

**Kramer Electronics, Ltd.**



# **RC-SV Configuration Guide**

**Revision 1**

**Intended for Kramer Technical Personnel or external  
System Integrators. To check that you have the latest  
version, go to the DOWNLOADS section of our Web site  
at <http://www.kramerelectronics.com>.**

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Overview</b>	<b>1</b>
2.1	System Requirements for the Kramer RC Configuration 2 Software	2
2.1.1	System Requirements	2
2.1.2	Operating Systems	2
<b>3</b>	<b>Initial Planning</b>	<b>3</b>
<b>4</b>	<b>The RC Configuration Software</b>	<b>4</b>
4.1	Installing the Software	4
4.2	Downloading and Installing the Drivers	6
4.2.1	Download the Drivers	6
4.2.2	Install the Drivers	7
4.2.3	Creating a Driver Command	11
4.3	Port Mapping	13
4.4	The Kramer RC Configuration Main Window	15
4.4.1	The RC Command Area	18
<b>5</b>	<b>Creating a Macro</b>	<b>20</b>
5.1	Labeling the Buttons	22
5.2	Creating a Driver Command	23
5.2.1	An RS-232 Command – Switch Input to Output	23
5.2.2	A Relay Command – Turn Lights ON	24
5.2.3	A Switcher Command	24
5.2.4	A Power Amplifier Command	25
5.2.5	An LCD Keypad Command	26
5.2.6	Setting the Button State and Color	26
5.2.7	The Ignore Button Command	27
<b>6</b>	<b>The Kramer RC Configuration Menus</b>	<b>28</b>
6.1	The File Menu	28
6.2	The Edit Menu	29
6.3	The Configuration Menu	29
6.4	The Device Menu	30
6.4.1	The Connect Command	30
6.4.2	The Device Properties Dialog Box	31
6.5	The Help Menu	31
6.6	Load Firmware	32
<b>7</b>	<b>Connecting a Room Controller as a Stand Alone Device (Master)</b>	<b>34</b>
7.1	The Port Manager in the Stand Alone Mode	35
7.2	The Device Properties Window in the Stand Alone Mode	35
<b>8</b>	<b>Connecting via the ETHERNET</b>	<b>36</b>
8.1	Connecting the ETHERNET Port directly to a PC (Crossover Cable)	36
8.2	Connecting the ETHERNET Port via a Network Hub (Straight-Through Cable)	37
<b>9</b>	<b>Writing a Configuration</b>	<b>37</b>

## Figures

Figure 1: Media Room Components List	3
Figure 2: Driver Database Notice	5
Figure 3: Setting a Working Directory	5
Figure 4: Change Working Directory Window	6
Figure 5: The Driver Manager Window Prior to Installing the Drivers	7
Figure 6: Importing a Kramer Driver File	8
Figure 7: Exporting a Kramer Driver File	8
Figure 8: The Driver Manager Window	9
Figure 9: New Serial Command Window	11
Figure 10: Writing the Serial Commands	11
Figure 11: New IR Command Window	12
Figure 12: Connect to IR Capture Device Window	12
Figure 13: IR Command Area Window	13
Figure 14: IR Emitter Wiring	13
Figure 15: The Sony DVD Player in the RC Command Area	14
Figure 16: The Port Manager Window	14
Figure 17: The Kramer RC Configuration Main Window	15
Figure 18: Event Macros Tab	17
Figure 19: Using the Toggle 1-2-3-4 Behavior	18
Figure 20: IR, RS-232 and RS-485 Port RC Command Area	18
Figure 21: Relay Port RC Command Area	18
Figure 22: Switcher Port RC Command Area	19
Figure 23: Switcher Port RC Command Area	19
Figure 24: Button Color Port RC Command Area	19
Figure 25: Ignore Button Port RC Command Area	20
Figure 26: Selecting a Button to Write a Macro	20
Figure 27: Creating a New Command	21
Figure 28: Selecting the Port	21
Figure 29: Setting the Delay Time and Button Lighting	22
Figure 30: Labeling the RC Buttons	22
Figure 31: Typing the Label	22
Figure 32: Switch to COMP1 Command	23
Figure 33: Lights ON RC Command	24
Figure 34: Switcher RC Command	25
Figure 35: High Volume RC Command	25
Figure 36: Keypad LCD RC Command	26
Figure 37: Change Color RC Command	27
Figure 38: Select Button Color	27
Figure 39: Ignore RC Command	28
Figure 40: The File Menu	28
Figure 41: The Edit Menu	29
Figure 42: The Configuration Menu	29
Figure 43: The Device Menu	30
Figure 44: Device Selection Dialog Box	30
Figure 45: Device Properties Window	31
Figure 46: The Help Menu	31

Figure 47: Load Firmware Upgrade Window (SV-551)	32
Figure 48: Load Firmware Upgrade Window (RC-6x)	33
Figure 49: Transforming to the Stand Alone Configuration	34
Figure 50: Standalone Device Description	34
Figure 51: The Port Manager in the Stand Alone Mode	35
Figure 52: The Device Properties Window in the Stand Alone Mode	35
Figure 53: Local Area Connection Properties Window	36
Figure 54: Internet Protocol (TCP/IP) Properties Window	37
Figure 55: Loading a Configuration	38

## Tables

Table 1: Driver Manager Window Features	10
Table 2: The Port Manager Window Features	15
Table 3: Kramer RC Configuration Window Features	16
Table 4: IR, RS-232 and RS-485 Port Command Area Features	18
Table 5: File Menu Features	28
Table 6: Edit Menu Features	29
Table 7: Configuration Menu Features	29
Table 8: Device Menu Features	30
Table 9: Connect Dialog Box	30
Table 10: Connect Dialog Box	31
Table 11: Help Menu Features	31

## 1 Introduction

Welcome to Kramer Electronics! Since 1981, Kramer Electronics has been providing a world of unique, creative, and affordable solutions to the vast range of problems that confront the video, audio, presentation, and broadcasting professional on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better! Our 1,000-plus different models now appear in 11 groups<sup>1</sup> that are clearly defined by function.

Congratulations on purchasing your Kramer Room Controller (RC) device, which is ideal for controlling A/V equipment and media room items.

The configuration software is part of the package and includes this *RC-SV Configuration Guide*<sup>2</sup>.

## 2 Overview

The Kramer SummitView™ Essentials Kit and Standard Kit present a solution for the integration of media and control in classrooms, training rooms and presentation rooms. It includes the Kramer **SV-551 SummitView™ Processor / Switcher** and a set of room controllers<sup>3</sup> that can be configured via the *Kramer RC configuration 2* software.

This software is designated to configure the:

- **SV-551** in a SummitView™ Essentials Kit and Standard Kit (the **SV-551** is defined as the Master and the room controllers are slaves)
- **RC-6x<sup>4</sup>** Room Controller (the room controller is connected as a stand alone unit and is defined as the master), see section 7.

From this section on, the information refers to both setups (the SummitView™ Essentials Kit and Standard Kit setup, and the RC Stand alone setup), unless noted otherwise.

---

1 GROUP 1: Distribution Amplifiers; GROUP 2: Switchers and Matrix Switchers; GROUP 3: Control Systems; GROUP 4: Format/Standards Converters; GROUP 5: Range Extenders and Repeaters; GROUP 6: Specialty AV Products; GROUP 7: Scan Converters and Sealers; GROUP 8: Cables and Connectors; GROUP 9: Room Connectivity; GROUP 10: Accessories and Rack Adapters; GROUP 11: Sierra Products

2 Download up-to-date Kramer user manuals and guides from the Internet at this URL: <http://www.kramerelectronics.com>

3 Wall plates are also included in the kit but they are not configured

4 Refers to the Kramer RC-62 and RC-63 families

The **SV-551**, SummitView™ Essentials Kit and Standard Kit<sup>2</sup> user manual describes the installation process of the system<sup>1</sup>. The *RC-SV Configuration Guide* describes how to use the configuration software.

Before you operate the RC system:

- Import the drivers of the peripheral devices
- Configure your system<sup>2</sup>
- Write the configuration<sup>2</sup>
- Install the room controller system

## **2.1 System Requirements for the Kramer RC Configuration 2 Software**

This section describes the system requirements for the Kramer RC Configuration software.

### **2.1.1 System Requirements**

The system requirements include:

- 400MHz processor
- 128MB RAM
- At least 300MB free hard disk space
- Microsoft® Internet Explorer 6.0
- Network connection for configuring devices or USB
- Microsoft.NET® Framework 2.0 Service Pack 1, automatically installed (see section 4.1)

### **2.1.2 Operating Systems**

Microsoft® Windows XP® is the recommended operating system<sup>3</sup>.

---

1 For installing the RC as a standalone unit, refer to its user manual

2 The SV-551 for the SummitView™ system and the RC-6x for the stand alone setup

3 Windows NT does not support .NET 2.0.

### 3 Initial Planning

Carefully plan your RC system layout to ensure a smooth and easy configuration and installation (refer to the **SV-551**, SummitView™ Essentials Kit and Standard Kit<sup>2</sup> User Manual<sup>1</sup>), by:

- Defining your requirements
- Listing the peripheral devices and room items that will be included in the system
- Planning the location of each device
- Planning the function of each device

Make a detailed list of the functions and commands required of the system devices, as illustrated in the partial list in Figure 1:

Media room components list		
Device	Functions	Commands Used
Blinds (relay)	Shut out External lighting	Open Close
Projector (RS-232)	Show presentation	Turn on Turn off Change inputs Focus
VCR (IR-1)	Play Video	Play Stop Pause Rewind

Figure 1: Media Room Components List

Once this list is finalized and approved, you can carry on with the configuration and installation process.

