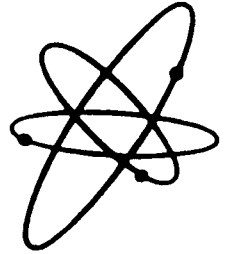


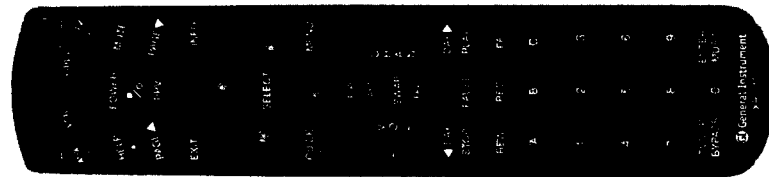
Main Electronic Supplies Ltd.

WHOLESALE DISTRIBUTORS – PARTS & ACCESSORIES

4554 MAIN STREET, VANCOUVER, B.C., V5V 3R5 TELEPHONE: 872-0267



**XRC 100
UNIVERSAL
REMOTE
CONTROL**



General Instrument

GETTING STARTED

Congratulations! Your new XRC 100 Universal Remote Control eliminates the frustration of having to use several remote controls. The XRC 100 has been designed to control most TV sets and VCRs in today's consumer market, as well as your cable terminal.

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

- The XRC 100 allows you to control multiple devices. The only time you will need to change modes is when you want to switch control to a different device.
For example, say you are using the remote to control your cable terminal and now you want to change the channel on your VCR. First press VCR and then press the desired channel number key(s). To return to controlling your cable terminal, press the CABLE key and then the desired function key. The remote control will stay in the cable mode until you press another mode key.
- The AUX mode can be used for a second TV or VCR, or for a digital audio tuner.
- The four mode keys (AUX, VCR, CABLE, and TV) also serve as indicator lights which show which device is being controlled and help guide you through programming the remote. Refer to the *PROGRAMMING YOUR XRC 100* section of this guide for details.
- You can program the XRC 100 to control volume through your cable terminal, TV, or VCR without being in that mode. For example, you can control volume through your TV even though the remote is in the cable mode. You must program the remote in order to use the volume control feature. Refer to *PROGRAMMING VOLUME CONTROL*.
- The XRC 100 also provides control of stand-alone digital audio tuners as well as services such as Music Choice™ (MC) and Digital Music Express™ (DMX).

BATTERY REPLACEMENT

If the batteries in your remote control need to be replaced, use two fresh 1.5 volt, AA batteries.

To install or replace the batteries, slide the battery door on the back of the remote open and insert the batteries in the direction indicated. Then slide the battery door closed until it snaps into place.

Point the remote at your cable terminal and press CABLE then POWER to turn the terminal on. If the terminal does not turn on, remove the batteries, check their orientation, or replace them as needed.

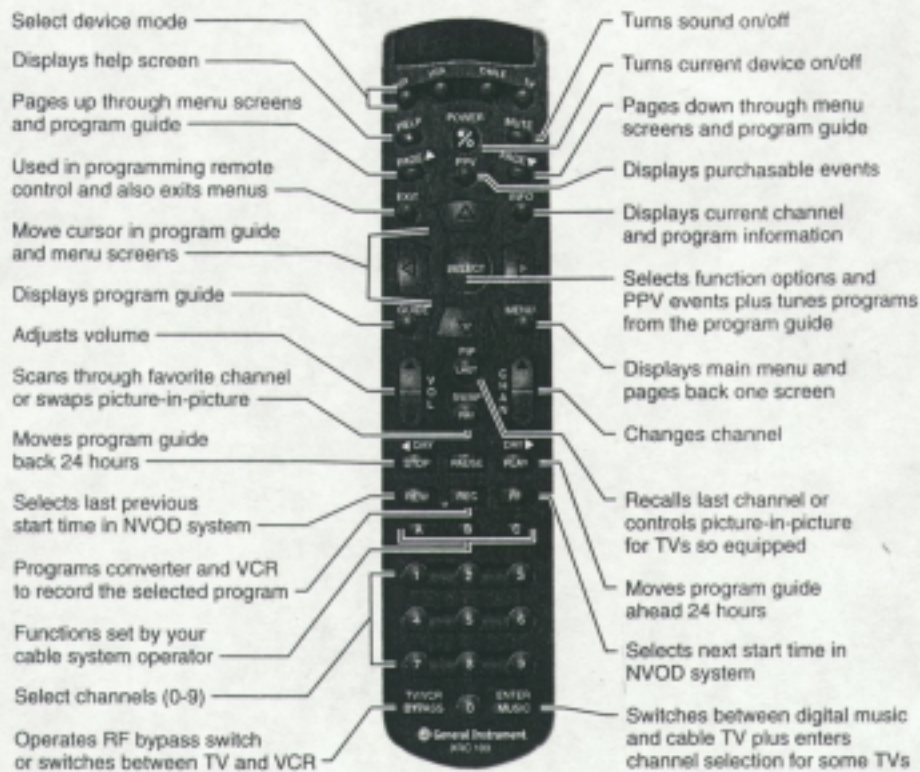
Once you have programmed your remote control, you *will not* need to reprogram it after you take the batteries out to replace them.



