

APPENDIX I  
: USER'S MANUAL

**Universal Remote Control**



**OWNER'S MANUAL**

simply MORE powerful™

**RF20**

**MasterControl™**

## Congratulations!

Congratulations on purchasing Universal Remote Control's MASTERCONTROL™ RF10 Pre-programmed and Learning Remote Control! You now have the power to control your entire home entertainment system with one easy-to-use remote. The RF10 can be used with thousands of audio/video components because of the extensive code library pre-programmed into the remote. And, the RF10's impressive lineup of special advanced features can automate and customize the operation of your system in many ways. So... get ready to sit back, relax and simplify your home entertainment experience.

The Quick Setup DVD Program Guide supplied with the RF10 will assist you in programming your remote by guiding you through an easy step-by-step process. This Owner's Manual is designed as a companion reference source to the DVD Guide, should you need to refer back to a particular section, or review certain instruction detail not covered in the DVD. However, if you are unable to watch the DVD Guide for some reason, everything you need to know about programming the RF10 is contained in this Manual.



**UNIVERSAL**<sup>®</sup>  
remote control

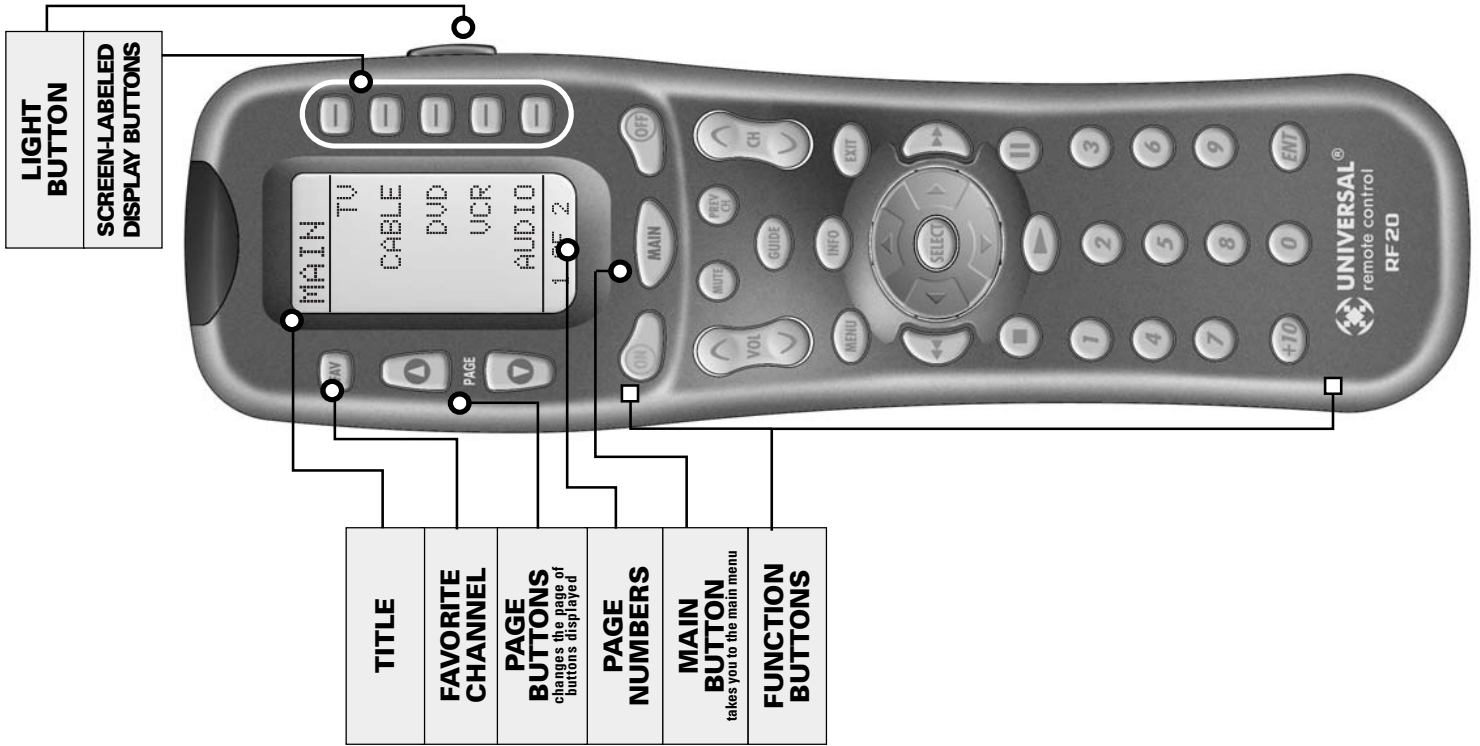
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MASTERCONTROL™ RF10 Owner's Manual  
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Warning: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Note: The manufacturer is not responsible for any Radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

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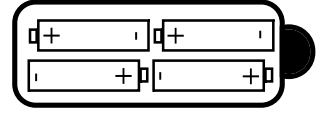
### Getting Started-Overview

This is what MASTERCONTROL™ RF20 is all about! The RF20 is designed to operate up to 10 different Audio/Video Components and is pre-programmed to operate virtually all brands of TV, VCR, DVD and CD Players, Cable Set Top Boxes, Satellite Receivers, TiVo and other DVRs, Audio Components, Tape Decks, Multimedia PCs, XM Radio, Ipod, X-Box, Lighting Controls and other custom installation products. It also offers an impressive lineup of special features designed to provide you with many time-saving conveniences and enhance your overall entertainment experience. However, we strongly recommend that you fully complete all of the Basic Setup steps before proceeding to customize your RF20 with any of the special advanced features.

### Battery Installation

The very first step is to insert the four AAA batteries that are included in the package into the battery compartment located in the back of the remote. Just press the tab and lift off the cover. Please be sure to insert the batteries correctly as you see in the diagram. Remember, there is a positive and negative end to each battery and you can

tell by the + (positive) and - (negative) symbols. Once the batteries are correctly installed, replace the cover. Now you're ready to start!



## Activating Component Commands – Simple, Easy, Intuitive

Once you've programmed RF20 for your Components, all you have to do to operate a specific Component is first, press the MAIN button. This will display Page 1 of the MAIN menu on the LCD screen. Page 1 of the MAIN menu displays five Components. Then, simply select the Component you want to operate by pressing the corresponding Screen-Labeled Component Display Button on the right side of the LCD Screen. As an example, if you press the TV Display Button, the display label at the top of the screen will change from MAIN to TV, and all the buttons on RF20 will work your TV. To operate another Component, simply press the MAIN button again to return to Page 1 of the

MAIN menu and select the next Component you want to operate.

If you don't see the Component you want to control on Page 1 of the MAIN menu, just use the PAGE (▲) (▼) buttons on the left side of the screen to bring up Page 2 of the MAIN menu which displays an additional five Components.

Each Component is provided with five pages of pre-labeled command display buttons (or space for additional command display buttons). Once again, simply use the PAGE (▲) (▼) buttons to take you to the next command page, or return you to the previous command page.

**TV DEVICE  
BUTTON**

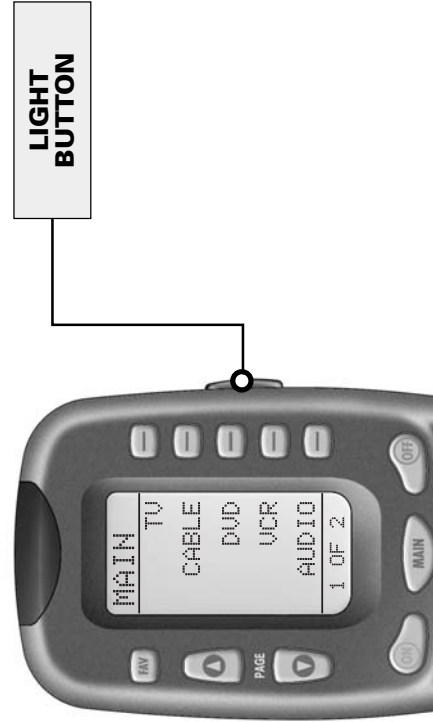
**MAIN  
BUTTON**



## Light Button

The fully backlit keypad makes the RF20 easy to use in the dark or dim lighting conditions. Simply press the LIGHT button to backlight all the keypad buttons and LCD screen. To turn off the backlight, press the LIGHT button again, or just wait ten seconds (the backlight automatically shuts itself off). Lights out!

Try it out!



## Basic Setup - Overview

There are two ways to program the RF20:

- **The Pre-Programmed Code Method**
- **The Learning Method**

The Pre-Programmed Code Method allows you to set up all the buttons at once, so it's the fastest and easiest of the two methods. The Learning Method allows you to transfer functions from other remotes (old or new), one button at a time.

