# home automation for the macintosh

MouseHouse 1.0 X-10 Software for the Macintosh

# User Manual

MouseHouse<sup>™</sup> is a line of software and hardware solutions from Swing Software that allows you to control electrical appliances in your home or office using a graphical interface.

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# **O**VERVIEW

Using the industry standard X-10<sup>™</sup> protocol, *MouseHouse 1.0 for Macintosh* can control any electrical appliance in your home or office. You can define and create an iconized list of appliances, turn appliances on and off, define a weekly schedule of events, and build sets of commands that can be operated with a single click. The X-10 standard is an inexpensive, reliable, and easy-to-use method of controlling electrical appliances using the existing 110-volt wiring in your home or office. By sending transparent signals over the wiring, the X-10 protocol can turn appliances on/off and dim lights on schedule or in response to various actions. Scheduled events take place even if your Macintosh is off. MouseHouse works by sending commands through a CP290 controller that is plugged into a serial port on your Macintosh. The commands are then intercepted by X-10 modules that are placed between the appliance and the wall outlet.

# HARDWARE REQUIREMENTS

MouseHouse requires the following hardware:

- Any color Macintosh
- 4MB available RAM
- 3MB available hard disk space
- MacOS 7.0 or higher
- An X-10 CP290 Home Control Interface connected to a serial port
- X-10 compatible modules to control your appliances

# TECHNICAL SUPPORT

MouseHouse technical support, free software downloads, bug fixes, upgrade information, helpful tips, and other useful information is always available at the MouseHouse web site located at:

http://www.swingsoftware.com/www/mousehouse/.
You may also send email to:

mousehouse@swingsoftware.com
or contact Swing Software directly.

Swing Software PO Box 147 Romeo, MI 48065

Orders Only: Phone (810) 336-9000, Fax (810) 336-0116 Inquiries for dealer pricing welcome.

## INSTALLATION

MouseHouse is on your master floppy in compressed form. To install it onto your hard drive, double click on the installation icon (Figure 1) and specify a location on your hard drive. MouseHouse requires approximately 3MB of space for complete installation.



Figure 1: The MouseHouse installation disk.

Once you have installed the MouseHouse software on your hard drive, you will have a folder (Figure 2) that contains the MouseHouse software components. The MouseHouse 1.0 icon is the application itself. The Serial Tool must be placed in the Extensions Folder inside your System Folder before running MouseHouse. The Serial Tool is the component that communicates between the CP290 and the Macintosh. The Serial Tool is developed by Apple to ensure that multiple applications can share to same serial port without conflict. This includes the use of automatic serial switches that are Communications Toolbox compatible. The Sample House File contains a sample selection of devices, events, and macros to help you become familiar with and see some examples of the MouseHouse features.

	🔰 🐧 MouseHouse 1.0	) 2 8
3 items	47.5 MB in disk	71.9 MB available
	MouseHouse 1.0	<u> </u>
	Serial Tool	Sample House File
4		▶ <i>11</i>

Figure 2: MouseHouse installed on your hard drive.

Once you have installed the Serial Tool, you can start using MouseHouse by double-clicking on the MouseHouse 1.0 icon.

# SETTING UP MOUSEHOUSE

The first window you will see after opening MouseHouse is the intro window (Figure 3). This window gives you an overview of the MouseHouse windows.

Devices	The devices window is where you define and describe all of the X-10 modules in your home.
Events	The events window is where you set up regularly scheduled commands that are performed on the X-10 devices in your home.
Macros	The macros window is where you can define a sequence of X-10 commands that can be performed with a single click of a button.
Actions	The actions window is where you control your X-10 devices. From here you can turn devices on and off, dim lights, and run macros.
Preferences	The preferences window allows you to set up options and preferences so that MouseHouse performs correctly.
Help	The help window is a quick reference guide that is available online.

All of these windows are described in detail in the pages that follow, but before you begin using MouseHouse you should set up your preferences by clicking on the Preferences button (Figure 6).

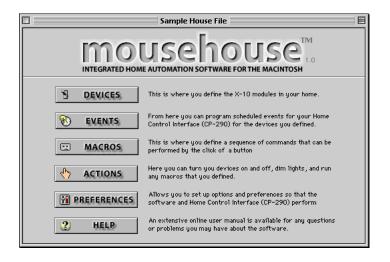


Figure 3: The Mousehouse intro screen is an overview of the all the windows.

Throughout MouseHouse, you can navigate to any window by using the icons at the top of every window (Figure 4). And any time you have a question about a window item, you can simply place your mouse over the object and get a detailed description of that item in the helper bar (Figure 5) at the bottom of every window.



