

# Morse Mania

Version 3.5.1

August 25, 2009

## Introduction

Morse Mania is a morse code tutor for the Macintosh.

If you have any ideas or suggestions for improvement, or any bugs to report, please don't hesitate to send them to us [info@blackcatsystems.com](mailto:info@blackcatsystems.com).

If you find Morse Mania useful, please purchase (register) your copy, and help support the development of ham radio software for the Macintosh.

Registration is also your way of "voting" for software. The resources (time) we spend on a particular program are proportional to the number of orders we receive. So, quite simply, the more people who purchase a particular program, the more time we're going to spend working on and improving that program.

### Requirements:

Mac OS X preferred, also runs under Mac OS 9.

68K and older PPC system users should use MorseMania 1.9.6.

Please see the next chapter of this document for complete instructions on using Morse Mania.

## Getting Started

### Speed Menu

Under the **Speed** menu, you can set the speed the morse characters are sent. Possible speeds are 5, 7, 10, 13, 17, 20, 25, 30, 35, and 40 words per minute. You can also select Farnsworth mode. In this case, the dots and dashes are sent faster, but the overall rate remains the same.

### Farnsworth Mode

Farnsworth is useful when first learning morse code, so you don't reach the "plateau" around 7 wpm, where you can't copy any faster, because you learned the individual dots and dashes that make up each character, rather than the overall sound. In Farnsworth mode, each character is sent at a high speed, but with a long pause between characters. Hence, you hear the character as it sounds, and don't try to learn the individual dots and dashes that make it up. The long pause gives you time to think about what you just heard, and identify the character, before the next one comes along.

### Koch Mode

Koch mode is generally recognized as the quickest way to learn full speed CW. Koch himself was able to teach a group of students to copy CW at 20 wpm in just a little over 13 hours total time.

Here's a brief description of the Koch method: You start off by learning just two letters, at full speed (15 or 20 wpm). Then after achieving 90% or better success in copying them, you add another letter. You keep doing this, until you have mastered all of the characters.

As with Farnsworth, you hear the characters at full speed. The idea behind Koch mode is that you learn each character one at a time, and don't move on until you've fully mastered that character. You can learn at your own pace, and you get continuous immediate positive feedback as you learn each character. After you learn the first one or two characters, you realize that you indeed can copy CW at high speeds, and never hit the speed plateau that you otherwise would with traditional methods of learning CW.

It is important that you only select one new character to learn at a time, and that you don't move on to another new character until you're getting accurate copy of all of the current characters. Some characters will take

longer to learn than others, that's normal.

To use Koch mode with Morse Mania, you'll first want to select the "Koch Settings..." menu item below it to get a window where you can select which characters you'd like to learn by checking the boxes. (Be sure to close the window after you've made a change) When you use the Copy Groups exercise, only those characters will be sent, and the length of each word is random.

## Groups Menu

Under the **Groups** menu, you can select which group(s) you would like to practice. The groups are arranged according to combinations of dots and dashes, and are as follows:

E I S H

T M O

A D G K

N R U W

B C F J

L P Q V

X Y Z

Numbers 0 1 2 3 4 5 6 7 8 9

Punctuation . , ? : ; / (

Abbreviations AS AR BT SK ER (error)

You may also select all the groups, or deselect them all.

## Exercises

Under the **Exercise** menu, you may choose one of three exercises, or stop the current exercise.

### Learn Characters

In this exercise, random characters from the selected group(s) are sent at the chosen speed. The character is also displayed on the screen.

## Guess The Character

In this exercise, random characters from the selected group(s) are sent at the chosen speed.

You must type the character sent. For abbreviations, type both letters, such as AS for character sent. If you correctly decode the character, it is briefly displayed, in black, and then the next character is sent. If you type the wrong character, you may continue to try again.

If you fail to decode a character in a certain amount of time, it is displayed in red for your reference, and then the next character is sent.

When you stop this exercise, a small box will pop up, telling you how many you correctly decoded, incorrectly decoded, and what your percentage correct was. You can type cmd-A to stop the exercise, in addition to selecting it from the menu.

## Copy Groups

In this exercise, random five figure groups of characters from the selected group(s) are sent at the chosen speed. When you select this mode, you will be asked how many groups you would like to have sent. The groups sent are displayed on the screen, so you can compare the text you copied to what was actually sent.

Alternately, you can specify the number of minutes to send.

At the end of the exercise, the total number of characters sent will be displayed.