## Pre-Programmed Code Method

### STEP 1:

The pre-programmed 3-digit codes are found in the back of this Manual on page 44. The codes are listed by Component category (i.e., TV, VCR, DVD, etc.), then by brand name. For instance, if you want to locate a code for a Sony TV, first locate the TV category, and then look for the Sony brand.

Once you have located the 3-digit code (or in some cases, several code numbers) for the Component that you want to operate with your RF20, write them ALL down on a piece of note paper. It's important that you write down all the codes because only one code is going to work for you.

### STEP 2:

Now, turn on the Component you want to program... let's say your TV to start. Look up your TV's manufacturer setup code from your reference list.

### STEP 3:

Press and hold the MAIN and ENT (Enter) buttons at the same time for approximately 3 seconds, until the word "SETUP" is displayed at the top of the LCD screen. This signals that you are now in setup mode.

#### IMPORTANT:

You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.



**MAIN  
BUTTON**

**ENTER  
BUTTON**

**STEP 4:**

Press the P-PRO display button to select the Pre-Programmed Method.

The screen will then display the five Components from Page 1 of the MAIN menu.

To display Page 2 of the MAIN menu that lists an additional five Components, simply press the PAGE (▲) (▼) buttons.

**STEP 5:**

Press the Component display button you want to program. For example: If you want to setup the TV Component button, press the TV Component display button. The screen will flash "FROM - TABLE".

**STEP 6:**

In this step you verify the type of component you plan to operate with this component button. For example: If you plan to operate the TV component with the TV button, simply press the TV display button once again. However, if for example you are setting up AUX to operate a second DVD Player, you would first need to press AUX in Step 5, and then DVD in Step 6.



**P-PRO  
BUTTON**



**FIRST FIVE  
DEVICE NAMES  
PAGE  
BUTTONS**



**NOTE:**

if the Component fails to turn off after you have entered all the code numbers listed for your brand, you can scan through all the other code numbers that are pre-loaded into the RF20 for that Component (in this case TV) by using the UP or DOWN display buttons on the screen. (There is a chance that your Component was actually manufactured by another brand.) However, most of the code tables are so large that it is usually faster to use the Learning Method on Page 15.

**STEP 7:**

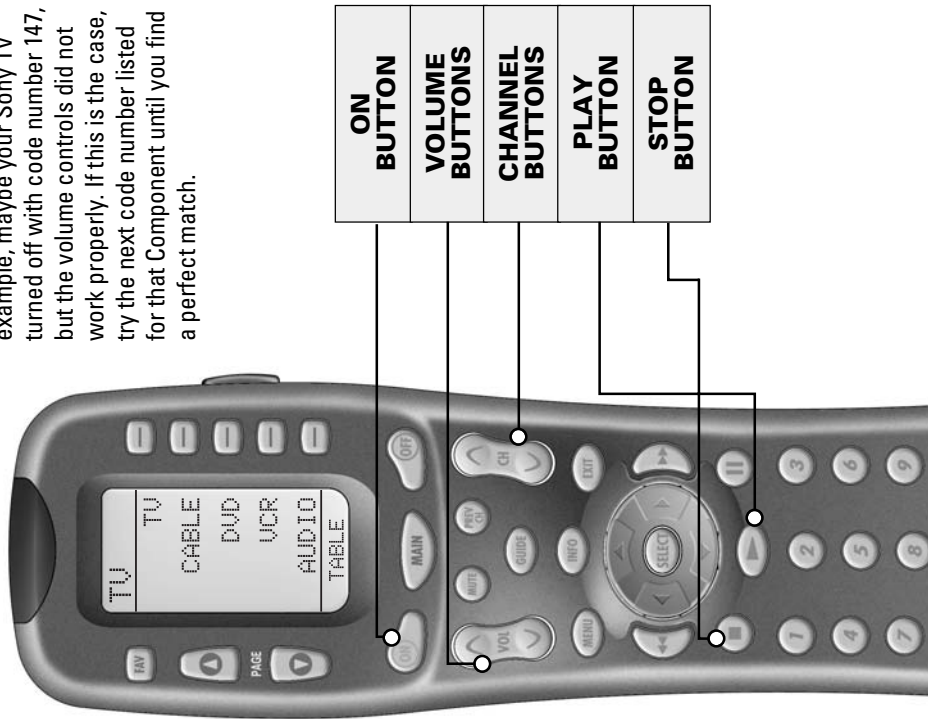
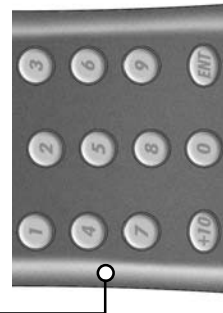
Point the RF20 toward the Component you want to program, (in this example, TV), and punch in the 3-digit code that you wrote down for that specific Component. Use the Number buttons 0-9 on the remote to punch in the code. If the 3-digit code number that you just punched in is correct, the Component will turn off.

If the Component does not turn off, continue entering code numbers from your list until the Component turns off. Some brands have several possible code numbers.

**STEP 8:**

When the Component turns off, press the ON button to turn the Component back on. Now you can test the Volume and Channel buttons (for TV), or PLAY and STOP (for VCR and DVD) to make sure they all work. If any of the buttons do not work properly, you need to find a new correct code. For

example, maybe your Sony TV turned off with code number 147, but the volume controls did not work properly. If this is the case, try the next code number listed for that Component until you find a perfect match.

**UP & DOWN  
BUTTONS****NUMBER  
BUTTONS**



**STEP 9:**

Once you have found the right code, save the code number by pressing the SAVE display button that appears on the LCD screen. The LCD screen will blink "SAVED" two times, signaling that the code number has been successfully saved.

**SAVE  
BUTTON**

**STEP 10:**

Exit SETUP mode by pressing the MAIN button two times. When the LCD screen displays MAIN, you are back in normal operating mode.

**NOW, PROGRAM THE REST OF YOUR COMPONENTS BY REPEATING STEPS 1 THROUGH 9. IN MOST SYSTEMS, YOU CAN FINISH BASIC SETUP IN JUST A FEW MINUTES AND PUT ALL YOUR OLD REMOTES AWAY.**

**IF YOU ARE STILL MISSING COMMANDS TO CONTROL ANY OF YOUR COMPONENTS, USE THE LEARNING METHOD ON PAGE 15.**

**MAIN  
BUTTON**



### Learning Method

The RF20 can actually 'learn' commands from other remote controls (old or new), one-button-at-a-time, so it will never become obsolete. RF20 is the last remote you'll ever need! Just follow these simple steps:



#### STEP 1:

Line-up the RF20 with the other remote control, head-to-head, one or two inches apart.

#### STEP 2:

On the RF20, press and hold the MAIN and ENT (Enter) buttons at the same time for approximately three seconds, until the word "SETUP" is displayed at the top of the LCD screen. This signals you are now in SETUP mode.

#### IMPORTANT

You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.

MAIN  
BUTTON

ENTER  
BUTTON



#### STEP 3:

Press the LEARN display button on the LCD screen. The top of the screen will change to "LEARN" and display the five Components from Page 1 of the MAIN menu.



To display Page 2 of the MAIN menu that lists an additional five Components, simply press the PAGE (▲) (▼) buttons.

#### STEP 4:

Select the Component you want to teach commands to by pressing that Component display button on the LCD screen (in this example, TV). The top of the TV screen will change to "TV".



**NOTE:** If you want to teach any command to a Component button, press the desired Component display button once the top of the screen displays "MAIN", by pressing the PAGE button. The top of the screen will change to "READY". Then go to STEP 6.



LEARN  
BUTTON

**STEP 5:**

Press any button on the RF20 that you want to teach a command to. The top of the screen will change to "READY" and the bottom of the screen will display the button name you pressed.



**NOTE:** If you don't see the display button you would like to teach on the LCD screen, use the PAGE (▲) (▼) buttons. The only buttons you can't teach are the PAGE and MAIN buttons.

**STEP 6:**

Press and hold the button on the other remote control that you want to 'teach' to the RF20 until the LCD display on the RF20 changes to either "GOOD" or "FAILED". If the "GOOD" label appears on top of the display, you were successful. If the "FAILED" label appears on top of the display, try 'teaching' the same button to the RF20 once again by repeating STEPS 5 and 6.

**STEP 7:**

Now, continue to teach the RF20 any other commands from your other remotes by repeating STEPS 4 through 6 (to go back to STEP 4, simply press MAIN once).

**STEP 8:**

Once you have completed teaching all the button commands to the RF20, return to normal operation by pressing the MAIN button twice.

**NOTE:** Test all your new commands. If any of them don't work, try the Learning Method again, following these suggestions:

- Move to another room. Plasma TVs, sunlight, halogen or quartz lighting can interfere with the learning process.

- Even though the old remote seems to be working fine, put in fresh alkaline batteries.

- Gradually vary the distance between the remote controls. Try 1", 2" and so on, up to 4 feet.

- Try tapping the button on your old remote instead of pressing and holding it during the learning process.