Note that the RC configuration and installation processes are independent of each other. You do not have to connect the RC device before starting the configuration

<sup>1</sup> Download up-to-date Kramer user manuals and guides from the Internet at this URL: <http://www.kramerelectronics.com>

## 4 The RC Configuration Software

The *Kramer RC Configuration 2* software lets you set a sequence of commands (the macro) and assign them to any of the buttons on the RC device.

The *Kramer RC Configuration 2* software lets you:

- Create your own device drivers manually or via the IR learner feature
- Write, modify or delete commands
- Change the order of commands within the macro
- Set delay times between commands in a macro
- Set the button lighting and color
- Change text on the LCD displays on the RC units
- Save multiple sets of RC device configurations
- Read macros from the RC device

The RC buttons can be configured prior to installation

The following sections describe how to:

- Install the software (see section 4.1)
- Download the device drivers (see section 4.2)
- Create Serial and IR commands (see section 4.2.3)
- Map the ports (see section 4.3)
- Use the Kramer RC Configuration main window (see section 4.4)
- Write a macro (see section 4.4.1)

### 4.1 Installing the Software

Prior to using the *Kramer RC Configuration 2* software, make sure that the “.NET Framework” Revision 2.0 software is installed on your PC. If it is not, you need to install it:

- If you have a fast Internet connection, this software is automatically installed during the installation of the *Kramer RC Configuration 2* software
- If you do not have a fast Internet connection, insert the CD-ROM into the CD-ROM drive, double click the *dotnetfx.exe*<sup>1</sup> file and follow the on-screen instructions<sup>2</sup>

---

<sup>1</sup> File names are liable to change

<sup>2</sup> Installation may take about 15 minutes

Before getting started with your *Kramer RC Configuration 2*, you must download the software and then install it. You can download it<sup>1</sup> from the Internet. To do so:

1. Go to our Web site at <http://www.kramerelectronics.com> and download the file: “*Kramer RC Config2.zip*” from the DOWNLOADS section.
2. Extract the file “*Kramer RC Config2.zip*” package, which includes the *Kramer RC configuration 2* application setup and the Kramer device drivers<sup>2</sup>, to a folder (for example, C:\Program Files\Kramer RC Configuration).
3. Install the *Kramer RC Configuration 2* application.  
When running Setup, you are prompted to set the working directory (see Figure 2):



Figure 2: Driver Database Notice

4. Click OK.  
The following window appears (see Figure 3):

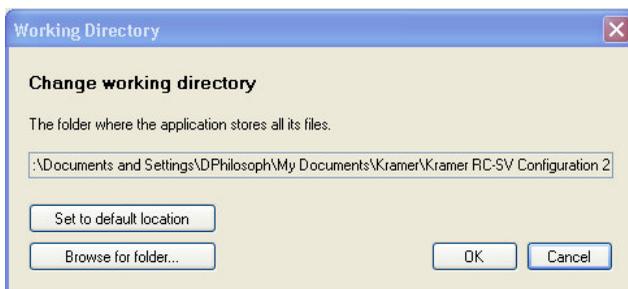


Figure 3: Setting a Working Directory

---

<sup>1</sup> File names are liable to change from time to time

<sup>2</sup> Mostly for matrix switchers and switchers

5. Select or create a new working directory<sup>1</sup> (see Figure 4).



Figure 4: Change Working Directory Window

6. Continue to run the setup according to the installation instructions.

## 4.2 Downloading and Installing the Drivers

The RC system peripheral devices have device drivers that let them communicate with computers. The device driver needs to be installed so that the computer can recognize it and control it. The *Kramer RC Configuration 2* software uses driver commands to control these peripheral devices.

### 4.2.1 Download the Drivers

Check—according to your list of peripheral devices (see the example in Figure 1)—that you have all the required drivers:

- Kramer machines have drivers that are provided within the package
- Other peripheral device drivers that are included in the package

Download the required drivers to a folder (for example, C:\Media-Room-1\Peripheral Device Drivers).

---

<sup>1</sup> The working directory will keep the information that is essential for operating the software. This information will remain unchanged while upgrading the software

## 4.2.2 Install the Drivers

The peripheral device drivers are installed via the Driver Manager window, defined in Figure 8 and Table 1:

To access the Driver Manager window:

1. Open the *Kramer RC Configuration 2* program.
2. From the File menu, click Driver Manager.  
The Driver Manager window appears (see Figure 5).

When open, the Driver Manager window lets you:

- Import one or more drivers (Import Drivers..., see Figure 6), or export an existing driver (Export Driver..., see Figure 7)
- Add a new device driver
- Rename or delete devices, revisions and commands, as defined in Table 1
- Set the driver revision date
- Write new commands

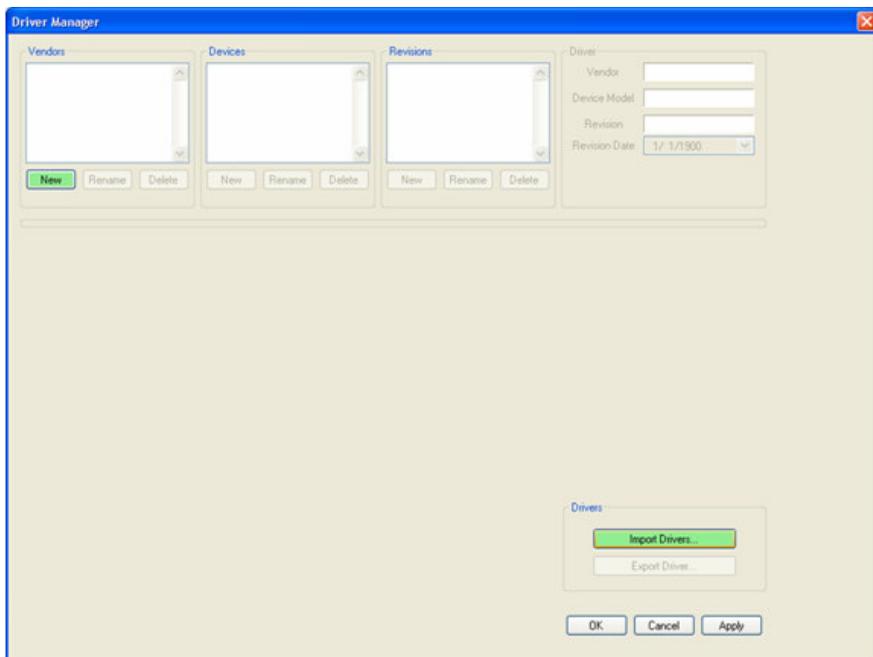


Figure 5: The Driver Manager Window Prior to Installing the Drivers

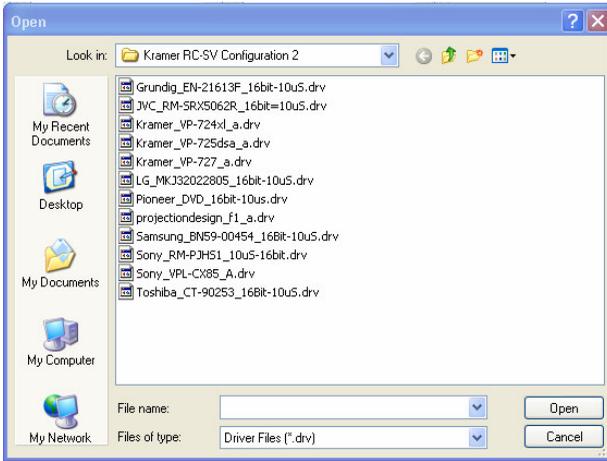


Figure 6: Importing a Kramer Driver File

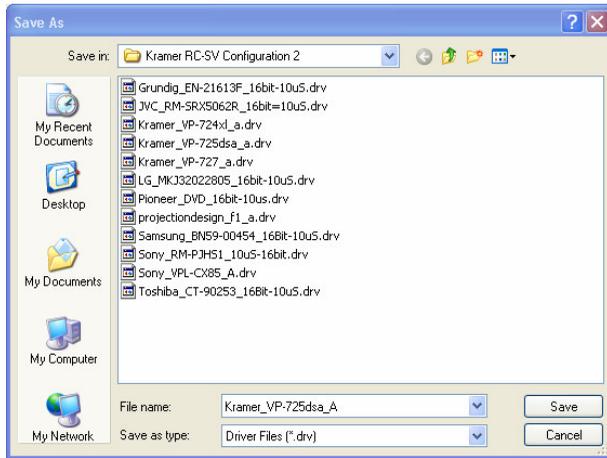


Figure 7: Exporting a Kramer Driver File

Figure 8 and Table 1 define the Driver Manager window:

# The RC Configuration Software

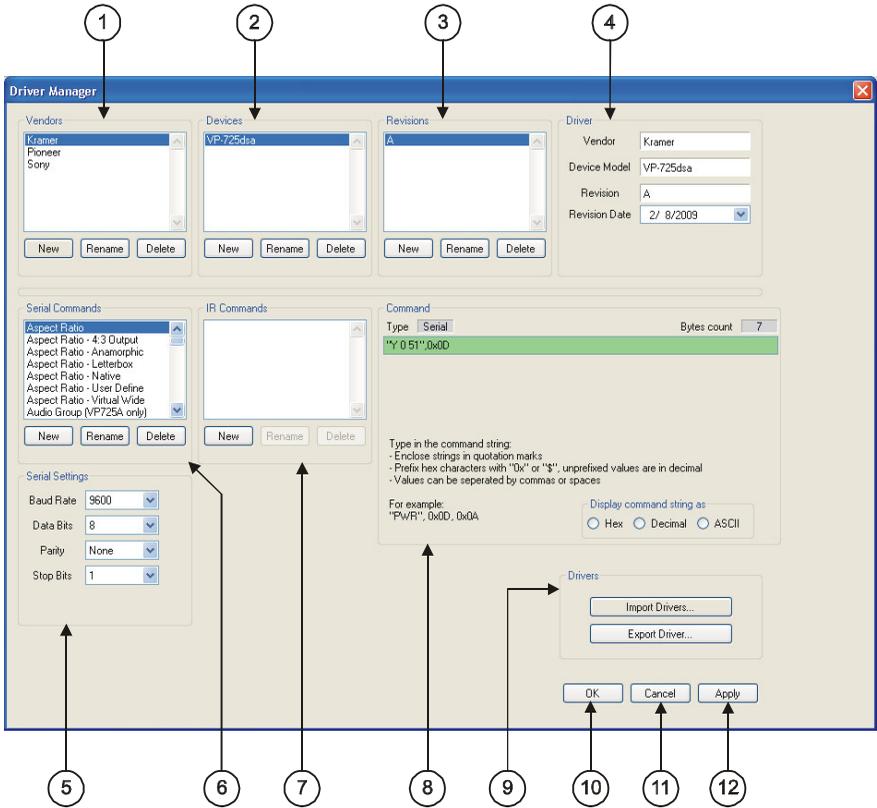


Figure 8: The Driver Manager Window

## The RC Configuration Software

*Table 1: Driver Manager Window Features*

#	Feature	Function
1	<i>Vendors Area</i>	Lists the downloaded vendors New: press to enter a new vendor name manually Rename: press to rename the vendor name Delete: erases the selected vendor
2	<i>Devices Area</i>	Lists the names of devices of a selected vendor (in the Vendors area) New: press to enter a new device name manually Rename: press to rename the device name Delete: press to erase the selected device
3	<i>Revisions Area</i>	Lists the revision of a selected device New: press to enter a new revision manually Rename: press to rename the revision number Delete: press to erase the selected revision
4	<i>Driver Area</i>	Displays the selected <i>Vendor</i> , <i>Device Model</i> and <i>Revision</i> . Lets you set the <i>Revision Date</i>
5	<i>Serial Settings Area</i>	Select the serial settings for the device: the <i>Baud Rate</i> , the <i>Data Bits</i> , the <i>Parity</i> and the <i>Stop Bits</i>
6	<i>Serial Commands Area</i>	Lists the serial command names for a specific device New: press to enter a new command name manually Rename: press to rename the Command editing tab Delete: press to erase the selected command
7	<i>IR Commands Area</i>	Lists the IR command names for a specific device New: press to enter a new command name manually Rename: press to rename the Command editing tab Delete: erases the selected command
8	<i>Command Area</i>	Displays the command type (see Figure 10 and Figure 13)
9	<i>Drivers Area</i>	Import Drivers...: press to import one or more driver files Export Driver...: press to export a driver file
10	<i>OK Button</i>	Apply changes and close window
11	<i>Cancel Button</i>	Close window without applying changes
12	<i>Apply Button</i>	Apply changes, but do not close window

### 4.2.3 Creating a Driver Command

You can write two types of commands to a connected device (for example, a DVD<sup>1</sup>):

- Serial commands (see section 4.2.3.1)
- IR commands (see section 4.2.3.2)

#### 4.2.3.1 Creating a Serial Command

To write the serial commands for the selected device, click the New button in the Serial Commands area. The New Serial Command window appears. Type the new command name:

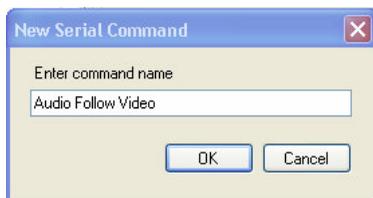


Figure 9: New Serial Command Window

A Serial Command type area appears, as illustrated in Figure 10.

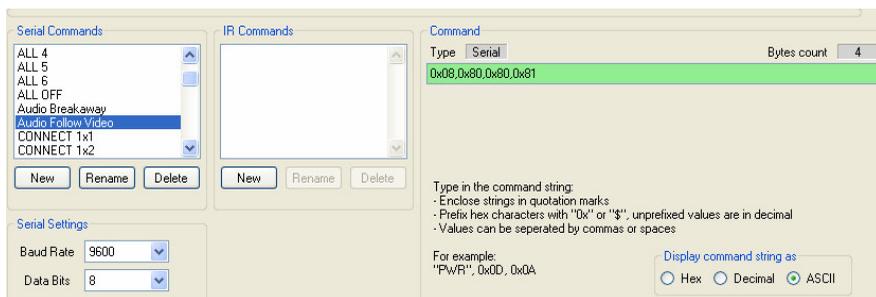


Figure 10: Writing the Serial Commands

The serial commands created can be sent via the RS-232 and RS-485 ports.

<sup>1</sup> Or a Kramer machine

### 4.2.3.2 Creating an IR Command

To create IR commands for a selected device, connect the RC device directly<sup>1</sup> to your PC via the USB connector and use the remote control transmitter<sup>2</sup> to learn its IR commands.

To write a new IR command to the RC device:

1. Click the New button in the IR commands area to type the new command name.

The following window appears:



Figure 11: New IR Command Window

2. In the Command area, click the Connect to IR Capture Device button (see Figure 13), select the port and click OK:



Figure 12: Connect to IR Capture Device Window

3. Click the Read IR button to read the command.  
The command area displays the following message: “Ready for reading IR command. Please send IR command to the device”.
4. Press the appropriate button on the remote control transmitter.  
The command area displays the following message: “IR command reading”.  
The IR command appears, as illustrated in Figure 13:

---

<sup>1</sup> Whether it is defined as a Slave or a standalone Master

<sup>2</sup> Of the machine from which you want to learn the IR commands. For example, use the DVD control transmitter to write the DVD commands to the driver manager



Figure 13: IR Command Area Window

You can test the IR command by connecting the RC unit IR terminal block connectors to the device via the IR emitter, and then clicking the IR-Out Testing button.

Figure 14 shows how to connect the IR emitter<sup>1</sup>. The white striped side connects to IR OUT, the black side connects to the Ground, and the LED Emitter Shell is affixed to the IR sensor window with the adhesive layer.

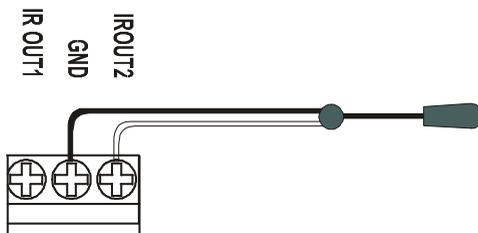


Figure 14: IR Emitter Wiring

**NOTE:** The dual IR emitter emits a weaker IR signal that may not be detected by some devices

### 4.3 Port Mapping

The Port Manager window defines the ports on the Master device (**SV-551** or **RC-6x**, depending on the type of installation) and lets you write a description and assign a default driver for each port. For example, if a DVD is connected to the **SV-551** via the IR\_2 port, you can change the description next to that port to “Sony DVD” and assign the Sony DVD driver to this port.

In this way, the Sony driver will be associated with the Sony DVD port<sup>2</sup> when creating a command sequence as illustrated in Figure 15, making it easier to

<sup>1</sup> Using the Kramer 3.5mm to IR Emitter Control Cable (C-A35/IRE-10)

<sup>2</sup> Although you can assign it with a different Vendor or Device

select the commands (also see section 4.4.1). The same applies to all the ports in the Port Manager window.

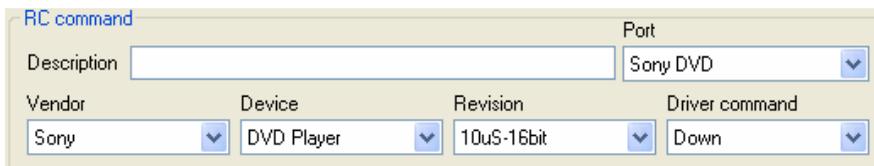


Figure 15: The Sony DVD Player in the RC Command Area

For the RS-232 and RS-485 ports on the unit, the Port Manager window also lets you set the baud rate, data bits, parity and stop bits.

To open the Port Manager window, click the “Port Manager...” item in the Configuration menu (see section 6.3). Figure 16 shows the Port Manager window for Kramer **SV-551 SummitView™ Processor / Switcher**<sup>1</sup>.

