UR Cap

Installation & Setup Instructions

Notes

UR Cap allows the following two choices:

> Single Speed Forward/Reverse Operation
> Multiple Speed Single Direction Operation
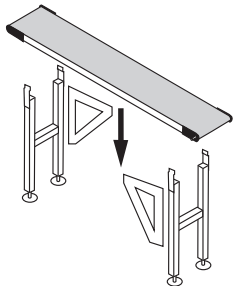
Only one operation option may be used at a time.
Multiple Speed Single Direction Opeartion allows user to choose
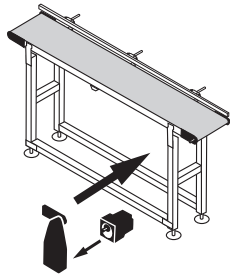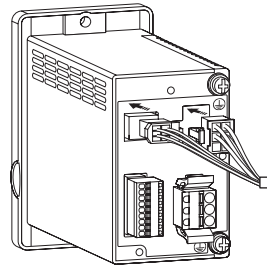between four preset speeds set on the driver.
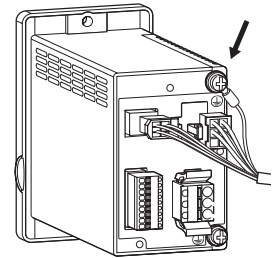
Installation

1 Assemble conveyor to stands and attach any sides or guides following instructions in the AS40 Installation & Operation Manual
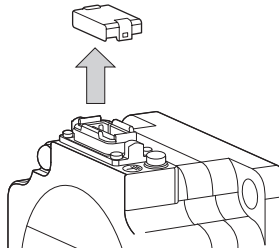
2 Install gearmotor and drive mounting package to conveyor following instructions in the AS40 Installation & Operation Manual
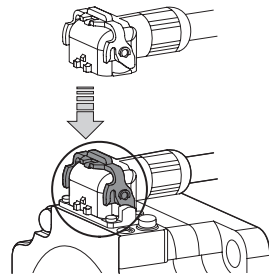
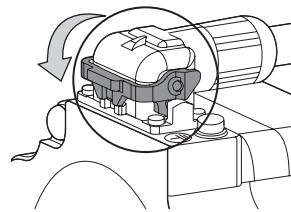**3** Push to connect motor cable to connections CN2 and CN3 on the back panel of the driver

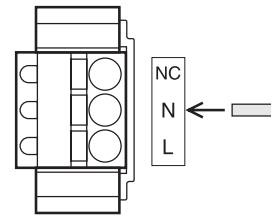**4** Connect green wire of motor cable to upper ground terminal
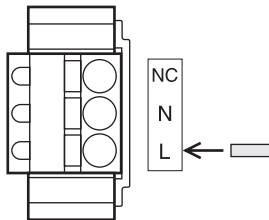
5 Remove motor connector cap

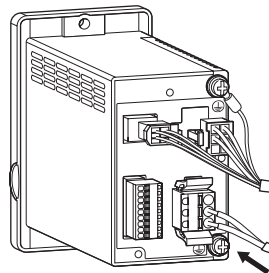**6** Attach motor cable to connection point on motor

7 Rotate latch down to secure motor cable in place
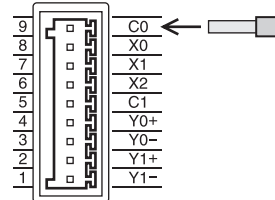
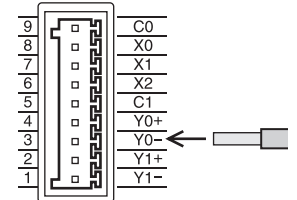**8** Connect power cable neutral wire to N on CN1 connector

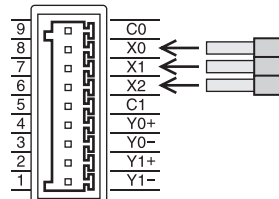**9** Connect power cable live wire to L on CN1 connector

10 Connect power cable ground wire to lower ground terminal
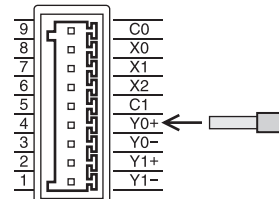
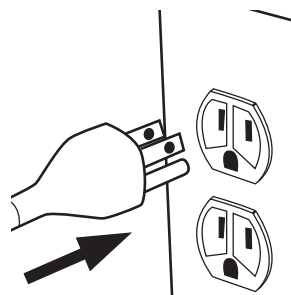**11** Connect terminal C0 to ground

