

Welcome to the Sound Card Digital Modes

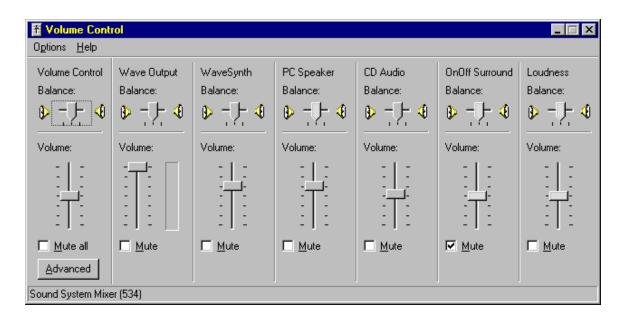
Now that you have your PK-232/PSK or have upgraded your older PK-232 or PK-900 you will need some software to get on the air. Timewave's ModemSwitch program provides a way to switch your PK-232/PSK into soundcard mode to get on the air. For software suggestions, see the Sound Card Software Roundup following the Operating Notes

Operating notes

Your new PSK Interface board provides an entirely new set of modes and tools for your station. The programs tested and in use by the hams at Timewave are the 32-bit Windows based programs from the list provided by Dr. Welp. There are other programs available there, some DOS based and some Linux implementations.

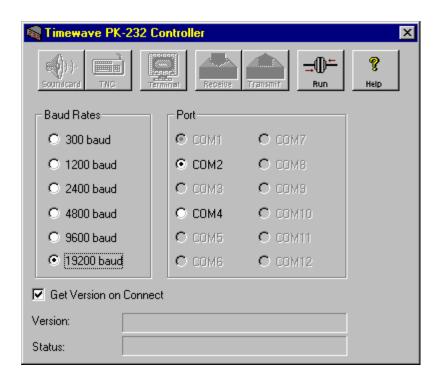
Documentation levels vary greatly between the programs you download, but most use the same basic setup and connection scheme. Be sure you understand the use of the volume controls for your audio mixer (usually accessible via the speaker icon or the lower bar of your window).

If one of the inputs/outputs needed by your program is muted or not set correctly you will need to find the volume control for your system. Under or over driving the radio or sound card or a muted signal is the most common problems.



Our test station here at Timewave is a PK-232/PSK connected to the radio using AFSK cables. Using this configuration we are able to switch between modes with a few keystrokes and without changing cables. Good luck and hope you enjoy some of the new modes.

Modemswitch™ is an program from Timewave Technology Inc. Install Modemswitch™ from the Timewave CD to quickly switch the PK-232/PSK and the PK-900/PSK into and out of sound card mode. After switching into sound card mode any soundcard program may be used in your station. ModemSwitch also controls RX/TX control from your PK232/PSK or PK-900PSK.



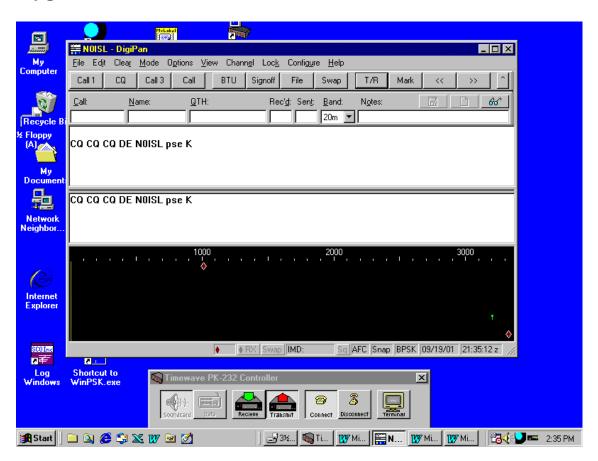
Selecting Soundcard mode will reduce the window size and allow you to manually switch between Transmit and Receive. Until your favorite program has been upgraded to support the PK-232/PSK PTT use the TX/RX controls on the ModemSwitch window.



