Crestron **SmarTouch™ STS** Touchpanels

Operations Guide

CRESTRON
REMOTE CONTROL SYSTEMS

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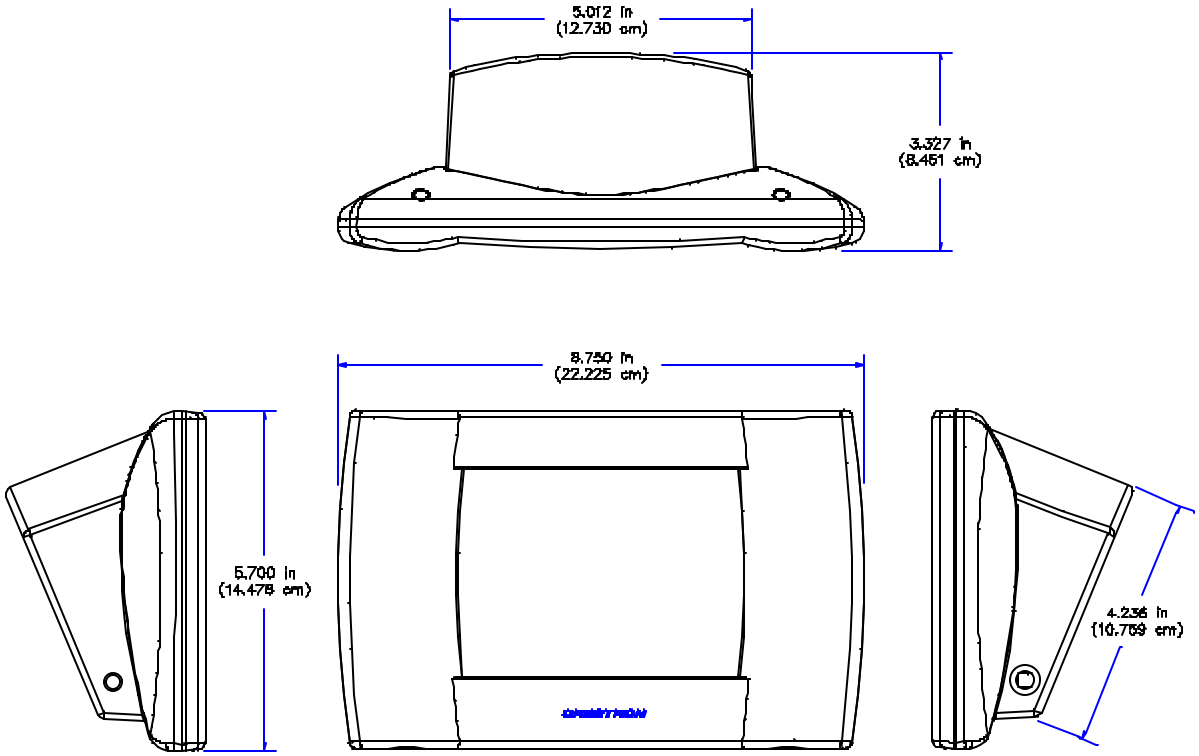
SmarTouch STS: Touchpanels



Introduction

This Operations Guide supports and addresses the attributes of the SmarTouch STS Touchpanels (herein referred to as the touchpanel) that are beyond the scope of the SmarTouch STS Touchpanel User's Operations Guide (latest revision of Doc. 5804). The two guides combined provide details of the touchpanel whether it is used in either a Cresnet remote control system or as part of the SmarTouch STS. Peruse the information in the User's Guide, before furnishing it to the end user.

NOTE: It is not necessary to provide this Operations Guide to the end user.

Software

Have a comment about Crestron software?

Direct software related suggestions and/or complaints to Crestron via email (software@crestron.com). Do not forward any queries to this address. Instead refer to "Further Inquiries" on page 16 for assistance.

Unlimited control screen variations incorporating two and three-dimensional graphics and text are possible and can be created with VisionTools™ Pro (VT Pro), a design and programming Windows®-based software. A set of pages which make up a project can be designed for each application. Each touchpanel can be organized with the ideal, color-oriented control environment with custom control graphics: icons, two and three-dimensional buttons, and floor plans. The project is uploaded to the touchpanel and programmed into the flash PROM. The touchpanel uses the programmed project until another is uploaded from the PC. The PC may be disconnected from the control processor except when loading a program.

For additional software information, refer to the help file provided with the software. A copy of the software can be obtained from the Software Downloads page (Touchpnl Library) of the Crestron website (www.crestron.com). A tutorial is provided as a guide for the novice programmer.

Leading Specifications

The table below provides a summary of leading specifications for the SmarTouch STS touchpanels. Dimensions and weight are rounded to the nearest hundredth unit.

