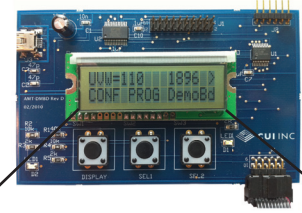


# Demo Board Instructions for the AMT303



1. Provide power to the demo board by connecting the USB port to a USB source.
2. Connect encoder to the demo board with provided I0C ribbon cable.
3. Program the AMT303 by pressing the button below “CONF.”

### a. CW/CCW Set

1. The default is CCW (counter-clockwise) for incrementing.
2. Press the button below “CCW” to change to CW for incrementing if desired, if not, skip this step.
3. Proceed to the next step by pressing the button below “NEXT.”

### b. Output Set

1. The default is QAQB, which is standard.

### c. Resolution Set

1. To set resolution, press the button below the “+” or the “-” symbol until the desired resolution appears.
2. Proceed to the next step by pressing the button below “NEXT.”

### d. Motor Pole Count Set

1. Press the button below the “+” or “-” symbol to increase the pole count until it matches the motor pole count. Note: Some motor manufacturers state the pole count as ‘pole pairs’. The AMT303 demo board shows the total pole count, not pole pairs.
2. Proceed to the next step by pressing the button below “NEXT.”

### e. Commutation Offset Set

1. This feature is rarely used. It is included because some BLDC motors use a Delta phase connection system; default is WYE or STAR. Consult with the factory before setting this parameter.
2. To delay or advance the commutation signals in 5° increments, press the button below “+” or “-” respectively until the desired offset is displayed on the LCD screen.
3. Proceed to the next step by pressing the button below “NEXT.”

### f. Set Commutation Zero Position and Complete Programming Cycle

1. Press the button below “PROG.”
2. Press the button below “PROGRAM.”
3. Press the button below “NEXT.”
4. Press the button below “ZERO”  
Commutation zero is set.

Note: In order to set commutation zero position, the encoder must be mounted to the motor with the motor rotor locked in its zero position. The motor rotor is usually locked in its zero position by applying +V to phase A, and Ground to phase B.

Congratulations! The AMT303 demo board has loaded the parameters into the EEPROM and is ready to program subsequent AMT303's. To load identical data into subsequent AMT303's, remove the encoder from the cable, attach the next encoder and repeat, screen will appear as shown in “3e3.” Press the button below “NEXT” and perform steps “3e2” through “3e4.”

1a DB6900D V12 80>  
NO CONNECT

2 UUV=000 XXXX <>  
CONF PROG DemoBd

3a CONF <>  
3b NEXT CW QAQB

3c RES: 1024 <>  
NEXT + -

3d POLES: XX <>  
NEXT + -

3e ANGLE: +0000° <>  
NEXT + -

3f1 UUV=000 XXXX  
NEXT PROG DemoBd

3f2 ZERO OR PROGRAM <>  
ZERO PROGRAM

3f3 SUCCESS <>  
NEXT

3f4 ZERO OR PROGRAM <>  
ZERO PROGRAM

SUCCESS <>  
NEXT