Some additional Information regarding the Learning Process:

- Learned functions override any existing pre-programmed functions on the remote control.
- All buttons can be learned except for the PAGE, MAIN and LIGHT buttons.
- Learned functions are automatically erased when a new function is learned on the same button.
- Learned functions are retained even after a different Setup Code Number is programmed into the remote.
- To return to an original pre-programmed function, a learned function must be erased.

**BASIC SETUP****BASIC SETUP**

## Transmitting (Busy Signal) Icon

When a command is being transmitted, an icon will appear in the upper right corner of the LCD screen. This indicates that a signal is being sent. This is particularly useful when setting up Macros and FAVs, since it flashes with every step of a sequence of commands.



## Customizing Your RF20 with Special Advanced Features

After you've finished all your basic setup, you can choose to make operation easier by customizing the RF20 just the way you want, using the Special Advanced Setup Features described in this section.

### Customizing the LCD Screen

You can easily edit or change the name of any of the display buttons (including Favorite Channels) on the LCD screen by following these steps:

## CHILD LOCK FEATURE

This 'child-lock' feature prevents the unauthorized use of the remote control by children. It blocks all operations of the remote control.

### To Activate:

Press the +10 and ENT (Enter) buttons simultaneously for 3 seconds. The bottom of the LCD will blink "LOCKED" three times and then display "LOCKED".

### To Return to Normal Operation:

Press the +10 and ENT (Enter) buttons simultaneously again for 3 seconds. The LCD will display the last use mode.

### STEP 1:

Press and hold the MAIN and ENT (Enter) buttons at the same time for approximately 3 seconds, until the word "SETUP" is displayed at the top of the LCD screen. This signals that you are now in setup mode.

**IMPORTANT:** You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.

### STEP 3:

Press the TEXT display button. The screen will display the list of Components and "EDIT" will appear at the top of the screen.

### STEP 4:

Navigate to the Component and page where there is a button label you want to EDIT, selecting between the FAV, MAIN, COMPONENT display buttons; then using the PAGE button.

**NOTE:** If you wish to change the name of a Component button, press the Page (▲) Up button twice. The top of the display will change to MAIN, and you can navigate to MAIN page 1 or page 2 before going on to Step 5.

### STEP 2:

Press the EDIT display button. The LCD display will change to the EDIT menu.

**STEP 5:**

Press the button you wish to edit. The first character space of your button label will start to blink.

- UP CURSOR**  
Button deletes all text
- LEFT CURSOR**  
Moves blinking character left
- DOWN CURSOR**  
deletes the currently blinking character
- RIGHT CURSOR**  
Moves blinking character right
- BLINKING CHARACTER**



**STEP 7:**

Once the character you want appears, move to the next space by pressing the Right cursor button.

**STEP 8:**

When you are finished editing the button, press the button you edited and "SAVED" will flash at the bottom of the display.

To change any other button labels on the same Component, press the next button, then repeat steps 6-8. If you wish to edit a button on another Component, press the MAIN button once, then repeat Steps 4-8.

**STEP 9:**

Once you've finished editing buttons, press the MAIN button four times to return to normal operation.

**STEP 6:**

Change the character by using any of the number keys. Each press of the same number button selects the next character of that number's group, as shown in the diagram below.



## Favorite Channel Setup

This is one of RF20's most desirable features. Once it's set up, you can select up to 40 favorite channels with the press of a button - without the need to remember or type in a channel number. Let the channel surfing begin!

To access Favorite Channel listings, simply press the FAV button to display Page 1 of Favorite Channel listings. There are eight pages of Favorite Channels, with five Channels on each page, for a total of 40 Channels. Just use the PAGE (▲) (▼) buttons to locate the Channel you want to setup. Each Channel can be setup to be instantly selected with the press of one button.

To setup a Favorite Channel button, follow these steps:

### STEP 1:

Press and hold the MAIN and ENT (Enter) buttons at the same time for approximately 3 seconds, until the word "SETUP" is displayed at the top of the LCD screen. This signals that you are now in setup mode.

#### IMPORTANT:

You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.

### STEP 2:

Press the FAV display button.

The top of the display will show "FAV". The bottom of the display will flash "SELECT"

### STEP 3:

Use the PAGE (▲) (▼) buttons until you locate the name (i.e., ABC, CBS, NBC) of the favorite channel you want to setup.

### STEP 4:

Press the favorite channel display button you want to setup. The top of the screen will change to show the channel name. The bottom of the screen displays "STEP0", indicating that you have not entered the channel number yet.

### STEP 5:

Press either the TV, SAT or CABLE Component button (select the Component you use to enter channel numbers).

### STEP 6:

Press each of the number buttons for the channel.

**Note:** If a number is repeated when setting the channel (for example, channel "33" or "522"), it is usually best to set a half second delay in between the identical numbers by pressing the (II) PAUSE button. Each press of the PAUSE button increases the delay by a half second.



**PAUSE  
BUTTON**

**NOTE:** Some brands of television require an ENT (Enter) command after the channel numbers.



**FAV  
BUTTON**

## MacroPower™ Setup

MacroPower™ is a unique feature that enables you to turn all of your Components ON or OFF, at the same time, simply with the press of one button.

We call that a "Macro". What would normally take multiple remotes and button pushes, the RF20 can accomplish with the press of one button. In addition to the Power ON or OFF buttons, any of the Display buttons (on any Component or Page) can be set to be Macro buttons as well. Feel the power!

To setup a Power ON macro button that will turn ON several components at the same time (for example, TV, VCR and CABLE), follow these easy steps:

### STEP 7:

Press the LIGHT button after you enter the channel number. A new screen appears displaying SAVE, UNDO or EXIT.

### STEP 8:

To save the channel you entered, press the SAVE display button. The UNDO display button lets you erase the last entry. The EXIT display button erases all entries for this button.

### STEP 9:

When you are finished setting up Favorite Channel buttons, press the MAIN button twice to return to normal operation.

**SAVE  
BUTTON**



### STEP 1:

Press and hold the MAIN and ENT (Enter) buttons at the same time for approximately 3 seconds, until the word "SETUP" is displayed at the top of the LCD touch screen. This signals that you are now in setup mode.

**IMPORTANT:** You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.

### STEP 4:

Press the first component display button you want the Macro to turn on (in this example, TV) and "TV" will display at the top of the screen and "STEP 1" at the bottom.

### STEP 5:

Then, press the ON button to confirm the command and "STEP 2" will display at the bottom of the screen. (NOTE: Whenever a button is pressed, another Macro step is counted and displayed at the bottom of the screen.)

### STEP 6:

Now, press the MAIN button to return to the Main Component listing. ("STEP 3" will display at the bottom of the screen.)

### STEP 2:

Press the MACRO display button on the LCD screen. The top of the screen will display "MACRO". The bottom of the display will flash "SELECT".

### STEP 2:

Press the MACRO display button on the LCD screen. The top of the screen will display "MACRO". The bottom of the display will flash "SELECT".

### STEP 3:

Press the ON button. "ON" will display at the top of the LCD screen. "STEP0" will display at the bottom of the screen indicating that no macro steps have been entered yet.

**STEP 7:**

Press the second component display button that you want the Macro to turn on (in this example, VCR) and "VCR" will display at the top of the screen. ("STEP 4" will display at the bottom of the screen.)

**STEP 8:**

Then, press the ON button to confirm the command. ("STEP 5" will display at the bottom of the screen.)

**STEP 11:**

Then, press the ON button to confirm the command. ("STEP 8" will display at the bottom of the screen.)

**NOTE :** Don't worry about the number of steps. Each macro button can store up to 190 steps, so you are not likely to run out of steps!

You can also program delays in between commands by pressing the (II) PAUSE button. Each press adds half a second to the delay.

**STEP 12:**

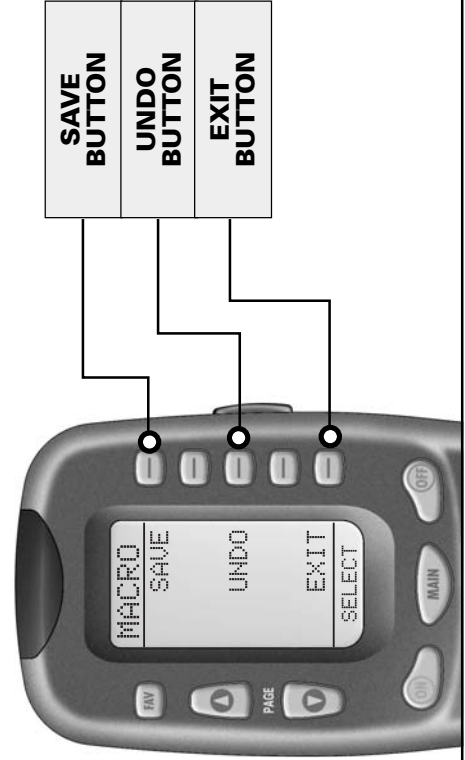
Press the LIGHT button to end your macro. A new screen will appear:

**STEP 13:**

If you are satisfied with your macro, press the SAVE display button. The UNDO display button lets you erase the last step. The EXIT display button erases all the macro steps.

