Wireless Mouse1.fm Page -4 Friday, July 21, 2000 10:48 AM

USER'S GUIDE

PERACOM NETWORKS

WIRELESS MOUSE

Wireless Mouse1.fm Page -3 Friday, July 21, 2000 10:48 AM

Important Safety Instructions

1. Read these instructions.
2. Follow all instructions.
3. Keep these instructions.
4. Heed all warnings.
5. Do not use this apparatus near water.
6. Clean only with a damp cloth.
7. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, or the apparatus does not operate normally or has been dropped.

Wireless Mouse1.fm Page -1 Friday, July 21, 2000 10:48 AM

FCC Notice

NOTICE

FEDERAL COMMUNICATIONS COMMISSION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to 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 undesired operation. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications, However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Peracom Networks, Inc. may void the user's authority to operate the equipment.

Wireless Mouse1.fm Page 0 Friday, July 21, 2000 10:48 AM

Table of Contents

Important Safety Instructions ii

FCC Notice iii

The Avcast Home Entertainment System 1

Introducing the Wireless Mouse 2

Appendix A: Changing the RF Address 5

Appendix B: Wireless Mouse Specifications 7

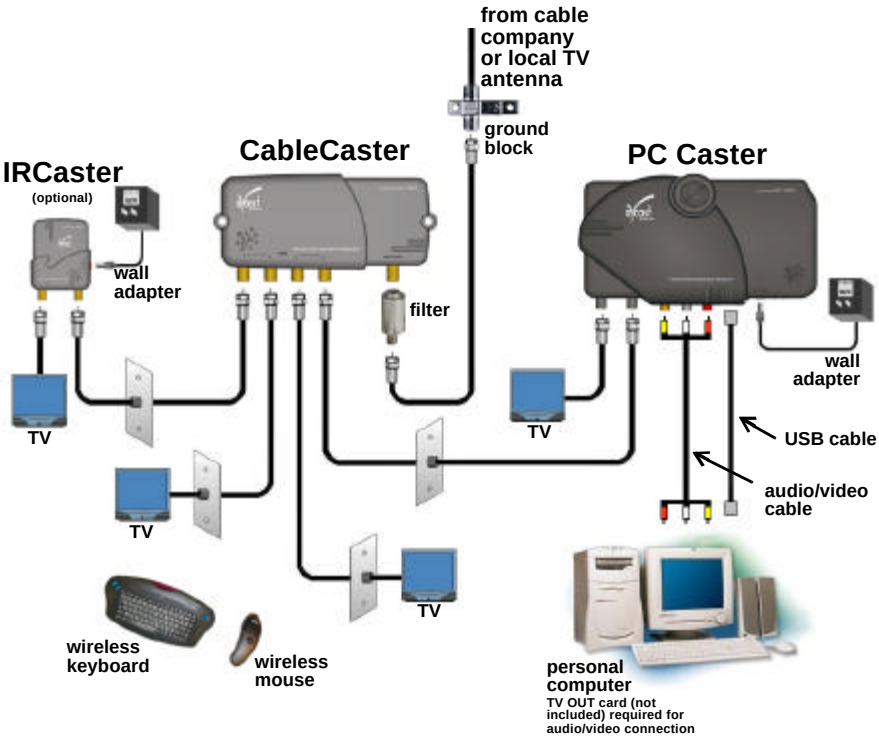
Appendix C: Support and Troubleshooting 8

Appendix D: Accessories and Replacement Parts 10

Index 12

The Avcast Home Entertainment System

The Avcast system uses the existing coaxial cable wiring in a house to create a home entertainment network. The Avcast home entertainment network connects television sets (TVs) and a personal computer (PC) together — allowing the user to their PC screen on any television connected to the network. The following is an example of a basic Avcast home entertainment network:



Wireless Mouse1.fm Page 2 Friday, July 21, 2000 10:48 AM

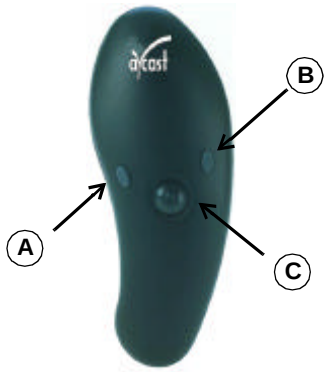
Introducing the Wireless Mouse

The Avcast Wireless Mouse is used with a PC Caster and a PC in the Avcast home entertainment network.

