview

In this section, you'll see how to upgrade the firmware in the ViewPoint using the SOFTROM software program. Your PC must be connected to the PROGRAM DB-9 connector on the Controller or camera control unit connector using a Programming Cable.

Caution

Power loss during SOFTROM download can seriously affect the PosiTrack 30 and any previously stored information.

If power is lost during the download process, the unit powers up with the same set of code it had prior to the download. There is a small window during which a loss of power can be catastrophic. If power is lost between the erase of flash memory and the completion of copying the new boot code from RAM to flash memory, the unit does not operate at all when power returns.

To update the firmware in the touch panels:

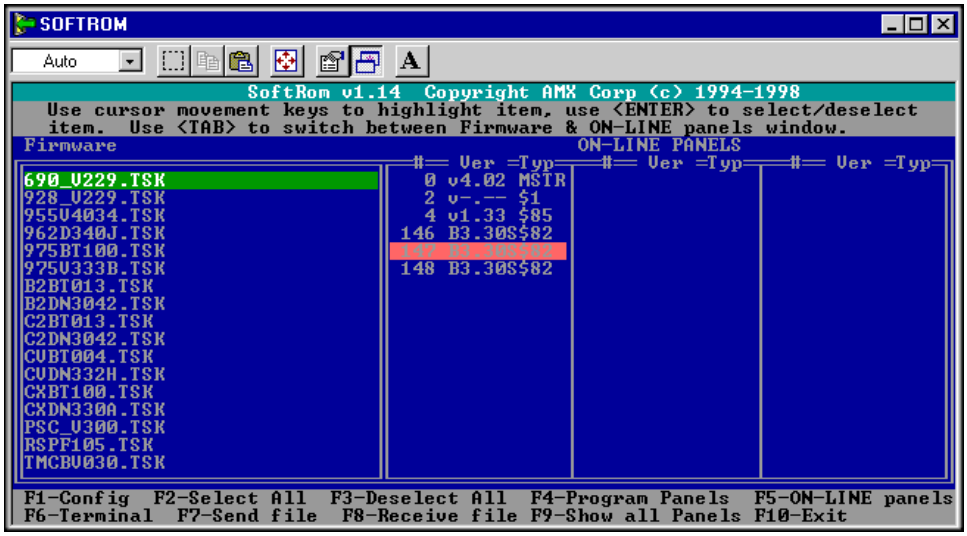
Note

These steps follow the installation of this software from the AMX Control Disc.

1. Place the AMX Control Disc into the Compact Disc player of your PC.
2. From the Start menu, go to Programs\AMX Control Disc\AMX DOS Tools\SOFTROM.
3. Click the SOFTROM program. A screen similar to the screen shown in Figure 114 appears on your computer.

Figure 114

SOFTROM screen



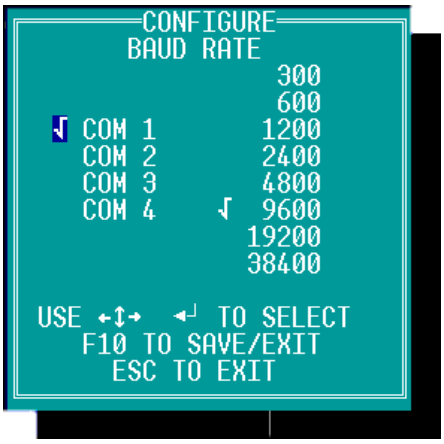
Configuration

To configure the communication setting for the SOFTROM program:

1. Press F1 and the screen in Figure 115 appears.

Figure 115

Configuration screen



2. Using the up/down arrow keys, select the communications port you are using to interface with the controller and press ENTER.
3. Using the right arrow key, move to the BAUD RATE column. Then use the up/down arrow keys to select the interface communications speed.
4. Press ENTER.
5. Press F10 to save the communication settings and to exit the CONFIGURE screen.

Note

Make sure that the BAUD RATE selections match the setting on the Controller.

Downloading the Firmware

To download the firmware:

1. Press F5 to acquire the list of online programmable devices.
2. Using the up/down arrow keys, select your firmware versions listed in the Firmware column of the screen, and press ENTER.
3. Using the Tab key, switch to the ONLINE MASTERS list.
4. Using the up/down arrow keys, select the device to be programmed.
5. PressENTER for each device as it is selected

