

**NAME**

cdet1 – speech/pause (VAD) detector based on cepstral distance thresholding

**SYNOPSIS**

**cdet1** [ **-filename1** ] [ **-filename3** ] [ **-lL** ] [ **-sS** ] [ **-rR** ] [ **-pP.P** ] [ **-qQ.Q** ]

**DESCRIPTION**

**cdet1** detects speech and speech pauses in the signal contained in the file *filename1* and writes the output to the file *filename2*. If the input and/or output file names are not specified, input is read from standard input / output is printed out to standard output. Output is written as a sequence of decimal numbers with each number on a separate line so that the output file can be readily processed by MATLAB (-ascii switch). Each output line corresponds to one window in the input signal.

**OPTIONS**

The following options are supported:

- l** Input signal window length <256>
- s** Signal window overlap <128>
- r** Number of initial windows considered speechless <60>
- p** Adaption constant for background cepstrum updating <0.8>
- q** Adaption constant for threshold updating <0.97>
- i** Input signal file name
- o** Output signal file name

**EXAMPLE**

**cdet1 -i signal.raw -o detect.asc**

Detects speech in a signal read in from the file *signal.raw* with the default values of parameters (L=256, S=128, R=60, P=0.8, Q=0.97) and writes the output into *detect.asc*.

**cdet1 -o detect.asc -l256 -s192 -q0.95 -p0.8**

Detects speech in a signal read in from stdin and writes the output into the file *detect.asc* with 75% window overlapping and faster threshold updating.