Leading Specifications of the SmarTouch STS Touchpanels

SPECIFICATION	DETAILS
Power Options	
ST-BTP	Rechargeable NiCad power pack (Fully charged battery, 2800 mAh capacity, can last up to 10 days depending on touchpanel settings and usage.)
AC: Domestic External Adapter	12V DC, 1.0A, 120V Input (P/N PW-1210 or equivalent)
AC: International External Adapter	12V DC, 1.0A, 230V Input (P/N PWI-1210 or equivalent)
SIMPL™ Windows®	Version 1.30 or later (Note 1 and 2)
CNX Operating System	Version 5.01.09x or later
CNX Monitor	Version 2.00 or later
CNMS, CNRACK, CNLCOMP Operating System	Version 3.16.08 or later
ST-CP Operating System	Version 1.29 or later
ST-CP Monitor	Version 1.29 or later
VisionTools™ Pro	Version 1.2 or later (Note 1)
Crestron Database	Version 11.7.211 or later (Note 1)
Default Network ID	03
Default RF ID	10
Default Timeouts	1 minute for standby 2 minutes for powerdown
Touchpanel Dimensions (without battery and power pack)	Height: 5.70 in (14.48 cm) Width: 8.75 in (22.23 cm) Depth: 3.33 in (8.45 cm)

Note 1 The latest software versions can be obtained from the Software Downloads page (Simplwin, Touchpnl, and Cresdb Libraries) of the Crestron website (www.crestron.com). New users are required to register in order to obtain access to the FTP site.

Note 2 When programming the ST-1550 with SIMPL v1.30.01 and earlier, select ST-1500 from the *Device Library*.

Leading Specifications of the SmarTouch STS Touchpanels (Continued)

SPECIFICATION	DETAILS
Touchpanel Weight	Weight: 1.85 lb (0.84 kg)
Touchpanel Memory	768 Kbytes flash memory (available for user programming)
View Screen Dimensions	Height: 3.550 in (9.017 cm) Width: 4.700 in (11.938 cm)
View Screen Resolution	320 x 240 pixels
View Screen LCD	STN color, dot matrix type for ST-1550C FSTN Transmissive mode, dot matrix type for ST-1550
View Screen Illumination	Backlit fluorescent
View Screen Touch Screen	Resistive Membrane

As of the date of manufacture, the unit has been tested and found to comply with specifications for CE marking.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Configuring the Touchpanel (Advanced Settings Screen)

Advanced Settings Screen

DayLight Savings	Power Up On Last Page
Display EEPROM	Display Palette
Display Touch Data	Interface
Firmware	Self Test
RETURN	

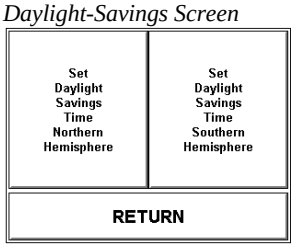
It may be necessary to make adjustments or *configure* the touchpanel to accommodate the personal lifestyle of the end user. Descriptions for preferences and power management settings of the touchpanel are provided in the latest revision of the SmarTouch STS Touchpanel User's Operations Guide (Doc. 5804). The **Advanced Settings** button from the Preferences and Settings Menu opens the Advanced Settings Screen, shown to the left of this paragraph.

The Advanced Settings Screen contains diagnostic buttons (**Display EEPROM**, **Display Touch Data**, **Firmware**, **Display Palette** (**Colorbar** for ST-1550), and **Self**

Test) and buttons for special settings (**DayLight Savings**, **Power Up On Last Page**, and **Interface**). Diagnostic buttons should only be used under supervision of a Crestron technical support representative during telephone support. These options are numeric in nature and their interpretation is beyond the scope of this Operations Guide. Details of the special settings buttons are discussed in the following paragraphs. Touch the **RETURN** button, located at the bottom of the screen, to display the Preferences and Settings Menu.

Daylight Savings

Daylight-Savings Screen



To obtain the Daylight-Savings Screen, shown to the left of this paragraph, touch the **DayLight Savings** button from the Advanced Settings Screen. Two options are available: **Set Daylight Savings Time Northern Hemisphere** and **Set Daylight Savings Time Southern Hemisphere**. Each button can be toggled (ON/OFF states). Activating one of these buttons causes the real time clock to automatically adjust on the appropriate dates for daylight-saving time. An activated button is indicated by a changing the button's background color to blue (black for ST-1550). After verifying the setting, touch the **RETURN** button, located at the bottom of the screen, to display the Advanced Settings Screen.

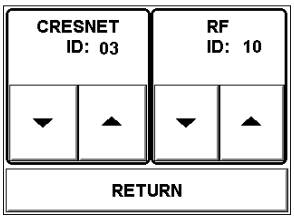
NOTE: If you wish to completely deactivate the daylight-saving time feature, verify that both buttons are not activated (both assume a background color of gray).

Power Up On Last Page

The state of the **Power Up On Last Page** button determines which screen appears after a power down timeout. The ON state is indicated by changing the button's background color to blue (black for ST-1550). As a result, the last screen to be displayed reappears and restores all feedback when the touchpanel is activated after a power down timeout. If desired, touch the button to turn it OFF; the button's text assumes the same shade as all the other buttons on the screen. The OFF state signifies that the first page of the project appears when the touchpanel is activated after a power down timeout.

Interface

Interface Screen



The touchpanel communicates with a ST-CP (for SmarTouch STS) or Cresnet master computer (for Cresnet System). The communication interface must be correctly specified or communication does not occur. These communication parameters must match those assigned in the software project. To set communication parameters select the **Interface** button from the Advanced Settings Screen and display the Interface Screen, shown to the left of this paragraph. After communication parameters have been verified, touch the **RETURN** button, located at the bottom of the screen, to save the setting and display the Advanced Settings Screen.

The CRESNET network identity number (NET ID) is displayed in the top left corner of the Interface Screen. NET ID is only used during screen uploads to the touchpanel and is identified by the two-digit hexadecimal number. "03" is shown as an example in the illustration and happens to be the default. The down and up arrow buttons decrease and increase the NET ID by one, respectively.

