



MODEL MK19A

WIRELESS MOUSE REMOTE SYSTEM



**INCLUDES JR20A MOUSE REMOTE
AND JR21A WIRELESS RECEIVER**

OWNER'S MANUAL

— READ THIS FIRST! —

SAFETY CONSIDERATIONS

Remember to exercise good common sense when using your X-10 Mouse Remote for home automation applications - especially when scheduling unattended devices. There can be some unexpected consequences if not used with care. For example, an empty coffee pot can be remotely turned on. If that should happen, your coffee pot could be damaged from overheating. If an electric heater is turned on by remote control while clothing is draped over it, a fire could result. DO NOT USE the system for the control of high power heating appliances such as portable heaters.

Caution: To reduce the risk of electric shock, do not disassemble any part of the Home Automation System. No user-serviceable parts are inside. If you spill liquid on any accessory unit (Modules, etc.) disconnect the unit from the AC outlet to prevent possible fire or shock hazard and consult authorized service personnel.

Powerline operated equipment or accessories connected to any of these units should bear the UL listing or CSA certification mark and should not have been modified in any way that might defeat their safety features.

Warning: To prevent electric shock hazard, do not expose any part of the Home Automation System to rain or moisture.

FCC CAUTION

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.

OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.

This equipment generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturers instructions, it may cause interference to radio and television reception. It has been type tested and found to comply with the limits for remote control devices in accordance with the specifications in Sub-Parts B and C of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by unplugging the equipment, try to correct the interference by one or more of the following measures.

- Reorient the antenna of the radio/TV experiencing the interference.
- Relocate the interface with respect to the radio/TV.
- Move the interface away from the radio/TV.
- Plug the interface into an outlet on a different electrical circuit from the radio/TV experiencing the interference.
- If necessary, consult your local Dealer for additional suggestions.

NOTE: Modifications to any of the components in this kit will void the user's authority to operate this equipment.

CONTENTS

INTRODUCTION	5
BATTERY INSTALLATION	6
SETTING UP YOUR MOUSE REMOTE	7
BUTTON DESCRIPTIONS	7
BUTTON DEFAULTS	9
MOUSE OPERATION	14
MOUSE SOFTWARE INSTALLATION	16
MOUSE SOFTWARE CONFIGURATION	16
TYPICAL APPLICATION SCENARIO	21
SETTING UP FOR TV, VCR, CD, CABLE BOX AND SATELLITE RECEIVER	22
CODE LISTINGS	23
USING AUX TO CONTROL A SECOND TV, VCR, CABLE BOX OR SATELLITE RECEIVER	32
SEARCHING FOR CODES	34
IDENTIFYING CODES FOUND USING THE SEARCH PROCEDURE	35
SETTING THE SLEEP TIMER	36
HOME AUTOMATION	37
CONTROLLERS AND MODULES	37
HOUSE CODES AND UNIT CODES	38
INSTALLING HOME AUTOMATION COMPONENTS	39
TRANSCIVER MODULE	39
LAMP MODULE	40
CONTROLLING X-10 MODULES	41
TO SET THE X-10 SLEEP TIMER	42
CHANGING THE X-10 HOUSE CODE: ...	43
CONTROLLING AN IR MINI CONTROLLER	44
EXPANDING YOUR SYSTEM	45
TROUBLESHOOTING	47
MOUSE RELATED PROBLEMS	48
SYSTEM REQUIREMENTS	50
WARRANTY	51

INTRODUCTION

Congratulations on your purchase of the X-10 Mouse Remote and Wireless Receiver.

Wireless Mouse....

The MK19A kit consists of a remote control (JR20A) and a wireless receiver (JR21A). The remote control sends wireless RF signals to the receiver which is connected to your PC. You plug the receiver into the serial port or PS/2 port on your PC and plug your regular mouse into the socket on the receiver. This lets you use the remote as a wireless mouse. You use the mouse pad on the front of the remote to move the cursor around the PC screen, and use the buttons on the back of the remote as the left and right mouse buttons. It's that simple! However, to take advantage of the advanced features of the Mouse Remote, you can install the software that came with it. This lets you configure the remote's special function buttons (WEB, DVD, CD, and Phone). You can configure these buttons to perform special functions such as launching your WEB Browser, for example.

Universal Remote....

You can use the Mouse Remote as a Universal Remote, to control most audio/video products. Control your TV, VCR, Cable Box, Satellite Receiver, etc. all from the same convenient and easy to use remote.

Make your lights and appliances go to work for you....

The X-10 Mouse Remote will control most or all of your video and audio equipment. But what really sets it apart from other universal remotes is that you can also control almost any light or appliance in your home - even in another room! And it's easy to install. Within minutes, you can be using your X-10 Mouse Remote to dim the lights, start brewing a fresh pot of coffee and play your favorite movie! (Requires X-10 Transceiver and Modules, sold separately).

SETTING UP YOUR MOUSE REMOTE

Here are just some of the things you can do with your X-10 Mouse Remote...

- Control your entire audio/video and lighting setup for the ultimate Home Theater experience.
- Turn on lights at night to scare away intruders if you hear a noise.
- Start the coffee from your bedroom when you wake up.
- Turn on your electric blanket before the movie ends, so it's nice and warm when you go to bed.

Use this manual to become familiar with your Mouse Remote....

This manual will explain how to set up your Mouse Remote to use it with your PC as a wireless mouse.

Next, it shows you how to set it up to control your existing Audio/Video equipment.

Next, it will show you how you can use it with an X-10 Transceiver Module and Lamp Module (sold separately) to operate electrical devices in your home.

Finally, the manual will show how you can expand your system with some of the many additional X-10 products you can purchase.

BATTERY INSTALLATION

1. Push the tab and lift off the battery cover.



2. Fit four AAA alkaline batteries, taking care to match the + and - marks in the battery compartment.



BUTTON DESCRIPTIONS

INDICATOR LIGHT

The indicator light flashes when a key is pressed (if the key is available in the selected mode).

POWER

Works in the same way as your original remote. Turns All Lights On in X-10 mode.

SET UP

Used to set up the remote to control your TV, VCR, Cable, etc.

PC

Press first to access WEB, DVD, PHONE, or CD functions.

X-10

Lets you control X-10 Modules to operate lamps and appliances around the home.

WEB

Can be configured with the enclosed software to launch your browser, etc.

DVD

Can be configured with the enclosed software to play disks in your DVD drive.

PHONE

Can be configured with the enclosed software to launch telephony/fax applications, etc.

CD

Can be configured with the enclosed software to launch the PC's CD player.

AUX, TV, CBL, SAT, VCR

Used to select the device you want to control. SAT includes DSS receivers.

0-9

Used as your original remote and to enter device codes. Can also be configured to perform PC functions.

UP ARROW

Used for shift when in PC mode.

ENTER

Used to confirm certain entries.

VOLUME +/- (UP/DOWN)

Works like your original remote. Also brightens and dims lamps in X-10 mode. Works as Line Up/Down in PC mode.

CHANNEL +/- (UP/DOWN)

Works like your original remote. Also works as on and off in X-10 mode. Also works as Page Up/Down in PC mode.

MOUSE PAD

Moves the cursor around the screen.

MOUSE BUTTONS (ON BACK)

Used as left and right (looking from front) mouse buttons.

MUTE

Works the same as your original remote. Also turns All Modules Off in X-10 mode. Also works as Maximize in PC mode.

A-B

Used as a TV/VCR button.

DISP

Used to access on-screen information. Also works as Minimize in PC mode.