THE KEYBOARD

The illustration below identifies the keys on your remote control: see your cable terminal and digital audio user guides for further instructions. 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 press the REC key twice. This feature was added to avoid accidental recording.



PROGRAMMING YOUR XRC 100

You are now ready to program the XRC 100 remote control. Find the code for your cable terminal, TV set, VCR, and the device you wish to assign to the AUX mode, in the *DEVICE CODES* section at the end of this guide.

All codes are three-digit numbers. As you program for each mode, write down the correct codes in the spaces provided, for future use.

Many devices have more than one code listed. For these cases, start with the first code listed. For example, if you have a Sony TV, the first code is 000.

Please note after entering a device code, the mode indicator should flash twice. If all four mode indicators show one long flash, you have entered an invalid code. Try again.

Also note that if it takes you longer than 10 seconds to press the next key in the programming sequence, the whole sequence will be erased and you will have to start over. This feature was added to prevent you from accidentally reprogramming the remote during regular viewing.

PROGRAMMING FOR YOUR TERMINAL

The XRC 100 is already programmed to control the General Instrument CFT2200 and DCT 1000 cable terminals. If you have either of those terminals you can move on to *PROGRAMMING FOR YOUR TV*. If you have some other cable terminal, look up the manufacturer in the *DEVICE CODES* section and note the three-digit code.

On the remote control, press and hold **CABLE** until the four mode indicators flash twice. Now enter the three-digit code. The **CABLE** indicator should flash twice; if it doesn't, press and hold **CABLE** as described above and try again. For example, if you have a General Instrument cable terminal (other than the CFT2200 or DCT 1000), press and hold **CABLE** until the four mode indicators flash twice, then press 0-0-3.

After you have entered the code, point the remote at your terminal and press **POWER**. If your terminal turns on or off, you have finished programming for the terminal. Note your code below.

Cable Terminal Code ___ ___ ___

If, after trying all of the codes listed, the terminal still does not turn on or off, refer to the *IF THE DEVICE DOES NOT RESPOND* section of this guide.

PROGRAMMING FOR YOUR TV

Look up the manufacturer of your TV in the *DEVICE CODES* section and note the three-digit code.

On the remote control, press and hold **TV** until the four mode indicators flash twice. Now enter the three-digit code. The **TV** indicator should flash twice; if it doesn't, press **TV** as described above and try again. For example, if you have a Sony TV, press and hold **TV** until the four mode indicators flash twice, then press 0-0-0.

After you have entered the code, point the remote at your TV and press **POWER**. If your TV turns on or off, you are finished programming for your TV. Note your TV set code below.

TV Code ___ ___ ___

If, after trying all of the codes listed, the TV still does not turn on or off, refer to the *IF THE DEVICE DOES NOT RESPOND* section of this guide.

PROGRAMMING FOR YOUR VCR

Look up the manufacturer of your VCR in the *DEVICE CODES* section and note the code.

On the remote control, press and hold **VCR** until the four mode indicators flash twice. Now enter the three-digit code. The **VCR** indicator should flash twice; if it doesn't, press **VCR** as described above and try again. For example, if you have a JVC model, press and hold **VCR** until the four mode indicators flash twice, then press 0-0-8.

After you have entered the code, point the remote at your VCR and press **POWER**. If your VCR turns on or off, you have successfully programmed for the VCR. Note your VCR code below.

VCR Code ___ ___ ___

If you have tried all the codes listed for your VCR and it still does not turn on or off, refer to the *IF THE DEVICE DOES NOT RESPOND* section of this guide.

PROGRAMMING THE AUX MODE

You can program the AUX mode to control another device such as a second TV or VCR, or a digital audio tuner.

Suppose you want to control a second VCR. Look up the manufacturer of your VCR in the *DEVICE CODES* section and note the code.