If Koch mode is selected, then only those characters enabled in the Koch window will be sent, and the groups will be of random length, instead of five figures.

## Copy Words

This exercise is very similar to Copy Groups, except that instead of sending random 5 character groups, random words, from a list of over 2,000 words, are sent. This gives you a more realistic experience copying morse code than just random letters and numbers.

## Typing Text

Morse Mania can send characters that you type.

Select **Type Letters** from the Exercise menu. You will be presented with a window. Any letter you type that has a valid morse equivalent, will be sent at the currently selected speed.

You can also use this window to practice sending morse code. Use your mouse button as the key, and click it as you would press on the key. Position the cursor at the very bottom of the window when doing this. While you have the key pressed, you'll hear a tone. Also, Morse Mania will try to decode what you send. It will take typing a few letters for Morse Mania to determine at what speed you are sending. Also, remember that computer decoding of morse code is rarely perfect, so don't be surprised if it doesn't copy what you send with 100% accuracy, as software decoding does not cope well with the variations in speed natural with hand keying.

Also, this feature works best under OS X, with few other applications running. Under Mac OS 9, or with other programs running, the generated tone may be choppy due to Morse Mania not getting enough processing time.

## Sending Text From A File

Morse Mania can send characters from a text file. This is a great way to send real words and sentences. You can even make up a complete QSO, and have it sent.

Select **Send From File...** from the File menu. You may use any text file, created with SimpleText or another text editor or word processor. If you use a word processor, make sure you save the file as a plain text file, not in a special word processor format.

If you want to send any of the special prosigns, use the following substitutions:

\*a = AS  
\*b = BT  
\*e = Error  
\*r = AR  
\*s = SK

Characters will continue to be sent until either the entire file is transmitted, or you stop the transmission by selecting **Stop Sending From File**.

### Practice Copying a QSO

Morse Mania can also generate a random part of a QSO to copy, to assist in “real world” copying of CW. Select **Create and Send QSO File** from the File menu.

### Audio control

Under the **Volume** menu, there are five settings to select the audio volume level. There is also an option to select the frequency (tone) of the morse code audio. The default value is 848 Hz.

### Controlling Morse Mania via Applescript

Morse Mania can be controlled via Applescript. You can send text which will be sent through the Mac’s speaker as morse code. You can also control the speed (wpm), audio frequency (tone), as well as volume:

#### Some examples:

To set the speed to 20 wpm:

```
tell application "Morse Mania OSX"  
    speed 20  
end tell
```

To set the volume (0-255) to the maximum:

```
tell application "Morse Mania OSX"  
    volume 255  
end tell
```

To set the audio frequency to 850 Hz:

```
tell application "Morse Mania OSX"  
    freq 850  
end tell
```

And finally, to send some morse code:

```
tell application "Morse Mania OSX"  
    morse "CQ CQ CQ DE N3JLY"  
end tell
```

## Registering (Purchasing) Morse Mania

Morse Mania is distributed as shareware. If after trying Morse Mania you decide you wish to continue using it, you must purchase (register) a copy. The registration fee is only \$19.99, allowing the use on a single computer. If you wish to run Morse Mania on multiple computers, you must obtain a license for each system, or the appropriate site license.

Site licenses are also available, allowing copies to be run on multiple computers at a single location (for example, a school or university, or office). Please contact Black Cat Systems for pricing and details about site licensing.

By registering your copy of Morse Mania, you'll help support our efforts to develop new versions with additional information. When you register, you'll be entitled to use all new releases and updates to Morse Mania released over the next year, free of charge.

When you register and receive your registration code, select **Enter Registration...** from the **Edit** menu, and enter the code. If you register and don't get your registration code within a week, please send us an email at [info@blackcatsystems.com](mailto:info@blackcatsystems.com).

Thanks again for giving Morse Mania a try.

Black Cat Systems  
4708 Trail Court  
Westminster, MD 21158

email: [info@blackcatsystems.com](mailto:info@blackcatsystems.com)

Web: <http://www.blackcatsystems.com/software/morsemania.html>

## Purchasing by Check or Money Order Form

To order by check, please fill out and mail the following form, along with your payment. You can pay with a wide variety of cash from different countries but at present if you pay via check, it must be a check or money order drawn in US Dollars. While there is the risk of loss in the mail, currency is also OK, including foreign currency.

Please make sure you include your email address with your payment. That way we can send the registration code to you. If you do not send us a valid email address, we have no way to send you the code.