*Figure 4: Icons allowing you to move to a different window are always available at the top of every window.* 

2	٩	1ove	tł	ie m	ouse	over	an	object	t on	the	screen	and I	hel	p will appear he	re.
	-		-												

#### Figure 5: The helper bar is available at the bottom of every window.

# PREFERENCES

Clicking on the Preferences button will bring you to the Preferences window (Figure 7) which has several important options that you should verify before continuing to use MouseHouse.



Figure 6: Set up your preferences before using MouseHouse.

Sample House File							
Version 1.0	PREFERENCES 🔊 🐑 🔄 🕎 🕅						
CP290 Hardware Serial Connection : D Modem Port Base House Code : A V Options Hide application when in background Open "Actions" window on startup Synchronize clocks on startup Bupass verification alerts	Time Settings         Mao:       Sun 11:15 PM       CP290:       Fri 12:57 AM         Synchronize Clocks       Check CP290 Time         Time Zone:       Eastern       GMT:       -5         Latitude:       42       23 $\bigcirc$ N (+) $\bigcirc$ S (-)         Longitude:       83       6 $\bigcirc$ E (-) $\bigcirc$ V (+) $\bigcirc$ Daylight Savings Time Currently In Use       Sunrise:       6:01 AM       Hours of Daylight:         Sunset:       9:18 PM       15:17						
Switches to the "Preferences" window where preferences and CP290 options.	Switches to the "Preferences" window where you set up software Sun 30th   6 6:01 AM						

Figure 7: Verify the settings that match your preferences.

#### SERIAL CONNECTION

The most important items for you to verify on the Preferences window are the CP290 Interface options. The Serial Connection (Figure 8) item allows you to specify the serial port to which your CP290 is connected.

Serial Connection :	JO.	Modem	Port

Figure 8: Serial Port Connection

MouseHouse is Communications Toolbox compatible which means it can support virtual ports from 3rd-party serial switches using Apple's Serial Tool. While you may connect the CP290 to any port connection, you must make sure that the rest of the Serial Tool settings resemble those in Figure 9.

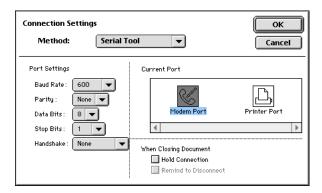


Figure 9: Other than the Current Port, be sure all of your settings match those indicated above.

## BASE HOUSE CODE

The Base House Code is the house code that is used by the rocker keys on your CP290. It is set to "A" when you first purchase your CP290, but it can be set to any housecode A-P, that you wish. So, for example, if you set your Base House Code to "J", the rocker keys on your CP290 will operate devices J1-J8. One caveat of changing the Base House Code is that all events stored in the memory of the CP290 will be erased.

#### SETTING THE CP290 CLOCK

The CP290 has its own internal clock that is used for processing scheduled events. The accuracy of the CP290 clock varies from unit to unit, and it is always a good idea to at least keep it synchronized with your Macintosh. You can check the the time to which your CP290 is set by clicking the Check CP290 Clock button. To synchronize the CP290 to your Macintosh, click the Synchronize Clocks button, or check the Synchronize clocks on startup check box.

#### USING LATITUDES/LONGITUDES FOR SUNRISE/SUNSET

Currently, MouseHouse can determine the sunrise and sunset times for your home only for display at the bottom of your MouseHouse window. The sunrise and sunset is determined by the latitude and longitude of your house. The easiest way to determine these values is to use the Macintosh "Map" control panel or go to the web site: http://wings.buffalo.edu/geogw

# SAVING YOUR HOUSE FILE

All of the work you do in MouseHouse (defining devices, scheduling events, creating macros, etc.) is stored in a file independent of the MouseHouse application. Just like any other Macintosh application, you can save the file, open another file, print the file, etc. When launching MouseHouse, the file that you last saved will automatically be opened. As discussed in the installation section of this manual, there is also a sample house file available for you to review.

# ADD, UPDATE, AND DELETE YOUR LISTS

Much of the MouseHouse interface is formatted using lists of information. To control the contents of these lists you will often need to use the list's associated Add, Update, and Delete buttons. The Add button adds the defined item to the list. The Update button updates the selected item so that it reflects the specified description. The Delete button removes the selected item from the list.



