

# Alva ST

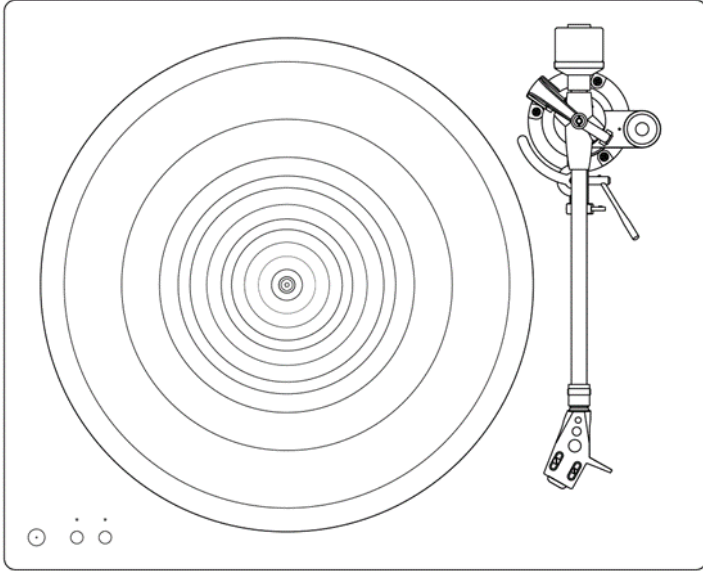
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# Alva ST

Last updated: July 14, 2022 06:00. Revision #5206



# Users Manual

## Introduction

Last updated: July 13, 2022 09:33. Revision #5162

This guide is designed to make installing and using this product as easy as possible. Information in this document has been carefully checked for accuracy at the time of printing; however, Cambridge Audio's policy is one of continuous improvement, therefore design and specifications are subject to change without prior notice.

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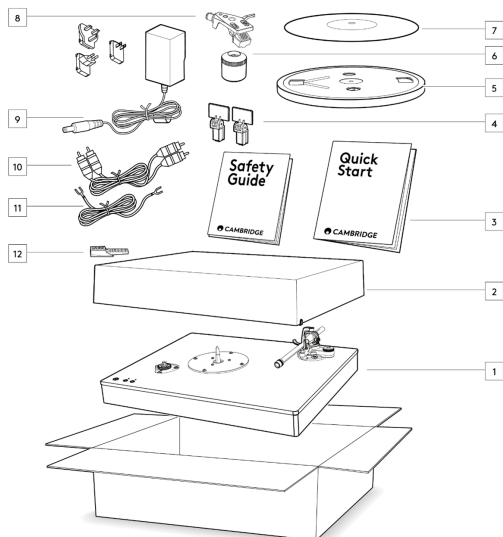
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## What's included with the Alva ST?

Last updated: July 12, 2022 10:39. Revision #5129

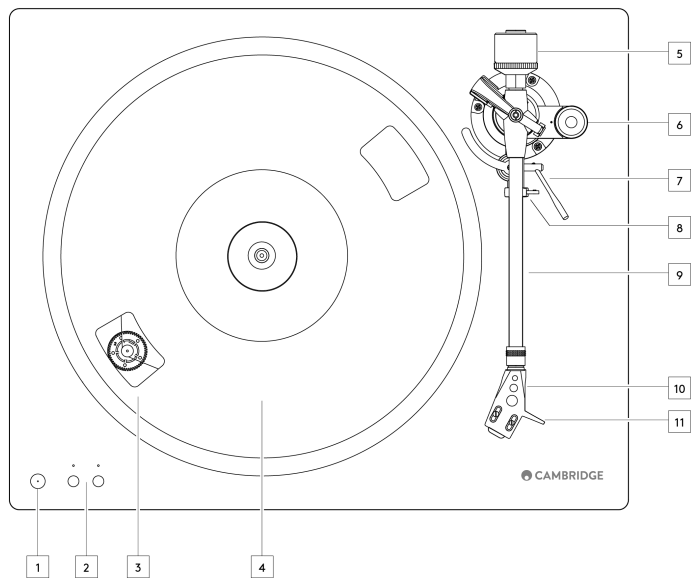
**Inside the box of your Alva ST you will receive:**



1. Alva ST Belt-Drive Turntable.
2. Dust cover.
3. Quick Start Guide & Safety Guide.
4. 2 x Hinge Assembly.
5. Platter.
6. Counterweight.
7. Slipmat.
8. Removable Headshell with Moving Magnet Cartridge.
9. Power Adaptor with Switchable Plugs.
10. RCA Cable.
11. Ground Lead.
12. Ortofon Stylus Gauge.

