

```
Print SortList("b;c;A;a;", ";", 4+32) // prints "A;b;c;"
Print SortList("b;c;a;A;", ";", 4+32) // prints "a;b;c;"

// Numeric sorts
Print SortList("9,93,91,33,15,3", ",", 2) // prints "3,9,15,33,91,93,"
Print SortList("9,93,91,33,15,3", ",", 3) // prints "93,91,33,15,9,3,"
```

**See Also****Sort, StringFromList, WaveList, RemoveEnding**See **Setting Bit Parameters** on page IV-12 for details about bit settings.

## SoundInRecord

**SoundInRecord** [/BITS=*bits* /Z] **wave**

The SoundInRecord operation records audio input at the sample rate obtained from the wave's X scaling and for the number of points determined by the length of the wave. The recording is done synchronously.

The number type of the wave must be a type supported by the sound input hardware as reported by the SoundInStatus operation. Use **SoundInStatus** with the format keyword to check if a particular format is supported.

On Windows 8-bit or 16-bit integer are typically supported. On Macintosh, 16-bit integer or 32-bit floating point (the Mac OS native type for sound) are typically supported.

To record in stereo, provide a 2 column wave. (The software is designed to handle any number of channels but has not been tested on more than 2.)

**Flags**

/BITS=*bits* Controls the number of bits used for each recorded sound sample.

Use /BITS=24 with a 32-bit integer wave for 24-bit sound data capable of representing values from -8,388,608 to +8,388,607.

If you omit /BITS or use /BITS=0, SoundInRecord uses the wave's data type and size to determine how many bits are recorded for each sound sample.

The /BITS flag was added in Igor Pro 9.00.

/Z Errors are not fatal. V\_flag is set to zero if no error, else nonzero if error.

**Details**

SoundInRecord requires a computer with sound inputs. Several sample experiments using sound input can be found in your Igor Pro Folder in the Examples folder.

**See Also****SoundInSet, SoundInStartChart, SoundInStatus**

## SoundInSet

**SoundInSet** [/Z] [gain=*g*, agc=*a*]

The SoundInSet operation is used to setup the input device for recording.

**Parameters**

SoundInSet can accept multiple *keyword=value* parameters on one line.

agc=*a* Turns automatic gain control mode on (*a*=1) or off (*a*=0). Will generate an error if device does not support setting agc. Use SoundInStatus to check or use /Z flag to make errors nonfatal.

*Windows:* This is not supported and V\_SoundInAGC from the SoundInStatus command always returns -1.

gain=*g* Sets input gain, 0 is lowest gain and 1 is highest. Will generate an error if device does not support setting gain. Use SoundInStatus to check or use /Z flag to make errors nonfatal.