# **Quick Start Guide - Unpacking**

## **First Steps**

- Fit the mounting plate and Joint 1-2 module to a secure surface as described in 'Mounting the base' section.
- Connect the control box and pendant an described in 'Connection the system together', you will also need to connect the safety inputs. See 'Safety Inputs' section.

#### Power On and driving joints

- Power on the control box by pressing the round button on the pendant or control box.
- Once the system has booted the green LED on the control box will flash and the user interface will show on the pendant screen
- Press 'Bus On' to power the arm up.
- Next press 'Arm Enable', the brakes will then release with an audible click.

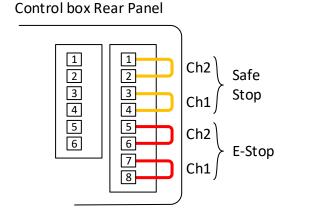
#### Bus On Arm Enable Main view Joint jog ► PLAY STOP Robot Status Refresh Pullscreen Engineer UI

٠ Go to the joint jog tab by selecting the icon on the left toolbar, press and hold the jog arrow next to Joint 2 until the joint coupling has rotated to point upwards. This will enable the next link to be fitted.



- Return to the main tab by selecting the top icon on the left toolbar, press the 'Arm Disable' button and then press 'Bus Off'.
- Fit the required link tube and other joint modules, tightening each coupling ring securely.
- Press 'Bus On' and then 'Arm Enable' The brakes will release with a series of clicks and the wrist indicator will go green to show the arm is enabled.
- You can now test each joint with the Joint jog controlls

#### **Safety Inputs**



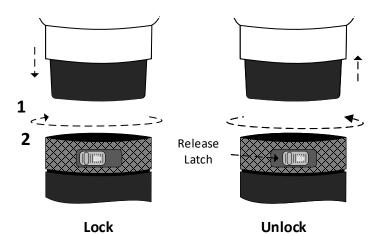
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Reference URD-0001

Version 0.7

Wire the safety inputs to your required stop circuits. The robot motion will be inhibited until both channels of 'safe stop' and 'e-stop' are complete as shown above. Breaking the 'E-Stop' circuits removes all power to the arm. Breaking the 'Safe Stop' circuits maintains power to the arm but engages the brakes and disables the motor drives.

#### **Modular Couplings**



To disconnect the modules

support the upper module

and turn the locking ring

anticlockwise while holding

the release latch to the right.

released lift it upward

module is

As the upper

supporting its weight

connect the modules То carefully align the locating pins and gently lower the upper module into the lower while turning the locking ring clockwise. Continue until the ring is tight and can't turn any further.

#### Wrist Status Indicator

- Flashing Orange Booting/comms lost
- Steady Orange SW disabled, brakes on ٠
- Red Safe Stop, drive HW disabled, brakes on •
- Green Drives Enabled robot can move •
- Blue Free / hand guided mode
- White Sequence playback / running

### Mounting the base

The base of the robot must be mounted to a rigid flat surface using 8x M6 bolts with mounting pattern show bellow.

First fit the black base plate to the table using 8 x M6 bolts with the recessed side down.

Next fit the Joint 1-2 module using the 4 x M8 bolts provided.

#### **Next Steps**

Connect the control box to your network via the RJ45 connector.

Open a browser and enter the URL: http://psuxxx where xxx is the serial number of your control box.

### Connecting the system together