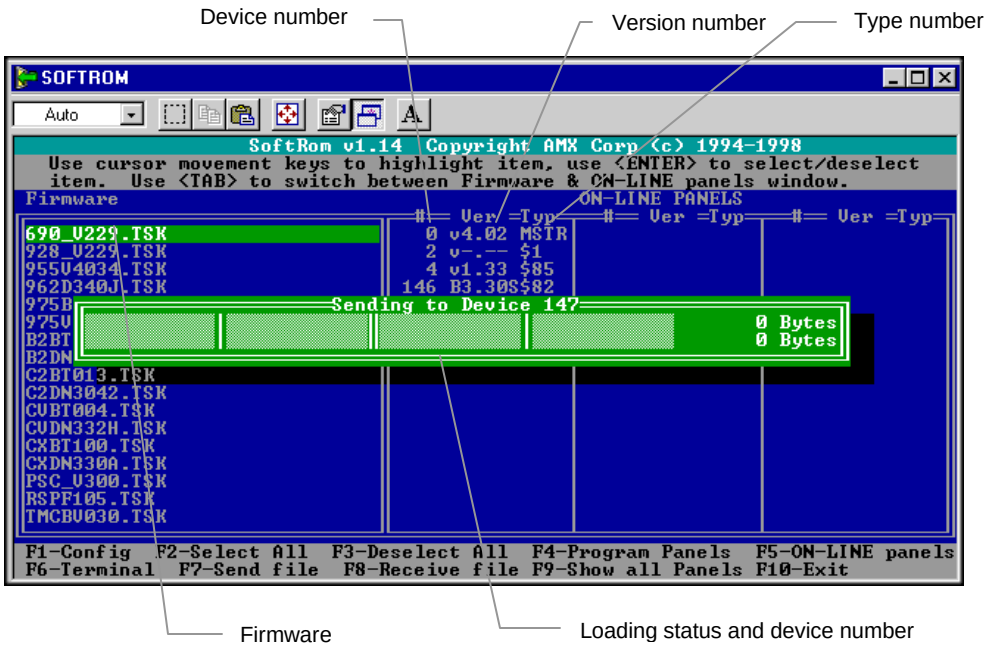
Note

You can press F2 to select all ONLINE programmable devices and F3 to clear all devices.

6. Press F4 to program the selected device; a loading message (Figure 116) appears on the screen

Figure 116

Loading message



Note

Firmware can be downloaded to multiple device numbers automatically. If multiple devices are selected, the bottom half of the loading bar indicates the percentage complete for the selected devices.

7. Press F5 to refresh the screen. Verify that the selected device has the correct firmware version. If any devices still appear with an old version of the firmware, repeat steps 3 through 5 until it appears with the correct version.

8. Press F10 to exit the SOFTROM program.

Contacting Sales and Technical Support

Overview

Customer service and satisfaction is our highest priority here at Panja Incorporated. If you are experiencing any problems or have a question about your product, please contact Technical Support or your regional Sales and Support Team for assistance.

U.S. Sales and Technical Support Teams

Figure 117 and Figure 118 list contacts for the U.S. Sales and Support teams by region.

Figure 117

U.S. Sales and Support Teams

U.S. Sales and Support Teams

U.S. Team	Telephone	Fax	E-mail
West Team (Dallas office)	800-552-6955	972-907-6222	West_Team@panja.com
West Team (Costa Mesa office)	800-562-6956	714-241-0365	West_Team@panja.com
Mid-West Team	800-852-6985	972-907-6224	Midwest_Team@panja.com
South Team	800-752-6975	972-907-6220	South_Team@panja.com
East Team	800-462-6946	215-657-8799	Panja_East@panja.com

Figure 118

Other Panja Contacts

Other Panja Contacts

	Telephone	Fax	E-mail
International Team	+1 972-907-6247 or +1 800-222-0193	+1 972-907-6213	International_Team@panja.com

Panja International Offices

Figure 119 lists Panja International offices.

Figure 119

Panja International Offices

Panja International Offices		
	Telephone	**Fax**
Panja Singapore	+65 221-2045	+65 221-2089
Panja Canada - Calgary	+1 403-256-2232 +1 888-222-0193	+1 403-256-6106
Panja Canada - Toronto	+1 905-304-1839 +1 888-250-3983	+1 905-304-6783
Panja Mexico	+525-638-0007	+525-638-0825

Technical Support

Panja Inc. provides technical support by telephone, fax, E-mail, or bulletin board system (BBS). For the fastest possible service, please have the following information ready, or provide it in your fax or E-mail message:

- Your name, company name, mailing address, and telephone number
- The name of your authorized Distributor or Dealer
- Dealer ID
- Job Title
- Purchase Order #
- Sales Order #

In addition to the general information listed above, it is necessary for your Technical Support representative to know the nature of your service problem. The more information you provide initially, the faster your representative can resolve the problem. With this in mind, please have the following information at hand.

- **If you are having a problem with hardware** — identify the equipment/firmware version you are using, what you were doing when the problem occurred, and any troubleshooting you've tried (if any).
- **If your problem is with a software program** — identify the program you are using and the version number, the operating system on your PC, what you were doing when the problem occurred, and any troubleshooting you've tried (if any).

Figure 120 lists the contact numbers for Technical Support.

Figure 120

Technical Support Contacts

Technical Support Contacts

	Telephone	Fax
U.S. and Canada (Dallas Office)	800-932-6993	972-907-6214
U.S. East Coast region (Philadelphia office)	800-462-6946	215-643-2808
		215-657-8799
Technical Support BBS	972-907-2884	bbs.panja.com

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