The PC Caster allows you to watch the screen of your personal computer on any TV connected to the Avcast home entertainment network.

The Wireless Mouse allows you to perform all of the functions of the mouse that is connected to your personal computer — remotely. You can view and control the PC using a TV screen in a completely different room. The Wireless Mouse uses radio frequency (RF) to communicate with the PC Caster that is connected to the PC.

The Wireless Mouse has a joystick, and left and right buttons.



A **left mouse button**

B **right mouse button**

C **joystick**

It is possible to have more than one PC connected to your Avcast home entertainment system by using additional PC Casters. Setting the internal "frequency addresses" of each set of PC Caster and remote devices to different channels allows them to exist on the system and be used simultaneously.

The Wireless Mouse is powered by 3 AAA batteries that you install in the battery compartment on the back of the Wireless Mouse (see Appendix A for Wireless Mouse Specifications).

Other Items in the Kit

AAA Batteries (3)

Warranty Card

Technical Information

The appendixes in the back of this guide provide technical specifications.

Wireless Mouse1.fm Page 3 Friday, July 21, 2000 10:48 AM

How to Use the Wireless Mouse

Before you start:

- The original PC keyboard and mouse need to be connected to the PC for it boot up properly.
- The PC mouse should not be used at the exact same time as the Wireless Mouse. Using both of them simultaneously may produce unexpected results.

Set up the Wireless Mouse

1. Remove the battery compartment cover and insert 3 new AAA batteries (supplied).

The Wireless Mouse is powered by 3 AAA batteries located in the battery compartment under a snap-on cover on the back of the device. Insert the batteries as indicated by the polarity symbols (+ and -) marked inside the battery compartment.

2. Close the battery compartment cover.

3. Calibrate the Wireless Mouse.

The Wireless Mouse needs to be calibrated each time its batteries are replaced. To calibrate, press and hold the joystick straight down once, then move the joystick around completely in each direction (right, left, forward, back).

4. Verify the Wireless Mouse is working properly.

Go to the personal computer connected to the Avcast entertainment system and make sure that it is switched on. Position yourself in front of the PC and manipulate the mouse joystick to verify it is communicating with the computer properly. You should be able to see the cursor moving around on the screen. Go to the troubleshooting information in Appendix B if the Wireless Mouse does not appear to be communicating with the PC.

Next, go to a TV connected to the Avcast entertainment system and make sure that it is switched on. Position yourself in front of the TV and manipulate the mouse joystick to verify it is communicating with the computer properly. You should be able to see the cursor moving around on the TV screen the same way you did on the PC screen. If the Wireless Mouse does not appear to be communicating with the PC at that location, you need to make some adjustments to the physical placement of the PC Caster to improve the RF (remote) reception. Go to the RF Positioning of PC Caster section of the PC Caster User's Guide for more information.

Wireless Mouse1.fm Page 4 Friday, July 21, 2000 10:48 AM

Mouse Functions

The left/right mouse buttons and joystick on the Wireless Mouse provide the same functions of a 2-button PC mouse. Manipulating the Wireless Mouse joystick in different directions moves the PC cursor accordingly. The farther you push the mouse joystick in a direction, the faster the cursor moves.

In most cases the range of the Wireless Mouse should be greater than 80 feet from the location of the PC Caster.