## Top view

Last updated: July 13, 2022 01:20. Revision #5174



**1. Standby/On** - Switches the unit between standby (indicated by a dim LED) and on (indicated by a bright LED).

**2. Start/Stop and Speed Selection Buttons** - Use to start or stop platter rotation at either 33, or 45 RPM.

**3. Belt Drive Motor**

**4. Platter**

**5. Tonearm Counterweight** - Used to adjust the stylus tracking force.

**6. Anti-Skating Dial** - Allows adjustment of the anti-skate function.

**7. Tonearm Lift Lever** - Used to gently lift and lower the tonearm.

**8. Tonearm Rest and Clamp** - Used to secure the tonearm when not in use.

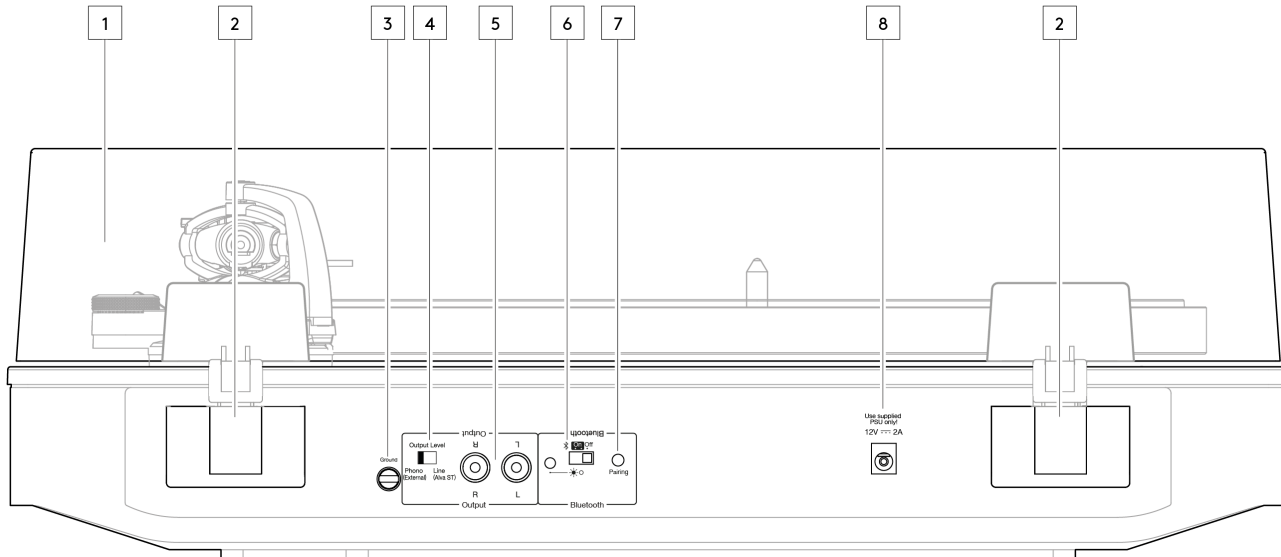
**9. Tonearm**

**10. Moving Magnet Cartridge with Elliptical Stylus.**

**11. Headshell with Finger lift**

## Rear view

Last updated: July 13, 2022 09:34. Revision #5164



### 1. Lid

### 2. Lid hinges

### 3. Ground Connection Screw

### 4. Output Level Switch - Select between line level, or phono level output

**Line:** With the switch set to 'Line' the internal phono stage will be used

**Phono:** With the switch set to 'Phono', an external phono stage will need to be used

### 5. Signal Output Sockets

### 6. Bluetooth Status with LED ON/OFF Switch

### 7. Bluetooth Pairing Button

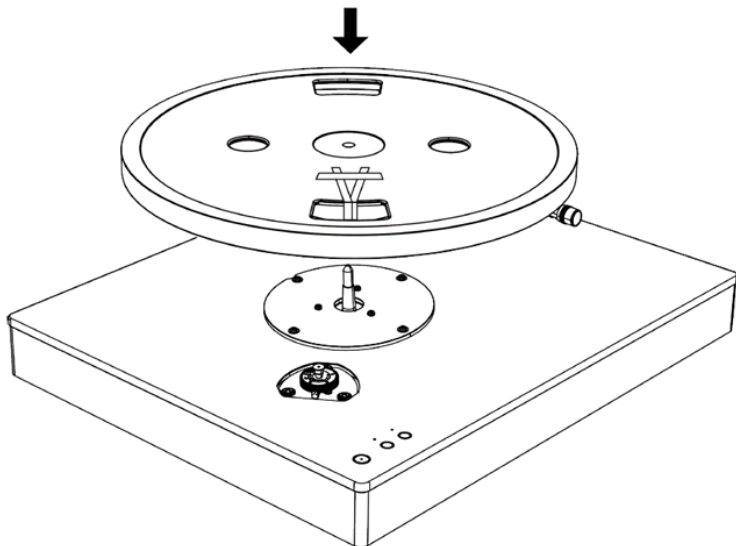
### 8. DC 12V Power Socket

## Setting up the Alva ST

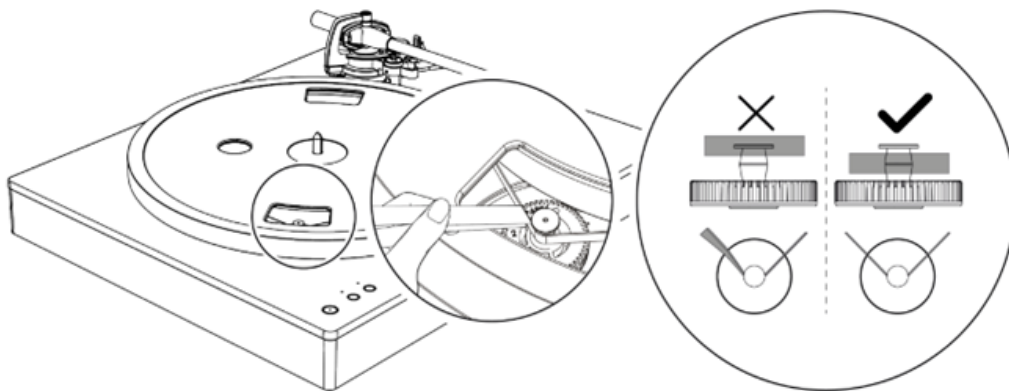
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Once you have unboxed your turntable, please remove all of the separate components in preparation for assembly.

