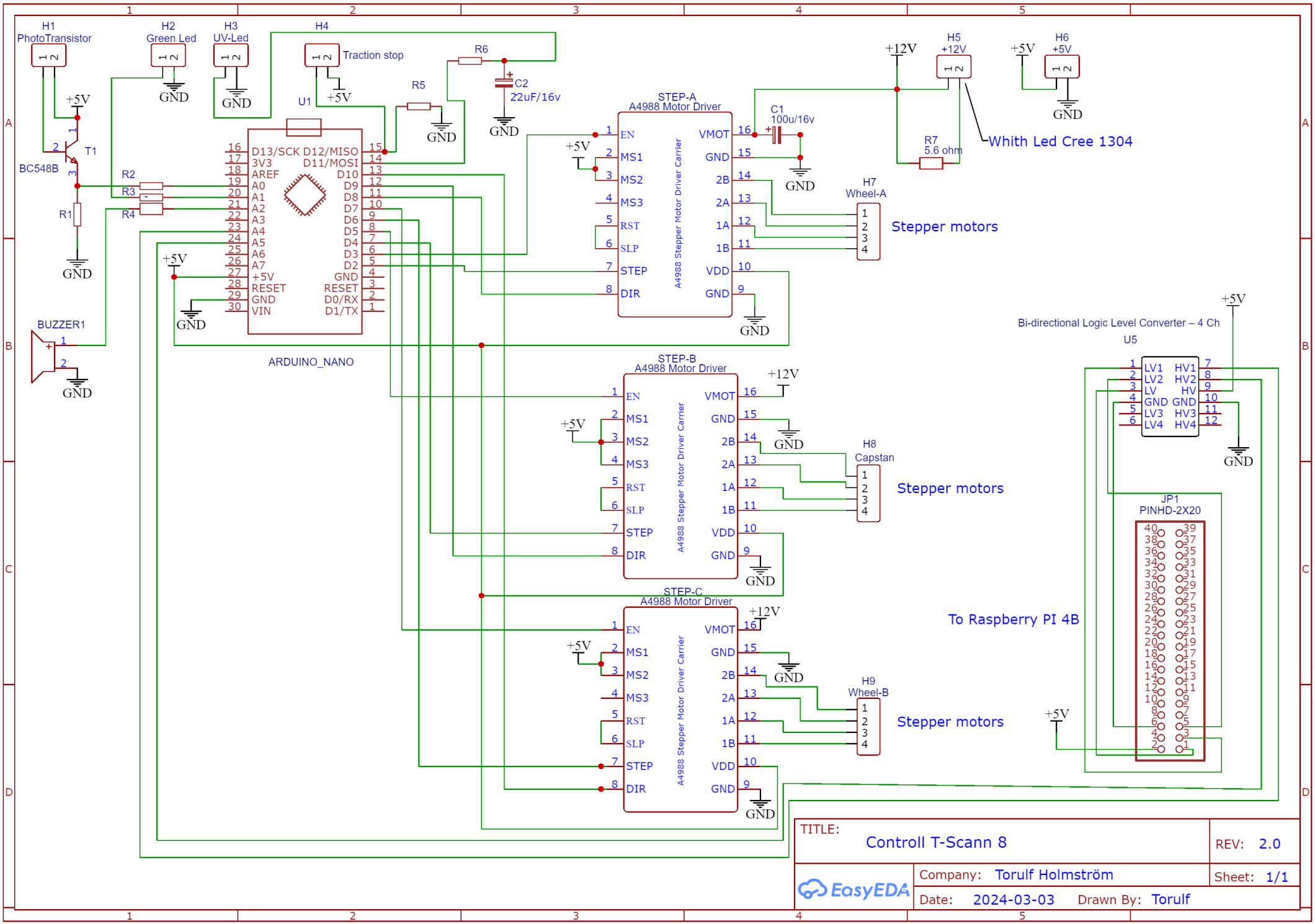