The radio frequency identity number (RF ID) is displayed in the top right corner of the Interface Screen. This ID code is necessary to secure RF communications such that controls can be activated from the touchpanel. The RF ID must match the

identity code in the software program and is identified by the two-digit hexadecimal number (i.e., 10, 20, 30, …, F0). “10” is shown as an example in the illustration and happens to be the default. The down and up arrow buttons decrease and increase the RF ID most significant digit by one, respectively. For more information for use with Cresnet System, refer to “Touchpanel as Part of Cresnet System” on page 9.

NOTE: Crestron recommends that 00 not be selected as a valid RF ID.

Internal Scheduler

Crestron offers an internal scheduler feature built into the touchpanel. There are actually two parts to the internal scheduler: developing a button sequence and scheduling a button sequence/function. Each part can be utilized independently of the other or combined. A sequence differs from the macros created from the Control pull-down menu, because the end user can assign actions to the buttons. With proper and careful project design, the end-user can easily make adjustments to the system to better suit his personal needs and way of life. Furthermore, the end-user can schedule an *event* so that it can begin at any given date and time and reoccur as programmed. An *event* is defined as the actions initiated by one sequence or a single button function.

DEFINITIONS:

Function: A single button press (join number 1 through 999) which typically triggers one or more commands to be sent from the control system.

Sequence: A series of button presses that can be recorded and played back in real time.

Event: A scheduleable action, that is, either a sequence of button presses or a direct button press (*function*).

Schedule: A list of *events* that have been designated to run on specific dates at a specific time.

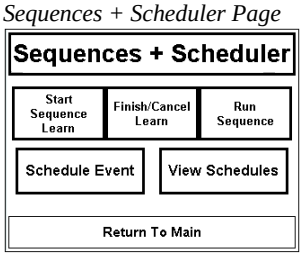
Button Sequence Development

The purpose of developing a button *sequence* is to build a consecutive order of preselected buttons that run in real time when a single programmed button is touched. You determine and assign the join number for the programmed button from a range of reserved join numbers. The buttons in the *sequence* can be chosen from any page in the project.

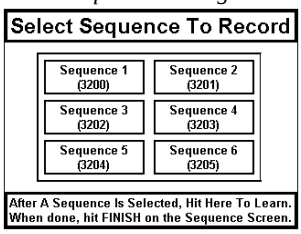
Obtain the latest version of VT Pro from the Software Downloads page (Touchpnl Library) of the Crestron website (www.crestron.com).

There are two buttons with reserved join numbers that must be touched when developing a sequence. These buttons exist on the Sequences + Scheduler page in the SmarTouch Wizard templates, “st-1550/c basic template.vtp” (included with the Crestron database), shown to the left of this paragraph. Copy or redraw these buttons to another page so that the end user can use them as needed. One button, “Start Sequence Learn”, initiates the “learning” function and the other, “Finish/Cancel Learn”, terminates it. Complete the following steps to assign a programmable button to a button sequence. It is assumed that the “Start Sequence Learn”, “Finish/Cancel Learn”, and programmable buttons as well as the buttons to be included in the sequence exist in the project available to the end user.

Sequences + Scheduler Page



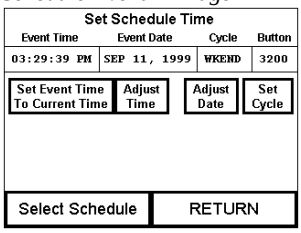
Learn Sequence #1 Page



1. Touch the **Start Sequence Learn** button (reserved join number = 3072).
2. Touch the programmable button. Its join number must be within the reserved join number range from 3200 to 3327. In “st-1550/c basic template.vtp”, a number of programmable buttons with reserved join numbers were grouped onto a single page, Learn Sequence #1, as shown to the left of this step.
3. Touch the **Hit Here to Learn** button at the bottom of the screen. The opening menu of the project appears so that you can select buttons to add to the sequence.
4. Touch the buttons in the sequence at the same speed that you would like to be replicated. These buttons can be from any page in the project.
5. Each page in In “st-1550/c basic template.vtp” has a **SEQ + SCHED** button. Use this button to return to the Sequences + Scheduler page after touching all the buttons in the sequence.
6. Touch the **Finish/Cancel Learn** button (reserve join number = 3073) from the Sequences + Scheduler page.

Scheduling a Sequence/Button Press

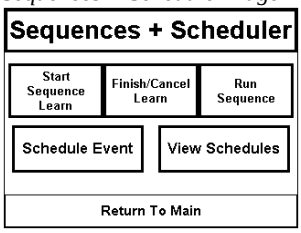
Schedule Event #2 Page



The purpose of scheduling a sequence or button is to initiate an *event* at a programmed date and time. The programmed date and time is defined as the activation time. It is assumed that the sequence has been developed as described in the previous paragraph or the preferred button initiates a *function*. A **Schedule Event** button (found on the Sequences + Scheduler page in “st-1550/c basic template.vtp”) has a reserved join number (3424) and must be touched prior to pressing the button to be scheduled. A “scratch” schedule laid out on the Schedule Event #2 page, shown to the left of this paragraph, is made available so that the time, date, and cycle of the event can be entered.