**STEP 14:**

Press the MAIN button twice to return to normal operation.





## Advanced Macro Options:

### SETTING UP A POWER OFF MACRO:

Simply follow the same steps as outlined above, except press the OFF button in place of the ON button.

### SETTING A COMPONENT BUTTON AS MACRO:

If you wish to set one of the Component buttons as a macro, in STEP 3, press the Page Up button twice. The top of the display will change to MAIN, and you can navigate to MAIN page 1 or page 2. Press the Component button you want to set as a Macro button. The top of the screen will display the button label you selected. Select the Component and Page that has a button you want in your Macro using the MAIN, Component and Page buttons. Simply press the button(s) with the command(s) you want in your Macro. Then complete and save the Macro by following STEPS 12 and 13 as outlined above.

### PROGRAMMING A "PRESS & HOLD" MACRO:

Another option for Component button macros is to only send the macro if the button is pressed and held. This is setup by entering a delay as the first step of the macro. The amount of delay determines how long the user must press the button before the macro is sent. The advantage of this option is that a normal press of the COMPONENT button will simply switch Components without sending the macro command.

## SimpleSound™ Setup & Other 'Punch Throughs'

SimpleSound™ is a dynamic feature that gives you total volume control over all the Components in your system, even those without their own built-in volume control, such as TiVo, DVD and VCR... saving you the hassle and inconvenience of constantly needing to switch between Component modes on the remote. With SimpleSound™, you can set the RF20's volume control buttons to always control the sound in your system, even when you're in VCR or DVD mode, without switching back to AUDIO or TV. Even more exciting, SimpleSound™ is what is called a 'Punch Through' feature and is not limited strictly to volume control. Click and enjoy!

### STEP 1:

In a basic home entertainment system, the sound may come from your TV. In a more advanced system, the sound may come from your audio Component such as a Surround Sound Receiver or Home Theatre system. So, first, you need to identify which Component you want to use in your system for sound.

### STEP 2:

Press and hold the MAIN and ENT (Enter) buttons at the same

time for approximately 3

seconds, until the word "SETUP" is displayed at the top of the LCD screen. This signals that you are now in setup mode.

**IMPORTANT:** You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.

### STEP 3:

Press the PAGE (▲) UP button to display Page 2 of the Setup Menu on the LCD screen. Press the PUNCH display button.

### STEP 4:

Then press the VOL (Volume) display button. The screen will display "VOL" at the top. This sets up the group of three buttons (Volume Up, Volume Down and Mute) in one action!

**VOLUME  
BUTTON**



The bottom of the display flashes "PUNCH TO". Press the button for the Component that doesn't have volume control commands yet (i.e., DVD). This is the Component you are going to PUNCH TO for the volume and mute commands.

**NOTE:** If you want to PUNCH TO the MAIN Component, press the POWER OFF button at this time.

#### STEP 5:

The bottom of the display will then flash "PUNCH FROM". Now select the Component that has the volume commands you want to use (i.e., TV for systems using the TV speakers, AUDIO for systems with surround sound receivers). The bottom of the display will flash "SAVED".

#### STEP 6:

Repeat STEPS 4-5 until all your Components operate the volume perfectly.

#### STEP 7:

Press the MAIN button twice to return to normal operating mode and test your SimpleSound™ settings.

**NOTE:** The Punch Through feature is not limited to volume and can also be applied to channel selection or other functions. If you find yourself switching to a particular Component frequently to use a group of controls, consider using Punch Through for another group, as listed here:

VOL	Volume Up, Volume Down and Mute
CH	Channel Up, Channel Down, Previous Ch and Channel (0-9) buttons.
PLAY	Play, Stop, Pause, Rewind and Fast Forward
VOD	Guide, Menu, Info, Exit, Up, Down, Left, Right, Select

Simply perform the steps outlined above, but in STEP 4, press one of the control options (CH, PLAY or VOD).

## Setting Backlight Options

You can customize the backlighting feature to suit your specific preferences by following these simple steps:

### Adjusting Length of Backlight Time

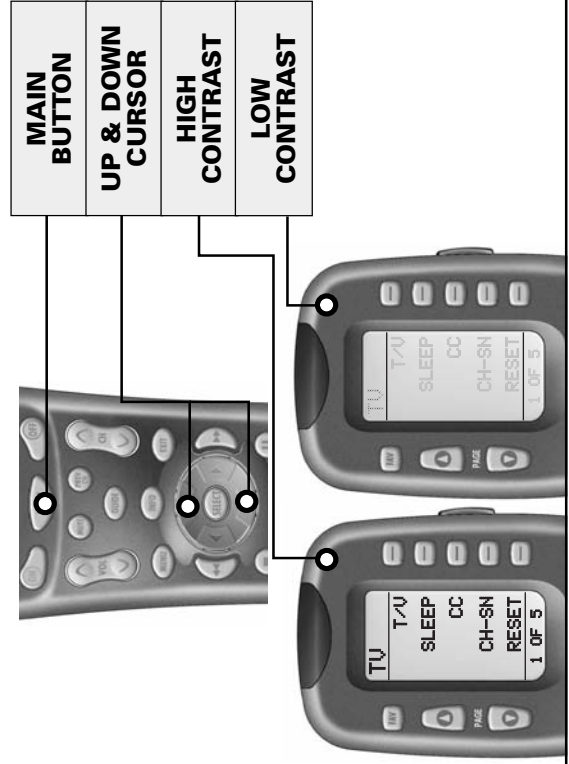
You can adjust the amount of time that the RF20 backlight stays on by entering the SETUP mode and proceeding to page 2 (using the PAGE (▲) UP button), then pressing the LIGHT display button on the LCD screen (not the Backlight button). Then enter the amount of time you would like the light to stay on using the number pad (0-99 seconds). After making your selection, press the SAVE display button.

### Adjusting Contrast

You can make the text darker by pressing both the MAIN and cursor UP buttons at the same time. To make the text appear lighter, press both the MAIN and cursor DOWN buttons at the same time.

### Turning OFF Backlighting

If you don't want backlighting at all (this extends battery life), press the ON display button that appears on the screen. The ON will change to OFF. Press the SAVE display button. Exit the setup mode by pressing the MAIN button.



### Hiding and Adding Pages

Each of your RF20 Components actually contains eight pages. However, only five pages are visible in the factory default setting. Three pages are hidden in each Component. If you wish to use the hidden pages, you can ADD it. If you don't want to use some of the existing pages, you can HIDE them. You can add or hide pages on Components OR on your favorite channel pages using this simple process:

**NOTE: Be sure to program your Macros before you hide pages with potential macros in them. You can't access hidden pages during macro setup. However, after you finish Macro setup, you can hide pages without affecting operation of your macros.**

**STEP 1:**

Press and hold the MAIN and ENT (Enter) buttons at the same time for approximately 3 seconds, until the word "SETUP" is displayed at the top of the LCD screen. This signals that you are now in setup mode.

**IMPORTANT:** You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.

**EDIT  
BUTTON**



**PAGE  
BUTTON**



**STEP 2:**

Press the EDIT display button on the LCD screen.

**STEP 3:**

Press the PAGE display button once the screen changes to EDIT mode.



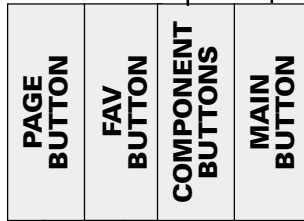
This page is hidden. To ADD it, press the LIGHT button.



This page is visible. To HIDE it, press the LIGHT button.

**STEP 4:**

"PAGE" appears at the top of the screen. Now, you can navigate to any page, using the MAIN, COMPONENT, FAV, and PAGE display buttons.



**STEP 5:**

When you select a page, the top of the screen indicates whether you want to "ADD?" or "HIDE?" the page displayed. When you want to change a page's visibility (i.e., either ADD or HIDE), simply press the LIGHT button.

**STEP 6:**

You can continue to ADD or HIDE pages on other Components by repeating Steps 4 and 5.

**STEP 7:**

When you are finished adding and hiding pages, press the MAIN button four times to return to normal operation.

## Recalling Pre-Programmed Setup Code Numbers

In case you didn't write down the Pre-Programmed Code Numbers that you used to set up your RF20, you can easily recall them using this simple process:

### STEP 1:

Press and hold the MAIN and ENT (Enter) buttons at the same time for approximately 3 seconds, until the word "SETUP" is displayed at the top of the LCD touch screen. This signals that you are now in setup mode.

**IMPORTANT:** You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.

### STEP 2:

Go to Page 2 of the Setup Menu by pressing the PAGE (▲) button.

