# TECHNICAL MANUAL

# INTEGRITY 600 SERIES
# SOFT603
# SYSTEM CONTROL APPLICATION
# FOR WINDOWS™


*Publication:* 81-9059-0637-0, Rev. A

July, 2008

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Printed in the United States of America.

As of publication, this product had not completed FCC compliance testing.

July, 2008

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# Chapter 1 About This Manual

## 1.1 Documentation and Safety Overview

This manual provides instructions for installation and operation of the Integrity 600 Series SOFT603 System Control Application for Windows™, designed and produced by QuStream.

It is the responsibility of all personnel involved in the installation, operation, and maintenance of the equipment to know all the applicable safety regulations for the areas they will be working in. ***Under no circumstances should any person perform any procedure or sequence in this manual if the procedural sequence will directly conflict with local Safe Practices. Local Safe Practices shall remain as the sole determining factor for performing any procedure or sequence outlined in this document.***

## 1.2 Warnings, Cautions, and Notes

Throughout this document, you should notice various Warnings, Cautions, and Notes. These addendum statements supply necessary information pertaining to the text or topic they address. It is imperative that audiences read and understand the statements to avoid possible loss of life, personal injury, and/or destruction/damage to the equipment. These additional statements may also provide added information that could enhance the operating characteristics of the equipment (i.e., Notes). Examples of the graphic symbol used to identify each type of statement and the nature of the statement content are shown in the following paragraphs:

### 1.2.1 Warning

| | |
|---|---|
|  | **Warning statements identify conditions or practices that can result in loss of life or permanent personal injury if the instructions contained in the statement are not complied with.** |

### 1.2.2 Caution

| | |
|---|---|
|  | **Caution statements identify conditions or practices that can result in personal injury and/or damage to equipment if the instructions contained in the statement are not complied with.** |

### 1.2.3 Note

| | |
|---|---|
|  | **Notes are for information purposes only. However, they may contain invaluable information important to the correct installation, operation, and/or maintenance of the equipment.** |

# Chapter 2 Introduction

## 2.1 DESCRIPTION

QuStream's SOFT603 is a software application, for use on a compatible Windows™ based PC, that emulates the functions of the QuStream RCP-503 hardware control panel. Just as the RCP-503 communicates with Integrity system frames and processing cards over an Ethernet link, the SOFT603 application uses the Ethernet function of the host PC for communication with system components. This versatile software application greatly enhances the system integration possibilities of an Integrity system. Virtually any PC within your local area network (LAN) becomes a full featured control panel for your entire Integrity 400/500 or 600 Series system. Users familiar with the RCP-503 hardware will feel right at home with the SOFT603. All operating screens and controls are the same as the hardware control panel. Figure 2-1 illustrates the front "home" screen of the SOFT603 application.


**Figure 2-1 SOFT603 "Home" Screen**

## 2.2 HARDWARE SYSTEM REQUIREMENTS

SOFT603 requires a PC running Microsoft Windows™ XP operating system, with a minimum of 512 Mb RAM. The entire application requires less than 10 Mb of disk space on a local drive.

## 2.3 NAMING CONVENTIONS

Throughout this text the term "card" is used to identify either a 600 series DA or processing module or a 400/500 series processing or DA board.

# Chapter 3 Installation

## 3.1 INSTALL SOFT603 PROGRAM AND DATA FILES

Your SOFT603 installation disk contains an auto-run file that guides you through the installation process. Upon completion of software installation, a desktop shortcut icon is automatically placed on the PC desktop. This shortcut allows you to easily launch the SOFT603 application.

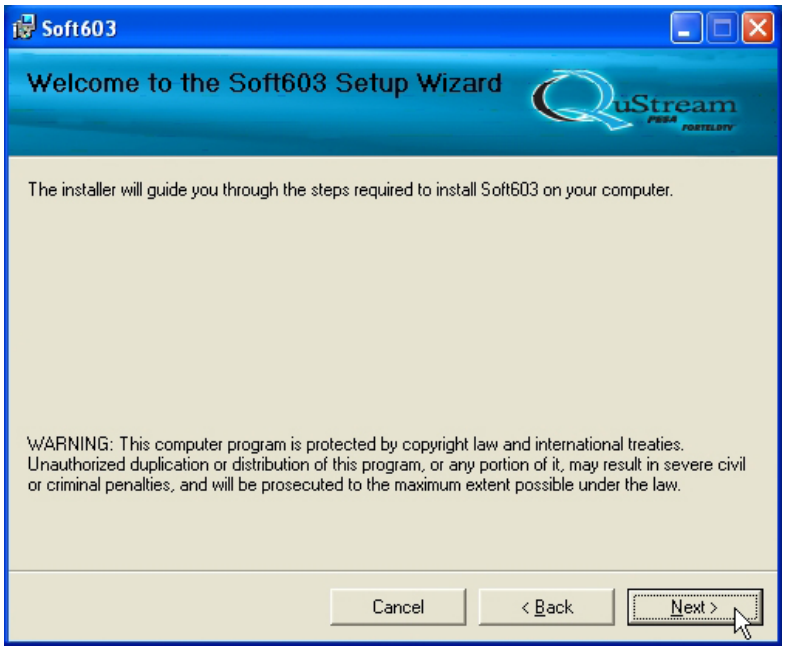
Install the SOFT603 software application as follows:

1. Insert the SOFT603 CD into the CD Drive of the host PC.

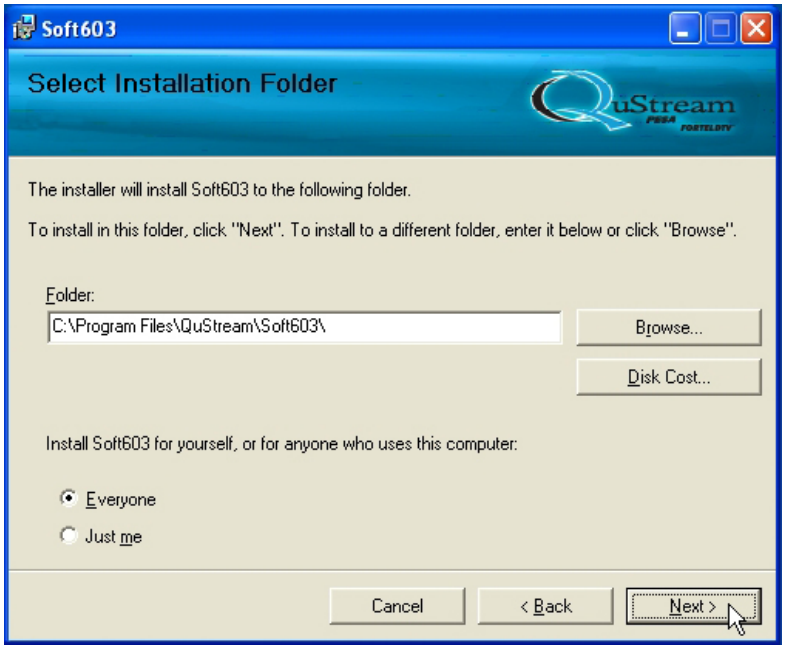
2. Allow the disk to initiate the auto-run function. When initialization is complete, the following banner is displayed on the desktop. Click **Next** to begin installation of the SOFT603 application.


3. If the auto-run function does not automatically launch, navigate to the directory of the disk drive containing the installation CD and double click on **setup.exe**. The banner shown above should be displayed on the desktop. Click **Next** to begin installation.

