

Quick Start for **DSP-,xx SSP-xx** and **SSQ-xx** controllers

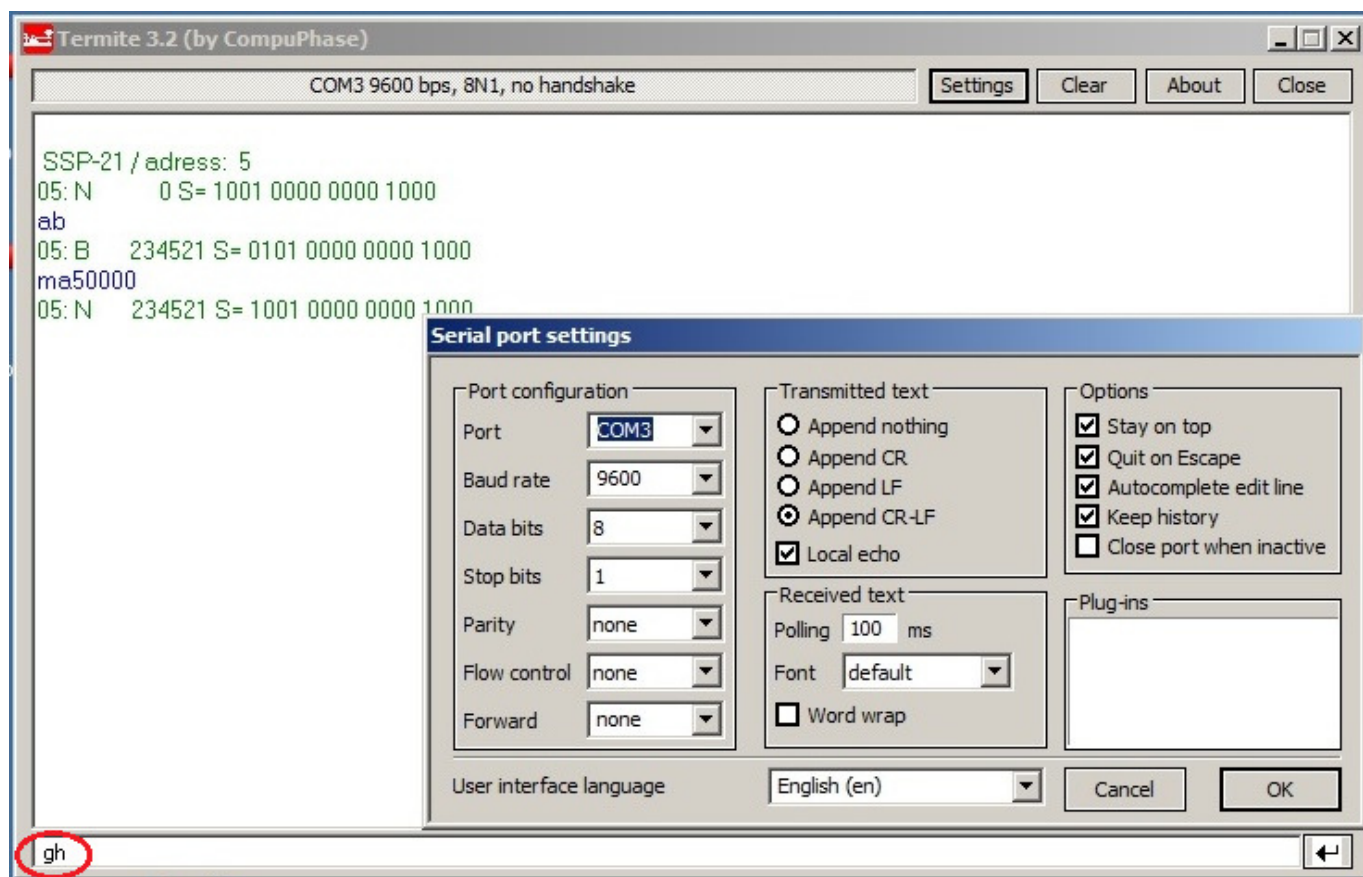
The controller uses serial communication and for this you will need a Terminal program. Here are 2 sources where this type of software is available:

Free version: www.compuphase.com/software_termite.htm

Trial version: www.hilgraeve.com/hyperterminal-trial

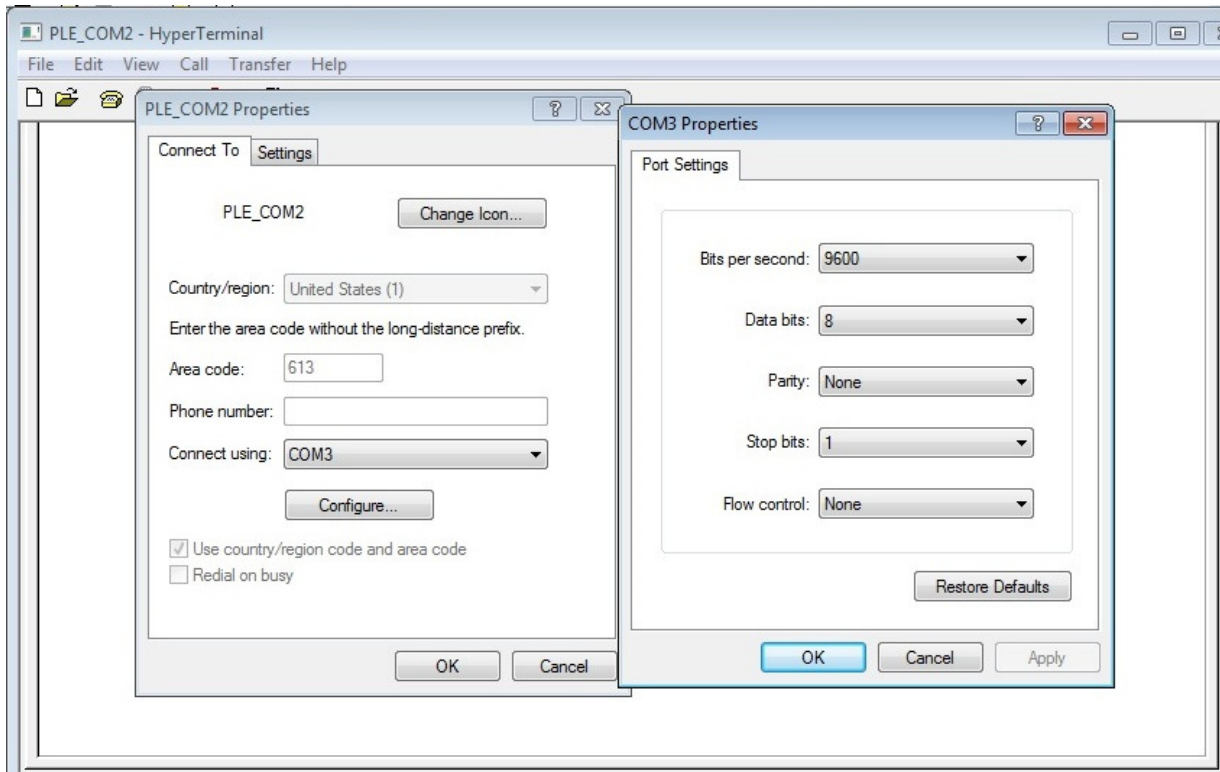
When running the “Termite” program, the correct communication setup should look like in the screen captures below.

Termite (free software).