### STEP 3:

Press the RECAL display button on the LCD screen. The display will change to the Recall screens. The screen automatically switches between four screens, alternately flashing Page 1 components and code numbers, then Page 2 components and code numbers.

### STEP 4:

Write down the code numbers as they appear for future reference. Page 43 of this manual provides a convenient space for you to record your code numbers.

### STEP 5:

Return to normal operation by pressing the MAIN button twice.

## Cloning Other RF20s

If you are fortunate enough to own more than one RF20, you'll be happy to know that you can easily copy and transfer all the setup from one RF20 to another. Just follow these easy steps:



### STEP 1:

For both the programmed RF20 that you want to clone, and unprogrammed RF20, press and hold the MAIN and ENT (Enter) buttons at the same time for approximately 3 seconds, until the word "SETUP" is displayed at the top of their respective LCD screens. This signals that both remotes are now in setup mode.

**IMPORTANT:** You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.

### STEP 2:

Press a PAGE button on each remote to bring up Page 2 of Setup and display the CLONE button.

### STEP 3:

Press the CLONE button on each remote.

### STEP 4:

Align the two RF20s head-to-head, about an inch apart.

### STEP 5:

Press the RECV display button on the unprogrammed RF20 that you want to setup by cloning.

### STEP 6:

Press the SEND display button on the programmed RF20 that you want to clone.

### STEP 7:

Press the START button on the unprogrammed RF20, and then press the START button on the programmed RF20 that you want to clone.

**NOTE:** Cloning typically takes about 40 seconds. After successful cloning is completed, the newly cloned RF20 will flash "GOOD".

### STEP 8:

Return to normal operation by pressing the MAIN button twice.

## Erasing Commands - Overview

You can erase an individual button with a learned command, a macro or a favorite channel. You can erase an ENTIRE Component's learned command or macro buttons. You can also erase ALL your learned commands on all Components or all your macros or favorite channels everywhere.

If you really want a fresh start, it is possible to reset everything to the factory default settings.

### Erasing Learned Buttons, Macros or Favorite Channels

#### STEP 1:

Press and hold the MAIN and ENT (Enter) buttons at the same time for approximately 3 seconds, until the word "SETUP" is displayed at the top of the LCD screen. This signals that you are now in setup mode.

**IMPORTANT:** You now have 30 seconds to perform the next step while you are in SETUP mode. If you don't press a button within 30 seconds, SETUP will disappear from the screen, signaling that you have exited setup mode and you will need to start over.

#### STEP 2:

Press a PAGE button to display Page 2 of Setup.

#### STEP 3:

Press the ERASE display button on the LCD screen.

#### STEP 4:

Press either the LEARN, MACRO or FAV button. The following screen appears:

ALL - Erases ALL of the specified (Learned, Macro or FAV buttons everywhere in the RF20)

DEVICE - Erases all learned or Macro buttons in a single Component (NOTE: This option is not available for FAVs.)

KEY - Erases one button only.



## ERASING COMMANDS

#### STEP 5:

If you press ALL, the RF20 displays a "SURE?" button. After the SURE button is pressed, all the buttons will be erased.

If you press DEVICE, a list of Components will appear. Press the Component button that you wish to erase. The bottom of the screen will flash ERASE twice, then ERASED.

If you press KEY, you'll have to navigate to the Component and Page you want using the MAIN, COMPONENT and PAGE buttons. Press a button to erase it. The bottom of the display will flash ERASE twice, then ERASED.

#### STEP 6:

To return to normal operating mode, press the MAIN button four times.



**SURE  
BUTTON**

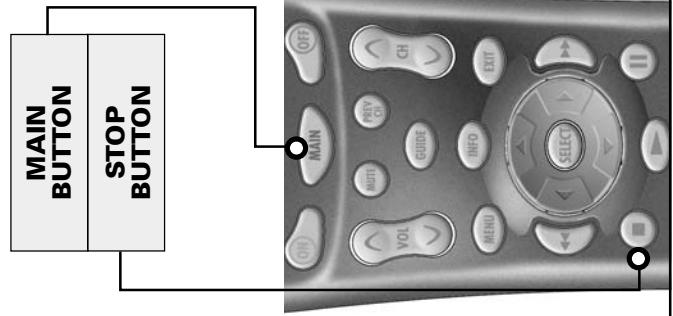
### Re-setting RF20 to Original Factory Default Settings

If you want to start with a clean slate, you can re-set the RF20 its original factory default settings by performing the following steps.

**NOTE: This process will essentially erase EVERYTHING you have programmed into the RF20.**

**STEP 1:**

Press and hold both the MAIN and the STOP buttons for 10 seconds.



**STEP 2:**

After 10 seconds, the RESET screen appears. Press the ALL button. The RF20 will display a "SURE?" button. Press the "SURE?" button. Press the SURE button to erase all of your settings and return to the factory default setup



## ERASING COMMANDS

## ERASING COMMANDS

## The Optional PowerBlaster™ (for 'barrier-free' RF control) [Sold separately]

Of all the fabulous RF20 features, this is probably the most exciting. When used in combination with the optional PowerBlaster™, the RF20 becomes an amazing remote control powerhouse that sends multi-directional RF (Radio Frequency) signals that pass through walls, doors and floors - both indoors and outdoors.

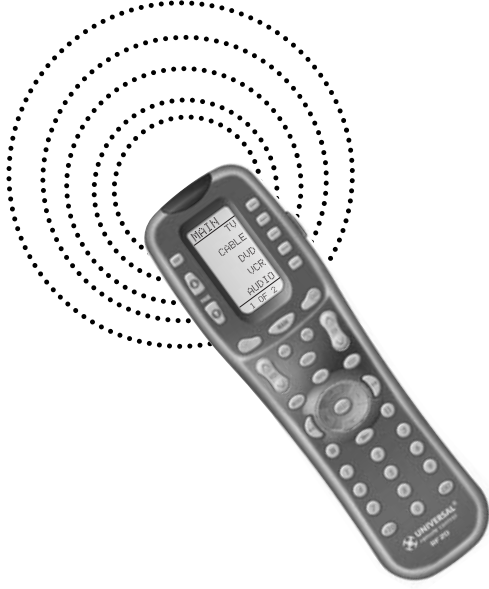
This changes everything! It enables you to control Components that are completely out-of-sight, up to 100' away. The PowerBlaster™ picks up RF20's radio frequency signals from any direction, regardless of distance, so RF20 doesn't need to be pointed directly at any Component. Just imagine - no more pointing! Now you can close your entertainment center doors, hide your Components, and still control them with ease. Control outdoor speakers on your patio. Control your Components anywhere!

One of the best things about this is -- nothing has to be done to the RF20 for this feature to work. Every time you press a button on the RF20, it sends both a standard IR (Infrared Command) AND an RF (Radio Frequency) signal. If you install the PowerBlaster™ kit, it will automatically receive RF20's radio signals and translate them into the infrared commands that control your Components.

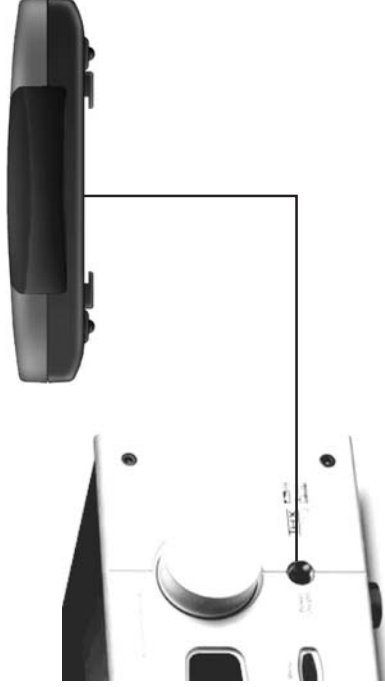
**NOTE: The RF20's radio signals will not control Components directly. You must have a PowerBlaster™ to receive the RF20's radio signals. Components that came with "no pointing" radio remote controls cannot be operated by the RF20 unless the Component can be switched to standard IR (Infrared Control) via its internal menus. Some remote control ceiling fans are radio only and cannot be operated by the RF20.**

## THE POWER BLASTER

The RF20 sends radio signal to the PowerBlaster™, which is a radio receiver



The PowerBlaster™ converts radio signals to standard infrared commands and sends them out via a built-in front blaster to Components in the same cabinet space.



Self-adhesive "flashers" (included in the PowerBlaster™ kit) affix to the front panels of your Components. The flashers relay infrared commands to Components out-of-sight of the PowerBlaster's front blaster. The flashers plug into PowerBlaster's rear flasher line output jacks. Each flasher has a 10' cable to easily reach Components on nearby shelves.

**Pre-Programmed Code Notes**

Record the three digit codes for your system here

AUDIO	_____
DVD	_____
CD	_____
SAT	_____
TV	_____
VCR	_____
CABLE	_____
AUX	_____
LIGHT	_____
TAPE	_____
PHONO	_____
TV2	_____
VCR2	_____
DVR	_____
LDP	_____
XM RADIO	_____
IPOD	_____
X-BOX	_____

**Pre-Programmed Code Tables**

The RF20's Pre-Programmed code library is divided into categories (TV, VCR, AUX, etc.). Each category actually includes many types of Components. For example, the VCR category includes TV/VCR combo units.

