

# MAC

**AUTOMATION CONCEPTS**

*Owners Information Manual*

## Simple Timer Indexing CT4



**IMPORTANT! PLEASE READ INSTRUCTIONS CAREFULLY**  
Failure to install and operate MAC products according to our specified instructions could result in equipment malfunction or serious injury. In addition, your warranty may be void if our instructions have not been followed.

**Questions? Call Tool-Free 1-800-435-6979**

MAC Automation Concepts, Inc., 1760 Kilkenny Ct., Woodstock, IL 60098

*Congratulations*

1760 Kilkenny Ct.  
Woodstock, IL 60098  
Phone: 815-337-3000  
Fax: 815-337-3020

Dear Valued Customer,

Congratulations on your purchase of one of MAC's many quality engineered products. We're glad that you have chosen us as your exclusive parts handling equipment supplier.

The first step in getting your machine up and running quickly and easily is to read this instruction manual. In it you will find detailed drawings illustrating the parts and components along with information explaining how to properly use your machine. Please read these instructions carefully before attempting to run your machine.

Your machine is covered by our Limited Warranty. Be sure to read our maintenance schedule for proper care of your machine. If you do experience a problem, please call us toll free at 1-800-435-6979.

Remember to call us for all your replacement part needs! MAC Automation sells all of the products and supplies required to maintain your machine!

Thanks again for choosing MAC Automation Concepts!

Sincerely,

*Frank Eltvedt*

Frank Eltvedt  
President and CEO  
MAC Automation Concepts, Inc.

**Providing all your Parts Handling Needs!**



# Index

<b>Control System Information.....</b>	<b>Page 4</b>
Control System Description	
System Specifications	
Component Descriptions	
Control Enclosure Overview	
System Overview	
<b>System Startup.....</b>	<b>Page 6</b>
Startup Procedures	
Hooking the System Up	
Running the System for the First Time	
Setting the Control Target	
System Sequence of Events	
<b>Troubleshooting.....</b>	<b>Page 7</b>
<b>System Maintenance.....</b>	<b>Page 8</b>
Safety Precautions	
Periodic Inspections	
<b>Spare Parts List.....</b>	<b>Page 9</b>

### **Control System Description**

A momentary pulse initiates conveyor motion. An adjustable time delay relay determines the duration of the time the conveyor will run. After the timer completes its cycle, it then stops and awaits the next signal.

### **System Specification**

**Input Voltage:** 115 VAC 60 HZ Single Phase  
**Input Current:** 5 Amp Fused Main

### **Component Descriptions**

#### **System Control Enclosure (Figure 1.0)**

Contains all control wiring and interfaces for the system.

#### **On/Off Selector Switch**

The ON/OFF selector switch turns all the power OFF in the control box. This does not mean that incoming line is also turned OFF. To guarantee that there is no power in the control box you must unplug the unit.

#### **Intermittent / Continuous Selector Switch**

The INT/CONT selector switch enables the conveyor to run either continuously or intermittently from the timer and control signal.

#### **Power Cord**

This cord brings power into the unit, it is typically 110 VAC.

#### **Control Signal Bulkhead**

This cord interfaces the conveyor to the production system. The signal tells the control package when to reverse.

#### **Motor Power Cord**

This cord brings power to the motor.

#### **Conveyor Speed Pot (Figure 1.1)**

Only available on variable speed conveyors. Controls the belt speed.

**Analog Timer (Figure 1.2)**

Controls the time the conveyor is reversed in automatic mode after a control signal is given.

