VideoReQuest Crestron Module Guide
Version 1.5

Control of a single VideoReQuest™ from a Crestron™ control system through RS232 or Ethernet

DVD Changer 1 | DVD Changer 2 | DVD Changer 3 | DVD Changer 4

www.request.com

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REVISION HISTORY

Revision	Changes
1.0	Initial Version
1.1	Added Single and Double line presses
1.5	Added DVD Menu controls
	Fixed CURSOR-UP and CURSOR-DOWN to scroll player details

CRESTRON INSTALL CHECKLIST

Client Name: _____

Date Installed: _____ **Module Version:** _____

Connection to VRQ: ☐ Ethernet ☐ Serial   **Processor Type:** _____

Hardware Requirements

☐ 1) Crestron Processor and VideoReQuest DVD Controller

☐ 2) It is STRONGLY recommended that you use a 2-series Crestron processor. If you are forced to use an XGen processor, you MUST use RS232 communication at 9600 Baud ONLY.

☐ 3) Female→Female NULL Modem serial cable if connecting serially (one ships with the VideoReQuest). It is HIGHLY recommended to use a cable that is no longer than 10ft to prevent ground problems. If making your own cable and using any baud rate other than 9600, be sure to connect pins 7 and 8 for HW Hand Shaking.

Hardware Configuration

☐ 1) Install VideoReQuest unit and Crestron processor in rack

☐ 2) Connect cables for control (NULL Modem Serial or Ethernet)

Software Requirements/Setup

☐ 1) Ensure that you have the all the latest SIMPL Windows and VTPro programs and components installed. Don't forget the SIMPL Windows Cross Compiler!

☐ 2) If connecting via RS232, configure the VideoReQuest Baud Rate by going to **Menu→Configuration→Control Port**.
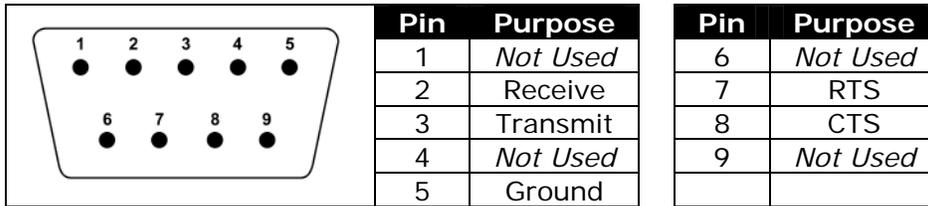*NOTE: All Baud Rates EXCEPT 9600 require HW Flow Control!!*

Software Configuration

☐ 1) Import the ReQuest demo program into SIMPL Windows using **File→Import Archived Program** (see page 2 below for more info)

☐ 2) Select a control method (Ethernet or Serial). The demo is setup for Ethernet. If using Serial, comment out the TCP/IP client, uncomment the COM Port, and configure it with the same settings used in the VideoReQuest setup.

☐ 3) If integrating the VideoReQuest into an existing Crestron program, copy the logic from the demo program to your program. Be sure to copy Digital, Analog, and Serial joins for the touch screens. Modify the joins as necessary to fit into your system.

☐ 4) If using the ReQuest demo touch screen interfaces, open those in VTPro and modify as necessary. Copy our screens to yours if integrating with an existing system
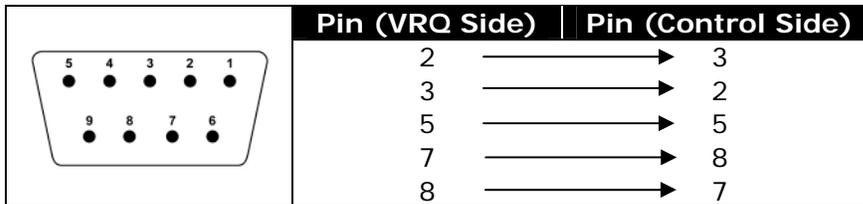
INTRODUCTION:

This document explains how to interface the VideoReQuest DVD Controller with Crestron control systems. It will not give a detailed explanation of the protocol used to communicate with the VideoReQuest via Ethernet, Serial, or IR control. For this information, please download the VideoReQuest Communication Protocol Guide from www.request.com. This document is designed to be used in conjunction with the VideoReQuest Crestron demo program version 1.5.