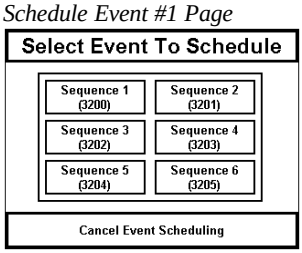
There are a number of fields on this page that can be set by selecting the **Adjust Time**, **Adjust Date**, or **Set Cycle** buttons. Each of these buttons opens another page. Once the “scratch” schedule information is assigned, it must be transferred to one of thirty possible scheduled *events*. The **Select Schedule** button on the Schedule Event #2 page opens the Schedule Event #3A page and permits the end-user to save the schedule. Complete the following steps to schedule a sequence or button.

Sequences + Scheduler Page



1. Touch the **Schedule Event** button (reserve join number = 3424) from the Sequences + Scheduler page, shown to the left of this step.

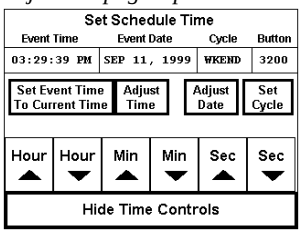
Schedule Event #1 Page



2. Touch any button with a digital join number. Button may be one that has a programmed sequence or one that initiates a specific function (join number 1 through 999). In this example, the available buttons are sequence buttons that are available from the Schedule Event #1 page, shown to the left of this step.

NOTE: If the activation time is close to the current time, touch the **Set Event Time To Current Time** button (join number 3360) to set the "scratch" schedule time and date to the current time. Then use the increment/decrement buttons as described in the next step to make adjustments.

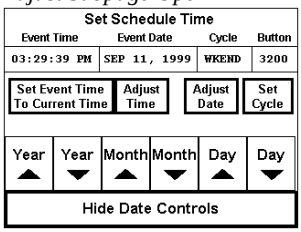
Schedule Event #2A Page with Time Adjust Subpage Open



3. To set the activation time for the event, touch the **Adjust Time** button to open a subpage titled Time Adjust on the Schedule Event #2A page, shown below. Use the increment/decrement buttons to increase and decrease the hours, minutes, and seconds of the event. Each of these buttons have reserved join numbers.

4. Touch the **Hide Time Controls** button to close the subpage when the activation time for the event is set.

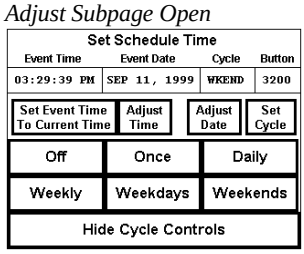
Schedule Event #2A Page with Date Adjust Subpage Open



5. To set the activation date for the event, touch the **Adjust Date** button to open a subpage titled Date Adjust on the Schedule Event #2A page, shown to the left of this step. Use the increment/decrement buttons to increase and decrease the year, month, and day of the event. Each of these buttons have reserved join numbers.

6. Touch the **Hide Date Controls** button to close the subpage when the activation date for the event is set.

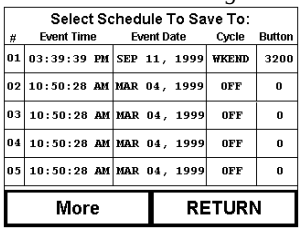
Schedule Event #2A Page with Cycle Adjust Subpage Open



7. The cycle of the event determines how often it occurs. To set the cycle for the event, touch the **Set Cycle** button to open a subpage titled Cycle Adjust on the Schedule Event #2A page, shown to the left of this step. Available options for how often an event can occur are: Off (never occurs), Once, Daily, Weekly, Weekdays, and Weekends. Each of these buttons have reserved join numbers.

8. Touch the **Hide Cycle Controls** button to close the subpage when the activation cycle for the event is set.

Schedule Event #3A Page



9. The event time and date have been properly set up in the "scratch" schedule. Touch the **Select Schedule** button to open the Schedule Event #3A page, shown to the left of this step. Notice that this page has five schedules defined on the screen. To gain access to five more schedules, touch the "More" button.

10. Determine the schedule that you want to use and touch that line. The new schedule time, date, cycle, and join number appear automatically. The event is now scheduled.

The Schedule System Display

The schedule system display appears because of the command text specifier “N”. This command text is written in a border or button in the following format:

`N{Schedule Number},{Specifier}

The available schedule numbers are 0 through 31, where schedule 0 is the “scratch” schedule. Refer to the table below for a description of the specifiers.

Table of Specifiers

SPECIFIER	MEANING	NOTES
0	Seconds	0 to 59
1	Minutes	0 to 59
2	Hours	24 Hour Time, 0 to 23
3	Day of the Month	1 to 31
4	Month	1 to 12
5	Year	4 Digit, i.e., 1996
6	Weekday	0 to 6
7	Day of the Year	0 to 365
8	Hours	12 Hour Time, 1 to 12
9	12 Hour Time Type	AM or PM
10	Month	3 Characters: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC
11	Day of the Week	3 Characters: SUN, MON, TUE, WED, THU, FRI, SAT
12	Type of Schedule	Cycle Type: OFF, ONCE, DAILY, WEEK, WKDAY, WKEND
13	Join Number for that Schedule	

EXAMPLE: To show the type of cycle for schedule #1, the command text in a border or button would look like:

`N1,12

NOTE: As with all command text, formats as that shown above are the only text allowed in the border or button.