On the remote control, press and hold VCR until the four mode indicators flash twice. Now press 9-9-2. Next press and hold AUX until the four mode indicators flash twice. Finally, enter the three-digit code for your VCR. The AUX indicator should flash twice; if it doesn't, press AUX as described above and try again. For example, if you have a Mitsubishi VCR, press and hold VCR until the four mode indicators flash twice, then press 9-9-2-AUX (hold until the four mode indicators flash twice) -0-4-3.

After you have entered the code, point the remote at your VCR and press POWER. If the VCR turns on or off, you have successfully programmed for the VCR. Note the code below.

AUX Code ___ ___ ___

If you want to control a second TV, the key sequence is similar, except replace the vcr key with the tv key. The sequence is TV (hold until the mode indicators flash twice) -9-9-2 aux (hold until the indicators flash twice) - the device code for your TV.

If you have tried all the codes listed for the device you want to control and it still does not turn on or off, refer to the *IF THE DEVICE DOES NOT RESPOND* section of this guide.

PROGRAMMING VOLUME CONTROL

You can program the XRC 100 to control volume through your cable terminal, your TV, or your VCR, without being in that mode. You can change your volume control selection at any time without disturbing the codes you programmed.

To program for volume control, first press and hold the mode key of the device in which volume is to be controlled until the four mode indicators flash twice. Next press 9-9-3. For example, if you want to control volume through your TV, press and hold TV until the four mode indicators flash twice, then press 9-9-3.

IF THE DEVICE DOES NOT RESPOND

If the device you want to control does not respond, first try all of the manufacturer codes for the device. However, manufacturers often put their brand name on devices made by others. For these cases, the XRC 100 has a feature which will search the library of codes for you, and find the correct one.

CODE SEARCH

Suppose you can't seem to find the correct code for your TV. To start the search, turn on your TV and aim the remote control directly at it.

Press and hold TV until the four mode indicators blink twice, then press 9-9-1. Now repeatedly press POWER-TV until your TV turns off. You may need to press POWER-TV a number of times. *Be patient, and go slow, so you don't miss the correct code.*

When the TV turns off, press SELECT to lock in the code. The TV indicator will flash twice to indicate that the code is accepted. The TV set code is now programmed into the remote control.

To find your cable terminal, VCR, or AUX code, use the same procedure but substitute the CABLE, VCR or AUX key for the TV key.

If these procedures are successful, you will be able to control the devices you programmed; but you still have not discovered the device codes. If you want to record these codes for future reference, use the "blink back" feature described next.

CODE SEARCH USING "BLINK BACK"

To use "blink back" to find your programmed TV code, press and hold TV until the four mode indicators flash twice, then press 9-9-0. Now press 1 and count the number of times the TV indicator blinks. This number is the first digit of your TV code. If the indicator does not blink after any step of this procedure, the digit is 0.

Next, press the 2 key. The TV indicator will blink again. Count the number of blinks to find the second digit of the code. Finally, press 3. The number of blinks is the third and final digit of the code.

You can also find the programmed cable terminal, VCR, and AUX codes using the same procedure. But the beginning sequence is CABLE (hold for two blinks)—9—9—0, VCR (hold for two blinks)—9—9—0, or AUX (hold for two blinks)—9—9—0. Then use the 1, 2, and 3 keys as in the TV code search above.

DEVICE CODES

CODES FOR CABLE TERMINALS

FOR TELEVISION VIEWING

ABC	003, 011, 013, 014, 047
General Instrument	003, 011, 012, 014, 047, 276, 476, 690, 691,
Hitachi	011
Jerrold	003, 011, 012, 014, 047, 276, 476, 690, 691
Rembrandt	011
Signature	011
Starcom	003, 047
Tocom	012, 013
United Cable	003

FOR DIGITAL AUDIO LISTENING

General Instrument	459, 520
Jerrold	459, 520
Starcom	459
DMX (Scientific Atlanta)	460

CODES FOR TELEVISION

A-Mark	003
Abex	032
Admiral	093
Adventura	046
Aiko	092
Akai	030, 098
Alaron	216
Alleron	179, 183
Ambassador	177
Anam	004, 009, 068, 180

