

## GPIB-to-USB v1.5 interface commands

Command Sequence, all terminated by <LF> (= Ctrl-J)	Purpose
C	Reset
I	Display firmware version info
Gn	Send command byte <n> (0..255), example: G65 sends 'A'
Ra,s Ea,s	Send string <s> to address <a> and read answer, example: R3,E sends echo command to 7150+ at address 3 and reads response until linefeed <LF> found E does the same but response is terminated EOI signal instead of linefeed thus allowing binary transfer
Wa,s	Write string <s> to address <a>
Ba,n	Send byte <n> (0..255) to address <a>
S	Check GPIB SRQ signal
Tn	Set GPIB timeout in microseconds (1 s = 1000000 microseconds)
Ha,	Read from address <a> until linefeed <LF> is found (new in v1.5)

## Some of the 7150+ GPIB commands

A	Device Clear	Set all parameters to power-on defaults																																
C0 C1	Normal operating mode Enter calibration mode																																	
E	Echo back	Send all present settings in alphabetical order, eg C0 D0 I3 J1...																																
Hn	n = value. Only in calibration mode, set high point	<div>n=applied input x 10<sup>(7-R)</sup> R= range 1..6 eg:<table><tr><td>R</td><td>factor</td></tr><tr><td>1</td><td>1,000,000</td></tr><tr><td>2</td><td>100,000</td></tr><tr><td>3</td><td>10,000</td></tr><tr><td>4</td><td>1,000</td></tr><tr><td>5</td><td>100</td></tr><tr><td>6</td><td>10</td></tr></table></div> <div>2V in 2V range (R=2), n =2*100,000 = 200000</div> <div>0.3V in 200V range (R=4), n=0.3*1000= 000300</div>			R	factor	1	1,000,000	2	100,000	3	10,000	4	1,000	5	100	6	10																
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In	n=0..6 set integration time	<div>0= 6.66ms (3x9's)</div> <div>1= 40.0 ms (4x9's, 50Hz mains)</div> <div>2= 50.0 ms (4x9's, 60Hz mains)</div> <div>3= 400 ms (5x9's)</div> <div>4= 10x400 ms (6x9's) not for Vac, or Iac</div> <div>5 = reserved</div> <div>6=100 ms (4x9's)</div>																																
Ln	n = value. Only in calibration mode, set low point	(format is the same as H command)																																
Mn	n=0..5 Mode	0=Vdc, 1=Vac, 2=KOhm, 3=Idc, 4=Iac, 5=temp																																
Rn	N=0..6 Range	<table><tr><td>R</td><td>Vdc &amp; Vac</td><td>Kohm</td><td>Idc &amp; Iac</td></tr><tr><td>0</td><td>Auto</td><td>Auto</td><td>Auto</td></tr><tr><td>1</td><td>0.2 (Vdc)</td><td>Not used</td><td>Not used</td></tr><tr><td>2</td><td>2V</td><td>Not used</td><td>Not used</td></tr><tr><td>3</td><td>20V</td><td>20K</td><td>Not used</td></tr><tr><td>4</td><td>200V</td><td>200K</td><td>Not used</td></tr><tr><td>5</td><td>2000V</td><td>2M</td><td>2A</td></tr><tr><td>6</td><td>Not used</td><td>20M</td><td>Not used</td></tr></table>	R	Vdc & Vac	Kohm	Idc & Iac	0	Auto	Auto	Auto	1	0.2 (Vdc)	Not used	Not used	2	2V	Not used	Not used	3	20V	20K	Not used	4	200V	200K	Not used	5	2000V	2M	2A	6	Not used	20M	Not used
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W	Write calibration																																	

<https://github.com/TheHWcave/GPIB-to-USB>