

**NAME**

`smr2run` – convert Spike2 .smr (SON) format file to a run file

**SYNOPSIS**

`smr2run` [-v] [-q] [-n] *smrfile* [*runfile*]

`smr2run` [-v] [-q] [-n] **-b** *smrfile* ...

**DESCRIPTION**

*Smr2run* converts a SON-format .smr file of Spike2 waveforms into SCRC runfile format. Each waveform channel in the Spike2 data will produce a separate waveform file associated with the output runfile. Only SON data kinds 1 (Adc) and 9 (RealWave) are supported for now. Events and spike markers are skipped over in the input file. 64-bit .smr files are not yet supported, only 32-bit.

The *smrfile* name specifies the Spike2 .smr input file. The *runfile* name specifies the name of the run file to be created. If the *runfile* name is omitted, the name of the Spike2 file, with the .smr suffix removed, will be used as the output file name. You don't need to include the **.frm** suffix, or any other suffix, on the *runfile* name you specify. The necessary suffixes for all files created for the run will be appended automatically.

**Options**

- b** Specifies batch mode, where all the following non-option arguments are Spike2 input file arguments, and the default *runfile* name (taken from each .smr file name) is used for each output runfile.
- v** Specifies more verbose output from the conversion program. The **-v** option can be repeated, to increase verbosity, up to 4 times (more has no effect).
- q** Specifies more quiet (less verbose) output. Only error and warning messages will be shown. The **-v** and **-q** options essentially cancel each other out, so you will typically use only one or the other.
- n** Specifies that no output runfile or waveform files are generated. With **-n**, *smr2run* will only do a "dry run", reading and checking the input .smr file (or files in batch mode), and showing what it found as well as any errors or warnings if applicable. The **-n** option can be repeated a second time to cause *smr2run* to only do a quick scan of headers, and not read all the waveform data.

**Start time field handling**

The *smr2run* program transfers the SMR file's start time field to the new counterpart in the run header. Confusion can occur if SMR files move across time zones: Spike2 and Signal store the start time in local time, while run files use UTC for the start time in their run header. *Smr2run* does the conversion in the local time zone, which will result in an inaccurate start time in the run file if the SMR file originated from a different time zone. It is best to convert SMR files in the time zone in which they were captured, which can be overridden in software when running *smr2run*. E.g.:

```
TZ=Europe/Copenhagen smr2run cphdopa013.smr run013
```

See the directory `/usr/share/zoneinfo` on most systems for a list of time zone names known to the system.

**EXAMPLES**

`smr2run -v ks02.smr ks02conv`

Converts one Spike2 data file into the specified runfile "ks02conv", listing all channels it finds including those not converted (non-Adc or RealWave data).

`smr2run -q -b *.smr`

Converts all Spike2 data files in current directory into corresponding runfiles, operating quietly.

`smr2run -q -n -b *.smr`

Checks all Spike2 data files in current directory to ensure they are readable, only giving output if any errors or warnings are encountered.

`smr2run -b -v -n -n *.smr`

Show header information for all Spike2 data files in current directory, listing all channels in each

file.

**FILES**

\*.smr Spike2 input file  
\*.frm frame file containing run header  
\*.w?? waveform files

**SEE ALSO**

calibrate(1), axon2run(1), asc2run(1), analysis(1), dsepr(1), frmfile(5)