

Connectors SMDC

Connectors are used to connect motors to the controller DHR15-F (DB15 Female) or и IDC10MS to choose from (i.e., either those or others can be soldered)

Stepper motor connection X1_M1 – X1_M5 (DHR15-F)

1. Plus winding B of the stepper motor;
2. Minus winding B of the stepper motor
3. Minus winding A of the stepper motor
4. Plus winding A of the stepper motor
5. 5 volts (not switched off)
6. Signal C for limit sensors
7. GND (common)
8. Signal A for limit sensors
9. Signal B for limit sensors
10. Not used
11. 5 volts (controlled, on when driving, off when stopped)
12. Not used
13. Not used
14. Not used
15. Not used

Attention! The total current on pins 5 and 11 must not exceed 100 mA.

Stepper motor connection X1*_M1 – X1*_M5 (IDC-10MS)

1. Minus winding B of the stepper motor
2. Plus winding B of the stepper motor
3. Minus winding A of the stepper motor
4. Plus winding A of the stepper motor
5. GND (common)
6. GND (common)
7. Signal B for limit sensors
8. 5 volts (**Driven. Current must not exceed 100mA**)
9. Signal C for limit sensors
10. Signal A for limit sensors

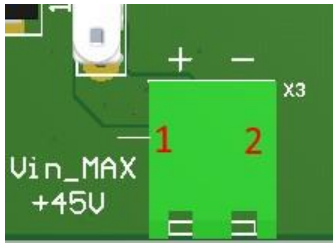
5 volts connector X6



Connector X6 (JST B2B-XH-A, reply part JST XHP-4) can be used to remove a five-volt power supply for your needs. The current should not exceed 800mA. Also remember that this value includes the current on all connectors where five volts are output.

1 – GND (common); **2** – +5 volts.

Power connectors X3, X5



To connect the power supply, use the connector X3 (2EDGR-5.08-2P, receptacle 2EDGK-5.08-02P)

1 – plus power supply; 2 – GND (common)



Connector X5 (JST B2B-XH-A, receptacle JST XHP-2) it can be used as a voltage source (equal to the input voltage). Or it can be connected to the power supply voltage. It must be remembered that in this case, the fuse will not be involved and the maximum permissible current will be 2.5 amps.

1 – GND (common); 2 – plus power supply

USB connectors (X4, X9)



A standard connector is used to connect the USB cable type B (X4). Or JST B4B-XH-A, (receptacle JST XHP-4) (X9).

Pinout X9:

1. +5 volts
2. D-
3. D+
4. GND (common)

UART connector (X8)

To connect via UART, use the connector JST B5B-XH-A.

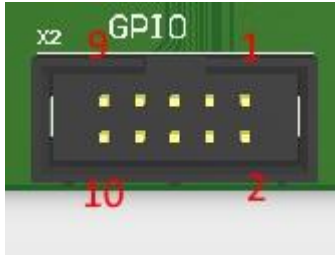
The voltage on line 2 (RXD) must not exceed 3.3 volts. The maximum line voltage is 3 (TXD) 3.3 volts.



1. + 5 volts. can use it provided that **the current does not exceed 100 mA**.
2. RXD – receiver line
3. TXD – transmitter line
4. Read/Transmit (n be used for a transceiver RS485 etc)
5. GND – general

GPIO connectors (X2)

In the “output” mode, the maximum voltage is 3.3 volts. In the “input” mode, a voltage of no more than 5 volts is allowed. By default, GPIO is configured as "inputs".



1. +5B - power output 5 volts. Can use it provided ***the current does not exceed 120mA.***
2. GND – general.
3. Input/output number 1
4. Input/output number 2
5. Input/output number 3
6. Input/output number 4
7. Input/output number 5
8. Input/output number 6
9. Input/output number 7
10. Input/output number 8