Anam National	055, 161
AOC	003, 019, 030, 137, 185
Archer	003
Astro Text	379
Audiosonic	109
Audiovox	003, 180
Belcor	019
Bell & Howell	016, 154
Bradford	180
Brandt	109
Brockwood	019
Broksonic	003
Candle	030, 046, 056, 186
Carver	054
CCE	329
Celebrity	000
Citizen	030, 039, 046, 056, 060, 092, 186, 280
Clairtone	185
Concerto	056
Contec	157, 158, 180, 185
Craig	161, 180
Crown	039, 180
Curtis Mathes	030, 039, 060, 154, 415
CXC	180
Daewoo	019, 039, 066, 067, 091, 092, 451
Daytron	019
Dumont	017, 019
Dynatech	049
Electroband	000, 185
Electrohome	381, 389, 409
Emerson	019, 038, 039, 154, 158, 177, 178, 179, 180, 182, 183, 185, 236, 280, 282, 463
Envision	030
Ferguson	109
Fisher	154, 159
Fujitsu	179
Funai	179, 180
Futuretech	180
GE	021, 027, 029, 047, 051, 055, 135, 138, 174, 178, 251, 279, 282
GEC	437
Gibraltar	017, 019, 030
GoldStar	001, 002, 019, 030, 032, 039, 056, 106, 109, 178, 409
Gradiente	392
Grundig	070

Grunpy	179, 180
Hallmark	178
Harvard	068, 180
Hitachi	032, 038, 056, 109, 145, 151, 173, 227, 279, 409, 413
Ima	180
Infinity	054
Janeil	046
JBL	054
JCB	000
Jensen	050
JVC	036, 053, 069, 160, 169, 182
Kamp	216
Kawasho	158, 216, 308
Kenwood	019, 030
Kloss	024, 046
KMC	106
KTV	030, 039, 180, 183, 185, 280
Logik	016
Luxman	056
LXI	047, 054, 148, 154, 156, 178
M-Electronic	109
Magnavox	030, 036, 054, 096, 186, 230, 386
Majestic	015, 016
Marantz	030, 054
Megatron	003, 145, 178
MEI	185
Memorex	016, 056, 106, 150, 154, 178
MGA	019, 030, 150, 155, 178
Midland	017, 032, 039, 047, 051, 135
Minutz	021
Mitsubishi	014, 019, 098, 150, 155, 178, 241, 331, 358
Motorola	055, 093
MTC	019, 030, 049, 056, 060, 091, 185
Multitech	049, 180
NAD	156, 166, 178
NEC	019, 030, 036, 056, 434
Nikko	030, 092, 178
Noblex	430
Nordmende	109
NTC	092
Onwa	180
Optimus	154, 166
Optonica	093, 165
Orion	236
Panasonic	051, 054, 055, 162, 226, 250, 338, 375

Penney	002, 003, 018, 019, 021, 027, 030, 032, 039, 047, 051, 060, 110, 135, 138, 149, 156, 178, 309
Philco	019, 030, 054, 096, 302
Philips	054
Pilot	019, 030, 039
Pioneer	038, 109, 166
Portland	019, 039, 092
Priceclub	060
Prism	051
Proscan	047
Proton	003, 031, 178, 466
Pulsar	017
Pulser	019
Quasar	051, 055, 219, 250
Radio Shack	019, 032, 039, 165, 180, 409
RCA	018, 019, 029, 038, 047, 090, 135, 174, 254, 278
Realistic	019, 030, 032, 039, 056, 154, 165, 178, 180
Rhapsody	183, 185, 216
Runco	017, 030, 251
Saba	109
Sampo	030, 032, 039, 100, 110
Samsung	019, 030, 032, 039, 056, 060, 110, 178, 329, 408, 427, 482
Samsux	039
Sanyo	107, 146, 154, 159, 232, 484
Scimitsu	019
Scotch	178
Scott	019, 178, 179, 180, 236, 309
Sears	015, 047, 054, 056, 146, 148, 149, 154, 156, 159, 168, 171, 178, 179, 281
Sharp	039, 093, 157, 165, 220, 281, 386, 491
Shogun	019
Signature	016
Simpson	186, 187
Sony	000, 011, 080, 111, 353
Soundesign	178, 179, 180, 186
Spectricon	003, 137
Squareview	171
SSS	019, 180
Starlite	180
Supre-Macy	046
Supreme	000
Sylvania	030, 054, 096, 381
Symphonic	171
Tandy	093