Touchpanel as Part of SmarTouch STS

This section of this Operations Guide and the next is to remind the reader that the touchpanel provides user interface in either the Cresnet System or SmarTouch STS. If the touchpanel is to be part of the SmarTouch STS, refer to the latest revision of the SmarTouch STS Touchpanel User’s Operations Guide (Doc. 5804) for descriptions regarding the system’s equipment and how to connect the panel in programming and operation modes.

Touchpanel as Part of Cresnet System

This section of the Operations Guide only applies to those using the touchpanel in a Cresnet System. It provides descriptions regarding programming via SIMPL Windows and details on how to connect the panel to load a program.

Programming with SIMPL™ Windows®

NOTE: Graphical touchscreen design is accomplished using VisionTools Pro (VT Pro). VT Pro is a Windows compatible software package for creating Crestron touchpanel screen designs. Refer to “Software” on page 2 for additional details regarding VT Pro.

SIMPL (Symbol Intensive Master Programming Language) is an easy-to-use programming language that is completely integrated and compatible with all Crestron system hardware. The objects that are used in SIMPL are called symbols. SIMPL Windows offers drag and drop functionality in a familiar Windows® environment.

SIMPL Windows is Crestron Electronics' software for programming Crestron control systems. It provides a well-designed graphical environment with a number of workspaces (i.e., windows) in which a programmer can select, configure, program, test, and monitor a Crestron control system.

The next two subsections describe a sample SIMPL Windows program that utilizes a touchpanel. The first subsection details how the sample program works with a textual description and block diagram. The second subsection provides a broad description of how to actually create the SIMPL Windows program.

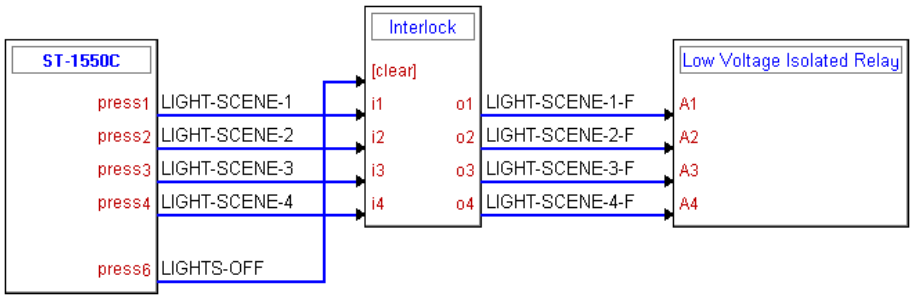
NOTE: The following description assumes that the reader has knowledge of SIMPL Windows. If not, please refer to the extensive help information provided with the software.

NOTE: There is no need to recreate the sample SIMPL Windows program. A similar copy of this program is available from Crestron’s ControlCD (version 5.1 and later) or the Software Downloads page (Examples Library) of the Crestron website (www.crestron.com). Search for the ST-1550C.SMW project in the SIMPL Windows Example Base.

How the Program Works

A basic STS Touchpanel SIMPL program is shown on the next page in block diagram form. For this example, the ST-1550C is the user interface in a relay-controlled lighting system with four preset scenes and an OFF scene. To activate a scene, the corresponding relay on the built-in low voltage relay card in the CNMSX-PRO must be latched. To turn the scene off, use the clear function of the INTERLOCK symbol to open all relays.

Block Diagram of ST-1550C



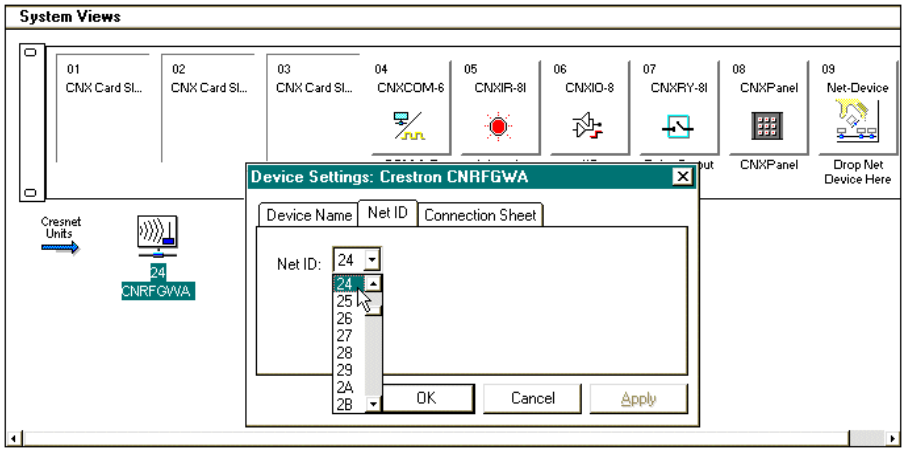
How to Create the Program

Configuration Manager

Use the Configuration Manager workspace (**Project | Configure System**) in SIMPL Windows to select and configure all the devices that need to be included into the system. For this example, add a CNRFGWA and ST-1550C to the system. The NET ID of the CNRFGWA is set to 24 and the the RF ID of the ST-1550C is set to 10, shown below.

