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

- Connect the control box to a router with DHCP support using a Ethernet Cat5/6 cable
- Connect your safety circuit to the safety inputs on the control box as shown to the right.
- Connect the first joint module to the control box
- Power o the control box by pressing the round button on the pendant or control box.
- Open a browser on a PC connected to the same router or local network and enter the address: "http://psuXXX" where psuXXX is the serial number of your control box found on the cable panel. Ie http://psu017
- On the top right toolbar you will find 4 buttons

- Press the Safe Stop and Estop button the clear these latches. If these do not clear check your safety circuits are closed, ie E-Stop button up.
- Press the Power On button to power the arm
- Press the Arm Enable button, you should hear a click as the break release.
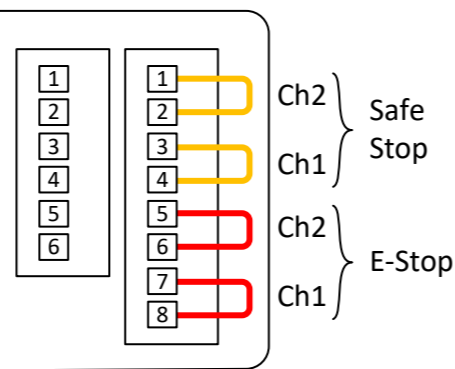

- Open the joint jog panel using the button on the left toolbar
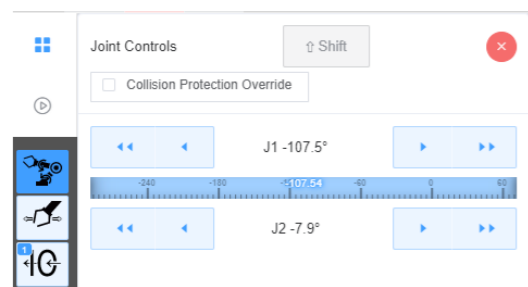
- Use the arrows to drive Joint 2 so the coupling points upwards.
- Power off the arm and fit the next link tube or joint module as required.
- Repeat the steps above, powering of the arm before each new module is fitted.

Safety Inputs

Control box Rear Panel

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
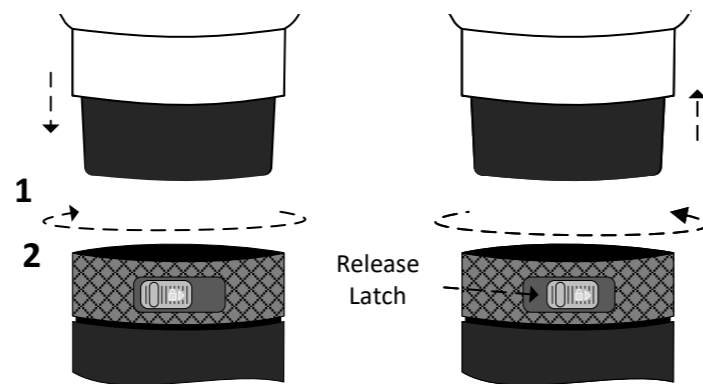
Lock

To connect the modules 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.

Unlock

To disconnect the modules support the upper module and turn the locking ring anticlockwise while holding the release latch to the right. As the upper module is released lift it upward supporting its weight

Wrist Status Indicator

- Flashing Orange – Booting/comms lost
- Steady Orange – SW disabled, brakes on
- 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.
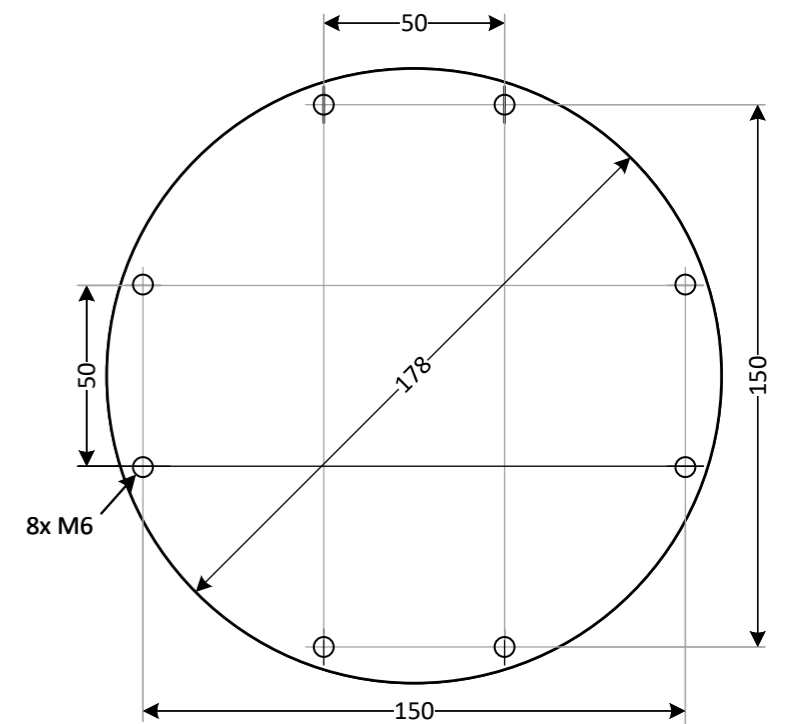
Preparing the arm to repack

Drive joint 5 and 6 to 0° power off the arm, remove and pack the Joint 5-6 module. Power on the arm and drive Joint 3 to 90°, power down the arm, remove and pack Joint 3-4 and any link tubes. Power on the arm drive joint 1 to -180° and Joint 2 -45°. Power off the arm, pack the module.

Connecting the system together