Manual Reference of TEREFES functions.
Library Version 2.
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```
//-------------------------------------------------------//
//---     Channel configuration                         --//
//- fd: FES file descriptor                             --//
//- Ch: Channel to be configured                        --//
//- ap, an: positive and negative amplitude in [mV]     --//
//  Range 0 to 90 mV
//- tp, tn: positive and negative pulse width in [us]   --//
//  Range 0 to 5067 us
//- repeat: Channel pulse repetition; Range: 0-3        --//
//- order: pulse order; 0: Pos/Neg; 1: Neg/Pos          --//
int fcn_SetUpChannel(int fd, uchar_t ch, uchar_t ap, unsigned
int tp, uchar_t an, unsigned int tn, uchar_t repeat, uchar_t
order);

//-------------------------------------------------------------//
//-- Modify Channel amplitude Compatible with Terefes V1    --//
//- fd: FES port file descriptor                            --//
//- Ch: Channel to be configured                            --//
//- ap, an: positive and negative amplitude in [mV]         --//
//----  No longer supported, Do not use                 ---//
int fcn_SetChannelAmplitude(int fd, uchar_t ch, uchar_t ap,
uchar_t an);


//-------------------------------------------------------------//
//-- Modify Channel Pulse width Compatible with Terefes V1  --//
//- fd: FES file descriptor                                  //
//- Ch: Channel to be configured                             //
//- tp, tn: positive and negative pulse width in [us]        //
//-----  No longer supported, Do not use               ---//
int fcn_SetChannelPulseWidth(int fd, uchar_t ch, unsigned int
tp, unsigned int tn);


//-------------------------------------------------------------//
//--- Write Global Repetitions Compatible with Terefes V1   -//
//- fd: FES port file descriptor                            -//
//- rep: Global repetitions; range[0-255]                   -//
int fcn_SetMaxGlobalRepetition(int fd, uchar_t rep);


//-------------------------------------------------------------//
// Write InterGroup and global time Compatible with Terefes V1//
//- tinter: period of inter-group pulses in mili seconds [ms];
//  Range 2 to 10000 ms                                      //
//- tglobal: stimulation period in mili second [ms];
//  Range 2 to 10000 ms                                      //
int fcn_SetStimulationPeriod(int fd, unsigned int tinter,
unsigned int tglobal);
```

```
//-------------------------------------------------------------//
//--- Set the number of channels of the vector list that
//    will be stimulated                                       //
// fd: FES file descriptor                                     //
// Len_ch: number of channels in the vector list to be
// considered for stimulation; Range [1-32]                    //
int fcn_StimulationChannels(int fd, uchar_t len_ch);

//-------------------------------------------------------------//
// Add channel to the stimulation vector list  -> Compatible
// with terefes V1                                            //
//- fd: FES file descriptor                                   //
//- ch: channel number to be added in the vector list         //
//- pos: List's position in which the channel will be added   //
int fcn_AddChannelToList(int fd, uchar_t ch, uchar_t pos);


//-----------------------------------//
//-- Turn on stimulation Source 1  --//
//- fd: FES file descriptor          //
int TurnOnF1(int fd);

//-----------------------------------//
//-- Turn on stimulation Source 2 --//
//- fd: FES file descriptor         //
int TurnOnF2(int fd);


//-----------------------------------//
//-- Turn off stimulation Source 1 --//
//- fd: FES file descriptor          //
int TurnOffF1(int fd);

//-----------------------------------//
//-- Turn off stimulation Source 2 --//
//- fd: FES file descriptor          //
int TurnOffF2(int fd);

//-------------------------------------//
//-- start Stimulation               --//
//- fd: FES file descriptor           //
int StartStimulation(int fd);

//-------------------------------------//
//-- Stop Stimulation                --//
//- fd: FES file descriptor           //
int StopStimulation(int fd);
```

```
//-------------------------------------------------------//
// --- Set Terefes function Mode                      ---//
// --- Range: 1-6                                     ---//
// --- Recommendation: use only mode 6                ---//
// --- Further details, see Diego Galeano's Manual --//
int fcn_SetConfigurationMode(int fd, uchar_t mode)


//-------------------------------------------------------------//
//--- Modify the Positive Channel amplitude of channels
//    included in the list vector                          ---//
//--- Only work with terefes V2                            ---//
//--- Further details, see Diego Galeano's Manual          ---//
//- fd: FES file descriptor                                ---//
//- Amp_ch: it can be a vector of values or a single value.
//  The position of the values correspond to each included
//  channel in the vector list
//- len: len of the channel list                           ---//
//--- When mode 6 is set, this function also modify the
//    negative pulse amplitude                          ---//
int fcn_SetFastPositiveChAmp(int fd, uchar_t ampCh[16], uchar_t
len)


//-------------------------------------------------------------//
//--- Modify the Negative Channel amplitude of channels
//    included in the list vector                          ---//
//--- Only work with terefes V2                            ---//
//--- Further details, see Diego Galeano's Manual          ---//
//- fd: FES port file descriptor                           ---//
//- Amp_ch: it can be a vector of values or a single value.
//  The position of the values correspond to each included
//  channel in the vector list
//- len: len of the channel list                           ---//
int fcn_SetFastNegativeChAmp(int fd, uchar_t ampCh[16], uchar_t
len);


//-------------------------------------------------------------//
//--- Modify the positive Pulse Width of channels
//    included in the list vector                          ---//
//--- Only work with terefes V2                            ---//
//--- Further details, see Diego Galeano's Manual          ---//
//- fd: FES port file descriptor                           ---//
//- pwCh: it can be a vector of values or a single value.
//  The position of the values correspond to each included
//  channel in the vector list
//- len: len of the channel list                           ---//
//--- When mode 6 is set, this function also modify the
//    negative pulse width                              ---//

int fcn_SetFastPositivePWidth(int fd, uint16_t pwCh[16], uchar_t
len);
```

```
//-------------------------------------------------------------//
//--- Modify the negative Pulse Width of channels
//    included in the list vector                          ---//
//--- Only work with terefes V2                            ---//
//--- Further details, see Diego Galeano's Manual          ---//
//- fd: FES port file descriptor                           ---//
//- pwCh: it can be a vector of values or a single value.
//  The position of the values correspond to each included
//  channel in the vector list
//- len: len of the channel list                           ---//
int fcn_SetFastNegativePWidth(int fd, uint16_t pwCh[16], uchar_t
len);
```