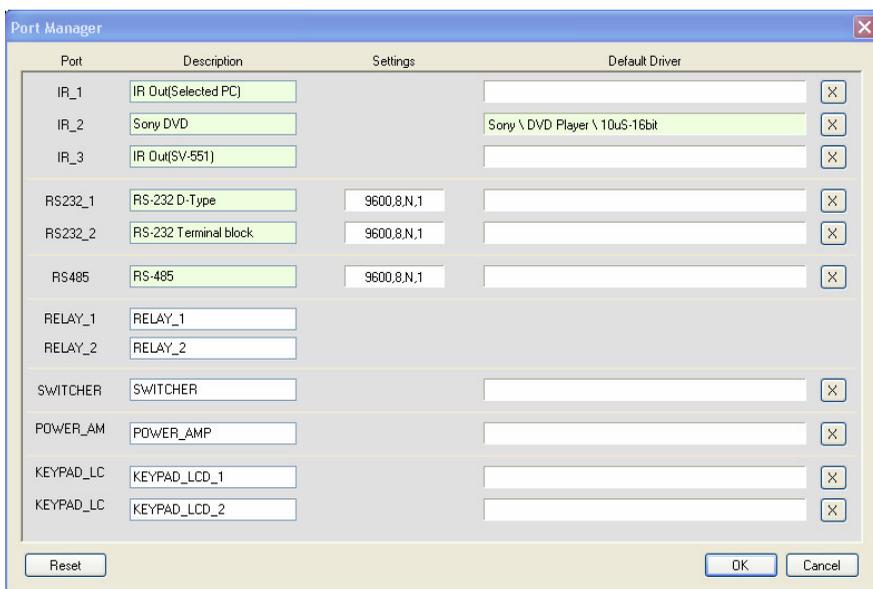


Figure 16: The Port Manager Window

<sup>1</sup> Figure 51 shows the Port Manager window for the RC-6x stand alone setup

Table 2: The Port Manager Window Features

The Item	Description
Port	Lists the ports available for the selected machine
Description	Type a description of the port
Settings	For serial ports, press the white area to open the serial Settings window and define the baud rate and parity For Ethernet ports, press the white area to open the Ethernet Settings window and define the IP address and TCP port
Default Driver	Press the white area to open the Drivers Tree window and select the default driver for this port
	Press to clear the Default Driver data
Reset	Press to reset to default definitions

### 4.4 The Kramer RC Configuration Main Window

After importing the drivers and defining the ports, use the Kramer RC Configuration main window to assign a sequence of commands (the macro) for each RC button. Figure 17 illustrates the *Kramer RC Configuration 2* main window, and Table 3 defines it:

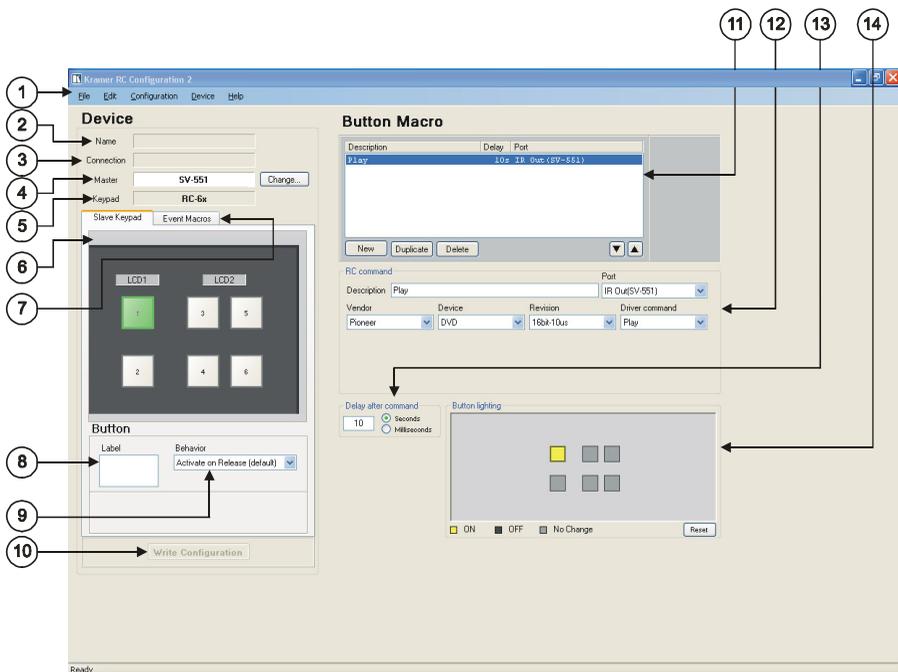


Figure 17: The Kramer RC Configuration Main Window

Table 3: Kramer RC Configuration Window Features

#	Feature		Function												
1	Menu Bar		Menus are described in section 6												
<b>Device Area</b>															
2	Name Box		Displays the name of the specific device <sup>1</sup>												
3	Connection Box		Displays the connection properties with the device (IP address or com port) <sup>1</sup>												
4	Master Box		Select the Master device to which the slave keypad is connected. Click the change button to change the master device type and the Slave Keypad appearance (from a list)												
5	Keypad Box		Select the device type <sup>2</sup>												
6	Slave Keypad Tab		Shows the layout of the RC buttons according to the device type selected, with the labels on the button. Click to Select a button to configure, modify, read, or delete its macro. When the button is: <ul style="list-style-type: none"> <li>• Blue rimmed, it is assigned a command sequence</li> <li>• Green, it is selected</li> <li>• Gray, it is not assigned a macro</li> </ul>												
7	Event Macros Tab		By default, one event command sequence is assigned and can have commands added to it: Startup – a series of commands to be executed upon unit startup (see Figure 18)												
8	Button Area <sup>3</sup>	Label Text Box	Select a button and type the required button label												
9		Behavior Drop-down Box	Assign the button response to press and release actions												
			<table border="1"> <thead> <tr> <th>Button Definition</th> <th>Behavior</th> </tr> </thead> <tbody> <tr> <td>Activate on Release (default)</td> <td>The macro is executed upon releasing the button</td> </tr> <tr> <td>Activate while Pressed</td> <td>The macro is activated and repeated for as long as the button is pressed</td> </tr> <tr> <td>Toggle 1-2-3-4</td> <td>Cycling macro behavior: The button can be assigned with up to 4 different macros. Each time it is pressed, the next macro in the set will be activated in a cyclic fashion.<sup>4</sup></td> </tr> <tr> <td>Toggle Press-Release</td> <td>Dual macro behavior: One macro is activated when pressing the button and the other is activated when releasing the button</td> </tr> <tr> <td>Disabled</td> <td>The button is disabled</td> </tr> </tbody> </table>	Button Definition	Behavior	Activate on Release (default)	The macro is executed upon releasing the button	Activate while Pressed	The macro is activated and repeated for as long as the button is pressed	Toggle 1-2-3-4	Cycling macro behavior: The button can be assigned with up to 4 different macros. Each time it is pressed, the next macro in the set will be activated in a cyclic fashion. <sup>4</sup>	Toggle Press-Release	Dual macro behavior: One macro is activated when pressing the button and the other is activated when releasing the button	Disabled	The button is disabled
			Button Definition	Behavior											
			Activate on Release (default)	The macro is executed upon releasing the button											
			Activate while Pressed	The macro is activated and repeated for as long as the button is pressed											
			Toggle 1-2-3-4	Cycling macro behavior: The button can be assigned with up to 4 different macros. Each time it is pressed, the next macro in the set will be activated in a cyclic fashion. <sup>4</sup>											
Toggle Press-Release	Dual macro behavior: One macro is activated when pressing the button and the other is activated when releasing the button														
Disabled	The button is disabled														
10	Write Configuration Button <sup>5</sup>		Press to write the configuration of all the buttons to the device												

1 The name and IP number are initially set by the Properties dialog box (see section 7.2)

2 The device type can be selected only if there is no device connected to the computer. If a device is connected, the device type is selected automatically

3 The Button area appears only after selecting a button in the Front Panel tab

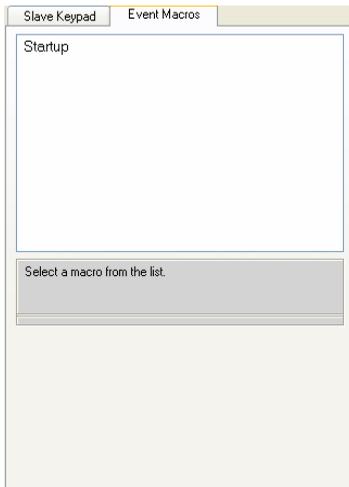
4 The number of toggle states can be determined (from 1 to 4). The selected number of toggle states appears above the Button Macro area (see Figure 19)

5 This button is enabled only when a device is connected to the PC. Otherwise it is disabled

## The RC Configuration Software

#	Feature	Function
<b>Button Macro Area</b>		
11	Button Macro Display Box	Displays the macro RC commands' Description, Delay and Port in sequence. Select an RC command to duplicate, delete, or change its position in the sequence
	<i>New</i> Command Button	Click to add a new command to the Button Macro display box <sup>1</sup> (see section 4.4.1)
	<i>Duplicate</i> Command Button	Duplicate a command in the Button Macro display box
	<i>Delete</i> Command Button	Delete a command from the Button Macro display box
	 Button	Move up the selected command
	 Button	Move down the selected command
12	<i>RC command</i> Area (see section 4.4.1)	Appears different for different ports and includes the following features of the command selected in the Button Macro display box:
	Description Text Box	Optional descriptive text for the command
	<i>Port</i> Drop-down Box	Displays the port associated with the RC command: Select a port when modifying or writing a new RC command
13	<i>Delay after command</i> Text Box <sup>2</sup>	Set a delay time following the command <sup>3</sup>
15	<i>Button lighting</i> Area <sup>2</sup>	Select the buttons that will illuminate, turn dark or remain the same following a command (the lighting configuration can be different for each command within the sequence). Toggle between ON (yellow), OFF (black) and No Change (gray). You can also click reset to reset the buttons to No Change (gray)

Figure 18 shows the Event Macros Tab:



*Figure 18: Event Macros Tab*

1 The button macro display box displays <No Description> under Description and None under Port

2 Shows after checking this option in the configuration menu (see section 6.3)

3 In seconds or milliseconds, via check box

Figure 19 shows the Toggle button behavior:



Figure 19: Using the Toggle 1-2-3-4 Behavior

#### 4.4.1 The RC Command Area

The RC Command area appears different for the various types of ports.