Tatung	003, 049, 055, 396
Technics	051, 250
Techwood	051, 056
Teknika	016, 019, 039, 054, 056, 060, 092, 150, 175, 179, 180, 186, 322
Telefunken	074, 109
Tera	031
Thomson	109, 209
TMK	056, 177, 178
Toshiba	036, 060, 149, 154, 156
Tosonic	185
Totevision	039
Trical	157
Ultra	391
Universal	027
Vector Research	030
Victor	053
Video Concepts	098
Vidikron	054, 242
Vidtech	019, 178
Viking	046
Wards	016, 019, 020, 021, 027, 028, 029, 030, 054, 056, 080, 096, 111, 165, 174, 178, 179, 202
Yamaha	019, 030
Zenith	016, 017
Zonda	003

CODES FOR VCRs

Action	317
Advantz	356
Adventura	000
Aiko	278
Aiwa	000, 406, 436, 468
Akai	041, 049, 156, 242
American High	035
Asha	240
Audiovox	037
Beaumarck	240
Broksonic	121, 184, 211, 295, 361
Calix	037
Canon	035, 102
Capehart	020
Carver	081
CCE	072, 278

Citizen	037, 278
Colt	072
Craig	037, 047, 072, 240, 271
Curtis Mathes	035, 041, 060
Cybermex	051, 240
Daewoo	017, 020, 045, 087, 278
Daytron	020
Dynatech	000
Electrohome	037
Electroponic	037
Emerex	032
Emerson	000, 002, 036, 037, 043, 068, 088, 121, 184, 208, 209, 211, 212, 278, 294, 295, 361, 479
Fisher	047, 054
Fuji	033, 035
Funai	000, 325
Garrard	000, 325
GE	035, 060, 202
Go Video	232, 279, 350
GoldStar	037, 038, 471, 480
Gradiente	000, 408
Grundig	195
Harley Davidson	000
Harman/Kardon	038
Harwood	068, 072
Headquarter	046
HI-Q	047
Hitachi	041, 042, 082, 105, 235, 292, 396
Jensen	041
JVC	008, 041, 067, 206, 207, 384
Kenwood	038, 041, 067, 384
KLH	072
Kodak	035, 037
Lloyd	000
Lloyd's	208
Logik	072
LXI	037
Magnavox	035, 039, 081, 103, 110, 149
Magnin	240
Marantz	035, 081
Marta	037
Matsushita	035
MEI	035
Memorex	000, 035, 037, 039, 046, 047, 048, 240, 268, 299
MGA	043

MGN Technology	240
Minolta	042, 105
Mitsubishi	043, 067, 173, 242, 443
Motorola	035, 048
MTC	000, 240
Multitech	000, 072
NEC	038, 040, 041, 050, 067, 082
Nikko	037
Noblex	240
Olympus	035, 226
Optimus	037, 048, 432
Optonica	062
Orion	479
Panasonic	035, 102, 162, 225, 226, 227, 246, 254, 378, 454
Penney	035, 037, 038, 040, 042, 054, 240
Pentax	042, 105
Philco	035
Philips	035, 062, 081, 110, 403
Pilot	037
Pioneer	067
Portland	020
Protec	072
Pulsar	039, 051
Quarter	046
Quartz	046, 155
Quasar	035
Radio Shack	000, 037, 325
Radix	037
Randex	037
RCA	042, 060, 105, 149, 202, 277, 453
Realistic	000, 035, 037, 046, 047, 048, 062, 240
Ricoh	034, 253
Runco	039
Samsung	045, 051, 240
Sanky	039, 048
Sansui	041, 067, 082, 271
Sanyo	046, 047, 240, 268, 372
Scott	043, 045, 121, 184, 210, 211, 212
Sears	035, 037, 042, 046, 047, 054, 057, 105
Sharp	048, 062
Shintom	072
Shogun	051, 240
Singer	072
Sony	022, 032, 033, 034, 035, 253, 275
STS	042

Sunpak	253
Sylvania	000, 035, 043, 081, 103, 110
Symphonic	000, 325
Tatung	041
Teac	000, 041
Technics	035, 162, 246
Teknika	000, 035, 037, 052
TMK	036, 208, 240
Toshiba	043, 045, 057, 210, 212, 366
Totevision	037, 240
Unitech	240
Vector	045
Vector Research	038, 040
Video Concepts	040, 045, 221
Videosonic	240
Wards	000, 035, 042, 047, 048, 062, 072, 149, 212, 240
XR-1000	000, 035, 072
Yamaha	038
Zenith	033, 034, 039

Copyright © 1996 by General Instrument Corporation. No part of the contents of this book may be reproduced or transmitted in any form or by any means without the written permission of the publisher. Music Choice is a trademark of General Instrument Corporation. Digital Music Express is a trademark of International Cablecasting Technologies, Inc.