Within each category, the code numbers are listed in rows by brand (Sony, Panasonic, B & K, etc.). Some brands have more than one three digit code for you to try. Just circle the correct row and refer to it while you setup (step by step instructions for using Pre-Programmed codes are found on page 7).

<b>TV</b>	TVs, Plasmas, Projectors and Monitors
<b>CABLE</b>	Cable TVs and Web TVs
<b>DVD</b>	DVD Players and TV/DVD Combos
<b>VCR</b>	VCRs and TV/VCR Combos
<b>AUDIO</b>	Amps, Preamps, A/V Receivers and XM Radios
<b>SAT</b>	Satellite Receivers
<b>CD</b>	CD Players and CD Changers
<b>DVR</b>	TiVo, Replay and other DVR's
<b>AUX</b>	Tape Decks, Lighting Controls, Multimedia PCs, Xbox, iPod and Custom Installation Products



BRAND	CODE NUMBERS	BRAND	CODE NUMBERS
ADMIRAL	072 081 161 160	KENWOOD	197 070
ADVENT	247	KLOSS	002 059
AKAI	197 146 248	KMC	143
A MARK	112 143	KTV	043 197 143 154
AMPRO	167 073 157 183	LG	113 116 102 004 106 112 119 127 143 243 284 363 365
AMSTRAD	052	LOGENET	072
ANAM	043 054 056 080 112 131	LOEWE	164
AOC	197 004 112 058	LOGIK	072
APEX DIGITAL	006 310	LUXMAN	004
AUDIOVOX	076 273	LXI	166 007 015 052 081 160 164
BARCO	233	MAGNAVOX	164 059 197 003 060 061 004 063 064 127 022 160 094 239 226 273
BLAUPUNKT	088	MARANTZ	197 164 184
BROKSONIC	238	MATSUI	164
CAIRN	201	MAXENT	242
CANDLE	197 002 003 004	MEMOREX	007 072 004
CAPEHART	058	METZ	088
CETRONIC	043	MGA	197 004 024 028 042
CITIZEN	197 002 003 004 043 101 103 143	MINERVA	088
CLASSIC	043	MITSUBISHI	109 124 024 004 028 040 042 146 191
CONCERTO	004	MTC	197 004 062 101
CONTEC	043 050 051	NAD	015 025
CORONADO	143	NEC	132 130 134 197 040 016 024 056 019 236 237 262 272
CRAIG	043 054	NIKEI	043
CROWN	043 143	NUVISION	351
CURTIS MATHES	197 101 004 143	ONKING	043
CXC	043	ONWA	043
DAEWOO	004 016 043 044 076 103 114 125 127 143	OPTONICA	019 081
DAYTRON	004 143	OPTOMA	265 270
DELL	319 320 321	ORION	096
DREAMVISION	235 345	PANASONIC	034 056 080 092 164 208
DWIN	177 257	PHILCO	197 003 059 060 064 164 004 024 056 063
DYNASTY	043	PHILIPS	164 005 093 038 197 003 004 059 127 184 206 239 259
DYNATECH	062	PIONEER	135 025 197 018 023 116 190 234 335
EIKI	187	POLAROID	138 268 328 353 354 356 388
ELECTROHOME	143 024 076 196	PORTLAND	004 143
EMERSON	028 048 043 155 005 197 004 047 050 051 076 096 143 151 153 154	PROSCAN	144 160 161 165 167
EPSON	324	PROTON	004 131 058 143 171 173 193
ESA	323	QUASAR	034 056 092
FISHER	007 057	RADIO SHACK	019 004 143 043 127
FUJITSU	198 246 346	RCA	160 165 065 156 144 161 197 004 024 056 152 023 074 333
FUNAI	028 043	REALISTIC	007 019 043 047
FUTURETECH	043	ROCTEC	186
GATEWAY	242 268	RUNCO	168 169 178 179 180 181 182 183 073 157 340
GE	160 144 165 073 197 008 009 034 056 074 130 155 161 004	SAMPO	197 058 004 202
GOLDSTAR	091 157 183	SAMSUNG	050 089 101 105 004 127 143 160 228 229 258
HALL MARK	113 116 102 004 106 112 119 127 143	SANYO	166 007 020 053 057 082 187
HANNSPREE	004	SCEPTRE	276
HITACHI	381	SCOTT	028 043 004 048 143
HP	011 163 166 004 009 010 012 023 075 143 158 072	SEARS	015 030 004 007 028 057 143 094 160 082 165 166
HYUNDAI	316 327 378	SELECO	189 200 205 227
INFINITY	337 338	SHARP	081 019 014 170 028 029 004 022 143 175 251
INFOCUS	164	SIEMENS	088
INSIGNIA	230 330 333	SIM2	189 200 205 227
JBL	350	SIGNATURE	072
JCPENNEY	164	SOLE	231 232
JENSEN	004 024 197 008 009 030 065 101 143 156 160	SONY	070 139 147 126 185 194 085 213 271 279
JVC	013	SOUNDESIGN	028 004 003 043
KEC	038 034 070 063 145 199 210 240 241	SPECTRICON	112
	043	SSS	004 043

TV

TV

CODE NUMBERS

BRAND

CODE NUMBERS

BRAND

BRAND	CODE NUMBERS
SUPRE MACY	002
SVA	328
SYLVANIA	197 003 059 060 063 064 164 044 160 127
SYNTAX OLEVIA	376
TANDY	081
TATUNG	056 062
TECHNICS	034 080
TECHWOOD	004
TEKNIKA	002 003 004 024 028 043 072 101 143
TELEFUNKEN	037 046 086 087
TELERENT	072
TERA	172
TMK	004
TOSHIBA	015 138 030 007 040 062 101 325
TOTEVISION	143
UNIVERSAL	008 009
VIDEO CONCEPTS	146
VIDIKRON	174 184 188 192 340
VIDTECH	004
VIEWSONIC	242
VIZIO	386 387
WARDS	004 008 009 019 028 060 061 063 064 072 074 143 164 034
WESTING HOUSE	076 280
WINBOOK	339
YAMAHA	197 004
YORK	004
YUPITERU	043
ZENITH	073 072 095 103 157 183 243 284
ZONDA	112

BRAND	CODE NUMBERS
ABC	004 103 003 039 042 046 053
ADELPHIA	043 074
ADVANCED NEWHOUSE	043
ALTRIO	043
AMERICAST	099
ARCHER	005 007 014
ARMSTONG	074
AT&T BROADBAND	074
ATLANTIC BROADBAND	043 074
BELL SOUTH	099
BLUE RIDGE	043 074
BRESNAN	074
BRIGHT HOUSE	043 110
BUCKEYE COMM	074
CABLEVISION	043 074 108
CENTURION	092
CENTURY	007
CHARTER	043 074
CITIZEN	007
COGECO	074
COMBANO	080 081
COMCAST	043 074 110
COMSAT	074
COX DIGITAL	043 074
DIGICABLE	101
EAGLE	020 030 040
EASTERN	057 066
ECHOSTAR	106
ELECTRICORD	032
GEMINI	008 054
GENERAL ELECTRIC	072
GENERAL INSTRUMENT	074 103 104
GNC	099
GOLDEN CHANNEL	030
HAMLIN	049 050 055
HITACHI	103 055
INSIGHT	074
JERROLD	074 004 103 002 003 008 009 010 069
MAGNAVOX	010 012 064 079 095 094
MASSILLON	074
MEDIA ONE	107
MEDICOM	074
MEMOREX	052
MITSUBISHI	102
MOTOROLA	074 110 109 111
MOVIE TIME	028 032
MOXI	111
NCTC	074
NSC	015 028 038 071
OAK	031 037 053
PACE	043 074
PANASONIC	044 047
PARAGON	052
PHILIPS	006 012 013 020 085 095
PIONEER	043 103 034 051 063 076 105
PRUCER	059
PULSAR	052
RCA	047
RCN	074
RECOTON	098