PLAY, REW, FF, STOP

Work the same as on your original VCR remote.

SELECT

Used for menu selections on DSS receivers.

TIMER

Used to set the Sleep Timer to automatically switch off the TV or X-10 Modules after a preset time.

GUIDE

Displays the main menu on DSS receivers.

REC

Record button. Works the same as your original VCR remote. You must press the REC button twice to begin recording.

PAUSE

Works the same as your VCR remote.

LAST

Selects the last channel selected.

The Mouse Remote buttons can be programmed to perform various functions using the Mouse Remote software, but they are pre-programmed with the following defaults:

When PC mode is selected the keys default to the following:

Key	PC
Power	Close Application
Enter	Enter
Play	Nudge mouse cursor up
Rew	Nudge mouse cursor left
FF	Nudge mouse cursor right
Stop	Nudge mouse cursor down
Rec	-
Pause	-
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
Vol+	Line Up
Vol-	Line Down
CH+	Page Up
CH-	Page Down
Mute	Minimize
A.B	-
Display	Maximize

Key below + Shift

0	-
1	Home
2	Up Arrow
3	Page Up
4	Left Arrow
5	-
6	Right Arrow
7	End
8	Down Arrow
9	Page Down
Vol+	Line Up
Vol-	Line Down
CH+	Page Up
CH-	Page Down
Mute	Minimize
A.B	-
Display	Maximize

When WEB mode is selected the keys default to the following:

Key	WEB
WEB	Default Browser
Power	-
Enter	-
Play	-
Rew	-
FF	-
Stop	-
Rec	-
Pause	-
0	www.x10.com
1	www.pc.orcaweb.com
2	-
3	-
4	-
5	-
6	-
7	-
8	-
9	-
Vol+	Line Up
Vol-	Line Down
CH+	Page Up
CH-	Page Down
Mute	Minimize
A.B	-
Display	Maximize

Key below + Shift

0	-
1	Home
2	Up Arrow
3	Page Up
4	Left Arrow
5	-
6	Right Arrow
7	End
8	Down Arrow
9	Page Down
Vol+	Line Up
Vol-	Line Down
CH+	Page Up
CH-	Page Down
Mute	Minimize
A.B	-
Display	Maximize

When DVD mode is selected the keys default to the following:

Key	DVD
Power	-
Enter	-
Play	-
Rew	-
FF	-
Stop	-
Rec	-
Pause	-
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
Vol+	Line Up
Vol-	Line Down
CH+	Page Up
CH-	Page Down
Mute	Minimize
A.B	-
Display	Maximize

Key below + Shift

0	-
1	Home
2	Up Arrow
3	Page Up
4	Left Arrow
5	-
6	Right Arrow
7	End
8	Down Arrow
9	Page Down
Vol+	Line Up
Vol-	Line Down
CH+	Page Up
CH-	Page Down
Mute	Minimize
A.B	-
Display	Maximize

When CD mode is selected the keys default to the following:

Key	CD
Power	-
Enter	-
Play	Play CD
Rew	Previous Track
FF	Next Track
Stop	Stop CD
Rec	-
Pause	Pause CD
0	CD Track 10
1	CD Track 1
2	CD Track 2
3	CD Track 3
4	CD Track 4
5	CD Track 5
6	CD Track 6
7	CD Track 7
8	CD Track 8
9	CD Track 9
Vol+	Master Vol+
Vol-	Master Vol-
CH+	Next Track
CH-	Previous Track
Mute	Master Mute
A.B	-
Display	Maximize

Key below + Shift

0	CD Track 20
1	CD Track 11
2	CD Track 12
3	CD Track 13
4	CD Track 14
5	CD Track 15
6	CD Track 16
7	CD Track 17
8	CD Track 18
9	CD Track 19
Vol+	Master Vol+
Vol-	Master Vol-
CH+	Next Track
CH-	Previous Track
Mute	Master Mute
A.B	F1
Display	-

When PHONE mode is selected the keys default to the following:

Key	PHONE
PHONE	Default Dialer
Power	-
Enter	-
Play	-
Rew	-
FF	-
Stop	-
Rec	-
Pause	-
0	0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
Vol+	Line Up
Vol-	Line Down
CH+	Page Up
CH-	Page Down
Mute	Minimize
A.B	-
Display	Maximize

Key below + Shift

0	0
1	Home
2	Up Arrow
3	Page Up
4	Left Arrow
5	-
6	Right Arrow
7	End
8	Down Arrow
9	Page Down
Vol+	Line Up
Vol-	Line Down
CH+	Page Up
CH-	Page Down
Mute	Minimize
A.B	-
Display	Maximize

—MOUSE OPERATION—

The MK19A kit consists of a remote control (JR20A) and a wireless receiver (JR21A). The remote control sends wireless RF signals (from up to 40 ft. away) to the receiver which is connected to your PC. You plug the receiver into the serial or PS/2 port on your PC and plug your regular mouse into the socket on the receiver.

If you have a serial mouse....



To your serial mouse

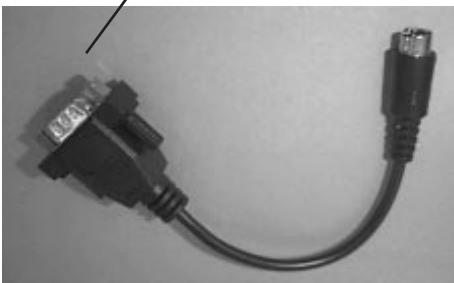
To serial port on your PC

If you have a PS/2 mouse....



To PS/2 port on your PC (using supplied adapter)

To your PS/2 mouse

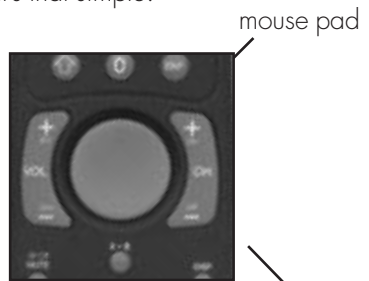


To install the JR21A Mouse Receiver:

First shut down and turn off your PC. Unplug your mouse and plug the mouse Receiver into your PC's mouse port (use the enclosed adapter if you have a PS/2 port). Plug your existing mouse into the socket on the Receiver. Set the switch on the Receiver to the front position. Turn on your PC.

IMPORTANT: You cannot connect the Mouse Receiver to a PS/2 port while the PC is turned on. If you try this, your PC will not recognize your mouse. You can attach the Receiver to a serial port while the PC is turned on but you will then need to re-boot your computer.

Wait for about 10 seconds after re-booting. Now you can use the JR20A remote as a wireless mouse. You use the mouse pad on the front of the remote to move the cursor around the PC screen, and use the buttons on the back of the remote as the left and right mouse buttons. It's that simple!



left mouse button (on back)

right mouse button (on back)

You can, at any time, still use your existing mouse, which always overrides the Mouse Remote. If you want to stop the JR21A receiver from receiving signals from the Mouse Remote for a period of time, set the switch on the JR21A to the back position. Remember to set it back to the front position next time you want to use the Mouse Remote.

Using the Mouse Remote to move the cursor around the screen and open and close applications is very easy to do and allows you, for example, to give PC presentations from across the room.

However, to take advantage of the advanced features of the Mouse Remote, you can install the software that came with it. This lets you configure the remote's special function buttons such as PC, WEB, DVD, PHONE, CD, etc. You can configure these buttons to perform special functions such as launching your WEB Browser, for example. If you prefer you can just use the defaults listed on pages 9 to 13.