# DEVICES

Clicking on the Devicesbutton (Figure 10) will bring you to the Devices window (Figure 11). Devices are descriptions of the X-10 modules in your home. A device could be a light switch module, a wall outlet module, an appliance module, etc. It is important that you first describe all of the devices in your home. All of the commands, events, and macros you may want to perform within MouseHouse can only take place on devices you have defined.



Figure 10: Define your X-10 modules by going to the Devices window.



Figure 11: Your X-10 modules can have a name and color icon associated with them.

#### DEFINING THE DEVICES IN YOUR HOME

You describe each device in your home by associating a name and icon for every X-10 module in your home. Since the X-10 protocol has 16 house codes and 16 unit codes, you can define up to 256 unique X-10 devices.

#### **OPERATING YOUR DEVICES**

The Devices window is only for *defining* the devices in your home. To *control* the devices you have defined, refer to the Actions window.

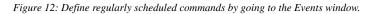
#### USING ICONS TO DESCRIBE YOUR DEVICES

MouseHouse allows you to associate an icon for each device and macro you define. MouseHouse comes with a standard set of icons for your use. You can easily add more icons by purchasing the MouseHouse Icon Upgrade which comes with more home automation related icons. For pricing and availability, visit the web site at: http://www.swingsoftware.com/www/mousehouse/icons.html. You can also add you own color icons using a resource editor such as ResEdit. If you are adding your own icons, be sure that they are in the icl8 format with a size of 16x16 and have a resource ID between 20000 and 29999.

# **EVENTS**

Events are regularly scheduled commands to be performed on the X-10 devices in your home. For example, you can schedule an event that will turn on your kitchen lights every weekday at 6:30 a.m. MouseHouse uses the memory of the CP290 to schedule up to 128 timed events. The Events window (Figure 13) is used to define and organize these events.





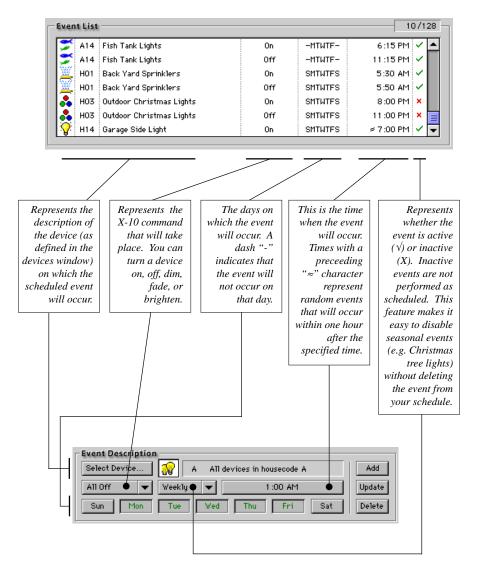
	sehouse 🖻 🖪 🖨	EVEN	IS	1 🕑 💷 🕚 🗹	
ivent Li	st			10/128	
芝 A1	4 Fish Tank Lights	On	-MTWTF-	6:15 PM 🗸 🔺	
芝 A1	4 Fish Tank Lights	Off	-MTWTF-	11:15 PM 🗸	
🖳 но	I Back Yard Sprinklers	On	SMTWTFS	5:30 AM 🗸	
🖳 но	I Back Yard Sprinklers	Off	SMTWTFS	5:50 AM 🗸	
📩 но	3 Outdoor Christmas Lights	On	SMTWTFS	8:00 PM 🗙	
👶 но	3 Outdoor Christmas Lights	Off	SMTWTFS	11:00 PM 🗙 📘	
🖓 нт	4 Garage Side Light	On	SMTWTFS	🕫 7:00 PM 🗸 🔽	
CP290 Events     Event Description       Select Device     Select Devices in housecode A       Get Events     All devices in housecode A       Sun     Mon       Tue     Wed       Thu     Fri       Sate     Delete					

Figure 13: Regularly scheduled events are easy to define.

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#### SCHEDULING AN EVENT

The Events window contains the event list, which describes every event that is scheduled to take place. There are several parameters at the bottom of the Events window that help you define each event. The event list is only an overview of the events that are scheduled to take place. The CP290 holds the actual information that performs the event. To make sure the CP290 contains the events you want, you will have to communicate with it by sending and receiving information as described below.



#### SENDING EVENTS TO THE CP290

Once you have defined your events and are satisfied with the event list, you need to make sure that the CP290 is aware of these events. This is done by clicking the Send Events button (Figure 11), which updates the CP290 so that it contains the events that are summarized in the event list.

#### **R**ECEIVING EVENTS FROM THE CP290

Occasionally, you may wish to verify the events contained in the CP290. Clicking on the Get Events button (Figure 14) will update the event list so that it reflects the contents of the CP290.

