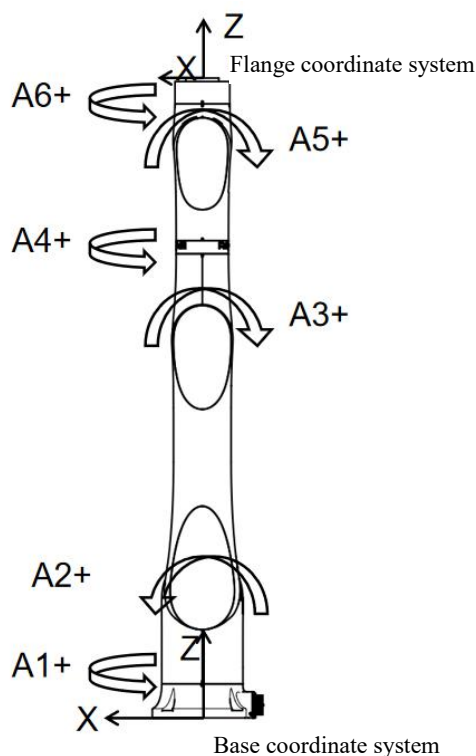


direction opposite to outgoing cable direction of the base. The Y axis is determined by the right-hand rule.

Rotation axis directions: When the axes are in the zero position, the A1, A4, and A6 perform forward rotation in the +Z direction of the base coordinate system, the A2 performs forward rotation in the +Y direction, and the A3 and A5 perform forward rotation in the -Y direction.

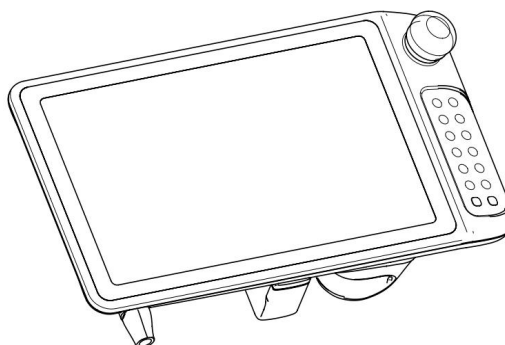


3.3 Teach Pendant

3.3.1 Teach Pendant overview

The Teach Pendant is an embedded handheld device integrated with complete hardware and software. It is available for performing all robot-related functions, including programming and debugging, viewing system status, and setting system parameters.

The robot system is equipped with a Teach Pendant called xPad2, which is well-designed, reliable, and easy to use. Skilled use of xPad2 will greatly improve the efficiency of the robot.



4 Technical Specifications

This section describes the specifications of xMate CR7-C flexible collaborative robots.

4.1 Manipulator

4.1.1 Basic parameters

Item		Parameter
Product Name		xMate CR7-C
Number of axes		6
Maximum reach		988mm
Repeatability		$\pm 0.02\text{mm}$
Maximum payload		7kg
Range of motion	Axis 1	$\pm 360^\circ$
	Axis 2	$\pm 360^\circ$
	Axis 3	$\pm 360^\circ$
	Axis 4	$\pm 360^\circ$
	Axis 5	$\pm 360^\circ$
	Axis 6	$\pm 360^\circ$
Maximum speed	Axis 1	$180^\circ/\text{s}$
	Axis 2	$180^\circ/\text{s}$
	Axis 3	$234^\circ/\text{s}$
	Axis 4	$240^\circ/\text{s}$
	Axis 5	$240^\circ/\text{s}$
	Axis 6	$240^\circ/\text{s}$
Operating temperature		$0^\circ\text{C} \sim +50^\circ\text{C}$
Storage temperature		$-10^\circ\text{C} \sim +55^\circ\text{C}$
Maximum relative operating/storage humidity		93%, non-condensing, non-frost
IP rating		IP67
Mounting mode		At any angle
Weight		25 kg
Noise (mean)		$\leq 70 \text{ dB(A)}$



Warning

When the equipment leaves the factory, the motion limit of each axis does not exceed $\pm 180^\circ$ by default. The user can modify the range of motion of each axis according to the actual situations and this manual, provided that:

- The user is clearly aware of the range of motion of each axis described in this manual.
- The user ensures that the modified limit does not exceed the range of motion described in this manual.
- The user comprehensively considers relevant factors such as robot installation modes, EOAT characteristics, surrounding environment, and ensures that the

modified limit and the programming will not pose danger of collision.

- If the user changes the limit and brings it into effect, it means that the user confirms that the above rules are followed properly, and agrees that all consequences arising from the failure to follow the above rules properly will be borne by the user.

4.1.2 Working space

xMate CR7-C workspace diagram – the space went by the wrist reference point (the intersection of axes 4 and 5), as shown in the figure below.