1. Gently place the platter on the turntable.

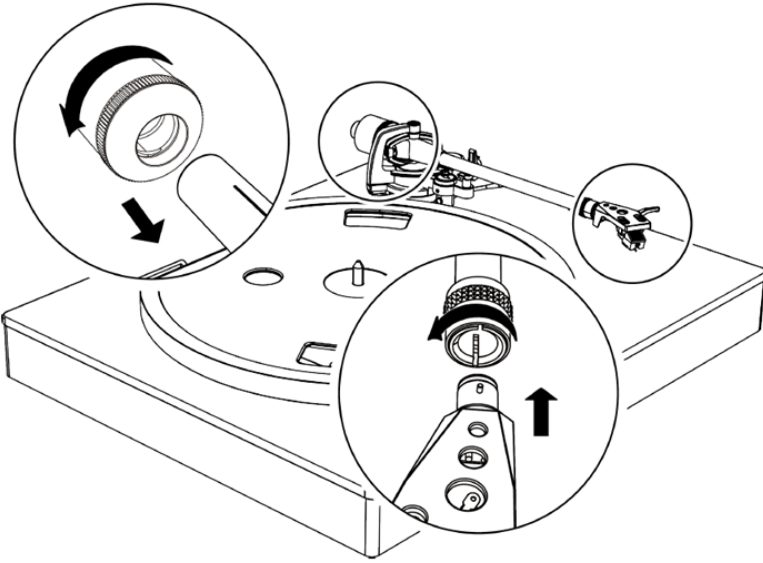


2. Install the drive belt around the motor, ensuring that it sits correctly on the spindle.

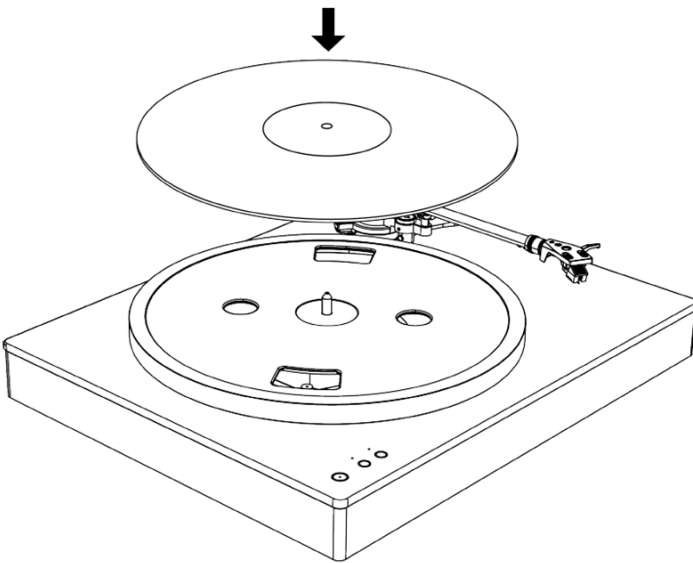




