

## Dado Automation Quick Start Checklist

This is a brief guide for testing and setting up the Master Controller. Read the following precautions before making any cable connections. Please do not turn on the power to your system before reviewing this guide.

### **IMPORTANT information, please read BEFORE turning on the power.**

Do not connect or disconnect any cables while the power is turned on.

Do not connect the CAT5 cable from the motor to any other port besides the MTR LOGIC port. The motor may become damaged if plugged into any other port.

Do not connect a Touch Screen that is labeled Touch Panel to any other port besides Touch Panel A or B.

Do not connect a Keypad version of the Touch Screen that is labeled Keypad(contains the fingerprint option) to any other port besides the Bio/Keypad port.

Insure that the door is able to move by hand from one side to the other without unusual friction or obstruction.

Insure that the belt has been installed correctly according to the track install guide. The belt and clamp can be installed in reverse, and if they are not installed correctly, the door will run in reverse and damage may result.

Insure that the cables attached to the motor are secured to the motor with wire ties so that the weight of the cables is not on the connectors(this is referred to as "strain relief").

Do not use CAT cables that are configured for computer use. Some CAT5 cables for networking can have wires reversed. ALL WIRE PAIRS SHOULD BE STRAIGHT THROUGH for the Dado Automation system or damage may result. The standard color combination for the Dado system has been changed from that of typical CAT5 cables. Please insure your cables only follow the following wiring scheme:



## **The primary settings required to be adjusted by the user are:**

**Set Closed Position**

**Closing Trip Level**

**Set Max Torque(Torque Cal)**

All settings designated as "Factory Settings" should never be changed without consulting Dado Door.

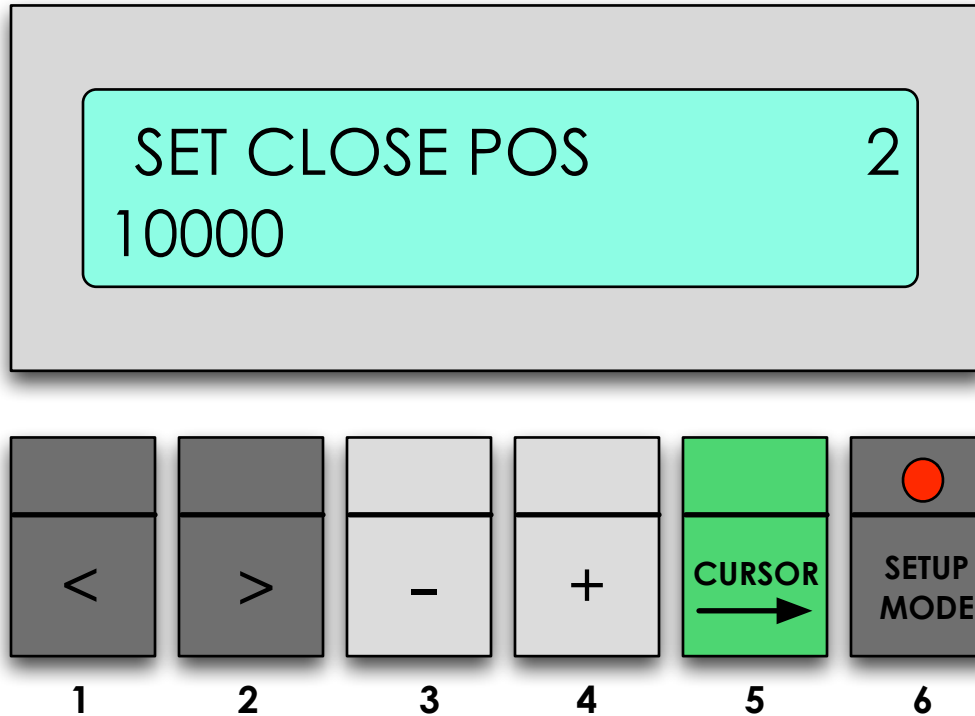
In the event of the system becomes inoperable, before powering off the Master Controller, look at the LCD display and see if any error messages are present. For a detailed explanation of error messages, see the error listing section later in the programming guide.

NOTE: The default distance the door is set to move is 20". You will need to adjust the Set Closed Position to your requirements. If your door is required to move LESS than 20", be sure to adjust this Closed Position BEFORE attempting to test the system. Never allow the door to contact the door jamb when closing.

### **The Bootup Diagnostics Routine**

Upon powering up the system, the door will make two small 1/8" diagnostic moves, then will start to move very slowly towards the fully open position. If the systems exhibits any behavior OTHER than moving slowly towards HOME(fully open), quickly turn off the power. If the door begins the homing process towards the CLOSED position, then the belt has been installed in reverse. It is advised that when powering the system up for the very first time that you have easy access to the motor and Master Controller. It is ideal to be able to see the door from the Master Controller while programming. If you cannot see the door from the position of the Master Controller, be sure to have someone at the door to report the movements.