MOUSE SOFTWARE INSTALLATION

Installation for Windows 3.x

Insert the Mouse Setup Disk or CD into your Floppy or CD drive. Launch File Manager and click on the drive letter for your Floppy or CD drive and double-click on Setup.exe. Follow the on-screen prompts to install the Mouse Remote software. After the installation is complete you will be given the opportunity to read the README file. Remember to re-boot your computer after installing the software.

Installation for Windows 95.

Insert Mouse Setup Floppy or CD into your Floppy or CD drive. Use Explorer to open your Floppy or CD drive and double-click on Setup.exe. Follow the on-screen prompts to install the mouse software. After the installation is complete you will be given the opportunity to read the README file. Remember to re-boot your computer after installing the software.

Configuration

Windows 3.x: click on the "RF Remote Mouse" icon in the control panel or click on the minimized mouse icon on the desktop and select the Configure option from the menu, to bring up a picture of the Remote.

Windows 95: click the remote mouse tray icon and select the "Configure" option from the menu, to bring up a picture of the Mouse Remote. (See page 20 also).

When the Mouse Remote picture is displayed, moving the cursor around the screen causes programmable buttons or buttons with additional help (setup/X-10/TV/CBL/SAT/VCR) to illuminate. Double-clicking on these buttons will allow them to be programmed or show additional help. Right-clicking on these buttons will display a pop-up menu offering additional options.

When you double-click on a button the window shown below is displayed.



This window lets you configure the button for what you want it to do. There are 6 different things that you can program a button to do. These are:

Launch
WWW
Multimedia
Edit
System
Messages

Launch lets you launch any application you choose from the button. For example: To set up button number 1 to launch your word processor:

Click on the Mouse Remote icon (on the desktop for Win 3.x or in the taskbar for Windows 95) and then click Configure.

When you see the picture of the Mouse Remote, click on the PC key and then double-click on the number 1 button.

When you see the picture above, click on Launch.

Clicking on the Launch button on the screen shown on page 17 displays a window similar to the one below.



The actual window you see depends on what button you clicked and will be different for Launch, WWW, Multimedia, Edit, System, and Messages. In this case you clicked on Launch so you will see the window above. Next click in the File name box and then type in the path and name for your word processor, or browse to find its location. Click OK to exit the above window and then again to exit the window on page 17. Then close the picture of the Mouse Remote. Now any time you press PC followed by 1 on the Mouse Remote, you will launch your word processor.

WWW lets you go straight to whatever URL you designate (after launching your browser). When you click on WWW you will see a window with a dialog box into which you type the WEB address that you want the button to take you to.

Multimedia lets you control your PC's CD or DVD player, etc. from the button. For example to set up a DVD player: On the Configuration picture for the Mouse Remote, first click on PC, then click on DVD then double click on Play. . When you see the screen on page 17, click on Multimedia. Select DVD Player for the media device and Play for the function. Repeat the above steps for Stop, FF, REW, Pause, etc.

Edit lets you set up any key to perform tasks such as Page Up, Page Down, Tab, Home, Type etc. Type allows to you assign text to a button so that it will be "typed" into any box you place the cursor over. For example you could assign a password to any button and then "type" it into a dialog box with the press of a button when you launch CompuServe® or America Online,® etc.

System lets you set up any button to maximize, minimize, or resize windows, close applications, shut down Windows® select the Windows 95® Start button, etc.

Messages This is an advanced feature that will primarily be used by programmers. It allows application specific information to be directed to the associated windows application. Refer to the on-line help for more information.

Virtual Keyboard

You can set up any key to launch your e-mail application, word processor, notepad, etc. you can then launch a virtual keyboard. This lets you move the cursor around the screen and press buttons on the virtual keyboard to type text from the Mouse Remote.

To assign the virtual keyboard to the A-B button for example:

Select Configure, click on PC, double-click on A-B and select System. Then select Virtual Keyboard for the function. Then to use the Virtual keyboard: launch your word processor, e-mail, etc. then press PC followed by A-B on the Mouse Remote.



The picture above will appear on top of your word processor. Move the cursor over each key and click the left mouse button on the back of the Mouse Remote (looking from the front) to press the virtual key. When you've finished "typing" press Enter on the Virtual Keyboard to enter the text into your word processor (or whatever other application is on the screen behind the Virtual Keyboard).

Note that the mouse pad and the buttons on the back of the remote are always active, no matter what mode the remote is in (PC, TV, VCR, etc.). Note however that the special function buttons (WEB, PHONE, CD, DVD) are only active after the PC button has been pressed. Note also that the mouse cursor will move faster as you press harder on the mouse pad. It actually has three distinct speeds.

Note also that speed, mouse trails, etc. can be set from the Remote Mouse Properties Sheet in the Control Panel.

Normally you will configure the Mouse Remote's buttons by clicking on the Tray icon (Windows 95) and then clicking Configure. If the tray icon is NOT visible in the system tray (because you closed it) Select Start, then Programs, then Remote, then Remote Mouse Buttons, to again show the Remote Mouse tray icon. Click on the tray icon then click Configure. Alternatively: If the tray icon is NOT visible a Configure button will be available in the properties sheet (in the Control Panel) allowing you to configure the Mouse Remote Buttons from there. If the tray icon IS visible in the system tray there is no Configure button in the Properties Sheet, so the Mouse Remote Buttons can be configured by clicking on the tray icon and then selecting Configure.

There is extensive on-line help available for the Mouse Remote software, so it is suggested that you refer to this help for more details. Note also that information on what each button does is available with the right-click of the mouse.

* Required X-10 Transceiver and Modules (sold separately).

TYPICAL APPLICATION SCENARIO

Here's a typical scenario that gives you an idea of what you can do with the power of the Mouse Remote:

Program 10 WEB sites into the numeric keys (e.g. 1 for www.x10.com, 2 for www.orcaweb.com...), then sit back in your armchair and press the PC key followed by the WEB key to launch your WEB browser. Then position the cursor over the URL field and press 1, 2, etc. to go directly to the address and read the latest information from each WEB site. Then using the channel up and down keys and volume up and down keys as scroll functions page through the site, while listening to a CD that you set to play on your PC's CD player earlier. After a while, skip back to track 7 on the CD by pressing CD followed by 7. Then return to WEB browsing mode by pressing the WEB key. Later still, as it starts to get dark, press the X-10 key and turn on the living room lights. * Then press the CD key and press pause while you answer the phone. Press the Power button to close your WEB browser and then press the PHONE button that you previously configured to launch Pointcast™. Sit back and relax while you read the latest issue of Wired™ magazine on-line.

To configure the above:

Click the tray icon and select Configure. Click the PC button then double-click the WEB button, then click Launch. Type in the name of your browser, or Browse to find its location. Click OK twice.

Click the PC button, then double-click button 1. Click WWW, then type the desired WEB address. Click OK. Repeat the process for each address you want to program for each numeric button.

Click PC, then CD, then double-click Play. Click Multimedia. Select your media device and function (Play). Repeat the process for Stop, Pause, FF, REW, MUTE, numeric keys, etc.

Get the idea?

SETTING UP FOR TV, VCR, CABLE, CD, AND SATELLITE RECEIVER

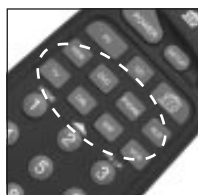
1. Turn on the device you want to control (TV, VCR, cable box, satellite receiver etc.).



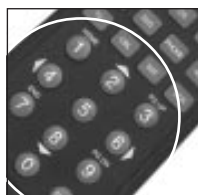
2. Press and hold SETUP until the LED indicator lights steadily. Release the SETUP button.