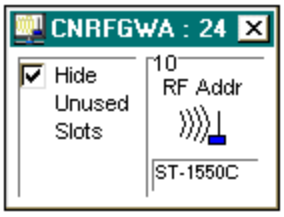
NOTE: Consult the "Leading Specifications" on page 2 for the correct version of SIMPL Windows. If using an early version of SIMPL Windows, Crestron recommends a SIMPL Windows and operating system upgrade. The latest version can be obtained from the Software Downloads page (Simplwin Library) of the Crestron website (www.crestron.com). New users are required to register in order to obtain access to the FTP site.

System View of the CNRFGWA NET ID Assignment in SIMPL Windows' Configuration Manager



When the ST-1550C is dropped onto the CNRFGWA, the RF ID default address (10) is automatically assigned. Verify or reassign in the Detail System View, shown after this paragraph. Notice that unused slots are hidden.

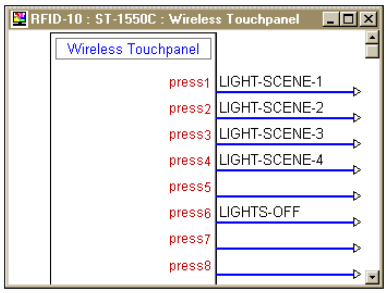
Detail System View of the ST-1550C RFID Assignment in SIMPL Windows' Configuration Manager



Programming Manager

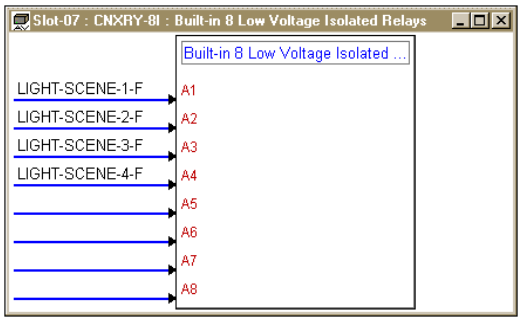
Use the Programming Manager workspace (**Project | Program System**) in SIMPL Windows to select symbols and assign their respective signals. For this example, the touchpanel symbol was added automatically when the device was added to the system in the Configuration Manager workspace. Expand the Network Modules folder and double click on the ST-1550C for a detail view (alternatively CTRL+D or drag and drop into Detail View). Assign signals as shown after this paragraph.

Detail View of the ST-1550C in SIMPL Windows' Programming Manager



Expand the Central Control Modules folder. Double click on the Slot-07 icon for a detailed view of the built-in relay (alternatively CTRL+D or drag and drop into Detail View). Assign signals as shown after this paragtraph.

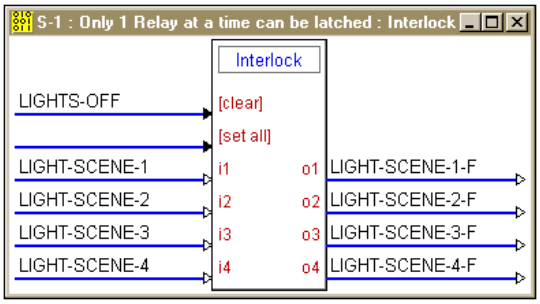
Detail View of the CNMSX-PRO Built-In Relay in SIMPL Windows' Programming Manager



All logic symbols necessary for the SIMPL Windows program must be added from the *Symbol Library* in the Programming Manager workspace. In this example, drag and drop one Interlock symbol from the Memory folder into the Logic folder in *Program View*. Expand the Logic folder to display the Interlock symbol integrated

into this program. View the symbol in detail view (alternatively CTRL+D or drag and drop into Detail View). Assign signals as shown below.

Detail View of an Interlock in SIMPL Windows' Programming Manager

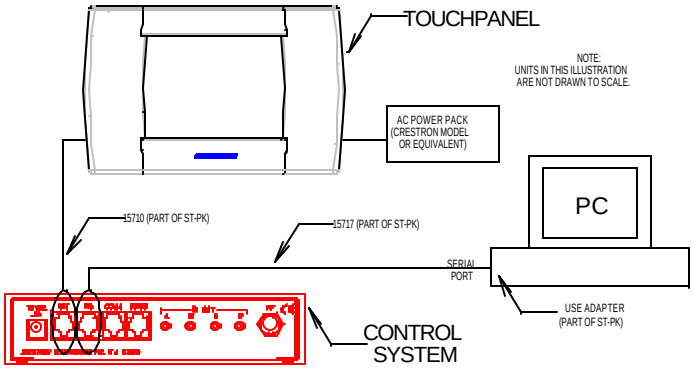


Loading a Program

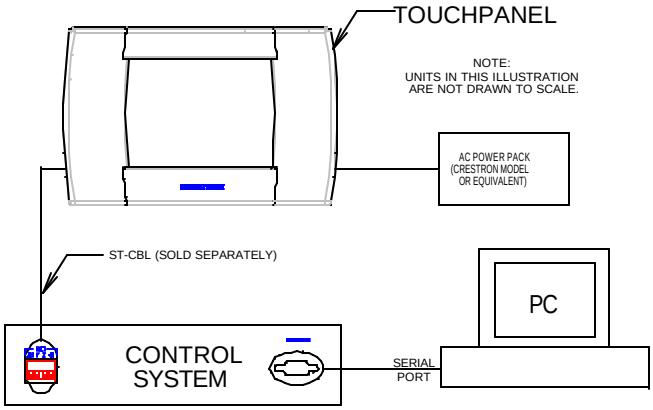
REMINDER: Every network device within the Cresnet requires a unique identity code (NET ID). These codes recognized by a two-digit hexadecimal number from 03 to FE. Matching NET IDs between touchpanel and VT Pro program is required if new touchpanel screens are to be loaded.

