

# The Morse Mouse

A New Type of Keyer-Paddle

Stanley Shure, W9GXJ & Dick Sylvan, W9CBT



Morse Mouse

Want to try something different in a Keyer-Paddle? Try the “Morse Mouse.” It is a modified computer mouse, preferably the two-button type, but the three-button version will work as well. But I’m getting ahead of myself, I stopped by my pal Stan’s, W9GXJ, house and saw him playing with a computer

mouse. Curious, I asked him what he was doing, his reply: “I’ve made a hand key out of it.” I suggested, “That thing would make a neat paddle for an electronic keyer. Let’s use one button for dit and one for dah.” Stan promptly rewired the mouse as a paddle. It takes some practice to acquire the skill to use it, but it is not difficult and is fun to operate. The first part of this article covers the construction, and the second part describes the operation of the Morse Mouse.

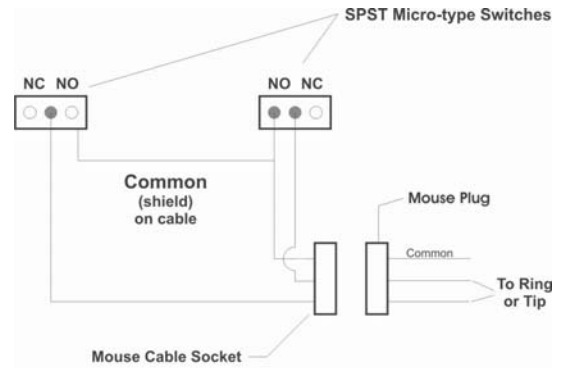
## PART I CONSTRUCTION OF THE MORSE MOUSE

By Stanley Shure, W9GXJ

First, obtain a two-button computer mouse for conversion to a code paddle for your electronic key. If a three-button mouse is obtained, the third button is not used.

Step one is to remove the mouse ball and bottom screw or screws. (Note: some units have a rectangular plastic strip covering the screw holes that first must be removed.) Lift off the top cover. Now remove both wheels and set

aside. Remove the circuit board with its cable. On the back side of the circuit board, remove the traces that go to the two micro-type switches and to the cable socket by scraping with a small



Note: You can also wire the mouse cable directly to the switches.

pen knife or rotary tool.

*“It’s a great weekend project.”*

Determine the common, and normally open, contacts on the switches using an ohmmeter. Cut off the mouse plug that goes to the computer, but leave about four inches of cable attached. This cable contains a shield wire and some

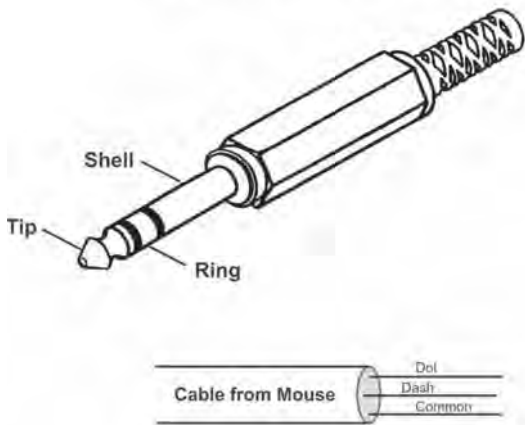
colored insulated wires; salvage all these wires from the four-inch cable. Some of these wires will be used as jumpers on the mouse circuit board. (See wiring diagram.)

All parts necessary for construction of the Morse Mouse will be taken from the original mouse except for a new plug to fit your keyer. Pick out two colored wires and the shield in the mouse cable (your choice). Wire jumpers from the circuit board cable socket to the two switches you are going to use. Check wiring with an ohmmeter after completing wiring changes.

Wire the ring and tip contact of a stereo plug to match your keyer’s requirements. The shield, or common, goes to the plug shell.

### Typical Paddle Plug

3-conductor Phone Plug



Note: Ring and Tip connection may be reversed to swap dit/dah paddles.



Under the Hood — Note Cable Reversed

## MAKE IT A SIMPLE MODIFICATION

Using your own cable and plug, solder them directly to both micro-type switches, as per the diagram. (Some mouse units use SMT components, so take care when soldering. Use a low wattage soldering iron and very thin, high quality solder.) Plug the mouse into your keyer and operate.