##### 4.4.1.1 The IR, RS-232 and RS-485 Ports RC Command Area

Figure 20 and Table 4 define the IR, RS-232 and RS-485 Port Command area:

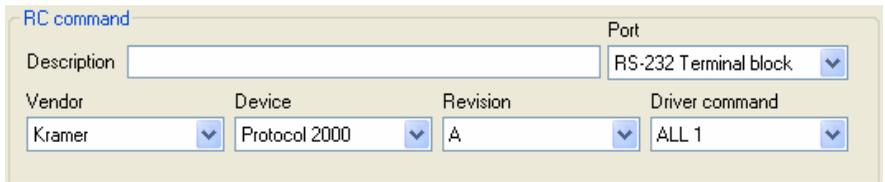


Figure 20: IR, RS-232 and RS-485 Port RC Command Area

Table 4: IR, RS-232 and RS-485 Port Command Area Features

Drop-down Box	Description
Vendor Drop-down Box	Displays the current vendor. Select the vendor when writing a new RC command or modifying a selected command
Device Drop-down Box	Displays the device driver name. Select the device driver when modifying or writing a new RC command
Revision Drop-down Box	Displays the device driver revision. Select a revision when modifying or writing a new RC command
Driver command Drop-down Box	Displays the current driver command. Select a driver command when writing a new command or modifying a selected command

##### 4.4.1.2 The Relay Port RC Command Area

The relay RC Command Area includes the Relay command drop-down box (Close, Open):

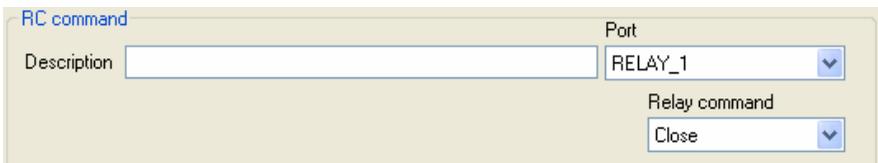


Figure 21: Relay Port RC Command Area

#### 4.4.1.3 The Switcher Port RC Command Area

The switcher port command area includes the **SV-551** Switcher command drop-down box (Video 1, Video 2, PC1, PC2 and PC3):

Figure 22: Switcher Port RC Command Area

#### 4.4.1.4 The Keypad LCD Port RC Command Area

The keypad LCD port RC Command area includes the LCD command drop-down box, which lets you type any text (up to 8 characters) to the LCD display on the control device:

Figure 23: Switcher Port RC Command Area

#### 4.4.1.5 The Button Color Port RC Command Area

The button color port RC Command area lets you select the button color and state (On Off, Fast Blink and Slow Blink) for each button:

Figure 24: Button Color Port RC Command Area

#### 4.4.1.6 The Ignore Button Port RC Command Area

The Ignore/ Unignore command lets you control whether a press of a button will issue the associated sequence of commands for that button. For example, inserting "IGNORE button 4" into another button's command macro, will actually disable button 4 until the "UNIGNORE button 4" command will be issued from another command macro.



Figure 25: Ignore Button Port RC Command Area

## 5 Creating a Macro

A macro includes a sequence of commands assigned to a selected button on the RC device.

To create a sequence of commands:

1. Press a button in the Slave Keypad tab to select the button to which you want to write the macro. The button turns green:

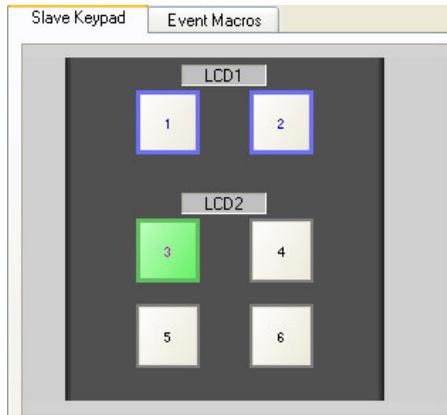


Figure 26: Selecting a Button to Write a Macro

2. Click the New button in the Button Macro area:

## Creating a Macro

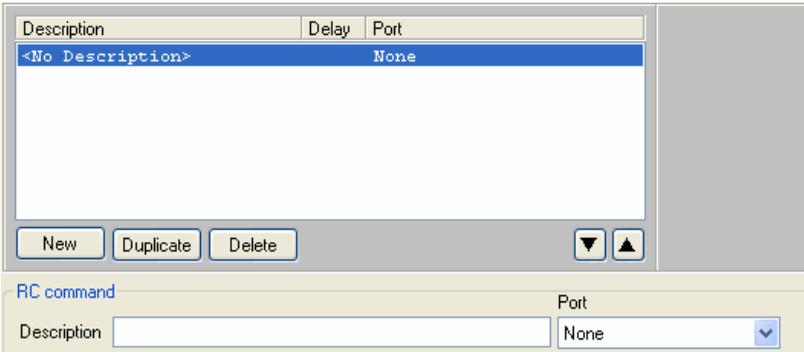


Figure 27: Creating a New Command

3. Select a port<sup>1</sup> from the drop-down box (for example, the RS-232 terminal block). The default driver appears.
4. Select a command from the Driver command area and write its description. Click the up or down arrow to save the command to the macro:

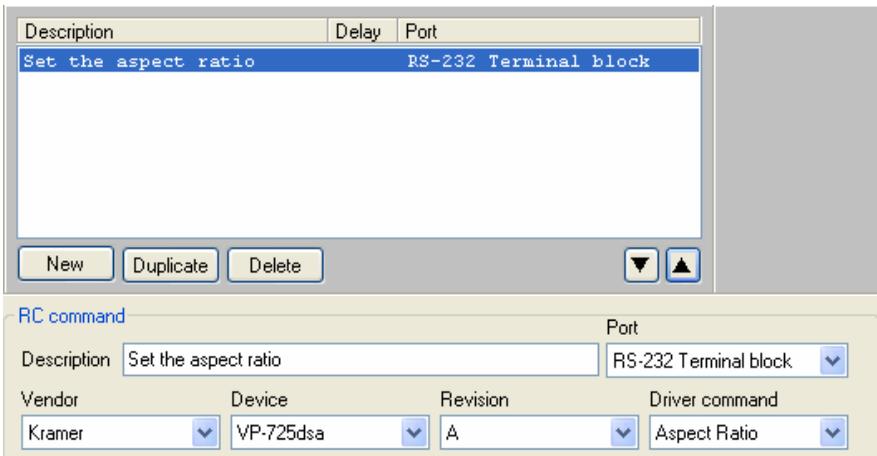


Figure 28: Selecting the Port

5. Repeat this process to add new commands. Click Duplicate to duplicate the command and delete a command by clicking the Delete button.
6. If required, set a delay time after the command or set the button lighting:

<sup>1</sup> This is an example. The RC command area appears different for different ports, as described in section 5.2

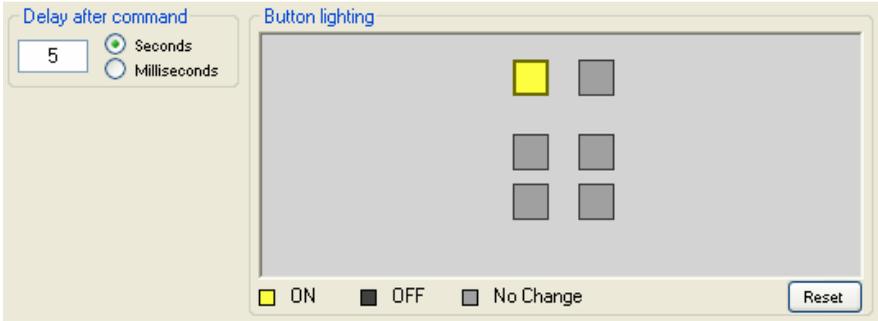


Figure 29: Setting the Delay Time and Button Lighting

## 5.1 Labeling the Buttons

For your convenience, you can label the buttons in the Slave Keypad tab area, as illustrated in the example in Figure 30.