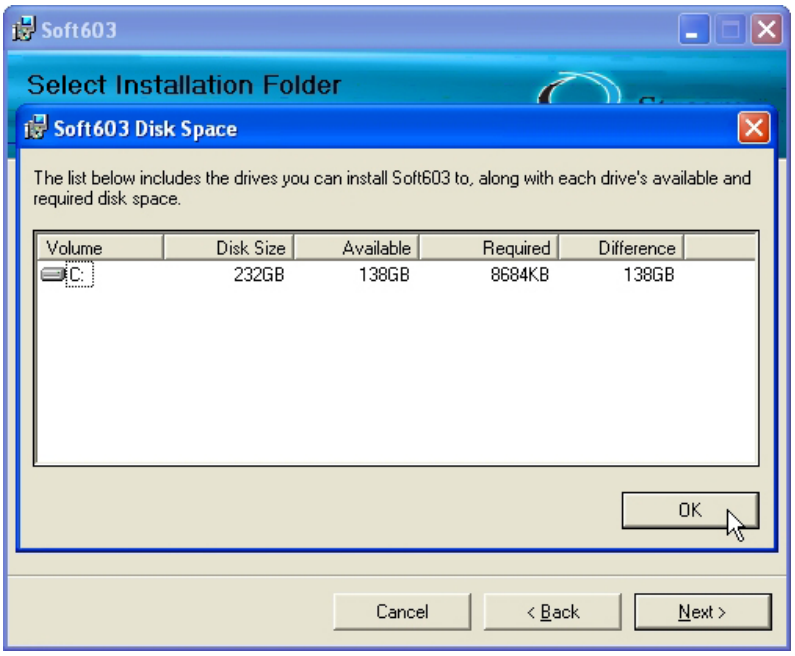
4. Click **Next** on the warning page as shown below.



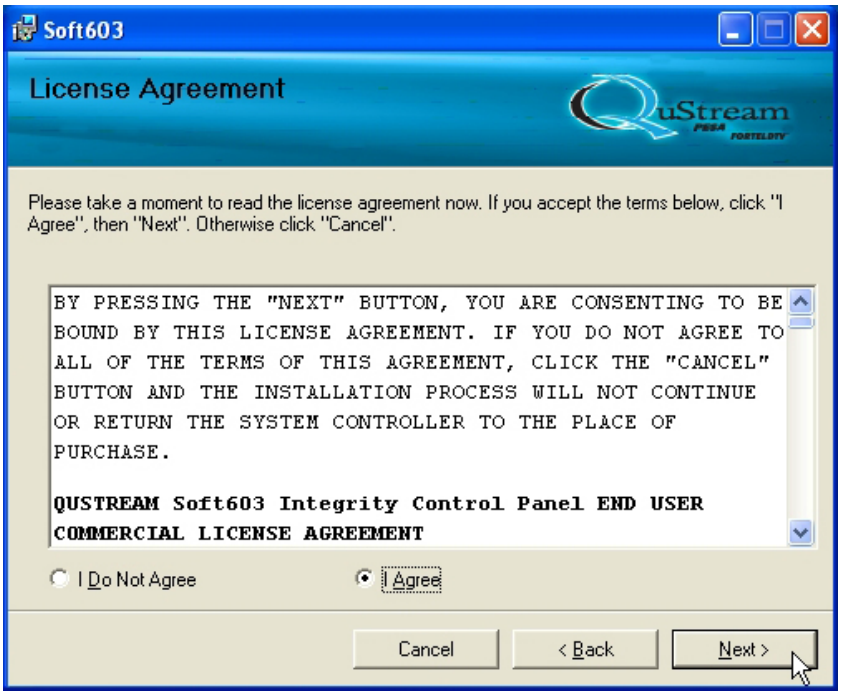

5. By default the auto-install function creates the folders shown below for the SOFT603 application. If you wish to install the software in a directory or folder other than the default, click **Browse** and navigate to the destination. At the bottom of the prompt screen you are given the option of installing the software to be available to everyone who uses the PC, or only to the user performing the installation. Click **Next** to begin installation.



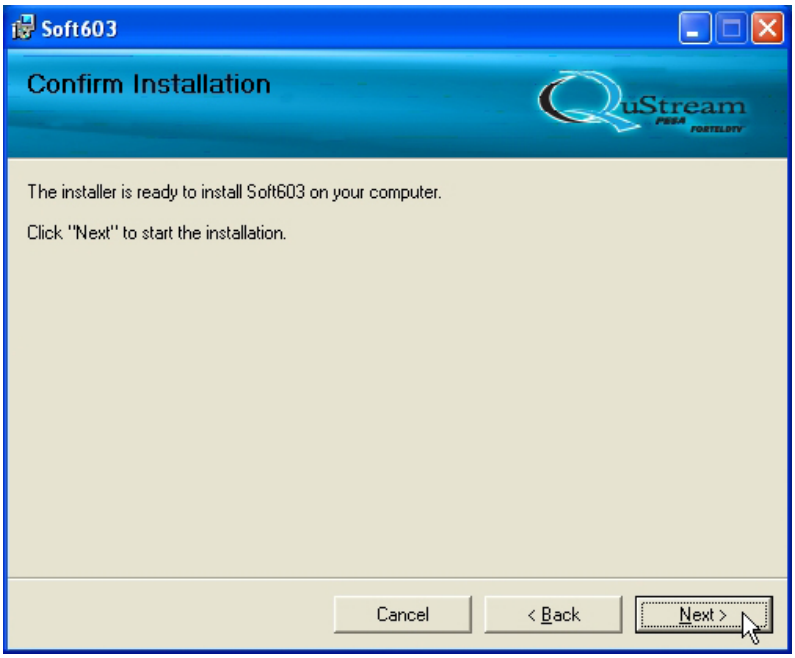
There is an additional button on the install folder prompt labeled **Disk Cost**. Clicking this button opens a display screen indicating the capacity and free space of hard disk drives in the PC, and the memory requirements of the SOFT603 application. An example of this screen is shown below. Click **OK** to exit this screen.