## MASTER CONTROLLER PROGRAMMING LCD DISPLAY



The Dado Door Master Controller is programmed by entering the Main Menu and scrolling to the various options. To enter the Main Menu, press the SETUP MODE button. This button contains a red LED which should turn on when the button is pressed. The menu will open up to the last setting that was displayed. The Main Menu is organized in a list of user settings. The left and right arrows < > are used to scroll from the top of the menu list to the bottom of the list. The menu list order may change, but this guide will provide the basic programming information needed to set up the parameters.

### Buttons Explained:

< > Move up or down the Main Menu

- + Add or subtract from a number, or select Yes/No fields

**CURSOR** Cycle the cursor through a menu item with more than one field

**SETUP MODE** Enter/Exit the Main Menu. The LED is ON upon entering the menu.

To exit the menu, press the button again, the LED will turn off.

You may enter Setup Mode at any time after the system is booted

and has completed the diagnostics routine. If there is a problem

with the system not being able to complete the bootup routine,

it may be required to enter the Setup Mode using the BYPASS MODE.

Some other controls may not work while in SETUP MODE.

## **MENU SETTINGS:**

These are the settings found in the Main Menu.

1. Test Motion
2. Closed Position
3. Max Torque
4. Input Config
5. Closing Trip Level
6. Opening Trip Level
7. Home Trip Level
8. Object Detection Level
9. Open Speed
10. Closing Speed
11. Set < > Directions
12. Accel/Decel Config
13. Offset Open Position
14. Offset Enable
15. Auto Close Enable
16. Auto Close Delay
17. Volume(Audio/Beep)
18. Device ID
19. Decel Rate \*
20. Deadband
21. Temperature Comp\*
22. Reset All Settings
23. Torque Cal

\* Factory settings. Do not change.

## **BYPASS MODE:**

If required, at power ON the user can immediately PRESS and HOLD down the Setup Mode Button until the Main Menu appears, this will bypass the diagnostics and HOMING process. This BYPASS approach to the Setup Mode is for special cases where the user may need to make some adjustments prior to the system running the diagnostics and HOMING routine. DO NOT ATTEMPT TO OPERATE THE DOOR FROM THIS MODE USING TEST MOTION, THE DOOR MUST BE HOMED PRIOR TO MOVING THE DOOR. If using the Bypass Mode, once you exit the Setup Mode by turning off the RED LED, the system will automatically begin the diagnostics and homing routine.

The first thing that needs to be done is to set the correct MAX TORQUE setting for your door system. This is a value that is unique to each installation.

In software revision 3.03.041, a feature was added to assist in setting up the Max Torque. Max Torque in earlier versions of the menu was called iMax, and was set with the Set iMax menu option.

**To use the Torque Cal feature, follow the steps below:**

1. Make sure the power is off
2. Push the doors towards the open position by hand
3. Turn on the power and immediately press and hold the MENU button until the screen displays MAIN MENU. Release the button, the RED LED should remain on. This method of start up is called the BYPASS MODE, which skips over the diagnostics routines and enters directly into the MENU.
4. Press button #2 ( > ) until the LCD screen shows TORQUE CAL. The system will beep several times with a warning that the door MUST be open to use this feature. If the door is closed, it is possible that the door will collide with the door jamb in the closed position or hit the opposite door. Damage may occur in this case.
5. Once the LCD shows TORQUE CAL, press the Green Button(#5). The door will make a short diagnostic move of approximately 1". If the software determines that the torque is adequate, a message will appear stating DOOR OK. Simply exit the MENU MODE if this message appears. Upon exiting the MENU MODE will typically cause the door to boot up normally and move the the HOME switch. If the door was already HOMED from a previous bootup, then the door will not HOME again upon exiting this menu option.
6. If the torque is determined to be too low, a message will appear stating TORQUE LOW, the Max Torque setting will automatically increment by 500 and the new setting will be stored in memory.
7. If the torque is too low to move the door any amount, the LCD will display a message stating DOOR NOT MOVING. The Max Torque setting will increment by 500 and the new value will be stored in memory.
8. Assuming there is not a connection problem or obstruction stopping the door from moving, at some point the torque will be set correctly and the display will read DOOR OK. Continue pressing the Green Button(#5) as needed to arrive at the correct torque. By design, the amount of torque must be manually incremented and re-tested using the button +. If the system does not ever display DOOR OK, please contact Dado Door for assistance.