52	DVD		CODE TABLES	
BRAND	CODE NUMBERS	BRAND	CODE NUMBERS	CODE NUMBERS
VINC YAMAHA ZENITH	161 042 089 166 195 197 057 074 091	THETA DIGITAL TOSHIBA YAMAHA		032 152 106 043 129
<b>DVD-TV/DVD Combos</b>	AIWA 146 FUNAI 143 SAMSUNG 165 SYLVANIA 143 SYMPHONIC 143 TOSHIBA 130			
<b>DVD-TV/DVD/VCR Combos</b>	MAGNAVOX 143 PANASONIC 144 SYLVANIA 143 TOSHIBA 164			
<b>DVD-DVD/VCR Combos</b>	GO VIDEO 137 218 PANASONIC 150 PHILIPS 105 (VCR Functions for VCR 067) POLAROID 234 SAMSUNG 137 159 SANSUI 154 SONY 145 191 TOSHIBA 141 ZENITH 091 (VCR Functions for VCR171)			
<b>DVD-DVD Recorder</b>	GATEWAY 175 GO VIDEO 220 221 222 ILO 268 KISS 279 LITEON 265 PANASONIC 139 SENSORY SCIENCE 222 SONY 191 TOSHIBA 188			
<b>DVD-LD</b>	DENON 206 207 FUNAI 120 KENWOOD 152 013 MAGNAVOX 032 121 MARANTZ 211 MITSUBISHI 121 NAD 121 OPTIMUS 049 013 PANASONIC 113 PHILIPS 032 PIONEER 106 117 121 RADIO SHACK 120 RCA 002 REALISTIC 049 RUNCO 127 SANYO 075 SHARP 152 013 SONY 053 110 TECHNICS 113			

BRAND	CODE NUMBERS	BRAND	CODE NUMBERS
AIWA	034 161	RCA	107 109 144 147 158 041 145 013 020 140 034 040
AKAI	016 146 043 046 124 125 142	REALISTIC	003 008 010 014 031 034 040 053 054 101
AMPRO	072	RICO	058
ANAM	031	RUNCO	148
AUDIO DYNAMICS	012 023 039 043	SALORA	014
BROOKSONIC	035 037 129	SAMSUNG	102 104 113 115 112 120 032 040 066 107 109 122 125
CANON	028 031	SANSUI	022 043 048 135
CAPEHART	108	SANYO	003 010 007 014 134 102
CRAIG	003 040 135	SCOTT	017 037 112 129 131
CURTIS MATHES	031 041	SEARS	003 008 010 014 081 013 101 009 017 073 112
DAEWOO	111 116 117 119 005 007 010 065 108 110 112	SHARP	149 054 031 159 165
DAYTRON	108	SHINTOM	024
DBX	012 023 039 043	SIGNATURE	034
DYNATECH	034 053	SONY	056 057 058 077 052 003 078 076 031 149 154
ELECTROHOME	059	SOUNDESIGN	034
EMERSON	006 029 035 017 025 027 031 034 036 037 046 101 129 131	STS	013
FISHER	138 153 162 116	SYLVANIA	031 034 059 067
FUNAI	003 010 008 009	SYMPHONIC	034
GE	034	TANDY	010 034
GO VIDEO	031 072 147 063 107 109 144	TATUNG	039 043
GOLDSTAR	132 136 155 040 115	TEAC	034 039 043
HARMAN KARDON	101 106 114 013 020 012 123	TECHNICS	031 070
HITACHI	012 045	TEKNIKA	031 019 034 101
INSTANTREPLAY	004 026 150 018 034 043 063 137 160 013	THOMAS	034
JCL	031	TMK	006
JCPENNEY	012 013 015 040 066 101	TOSHIBA	112 131 079 008 059 047 082 013 042 081
JENSEN	043	TOTEVISION	040 101
JVC	048 043 130 150 055 060 012 031 050 152 166	UNITECH	040
KENWOOD	014 048 034 047	VECTOR RESEARCH	012
LG	101 106 114 013 020 012 123	VICTOR	048
LLOYD	034	VIDEO CONCEPTS	012 034 046 141
LXI	034 003 009 017 106	VIDEOSONIC	040
MAGIN	040	WARDS	003 013 017 024 031 034 040 053 054 131
MAGNAVOX	067 031 034 068 041 156 164	YAMAHA	012 034 039 043
MARANTZ	067 069 012 031 156	ZENITH	072 080 056 048 101 034 058
MARTA	101		
MATSUI	027 030	<b>VCR-TV/VCR Combos</b>	
MEI	031	DAEWOO	005 117
MEMOREX	101 003 010 014 031 034 053 072 102 134 139	EMERSON	153
MGA	045 046 059	FUNAI	034
MINOLTA	013 020	GOLDSTAR	101 123
MINISUBISHI	059 061 151 013 020 045 046 051 142 049 168	HITACHI	034
MTC	034 040	JCPENNEY	101
MULTITECH	024 034	LG	101 123
NEC	012 023 039 043 048	LLOYD	034
NORDMENDE	043	MAGNAVOX	034 067
OPTONICA	053 054	MEMOREX	101
ORION	025	PANASONIC	070 167
PANASONIC	066 070 145 083 133 140 157 163 074 167	PHILIPS	034 067
PENTAX	013 020 031 063	RADIO SHACK	123
PHILCO	031 034 067	RCA	034
PHILIPS	031 067 034 101 054 071 156	SEARS	101
PILOT	101	SONY	057 154
PIONEER	021 013 048	SYLVANIA	067
PORTLAND	108	SYMPHONIC	034
PULSAR	072	THOMAS	034
QUARTZ	002 014	ZENITH	034
QUASAR	066 145 075		
RADIO SHACK	123		

BRAND	CODE NUMBERS	BRAND	CODE NUMBERS
VCR			

## BRAND

## CODE NUMBERS

## BRAND

## CODE NUMBERS

ADC	007	KENWOOD	026 066 145 146 181 190 197 192 182 199 151 222 180 005
ADCOM	082 092 225 161 269 355 356 366		280 374 550
AWA	170 018 104 202 203 213 211 188	KINERGETICS	220 140
AKAI	138 189	KLH	331
AMC	125 126 127 128 258 281 282 038	KOSS	216 573
AMEND	054	KRELL	150 072 376 384
AMX	196	KYOCERA	007
ANGSTROM	142	LEXICON	120 235 236 237 357 358 359 360 361 362 363 364
ANTHEM	335 336 337 338 339	LINN	124 377
ARCAM	141 418 419	LUXMAN	137 139 052 165 115 004 009
ATLANTIC TECHNOLOGY	342	LXI	076 056
AUDIO ACCESS	147	MAGNAVOX	086 164 152 208
AUDIO ALCHEMY	135	MARANTZ	006 028 031 040 063 185 186 251 265 119 289 296 492
AUDIO DESIGN	194 221 011	MCINTOSH	238 286
AUDIO EASE	021 196 207	MCS	076
AUDIO FILE	071	MERIDIAN	100 012 013
AUDIO MATRIX	167	MITSUBISHI	242 243 204
AUDIO SOURCE	273	MONDIAL	157 158 042 043 081 112
AUDIO TECHNICA	134	MYRYAD	276 293
B & K	096 097	NAD	186 113 283 478 479
BOSE	070 170 224 347 409 459 460 532	NAKAMICHI	111 244 245 172 183 287
BOSTON ACOUSTICS	447	NEC	176
BRYSTON	023	NIRO	343
CAMBRIDGE AUDIO	522	NILES	403
CARVER	006 028 061 071 201 214 226 180 185 022 029 077 284	ONKYO	017 046 064 107 108 187 079 080 090 179 209 270 275 438
CASIO	076	OPTIMUS	026 041 138
CHIRO	140	OUTLAW	342
CINEMA SOUND	034 134	PANASONIC	032 195 219 177 292 383 516
CITATION	148 272	PARASOUND	129 130 132 261 294 295 333 334
CLARION	026	PHAST	196
CLASSE	537	PHILIPS	249 250 251 063 119
COMPAQ	382	PIONEER	014 033 039 044 045 050 069 159 168 116 035 078 198 480
CURTIS MATHES	076	POLKAUDIO	029 515
DELPHI	415 515	PRIMARE	464
DENON	002 034 109 215 229 230 027 037 234 259 330 340 341 349	PROCEED	144 268
EAD	350 400 401 402 444 564	RCA	010 048 117 156 067 288
EIGER	466	REALISTIC	019 056 073 075 095
ELAN	149	REQUEST	351
ENLIGHTENED AUDIO	057 290	REVOX	162
ESCIENT	089 098	ROTEL	074 083 085
FANFARE	368 381 451 452 453 454	RUSSOUND	379 391 392
FISHER	352	SAMSUNG	016 571
FLEXTRONICS	047 214 180 182 297	SANSUI	040 048 110 119 065 228
FOSGATE	378	SANYO	047 059
FOSGATE AUDIONICS	062 231	SCOTT	019 091
GE	342	SEARS	076
GOLDSTAR	008	SHARP	026 094 131 175 181
HAFLER	174	SHERWOOD	024 038 055 102 103 105 106 051 030 447
HARMAN KARDON	231 233 254 153 154 118 121 227 277 317 318 365	SONY	018 093 223 247 248 160 166 015 101 184 218 271 353 369
HITACHI	020	SOUNDESIGN	372 380 417 421
IMERGE	371	SOUNDMATTERS	036
INKEL	197	SOUNDSTREAM	375
INTEGRA	354 438	SSI	064 088
JAMO	398	SUMO	068
JBL	263	SUNFIRE	171
JCPENNEY	076 216	TAEKWANG	344 345 346 494
JEFF ROWLAND	206	TEAC	138
JENSEN	098	TECHNICS	005 019 049 111 212 217
JVC	240 163 191 114 266 279 291	THETA DIGITAL	122 176 193 219 178 177 200 257 262

