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XRC 200 UNIVERSAL REMOTE CONTROL

Made in the Philippines

General Instrument®

GETTING STARTED

Congratulations! Your XRC 200 universal remote control brings new convenience to television viewing. By pressing a few keys, you can see what is on TV, select a program to watch, set up to record programs on your VCR, and much more.

The XRC 200 universal remote control has been designed to control most TV sets and VCRs on the market today as well as your cable device, eliminating the frustration of having to use several remote controls.

Before you start to program your remote control, please read the following important instructions.

The XRC 200 enables you to:

- Control multiple devices such as a cable device, TV, and VCR.
- Control an auxiliary device such as a second TV or VCR or a digital audio tuner.
- Control the volume through your TV while in Cable mode. (Refer to Programming Volume Control later in this brochure.)
- Control services such as Digital Music Express™ and Music Choice℠.

REPLACING THE BATTERIES

Use two fresh 1.5 volt, AA batteries. To install or replace the batteries:

1 Slide the battery door open on the back of the remote control.

2 Remove the old batteries, and insert the new ones as indicated.

3 Slide the battery door closed until it snaps into place.

4 Point the remote control at your cable device, press CABLE, and then press POWER. The CABLE key lights.

If the key does not light, check the battery orientation, or replace the batteries as needed.

If you replace the batteries within a few hours after removing the old batteries, you will not need to reprogram the remote control.

Use the mode keys to switch co
which device is being controlled

For example, to change the VCI
control your cable device, press
control the same device until yo

The illustration below identifies
user guides for more informatio

Select device mode

Displays help screen

Pages up through menu scr
and program guide

Exits from the
program guide

Move cursor in program gui
and menu screens

Displays program guide

Adjusts volume

Scans through favorite char
or swaps picture-in-picture

Moves program guide
back 24 hours

Selects last previous
start time in NVOD system

Programs converter and VC
to record the selected progr

Functions set by your
cable system operator

Select channels (0-9)

Operates RF bypass switch
or switches between TV an

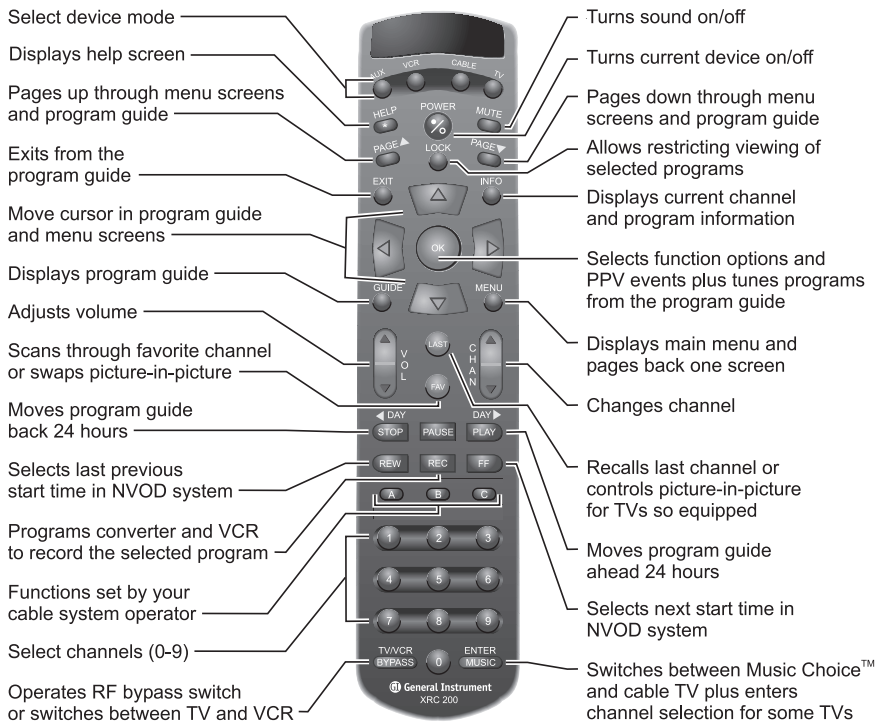
ES

USING THE KEYBOARD

Use the mode keys to switch control to a device. The four mode keys (AUX, VCR, CABLE, or TV) light to indicate which device is being controlled.

For example, to change the VCR channel, press VCR and then press the desired channel number key(s). To control your cable device, press CABLE and then press a function key. The remote control will continue to control the same device until you press another mode key.