Rear Serial Port Pinout

Pin	Purpose	Pin	Purpose
1	*Not Used*	6	*Not Used*
2	Receive	7	RTS
3	Transmit	8	CTS
4	*Not Used*	9	*Not Used*
5	Ground		

Serial Cable

Cable Type	Usage
Female→Female NULL MODEM cable	VRQ→Control System VRQ→DVD Changer
Male→Female STRAIGHT cable	VRQ→Video Switcher

Pin (VRQ Side)	Pin (Control Side)
2	3
3	2
5	5
7	8
8	7

COM Settings

The serial port NOT used for changer control is used for integrating the VideoReQuest with a control system. This port supports four possible configurations (see table below). These settings can be found by going to **Menu→Configuration→Control Port** on the VideoReQuest.

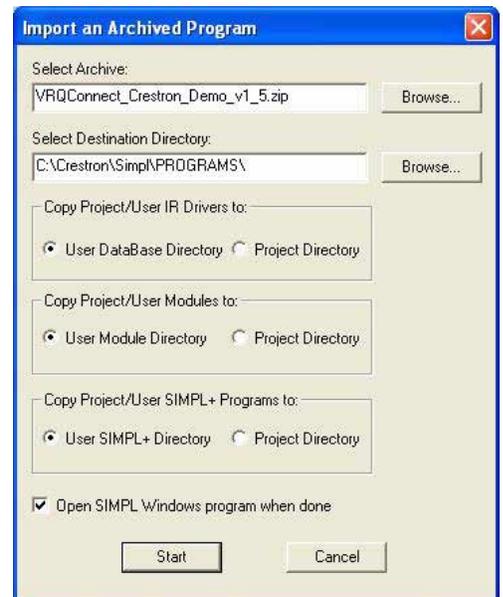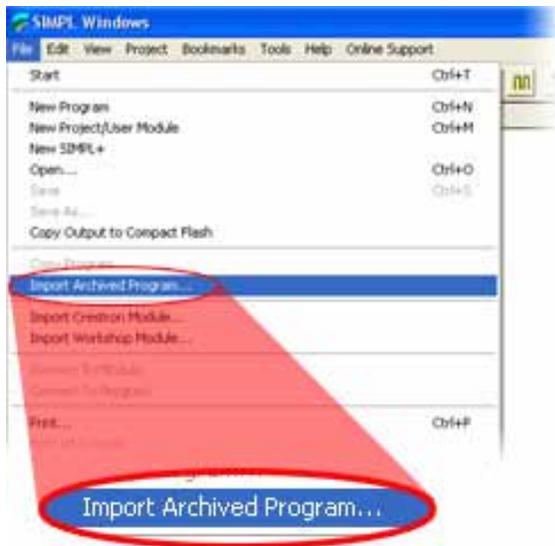| Parameter	Value	Value	Value	Value
Baud	9600	19200	38400	57600
Data Bits	8	8	8	8
Stop Bits	1	1	1	1
Parity	None	None	None	None
Flow Control	None	HW	HW	HW
				default

WHAT TO DO FIRST:

Do Not Unzip The Demo Program You Download!!!

1. Download VRQConnect_Crestron_Demo_v1_5.zip from www.request.com.
2. Open SIMPL Windows.
3. Select **Import Archived Program** from the **File** pull-down menu
4. Click **Browse** and find the zipped file you downloaded in step 1 above.
5. Click **Start** to import the file.

Following the above steps is CRITICAL to the success of your project. Although it is typically sufficient to simply copy the files to the appropriate place on your hard drive, SIMPL Windows performs better when the file is imported.

Importing the file will unzip the project, placing the .smw, .umc and .usp files in the appropriate places, and open our demo program in SIMPL Windows. This program works as a complete solution with our touch panel designs, which are also available on our website. If you choose to use our module in another program, but you plan to use our panel designs, you MUST copy over the entire VideoReQuest Logic subsystem in order for the panels to work correctly. If you have any questions or problems, call (800) 236-2812 for further assistance.