"Drag and Drop" Operation

When you press straight down on the mouse joystick and release it quickly, the mouse joystick function is the same as a left mouse button "point and click" operation.

When you place the cursor on a object on the screen, and press and hold the mouse joystick straight down for more than 3 seconds before releasing it, the "drag and drop" operation is activated. You can move the object around on the screen by pushing the mouse joystick in the desired direction. The "drag and drop" mode is indicated on the PC screen by a "jiggling" of the selected object.

The Wireless Mouse stays in "drag and drop" mode until you press and release the mouse joystick again or press one of the left/right mouse buttons.

Power for Wireless Mouse

When not in use, the Wireless Mouse goes into a low current power down state. When you press either button or move the mouse joystick, the circuitry in the Wireless Mouse causes the processor to "wake up". When a motion or button push is no longer detected, the Wireless Mouse returns to a power down state.

To ensure that the batteries do not get drained in case the mouse joystick is constantly pushed, the Wireless Mouse will power down if the joystick is constantly active for 45 seconds. The joystick must be moved or a button pressed for the Wireless Mouse to power on again.

The life of the batteries depends on the daily usage. Appendix A, "Wireless Mouse Specifications," contains information about typical battery life for the Wireless Mouse.

Appendix A: Changing the RF Address

What you need:

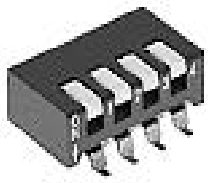
- A pointed tool such as a pen tip or tooth pick.

The Wireless Mouse has a default radio frequency (RF) address of zero. The RF address selection switch, located through a small window inside the battery compartment, sets the radio frequency (RF) address for the Wireless Mouse. Possible address values are zero through 15.

The RF address set on the Wireless Mouse must match the RF address set on the PC Caster for the two devices to communicate. In most Avcast network installations, you will not need to change the address of the PC Caster or the Wireless Mouse unless you have more than one PC Caster installed in your home entertainment system or if you live in close proximity to a neighbor who has a PC Caster installed in their home.

1. **Open the battery compartment cover on the back of the Wireless Mouse and remove the batteries to expose the instrument to change the RF address.**
2. **Find the desired RF address setting in table on the next page.**
3. **Use a pointed tool to move the switches on the instrument to change the RF address.**
4. **Close the battery compartment.**
5. **Set up the Wireless Keyboard.**

   Go to “Set Up the Wireless Mouse” on page 3 for verification and calibration instructions.



The Wireless Keyboard is now ready to use.

Wireless Mouse1.fm Page 6 Friday, July 21, 2000 10:48 AM

RF Address Settings

Switch Positions 1 2 3 4	Address
	0
	1
	2
	3
	4
	5
	6
	7

Switch Positions 1 2 3 4	Address
	8
	9
	10
	11
	12
	13
	14
	15

Appendix B: Wireless Mouse Specifications

Power for the Wireless Mouse

The Wireless Mouse is powered by 3 AAA batteries located in the battery compartment under a snap-on cover on the back of the Wireless Mouse. The life of the batteries depends on the daily usage. For 1150 mAh alkaline batteries, the following table shows the projected battery life in months (worse case and typical). The daily usage is the amount time that the mouse actuator has been used.

Daily Usage (minutes)	Battery Life (months)	
	Worst case	Typical
10	10	16
20	7	11
30	5	8

RF Transmission

The Wireless Mouse uses radio frequency (RF) to communicate with the PC Caster.

The Wireless Mouse uses a simple on off keying (OOK) scheme at 916.5 MHz. The power transmitted is less then 1 mw in order to meet the FCC requirements for an intentional radiator. The distance covered is highly dependent upon environment factors where the Wireless Mouse is being used. In most applications the range of the Wireless Mouse should be a minimum of 80 feet.

Appendix C: Support and Troubleshooting

Support

If you encounter problems with any of the Avcast components, you can contact the Avcast support staff by e-mail, by telephone, by mail or on the Internet.