The illustration below identifies the keys on your remote control. See your cable device and digital audio user guides for more information.



PROGRAMMING YOUR XRC 200

You are now ready to program the remote control. Find the codes for your set top terminal, TV, VCR, and any auxiliary device in the Device Codes section at the end of this guide.

Please note the following:

- All codes are three-digit numbers. As you program for each mode, write down the correct codes in the spaces provided for future reference.
- For many devices, more than one code is listed. In these cases, start with the first code.
- If you do not press the next key within 10 seconds, the whole sequence will be erased and you will have to start over. This prevents you from accidentally reprogramming the remote control during regular viewing.
- After you program the remote control, check the device functions. If a primary function does not operate, you can try another device code listed in the Device Codes section for the manufacturer. If the device does not respond, refer to Finding the Correct Device Code later in this guide.

PROGRAMMING FOR YOUR CABLE DEVICE, TV, AND VCR

The XRC 200 is already programmed to control the General Instrument CFT2200 and DCT1000 set-top terminals.

To control another device, look for the list of manufacturers' three-digit codes for the device type in the Device Codes section. Then perform the following steps:

1 On the remote control, press and hold the appropriate mode key until the four mode keys flash twice. The mode key continues to flash.

2 Enter the three-digit code.

After you press the first digit, the mode key should light and stay on. After you press the last digit, the mode key should flash three times and turn off.

If the mode key does
code is invalid for this
another device code.

3 Point the remote contr
device turns on or off,

If you have tried all th
device does not respo
later in this guide.

4 Write the codes below

Set-top device code

TV device code

VCR device code

5 Note that in the TV an
FF keys control your V
down REC and press P

PROGRAMMING FOR

You can program the AU
a second remote-control
receiver, or a digital audi

1 Look up the device ma
note the code.

2 Press and hold AUX fo
mode keys flash twice

3 On the remote control
the device (VCR for a v
and CABLE for a cable

4 Enter the three-digit co
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digit, the AUX key shou

If the AUX key does no
device code is invalid
with another device co

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Find the codes for
device in the Device

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manufacturer. If the
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E, TV, AND VCR

e General Instrument

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continues to flash.

uld light and stay on.
uld flash three times

If the mode key does not flash three times before turning off, the code is invalid for this device type. Repeat the procedure with another device code.

3 Point the remote control at the device and press POWER. If the device turns on or off, you have finished programming.

If you have tried all the codes listed for the manufacturer and the device does not respond, refer to Finding the Correct Device Code later in this guide.

4 Write the codes below:

Set-top device code ___ ___ ___

TV device code ___ ___ ___

VCR device code ___ ___ ___

5 Note that in the TV and VCR modes, the PAUSE, PLAY, REW, REC, and FF keys control your VCR. To record a program, you must hold down REC and press PLAY. This prevents accidental recording.

Programming for an Auxiliary Device

You can program the AUX mode to control an auxiliary device such as a second remote-controlled TV or VCR, a General Instrument satellite receiver, or a digital audio tuner.

1 Look up the device manufacturer in the Device Codes section and note the code.

2 Press and hold AUX for approximately three seconds until the four mode keys flash twice. The AUX key continues to flash.

3 On the remote control, press and hold the appropriate mode key for the device (VCR for a videocassette recorder, TV for a television, and CABLE for a cable device) until the four mode keys flash twice.

4 Enter the three-digit code for your VCR. After you press the first digit, the AUX key should light and stay on. After you press the last digit, the AUX key should flash three times and turn off.

If the AUX key does not flash three times before turning off, the device code is invalid for this device type. Repeat the procedure with another device code.

5 Point the remote control at the device to be controlled and press POWER. If the device turns on or off, you have finished programming.

If you have tried all the codes listed for the manufacturer and the device does not respond, refer to Finding the Correct Device Code later in this guide.

6 Write the device type and code below:

Device Type _____

AUX device code ___ ___ ___

Programming Volume Control

You can program your XRC 200 to control the volume through the TV while in any other mode. The TV must permit remote volume control.

For example, you can control volume through the TV while in Cable mode. In VCR mode, the volume control is always set through the TV.

This procedure does not affect any device codes you set previously.

To control the volume through the TV while in Cable mode:

1 Press and hold CABLE for approximately three seconds until the four mode keys flash twice. The CABLE key will continue to flash.