COMPLETE LIST OF MODULE INPUTS AND OUTPUTS

* The **FW** column indicates the minimum firmware on the VideoReQuest that supports that command
* The **D/A/S** column indicates whether the input/output is **D**igital, **A**nalog, or **S**erial
* Brackets ([ ]) around a signal name indicates that command is optional and does not need to be driven to compile the program without errors.
* The HIGHLIGHTED sections are commands to control the DVD player in DVD Mode ONLY.

Basic Module – Inputs

SIGNAL NAME	D/A/S	FW	DESCRIPTION
VRQ-RX$	S	1.1.2	Serial input for data received from the VideoReQuest
[START-SERIAL-COMMUNICATIONS]	D	1.1.2	Initializes RS-232 communications
[START-ETHERNET-COMMUNICATIONS]	D	1.1.2	Initializes a TCP/IP connection
[ETHERNET-DISCONNECT]	D	1.1.2	Closes a TCP/IP connection
[ETHERNET-CONNECT-FB]	D	1.1.2	Triggers initialization string to be sent to VideoReQuest. Driven by "CONNECT-F" from the TCP/IP client
[REFRESH-LOCAL-TEXT]	D	1.1.2	Refreshes all Digital, Analog, and Serial feedback with locally stored values
[REFRESH-VRQ-DATA]	D	1.1.2	Requests that VideoReQuest resend all current data
[CURSOR-UP]	D	1.1.2	Navigates up 1 line on the Browse/Chapters page
[CURSOR-DOWN]	D	1.1.2	Navigates down 1 line on the Browse/Chapters page
[CURSOR-LEFT]	D	1.1.2	Navigates to the previous list in the hierarchy. Acts as REWIND in DVD Mode
[CURSOR-RIGHT]	D	1.1.2	Navigates to the next list in the hierarchy. Acts as FAST FORWARD in DVD Mode
[PAGE-UP]	D	1.1.2	Navigates up 1 screen (6 lines) at a time.
[PAGE-DOWN]	D	1.1.2	Navigates down 1 screen (6 lines) at a time.
[GOTO-HOME]	D	1.1.2	Returns to the top of the Browse list
[GOTO-ALL-DISCS]	D	1.1.2	Navigates to the All Movies list
[GOTO-GENRES]	D	1.1.2	Navigates to the Genres list
[GOTO-RATINGS]	D	1.1.2	Navigates to the Ratings list
[GOTO-ACTORS]	D	1.1.2	Navigates to the Actors list
[GOTO-DIRECTORS]	D	1.1.2	Navigates to the Directors list
[GOTO-NOW-PLAYING]	D	1.1.2	Shows the currently playing movie. Switches to DVD mode
[GOTO-TOP-OF-LIST]	D	1.1.2	Navigates to the top of the current list
[GOTO-BOTTOM-OF-LIST]	D	1.1.2	Navigates to the bottom of the current list
[PLAY-NOW]	D	1.1.2	Plays the currently selected movie/chapter
[PLAY]	D	1.1.2	Resumes playback of the Now Playing movie
[PAUSE-TOGGLE]	D	1.1.2	Toggles between Pause and Unpause on the Now Playing movie
[DISCRETE-PAUSE]	D	1.1.2	Pauses playback of the Now Playing movie
[DISCRETE-UNPAUSE]	D	1.1.2	Unpauses playback of the Now Playing movie
[STOP]	D	1.1.2	Stops playback of the Now Playing movie. Switches back to VideoReQuest mode
[PREVIOUS-CHAPTER]	D	1.1.2	Restarts the current chapter or plays the previous chapter
[NEXT-CHAPTER]	D	1.1.2	Plays the next chapter
[REWIND]	D	1.1.2	Rewinds the current movie. Press PLAY to resume normal playback
[FAST-FORWARD]	D	1.1.2	Fast Forwards the current movie. Press PLAY to resume normal playback
[GOTO-VRQ-MODE]	D	1.1.2	Switches to VideoReQuest mode. Switches video to VideoReQuest output
[GOTO-DVD-MODE]	D	1.1.2	Switches to DVD mode (last DVD player accessed). Switches video to DVD output.
[POWER-TOGGLE]	D	1.1.2	Toggles soft power ON/OFF
[POWER-ON]	D	1.1.2	If VideoReQuest is soft powered OFF, turns unit ON
[POWER-OFF]	D	1.1.2	If VideoReQuest is ON, turns soft power OFF
[SEARCH]	D	*NA*	*Not Used*
[NUMBER-0]	D	1.1.2	Number 0
[NUMBER-1]	D	1.1.2	Number 1
[NUMBER-2]	D	1.1.2	Number 2
[NUMBER-3]	D	1.1.2	Number 3
[NUMBER-4]	D	1.1.2	Number 4
[NUMBER-5]	D	1.1.2	Number 5
[NUMBER-6]	D	1.1.2	Number 6
[NUMBER-7]	D	1.1.2	Number 7
[NUMBER-8]	D/A	1.1.2	Number 8
[NUMBER-9]	D	1.1.2	Number 9
[LETTER-A]	D	1.1.2	Letter 'A'
[LETTER-B]	D	1.1.2	Letter 'B'
[LETTER-C]	D	1.1.2	Letter 'C'
[LETTER-D]	D	1.1.2	Letter 'D'
[LETTER-E]	D	1.1.2	Letter 'E'
[LETTER-F]	D	1.1.2	Letter 'F'
[LETTER-G]	D	1.1.2	Letter 'G'
[LETTER-H]	D	1.1.2	Letter 'H'
[LETTER-I]	D	1.1.2	Letter 'I'
[LETTER-J]	D	1.1.2	Letter 'J'
[LETTER-K]	D	1.1.2	Letter 'K'