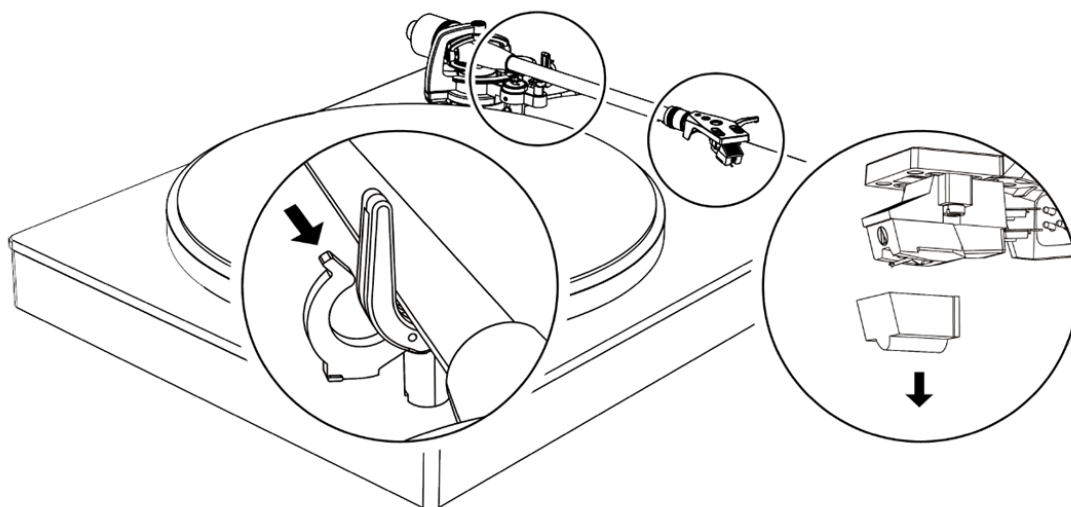
3. Push and rotate the counterweight onto the end of the tonearm, and then carefully install the headshell and cartridge assembly.



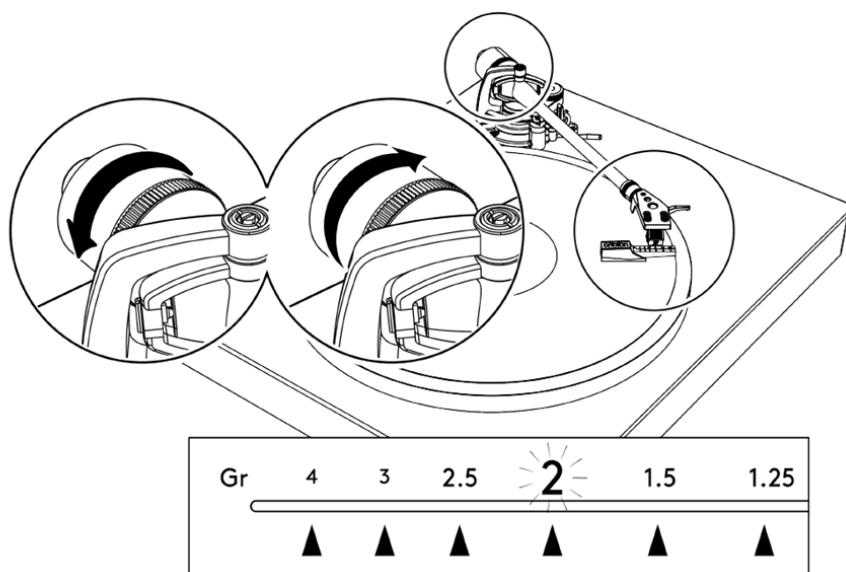
4. Place the slipmat on the platter.