To load a program, refer to the figures shown after this paragraph for typical connection diagrams. Complete the following steps provided to ensure proper connection to the system.

Typical Connection Diagram when Loading a Program from the ST-CP



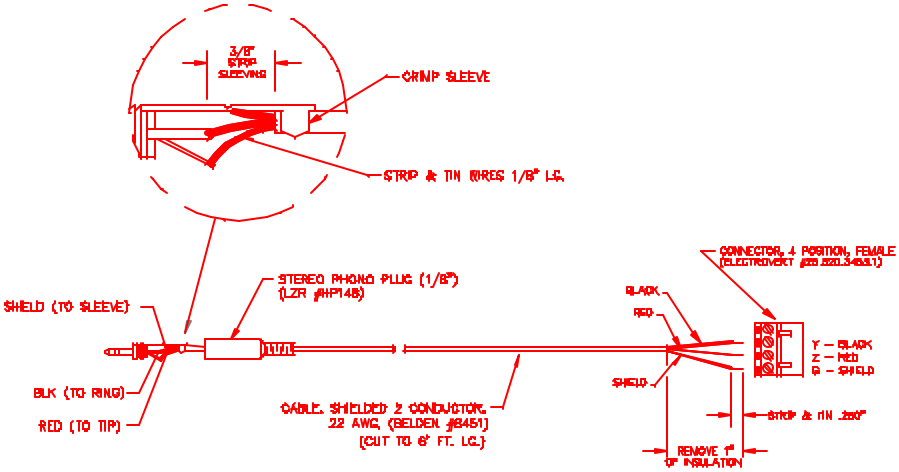
Typical Connection Diagram when Loading a Program from the CNMSX



NOTE: If the control system in use has a 4-pin network connector rather than a modular (RJ11-type) NET connector, use a ST-CBL (sold separately) or make a cable. Refer to the cable specifications, shown after the following steps.

1. Before making any connections to the touchpanel, verify that control system is properly connected to the PC (using cable 15717 and adapter) and powered on.
2. Attach the stereo connector end of the programming cable, part number 15710, to the touchpanel.
3. Attach the RJ11 connector end of the programming cable, part number 15710, to the connector labeled NET on the control system.
4. Attach the appropriate Crestron external AC power pack or equivalent to touchpanel and plug into outlet.
5. Use Crestron VT Pro software to upload the panel design project to the touchpanel. Refer to the software help file for upload settings.
6. After the touchpanel has been programmed, disconnect the programming cable. The touchpanel communicates with the control system via RF signals.

Programming Cable Specifications



Reserved Join Numbers

A reserved join number is a feature of the software that enables a designer to create a button on a touchpanel page that completes a predetermined function. The table after this paragraph provides a list of reserved join numbers available within SIMPL Windows software.

NOTE: Many touchpanel configuration “shortcuts” are available via the software. A button can be created on a page that either calls up the Preferences Menu, ramps contrast, adjusts brightness, etc., via reserved join numbers.

Reserve Join Numbers for SmarTouch STS Touchpanel

JOIN NUMBER	FUNCTION	VALUE
1015	Power	Off
1016	Stand by	On
1017	Brightness	Low
1018	Brightness	Medium
1019	Brightness	High
1023	Contrast	Up
1024	Contrast	Down
1035	Reboots the System *	N/A
1036	Discharges ST-BTP **	N/A
1120 - 1123	Digital Battery Bargraph	Gauge Bottom (1120) to Gauge Top (1123)
1160	Keyclick Volume	Up
1161	Keyclick Volume	Down
1172	Keyclick	On
1173	Keyclick	Off
3072	Scheduler	Start Learn
3073	Scheduler	End Learn
3074	Scheduler	Increment Seconds
3075	Scheduler	Decrement Seconds
3076	Time & Date Adjustment	Increment Minutes
3077	Time & Date Adjustment	Decrement Minutes
3078	Time & Date Adjustment	Increment Hours
3079	Time & Date Adjustment	Decrement Hours
3080	Time & Date Adjustment	Increment Days
3081	Time & Date Adjustment	Decrement Days
3082	Time & Date Adjustment	Increment Months
3083	Time & Date Adjustment	Decrement Months
3084	Time & Date Adjustment	Increment Years
3085	Time & Date Adjustment	Decrement Years
3200 - 3327	Scheduler	Programmable Buttons
3360	Time & Date Adjustment	Set Scratchpad Time & Date to Touchpanel's Current Time & Date
3361	Time & Date Adjustment	Save Settings
3362 - 3423	Scheduler (Odd Join Numbers Most Commonly Used)	Even #s: Copy Schedule to Scratchpad Odd #s: Copy Scratchpad to Schedule (i.e., 3362: Copy Schedule 1 to Scratchpad 3363: Copy Scratchpad to Schedule 1)
3424	Scheduler	Select Event Button

* Holding a button (assigned with join number 1035) for more than five seconds places the touchpanel into "setup mode". Use this mode to configure the touchpanel.