[LETTER-L]	D	1.1.2	Letter 'L'
[LETTER-M]	D	1.1.2	Letter 'M'
[LETTER-N]	D	1.1.2	Letter 'N'
[LETTER-O]	D	1.1.2	Letter 'O'
[LETTER-P]	D	1.1.2	Letter 'P'
[LETTER-Q]	D	1.1.2	Letter 'Q'
[LETTER-R]	D	1.1.2	Letter 'R'
[LETTER-S]	D	1.1.2	Letter 'S'
[LETTER-T]	D	1.1.2	Letter 'T'
[LETTER-U]	D	1.1.2	Letter 'U'
[LETTER-V]	D	1.1.2	Letter 'V'
[LETTER-W]	D	1.1.2	Letter 'W'
[LETTER-X]	D	1.1.2	Letter 'X'
[LETTER-Y]	D	1.1.2	Letter 'Y'
[LETTER-Z]	D	1.1.2	Letter 'Z'
[SYMBOL-AT]	D	1.1.2	Symbol '@'
[SYMBOL-POUND]	D	1.1.2	Symbol '#'
[SYMBOL-DOLLAR]	D	1.1.2	Symbol '$'
[SYMBOL-ASTERISK]	D	1.1.2	Symbol '*'
[SYMBOL-SLASH]	D	1.1.2	Symbol '/'
[SYMBOL-OPEN-PAREN]	D	1.1.2	Symbol '('
[SYMBOL-CLOSE-PAREN]	D	1.1.2	Symbol ')'
[SYMBOL-UNDERSCORE]	D	1.1.2	Symbol '_'
[SYMBOL-HYPHEN]	D	1.1.2	Symbol '-'
[SYMBOL-PLUS]	D	1.1.2	Symbol '+'
[SYMBOL-TILDA]	D	1.1.2	Symbol '~'
[SYMBOL-COLON]	D	1.1.2	Symbol ':'
[SYMBOL-QUOTE]	D	1.1.2	Symbol ' " '
[SYMBOL-APOSTROPHE]	D	1.1.2	Symbol ' ' '
[SYMBOL-EQUAL]	D	1.1.2	Symbol '='
[SYMBOL-AMPERSAND]	D	1.1.2	Symbol '&'
[SYMBOL-EXCLAMATION]	D	1.1.2	Symbol '!'
[SYMBOL-QUESTION]	D	1.1.2	Symbol '?'
[SYMBOL-COMMA]	D	1.1.2	Symbol ','
[SYMBOL-PERIOD]	D	1.1.2	Symbol '.'
[BACKSPACE]	D	1.1.2	Deletes the last character entered in text entry
[REQUEST-PLOT-SUMMARY]	D	1.1.2	Plot summary is not sent by default. Pulsing this input requests the plot summary from the VideoReQuest.
[GET-MORE-PLOT-SUMMARY]	D	1.1.2	Plot summary is sent in ~250 character chunks. Pulsing this input requests the next chunk.
[SINGLE-PRESS-LINE-1]	D	1.1.2	Issues Enter command on Line 1
[SINGLE-PRESS-LINE-2]	D	1.1.2	Issues Enter command on Line 2
[SINGLE-PRESS-LINE-3]	D	1.1.2	Issues Enter command on Line 3
[SINGLE-PRESS-LINE-4]	D	1.1.2	Issues Enter command on Line 4
[SINGLE-PRESS-LINE-5]	D	1.1.2	Issues Enter command on Line 5
[SINGLE-PRESS-LINE-6]	D	1.1.2	Issues Enter command on Line 6
[DOUBLE-PRESS-LINE-1]	D	1.1.2	Moves to Line 1. If Line 1 is already selected, issues Enter command on Line 1.
[DOUBLE-PRESS-LINE-2]	D	1.1.2	Moves to Line 2. If Line 2 is already selected, issues Enter command on Line 2.
[DOUBLE-PRESS-LINE-3]	D	1.1.2	Moves to Line 3. If Line 3 is already selected, issues Enter command on Line 3.
[DOUBLE-PRESS-LINE-4]	D	1.1.2	Moves to Line 4. If Line 4 is already selected, issues Enter command on Line 4.
[DOUBLE-PRESS-LINE-5]	D	1.1.2	Moves to Line 5. If Line 5 is already selected, issues Enter command on Line 5.
[DOUBLE-PRESS-LINE-6]	D	1.1.2	Moves to Line 6. If Line 6 is already selected, issues Enter command on Line 6.
[VRQ-MENU]	D	*NA*	*Not currently supported*
[DVD-MENU]	D	1.1.10	Enters the DVD menu when playing a DVD
[AUDIO]	D	1.1.2	Changes the audio output of the DVD player
[SUBTITLES]	D	1.1.2	Toggles subtitles ON/OFF
[ANGLE]	D	1.1.2	Changes the angle on enabled DVDs

