

# XRC 200 UNIVERSAL REMOTE CONTROL



Made in the Philippines

**GI** 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 ChoiceSM.

## 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.

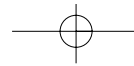
If the key does not light, check the battery orientation, or replace the batteries as needed.

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 to which device is being controlled. For example, to change the VCI control your cable device, press control the same device until you. The illustration below identifies the user guides for more information.

- Select device mode —
- Displays help screen —
- Pages up through menu screen and program guide —
- Exits from the program guide —
- Move cursor in program guide and menu screens —
- Displays program guide —
- Adjusts volume —
- Scans through favorite channels or swaps picture-in-picture —
- Moves program guide back 24 hours —
- Selects last previous start time in NVOD system —
- Programs converter and VCR to record the selected program —
- Functions set by your cable system operator —
- Select channels (0-9) —
- Operates RF bypass switch or switches between TV and —

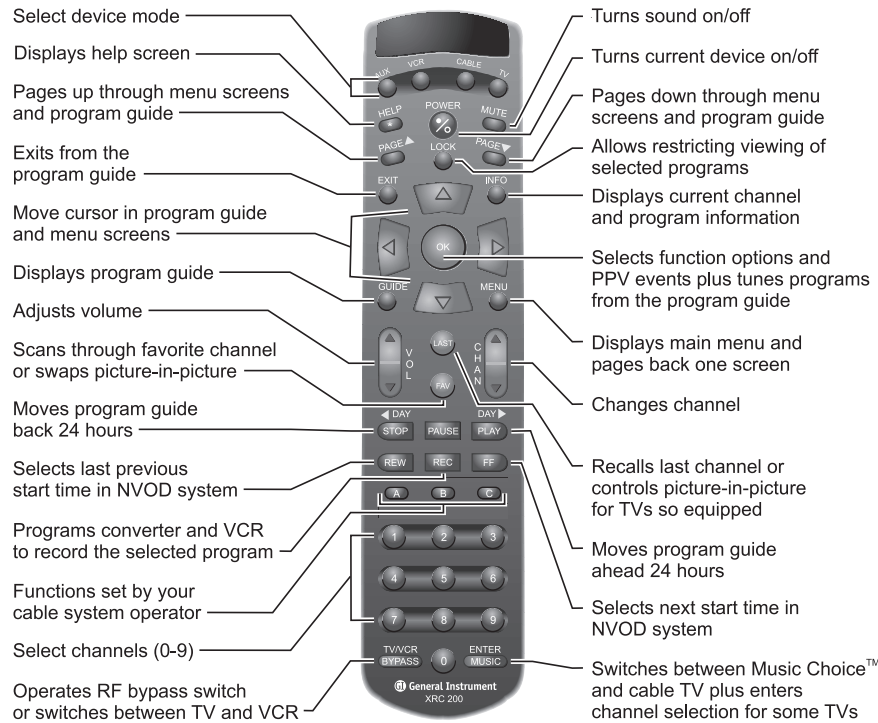


## USING THE KEYBOARD

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 not flash, the code is invalid for this device or another device code.

3 Point the remote control at the device. The device turns on or off.

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

4 Write the codes below in the spaces provided for future reference.

Set-top device code

TV device code

VCR device code

5 Note that in the TV and VCR mode, the FF keys control your VCR. Press FF down, REC, and press P.

### PROGRAMMING FOR YOUR CABLE DEVICE, TV, AND VCR

You can program the AUX key to control a second remote-control receiver, or a digital audio player.

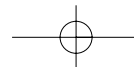
1 Look up the device manufacturer's code in the Device Codes section.

2 Press and hold AUX until the four mode keys flash twice.

3 On the remote control, press and hold the appropriate mode key until the four mode keys flash twice.

4 Enter the three-digit code. 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, the code is invalid for this device or another device code.



**UR**

Find the codes for device in the Device

am for each mode, rided for future

. In these cases,

ids, the whole art over. This he remote control

device functions. If / another device manufacturer. If the correct Device Code

**E, TV, AND VCR**

e General Instrument

facturers' three-digit tion. Then perform

ppropriate mode key until 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 approximately three seconds until all four mode keys flash twice. The you press will continue to flash.

- 3 Press **POWER** twice. The mode key will flash three times.