I would like to order \_\_\_\_\_ copies of Morse Mania at \$19.99 US each.

I would like to order \_\_\_\_\_ site licenses for Morse Mania at \$200 US each.

If you'd like a copy of Morse Mania (as well as demos of all of our other programs) on CDROM, please order one:

I would like to order \_\_\_\_\_ Black Cat Systems CDROMS at \$10 US each.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province: \_\_\_\_\_

ZIP/Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_

Email Address: \_\_\_\_\_

Macintosh Model: \_\_\_\_\_ System Version: \_\_\_\_\_

Enclosed, please find my check / money order / cash in the amount of \$\_\_\_\_\_ Maryland Residents please add 6% sales tax.

**Mail this form, along with payment, to:**

**Black Cat Systems  
4708 Trail Court  
Westminster, MD 21158  
USA**

## Purchasing Online

To purchase online with a credit card, go to the following URL:

<http://www.blackcatsystems.com/register/morsemania.html>

You will be sent to our order page at Kagi. Kagi handles our credit card payment processing.

Please make sure you include your email address when you register online. That way we can send the registration code to you. If you do not send us a valid email address, we have no way to send you the code.

# International Morse Code

## Morse Code Letters

A	· —
B	— · · ·
C	— · — ·
D	— · ·
E	·
F	· · — ·
G	— — ·
H	· · · ·
I	· ·
J	· — — —
K	— · —
L	· — · ·
M	— —
N	— ·
O	— — —
P	· — — ·
Q	— — · —
R	· — ·
S	· · ·
T	—
U	· · —
V	· · · —
W	· — —
X	— · · —
Y	— · — —
Z	— — · ·

## Morse Code Digits

0	— — — — —
1	· — — — —
2	· · — — —
3	· · · — —
4	· · · · —
5	· · · · ·
6	— · · · ·
7	— — · · ·
8	— — — · ·
9	— — — — ·

## Morse Code Prosigns

AR	· — · — ·	(End of message)
AS	· — · · ·	(Stand by)
BT	— · · · —	(Pause)
SK	· · · — · —	(End of contact)
Error	· · · · · · · ·	

## Morse Code Punctuation

Period	• — • — • —
Comma	— — • • — —
?	• • — — • •
Colon	— — — • • •
Semicolon	— • — • — •
(	— • — — •
/	— • • — •
)	— • — — • —
“	• — • • — •
Underline	• • — — • —
‘	• — — — — •
\$	• • • — • • —
+	• — • — •
-	— • • • • —
=	— • • • —
@	• — — • — •

## Revision History

- 3.5.1 Fixed a bug in the Copy groups exercise that could cause some characters to be skipped.
- 3.5.0 Improved morse code audio quality in Farnsworth mode.
- 3.4.0 Added an option to send groups for a specified time period.  
Total number of characters sent in the Send Groups exercise is displayed.  
Koch mode now works in Send Letters and Learn Letters exercises.
- 3.3.0 Fixed a bug with the Send File exercise not able to open all text files.  
Selecting Farnsworth mode now deselects Koch mode.  
Bug fix - running the guess a letter exercise for the second time would repeat the previously sent letter.  
Added a delay in the Copy Groups exercise before it actually starts sending.
- 3.2.0 Fixed a bug with the Send File and Send QSO exercises.  
Reduced the amount of CPU time used.
- 3.1.0 Fixed a bug with the send words exercise that could cause a crash.
- 3.0.1 Fixed a bug with selecting the abbreviations group.  
Fixed a bug with all of the abbreviations not being sent.  
Dot/Dash representation of characters displayed in Learn Characters exercise is now optional.
- 3.0.0 Can use the mouse button to practice sending morse in the Type Letters exercise.  
Can pause/resume playback of files and practice QSOs.  
Dot/Dash representation of characters displayed in Learn Characters exercise.  
Fixed a bug with the display of the Koch window.
- 2.8.0 Added Type Letters window.  
Fixed a bug that could cause a crash in the Copy Words exercise.
- 2.7.0 Added Copy Words exercise, sends random words from list of 2000.  
Corrected RST in Send QSO mode.  
Added menu shortcuts for exercises.  
Added detailed explanation of Koch mode.  
Can copy text from Group Copy Exercise window.
- 2.6.0 Added @ symbol  
Divided punctuation into two groups
- 2.5.0 Added the ability to specify the frequency (tone) of the morse code audio.  
Added Applescript support.  
Preferences menu tem now dimmed in OSX.  
Fixed a bug where the proper space (silence) was not sent after the letter O.