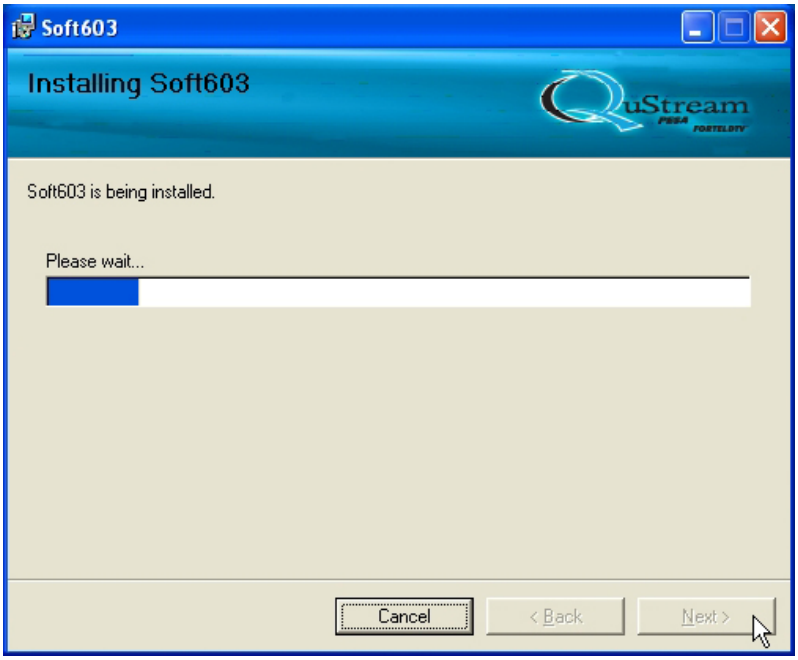

6. Read the license agreement, and select **I Agree**, then click **Next** to continue, as shown below.

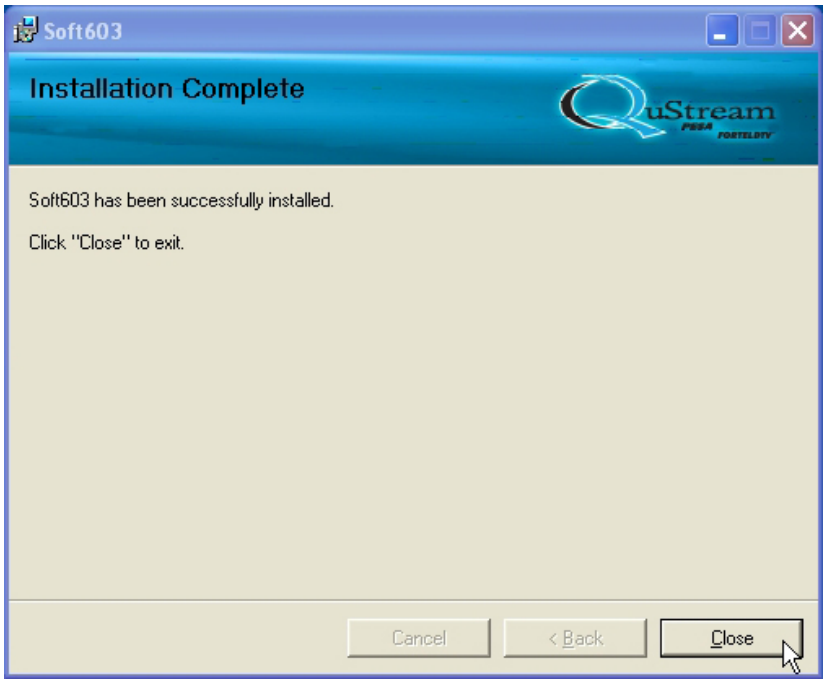


7. Click **Next** on the installation confirmation page as shown below.




8. During installation, the indicator bar tracks progress of software load. Upon completion of installation, the Installation Complete prompt is displayed. An example of each screen is shown below.

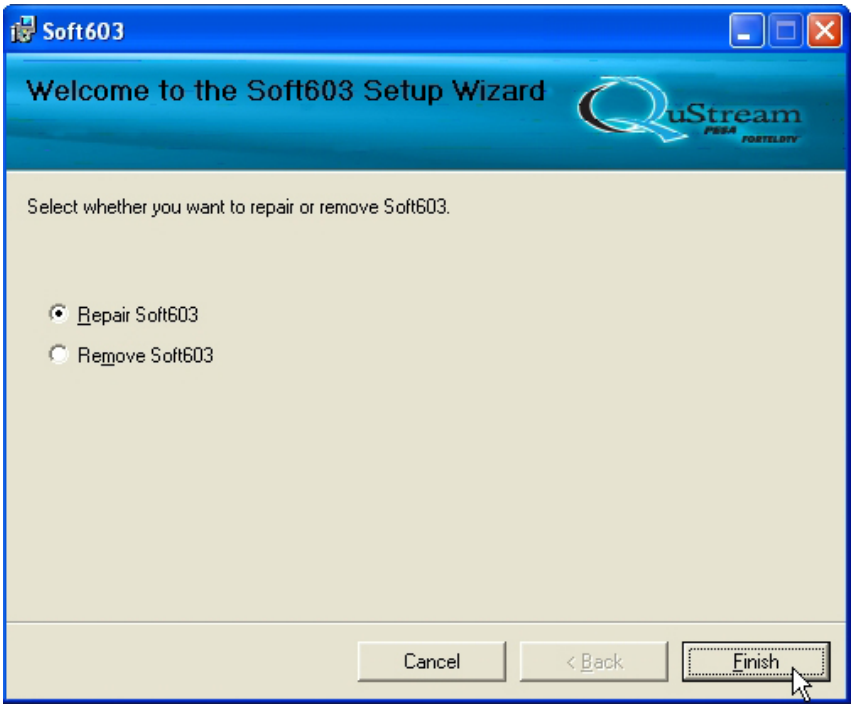





9. Click **Close** to exit the installation process. A shortcut icon to launch SOFT603 is automatically placed on the desktop.

## 3.2 REMOVING OR REPAIRING SOFT603 INSTALLATION

Should it ever be necessary to remove or re-install the SOFT603 application, insert the original installation CD into the PC disk drive, navigate to the disk drive directory and click on the **Setup.exe** file. A prompt window as shown below is displayed on the desktop. Select whether you wish to re-install the application (Repair Soft603) or remove the software from the host PC (Remove Soft603). Click **Finish** to complete the command.




## 3.3 CONNECTING THE HOST PC DIRECTLY TO THE INTEGRITY CHASSIS FRAME

Communication between the SOFT603 Host PC and an Integrity chassis frame is conducted over an Ethernet link. This link may be established directly between the host PC and chassis frame; or each component of the Integrity system may communicate with one another over the facility LAN.

It is permissible to run the SOFT603 application from a PC already installed on the facility network; or it may be desirable, in certain installations, to have the host PC dedicated only to running the SOFT603 program. If your installation is using the SOFT603 program on a dedicated PC, in lieu of a hardware RCP-503 control panel, it is possible to connect the Ethernet port of the host PC directly to the Ethernet port of a single chassis frame. When using a dedicated PC as a single control panel, and a single chassis frame, use a crossover CAT5E interconnecting cable, configured as shown in Figure 3-1. This illustration shows the rear panel of the FRM603 chassis frame as an example. Connection to the FRM-504 or FRM-501 chassis is the same as illustrated here.

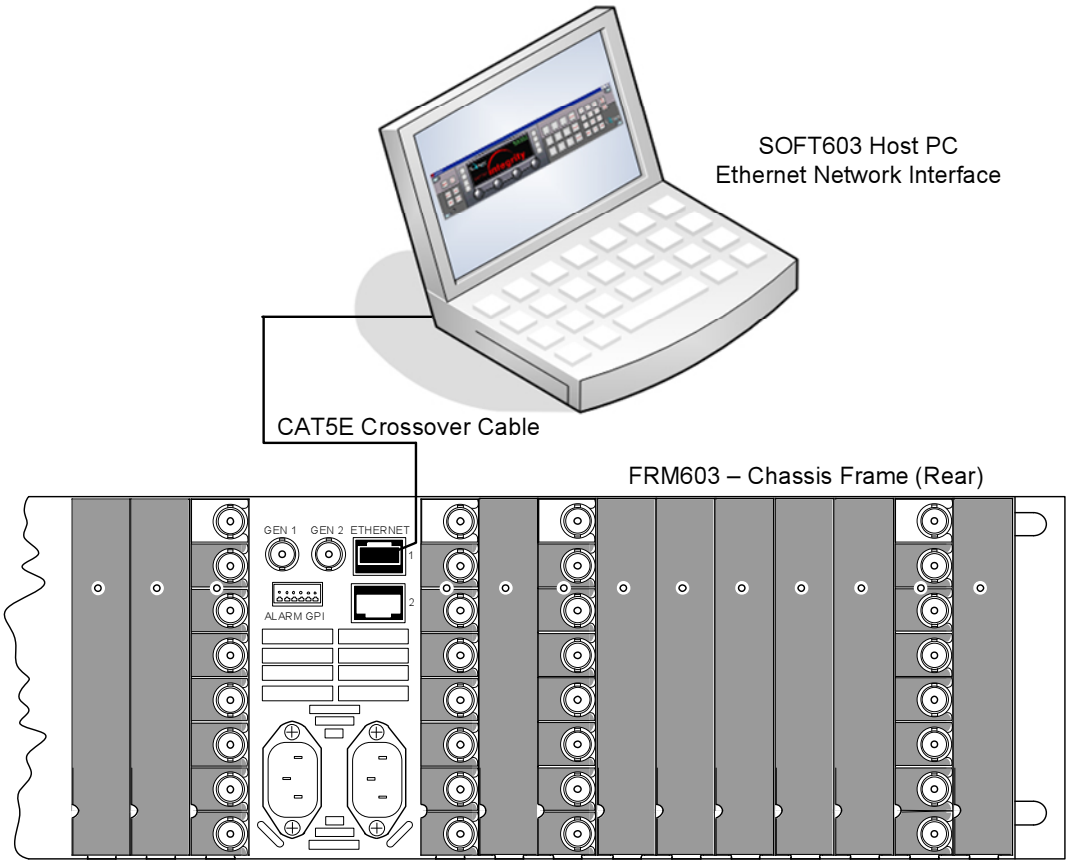



**Figure 3-1 Direct Connection of Host PC to Integrity Frame**

## 3.4 NETWORKED HOST PC AND CHASSIS FRAME

When multiple frames and control panels are used together, an Ethernet switch is required and used with standard Ethernet patch cables. When using a switch, the crossover cable **should not** be used. Connect a port on the Ethernet switch to the Ethernet port on the SOFT603 host PC using an Ethernet patch cable. Connect a port on the Ethernet switch to the Ethernet port on each chassis frame in the system using an Ethernet patch cable. An example of a networked system with two control panel host PCs is shown in Figure 3-2.

