

Congratulations on your purchase of an ORMEC XD-Indexer kit.

**WARNINGS**

1. You are working with dangerous, high voltages. Only qualified persons should make connections and changes. Do not touch any live parts while the power is on.
2. **Double check all wiring. When working with high voltages mistakes can be dangerous and costly.**
3. Motors can be dangerous. The output shaft will turn and the motor may jump or move under some circumstances if not secured. Stay clear of the motor shaft. Secure the motor so that it cannot jump.

**1**

Gather tools – ¼” flat blade screwdriver and wire cutters/strippers. Remove kit from the shipping box. Note there are more instructions on reverse side. You must supply wire for connection to your plug or panel.

**2**

Remove control box by cutting shipping restraint.

Go to **Step 3 Test** on reverse side for test instructions.

**6**

**5**

Connect power to circuit breaker and ground to and lug. Safety ground is required. Follow local electrical codes.

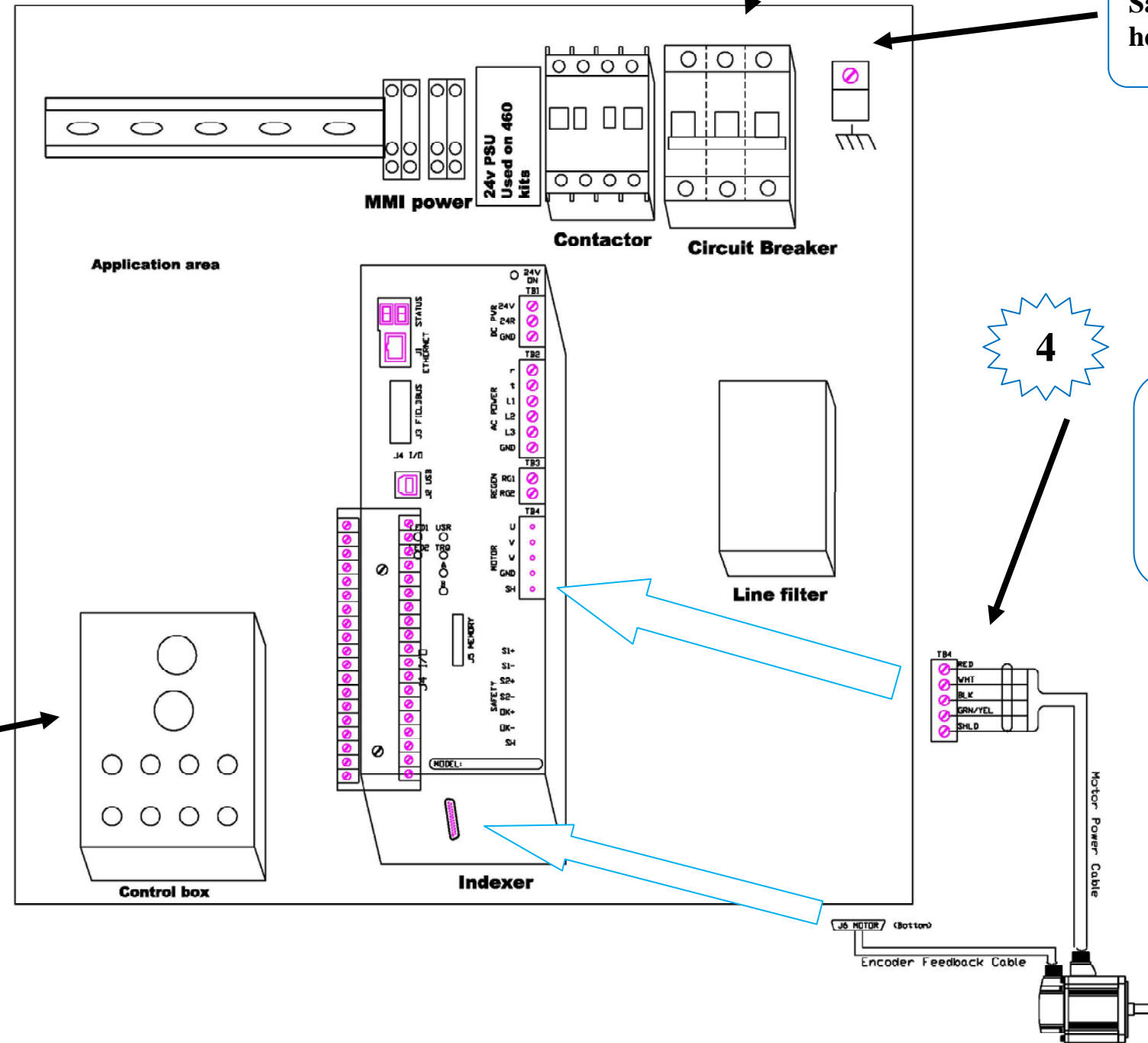
**Safety ground here.**

**4**

Connect 2 cables from motor to TB4 on front and J6 on bottom. Cables connect only one way. (Additional detail on reverse side.)