2 Press TV. The CABLE key will flash three times and turn off. You now control the volume through the TV whenever you change the volume level in CABLE mode.

Master Power Control

You can program your XRC 200 to turn on and off all of your remote-controlled devices (AUX, VCR, CABLE, or TV) when you press POWER. All devices must be in direct line of sight to ensure proper operation.

Perform the following steps to enable or disable power control for each device:

1 Make sure all devices to be controlled are turned on.

2 Press any mode key (AUX, CABLE, TV, or VCR) for appro
three seconds until all four mode keys flash twice. Th
you press will continue to flash.

3 Press POWER twice. The mode key will flash three tim

Finding the Correct Device Code

Manufacturers often put their brand name on devices m
If you have tried all of the manufacturer's device codes
guide but the device still does not respond, you can use
to find and identify the appropriate device code.

Scanning for a Device Code

Perform the following steps to scan for a code that oper
device:

1 Turn on the device.

2 Press and hold a mode key for approximately three s
the four mode keys flash twice. The selected mode k
continue to flash.

3 Press POWER. The mode key will stop flashing and re

4 Point the remote control at the device.

5 Press and release the Cursor Up key repeatedly and
time you press the key, the remote sends the power-
using a different device code. When the device turns
is programmed with a code that controls the device.

If you press the Cursor Up key after the device has t
press the Cursor Down key to return to the previous

6 Test whether other functions operate using the remot
primary function does not work, continue to press the
key to find another code that turns off the device. The
functions again.

7 When you are satisfied that all primary functions are
SELECT to lock in the code.

ress any mode key (AUX, CABLE, TV, or VCR) for approximately ree seconds until all four mode keys flash twice. The mode key ou press will continue to flash.

ress POWER twice. The mode key will flash three times and turn off.

DING THE CORRECT DEVICE CODE

ufacturers often put their brand name on devices made by others. u have tried all of the manufacturer's device codes listed in this e but the device still does not respond, you can use the XRC 200 nd and identify the appropriate device code.

NNING FOR A DEVICE CODE

orm the following steps to scan for a code that operates your ce:

urn on the device.

ress and hold a mode key for approximately three seconds until e four mode keys flash twice. The selected mode key will ontinue to flash.

ress POWER. The mode key will stop flashing and remain on.

oint the remote control at the device.

ress and release the Cursor Up key repeatedly and slowly. Each ne you press the key, the remote sends the power-off command sing a different device code. When the device turns off, the remote programmed with a code that controls the device.

you press the Cursor Up key after the device has turned off, ress the Cursor Down key to return to the previous device code.

est whether other functions operate using the remote control. If a rimary function does not work, continue to press the Cursor Up ey to find another code that turns off the device. Then test the nctions again.

When you are satisfied that all primary functions are working, press ELECT to lock in the code.

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Recalling a Device Code

Perform the following steps to read the code currently set for a device. This is useful for retrieving a device code that was set using the scanning method described previously.

1 Press any mode key until the four mode keys flash twice. The selected mode key will continue to flash.

2 Press HELP. The mode key flashes each of the three digits in the code. A pause separates each digit. For example, three flashes represent the number 3. Rapid flashing represents 0.

3 Count and record the sequence of flashes to determine the three-digit code.

Device Codes

Cable Device	Code
Digital Music Express	006
GI CFT2200/DCT1000	000
GI CFT2000 Series	001
GI DCR2000/3000	007
GI DCR4000	005
GI Sat Mode 0	009
GI Sat Mode 1	010
GI Sat Mode 2	011
GI Sat Mode 3	012
GI STARCOM Series	002
GI/TOCOM	003, 004
Primestar Mode 0	009