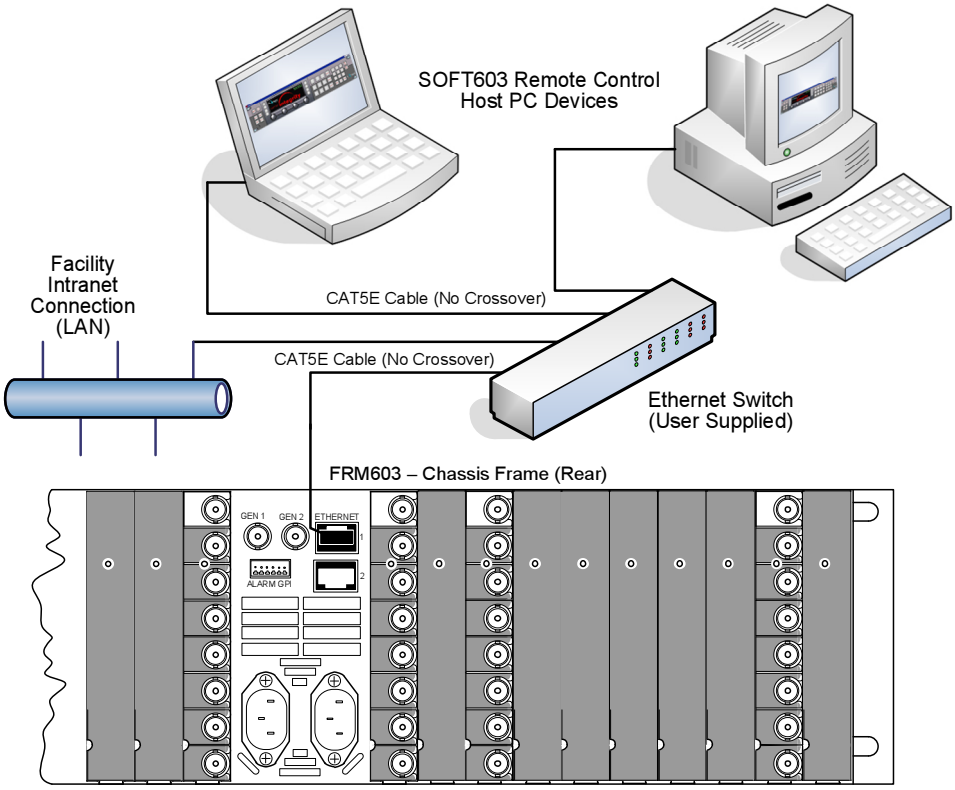



**Figure 3-2 Connecting Multiple Host PCs to a Local Area Network**

Every host PC running SOFT603, every frame controller card in the Integrity chassis frame must be assigned a unique IP address on the facility network. In many installations, you will need to consult your facility network administrator when adding hardware to the network or when the default IP address for any hardware must be changed.

Refer to Chapter 4 of this manual for additional information on changing IP address assignments of Integrity hardware items.

## 3.5 INITIAL SOFT603 START-UP

Double click on the desktop shortcut icon to start the SOFT603 application.

When you run the SOFT603 application for the first time, you will receive the prompt to enter your **Product Key** as shown in Figure 3-3.

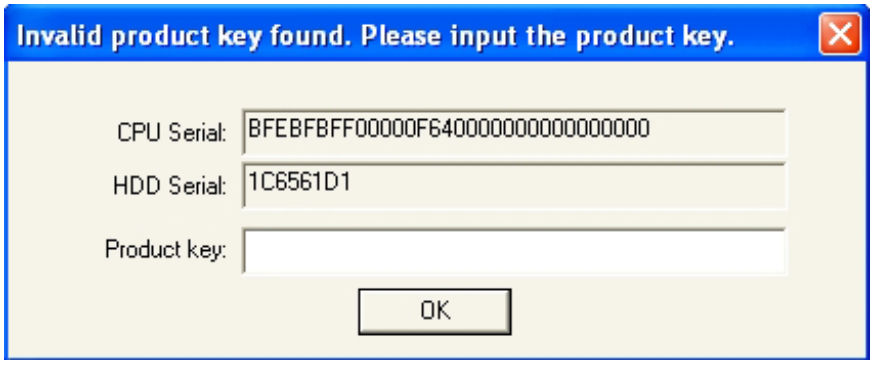



**Figure 3-3 Product Key Input Prompt**

The Product Key is a unique number based on the CPU ID and the Hard Disk ID of the PC, and stored in the key.ini file in the SOFT603 directory. When the SOFT603 is first started it displays the CPU and HD IDs and prompts for the product key. The product key must be obtained from the Qustream Product Support team. When the correct key is entered the SOFT603 application automatically creates the key.ini file and stores the key for subsequent use

## 3.6 TEMPORARY USE OF SOFT603 WITHOUT PRODUCT KEY

If you are installing the SOFT603 application and have not yet received the product key, it is still possible to use SOFT603, fully functional, on a temporary basis. Leave the **Product Key** field blank and click **OK** to continue. You will receive the prompt shown in Figure 3-4. To continue running the SOFT603 application, click **OK**. Click **Cancel** to abort the SOFT603 boot-up procedure.

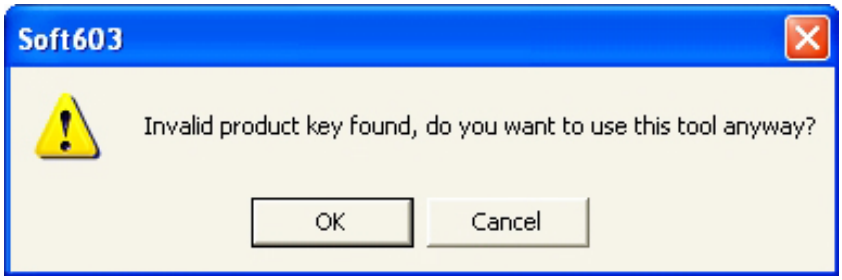



**Figure 3-4 Bypass Product Key Prompt**

If you clicked the OK button, the SOFT603 control panel graphic is displayed as shown in Figure 3-5 with a warning that the software is unauthorized. The panel is fully functional on a temporary basis and can be used immediately.


**Figure 3-5 Unlicensed Software Display**

Every time you launch the SOFT603 application you will be prompted for the Product Key until it has been entered. When the product key is entered, the control panel graphic will appear without the warning, and you will not be prompted to enter the key on future start-ups.

## 3.7 BOARD DEFINITION FILES

In order for the SOFT603 to control a processing card contained in an Integrity chassis frame, the correct Board Description File (BDF) for the card must be present in the **flash** folder under the SOFT603 directory, as shown in Figure 3-6.