**3**

Secure motor for initial test.



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This kit Quick Installation Guide sheet is written for panel and enclosure versions of the kit where the wiring is complete. If you received a parts only kit it is recommended that you wire your system following the layout shown and then return to this document or reference the complete installation instructions.

## **Step 1 - Unpacking**

Throughout this explanation references are made to the layout and connection diagram. That diagram can be found on the other side of this paper.

Carefully remove the panel from box. Place on a sturdy table and orient as shown in the diagram, reverse side. Remove motor and cables and set aside.

## **Step 2 - Connections**

1. Remove the control box from the panel by carefully cutting the shipping restraint. This will allow you to step back from the panel during operation.
2. Secure the motor. While the motor is spinning it is possible for it to jump or move slightly. Securing it to the table or on the floor helps to prevent damage to the motor or your foot if it falls.
3. Connect the motor cables. There are 2 cables in the kit. One provides power to the motor. The part number on the cable begins CBL-MMX. The other cable provides motor feedback. The part number on the cable begins CBL-ME. Locate these 2 cables and connect to the motor and to the servodrive. The cables will only connect one way and in one spot.
4. Connect power to the system. Connect your incoming power to the circuit breaker (CB1) located in the upper right corner of the panel. Connect your safety ground to the lug in the upper right corner.

## **Step 3 - Test**

1. Double check your wiring before turning on power. You don't want a careless mistake to slow you down.
2. Turn on your power.
3. Turn on the circuit breaker. The XD servodrive should light up. A series of numbers will appear on the display. When complete it will display a whirligig pattern. Note: if an A3 is

displayed the Indexer has detected that main power is off. Find the control box, move the Enable switch down to the Disable position and proceed to the next step.

4. **Find the control box.**
  - a. Pull the E-Stop button out if it is pushed in.
  - b. Press the E-Stop Reset button until the contactor closes.  
→ Note that there will be a loud click or thud when the contactor closes. It's normal, and it's normal to startle the first time.
  - c. The XD drive should now have the BUS POWER LED on.
5. **Enable motion** ~ On the control box move the toggle switch to the Enable position. The XD Indexer should now turn on the right dot in the lower right corner of the display.
6. **Home test** ~ Press and release the Home button. The motor should move to its home position. While it is moving the XD Indexer will show an H in the display. Press again to repeat if you missed it.
7. **Jog Test** ~ Press and hold the JOG button. As long as you hold the button the motor should jog (spin) forward (CCW). Release when you are done.
8. **Motion 1 Test** ~ Press and release the Motion 1 button. The motor will perform a slow speed, 1 rev index motion. During that time the XD Indexer will display a 1. (1 rev in 2 sec.)
9. **Stop Test** ~ Press and release the Motion 1 button then quickly press the Stop button. A motion will start with Motion 1 and Stop with the Stop button. Repeat the test if you weren't watching the motor.
10. **Motion 2 Test** ~ Press and release the Motion 2 button. This will start a series of motions to demonstrate motion repeating and chaining. There will be a sequence of longer slow moves, fast moves, fast short moves and motion in 2 directions. During this time the display on the XD Indexer will show a number which will be changing. The number indicates the motion table entry being executed. This demonstration chains together a series of entries. It then repeats the entire chain 3 times. When complete it comes to rest. You can stop the sequence at any time using the Stop button. (The motions are ½ rev in ½ sec, repeated 3 times, 1 rev in ½ sec, ¼ rev in 100 msec repeated 5 times, reverse 100 rev at 700 rpm and repeat this entire sequence 3 times.)
11. **Congratulations.** You have successfully demonstrated operation of your XD Indexer and kit and are ready to move to your application.



## **Step 4 - Next**

The Indexer and motor are running. The next steps include:

1. Mounting and connecting to your machine.
2. Connect MotionSet configuration tool.
3. Define your motions.
4. Connect your operator interface.
5. Move the E-Stop and Reset out of the control box to your machine.
6. Test and begin using it.

You may want to consult:

- Indexer Kit Instructions
- Indexer Getting Started
- Indexer Reference Manual