3. Press and release the mode button that matches the device you want to control. The LED blinks once. **Use AUX for CDs.**



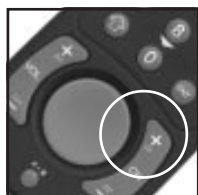
4. Enter the 3 digit Code from the Library Code Tables. The LED turns off after the last digit entered.



5. Point the remote at the device and press the POWER button. Your device should turn off.



6. Turn your device on and press CH +. If the device responds, setup is complete.



Notes:

For CD players use the AUX button. For Laser Disks use the VCR button.

If your TV/VCR/Cable Box/Satellite Receiver does not respond, try the other

codes for your brand. If it still doesn't respond, try the Code Search method on page 34.

If the LED blinks rapidly when you enter the code, you may have entered an invalid code. Recheck the code in the code list and try again.

If some buttons do not operate your equipment, try one of the other codes for your brand.

TV CODES

ABEX	185
ACME	003
ADA	016
ADC	012,096
ADMIRAL	014,186
ADVENTURA	187
AIKO	029
ALLERON	059
AMTRON	051
AKAI	015
AMSTRAD	202
ANAM NATIONAL	016,051,055,205,206,207
AOC	017,018,020,022,188,189,208
AUDIOVOX	051
.....
BELCOR	017
BELL & HOWELL	014,062,096
BRADFORD	051
BROKWOOD	017
.....
CANDLE	017,021,022,187
CAPEHART	188
CELEBRITY	015
CENTURION	022
CETRONIC	055
CITIZEN	017,021,022,029,051
.....	055,084,118,184,187,190
CLAIRTONE	189
CLASSIC	055
COLORTYME	017,022,023,213
CONCERTO	017,022
CONTEC/CONY	024,025,026,027,051,055,189
CRAIG	051,055
CROWN	051,055,184
CURTIS MATHES	013,017,022,028
.....	062,084,118,184
CXC	051,055
.....
DAEWOO	017,018,022,029,030
.....	031,055,098,139,140,184
DAYTRON	017,022,184
DIMENSIA	013
DUMONT	017,164
DYNASTY	055
DYNATECH	191
.....
ELECTROBAND	015,189
ELECTROHOME	016,017,022,034,035
EMERSON	017,022,025,027,036,037,038,039
.....	040,043,044,045,046,047,048,049,050
.....	051,052,053,054,055,056,057,058,059
.....	060,062,136,137,176,184,189,190,192,210
ENVISION	017,022
.....

FISHER 062,063,064,193
 FUJITSO 059
 FUNAI 051,055,059
 FUTURETEC 051,055
 GE 013,016,017,022,035,065,067,068
 100,176,177,178,179,180,181,194
 GIBRALTER 017,164
 GOLDSTAR 017,018,022,025,069
 070,071,168,169,184,185
 GRUNDY 051,059,184
 HALLMARK 017,022
 HARVARD 051
 HITACHI 017,022,024,025,026,072,073
 074,100,150,151,152,153,154,155
 156,157,158,159,160,161,163,192,211,212
 IMA 051
 INFINITY 075
 JANEIL 187
 JBL 075
 JCB 015
 JC PENNY 013,017,018,021,022,035,065
 067,071,076,077,084,100,118
 141,184,185,194,214
 JENSEN 017,022
 JVC 024,025,026,067,073,078
 079,080,102,171,172,195
 KAWASHO 015,017,022
 KAYPANI 188
 KEC 055
 KENWOOD 017,022
 KLOSS NOVABEAM 081,082,187,196
 KTV 051,055,083,184,189,190
 LODGENET 096
 LOEWE 075
 LOGIK 096
 LUXMAN 017,022
 LXI 013,022,062,075,084,194
 MEGATRON 022,072
 MAGNAVOX 017,021,022,075,081,082
 087,088,089,090,101,102
 143,144,145,146,147,196,197
 MAJESTIC 096
 MARANTS 075
 MARANTZ 017,022,075,091
 MATSUI 075
 MEI 189
 MEMOREX 014,022,062,095,096
 MGA 017,018,022,034,035
 059,064,092,093,095
 MIDLAND 067,164,184,185,194
 MINUTZ 065
 MITSUBISHI 017,018,022,034,035,059
 064,092,093,094,095,102,138
 MONTGOMERY WARD 096
 MOTOROLA 016,186
 MTC 017,018,022,084,118,189,191
 MULTITECH 051,191
 MULTIVISION 097
 NAD 022,084,198
 NEC 016,017,018,022,098,102,108,213
 NIKEI 055
 NIKKO 022,029
 NTC 029
 ONKING 055
 ONIWA 051,055

OPTIMUS 198
 OPTONICA 108,186
 ORION 048
 PANASONIC 016,067,075,183
 PHILCO 016,017,018,021,022,025
 075,081,082,087,088,090,196,197
 PHILIPS 016,017,019,021,022,025,075,081
 082,087,088,089,099,100,101,102
 PILOT 017,184
 PIONEER 017,022,103,104,105,192,198
 PORTLAND 017,018,022,029,184
 PRICE CLUB 118
 PRISM 067
 PROSCAN 013,194
 PROTON 017,022,025,106,188,199
 PULSAR 164
 PULSER 017
 QUASAR 016,067,083,107
 RADIO SHACK/REALISTIC 013,017,022,024,025
 051,054,055,062,108,184,185
 RCA 013,016,017,018,020,022,109,111,112
 113,114,115,116,142,192,194,200,201
 RHAPSODY 189
 RUNCO 164
 SAMPO 017,022,184,185,188
 SAMSUNG 017,018,022,024,025,028
 084,117,118,119,184,185,214,217
 SAMSUX 184
 SANYO 017,062,063,093,120,121,182,193
 SCOTCH 022
 SCOTT 017,022,025,037,048,051,055,059
 SEARS 013,017,022,026,059,062,063,064
 079,084,118,122,123,193,194,202,210
 SHARP 017,022,025,108,124,125
 126,127,135,184,186
 SHOGUN 017
 SIGNATURE 014,096,128
 SIMPSON 021
 SONIC 189
 SONY 015,019
 SOUNDESIGN 017,021,022,051,055,059
 SQUAREVIEW 202
 SSS 017,051,055
 STARLITE 051
 SUPREMACY 187
 SUPREME 015
 SYLVANIA 017,021,022,075,081
 082,087,088,089,090
 101,129,174,196,197
 SYMPHONIC 046,051,202
 TANDY 186
 TATUNG 016,191
 TECHNICS 067
 TECHWOOD 017,022,067
 TEKNIKA 017,018,021,022,025,026
 029,051,055,059,084,089
 095,096,118,183,184,187
 TELECAPTION 130
 TELERENT 096
 TERA 199
 TMK 017,022
 TOSHIBA 062,084,102,118
 122,130,131,173,214
 TOTEVISION 184
 UNIVERSAL 065,100

VICTOR	079,195
VIDTECH	017,018,022
VIKING	187
WARDS	013,014,017,018,022,037,046 059,065,075,081,082,087,088 089,096,100,101,108,132,133,197
YAMAHA	017,018,022
YUPITERU	055
ZENITH	096,134,164,165,166,167