12 Connect terminal Y0- to 24V power from robot

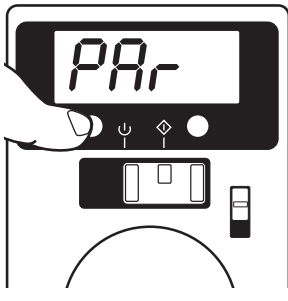**13** Connect terminals X0, X1 and X2 to digital output terminals of robot; note connections

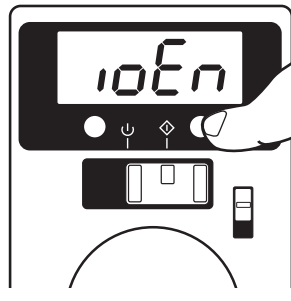**14** Connect terminal Y0+ to digital input terminal of robot

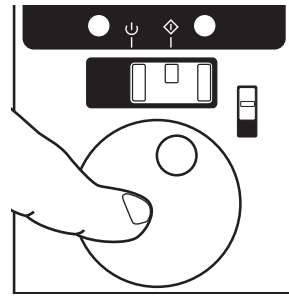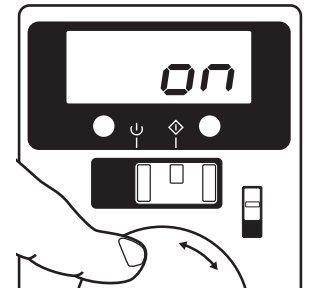**15** Connect power cable to 110V AC power

Setup

1 Press MODE three times to choose PAR mode

2 Press FUNCTION nine times to choose IOEN mode

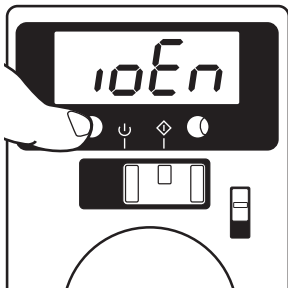**3** Press settings dial

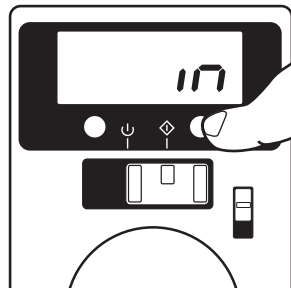**4** Rotate settings dial to ON

▶ **If using Single Speed Forward/Reverse Operation**

> Press MODE twice to lock in setting and proceed to speed setup
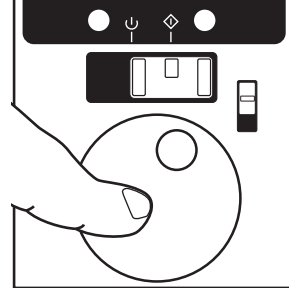
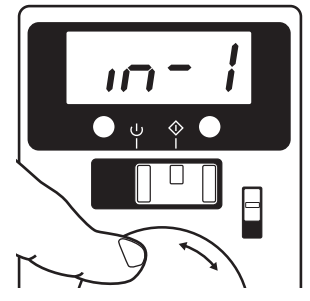▶ **If using Multiple Speed Single Direction Operation**

1 Press MODE to return to IOEN mode
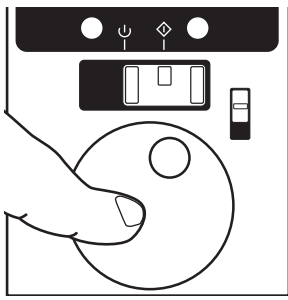
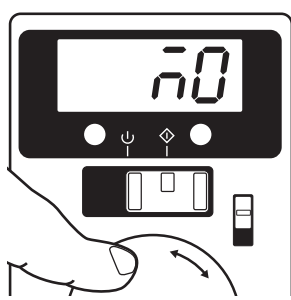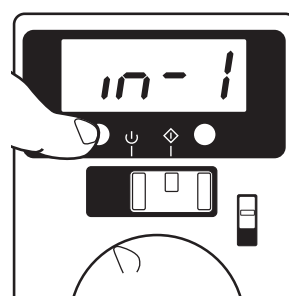**2** Press FUNCTION to select IN mode