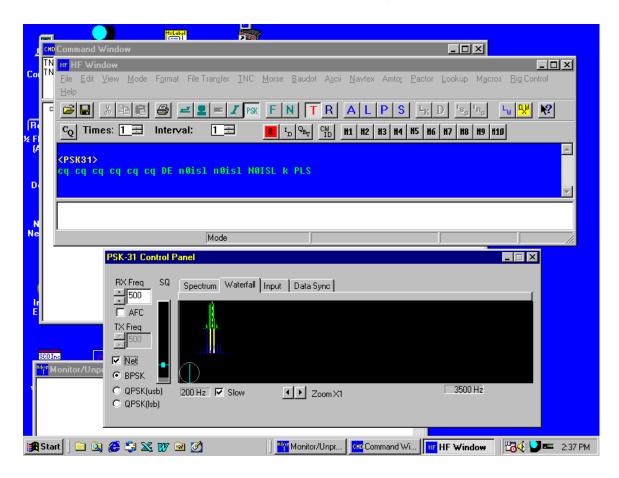
Modemswitch™ also provides a dumb terminal interface for setting up or checking out your PK-232.

```
cmd:PACKET
Opmode was PAcket
Opmode now PAcket
cmd:MYCALL NOISL
MYCALL was PK232
MYCALL now NOISL
cmd:C NOISL
*** CONNECTED to NOISL
RYRYRY TEST 1
RYRYRY TEST 1
cmd:D
cmd:*** DISCONNECTED: NOISL
NOISL*>NOISL (UA)
```

Here is an example of Digipan operating with the ModemSwitch window. Note that you can also operate in VOX mode until the upgraded software is available.



DSP Soundcard links Page 4 PK Term for Windows has been upgraded with PK-232/PSK RX/TX support for PSK31. (Don't run ModemSwitch and PK-Term at the same time!) Contact http://www.cssincorp.com for purchase information. Here is a screen print of PK TERM 99 running PSK31



Sound Card Software Roundup

Using your soundcard and the PSK-interface your station can operate all of the commonly used modes heard on the hambands today. If you access the Internet site of Dr. Oliver Welp. DL9QJ¹, http://www.muenster.de/~welp/sb.htm You will find perhaps the best collection of DSP Sound Card software available for downloads. This site provides software for:

- Packet Radio
- RTTY
- PSK-31
- MFSK-8
- MFSK-16
- MT-63
- FAX
- SSTV
- Hellschreiber
- CW (Morse)
- Voice Tools
- Recording Tools
- ZVEL, DTMF & more
- ACARS & other Aircraft Transmissions
- Analyzers & DSP
- Miscellanea

Internet Links

There are a great many other sites available and Dr. Welps provides pointers to most of those. If you have general questions about operating, see these sites:

¹ Permission was kindly granted by Dr. Welp for use of this link DSP Soundcard links Page 6

General Experience with PSK31 http://www.muenster.de/~welp/sb.htm#general

All about Soundblaster (by Creative Labs) http://www.soundblaster.com/

If you would like to know more about how your soundcard works go to http://howstuffworks.lycos.com/sound-card.htm it is a useful little tutorial.

More info about PSK31 http://bipt106.bi.ehu.es/psk31.html

Pk-Term for Windows fully supports the PK-232/PSK when running PSK-31and the PK-232 internal modems. Soundcard interface selection and TX/RX control are integrated into PK-Term. You don't need ModemSwitch to run PSK-31 with PK-Term! A demo version of PK-Term for Windows can be downloaded from http://www.cssincorp.cpm. PK-Term for Windows provides Pactor, Morse, PSK31 and more, all in a 32-bit Windows environment. Be sure to check this one out.

Nick Fedoseev's (UT2UZ) Internet site http://www.tav.kiev.ua/~nick/ provides access to MIXw 32, one of the leading 32-bit PSK/RTTY programs.

SSTV has several excellent programs that can put you on the air quickly. The PK-232/PSK interface was tested extensively with ChromaPIX 1.5.10 http://www.siliconpixels.com/ and MMSSTV http://www.qsl.net/mmhamsoft/mmsstv/ by JE3HHT - Makoto Mori has an excellent 32-bit program as well as a well-written SSTV primer.

http://iz8bly.sysonline.it/Hell/index.htm takes you to the ZL1BPU Web Site "Fuzzy Modes and Modern Digital Modes" for an introduction for some less well-known modes. Spend a few minutes there and you may find something that will add to your operating enjoyment.