VCR CODES

ADMIRAL	014
ADVENTURA	039
AIKO	040
AIWA	015,039
AKAI	016,017,018,019,020 021,124,125,126
AMERICAN HIGH	034
ASHA	026
AUDIO DYNAMICS	022,023
AUDIOVOX	027
BELL & HOWELL	024
BEAUMARK	026
BROKSONIC	025,038
CALIX	027
CANDLE	026,027,028,029,030,031,032
CANON	034,035,127
CAPEHART	033,123
CARVER	075
CCE	040,074
CITIZEN	026,027,028,029 030,031,032,040
COLORTYME	022
COLT	074
CRAIG	026,027,036,074
CURTIS-MATHES	013,015,022,026 029,031,034,035
CYBERNEX	026
DAEWO	028,030,032,038,039 040,041,123,143
DAYTRON	123
DBX	022,023
DIMENSIA	013
DYNATECH	015,039
ELECTROHOME	027,042
ELECTROPHONIC	027
EMERSON	015,019,025,027,028,034,037 038,039,042,043,044,045,046 047,048,049,050,051,052,053 054,055,056,057,058,059,060 078,118,126,129,130
FISHER	024,036,061,062,063,064,065,131
FUJI	034,132
FUNAI	015,039
GARRARD	039
GE	013,026,034,035,066,128,133
GOLDSTAR	022,027,031,067,134
GRADIENTE	039
HARLEY DAVIDSON	039
HARMAN KARDON	022,081
HARWOOD	074
HEADQUARTER	024
HITACHI	015,068,069,070,120,124,133,135

HIQ	036
INSTANT REPLAY	034
JCL	034
JC PENNEY	022,023,024,026,027,034,035 068,069,071,072,073,120,131
JENSEN	124
JVC	022,023,024,031,071,124,136
KENWOOD	022,023,024,029,031,071,124,136
KLH	074,144
KODAK	027,034
LLOYD	015,039
LOGIK	074
LXI	027
MAGNAVOX	034,035,075,076,117,121,137
MAGNIN	026
MARANTZ	022,023,024,029,031,034,071,075,077
MARTA	027
MASUSHITA	034
MEI	034
MEMOREX	014,015,024,026,027 034,036,039,056,117
MGA	042,078,126
MGN TECHNOLOGY	026
MIDLAND	066
MINOLTA	068,069,120
MITSUBISHI	042,068,069,078,079 080,081,082,083,084 085,086,087,119,126,136
MONTGOMERY WARD	014,088
MOTOROLA	014,034
MTC	015,026,039
MULTITECH	015,026,039,066,074
NEC	022,023,024,029,031,071,077 089,090,091,092,124,136
NIKKO	027
NOBLEX	026
OLYMPUS	034
OPTIMUS	014,027
OPTONICA	109,147
PANASONIC	034,035,122,138,139,140
PENTAX	029,068,069,029,120,133
PENTEX RESEARCH	031
PHILCO	034,035,075,076
PHILLIPS	034,075,109,137
PILOT	027
PIONEER	023,068,093,094,136
PORTLAND	029,030,032,123
PROSCAN	013
PROTEC	074
PULSAR	117
QUARTER	024
QUARTZ	024
QUASAR	034,035,138
RCA	013,016,026,034,068,069,095 096,097,098,099,100,101,102 103,104,120,128,133,138
RADIOSHACK/REALISTIC	014,015,024,026,027 034,035,036,039,042 062,063,109
RADIX	027
RANDEX	027
RICOH	141
RUNCO	117
SAMSUNG	018,026,028,046,066,125
SANKY	014,117
SANSUI	023,105,124,136

SANYO	024,026,036
SCOTT	025,028,038,045
	051,078,106,129
SEARS	024,027,034,036,061
	062,063,064,068,069
	120,131
SHARP	014,015,030,042,107,108,109
SHINTOM	017,069,074,111,145
SHOGUN	026
SIGNATURE	015
SINGER	034,074
SONY	017,111,112,132,141
STS	034,120
SYLVANIA	015,034,035,039
	075,076,078,137
SYMPHONIC	015,039
TANDY	015,024
TASHIKO	027
TATUNG	071,124
TEAC	015,039,071,098,124
TECHNICS	034,122
TEKNIKA	015,027,034,113,142,039
TOSHIBA	028,062,064,068,078,106,129
TOTEVISION	026,027
TMK	026,037,060
UNITECH	026
VECTOR RESEARCH	022,023,028,029
VICTOR	023
VIDEO CONCEPTS	022,023,028,029,126
VIDEOSONIC	026
WARDS	014,015,026,027,028,034
	036,039,042,068,069,074
	109,114,115,116,120,129
XR-1000	034,039,074
YAMAHA	022,023,024,031,071,124
ZENITH	017,111,117,132,141

CABLE CODES

ABC	014,015,016,017,018,019,020
ANTRONIX	021,022
ARCHER	021,022,023,024
CABLETENNA	021
CABLEVIEW	021
CENTURY	024
CITIZEN	024
COLOUR VOICE	025,026
COMTRONICS	027,028
CONTEC	029
EASTERN	030
GARRARD	024
GC ELECTRONICS	022
GEMINI	031,032
GENERAL INSTRUMENT	016
HAMLIN	033,034,035,048
HITACHI	016
HYTEX	015
JASCO	024
JERROLD	014,016,018,020,031
	036,037,062,063
MAGNAVOX	038
MEMOREX	039
MOVIE TIME	015,040,041
NSC	015,040

OAK	015,029,042
PANASONIC	013,061,064
PARAGON	039
PHILLIPS	024,025,026,032
	038,043,044,045
PIONEER	046,047
PULSAR	039
RADIO SHACK	058
RCA	013,060
REALISTIC	022
REGAL	035,048
REGENCY	030
REMBRANDT	016
RUNCO	039
SAMSUNG	027,047
SCIENTIFIC ATLANTA	019,049,050,051
	065,066,067
SIGNAL	027,031
SIGNATURE	016
SI MARX	027
SPRUCER	013
STANDARD COMPONENTS	052
STARCOM	014,020,031
STARGATE	027,031
STARQUEST	031
TANDY	053
TELEVIEW	027
TEXSCAN	052
TOCOM	017,036,054
TOSHIBA	039
TUSA	031
TV86	040
UNIKA	021,022,024
UNITED ARTISTS	015
UNITED CABLE	014
UNIVERSAL	021,022,023,024,055
VIDEOWAY	057
VIEWSTAR	028,038,040,053,056
ZENITH	039

SATELLITE CODES

AMPLICA	028
BIRDVIEW	029
CHANNEL MASTER	030,031,032
CHAPPARAL	013,014,033,034
CHEYENNE	014
DRAKE	015,016,037,038,039,040
DX ANTENNA	035,036
ECHOSTAR	041,042,043
FUJITSU	044,045
GENERAL INSTRUMENTS	017,018,019,046,047,048
JANEIL	049
JEROLD	050

KENWOOD	051
LUXOR	052
MACOM STATE	053
NORSTAT	054
REALISTIC	020,056,057
SCIENTIFIC ATLANTA	060
SIERRA I, II, III	014
STAR TRAK	061
STS	021,022,023,024,058,059
SUPER GUIDE	062
TOSHIBA	025,063
UNIDEN	026,064
VIDEO CIPHER II	027

DSS CODES

ECHOSPHERE	071
ECHOSTAR	071
DISH NETWORK	071
HUGHES SATELLITE	075
PANASONIC	069,072
PRIMESTAR	070
RCA	065
SONY	066
STAR SIGHT CABLE SERVICES	073
TOSHIBA	067,068,074

