

Setup instructions for Galil DMC 3310 to MCG brushless motor with comcoder

Step1

Connect the Halls to the Galil as shown on the attached page. Then rotate the motor shaft slowly and type in QHX (use WSDK) you should get the following sequence.

```
:QHX  
1  
:QHX  
3  
:QHX  
2  
:QHX  
6  
:QHX  
4  
:QHX  
5
```

Once correct sequence is obtained rotate shaft in the negative direction and you should get the above order backwards 5,4,6,2,3,1,

Step2

Once confirmed you need to connect the motor phases as shown on the attached page. Type SH for servo here Then using the OF command you can run a test to make sure the motor runs in both directions (at the same speed) OF 1 and OF -1

If you have connected the Encoder (type MO to turn off the motor and don't use SH) you can use the TV to check the velocity. If not just eyeball it. The motion should be smooth as well and require no help to get the shaft started.

Step3

If you don't get the right motion you will need to run through a truth table of 6 different settings, and retry the OF 1, OF-1 test.

```
ABC (Galil motor phases pins)  
RST (MCG motor leads, this is the good setup.)  
RTS  
STR  
SRT  
TRS  
TSR
```

Step4

You now need to use the CE (encoder config) and MT (motor config) to set up the motor and encoder polarity so during motion you will see motion in the correct direction and you don't get run away.

Inter-connection charts for

Galil DMC3310 to MCG Brushless motor with COMCODER

Galil		TO	MCG	
pin/connector	description		colour	description
Encoder 15 pin D-Sub Con			FEEDBACK from Comcoder through I cable FC-10	
pin 1	IDX+		Orange	Z
pin 2	MB+		Blue	B
pin 3	MA+		Brown	A
pin 6	IDX-		Yellow	Z'
pin 7	MB-		Green	B'
pin 8	MA-		White	A'
pin 5	GND		Black	Common
pin 10	Halls A		Violet	U
pin 13	Halls B		White/Brown	V
pin 14	Halls C		White/Orange	W
pin 15	+5Vdc		Red	+5Vdc
J1 motor connector			Power form I cable P3-10	
pin A	A Phase		Red	Phase R
pin B	B Phase		White	Phase S
pin C	C Phase		Black	Phase T