Basic Module – Outputs

SIGNAL NAME	D/A/S	FW	DESCRIPTION
VRQ-TX$	S	1.1.2	Serial output for commands to be sent to the VideoReQuest
[TCP/IP-CLIENT-CONNECT]	D	1.1.2	Controls when to open a TCP/IP connection. Should be connected to "CONNECT" on the TCP/IP client
[ON-NAV-PAGE]	D	1.1.2	This output is HIGH when the VideoReQuest is on the Browse page
[ON-PLAYER-DETAILS-PAGE]	D	1.1.2	This output is HIGH when the VideoReQuest is on the Player Details page
[ON-PLAYER-CHAPTERS-PAGE]	D	1.1.2	This output is HIGH when the VideoReQuest is on the Player Chapters page
[ON-DVD-PAGE]	D	1.1.2	This output is HIGH when the VideoReQuest is in DVD mode
[VRQ-VIDEO-ACTIVE]	D	1.1.2	This output is HIGH when the you should be displaying the VideoReQuest video output
[CHANGER-1-VIDEO-ACTIVE]	D	1.1.2	This output is HIGH when the you should be displaying the changer 1 video output
[CHANGER-2-VIDEO-ACTIVE]	D	1.1.2	This output is HIGH when the you should be displaying the changer 2 video output
[CHANGER-3-VIDEO-ACTIVE]	D	1.1.2	This output is HIGH when the you should be displaying the changer 3 video output
[CHANGER-4-VIDEO-ACTIVE]	D	1.1.2	This output is HIGH when the you should be displaying the changer 4 video output
[PLAY-FB]	D	1.1.2	This output is HIGH when the Now Playing movie is Playing
[STOP-FB]	D	1.1.2	This output is HIGH when the Now Playing movie is Stopped
[PAUSE-FB]	D	1.1.2	This output is HIGH when the Now Playing movie is Pause
[BROWSE-CURSOR-ON-LINE-1]	D	1.1.2	This output is HIGH when the cursor is on Line 1 of the Browse page
[BROWSE-CURSOR-ON-LINE-2]	D	1.1.2	This output is HIGH when the cursor is on Line 2 of the Browse page
[BROWSE-CURSOR-ON-LINE-3]	D	1.1.2	This output is HIGH when the cursor is on Line 3 of the Browse page
[BROWSE-CURSOR-ON-LINE-4]	D	1.1.2	This output is HIGH when the cursor is on Line 4 of the Browse page
[BROWSE-CURSOR-ON-LINE-5]	D	1.1.2	This output is HIGH when the cursor is on Line 5 of the Browse page
[BROWSE-CURSOR-ON-LINE-6]	D	1.1.2	This output is HIGH when the cursor is on Line 6 of the Browse page
[RIGHT-ARROW-FLAG]	D	1.1.2	This output is HIGH when there is a level below the current list on the Browse page
[LEFT-ARROW-FLAG]	D	1.1.2	This output is HIGH when there is a level above the current list on the Browse page
[UP-ARROW-FLAG]	D	1.1.2	This output is HIGH when there are more items above the current 6 lines on the Browse page
[DOWN-ARROW-FLAG]	D	1.1.2	This output is HIGH when there are more items below the current 6 lines on the Browse page
[WINDOW-TITLE]	S	1.1.2	Contains the text in the upper right corner of the VideoReQuest GUI
[LIST-TITLE-FULL]	S	1.1.2	Contains the full path from HOME on the Browse page (i.e. Home→Ratings→PG)
[LIST-TITLE-CURRENT]	S	1.1.2	Contains the current list title (i.e. if the FULL title is Home→Genres, current is Genres)
[LIST-TITLE-1]	S	1.1.2	Contains the highest level list title (always "HOME")
[LIST-TITLE-2]	S	1.1.2	Contains the second highest level list title (i.e. Genres, Ratings, All Movies, etc)