TV Brand	Device Code
Akai	032, 070
Alba	113
A-Mark	120
Amstrad	033
Anam	041, 120, 121
Anam-National	009, 021
AOC	005, 006, 019, 020, 195
Archer	120
Audiovox	120
Bauer	111
Becrese (See Hitachi)	
Brockwood	195
Candle	006, 022, 023, 025, 195
Capehart	019
Capehart	195
Circuit City	195
Citizen	006, 016, 022, 023, 024, 025, 026
Colortyme	195
Concerto	023
Contec	027, 028, 041, 091
Craig	021, 041, 194
Crown	026
Curtis Mathes	006, 203, 006, 016
CXC	041
Daewoo	005, 024, 026, 029, 030, 031, 032, 219
Daytron	026, 195
Dixi	032, 088, 120
Dumont	195
Electrohome	026, 195, 209, 213
Elta	032
Emerson	026, 027, 028, 033, 034, 035, 037, 038, 039, 040, 041, 122, 195, 220, 999
Envision	006
EON (See NEC)	
Etron	032
Fisher	042, 090
Formenti	111
Fortress	105
Fujitsu	034
FUJITSU	194
Funai	034, 041, 194
Futuretech	041
Futuretech	194
GE	003, 008, 009, 015, 040, 043, 044, 130, 190, 195
Genexxa	113
Goldstar	005, 023, 026, 045, 046, 088, 195
Gradiente	211
Granada	195
Grand	195
Grundig	047
Hallmark	195
Hinari	034
Hitachi	023, 026, 048, 049, 050, 051, 052, 053, 054, 055, 126, 202, 213
Infinity	026
JBL	026
Jensen	056
JVC	057, 058, 059, 060
Kenwood	006
Kloss	022, 110
KTV	026, 039, 040, 041
Kwasho	061
Linitron (See Sharp)	
Lloyd	195
Lloytron	026
Loewe	088
Logik	018
Luxman	023
LXI	003, 026, 090, 095, 117, 125, 023
Magnavox	006, 020, 024, 025, 026, 027, 068, 069, 110, 210
Marantz	006, 026, 088
Matsui	032, 109
Megatron	195
Memorex	018, 032, 090, 195
MGA	004, 005, 006, 071, 195
Mitsubishi	004, 005, 070, 071, 072, 123, 195, 207
MTC	005, 006, 016, 023, 031, 195
NAD	002, 117, 195
National	197
NEC	005, 006, 007, 017, 023, 127
Nikkai	112, 113, 118
Nikko	195
Nordmende	051, 217
Onwa	041
Optonica	105, 107
Orion	194
Osaki	112
Osume	091
Panasonic	008, 009, 010, 011, 012, 026, 074, 075, 197, 200, 206
PEC (See Toshiba)	
Penney	003, 005, 006, 014, 016, 026, 043, 096
Performance (See Sony)	
Philco	005, 006, 024, 025, 068, 110
Philips	026, 088
Pioneer	002, 048, 051, 076
Portland	005, 026
Prima (See Curtis Mathes)	
Proton	013, 019, 026, 124, 195
Pulsar	001
Pulser (See Daewoo)	
Pulser (See Goldstar)	
Quasar	008, 009, 075

	057, 058, 059, 060
	006
	022, 110
	026, 039, 040, 041
	061
	195
	026
	088
	018
	023
	003, 026, 090, 095, 117, 125, 023
	006, 020, 024, 025, 026, 027, 068, 069, 110, 210
	006, 026, 088
	032, 109
	195
	018, 032, 090, 195
	004, 005, 006, 071, 195
	004, 005, 070, 071, 072, 123, 195, 207
	005, 006, 016, 023, 031, 195
	002, 117, 195
	197
	005, 006, 007, 017, 023, 127
	112, 113, 118
	195
	051, 217
	041
	105, 107
	194
	112
	091
	008, 009, 010, 011, 012, 026, 074, 075, 197, 200, 206
	003, 005, 006, 014, 016, 026, 043, 096
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	005, 006, 024, 025, 068, 110
	026, 088
	002, 048, 051, 076
	005, 026
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	013, 019, 026, 124, 195
	001
	008, 009, 075

Radio Shack	026, 041, 107, 112
RCA	003, 005, 014, 015, 048, 079, 080, 081, 082, 083, 084, 085, 086, 087, 125, 133, 134
Realistic	090
Saba	051
Saisho	032, 033, 109
Sampo	006, 019
Samsung	005, 006, 016, 023, 026, 032, 088, 112, 195, 204, 221
Sanyo	042, 089, 090, 091, 092, 109
SBR	088
Schneider	088
Scott	026, 034, 037, 041, 093
Sears	003, 023, 034, 042, 089, 090, 094, 095, 096, 097, 099, 100, 117, 195, 101, 102, 103, 104
Seimitsu	195
Sharp	026, 091, 106, 107, 108, 128, 129, 105
Siemens	091
Signature	018
Solavox	112
Sony	000, 109, 119, 122
Soundesign	025, 041, 195
Spectricon	020, 120
Squareview	194
SSS	005, 041
Supra	023
Supre-Macy	022
Sylvania	006, 024, 025, 026, 068, 110, 111
Symphonic	132, 194
Tandy	113, 105
Tatung	009
Technics	008
Techwood	023
Teknika	004, 005, 016, 018, 022, 023, 024, 025, 026, 034, 041, 114, 115
Teleavia	051
Telefunken	051
Teletech	032
Tera	013
Thomas	195
Thomson	051
Thomson-Projector	051
Thomson-Projector	116
TMK	023, 195
Toshiba	016, 090, 096, 117, 118, 131
Tosonic	028