** While discharging, the touchpanel backlight is set to maximum and the timeouts are disabled.

NOTE: If designing an analog battery gauge bargraph, it can be displayed with any of the standard command text on analog channel 2. Therefore, `A2 displays the gauge as a bargraph that fills bottom to top. `D2 displays a bargraph that fills left to right (as designed in the “st-1550/c basic template.vtp” project). Obtain the latest version of VT Pro from the Software Downloads page (Touchpnl Library) of the Crestron website (www.crestron.com). New users are required to register in order to obtain access to the FTP site.

Problem Solving

Troubleshooting

The table below and on the next page provides corrective action for possible trouble situations. If further assistance is required, please contact a Crestron technical support representative.

SmarTouch STS Touchpanel Toubleshooting

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Project can not be uploaded to the touchpanel.	Touchpanel has powered down.	Power panel with power pack when programming and uploading project.
	NET ID on touchpanel is improperly set.	Verify that NET ID match. Refer to "Interface" in this Operations Guide and NET ID parameters assigned in the program.
Project can not be uploaded to touchpanel: 1. Screen is black.	Touchpanel is in standby or powered down.	Touch the touchpanel to display a screen. Verify that the panel has power supplied to it, either battery or power pack.
2. Checking communica-tions error.	Incorrect COM port specified.	Verify upload preferences is set to the COM port being used to communicate to the control system.
		Verify upload preferences specifies RACK (not the PANEL) as target of the upload.
3. Checking panel type error.	NET ID for panel and VT Pro project NET ID do not match.	Verify that panel NET ID matches the NET ID set in the VT Pro program. Refer to "Interface" in this Operations Guide.
Wrong screens appear on touchpanel.	Screens were not uploaded.	Upload screens as described in the help files found in VT Pro.
Touchpanel does not function.	No power to the touchpanel.	Confirm that power pack is attached or batteries are installed.
	Touchpanel is incorrectly calibrated.	Select the Calibration button from the Preferences and Settings Menu to enter "calibration mode".
		If the Calibration button cannot be reached, complete the following steps. Remove power (battery and/or power pack). Reapply power while holding finger to the touchscreen for approximately 10 seconds. During this short period, the words "SETUP MODE" appear as does the Opening Screen. Touch the Opening Screen and select the Calibration button from the Preferences and Settings Menu to enter "calibration mode".
	Touchpanel is not communicating to the control system.	Poll the network (F4 in either VT Pro or SIMPL Windows) to verify communication.

SmarTouch STS Touchpanel Toubleshooting (Continued)

TROUBLE	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Touchpanel does not function and RF LED on ST-CP illuminates, but COM or IR LEDs do not illuminate.	Touchpanel RF ID is not set to match the RF ID assigned in the SmarTouch system program.	Verify that RF ID match. Refer to "Interface" in this Operations Guide and RF ID parameters assigned in the program.
Touchpanel display is dark.	Standby or power down timeout has elapsed.	Touch screen to reactivate.
	Power is not applied to the touchpanel.	Verify that power is properly applied and all connections are made.
Touchpanel display is dark or too light.	Screen brightness or contrast is improperly set.	Hold a finger to the touchscreen for more than 10 seconds as power is applied. The display sets the brightness and contrast to a safe value.
Touchpanel exhibits slow operation.	Compressed graphics take time to decompress.	If there are no memory problems, decompressed graphics decrease the drawing time of panel pages.

Further Inquiries

If after reviewing this Operations Guide for the SmarTouch STS Touchpanel, you cannot locate specific information or have questions, please take advantage of Crestron's award winning technical support team by calling:

- In the US and Canada, call Crestron’s corporate headquarters at 1-888-CRESTRON [1-888-273-7876] or 1-201-767-3400.
- In Europe, call Crestron International at +32-15-50-99-50.
- In Asia, call Crestron Asia at +852-2341-2016.
- In Latin America, call Crestron Latin America at +525-574-15-90.

For local support from exclusive Crestron factory-trained personnel call:

- In Australia, call Soundcorp at +613-941-61066.
- In New Zealand, call Amber Technologies at +649-410-8382.

Return and Warranty Policies

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange, or service without prior authorization from CRESTRON. To obtain warranty service for CRESTRON products, contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number, and return address.
2. Products may be returned for credit, exchange, or service with a CRESTRON Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to CRESTRON, Cresskill, N.J., or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. CRESTRON reserves the right in its sole and absolute discretion to charge a 15% restocking fee, plus shipping costs, on any products returned with an RMA.
3. Return freight charges following repair of items under warranty shall be paid by CRESTRON, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

CRESTRON Limited Warranty

CRESTRON ELECTRONICS, Inc. warrants its Cresnet products, denoted by a "CN" prefix model number, to be free from manufacturing defects in materials and workmanship for a period of three (3) years from the date of shipment to purchaser. Disk drives and any other moving or rotating mechanical parts are covered for a period of one (1) year. CRESTRON warrants all its other products for a period of one year from the defects mentioned above, excluding touchscreen display components which are covered for 90 days. Incandescent lamps are completely excluded from Crestron's Limited Warranty. CRESTRON shall, at its option, repair or replace any product found defective without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

CRESTRON shall not be liable to honor warranty terms if the product has been used in any application other than that for which it was intended, or if it has been subjected to misuse, accidental damage, modification, or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced, or removed.

This warranty shall be the sole and exclusive remedy to the purchaser. In no event shall CRESTRON be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. CRESTRON makes no other warranties nor authorizes any other party to offer any warranty, expressed or implied, including warranties of merchantability for this product. This warranty statement supersedes all previous warranties.

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