[LIST-TITLE-3]	S	1.1.2	Contains the third level list title (i.e. which Genre you selected)
[COLUMN-1-HEADER]	S	1.1.2	Contains the text in the first column header on the Browse page of the GUI
[COLUMN-2-HEADER]	S	1.1.2	Contains the text in the second column header on the Browse page of the GUI
[COLUMN-1-DATA]	S	1.1.2	Contains the column 1 text for the currently selected line
[COLUMN-2-DATA]	S	1.1.2	Contains the column 2 text for the currently selected line
[NAV-LONG-DESCRIPTION]	S	1.1.2	Contains the small text under the currently selected line (i.e. if you select Genres, it would list the first few genres)
[BROWSE-LINE-1-TEXT]	S	1.1.2	Contains the text for Line 1 on the Browse page
[BROWSE-LINE-2-TEXT]	S	1.1.2	Contains the text for Line 2 on the Browse page
[BROWSE-LINE-3-TEXT]	S	1.1.2	Contains the text for Line 3 on the Browse page
[BROWSE-LINE-4-TEXT]	S	1.1.2	Contains the text for Line 4 on the Browse page
[BROWSE-LINE-5-TEXT]	S	1.1.2	Contains the text for Line 5 on the Browse page
[BROWSE-LINE-6-TEXT]	S	1.1.2	Contains the text for Line 6 on the Browse page
[DVD-SLOT-NUMBER]	S	1.1.2	Contains the currently playing DVD slot number (1-400)
[DVD-CHANGER-NUMBER]	S	1.1.2	Contains the currently playing DVD changer number (1-4)
[PLAYER-CURSOR-ON-LINE-1]	D	1.1.2	This output is HIGH when the cursor is on Line 1 of the Chapter list
[PLAYER-CURSOR-ON-LINE-2]	D	1.1.2	This output is HIGH when the cursor is on Line 2 of the Chapter list
[PLAYER-CURSOR-ON-LINE-3]	D	1.1.2	This output is HIGH when the cursor is on Line 3 of the Chapter list
[PLAYER-CURSOR-ON-LINE-4]	D	1.1.2	This output is HIGH when the cursor is on Line 4 of the Chapter list
[PLAYER-CURSOR-ON-LINE-5]	D	1.1.2	This output is HIGH when the cursor is on Line 5 of the Chapter list
[PLAYER-CURSOR-ON-LINE-6]	D	1.1.2	This output is HIGH when the cursor is on Line 6 of the Chapter list
[PLAYER-CHAPTER-1-TEXT]	S	1.1.2	Contains the text for Line 1 on the Chapters page
[PLAYER-CHAPTER-2-TEXT]	S	1.1.2	Contains the text for Line 2 on the Chapters page
[PLAYER-CHAPTER-3-TEXT]	S	1.1.2	Contains the text for Line 3 on the Chapters page
[PLAYER-CHAPTER-4-TEXT]	S	1.1.2	Contains the text for Line 4 on the Chapters page
[PLAYER-CHAPTER-5-TEXT]	S	1.1.2	Contains the text for Line 5 on the Chapters page
[PLAYER-CHAPTER-6-TEXT]	S	1.1.2	Contains the text for Line 6 on the Chapters page
[PLAYER-LONG-DESCRIPTION]	S	1.1.2	Contains extra information about the current movie
[PLAYER-MOVIE-TITLE]	S	1.1.2	Contains the currently selected movie title when in Details or Chapters
[PLAYER-GENRE]	S	1.1.2	Contains the currently selected movie's genre when in Details or Chapters
[PLAYER-CAST]	S	1.1.2	Contains the currently selected movie's cast list when in Details or Chapters
[PLAYER-DIRECTORS]	S	1.1.2	Contains the currently selected movie's directors list when in Details or Chapters
[PLAYER-PLOT-SUMMARY]	S	1.1.2	Contains the currently selected movie's plot summary when in Details or Chapters