3 Press settings dial

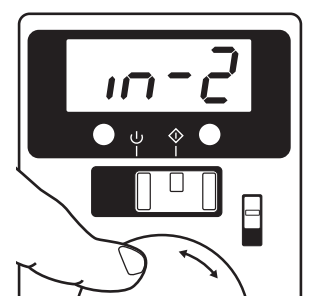**4** Rotate settings dial to IN-1

5 Press settings dial

6 Rotate settings dial to M0

7 Press MODE to lock in setting

8 Rotate settings dial to IN-2

► **If using Multiple Speed Single Direction Operation (continued)**
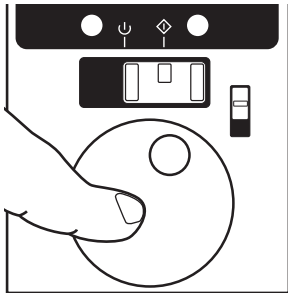
9 Press settings dial
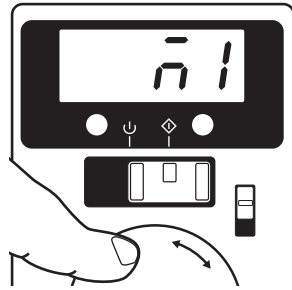
10 Rotate settings dial to M1
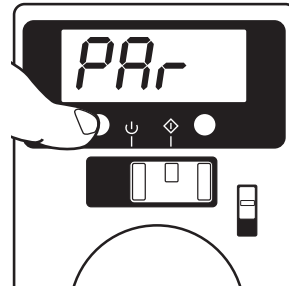
11 Press MODE three times to return to PAR mode

► **Speed Setup**

1 Press MODE twice to choose DATA mode

2 Press FUNCTION to choose D0

3 Press settings dial

4 Rotate settings dial to desired speed

5 Press MODE twice to return to D0

> If using Multiple Speed Single Direction Operation, repeat steps 2-5 to set speeds in D1, D2, and D3 as necessary

Robot Setup

URCap must be installed on the robot prior to setup. Unzip archive and copy the URCap to a USB key.; insert in the teach pendant. Visit Settings > URCaps to install.

▶ **For Single Speed Forward/Reverse Operation**

I/O Mapping

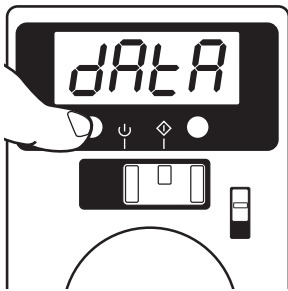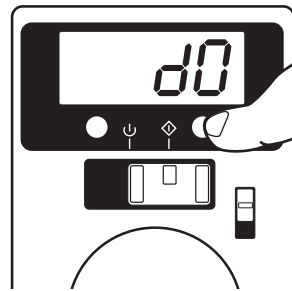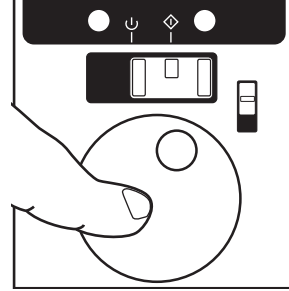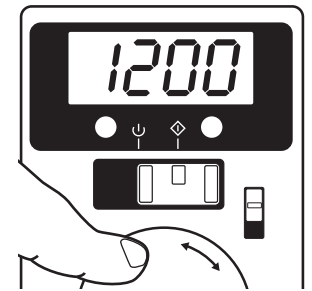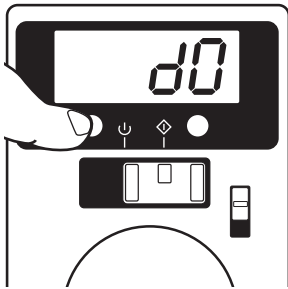Forward: ☑ digital_out[1] ▼
Reverse: ☑ digital_out[0] ▼
M0: ☑ digital_out[2] ▼
M1: ☐ digital_out[3] ▼
Conveyor Status: digital_in[0] ▼

Set pin mappings under QC Conveyors Settings tab as follows:
Set forward to digital out connected to X0
Set reverse to digital out connected to X1
Set M0 to digital out connected to X2
Set Conveyor Status to digital in connected to Y0+

▶ **For Multiple Speed Single Direction Operation**

I/O Mapping

Forward: ☑ digital_out[1] ▼
Reverse: ☐ digital_out[0] ▼
M0: ☑ digital_out[2] ▼
M1: ☑ digital_out[3] ▼
Conveyor Status: digital_in[0] ▼

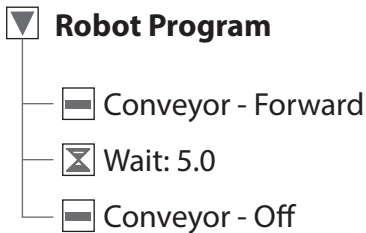Set pin mappings under QC Conveyors Settings tab as follows:
Set forward to digital out connected to X0
Set M0 to digital out connected to X1
Set M1 to digital out connected to X2
Set Conveyor Status to digital in connected to Y0+

▶ **Using the URCap**

▼ **Robot Program**

— ▬ Conveyor - Forward
— ⧗ Wait: 5.0
— ▬ Conveyor - Off

1 Insert the Conveyor node as necessary in your Robot Program.

QC Conveyors

◉ On ◉ Forward
○ Off ○ Reverse

Speed: Speed 1 ▼

2 Set variables as necessary. If a command is not compatible with chosen operation method, node will be highlighted as an error.

Notes