HY series inverter parameter setting instruction for CNC router

Option one: Maual operation

Primary parameters:
PD005=400
PD004=400
Set parameters above in order. If your motor is 400Hz, these two parameters (default setting is 50Hz) have to be changed to 400, or damage will be caused to spindle and inverter.

Secondary parameters:
PD003=?
PD003 stands for motor rotation speed. This parameter can be set to adjust motor's speed.
Default setting is 50Hz, maximum value is 400Hz.

PD001=0
Default setting of PD001 is 0. It means manual keypad control to RUN and STOP.

PD000=0
Default setting is 0. There is no need to change it.

PD014=15
Acceleration time is the time from 0Hz to maximum frequency (unit: s). The bigger the value, the longer the acceleration time.
For example: PD014=30, 30 seconds will be taken by spindle to run from 0Hz to max frequency. The longer the Acc time, the better to inverter. Because small current is need for slow start. If Acc time is too short, large current will have shock to inverter.

PD015=15
Deceleration time is the time from maximum frequency to 0Hz. The longer the Dec time, the better to inverter. If Dec time is too short, large inertia of spindle will have great voltage shock to inverter. Customer can ajust this parameter according to acutal requirement. Default setting is also available.

PD041=3
Carrier frequency. The lower the carrier is , the greater the electromagnetic noise of the motor will be, but the lower the heating capacity of the inverter will have.
The higher the carrier is, the lower the electromagnetic noise of the motor will be, but the stronger its interference to other systems will be, and the greater the heating capacity of the inverter will have.
Generally, PD041=3 is the suggestion.

PD013=8
Restore to factory setting.

Note: PD005, PD004 have to be change to 400, or damage will be caused to inverter and spindle. Other parameters can set arrording to actual demand.

Option two: PC operation

The same with option one that PD005, PD004 have to be change to 400.

PD001=1
it means use external terminal to run and stop; the correspondent terminal in inverter is FOR + DCM

PD002=1
it means inverter's rotation speed is controlled by 0-10V analog voltage; the correspondent terminal in inverter is VI + ACM, correspondent parameter PD072=400 (max rotation speed is

400Hz)
If the analog voltage is 0-5V, PD070=1

PD083=3   (it means use external 8 step speed control; the correspondent parameter is PD086-PD092)

PD047=19, PD048=20, PD049=21. (these three parameters have to be used together with PD080 to realize external 8 step speed control;   the correspondent terminal in inverter is SPH, SPM, SPL+ DCM.

Note: parameter setting for option one is also available to option two.