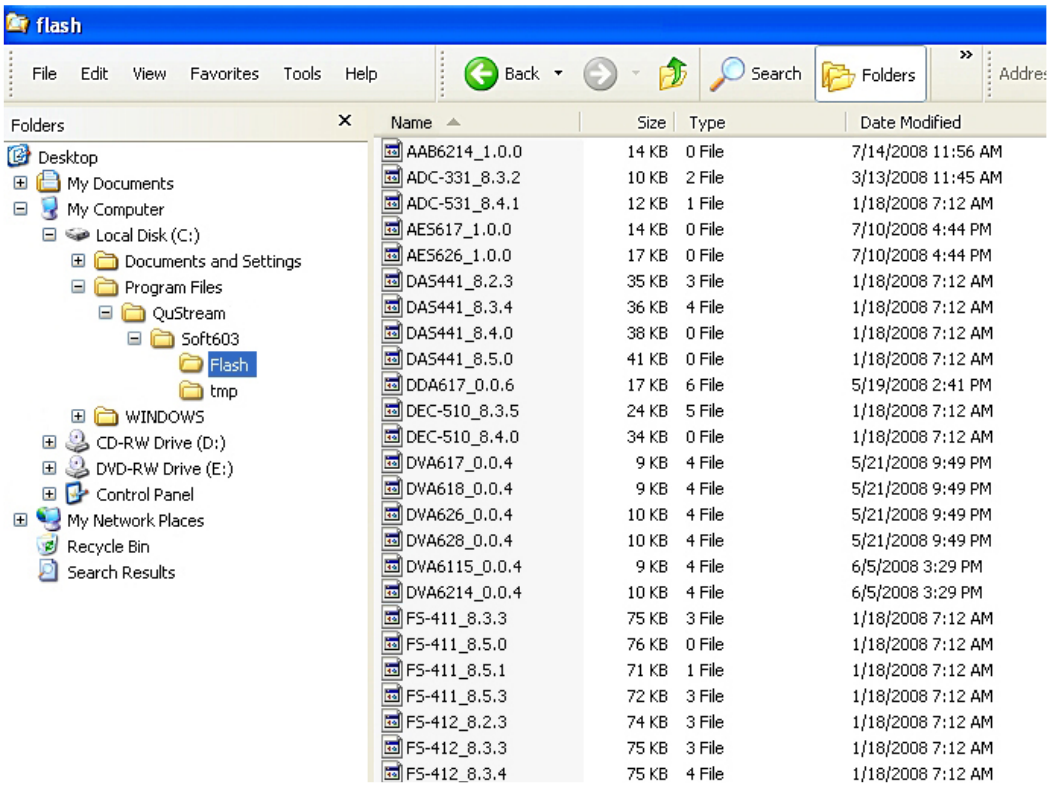



**Figure 3-6 Flash Directory Showing Location of BDF Files**

Each BDF file name is in two parts - the card name and the version number of the card software it supports. For example, software version 1.0.0.0 for AES617 card requires a BDF file AES617_1.0.0. Note only the first three digits of the software version number are relevant. New BDF files are released concurrent with new card software and are available from QuStream product support.
The flash directory may store multiple versions of the same card, for example AES617_1.0.0 and AES617_1.0.1. The Soft603 will automatically locate and use the correct BDF file.

Prior to using the SOFT603 controller for the first time, verify that the BDF files for every card in your system are contained in the flash folder. If you do not have all the BDF files needed, contact QuStream Customer Support.

There is no installation procedure for loading new or updated BDF files. Simply copy the new file into the flash folder. SOFT603 will automatically and seamlessly locate the correct file to use for a specified card.

# Chapter 4 Operation

## 4.1 INTRODUCTION

With SOFT603 you are treating the host PC as a component of Integrity Series hardware. Just as with the RCP-503, communication with other panels and chassis frames is over a dedicated Ethernet link, or the facility LAN.

The first step in preparing your SOFT603 control panel is to configure all system components to communicate with one another. This requires assigning and, if necessary, changing the IP address of system components.

When any Ethernet devices are connected to a network using an IP protocol, each device must have a unique IP address assigned. It is beyond the scope of this document to provide a tutorial on networking or IP address structure. If you are connecting Integrity system devices together directly or through an Ethernet switch in a unique intranet configuration, the factory set IP addresses will likely not need to be changed, and will allow the devices to communicate with one another.

If your installation requires including the Integrity devices into an existing facility LAN, you will need to consult your network administrator for the proper IP addressing scheme to use for each device in the system. If it is necessary to change the IP address of a system component, use the procedure contained in Paragraph 4.2.

## 4.2 IP ADDRESS CONSIDERATIONS

Each SOFT603 application package operates on the facility network, and communicates with other Integrity system components, with the IP address of the host computer as set through Windows™. When installing multiple installations on the LAN, each host PC must be configured during installation for a unique IP address assigned by the Integrity system engineer or the network administrator of your facility. To view the current host PC IP address, press [3][6][9][ENTER] using the numeric keypad. This is a read-only display and you can not change the IP address of the host PC through SOFT603. Use the Windows™ network configuration tools to change the IP address of the host PC.

## 4.3 PANEL LAYOUT AND CONTROL OPERATION

Panel layout of the SOFT603, Figure 4-1, is identical to the hardware RCP-503 panel. With the hardware panel, each key is actually a push-button which is pressed to actuate the switch device. With the software application version, each key is actuated by moving the cursor to the desired key and left clicking on the key icon.

There are four rotary knobs on the hardware panel which are actuated by turning the knob either clockwise or counterclockwise. These four controls are called Soft Knobs because the function of each is assigned by the menu display and there are no physical stops on the knob in either

direction. In the software control panel implementation, turning the "soft knob" is accomplished in one of two ways:

1. Move the cursor to the knob you wish to rotate and left click. With the left mouse button held down, drag the mouse to the right to rotate the knob clockwise, and move the mouse to the left to rotate the knob counterclockwise.

2. Move the cursor to the knob you wish to rotate and use the scroll wheel on the mouse to change the knob setting. Moving the scroll wheel forward moves the control clockwise, and moving the scroll wheel towards you moves the knob counterclockwise.

**NOTE**

Using the scroll wheel method is especially useful for making fine adjustments to settings.

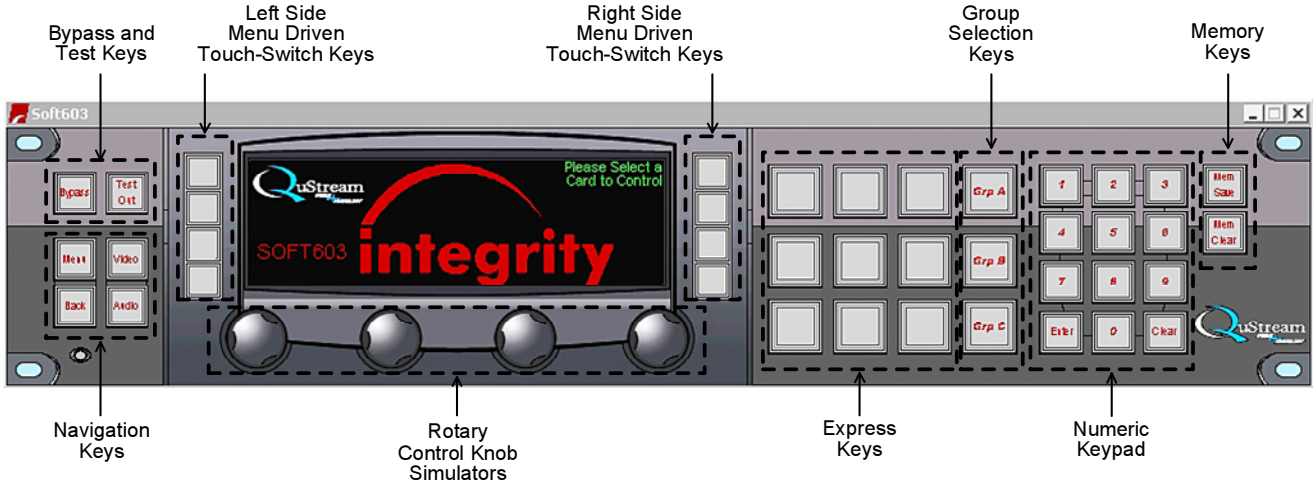



**Figure 4-1 SOFT603 Panel Layout**

## BYPASS KEY

**Bypass** is a special function key used only with certain cards that are equipped with a bypass relay connecting the analog input directly to the first analog video output on the card. It is used primarily in setting up microwave or satellite receive antennas as a means of viewing the unprocessed input sync tip in order to jog the antenna to the optimal position where sync noise is at a minimum. Currently, this feature is used on the FS-411A, FS-412A and FS-414A synchronizers.

