Aetherharp-4 supplies:

(dimensions in millimeters)

For the wooden housing (see the dimensional drawings):

A 1x pinewood 12x93x1050

B 2x pinewood 18x18x1086

C 2x pinewood 7x55x1050

D 2x pinewood 18x18x107

E 2x pinewood 12x93x43

F 3x pinewood 18x18x93

G MDF 10mm 20x20 for cable guidance

H acrylic cover 2x143x890

I white plastic L-profile 15x15 length 2600

J hardboard 3 mm 143x196

K hardboard 3mm 90x40 for the Teensy 3.5 computer mount

Clear coating for the outside

other components:

16 M3 plastic spacers 30 mm, shortened to 28 mm

2 M3 plastic spacers 5 mm

16x M3x40 bolts

6x M3x15 bolts with countersunk head

10x M3 nuts

4x M3 rings

wood glue

glue for the acrylic cover (Bisonkit clear contact glue)

2x white plastic cable tray 20x10 mm length 880 mm

1x cardboard strip 1 mm x 12mm x 880 mm

set colored wiring single-core 10x5m

1 m ribbon wiring 10 core 10 colors

circuit board 50x70 with copper islands

circuit board 10x90 with copper islands

Teensy 3.5 computer with soldered female connectors and pluggable connection pins

8 sharp analog distance sensors GP2Y0A41SK0F

2 LDR sensors

LCD I2c display 16x2 characters

capacitor 1000uF 6.3V

3 toggle switches (sustain and vibrato)

2 mini push buttons (up and down)

1 rotary encoder

USB pass-through plug USB-A/ USB-B

USB cable 100 mm USB-micro-B/USB-A

connection cable USB-B/USB-A

heat shrink tubing for the wiring

4 resistors 4k7 0.25 Watt

1 resistor 3k3 0.25 Watt

8 resistors 220 Ohm 0.25 Watt

2 resistors 12K 0.25 Watt

1 external power supply plug 5VDC 2A

1 chassis socket for the external power supply

1 blue LED 5 mm

8 bicolor LEDs 5 mm (blue and red)

1 LED holder 5 mm

14x wood screws 10 mm

double-sided tape

glossy photo paper

clear adhesive film

Tiewraps

tools:

solder

soldering iron

screwdriver

sandpaper