FAQ:

1.How many axes of Dobot robotic arm? Where do they fall on separately?

Dobot is a four-axis robot arm with parallel interconnection. Joint1, 2, 3, 4, Joint1-Joint3 are corresponding to the base, forearm and rear arm, respectively, using motor stepper. And Joint4 is for the rotation of end holders (gripper and suction cap), using servo instead.

2. What is the total payload of Dobot?

Dobot's payload is 500g. Note: When the joints are in different position, the torque varies as well, which would result in different payload.

3. What is the max reach of Dobot?

The max reach of Dobot is 320mm. As for detailed Dobot work envelope, please refer to the Dobot specification. .

4. What is the position repeatability of Dobot?

Dobot has a position repeatability of ± 0.1 mm.

5. Which attachments will be included in the package?

The basic package includes the following items: Dobot robot, Dobot controller, 5 pieces end effectors (gripper, suction cap, stylus, pen & pen holder, laser & laser holder), power adaptor, USB cable, toolkit, extension cable, base, suction cap and other accessories. For detailed information, please refer to the shipping list.

6. Do we need to assemble it by ourselves when we receive Dobot? Is it complicate?

The dobot arm has already been assembled when shipped out. You just need connect a few cables following the instructions.

7. How to use Dobot robotic arm to develop our own application?

Firstly, we have already published the communication protocol. By using serial port communication, you can configure operation parameters and send out control commends to operate Dobot. Also, we open sourced code of DobotTools, which can be used as a reference of the development.

8. Will Dobot open source?

We will not open our underlying codes at this moment but open communication protocols to support developers. The latest Dobot controller solves the problem of pulse losing and error accumulation when using Arduino mega 2560 alone. As it adopts new control scheme with FPGA, which has been proven to be very stable even after thousands of hours continuous operation. However, the current framework is strict with time sequence, as it will have an effect on safety and stability of Dobot's operation when modifying underlying codes. Therefore we recommend our users to access new sensor or controller through serial port communication.

9. How to connect Dobot with peripherals? Like adding sensor, switch signal or any others?

Users can connect peripherals and sensors with another microcontroller to collect and process sensor data and make logical operation, and then set up a serial communication between microcontroller and Dobot controller.

10. Can it control Dobot when using Arduino, PLC, and ARM microcontroller?

Yes. Users just need connect the microcontroller with the Dobot controller serial port, which is currently used to connect Bluetooth Module. And then you can send control commends to Dobot controller according to communication protocol.
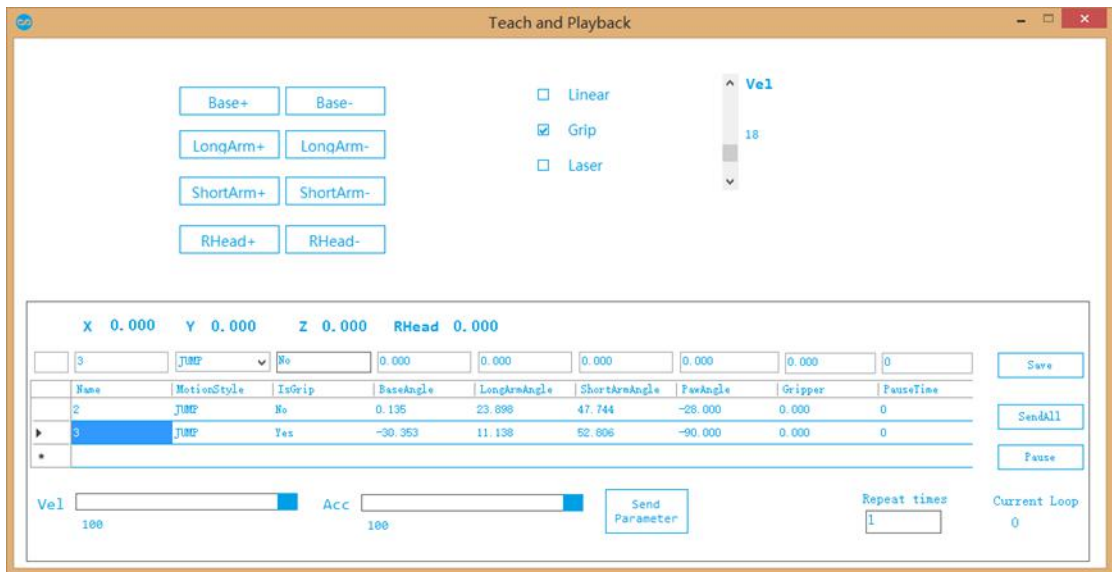
11. How dobot communicate and control?

Dobot controller offers two communication modes: USB and Bluetooth, respectively corresponding to the two serial ports Mega Arduino 2560.

(1) After installing Arduino driver at PC, users can communicate with Arduino controller through USB.

(2) There is a Bluetooth module on the controller board. Android/iOS can connect to Dobot controller through Bluetooth (Notice: android need input a password: 1234 while iOS app does not require this), and send out instructions to the controller.

(3) Bluetooth module ports can be served as a serial port for communicating with other microcontrollers. External microcontroller only needs to send control commends to Dobot controller according to communication protocol.

12. Why Dobot cannot move?

(1) Install and connect the sensor properly.

(2) USB dial switch should connect with USB end, while mobile phone should be available for Bluetooth.

(3) Please link with USB cable, open the software, and check if there is an instruction of 'Not found serial port ', if there is, please install Arduino driver, and then users will see one equipment called 'Arduino mega 2560'in the device manager.

(4) Configuration for Baud rate according to different version.(version 1.1 and later is 9600)

(5) Check if Dobot is at a limited position, if yes, put Dobot two arms into 45 degree, and check again after resetting.

(6) Enter into interface of teach&playback, check if there is numbers in the blank space of Joint2&3, if not, users can try to use firmware in DobotTools to download the latest firmware, and then try again.

Teach and Playback

Base+ Base-

LongArm+ LongArm-

ShortArm+ ShortArm-

RHead+ RHead-

☐ Linear
☑ Grip
☐ Laser

Vel
18

X 0.000   Y 0.000   Z 0.000   RHead 0.000

| 3 | JUMP | No | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |

Save

Name	MotionStyle	IsGrip	BaseAngle	LongArmAngle	ShortArmAngle	PawAngle	Gripper	PauseTime
2	JUMP	No	0.135	23.898	47.744	-28.000	0.000	0
3	JUMP	Yes	-30.353	11.138	52.806	-90.000	0.000	0

SendAll

Pause

Vel _____ 100   Acc _____ 100   Send Parameter   Repeat times 1   Current Loop 0

(7)

(8) If have further questions, pls contact us at **support@dobot.cc**, we will respond to you ASAP.