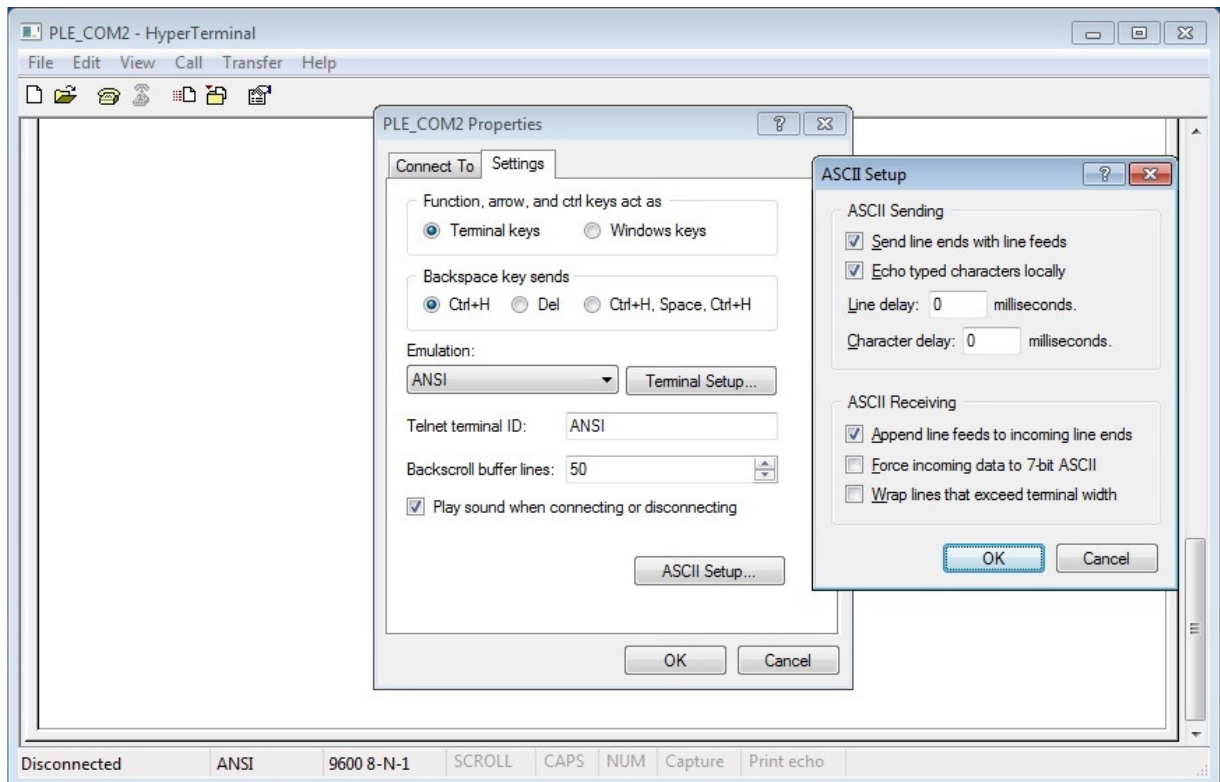


To send commands to the controller you will type them in the lower field and press <enter> key. In the example above you see “gh”.

HyperTerminal (trial software).



Here you select the same COM port shown in Device Manager and set the communication parameters.