## BRAND

## CODE NUMBERS

## BRAND

## CODE NUMBERS

TOSHIBA  
WARDS  
YAMAHA  
ZENITH  
**AUDIO-XM Radios & Tuners**  
BOSE  
DELPHI  
FANFARE  
KENWOOD  
POLKAUDIO  
SONY

060 087 198 278  
180  
026 253 169 067 173 205 264 232 089 264 274 285 332 373  
432 433  
143 210  
  
170 532  
415 515  
352  
550  
515  
380  
  
CABLEVISION /VOOM  
DIRECTV  
ECHOSTAR /DISH  
EXPRESSVU  
GENERAL ELECTRIC  
GENERAL INSTRUMENT  
GOI  
HITACHI  
HTS  
HUGHES  
JVC  
LG  
MAGNAVOX  
MEMOREX  
MITSUBISHI  
MOTOROLA  
NEXT LEVEL  
PANASONIC  
PANSAT  
PAYSAT  
PHILIPS  
PROSCAN  
RADIOHACK  
RCA  
SAMSUNG  
SKY  
SONY  
STAR CHOICE  
TOSHIBA  
UNIDEN  
ZENITH

148  
173  
122 167 168  
122  
151 106 150  
148  
122  
139 140  
122  
161 162 068 154 165 166 108 117  
122  
170  
136  
136  
068 154  
148  
148  
142 160  
172  
136  
152 153 156 068 154 136 108 117  
151 106 150  
148  
151 106 150  
123 155 163 169 175  
164  
103  
148  
127 068 154 157 158  
136  
159



## BRAND

ADCOM  
AIWA  
AKAI  
AMC  
AMEND  
ARCAMI  
AUDIO ACCESS  
AUDIO EASE  
AUDIO TECHNICA  
BSR  
CALIFORNIA AUDIO  
CAPETRONIC  
CARRERA  
CARVER  
CASIO  
CLARINETTE  
CREEK  
CROWN  
DENON  
EMERSON  
FISHER  
FRABA  
GENEXXA  
GOLDSTAR  
HAITAI  
HARMAN KARDON  
HITACHI  
INKEL  
JCPENNEY  
JENSEN  
JVC  
KENWOOD  
KOSS  
KRELL  
KYOCERA  
LOTTE  
LUXMAN  
LXI  
MAGNAVOX  
MARANTZ  
MCINTOSH  
MCS  
MEMOREX  
MISSION  
MITSUBISHI  
MITSUMI  
MODULAIRE  
MONDIAL  
MYRYAD  
NAD  
NAKAMICHI  
NEC  
NIKKO  
NSM  
ONKYO  
OPTIMUS  
PANASONIC  
PARASOUND  
PHILIPS  
PIONEER

## CODE NUMBERS

062 042  
059 065 088 089 105 122 170 187  
085 195 202  
231 232  
118  
238  
119 147  
165  
046  
037 057  
103 008  
063  
057 080  
185 041 044 050 086 107 130 134 135 138 139 203 204 167  
111 182  
182  
159  
035  
002 123  
042 069 102  
050 185 134 008  
111  
010 069 102  
080  
093  
018 033 047 208  
042 175  
130 143 144  
014 061 092 141  
158  
004 022 136 163 213 214 242 243  
185 007 023 055 071 072 142 137 254  
061  
241  
005  
102  
011 028 070 076 249 252  
069  
044 107  
027 041 044 051 077 107 209 246  
212 247  
014 073 092  
010  
044 107  
179  
153  
182  
147  
244 155  
006 005 067 178  
217 218 219 095  
014 062  
046  
044 107  
030 038 039 168 169  
010 050 057 058 081 082 083 085 093 195  
103 201 172 008 068 248  
233 240  
041 044 107 246 253  
010 020 025 056 174 175 176

## BRAND

PROCEED  
PROTON  
QUASAR  
RADIO SHACK  
RCA  
REALISTIC  
ROTEL  
SAE  
SANSUI  
SANYO  
SCOTT  
SHARP  
SHERWOOD  
SIGNATURE  
SONY  
SOUNDESIGN  
SUMO  
SYLVANIA  
SYMPHONIC  
TAEKWANG  
TANDY  
TEAC  
TECHNICS  
TECHWOOD  
THETA DIGITAL  
TOSHIBA  
VECTOR RESEARCH  
VICTOR  
WARDS  
YAMAHA  
YORX

## CODE NUMBERS

239  
044 107 228  
103 008  
182  
017 042 150  
042 050 051 102 181 182 187  
044 107 161 178 250  
044 107  
044 069 107 128 171 190 125  
050  
069 102  
026 031 051 066  
003 019 051 096 112 115 119 166  
033  
048 081 097 126 133 177 225 226 164  
251  
155  
044 107  
052 181  
195 085  
010  
015 034 036 051 052 101 131 140 079  
060 103 200 172 184 008 068  
076  
234 235  
006 067 091 160 148  
080  
004 022 114 124  
185 033  
024 046 054 186 183 245  
182







NOTES

CODE NUMBERS

BRAND

MARANTZ 014 027 056 065 087  
 238  
 MCINTOSH 242 243  
 MITSUBISHI 029 048  
 NAD 244 245 025  
 NAKAMICHI 002 012 016 017 018 019 115  
 ONKYO 026 054 055  
 OPTIMUS 007 010 032 088 195  
 PANASONIC 027 087  
 PHILIPS 003 039 047 050 066 098 222  
 PIONEER 007 088  
 QUASAR 027 113 119 224  
 SANSUI 026 057 131 175 181  
 SHARP 038 004 028 030 033 034  
 SHERWOOD 020 022 052 084 089  
 SONY 009 059 212  
 TEAC 007 010 076 088 109 122 193  
 TECHNICS 112  
 TOSHIBA 106  
 VICTOR 021 026 031 067 040  
 YAMAHA

**AUX-Media PC Controls**

DELL 261 262  
 GATEWAY 261 262  
 HAUPPAUGE 294 295  
 HP 261 262  
 KEYSpan 297  
 SONY 261 262  
 TOSHIBA 261 262  
 WINBOOK 261 262

**AUX - Xbox Controls**

MICROSOFT/XBOX 408 107

**AUX-iPod Controls**

APPLE/iPod 401  
 BOSE 409  
 KENSINGTON 406

## Frequently Asked Questions

### What is a "macro" button?

A "macro" is a button on the RF20 that you setup to make a lot of things happen when you press it. For example, to watch a DVD in most home theaters requires several remote controls and many button presses (power up the TV, power up the surround sound, power up the DVD player, set the TV to the correct video input, set the surround sound to the correct audio input and finally, press play on the DVD player remote control).

Instead of pressing all of those buttons one at a time, the RF20 enables you to setup one button that does all those steps automatically with one press. For more information on how and why you should setup macro buttons, watch the Quick Setup DVD Program Guide or refer to pages 28-29 in this Manual.

### If the batteries run out, will I lose my settings?

No. The RF20 stores all of your settings in non-volatile FLASH memory. You could remove the batteries for months, replace them at your convenience, and the RF20 would still remember your settings.

### Who can I call for more answers?

The Universal Remote Control Technical Support and Customer Service staff are ready to answer any questions you might have.

Call us at 1-914-835-4484  
Monday - Friday, 9AM to 6PM (EST)

## Warranty

Universal Remote Control's Mastercontrol™ RF20 is covered against any manufacturers defects or workmanship for a period of one year from the date of purchase if purchased from an authorized Universal Remote Control dealer. Units purchased from online auction sites or other unauthorized resellers have no warranty. This warranty does not cover the following items:

- Damage from misuse, neglect, or acts of nature
- Products that have been modified or incorporated into other products
- Products purchased more than 12 months ago
- Units purchased from unauthorized dealers or companies

## Specifications

Learning Capability - 825 IR commands at standard frequencies (15kHz to 100kHz)  
Macro Capability - 453 Macros of up to 190 steps each  
IR Range (Line of Sight via Infrared): 30-50 feet, depending on the environment  
RF Range (radio frequency): 50 to 100 feet, depending upon the environment  
RF Frequency: 418MHz  
Weight: 7.1 oz. (with batteries)  
Size: 8.5" x 2.5" x 1"  
Batteries: Four AAA Alkaline batteries included  
LCD Size: 0.88" x 1.88"

# RF20

MasterControl™

## OWNER'S MANUAL

simply MORE powerful™



**UNIVERSAL**<sup>®</sup>  
remote control

500 Mamaroneck Avenue  
Harrison, NY 10528  
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FAX: 1-914-835-4532

[www.universalremote.com](http://www.universalremote.com)  
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