Web Postings/FAQ:	www.avcast.com/support
E-mail:	support@avcast.com
Telephone:	(919) 379-2705 8:00 A.M. to 5:00 P.M. EST
FAX:	(919) 379-9420
Mailing Address:	Peracom 13000 Weston Parkway Suite 105 Cary, North Carolina 27513

Wireless Mouse1.fm Page 9 Friday, July 21, 2000 10:48 AM

Troubleshooting

Additional troubleshooting information for the Avcast Wireless Keyboard can be found on the support website listed above.

Problem	Probable Cause/Correction
Wireless Mouse does not communicate with the PC locally	• Check the polarity of the batteries and make sure they are inserted properly. Replace if necessary. • Verify the USB cable is connected between the PC and the PC Caster. • Check the RF address of the keyboard (inside battery compartment) to make sure it matches the RF address for the PC Caster. The default address for the keyboard and PC Caster is zero, but changing both to another matching RF address may reduce interference from elements such as phone lines, etc.
Wireless Mouse communicates with the PC locally but not remotely	• Check the position of the PC Caster (see section on RF Positioning of the PC Caster).
Wireless Mouse does not communicate with the PC locally	• Check the polarity of the batteries and make sure they are inserted properly. Replace if necessary. • Verify the USB cable is connected between the PC and the PC Caster. • Check the RF address of the keyboard (inside battery compartment) to make sure it matches the RF address for the PC Caster. The default address for the keyboard and PC Caster is zero, but changing both to another matching RF address may reduce interference from elements such as phone lines, etc.

Appendix D: Accessories and Replacement Parts

The following accessories and replacement parts are available from Peracom Networks, Inc. Ordering information is available on the Avcast website: www.avcast.com and from retail suppliers. All kits and accessories include a User Guide and a Warranty Card.

Accessory	Part Number
CableCaster	CC-1016N
1 CableCaster	
2 Screws	
3 Terminators	
1 Wall Adapter (15 VDC Power Supply)	
PC Caster	MC-1011N
1 PC Caster	
1 IR Emitter	
1 6-foot Audio/Video cable	
1 6-foot coaxial cable	
1 Terminator	
1 Wall Adapter (15 VDC Power Supply)	
IRCaster	IR-1018N
1 IRCaster	
1 IR Detector	
1 6-foot coaxial cable	
1 Terminator	
1 Wall Adapter (15 VDC Power Supply)	
(Each IRCaster after the first one in a network requires an in-line 75 Ohm DC Block — Radio Shack Part Number 15-1259)	
IR Detector	ID-1022N
Requires a Handset Adapter (Radio Shack Part Number 279-425) to connect the IR Detector and the IR Emitter to the PC Caster at the same time.	

Wireless Mouse1.fm Page 11 Friday, July 21, 2000 10:48 AM

Accessory	Part Number
Filters	
To block channels 65-90	FL-1029
To block channels 65-69	FL-1030A
To block channels 70-74	FL-1031A
To block channels 75-80	FL-1032A
To block channels 80+	
Weatherproof Case (for outdoor CableCaster installation)	WP-1033N
Wall Adapter (15 VDC Power Supply)	PW-1024NF
IR Emitter	IE-11023NF
IR Detector	ID-1022NF

Index

A

Appendix A
    changing the RF address 5
Appendix B
    specifications 6

B

battery compartment 3, 5

C

calibration 3

F

FCC Notice -2

I

Important Safety Instructions -3

P

PC Caster 2
    RF positioning 3
    RF transmission 6
    user's guide 3
PC. See personal computer
personal computer 3

R

radio frequency 2
    changing RF address 5
    RF positioning 3
    RF transmission 6
RF. See radio frequency

S

specifications 6

T

Table of Contents 0

W

warranty card 2
wireless mouse
    calibration 3
    drag and drop operation 4
    functions 4
    power 4
set up 3

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Patent Pending