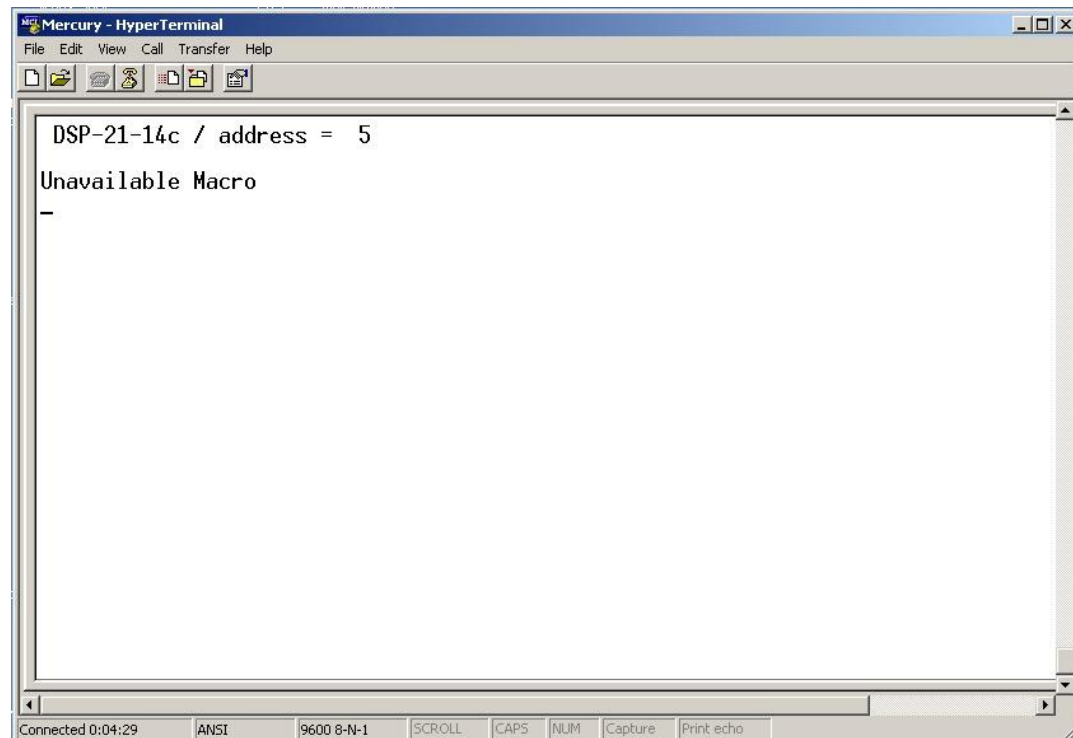


Now connect the motorized mechanics and the power to the controller and front panel **LED** light will turn **ON**. If the **LED** blinks it is an indication that the mechanics is at the end of travel. For closed loop systems it can also mean there is a problem with the feedback loop.

The more common Power Supply is 12V DC and 1Amp.



DC power input polarity.



This **HyperTerminal** screen indicates at power-up that:

- the communication with the controller is working correctly
- the controller address is 5
- no startup program have been saved in the controller memory.

If this screen doesn't appear at power-up check the connection with the PC and the power than try again.

Now you can use the **Command List** to send commands to the controller. Try the following:

- **MR800**<enter> The motor will rotate to move the mechanics in the (+) direction
- <enter> The last action will be repeated. (**M**ove **R**elative 800 increments)
- **DH**<enter> Sets the position counter to "0" also called "Home".
- **MA-2000** The motor will **M**ove **A**bsolute to the position -2000.
- <enter> No action because the motor is already at -2000 position.

Commands List = Print this page =

NR	Mnemonic	Function description	User NOTES
1	HE	HE lp	Display a list of commands
2	RF	Set R eporting O FF	Must be used (saved) for LabView and network
3	RN	Set R eporting O N	Recommend to use with Terminal programs
4	TP	T ell C urrent P osition	Display the current position
5	DH	D efine H ome	Sets the current position to "0"
6	GH	G o H ome	Moves the motor until the "0" position is reached
7	MN	M otor o N	Motor holding current is on
8	MF	M otor o Ff	Motor holding current is off
9	MA	M ove A bsolute	MA2222
1	MR	M ove R elative	MR500
11	AB	A Bort	Abort any action
12	WA	W ait [ms]	WA500 or wa10000 Stop execution for Xmsec.
13	GV	G et M aximum V elocity	Display maximum velocity
14	GA	G et M aximum A cceleration	Display maximum acceleration
15	GF	G et F ollowing e rror	Display maximum allowed lagging.
16	SF	S et F ollowing e rror	SF10000 or more to allow for larger lagging
17	SA	S et maximum A cceleration	SA1000
18	SV	S et maximum V elocity	SV90000
19	GQ	G et T orque	Reads and displays the set Torque value
20	SQ	S et T orque	After using GQ use to raise the current limit (PWM%)
21	GP	G et P -term	
22	GI	G et I -term	
23	GD	G et D -term	
29	DP	D efine P -term	DP10 for low gear, low friction low load
30	DI	D efine I -term	DI10 for low gear, low friction low load
31	DD	D efine D -term	DD2 for low gear, low friction low load
Commands used for configuration			Use only if instructed
32	AL1234	A dministrative L evel	Use for system integration. Exits on Power Off.
33	PW	P WM test	Only for DC motors after AL1234 command was given
34	RD	R everse motor D irection	Works only after AL1234 command was given
35	FD	L oad F actory D efault values	Use only after instructed by manufacturer
36	UD	U ppdate U ser D efaults in E E	Use to save application specific settings
37	LN	L imit S witch O peration O N	
38	LF	L imit S witch O peration o Ff	
39	LH	L imit S witches A ctive H igh	Use the UD command after system integration
40	LL	L imit S witches A ctive L ow	Use the UD command after system integration
41	LS	L imit S witches S wap	Use the UD command after system integration
User defined Macro programs			
37	CM	C ommand M acro	CM1 (Executes a saved Macro program)
38	DM	D efine M acro	DM1 (Defines and saves a Macro program)
39	EM	E rase M acro	EM1
40	TM	T ell M acro	TM1