Totevision	026
Toyomenko	195
Universal	043
Universal	190
Vector Research	006
Victor	057
Video Concepts	070
Vidtech	005, 195
Viking	022
Wards	005, 006, 015, 018, 024, 025, 027, 034, 043, 066, 107, 119, 190
Yamaha	005, 006
York	195
Zenith	001, 018
Zonda	120

VCR Brand	**Code**
Action	140
Advantz	141
Adventura	088
Aiko	047
Aiwa	088, 122, 123, 124
Akai	060, 181, 016, 150
American	054
Audiovox	200
Broksonic	008, 010, 059, 148
Calix	200
Canon	054, 207
Capehart	046
Carver	065
CCE	047, 089
Citizen	047, 200
Colt	089
Craig	044, 082, 089, 200
Curtis Mathes	051, 054, 060
Cybernex	079
Daewoo	034, 046, 047, 126, 127
Daytron	046
Dynatech	088
Electrohome	200
Electrophonic	200
Emerex	000
Emerson	008, 010, 047, 059, 067, 088, 090, 160, 200, 005, 006, 007, 009, 011, 148, 163, 164
Fisher	048, 082

Fuji
Funai
Garrard
GE
GoldStar
Go Video
Gradiente
Grundig
Harley Davidson
Harman/Kardon
Harwood
Headquarter
HI-Q
Hitachi
Jensen
JVC
Kenwood
KLH
Kodak
Lloyd
Lloyd's
Logik
LXI
Magnavox
Marta
Matsushita
MEI
Memorex
MGA
Minolta
Mitsubishi
Motorola
Multitech
NEC
Nikko
Olympus
Optimus
Optonica
Orion
Panasonic
Panasonic
Penney
Pentax
Philco
Philips

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Funai	149
Garrard	149
GE	028, 051, 054
GoldStar	030, 200, 193, 202
Go Video	057, 058, 120
Gradiente	175
Grundig	176
Harley Davidson	088
Harman/Kardon	030
Harwood	011, 089
Headquarter	081
HI-Q	082
Hitachi	032, 037, 060, 177, 040, 041, 118
Jensen	060
JVC	060, 061, 062, 063, 064, 179
Kenwood	030, 060, 062, 179
KLH	089
Kodak	054, 200
Lloyd	088
Lloyd's	160
Logik	089
LXI	200
Magnavox	027, 033, 054, 065, 144, 180
Marta	200
Matsushita	054
MEI	054
Memorex	033, 054, 081, 082, 083, 085, 088, 200, 066
MGA	067
Minolta	037, 177
Mitsubishi	062, 067, 181, 070, 194
Motorola	054, 085
Multitech	089
NEC	030, 032, 060, 062, 197, 031
Nikko	200
Olympus	054, 080, 128
Optimus	085, 200, 205
Optonica	254
Orion	129
Panasonic	054
Panasonic	080, 128, 201, 207, 023, 142, 209, 214, 216, 219
Penney	030, 037, 048, 054, 197, 200
Pentax	037, 177
Philco	054
Philips	054, 065, 144, 254, 143
Pilot	200
Pioneer	062
Portland	046
Protec	089
Pulsar	033, 079
Quarter	081
Quartz	081, 145
Quasar	054
Radio Shack	149, 200
Radix	200
Randex	200
RCA	027, 028, 037, 051, 177, 029, 130
Realistic	054, 081, 082, 085, 200, 254
Ricoh	002
Runco	033
Samsung	034, 079
Sanky	033, 085
Sansui	044, 032, 060, 062
Sanyo	081, 082, 083, 146
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Shogun	079
Singer	089
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STS	037
Sylvania	054, 065, 067, 144, 180
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Technics	054, 201, 219
Teknika	054, 200, 087
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Wards	027
Wards	037, 054, 082, 085, 089, 090, 254
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XR-1001	089
Yamaha	030
Zenith	001, 002, 033

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