-CP290 Events -
Send Events
Get Events
Clear Events

Figure 14: Before your events will take place you need to send them to the CP290.

# Macros

MouseHouse allows you to define a sequence of commands called *macros* that can be performed with a single click of a button. The Macros window (Figure 16) is where you define macros by constructing logical flow and selecting commands from the devices you have defined.

MACKUS	
--------	--

Figure 15: Macros are sequences of commands.

## DEFINING A MACRO SEQUENCE

You define each macro by associating a name and icon to a sequence of commands. The Macro List contains the name and icon of all the macros you have defined. Each macro sequence you define represents a series of commands that can be performed by a single click of a button.

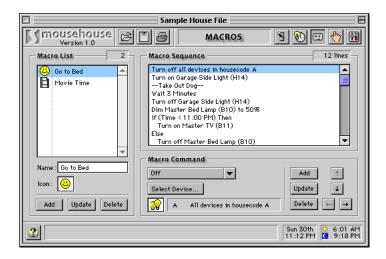


Figure 16: The Macros window

#### ADDING A COMMAND TO A MACRO SEQUENCE

Each macro sequence consists of a series of commands that can control X-10 devices, perform if/then logic, open other applications, and more. After selecting the type of command you want to add to the sequence, you may need to supply additional parameters.

There are several types of commands you can add to a macro: *X-10 Commands, If/Then Logic, Comments, Wait, Exit Macro, Beep, Open Application, Save Changes, and Quit MouseHouse*.

You may want to use the indentation and sequence controls (Figure 17) to structure your macro. The up/down arrows allow you to rearrange the sequence of the commands while the left/right arrows allow you to indent a single command.

Add	1
Update	Ŧ
Delete	$\leftarrow  \rightarrow $

Figure 17: Macro indentation and sequence controls.

*X-10 Commands* (Figure 18) allow you to perform an X-10 command to one of the devices you have defined in the Devices window.

Macro Command	
Off 👻	Add
Select Device	Update ↓
🙀 A All devices in housecode A	Delete 🔶 🔶

Figure 18: X-10 commands for macros.

*If/Then Logic* (Figure 19) allows you to check the status of the current time, day, date, season, or month before deciding which action to perform.

Macro Command	
IfThen	Add 🕇
If 🔻	Update 👃
Date ▼ = ▼ 6/30 ▼	Delete ← →

Figure 19: X-10 if/then logic..

*Comments* allow you to enter a descriptive sentence to help you remember something. A comment has no affect on a macro other than appearing in the list.

*Wait* commands allow you to tell MouseHouse to wait a specified time before continuing with the macro. You can wait for a specified number of seconds, minutes, hours, or with verification which waits for the user to click "OK" in a dialog box.

*Exit Macro* command will stop execution of the macro. This command can be helpful for debugging a macro or for response to an if/then condition.

**Open Application** commands launch a specified application.

*Save Changes* command saves your house file so that it represents any changes you have made to your devices, events, or macros.

*Quit MouseHouse* command quits MouseHouse and saves changes (if specified). Any command that follows in the macro sequence won't be executed.

#### **R**UNNING MACROS

The Macros window is only for defining your macros. To run the macros you have defined, go to the Actions window.

# **ACTIONS**

After you have defined devices and build some macros, you can perform the commands from the Actions window (Figure 21). The Actions window contains a list of all of the devices and macros you have defined. You control devices by first selecting the device and then clicking on the appropriate action button. You can perform macros by first selecting the macro and then clicking on the Run button.



Figure 20: Go to Actions window to control the devices and macros you defined..



Figure 21: This is where it all gets done. You can control your house from here.

#### SHORTCUTS AND IDEAS FOR THE ACTIONS WINDOW

The interface of the Actions window is well suited for a touch screen display or for control directly from the keyboard. Once you have set up all of your devices, events, macros and preferences you will, for the most part, only need to use the Actions window. You can set MouseHouse to open directly to the Actions window every time you startup by selecting the Open Actions Window on Startup button from the Preferences window.

# WE NEED YOUR SUPPORT

In order to continue to develop MouseHouse into the premier home automation interface for the Macintosh, we need to receive comments and thoughts from home automation enthusiasts like yourself. Please be sure to frequent our web site at:

http://www.swingsoftware.com/www/mousehouse/
or send email to:

mousehouse@swingsoftware.com

so that we can continue to develop software that meets your needs.

Please try to visit out web site frequently, we will be posting product updates, previews of new software ideas, home automation tips, and more.