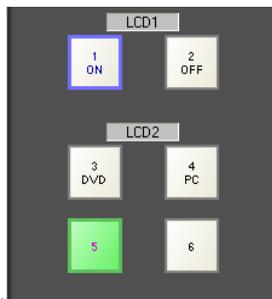


Figure 30: Labeling the RC Buttons

To label a button:

1. Open the Kramer RC Configuration main window.
2. Select a button.
3. Type the button text in the Label area:



Figure 31: Typing the Label

## 5.2 Creating a Driver Command

The driver commands for each port are slightly different. The following sections describe how to write a new command for the different ports.

### 5.2.1 An RS-232 Command – Switch Input to Output

To add a driver command to a button (for example, to switch the DVD player to the projector), do the following:

1. Open the Port drop-down box and select the RS-232 Terminal Block (or IR OUT or RS-485) port<sup>1</sup> from the list<sup>2</sup>.  
If a driver was assigned in the port mapping stage, the default driver associated with this port appears.
2. In the RC command area, write the command description (for example, SWITCH).
3. Select the Driver command (for example, “COMP!”) from the drop-down box<sup>2</sup>.

Figure 32 illustrates the RS-232 RC Command area as it appears after writing the driver command:

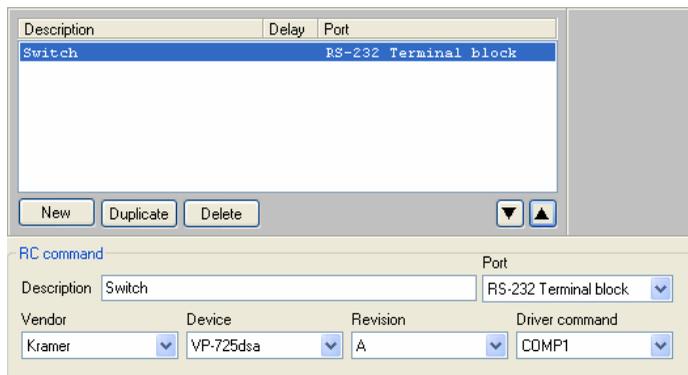


Figure 32: Switch to COMP1 Command

<sup>1</sup> Once the port is selected, the default driver details appear

<sup>2</sup> If the required data does not exist, you can install it via the Manager Driver window (see section 4.1)

### 5.2.2 A Relay Command – Turn Lights ON

To write a relay command on an RC button (for example, turn the lights on), do the following:

1. Select the Relay Port (for example, RELAY\_1)
2. In the RC command area, write the command description (for example, Lights ON).
3. Select the relay command (for example, Close).

Figure 33 illustrates the RC Command area as it appears after writing the command:

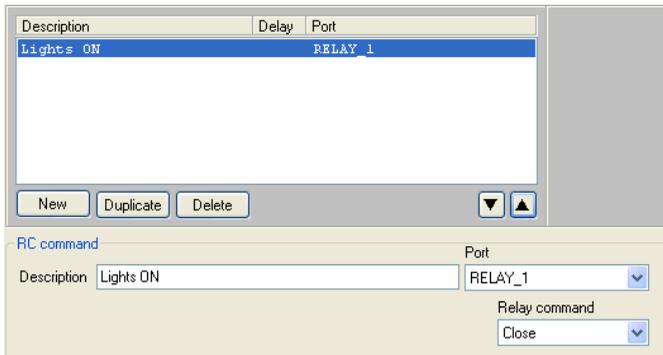


Figure 33: Lights ON RC Command

### 5.2.3 A Switcher Command

Use the Switcher command to select an input connected to the Kramer SV-551 (Video 1, Video 2, PC 1, PC2 and PC 3). The switcher command applies to the master-slave configuration only.

To write a switcher command on an RC button, do the following:

1. Select the SWITCHER Port.
2. In the RC command area, write the command description (for example, Select).
3. Select the switcher command (for example, Video 1).

Figure 34 illustrates the RC Command area as it appears after writing the command:

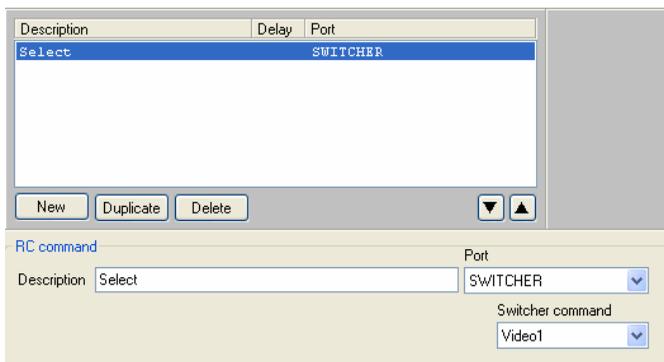


Figure 34: Switcher RC Command

### 5.2.4 A Power Amplifier Command

To write a power amplifier command<sup>1</sup> on an RC button, do the following:

1. Select the POWER\_AMP Port.
2. In the RC command area, write the command description (for example, High Volume).
3. Select the power amplifier command (for example, Volume set).
4. Move the sliding switch to the desired volume (for example, 12dB).

Figure 34 illustrates the RC Command area as it appears after writing the command:

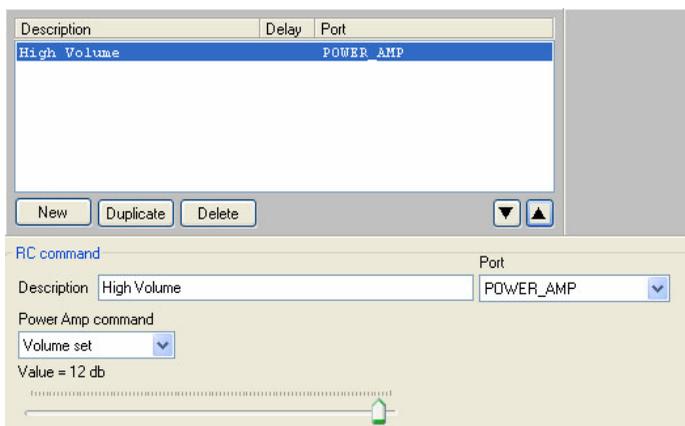


Figure 35: High Volume RC Command

<sup>1</sup> For the Master-Slave configuration only

### 5.2.5 An LCD Keypad Command

The LCD Keypad command lets you type-in the desired text to the LCD displays (LCD 1 and LCD 2).

To write an LCD keypad command on an RC button, do the following:

1. Select the KEYPAD\_LCD Port (1 or 2).
2. In the RC command area, write the command description (for example, Switcher).
3. Type-in the desired text.

Figure 34 illustrates the RC Command area as it appears after writing the command:

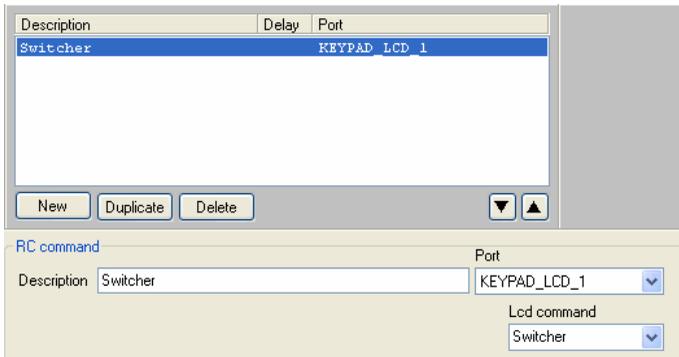


Figure 36: Keypad LCD RC Command

### 5.2.6 Setting the Button State and Color

To write a Button Color command on an RC button, do the following:

1. Select the BUTTON\_COLOR Port.
2. In the RC command area, write the command description (for example, Change Color).
3. Select the Button ID (from 1 to 6) to which this command refers<sup>1</sup>.
4. Set the state of the button (On, Off, Fast Blink, Slow Blink), for example, On.
5. Set the Button Color (see Figure 38).

Figure 37 illustrates the RC Command area as it appears after writing the command:

<sup>1</sup> For example, the command is written to button 1 but refers to an action taken for button 4

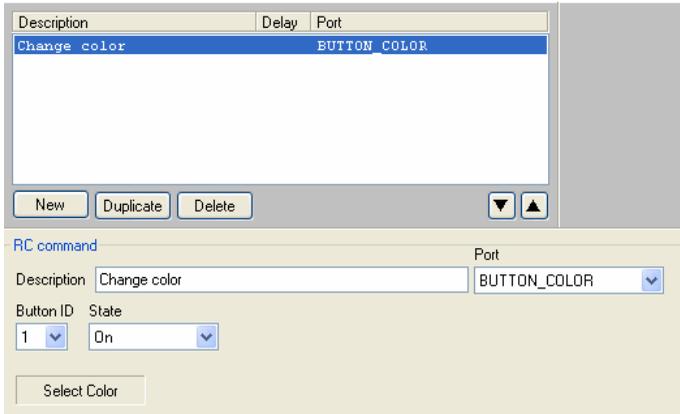


Figure 37: Change Color RC Command



Figure 38: Select Button Color

### 5.2.7 The Ignore Button Command

To write a Button Ignore command (see Figure 39) on an RC button (for example, button 1), do the following:

1. Select the IGNORE BUTTON Port.
2. In the RC command area, write the command description (for example, Ignore Button 4).
3. Select the Button ID (from 1 to 6) to which this command refers<sup>1</sup>, for example button 4.
4. Set the state of the button (Ignore, Unignore), for example, Ignore.