LASER DISC CODES

PIONEER	093
PROSCAN	146
RCA	146

CD CODES

ADC	013
ADCOM	014,067
AIWA	015,016
AKAI	068,090
AUDIO ALCHEMY	017
AUDIO TECHNICA	018
BSR	017
CALIFORNIA AUDIO LABS	069
CAPETRONIC	022
CARRERA	017
CARVER	019,020,021
CASIO	070
CURTIS MATHES	070
DENON	023,024
EMERSON	014,025,026
FISHER	020,027,028,029,030,071

GE	078
GENEXXA	025,026,031,072
GOLDSTAR	032,073
HARMON KARDON	033
HITACHI	031
INKEL	034
JC PENNEY	043,070
JVC	035
KENWOOD	027,036,037,038,080,081
KRELL	019
KYOCERA	013
LUXMAN	039,040,082,083,091
LXI	025,070
MAGNAVOX	019,084
MARANTZ	019,041,042,085
MCS	043,070
MGA	044
MISSION	019
MITSUBISHI	044,045
NAD	074,092
NAKAMICHI	046,047
NEC	043
NIKKO	018,026,029
NSM	019
ONKYO	048,049,075
OPTIMUS	017,020,021,025,031
.....	037,050,051,052,053
PANASONIC	069,086,093
PHILIPS	019,084
PIONEER	031,054,055,072
PROTON	019
QUASAR	069
RCA	014,020,025,056,076
RCA Digital Video Disc	096
REALISTIC	014,020,022,025
.....	026,031,042,050,052
ROTEL	019
SAE	019
SAMSUNG	094
SANSUI	019,025,057,076,087
SANYO	020,058,071,088,095
SCOTT	014,025,026
SEARS	025,037,042,070
SHARP	037,042
SHERWOOD	034,042,051,059
SHURE	043
SONY	060,061
STS	013
SYLVANIA	019
SYMPHONIC	062
TEAC	029,042,052,062,063,064
TECHNICS	069,086,089
THETA DIGITAL	084
TOSHIBA	074
VECTOR RESEARCH	017,032

VICTOR	035
YAMAHA	018,065,066,077

HOME AUTOMATION CODES

X-10 HOME AUTOMATION (RF)	013
X-10 HOME AUTOMATION (IR543).....	014
GE HOMEMINDER	015

USING AUX TO CONTROL A SECOND TV, VCR, CABLE BOX OR SATELLITE RECEIVER

The AUX button is normally used to control an audio component such as a CD player, but it can also be configured to control a second TV, VCR, cable box or satellite receiver.

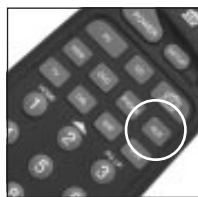
1. Turn on the equipment you want to control.



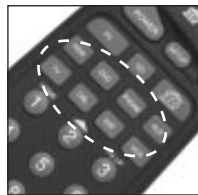
2. Press and hold SETUP until the LED indicator lights steadily. Release Setup button.



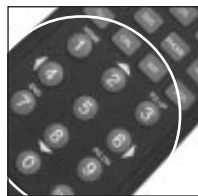
3. Press the AUX button.



4. Press and release the mode button that matches the A/V equipment you want to control. The LED blinks once.



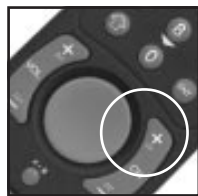
5. Enter the 3 digit Code from the Library Code Tables. The LED turns off after the last digit entered.



6. Point the remote at your A/V component and press the POWER button. Your A/V component should turn off.



7. Turn your A/V component on and press CH +. If it responds, setup is complete.



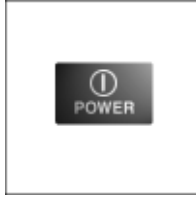
Notes:

If your audio/video component does not respond, try the other codes for your brand. If it still doesn't respond, try the Code Search method on page 34.

If the LED blinks rapidly when you enter the code, you may have entered an invalid code. Recheck the code in the code list and try again.

SEARCHING FOR CODES

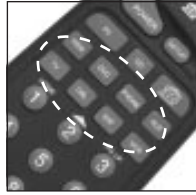
1. Turn on the device you want to control.



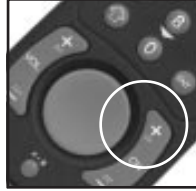
2. Press and hold SETUP until the LED indicator lights steadily. Release Setup button.



3. Press the mode button that matches the equipment you want to control. The LED blinks once. For AUX, press AUX, then the mode button.



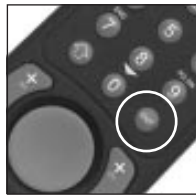
4. Press CH + repeatedly* until the device to be controlled changes channel.



If you go past the code accidentally, just press LAST repeatedly until the channel changes again.



5. Press and release the ENTER button to complete the setup.



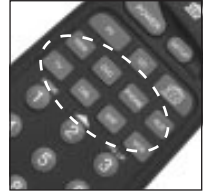
***Note:** You may have to press CH + many times (50+). If the device does not have a Channel Up function, use the PLAY button (VCR only) or the POWER button.

IDENTIFYING CODES FOUND USING THE SEARCH PROCEDURE

1. Press and hold SETUP until the LED indicator lights steadily. Release Setup button.



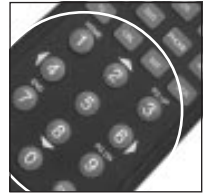
2. Press the mode button that matches the equipment you want to identify. The LED blinks once. For AUX, press AUX, then the mode button.



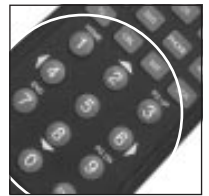
3. Press and release SETUP. The LED blinks once.



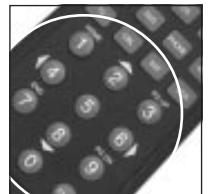
4. To find the first digit, press each number button from 0 to 9 until the LED blinks. The number you pressed is the first digit of the code.



5. Press each number button from 0 to 9 again as above to find the second digit.



6. Press each number button in turn to find the third digit. When the third digit has been found, the LED will go out.



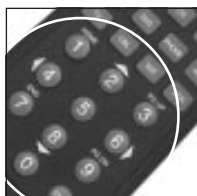
SETTING THE SLEEP TIMER

The Sleep Timer automatically turns off the TV after the time you set. Press the TV button, then follow the instructions below to set the Sleep Timer:

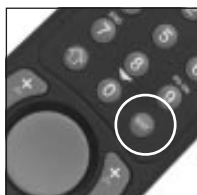
1. Press and hold **TIMER** until the LED indicator lights steadily. Release **TIMER** button.



2. Use the number buttons to enter the sleep time required (1 to 99 minutes).



3. Press **ENTER** to confirm the setting.



Note: Make sure you leave the remote pointing at the TV to ensure it turns off the TV at the time you set.

The first thing you need to understand is that there are two different devices you need to control your house; Controllers and Modules. Any light or appliance that you want to control is plugged into a Module and that Module is then plugged into a standard AC outlet.

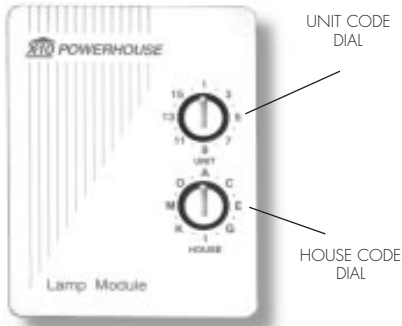
Modules receive commands from Controllers. Examples include the Lamp Module (sold separately). The Transceiver Module (also sold separately) is another example (although it also doubles as a Controller as described later).