- 2.4.1 Fixed a bug where Koch and Farnsworth, when selected, would not have a checkmark next to them in the Speed menu.
- 2.4.0 Resizable Copy Groups window.  
Fixed Koch mode bug.  
Cmd-W closes Copy groups window.  
Added 35 and 40 wpm.
- 2.3.5 Fixed a bug with Koch Mode.
- 2.3.3 Fixed a bug that could cause a beep sound to be made in an exercise.
- 2.3.2 Fixed a bug that could cause a crash in Send Groups mode.
- 2.3.1 Separate menu item to bring up Koch window
- 2.3.0 Added Koch mode.
- 2.2.0 Added generation of random QSOs to copy.
- 2.1.2 Fixed a bug that could cause a lockup when playing from a text file.
- 2.1.1 Small bug fixes
- 2.1.0 Fixed several bugs dealing with guessing letter mode  
Documentation within the program
- 2.0.1 Fixed a bug that would not allow Farnsworth to be selected
- 2.0.0 Initial Carbon release for Mac OSX
- 1.9.6 Now possible to send text files containing lower case letters. To send prosigns, insert a @ before the lowercase letter used to signify the prosign (as explained in the documentation)
- 1.9.5 Added several additional punctuation characters.  
Settings (speed, groups, volume, etc) now stored for recall next session.
- 1.9.1 Fixed bug that caused a slight pause after the first dot at higher speeds.
- 1.9.0 Eliminated clicking sound on some Macs.
- 1.8.0 Added ability to change the volume.

- 1.7.0 Added ability to send prosigns from a text file.
- 1.6.0 Added Farnsworth mode.
- 1.5.1 Fixed a bug where abbreviations were not completely sent.
- 1.5.0 Added ability to send text from a file for practice.
- 1.1.0 Added Copy Groups mode to send five figure groups for practice.
- 0.2.0 Changed the way sounds are produced, due to problems on some G3 systems.  
Fixed a bug where de-selecting all groups would cause the program to hang.
- 0.1.0 Initial Release

# Software License Agreement

This is a legal agreement between you and Black Cat Systems, covering your use of Morse Mania (the "Software"). Be sure to read the following agreement before using the Software. BY USING THE SOFTWARE (REGARDLESS IF YOU HAVE REGISTERED THE SOFTWARE OR NOT), YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, DO NOT USE THE SOFTWARE AND DESTROY ALL COPIES IN YOUR POSSESSION.

The Software is owned by Black Cat Systems and is protected by United States copyright laws and international treaty provisions. Therefore, you must treat the Software like any other copyrighted material (e.g., a book or musical recording). Paying the license fee allows you the right to use one copy of the Software on a single computer. You may not network the Software or otherwise use it or make it available for use on more than one computer at the same time. You may not rent or lease the Software, nor may you modify, adapt, translate, reverse engineer, decompile, or disassemble the Software. If you violate any part of this agreement, your right to use this Software terminates automatically and you must then destroy all copies of the Software in your possession.

The Software and its related documentation are provided "AS IS" and without warranty of any kind and Black Cat Systems expressly disclaims all other warranties, expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Under no circumstances shall Black Cat Systems be liable for any incidental, special, or consequential damages that result from the use or inability to use the Software or related documentation, even if Black Cat Systems has been advised of the possibility of such damages. In no event shall Black Cat Systems's liability exceed the license fee paid, if any.

This Agreement shall be governed by the laws of the State of Maryland. If for any reason a court of competent jurisdiction finds any provision of the Agreement, or portion thereof, to be unenforceable, that provision of the Agreement shall be enforced to the maximum extent permissible so as to effect the intent of the parties, and the remainder of this Agreement shall continue in full force and effect.

The Software and documentation is provided with RESTRICTED RIGHTS. Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subdivision (b)(3)(ii) of the Rights in Technical Data and Computer Software clause as 252.227-7013. Manufacturer is Black Cat Systems., 4708 Trail Court, Westminster, MD 21158, United States of America.

The name "Black Cat Systems", and "Morse Mania" are trademarks of Black Cat Systems.

Morse Mania is ©2000-2009 by Black Cat Systems. All rights reserved worldwide.

Created with the MacZoop framework, ©1994-2003 Graham Cox. All Rights Reserved  
<http://www.maczoop.com/>