Figure 1.0

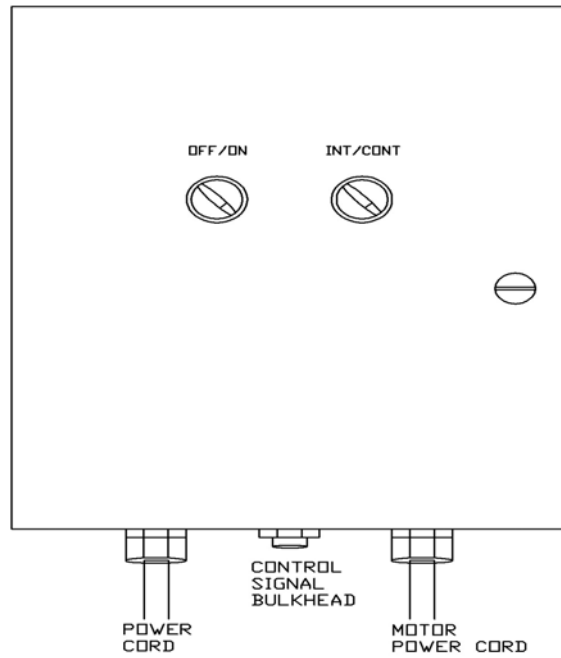
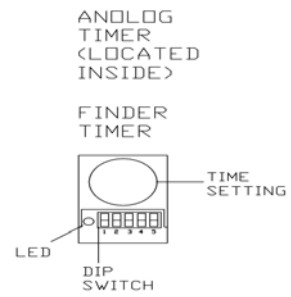
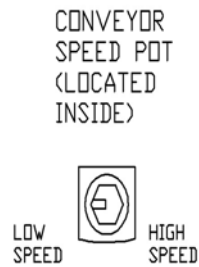


Figure 1.2

Figure 1.1



## Startup Procedure

### Hooking the System Up

- 1) If your System Control Enclosure is remote, mount the enclosure in the desired location. Connect the two motor plugs.
- 2) Wire in the Control Signal cable that is provided, into the production equipment according to the schematics. *\*Warning: Turn off and unplug the power to ensure safety.* Screw on the Control Signal cable into the bulkhead on the System Control Enclosure.
- 3) The main power supplied should be a standard 115 VAC 60 Hz single phase line cord. This should be connected to the appropriate receptacle.

### Running the System for the First Time or Restarts

- 1) Turn the selector switch to the On position.
- 2) Adjust the speed on the conveyor with the Conveyor Speed Pot.
- 3) Adjust the Analog Timer to the desired amount of time the conveyor should run in the reverse direction.

## System Sequence of Events

### With the mode selector switch in INT:

The conveyor will run intermittently. The conveyor will run after receiving a signal and will continue to run until the analog timer times out.

### With the mode selector switch in CONT:

The conveyor will run continuously.

## **Troubleshooting**

All systems are functionally checked at the factory prior to shipping. If you should develop a problem with your system, consult the following solutions. If your problem is not listed or persists, please contact Mac's customer service department.

### **Conveyor does not operate**

#### **Step 1**

Check the power connections and the main internal and DC motor supply fuses to the conveyor.

#### **Step 2**

With a voltmeter check the main power and the DC motor supply. If you have proper voltages, please check the motor. Any further problems, please contact customer service.

### **Conveyor is running in the wrong direction**

#### **Step 1**

Make sure that the power is turned off and that the power cord is unplugged.

#### **Step 2**

Reverse the black and the white wires off the motor power cord.

**Warning:** *This is an automatic operating conveyor, great care should be taken when servicing to avoid serious injury, and should only be done by a qualified maintenance technician.*

Before servicing any machine turn off the selector switch to assure there is no electrical power to the system beyond the switch and unplugged the systems power cord assures no power is applied to the system.

**Inspect Cords**

Visually check for excessive wear, replace as necessary. Following all safety procedures during replacement.



## STANDARD CT4 AC FIXED SPEED

PART#	DESCRIPTION	QTY
• 0308	A-B 1492-H6 FUSE TERM BLK	2
• 0628	A-B 1492-M37 FUSE DIVIDER	1
• 39882	CORD, BLACK 12'FT	1
• 42065	HOF ENCLOSURE NEMA 1	1
• 45582	FINDER 95.05SPA 2P RELAY	1
• 45580	FIN 40.52.8.120.000 120V RELAY	1
• 45451	C/H XTMC9A10A SINGLE MS 120AC	1
• 45465	C/H XTOM1P6AC1 1.0-1.6A RELAY	1
• 46634	MOELLER 2-POS LEVER SWITCH	2
• 46638	MOELLER NO CONTACT BLOCK	2
• 46636	MOELLER MOUNTING BASE	2
• 45607	FINDER TIMER 85.0	1
• 45608	FINDER TIMER BASE	1
• 45574	MEN RECEPTICAL	1
• 45578	MEN INTERLOCK CABLE	1
•		



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