When the **Bypass** key is clicked, the bypass relay state toggles and if the output is bypassed, a red warning legend appears in the display along the top row. This warning is to remind the operator that the currently selected card is in bypass mode. Click on the **Bypass** key icon again and the relay state toggles back to normal, so that both analog outputs are processed through the synchronizer.

### TEST OUT KEY

The **Test Out** key is a special function key used only with Integrity cards that include a reference quality test pattern generator. When TEST OUT mode is active, the last selected test pattern appears on all outputs. It is used primarily to provide a test signal downstream of the synchronizer to aid in setup of levels to their optimum value before an input signal is available, so that the operator can then use the video proc amp controls in the synchronizer to correct levels from the source once it is available and be assured that users downstream will see the same levels. When the test signal is active, proc amp controls are normalized.

Clicking on the **Test Out** key icon causes the internally generated test signal to appear on all outputs of that card. A red warning legend appears in the display along the top row to remind the operator that the currently selected card is in TEST mode.

### MENU KEY

Clicking the **Menu** key navigates to the home screen of the currently selected A/V card.

### BACK KEY

Clicking the **Back** key navigates to the previous screen from all soft key sub menus.

### VIDEO KEY

Clicking the **Video** key navigates to the video card home screen for the currently selected A/V card pair.

### AUDIO KEY

Clicking the **Audio** key navigates to the audio card home screen for the currently selected A/V card pair.

### TOUCH-SWITCH KEYS

Eight **Touch-Switch Keys** are used with the display to navigate to submenus or to change the state of certain card functions. These keys are arranged with four buttons on each side of the display. Display legends which appear in yellow are soft key labels. Legends which appear in white declare the current state of the indicated variable.

## ROTARY CONTROL KNOB SIMULATORS

On the hardware remote control panel there are four rotary controls, called soft knobs, in an array across the bottom of the display used to change the value of a control variable across a range. Display legends which appear in light blue are soft knob labels and define the function of the control for the current menu. In the software control panel application, the four control knobs are implemented by the **Rotary Control Knob Simulators**. Rotating the "soft knob" simulator is accomplished in one of two ways:

1. Move the cursor to the knob you wish to rotate and left click. With the left mouse button held down, drag the mouse to the right to rotate the knob clockwise, and move the mouse to the left to rotate the knob counterclockwise.

2. Move the cursor to the knob you wish to rotate and use the scroll wheel on the mouse to change the knob setting. Moving the scroll wheel forward moves the control clockwise, and moving the scroll wheel towards you moves the knob counterclockwise.

**NOTE**

Using the scroll wheel method is especially useful for making fine adjustments to settings.

## EXPRESS KEYS

**Express Keys** allow the operator to select any of nine predetermined A/V cards or card pairs directly. Express Keys are programmed by the system manager during installation.

## GROUP KEYS

**Group Keys** are the three large keys adjacent to the numeric keypad. They are used together with the numeric keypad to access individual cards, 0-99, in each of three banks which are assigned by the system manager. The group assignment of an A/V card can be verified once the card is accessed by observing the blue text label which appears above the alias name in the display.

## NUMERIC KEYPAD

The **Numeric Keypad** is used by operators along with a group key to select an A/V card for control. Numeric keys are also used by the system manager to access higher level functions used in installation and configuration of cards; and to program the Express Keys.

## 4.4 PANEL OPERATION

### 4.4.1 INITIALIZATION

When the SOFT603 application is launched, it will initialize. During initialization, the software executes a discovery process to determine the cards available for its control in your Integrity system frames. This process is complete when the Integrity logo appears on the display along with the select any card prompt, as shown in Figure 4-2.


**Figure 4-2 SOFT603 Initial Display Screen**

### 4.4.2 ACCESSING THE CONFIGURATION DISPLAY SCREEN

Once the initialization process is complete, open the configuration screen, Figure 4-3, by entering the access code [4][0][4][ENTER] on the numeric keypad. Entries on the menu screen and functions available through each are discussed below.

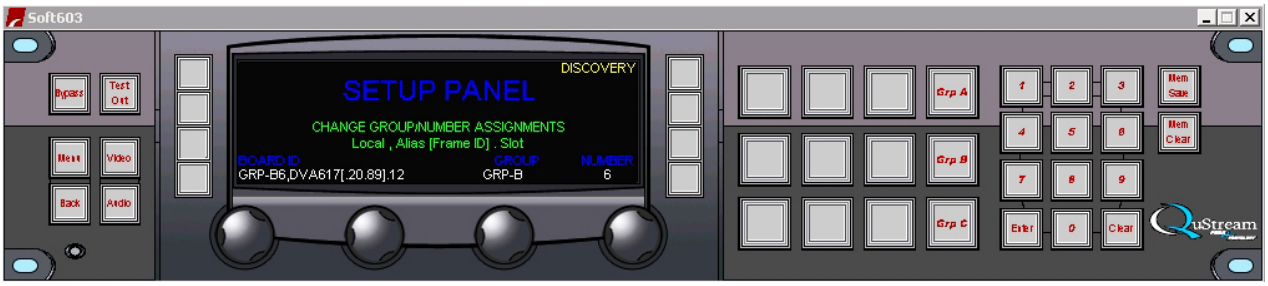



**Figure 4-3 Configuration Display Screen**

**DISCOVERY**

Clicking on the touch-switch key next to the menu entry **DISCOVERY** forces the control panel to execute the discovery process and determine the cards available for its control in your Integrity system frames.

**NOTE**

The DISCOVERY process is automatic, and using this function should only be required when there have been problems or "glitches" on the network.

**BOARD ID**

The lower left corner of the display shows a scrollable list of cards recognized by the panel which it found during the discovery process. Display information is shown in white text if the card is recognized, or gray text (dimmed) if the card is not currently accessible. Rotate the left knob to access a different card.

Each entry in the list provides the following information about that card:

Card Type

Alias Name

Frame Location

Slot Location

Current Group Assignment

Current Keypad Assignment

**GROUP**

Indicates the group to which the displayed card is assigned. If the card is not yet assigned to a group, the message "unavailable" is displayed.

**NUMBER**

Indicates the numeric assignment within the group assigned to the displayed card. If the card is not yet assigned to a group, a zero is displayed.

The display legend beneath BOARD ID gives you several pieces of information about the selected card, in the format Local, Alias [Frame ID], Slot.

Local is the left-most entry and identifies the group and number assigned to this card for this control panel. In the example shown, the display GRP-B6 indicates that the card is assigned to Group B, number 6.

Alias is the middle entry and identifies the card being configured by its assigned alias nomenclature and by its frame location. In the example shown, the display DVA617[.20.89] indicates that the card being configured has the alias DVA617 assigned, and it is physically located in the Integrity chassis frame assigned the IP address XXX.XXX.20.89; where the first two octets of the IP address are truncated for space saving. The truncated octets are assigned by the network administrator and will be the same for every frame and control panel on the network. In our example the actual IP address is 192.168.20.89, but only the last two octets are displayed.

Slot is a numeric entry and identifies the physical card slot of the chassis frame in which the card resides.

Looking at the example, the entire BOARD ID display tells us that the card currently shown is a DVA617 module, physically located in slot 12 of the chassis frame assigned the IP address 192.168.20.89; and for this control panel this module is configured as number 6 in Group B.