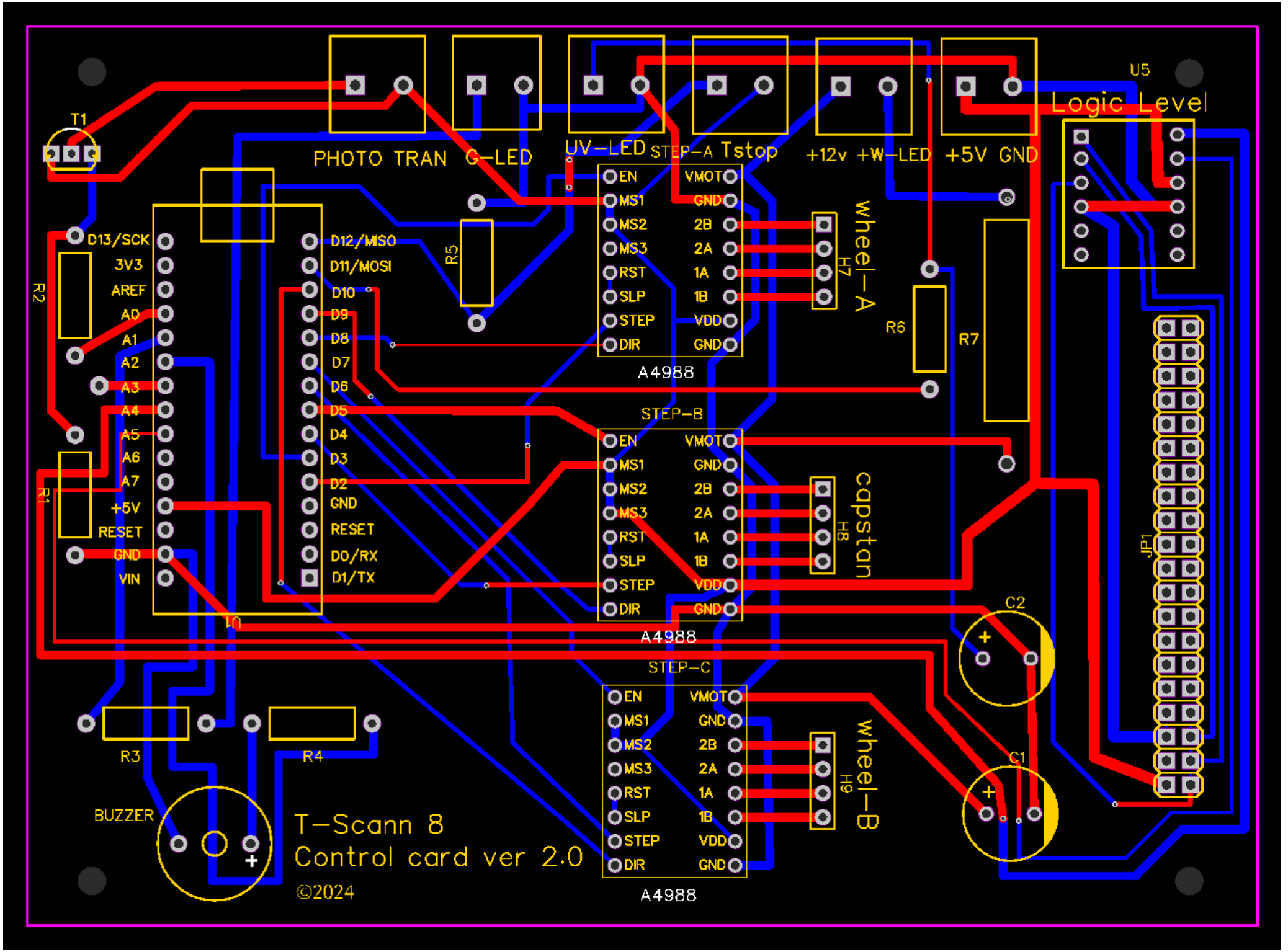

