

Foucault Pendulum Electronics Kit.

D12_Parts lists for the Printed Circuit Boards.

www.foucaultpendulum.nl

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| Document version | 2025-11-02 |
| Relates to PCB version | PCB BobControl v1 PCB Receivers v1 Other PCB's v0 |
| Related Documents | Schemas & Board layouts of all PCB's D02_Options D10_Assembly Instructions |

Table 1: BobControl_v1.

| Type | Value | Amount | Remark |
|-------------------|---------------|--------|--------|
| Resistor | 1 Ohm / 5w | 2 | |
| Resistor | 100 Ohm | 3 | |
| Resistor | 1 kOhm | 5 | |
| Resistor | 1.8 kOhm | 2 | |
| Resistor | 2.2 kOhm | 2 | |
| Resistor | 3.3 kOhm | 5 | |
| Resistor | 4.7 kOhm | 1 | |
| Resistor | 8.2 kOhm | 1 | |
| Resistor | 10 kOhm | 16 | |
| Resistor | 12 kOhm | 10 | |
| Resistor | 27 kOhm | 2 | |
| Resistor | 47 kOhm | 2 | |
| Resistor | 82 kOhm | 1 | |
| Resistor | 100 kOhm | 4 | |
| Resistor | 180 kOhm | 1 | |
| Resistor | 200 kOhm | 2 | |
| Resistor | 470 kOhm | 4 | |
| Resistor | PTC UB75F | 1 | |
| TrimPot | 1 kOhm | 1 | |
| TrimPot | 100 kOhm | 2 | |
| Capacitor Ceramic | 22 pF | 1 | |
| Capacitor Ceramic | 1 nF | 1 | |
| Capacitor Ceramic | 100 nF | 23 | |
| Capacitor Foil | 1 uF | 3 | |
| Capacitor Elco | 100 uF / 16 V | 2 | |
| Capacitor Elco | 100 uF / 35 V | 1 | |
| Capacitor Elco | 4700 uF 35 V | 2 | |
| Transistor | 2n2219 NPN | 1 | |

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|---------------------|------------------------------|------|----------------------|
| Transistor | 2n2905 PNP | 1 | |
| Transistor | BS170 N-Fet | 4 | |
| Transistor TO220 | 2n6388 NPN PWR Darlington | 1 | |
| Module DDS | GY9833 | 1 | |
| DC-DC converter | TBA-2421-H1 | 1 | |
| Diode | 1n4003 | 1 | |
| Led 3mm | Red | 2 +2 | |
| Led 3mm | Yellow | 2 +2 | |
| Led 3mm | Green | 6 +2 | |
| Led 3mm | Blue | 1 +2 | |
| IC | 4n35 Optocoupler | 1 | |
| IC | TL074 Quad Opamp | 2 | |
| IC Socket | DIL-14 | 2 | |
| IC Socket | DIL-6 | 1 | |
| Pinheader male | 2 x 4 | 1 | |
| Pinheader male | 2 x 2 | 3 | |
| Pinheader female | 1 x 7 | 1 | |
| Pinheader female | 1 x 8 long pins | 5 | |
| Pinheader female | 1 x 10 long pins | 1 | |
| Pinheader female | 2 x 3 long pins | 1 | |
| Pinheader female | 2 x 18 long pins | 1 | Or 1 single row x 18 |
| Jumpers | 0.1" | 8 | |
| Terminal block | 2 pol 0.2" | 2 | |
| Boxed Header male | 2 x 5 | 1 | |
| Boxed Header male | 2 x 10 | 1 | |
| Connector | RCA Fem Chassis | 1 | |
| Screw and nut Brass | M3 x 25 | 1 | |
| Stud + nut | M3 x 15 | 4 | |
| PCB | BobControl v1 | 1 | |

Table 2: Receivers_v1.

| Type | Vallue | Amount | Remark |
|----------------|-------------|--------|--------|
| Resistor | 100 Ohm | 18 | |
| Resistor | 1 kOhm | 6 | |
| Resistor | 5.6 kOhm | 6 | |
| Resistor | 22 kOhm | 12 | |
| Resistor | 27 kOhm | 7 | |
| Resistor | 100 kOhm | 6 | |
| Resistor | 180 kOhm | 7 | |
| Trimpot | 5 kOhm | 6 | |
| Capacitor Foil | 6.8 nF | 24 | |
| Capacitor Elco | 1 uF / 50 V | 6 | |

| | | | |
|----------------|--------------|----|--|
| Ceramic Filter | 465 kHz | 6 | |
| Diode | 1n4148 | 12 | |
| Led 3 mm | Green | 2 | |
| Boxed Header | 2 x 4 | 1 | |
| Boxed Header | 2 x 7 | 1 | |
| Boxed Header | 2 x 10 | 1 | |
| Screw and nut | M3 x 25 | 1 | |
| Stud and nut | M3 x 15 | 4 | |
| PCB | Receivers_v1 | 1 | |

Table 3: PMS_Base_v0.

| Type | Vallue | Amount | Remark |
|----------------|---------------|--------|--------|
| Resistor | 1 kOhm | 4 | |
| Resistor | 100 kOhm | 4 | |
| Capacitor Foil | 6.8 nF | 4 | |
| Transistor | BF245-C J-FET | 4 | |
| Boxed Header | 2 x 7 | 1 | |
| Header fem | 1 x 4 | 1 | |
| Module BME280 | GYBMEP | 1 | |
| PCB | PMS_Base_v0 | 1 | |

Table 4: PreAmps_v0.

| Type | Vallue | Amount | Remark |
|----------------|---------------|--------|--------|
| Resistor | 1 kOhm | 2 | |
| Resistor | 100 kOhm | 2 | |
| Capacitor Foil | 6.8 nF | 2 | |
| Transistor | BF245-C J-FET | 2 | |
| Boxed Header | 2 x 7 | 1 | |
| PCB | PMS_Base_v0 | 1 | |