### 4.4.3 ASSIGNING FRAMES AND CARDS TO GROUPS

In order to use the SOFT603 control panel for system control, each processing card must be configured in order for it to be accessible by the control panel. This requires assigning each card you wish to control with the SOFT603 to a control group and assigning it a number within that group.

Every Integrity card in the system may be accessed by each control panel. By default, on initial start-up of the SOFT603 application, no keypad assignments have been made. The installer must set up these assignments once.

The three large keys to the left of the numeric keypad are **Group Keys**, and are labeled Group A, B and C. It is not necessary for all cards in one frame to be assigned to the same group. In fact, the system is designed to provide flexibility in assigning any card in any frame to any keypad assignment.

Access the configuration screen by pressing [4][0][4][ENTER].

Rotate the left knob to access a different card.
Rotate the right two knobs to change the group and keypad assignment for the card.
Press the BACK key to exit after programming a card or series of cards.
It is not necessary to configure every card before using the ones already configured.

### 4.4.4 CONTROLLING INTEGRITY SERIES CARDS WITH THE SOFT603 CONTROL PANEL

Cards which have been given a keypad assignment are accessed by pressing the following keystroke sequence: [GROUP][NUMBER][NUMBER][ENTER] or [GROUP][NUMBER][ENTER]. The main menu of the selected card opens in the display window unless an invalid keystroke sequence was pressed. Verify that the correct card alias is shown in the center of the display in large blue text. The group assignment will appear just above it in small blue text.

From the main menu of the card you can access the various configuration and control menus. Configuration menus vary greatly from card to card, but the layout and control scheme is universal for all. For specific configuration or operating procedures for each card in the Integrity family, refer to the Technical Manual for the card.

### 4.4.5 COMMON CARD CONFIGURATION OPTIONS

Although the configuration menus for individual cards vary greatly, there are some functions available for individual cards that are common to many. These are identified and discussed below:

#### SETTING CARD ALIASES

An alias name is a label you create for each card, and appears in menus as a unique identifier for the operator. An alias may contain up to eight (8) characters from the following set: A-Z, a-z, 0-9, hyphen, or space. The alias is assigned directly to the card from its configuration menu. Once created in the card, the alias appears on all control panels.

An alias may be simple, such as “Sat12” or “SAT-12”, or more definitive, such as “TOWERCAM” or “LIVE EYE”. We recommend using such names for the nine Express Key selections, with a corresponding keycap legend.

The assigned alias appears on each menu screen for that card in large, blue text. This ensures that the operator knows exactly which card he is controlling before making adjustments.

When audio and video cards are used together as one device, the same alias name may be assigned to both cards, but you must first create the label in each card in the pair.

#### SETTING CARD A/V LINKS

An A/V Link is used to create a relationship between a video card and audio card so that they can be treated as one virtual device on control panels. Once the links are created, the operator may use the **Video** and **Audio** keys on the SOFT603 display to shift between video functions and audio functions within the card pair.

In use, the operator recalls a video card using either the group assignment or an express key.

When the selected video card appears in the display, click the **Audio** key to shift to control of audio input levels, etc. Clicking **Video** returns the operator to the home video screen of the A/V card pair. This provides a fast “toggle” between video gain controls and audio gain controls.

A/V Links are created in the configuration menu for each card and are password protected under the configuration password [9][9][9][ENTER]. Navigate to the A/V Link soft key menu on the video card first and rotate the selector knob until its indicator is set to the card slot where the audio card is located. Click **Back** to exit. Click the **Audio** key to jump to the home audio menu of the card and verify that you have linked to the correct card. Navigate to the Configure menu on the audio card using soft keys. Enter the configuration password [9][9][9][ENTER]. Navigate to the A/V Link soft key menu on the audio card and rotate the selector knob until its indicator is set to the card slot where the video card is located. Press the **Back** key to exit. Press the **Video** key to jump to the home video menu on the card and verify that you have linked to the correct card.

**CONFIGURATION PASSWORD**

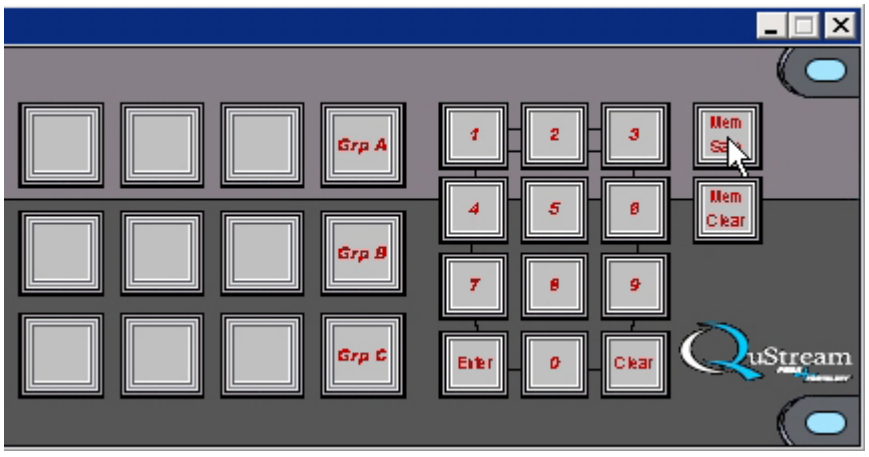
The configuration password is [9][9][9][ENTER] for all A/V cards. Operator access to the configuration screens should be at the discretion of the system manager. The configuration password allows changes to be made to system timing and other advanced functions which are usually adjusted only once during installation.

### 4.4.6 ASSIGNING EXPRESS KEY MACROS

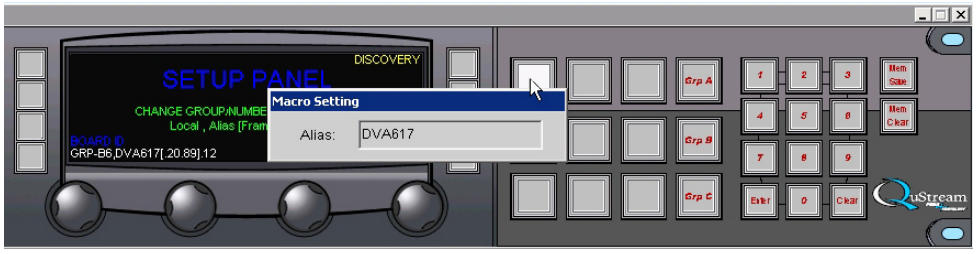
Express Keys are the nine large pushbuttons to the left of the three Group Keys. Each Express Key may be used to gain one-touch access to a card without using the number pad or group keys. The legend for each Express Key may be assigned so that the alias name for that card appears on its keycap.
Contain

Program an Express Key by the following sequence:

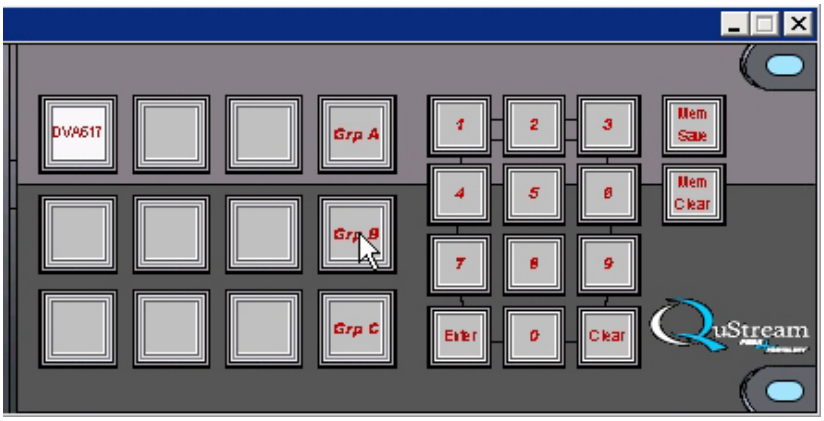
1. Click on [MEM SAVE] and then click the [Express Key] you wish to assign. For this example, we are using the upper left express key.