H1
PhotoTransistor
H2
Green Led
H3
UV-Led
H4
Traction stop
U1
R6
C2
22uF/16v
R5
H5
+12V
H6
+5V
R7
5.6 ohm
Whith Led Cree 1304
T1
BC548B
R1
R2
R3
R4
BUZZER1
ARDUINO_NANO
STEP-A
A4988 Motor Driver
C1
100u/16v
H7
Wheel-A
Stepper motors
STEP-B
A4988 Motor Driver
H8
Capstan
Stepper motors
STEP-C
A4988 Motor Driver
H9
Wheel-B
Stepper motors
A4988 Stepper Motor Driver Carrier
Bi-directional Logic Level Converter – 4 Ch
U5
JP1
PINHD-2X20
To Raspberry PI 4B
+5V
+12V
GND
TITLE:
Controll T-Scann 8
REV: 2.0
Company: Torulf Holmström
Sheet: 1/1
Date: 2024-03-03
Drawn By: Torulf
EasyEDA


T1
PHOTO TRAN
G-LED
UV-LED
STEP-A
Tstop
+12v
+W-LED
+5V
GND
U5
Logic Level
D13/SCK
3V3
AREF
A0
A1
A2
A3
A4
A5
A6
A7
+5V
RESET
GND
VIN
D12/MISO
D11/MOSI
D10
D9
D8
D7
D6
D5
D4
D3
D2
GND
RESET
D0/RX
D1/TX
R1
R2
R3
R4
R5
R6
R7
EN
MS1
MS2
MS3
RST
SLP
STEP
DIR
VMOT
GND
2B
2A
1A
1B
VDD
A4988
H7
wheel-A
STEP-B
H8
capstan
STEP-C
H9
wheel-B
JP1
C1
C2
BUZZER
T-Scann 8
Control card ver 2.0
©2024

1st Arduino Nano 32KB

Step-A to C
3 pieces A4988 Motor Driver

1st Bi-directional Logic Level Converter – 4 Ch

T1 BC548B

R1 2.2K
R2 820 ohm
R3 330 ohm
R4 330 ohm
R5 10K
R6 330 ohm
R7 5.6 ohm 5Watt wire wound / ceramic

Resistance 1/4 or 1/2 watt

C1 100uF / 16v
C2 22uf /16v

Electrolyte

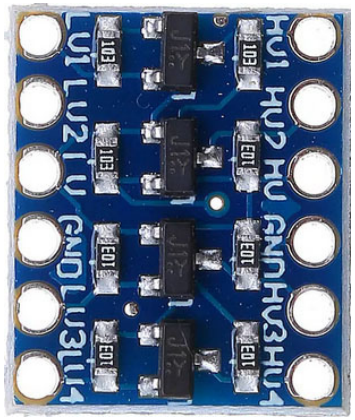
H1-H6 Screw terminal 5mm 2-pole
H7-H9 Pin strip 2.54mm
JP1 40 pin connector raspberry pi +
or Header Connector 2.54 mm ISP Male JTAG 40pin (2x20)

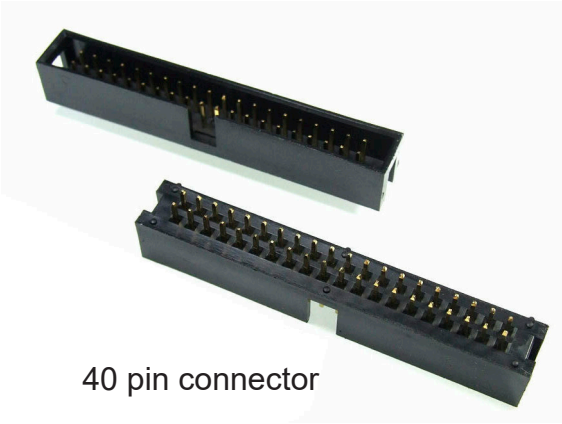
Components to connect to the card

3 pieces Nema 17 stepper motors with 5 mm shaft and facade
1 pieces LED UV 5mm (500 -1000 mcd) 395-400 nm
1 pieses Phototransistor WP7113P3C (5mm)
1 pieces Led Green (extra not necessary)
1 pieces Led white Cree 1304
1 pieces Pasive Buzzer 12mm
1 pieces XL 4005 DC- DC Module regulator
1 pieces Raspberry PI 4B
1 pieces Flat Cable for Raspberry Pi 40Pin short
1 pieces Raspberry Pi Camera HQ

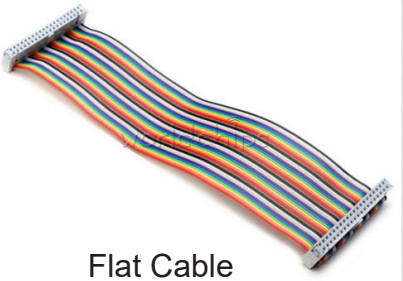
Logic Level Converter

pin 1





40 pin connector



Flat Cable



pin strip 2.54mm
Cut into 4 pole pieces x 3 pcs



Screw terminal 5mm

Where to buy these parts, see page **Purchase materials**