## PART II OPERATING THE MORSE MOUSE

By Dick Sylvan, W9CBT

Completing the Morse Mouse, I hooked it to my electronic keyer and tried to send with it. I made a lot of mistakes at first as it is a new skill to learn. We had put the dit key on the left and the dah key on the right. I found this kind of awkward for me, so I had Stan switch the dit to the right side.

I also turned the key around from the conventional position, so that the buttons now faced me — this requires that the cable exit



Morse Mouse in Action

## K9YA Code Practice Nets

### Fast Net

Every first Wednesday of the month, 7.137 MHz (plus or minus QRM) at 7:00 P.M. (2400 Z). Check in, exchange FISTS numbers or hang around for a chat. The Fast Net is called at 20+ wpm.

### Slow Net

Every 2nd, 3rd and 4th Wednesday of the month, 7.137 MHz (plus or minus QRM) at 7:00 P.M. (2400 Z). Check in, exchange FISTS numbers or hang around for a chat. The Slow Net is called at 10-wpm, but speed will be adjusted to that of the slowest operator.

CONTINUED - SEE MM  
ON PAGE 7

to a "Scaleable Polyphonic" MIDI. A few seconds later I had the file on my phone via Mobi MB and I then set the default ring to use the tone.

That was a few weeks ago and the ring has worked out very nicely. It is always a pleasure for me to hear and it doesn't seem to bother my fellow commuters, in fact a couple of people have asked me if that was Morse code. I felt I needed one thing to top it off and that was a custom graphic. I couldn't locate one in my collection so I asked Mike, N9BOR, and he was able to provide a nice CW graphic which I then downloaded and set as my phone's wallpaper. Now if only Nokia would take a hint and make a phone that sends the caller ID number in CW, then I would know if I wanted to take it out of my pocket or not. ■

---

*MM - CONTINUED FROM PAGE 3*

from the other side. I found this method worked much better for me. I practiced with the Morse Mouse for a few days and then had nerve enough to try it on the air. I have had numerous QSOs with it and found it to be a lot of fun. It certainly is an inexpensive project as computer mice can be picked up cheaply. I bought one for \$3.00. You might even have one laying around in your junk box. It's a great weekend project. ■

---

### **Amateur Radio Military Appreciation Day**

May has been named Military Appreciation Month by the U.S. Congress.

The Ft. Wayne Radio Club (Indiana) requests that Amateur Radio clubs and individuals join us on May 29, 2004 to commemorate Amateur Radio Military Appreciation Day (ARMAD) in a display of support for the men and women of the U.S. military. We ask that Amateur Radio Clubs and operators in the United States and around the world set up stations in public areas to contact those now serving in the military, and veterans for 4-6 hours. We ask that family members of military personnel and the general public be permitted to express their appreciation to our troops via third-party HF, VHF, UHF, Echolink and IRLP. This would be a great morale booster for those on the front-line and at home.

So, spread the word and submit any ideas to Emery McClendon, KB9IBW, special events manager, at [kb9ibw@netzero.com]. ■

to put that skill to work for the greater good.

### **WHAT CAN WE DO?**

Volunteer as a CW operator for local groups' special event and club contest stations.

Put your own CW special event station on the air. Celebrate a local radio club's anniversary or your own birthday!

When you hear a special event station using CW give them a call, whether you were looking for them or not. Let's make sure special event planners don't give up on CW due to a perceived lack of interest.

Contact event sponsors (available on the ARRL Web site's special events page) and request CW operation.

On the air, make a special effort to thank special event station ops for making Morse available. ■

---

*OLD MAN - CONTINUED FROM PAGE 4*

and one day join the Fast Code Net.

I'm glad to have passed Element 1 and hope that one day Morse will be an issue that unites rather than divides Hams. I understand that I'll always be a General (or, one day, Extra) "Lite." I only had to pass a 5-WPM exam and there is concern Morse will be dropped entirely from HF privilege requirements. I can't worry about that as I can't control it. Instead, I'll focus on striving to develop good operating skills and improve my CW copy and transmission skills.

Who knows, with enough practice, maybe one day I'll actually be good at this. I know I'll continue to have fun along the way! ■

---

### *CORRECTION*

April 2004 - *ANT HR IS FLAG POLE — HW CPY?*  
The article incorrectly states that the Force 12 Flag Pole Antenna includes a flag. ■