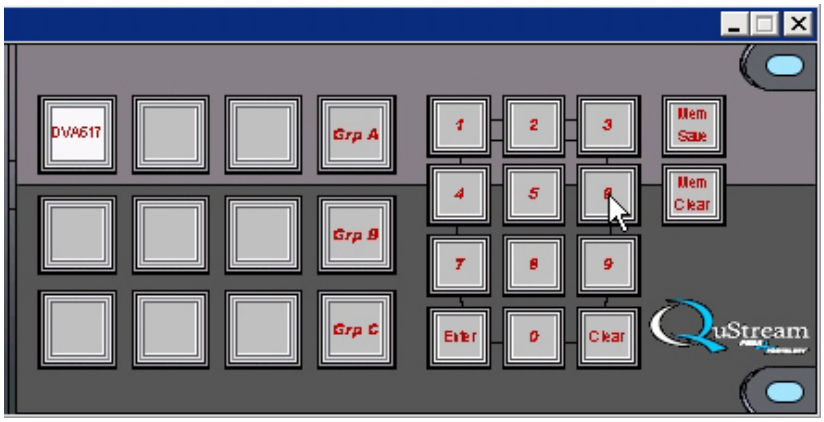


2. The prompt **Macro Setting** is displayed, as shown below. Enter the alias name for the card - this is the label that appears on the express keycap. Press the enter key on the computer keyboard to accept the keycap label.

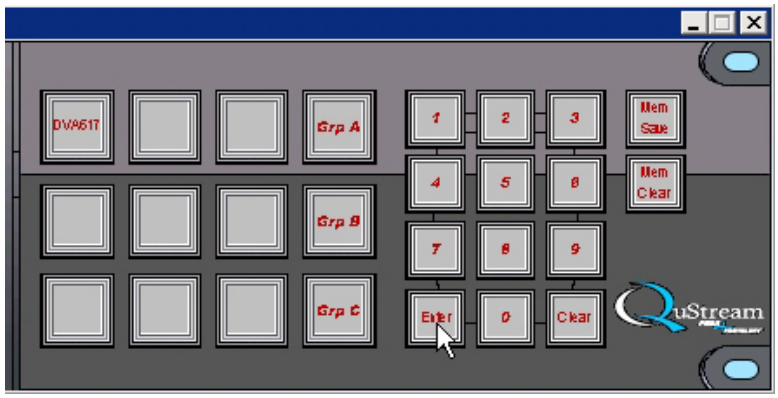



3. The keycap label is displayed, and the Express Key flashes to indicate a programming sequence is in progress. Click on the Group key corresponding to the control group assigned to the card, followed by the group number on the numeric keypad. In this example, the card we are programming to the express key is the DVA617 card assigned to control group B, group number 6. We would click on the **Grp B** key, as shown, to program the control group, followed by the number 6 on the numeric keypad, as shown in the second illustration.



4. Click the **Enter** key, as shown, to complete programming of the express key.




Cards which have been given an Express Key assignment are accessed by pressing the Express Key, or by pressing their Group/Number assignment. Assigning an Express Key is on a panel by panel basis. Installations which have multiple control panels may assign different cards to their Express Keys. This allows each operator panel to be configured for the nine cards they access most often at that work station. Express Keys created during installation allow the operator to skip the keypad selection and go directly to any of nine pre-determined A/V card pairs directly with a single keystroke. Press the named Express Key and the selected card will be recalled in the display.

### 4.4.7 PASSWORD PROTECTED FUNCTIONS

There are several functions used to configure the panel that are protected by a keypad code and not displayed in the on-screen menus without knowledge of the pass code. Some pass codes should be withheld from operators – they are for system configuration only!

### 4.4.8 SETTING DISPLAY ILLUMINATION LEVELS

Display backlight and key icon illumination levels are adjustable during installation to compensate for the general lighting in the work area. Access these controls using the numeric keypad. Press [1][4][7][ENTER] to access the brightness controls.

- **Normal** - sets the standard intensity of the backlit key icons.
- **Highlight** - sets the enhanced brightness associated with certain functions (i.e.: Mem Save).
- **Display** - sets the intensity of the display backlight.
- **Timeout** - sets an interval before the screensaver turns off the display. The default setting is 1.5 hours. Press any control after a timeout occurs and the display returns.

### 4.4.9 CHECKING PANEL INFORMATION

A panel information screen provides readout of the software version installed in the panel, the panel IP address, the panel MAC address and the list of installed Board Description Files. Press [3][6][9][ENTER] to display the panel info screen. Press the **Back** key to exit

# Chapter 5 Troubleshooting Guide

## 5.1 BEFORE CALLING TECH SUPPORT

Integrity systems rely on interconnections between frames and panels. In the event of difficulty with the system, there check the following to rule out communications problem between panels and frames.

1. Verify that each panel and frame has been assigned a unique IP address.
2. Verify that every LAN switch is working properly.
3. Verify that LAN cables are connected properly.
4. Determine if any new hardware was added to the LAN just before the failure occurred.
5. Determine that all power supplies are still connected and working properly.

**Finding Panel Version Info**

The SOFT603 panel version info is accessed by entering [3][6][9] from the keypad.

**Finding Card Version Info**

The A/V Card version info is accessed through the configuration menu password on each card.

## 5.2 FAQ

Q: Is their any restriction on which IP address I choose?

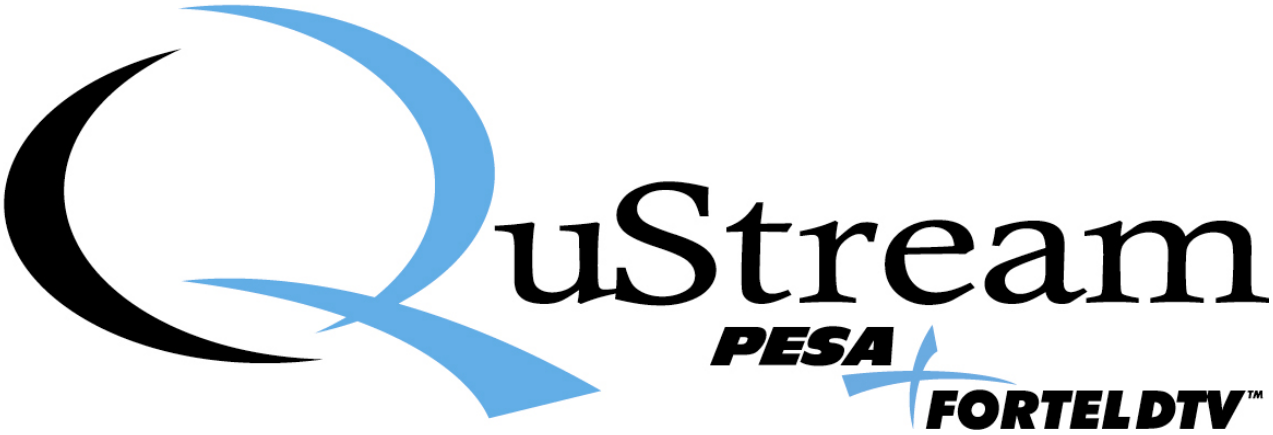
A: There are only two restrictions on IP addresses: You may not use 0.0.0.0, which is reserved for factory use, you must also choose a unique IP address for every device on the network, whether a control panel, system frame, or third-party device.

Q: Why can't I change a MAC address?

A: The MAC address is a unique code assigned at the factory from a bank of codes licensed by Fortel DTV. This identifier is how one Fortel product recognizes others on the LAN.

Q: Is there a limit to cable lengths and can I cascade multiple switches?

A: Hi-quality Ethernet cables should be limited to a maximum of 100 ft. lengths. You may cascade two switches in any one communications path, which means a maximum run length of 300 ft. using three, 100 ft. sections. We have not established a limit on the maximum number of ports on each switch.


QuStream
PESA
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