<sup>1</sup> For example, the command is written to button 1 but refers to an action taken for button 4

Figure 39 illustrates the RC Command area as it appears after writing the command to button 1:

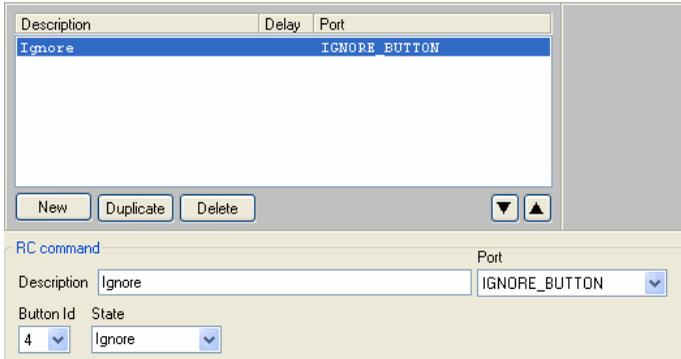


Figure 39: Ignore RC Command

## 6 The Kramer RC Configuration Menus

This section describes the Kramer RC Configuration menus.

### 6.1 The File Menu

Figure 40 illustrates the File menu and Table 5 defines it:

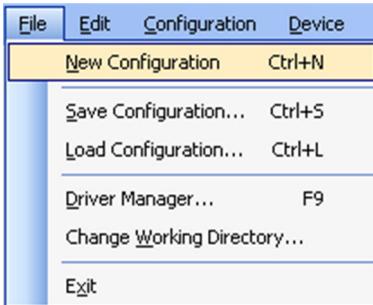


Figure 40: The File Menu

Table 5: File Menu Features

Menu Command	Function
New Configuration	Click to create a new device configuration <sup>1</sup> .
Save Configuration...	Click to save the current configuration.
Load Configuration...	Click to load a saved configuration.
Driver Manager ...	Click to open the Manage Drivers window (see section 4.2.2).
Change Working Directory...	Click to set the new working directory <sup>2</sup> .
Exit	Click to exit the program.

<sup>1</sup> This will discard the active configuration

<sup>2</sup> The working directory can be changed at any time

## 6.2 The Edit Menu

Figure 41 illustrates the Edit menu and Table 6 defines it:

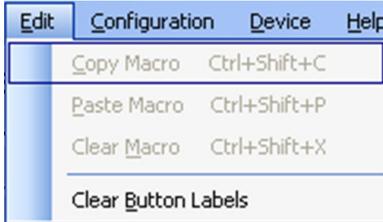


Figure 41: The Edit Menu

Table 6: Edit Menu Features

Menu Command	Function
Copy Macro	Click to copy a button macro command sequence.
Paste Macro	Click to paste a button macro command sequence.
Clear Macro	Click to clear the Macro-commands sequence box.
Clear Button labels	Click to clear all the button labels.

## 6.3 The Configuration Menu

Figure 42 illustrates the Configuration menu and Table 7 defines it:

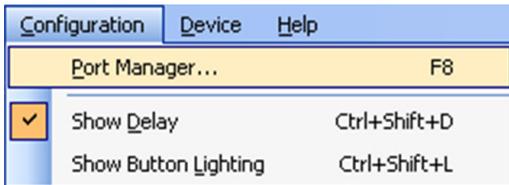


Figure 42: The Configuration Menu

Table 7: Configuration Menu Features

Menu Command	Function
Port Manager	Lists the ports names, description, settings and drivers (see section 4.3).
Show Delay	Check to show in RC main configuration window.
Show Button Lighting	Check to show in RC main configuration window.

## 6.4 The Device Menu

Figure 43 illustrates the Device menu and Table 8 defines it:

Table 8: Device Menu Features

Menu Command	Function
Connect...	Click to connect to a device via an IP number or serial port.
Disconnect	Click to disconnect the device
Properties <sup>1</sup>	Click to show the device properties dialog box.
Write Configuration <sup>1</sup>	Writes the configuration to the device.
Load Firmware	Load file for firmware upgrade.
Set As Slave	Enabled when the RC is connected as a stand alone unit. Lets you set the device as a slave. The RC controller will automatically disconnect.



Figure 43: The Device Menu

### 6.4.1 The Connect Command

To connect a device, do the following:

1. Open the Device menu and click Connect. The Connect window appears (see Figure 44).
2. Select the Connection method and type the IP number of the desired device (or port).

Table 9: Connect Dialog Box

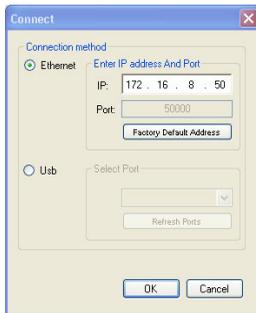


Figure 44: Device Selection Dialog Box

Feature	Function
Connection Method Area	Check <i>Ethernet</i> to select connection to the device via the Ethernet. Check <i>Usb</i> to select connection to the device via a USB connector.
Ethernet Area	<i>IP</i> : Type the IP number of the device you want to connect to. <i>Port</i> : shows the port number. <i>Factory Default Address</i> Button: Press to reset the IP number to its default value.
USB Area	<i>Port</i> : select the communication USB port. <i>Refresh ports</i> : click to check if there are ports ready to connect on the Kramer device.

<sup>1</sup> Active only when a device is connected

## 6.4.2 The Device Properties Dialog Box

To connect a device, open the Device menu and click Properties. The Device Properties window Appears (see Figure 45). Figure 52 shows the Device Properties window in the stand alone setup.

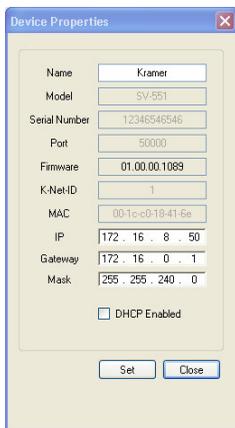


Figure 45: Device Properties Window

Table 10: Connect Dialog Box

Feature	Function
Name, IP, Gateway, Mask	If required, change information.
Model, Serial number, Port, Firmware, K-Net-ID, MAC,	Displays information.
DHCP <sup>1</sup> Enabled	Check box to enable operation in the DHCP mode. When in the DHCP mode, you can only change the name of the device. This process may take several minutes and will cause an automatic restart on the device.

## 6.5 The Help Menu

Figure 46 illustrates the Help menu and Table 11 defines it:

Table 11: Help Menu Features

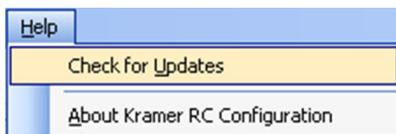


Figure 46: The Help Menu

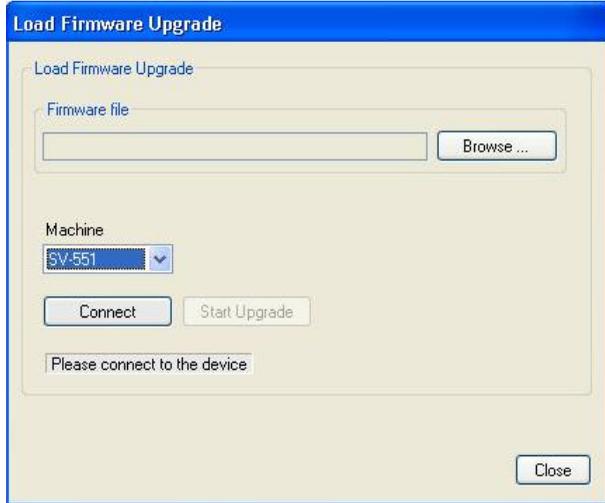
Menu Command	Function
Check for updates	Search the Kramer Electronics Web site for software updates.
About Kramer RC Configuration	Shows the current software version.

<sup>1</sup> Dynamic Host Configuration Protocol: Allows the network administrator to distribute IP addresses from a central point and automatically send a new IP address when an Ethernet point is plugged into a different network location

## 6.6 Load Firmware

To load new firmware:

1. From the Device menu select Load Firmware.  
The Load Firmware Upgrade window appears:



*Figure 47: Load Firmware Upgrade Window (SV-551)*

2. Click the Browse button to find the firmware file.
3. Select the machine from the drop-down list box<sup>1</sup>.

---

<sup>1</sup> When selecting a room controller device such as RC-6x, you have to select the connection method: Direct connection or Connection via SV-551 via K-NET

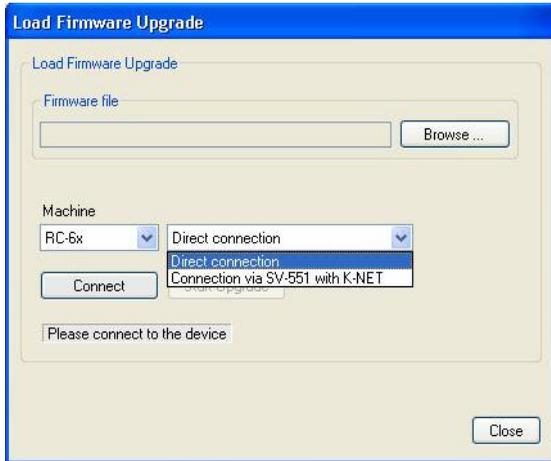


Figure 48: Load Firmware Upgrade Window (RC-6x)

4. Connect to the device.
5. Click the Connect button to connect the device and then click Start Upgrade.
6. Upon completion, open the Device Properties window (see Figure 45) to make sure the firmware was upgraded<sup>1</sup>.