Controllers are plugged into standard wall outlets and send commands to Modules over your existing electrical wiring in your house without affecting your electricity in any way.

The Transceiver Module works as a Controller when it is used with a remote control such as the X-10 Mouse Remote. When the Transceiver Module receives a command from a remote control it sends digital signals over your existing house wiring to a Module which receives the signals and executes the command. The Remote uses radio frequency (RF) signals to send commands to the Transceiver Module. RF signals can go right through walls, so you can use the Mouse Remote to control lights or appliances from anywhere in your home.



HOUSE CODES AND UNIT CODES



Each Module has a specific address made up of a House Code (red dial on the face of the Module) and a Unit Code (black dial on the face of the Module).

The Controller first sends an address and then a command on the AC power lines. Only the Module with a matching address will execute the command. If more than one Module has the same address, both Modules will execute the command.

Addresses are set on the Module by turning the two dials on the front of the Module to the desired letter and number (using a small screwdriver or a coin). The House Code is selected from the letters A through P, and the Unit Code is selected from the numbers 1 through 16.

— INSTALLING HOME — AUTOMATION COMPONENTS

TRANSCIVER MODULE

The Transceiver Module (sold separately) receives radio frequency (RF) commands from Mouse Remote to operate a lamp or appliance plugged into it. The Transceiver Module also passes on commands over your house wiring to control other X-10 Modules. Note that (unlike the Lamp Module) you cannot dim and brighten a lamp connected to the Transceiver Module.

You should locate the Transceiver Module centrally in the home for maximum range when controlled by the X-10 Mouse Remote.

1. Set the House Code to 'A'.



2. Plug a lamp or appliance into the Transceiver Module.



3. Plug the Transceiver Module into a convenient AC outlet. Fully extend the antenna.



LAMP MODULE

The Lamp Module (sold separately) may be used to control any incandescent lamp rated up to 300W. It is not suitable for other types of lamps such as fluorescent or energy saving lamps, or lamps which include a dimmer control.

Caution: Do not connect an appliance such as a coffee pot or heater to the Lamp Module. It may damage the Module and the appliance and could cause a fire hazard.

1. Set the House Code to 'A' and the Unit Code to '2.'



2. Plug a lamp into the Lamp Module.



3. Plug the Lamp Module into a convenient AC outlet.



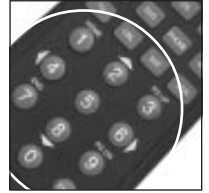
CONTROLLING X-10 MODULES

If you have installed the Transceiver Module (sold separately) you can control it and other X-10 modules as follows:

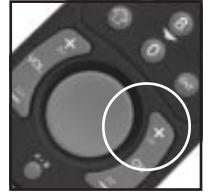
1. Press and release the X-10 button.



2. Use the number buttons to enter the Unit Code number of the chosen module. (You do not need to enter '0' first for a single digit number.)



3. Press the appropriate button for the function you require (see below).



X-10 FUNCTIONS:

On:	CHANNEL +
Off:	CHANNEL -
Bright:	VOLUME +
Dim:	VOLUME -
All Lights On:	POWER
All Modules Off:	MUTE

Note: You cannot dim or brighten an Appliance Module. If the module was off and you press Bright or Dim (VOLUME+ or VOLUME-) this will simply turn the module on.

TO SET THE X-10 SLEEP TIMER

The X-10 Sleep Timer switches off the chosen modules after the preset time.

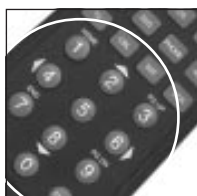
1. Press and release the X-10 button.



2. Press and hold TIMER until the LED indicator lights steadily. Release the TIMER button.



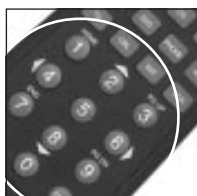
3. Use the number buttons to enter the module Unit Code for the module to be turned off.



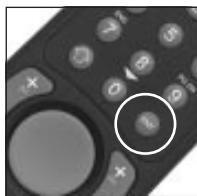
4. Press the desired function button (e.g. CH - to turn the module off, or CH+ to turn it on, after the preset time).



5. Using the number buttons enter the sleep time desired (1 to 99 mins).



6. Press ENTER to confirm the setting.



CHANGING THE X-10 HOUSE CODE

The Mouse Remote defaults to House Code A, and in most cases you will not need to change this unless you are experiencing interference from a neighboring X-10 system.

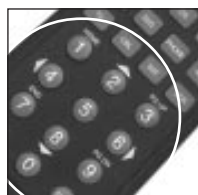
1. Press and release the X-10 button.



2. Press and hold SETUP until the LED indicator lights steadily. Release the Setup button.



3. Use the number buttons to enter the number equivalent to the chosen House Code (1=A, 2=B .. 16=P).



4. Press the ENTER button to confirm the House Code. The LED turns off.



Note: The Housecode you choose must match the Housecode on the Transceiver Module you are using it with.

CONTROLLING AN IR MINI CONTROLLER (IR543)

If you already own an IR Mini Controller, you will need to change the X-10 Home Automation code in the remote to use it. The code for standard X-10 Home Automation is 013. The code to control the IR543 Mini Controller is 014. To change the code:

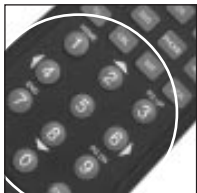
1. Press and hold **SETUP** until the LED indicator lights steadily. Release the **SETUP** button.



2. Press and release the **X-10** button.



3. Enter 014 to control an IR Mini Controller, 013 for standard X-10 control. The LED turns off after the last digit entered.



Note: In most cases, you will not need to use the IR543 Mini Controller to receive commands from the Mouse Remote - the Transceiver Module does this for you and has the added advantage of working through walls. You can't control the IR543 Mini Controller and the Transceiver Module at the same time.

EXPANDING YOUR SYSTEM

The products illustrated below represent just a few of the wide range of X-10 compatible products you can choose from to expand your Home Automation system. They are available from electrical outlets, department stores and mail order catalogs.

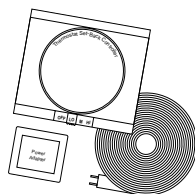
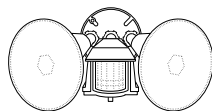
X-10 Home Automation products also integrate with X-10 security systems, so you can use the security remotes that come with them to control macros and flash lights when the security system is tripped.

Check out our WEB Site at:

<http://www.x10.com>

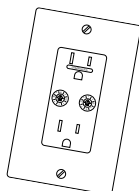
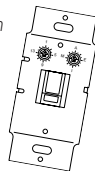
for more information on these and many other X-10 products.

The Dual Floodlight Motion Detector PR511 turns on at dusk and/or when it detects movement, and sends X-10 signals to control other Modules, or trigger ActiveHome macros.



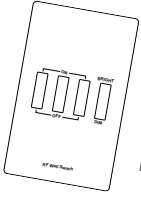
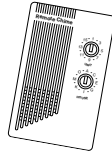
*The **Thermostat Setback Controller TH2807** mounts below your thermostat to reduce the room temperature at night or at the times you set to save energy. No wiring needed to your existing thermostat.*

Replace your existing wall switches with the **Wall Switch Module WS467**. Installs like a regular dimmer. On/Off and Bright/Dim functions. Other models available for 3-way lighting.



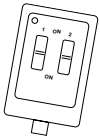
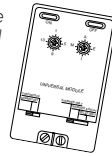
Replace an existing AC wall outlet with the **Receptacle Module SR227**. Has one 15A/1800W controlled outlet and one outlet which is always on.