Appendix A: Troubleshooting

The first step to troubleshooting ANY problems is to verify that you imported the demo program (see "What To Do First" on Page 2) and you are not getting any errors related to VideoReQuest when you compile your program. If either of these is not the case, please go back and fix these problems before continuing*

A) Can't establish 1-way serial/Ethernet communication:
1. Make sure Serial settings are the same as those you have set in the VideoReQuest. If using 9600, there is NO FLOW CONTROL. Otherwise, there is RTS/CTS HW Flow Control.
2. If connecting via TCP/IP, verify the following:
   a. The IP address in the TCP/IP client is the same as the IP set in the VideoReQuest
   b. When you select the VideoReQuest from your source page, VRQ-ETHERNET-CONNECT goes HIGH
   c. You are able to ping the VideoReQuest's IP Address from your computer

B) I have one-way control but I can't get any feedback:
1. Make sure you are not getting any errors when you compile the program. Pay special attention to errors such as "SIMPL Windows Cross Compiler not installed" or "SIMPL Windows can not open *VRQConnect_v1_5.usp*". The second of these suggests that the program was not imported correctly. See page 2 for information on importing the program.
2. Make sure you are **pulsing** the *START-SERIAL-COMMUNICATIONS* or *START-ETHERNET-COMMUNICATIONS* input to the module. This will send the data feedback request to the VideoReQuest. The VideoReQuest will not send any data until it is requested. Make *sure* that this is being sent by verifying in Test Manager. The following is the string sent by the module to enable text feedback:
   \xFC\xA0\x05\x01\x00\x00\x00\x03\x00\x01\x06\x00
3. Make sure you have the latest version of the VideoReQuest Crestron Demo Program by going to www.request.com and clicking on Support along the top, then Crestron down the left side under the VideoReQuest heading.
4. Upload **ONLY** the VideoReQuest Crestron demo program and demo touch screens available on our web site. This will eliminate any errors made when integrating the VideoReQuest Macro into your Crestron program and will help you determine if the problem is in the programming or the VideoReQuest.

C) Getting garbage text or lines not refreshing on Crestron Touch panels:
If you are plugged into a built in Serial Port on the back of an X-series control processor then you are most likely overflowing the buffer (255 Bytes) that goes with the internal serial port. The best way to fix this is to add an internal CNX-COM2 card. This problem has been fixed on 2-series processors from Crestron as each Serial Port has an 8k buffer.

D) The text is being drawn slowly on the touch screens:
If there are a lot of touch panels attached to one control processor then make sure you are using an "Indirect Text Broadcast" to send the serial data out to the touch panels. This does a broadcast of serial text to all of the touch panels instead of sending each line to each touch panel individually.

E) **When I go into the VideoReQuest pages on my touch panel nothing happens:**

1. Verify that you are pulsing the START-SERIAL-COMMUNICATIONS or START-ETHERNET-COMMUNICATIONS signal when you select the VideoReQuest from your source page

2. Try to navigate on the panel. Occasionally after a program or touch panel is loaded, the indirect text doesn't update automatically.