---

<sup>1</sup> If the firmware number remains the same, close the Device Properties windows, disconnect and then reconnect the device, and open the Device Properties window again to check the firmware number

## 7 Connecting a Room Controller as a Stand Alone Device (Master)

You can configure the Room Controller to be used as a standalone device. To do this you have to connect the Room controller directly to your PC via the USB connector.

To define the RC as a Master device:

1. From the Device Menu, click Connect....
2. Select the connection method to be USB, select the port and click OK.  
The following warning appears:

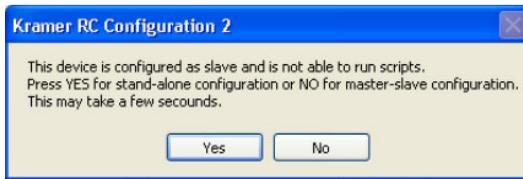


Figure 49: Transforming to the Stand Alone Configuration

3. Click Yes.  
The room controller is now stand alone and the Device description appears as follows:

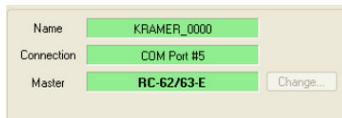


Figure 50: Standalone Device Description

When in the stand alone mode, you can write the command sequences directly to the room controller by clicking the Write Configuration button in the Device area (see section 9).

The following windows will appear differently when in the standalone mode:

- The Port Manager window, see section 7.1
- The Device Properties window, see section 7.2

## 7.1 The Port Manager in the Stand Alone Mode

The Port Manager displays the ports relevant to the room controller, as illustrated in Figure 51:

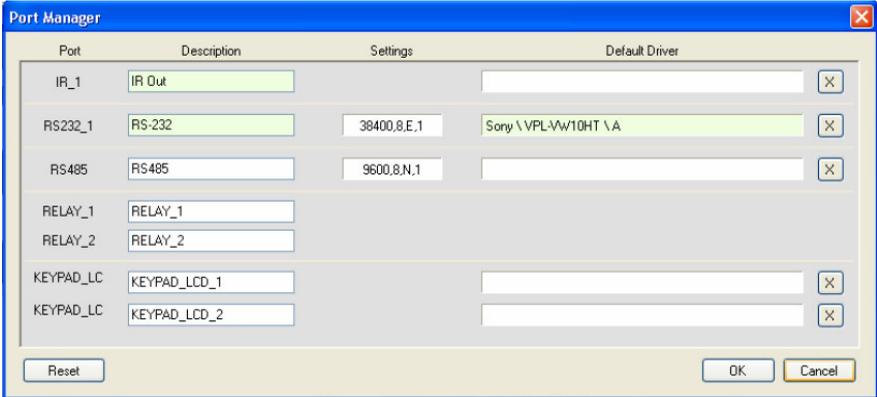


Figure 51: The Port Manager in the Stand Alone Mode

## 7.2 The Device Properties Window in the Stand Alone Mode

Figure 52 shows the Device Properties window in the stand alone mode:

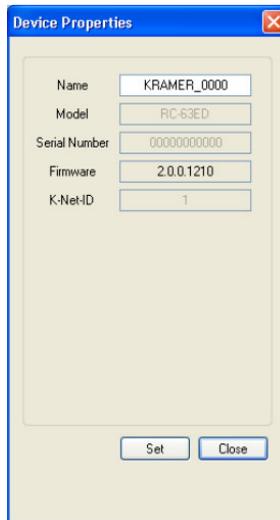


Figure 52: The Device Properties Window in the Stand Alone Mode

To exit the stand alone mode open the Device menu and select Set as Slave.

## 8 Connecting via the ETHERNET

You can connect the **SV-551** via the Ethernet, using a crossover cable (see section 8.1) for direct connection to the PC or a straight through cable (see section 8.2) for connection via a network hub or network router.

### 8.1 Connecting the ETHERNET Port directly to a PC (Crossover Cable)

You can connect the Ethernet port of the RC device to the Ethernet port on your PC, via a crossover cable with RJ-45 connectors.

This type of connection is recommended for identification of the factory default IP Address of the RC device (192.168.1.39) during the initial configuration

After connecting the Ethernet port, configure your PC as follows:

1. Right-click the My Network Places icon on your desktop.
2. Select **Properties**.
3. Right-click Local Area Connection Properties.
4. Select **Properties**.  
The Local Area Connection Properties window appears.
5. Select the Internet Protocol (TCP/IP) and click the **Properties** Button (see Figure 53).

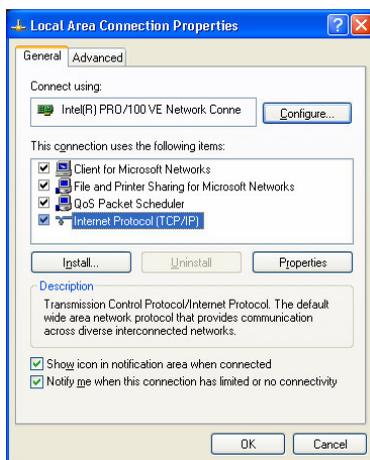


Figure 53: Local Area Connection Properties Window

6. Select Use the following IP Address, and fill in the details as shown in Figure 54.
7. Click OK.

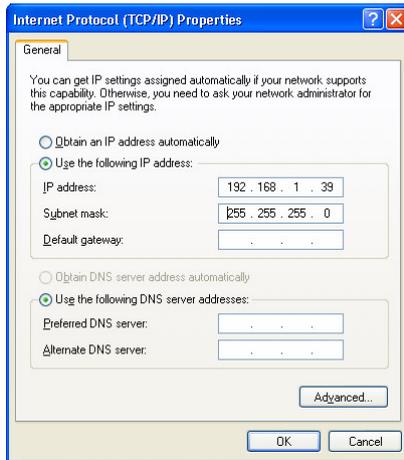


Figure 54: Internet Protocol (TCP/IP) Properties Window

## 8.2 Connecting the ETHERNET Port via a Network Hub (Straight-Through Cable)

You can connect the Ethernet port of the RC device to the Ethernet port on a network hub or network router, via a straight-through cable with RJ-45 connectors.

## 9 Writing a Configuration

Once your configuration is ready, you can write it to the device, via the “Write Configuration” button.

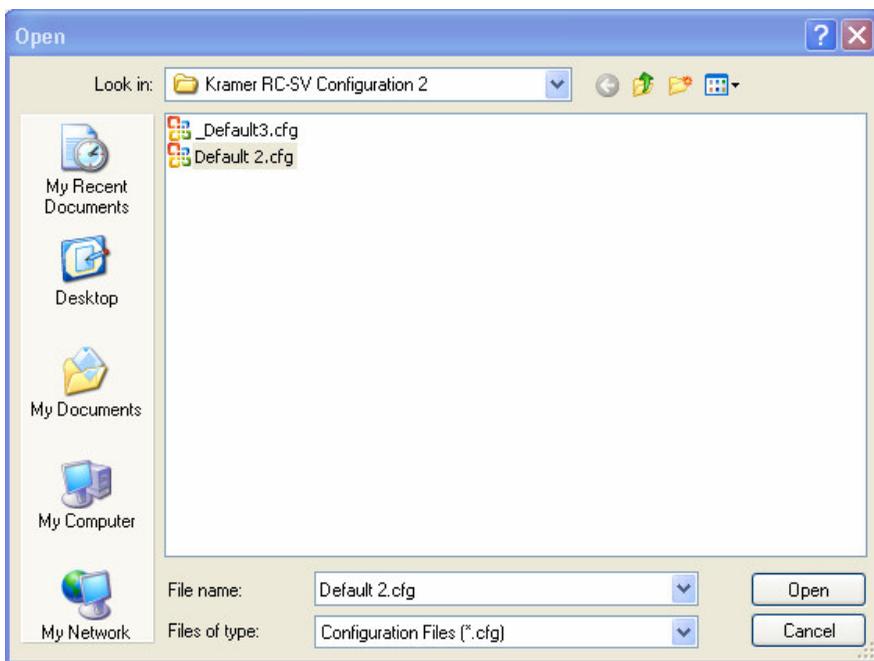
Note that if the room controller is defined as a:

- Master (stand alone), the configuration is written directly to the device
- Slave device (the room controller is connected to the **SV-551**), the configuration is written to the **SV-551**

In case you have written the configuration to a stand alone device and it is now connected as a slave to the **SV-551**, you have to write the configuration once again after defining the device as a slave.

To write a configuration to the device, do the following:

1. Connect the PC to the:
  - **RC-6x** (stand alone) to write the configuration directly to the **RC-6x**
  - **SV-551** (in a SummitView™ kit setup) to write the configuration to the **SV-551**
2. From the File menu, select Load Configuration<sup>1</sup>....  
The Open window appears (see Figure 55).
3. Click Open<sup>1</sup>
4. In the Device area in the RC Configuration 2 main window, click the Write Configuration button<sup>2</sup>.  
The configuration is written to the device.



*Figure 55: Loading a Configuration*

<sup>1</sup> Skip this step if you have the desired configuration loaded

<sup>2</sup> The Write Configuration button is enabled only when the device is connected