

```

0001 function [sim, I_list, PW_list]=ld_charge_ctrl_multich(sim, ev, v_list, Nch)
0002 //
0003 // Charge control for multiple channels using the same lookup table
0004 //
0005
0006 // Get table data and their lengths
0007 tabPW_ = CHCNTL.tabPW;
0008 tabI_ = CHCNTL.tabI;
0009 vlen = length(tabI_);
0010
0011 // The vectors containing the tables
0012 [sim,TABI] = ld_constvec(sim, ev, tabI_ );
0013 [sim,TABPW] = ld_constvec(sim, ev, tabPW_ );
0014
0015 // init output lists
0016 I_list = list(); PW_list = list();
0017
0018 // loop
0019 for i=1:Nch // Create blocks for each channel by a for loop
0020
0021 // extract normalised stimulation for channel i
0022 v = v_list(i);
0023
0024 // calc index
0025 [sim, index] = ld_gain(sim, ev, v, vlen);
0026 [sim, index] = ld_add_ofs(sim, ev, index, 1);
0027
0028 // look up the values
0029 [sim, I] = ld_extract_element(sim, ev, TABI, index, ...
                                vecsize=vlen );
0030 [sim, PW] = ld_extract_element(sim, ev, invec=TABPW, ...
                                pointer=index, vecsize=vlen );
0031
0032 // store signals
0033 I_list($+1) = I; PW_list($+1) = PW;
0034 end
0035 endfunction

```