Use a controller to trigger the **Remote Chime Module SC546** to call Dad up for dinner, or warn people you're about to turn on the sprinkler.



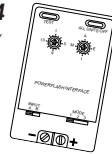
Fit a **Wireless Wall Switch RW724** anywhere you need an extra switch - with no wires. Sends commands to the Transceiver Module just like a remote.

Use the isolated contacts on the **Universal Module UM506** to control pool pumps, sprinklers, drapes and other low voltage equipment. Includes built in warning beeper.



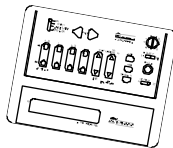
Switch entrance or garage lights on from your car with the convenient **Keychain Remote KC674**.

The **PowerFlash Module PF284** connects to dry contact or low voltage alarm terminals on your burglar alarm system and flashes X-10 controlled lights when it is triggered.



Plug in a **Heavy Duty Module HD245** to control 220V appliances such as air conditioners and water heaters.

Use the **Mini Timer MT10A** to program up to 4 X-10 Modules to go on and off up to twice a day.



The Transceiver Module doesn't respond to the remote:

- Check the House Code of the Transceiver Module is set to A. If you have changed the Housecode on the remote (see p. 43), check that it matches the Housecode on the module.
- Press the ON/OFF button on the front of the Transceiver Module to confirm it operates the equipment connected to it.

The Transceiver Module works, but other modules don't respond:

- Check that the module has the same Housecode as the Transceiver Module.
- Try plugging the Module into a different outlet.

The Mouse Remote won't control your A/V equipment, or doesn't work at all:

- Use manual controls or the original remote control to confirm the equipment is working properly.
- Be sure you pressed the device key for the device you want to control.
- Re-enter the code for your A/V product from the code listings on pages 23 through 32.
- Try searching for the code as described on page 34.
- Replace the Mouse Remote's batteries.

The Remote won't control my audio CD player:

- The CD key on the Mouse Remote controls the CD player in your PC. To control an external audio CD player set it up under the AUX key. Press Setup, then AUX, then CD, then enter the code from the code listings under the heading CD Codes (page 30-31).

Mouse related problems:

No mouse control (even the standard mouse) or no cursor in Windows:

- Ensure that the JR21A Mouse Receiver is plugged into your serial or PS/2 port and your mouse is plugged into the receiver.
- Ensure that the switch on the JR21A is on (forward).
- Ensure that if you plugged the JR21A into your *serial* port that you have a *serial* mouse plugged into the JR21A.
- Ensure that if you plugged the JR21A into your PS/2 port that you have a PS/2 mouse plugged into the JR21A.
- Ensure that a compatible driver is loaded (i.e. the Windows default driver or the X-10 driver).
- Mice that provide additional functions (e.g. the Intellimouse™) cannot be used in the same port as the Mouse Remote. In this case, attach the Mouse Remote to a different port (Windows 95).
- A DOS driver might be loaded and could be leaving the system in an unknown state before Windows starts. Remove all DOS mouse drivers, and restart Windows.

Cursor jumps when a button on the Mouse Remote is pressed:

- The X-10 mouse driver included with the system has not been installed. Install it as shown on page 16.

Cursor movement seems slow or sluggish:

- Try different speed settings in the Remote Mouse Properties Sheet in the Control Panel.

Cursor seems to run around the screen by itself, selecting menus and bringing up screens:

- Caused by loss of PS/2 mouse data synchronization. Change the mouse driver to X-10 Remote PS/2 Mouse Driver (Resync).

Tray Icon not visible (Windows 95):

- The X-10 mouse driver included with the system has not been installed, or the Mouse Remote has not been detected. Check that the driver has been installed and that all mouse connections have been made correctly.
- You might have selected close from the Menu that comes up when you click on the tray icon. Select Start, then Programs, then Remote, then Remote Mouse Buttons, to again show the Mouse Remote tray icon.

Note: speed, mouse trails, etc. can be set from the Remote Mouse Properties Sheet in the Control Panel. If the tray icon is NOT visible in the system tray (because you closed it) then a Configure button will be available in the properties sheet allowing you to configure the Mouse Remote Buttons from there. If the tray icon IS visible in the system tray there is no Configure button in the Properties Sheet so the Mouse Remote Buttons can be set by clicking on the tray icon and then selecting Configure.

Refer to the online help for more information.

More information on X-10 products can be found at

<http://www.x10.com>

Software updates and bug fixes for the Mouse Remote software can be found at

<http://www.x10-beta.com/Mouse> (case sensitive).

System Requirements

Note: The system requirements are not defined by the Mouse Remote, but by the applications that will be enhanced with the use of the Mouse Remote.

Minimum:

Windows 3.1 or Windows 95, 486/66 processor, 8MB RAM, double speed CD ROM drive, local bus video adapter with 1MB RAM, 128kB level 2 cache, a Windows compatible sound card and a PS/2 or serial mouse.

Recommended:

Windows 95, Pentium,[™] 16MB RAM, quad speed CD ROM, PCI bus video adapter with 1MB RAM, 256kB level 2 cache, Windows compatible sound card and a PS/2 or serial mouse.

Note the CD ROM, and video card suggestions are applicable if you want to use the Mouse Remote to remotely control audio or video CDs played on your PC.

WARRANTY

12 MONTH LIMITED WARRANTY

X-10 (USA) INC. (X-10) WARRANTS ITS PRODUCTS TO BE FREE FROM DEFECTIVE MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE ORIGINAL DATE OF PURCHASE AT RETAIL. X-10 AGREES TO REPAIR OR REPLACE, AT ITS SOLE DISCRETION, A DEFECTIVE X-10 PRODUCT IF RETURNED TO X-10 WITHIN THE WARRANTY PERIOD AND WITH PROOF OF PURCHASE.

IF SERVICE IS REQUIRED UNDER THIS WARRANTY:

1. RETURN THE DEFECTIVE UNIT POSTAGE PREPAID TO THE ADDRESS ON THE BACK OF THIS OWNER'S MANUAL.
2. ENCLOSE A CHECK FOR \$4.00 TO COVER HANDLING AND RETURN POSTAGE.
3. ENCLOSE A DATED PROOF OF PURCHASE.
4. X-10 IS NOT RESPONSIBLE FOR SHIPPING DAMAGE. UNITS TO BE RETURNED SHOULD BE PACKED CAREFULLY.

THIS WARRANTY DOES NOT EXTEND TO ANY X-10 PRODUCTS WHICH HAVE BEEN SUBJECT TO MISUSE, NEGLIGENCE, ACCIDENT, INCORRECT WIRING OR TO USE IN VIOLATION OF OPERATING INSTRUCTIONS FURNISHED BY US, NOR EXTEND TO ANY UNITS ALTERED OR REPAIRED FOR WARRANTY DEFECT BY ANYONE OTHER THAN X-10. THIS WARRANTY DOES NOT COVER ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED AND NO REPRESENTATIVE OR PERSON IS AUTHORIZED TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF OUR PRODUCTS.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, AND/OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO THE ORIGINAL CUSTOMER. THIS WARRANTY GIVES YOU SPECIFIC RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

* Windows, Windows 95, Pentium, CompuServe, America Online, Pointcast, Wired, and Intellimouse are trademarks or registered trademarks of their respective owners.

X-10 (USA) Inc.
91 Ruckman Rd.
Closter, NJ 07624-0420

<http://www.x10.com>