**FINDING THE CORRECT DEVICE CODE**

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

**SCANNING FOR A DEVICE CODE**

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

- 1 Turn on the device.
- 2 Press and hold a mode key for approximately three seconds until the four mode keys flash twice. The selected mode key will continue to flash.
- 3 Press **POWER**. The mode key will stop flashing and remain lit.
- 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-off command using a different device code. When the device turns off, the device is programmed with a code that controls the device.

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

- 6 Test whether other functions operate using the remote control. If a primary function does not work, continue to press the Cursor Up key to find another code that turns off the device. The device is programmed with a code that controls the device.
- 7 When you are satisfied that all primary functions are working, press **SELECT** to lock in the code.

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

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

### **CHANGING THE CORRECT DEVICE CODE**

Manufacturers often put their brand name on devices made by others. If you have tried all of the manufacturer's device codes listed in this section but the device still does not respond, you can use the XRC 200P to find and identify the appropriate device code.

### **FORMING FOR A DEVICE CODE**

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

1. Turn on the device.

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

3. Press POWER. The mode key will stop flashing and remain on.

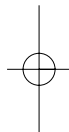
4. Point the remote control at the device.

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

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

7. Test whether other functions operate using the remote control. If a primary function does not work, continue to press the Cursor Up key to find another code that turns off the device. Then test the functions again.

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



**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**

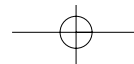
CABLE DEVICE	CODE
Digital Music Express	006
GI CFT2200/DCT1000	000
GI CFT2000 Series	001
GI DCR2000/3000	007
GI DCR4000	005
GI Sat Mode 0	009
GI Sat Mode 1	010
GI Sat Mode 2	011
GI Sat Mode 3	012
GI STARCOM Series	002
GI/TOCOM	003, 004
Primestar Mode 0	009

**TV BRAND**

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
Colorlyme	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

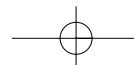


057, 058, 059, 060  
 006  
 022, 110  
 026, 039, 040, 041  
 061  
  
 195  
 026  
 088  
 018  
 023  
 003, 026, 090, 095, 117, 125, 023  
 006, 020, 024, 025, 026, 027, 068, 069, 110, 210  
 006, 026, 088  
 032, 109  
 195  
 018, 032, 090, 195  
 004, 005, 006, 071, 195  
 004, 005, 070, 071, 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  
  
 y)  
 005, 006, 024, 025, 068, 110  
 026, 088  
 002, 048, 051, 076  
 005, 026  
  
 nes)  
 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  
 Teletex 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



027, 034, 043, 066, 107,

Fuji 001, 054  
 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  
 Scott 008, 010, 034, 059, 067, 090, 212  
 Sears 037, 048, 054, 081, 082, 177, 200, 221  
 Sharp 085, 254  
 Shintom 089  
 Shogun 079  
 Singer 089  
 Sony 000, 001, 002, 003, 054, 147  
 STS 037  
 Sylvania 054, 065, 067, 144, 180  
 Symphonic 149  
 Tatung 060  
 Teac 060  
 Technics 054, 201, 219  
 Teknika 054, 200, 087  
 TMK 006, 160  
 Toshiba 034, 067, 090, 212, 221, 223  
 Totevision 200  
 Vector 034  
 Vector Research 030, 197  
 Video Concepts 034, 197, 068  
 Wards 027  
 Wards 037, 054, 082, 085, 089, 090, 254  
 XR-1000 054  
 XR-1001 089  
 Yamaha 030  
 Zenith 001, 002, 033

090, 160, 200, 005, 006,

Copyright © 1998 by General Instrument Corporation. No part of the contents of this reproduced or transmitted in any form or by any means without the written permission of General Instrument Corporation.  
 Digital Music Express is a trademark of International Cablecasting Technologies, Inc.  
 Music Choice is a service mark of Digital Cable Radio Associates, L.P.  
 462177-001-99, 03/98



ght © 1998 by General Instrument Corporation. No part of the contents of this book may be used or transmitted in any form or by any means without the written permission of the publisher.

Music Express is a trademark of International Cablecasting Technologies, Inc.  
Choice is a service mark of Digital Cable Radio Associates, L.P.

77-001-99, 03/98