5. Release the tonearm from its rest and remove the stylus guard. Ensure the anti-skating dial is set to '0'.



6. Place the stylus tracking force gauge onto the platter and carefully lower the stylus onto '2'.

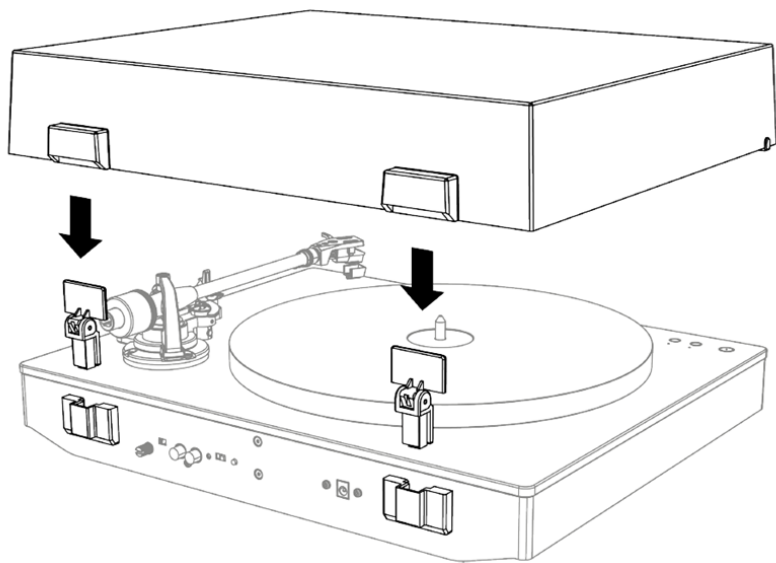


Ensuring that the tracking force is set correctly is important to the performance of your turntable and helps to minimise damage to your records.

To adjust the counterweight, return the tonearm to its rest. Rotate anti-clockwise to increase the balance weight and rotate clockwise to decrease the balance weight. This process requires care and patience to balance the cartridge properly.

Adjust the counterweight until the stylus force gauge is in balance, and then return the tonearm to its rest. Set the anti-skating dial to '2', matching the cartridge tracking force.

7. Connect the hinges to the turntable and attach the lid.



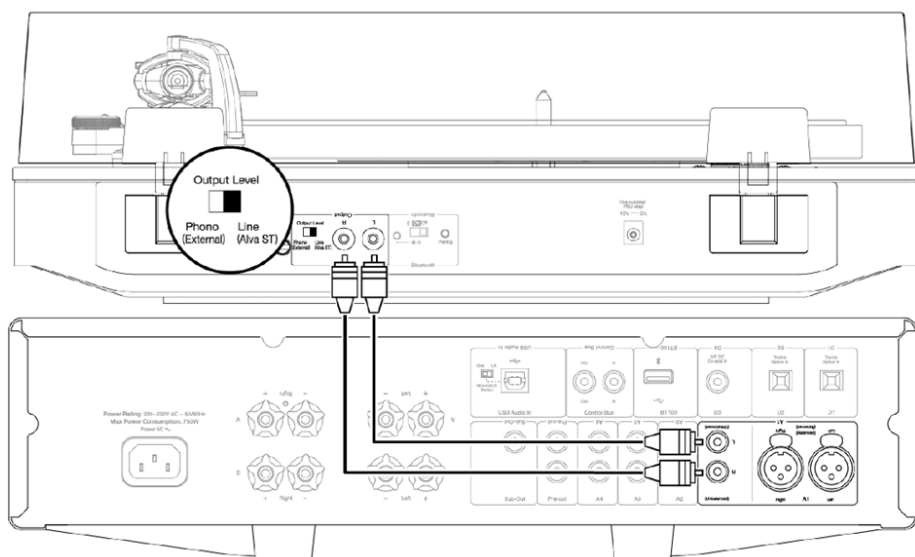
## Getting connected

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### Analogue Audio Connections

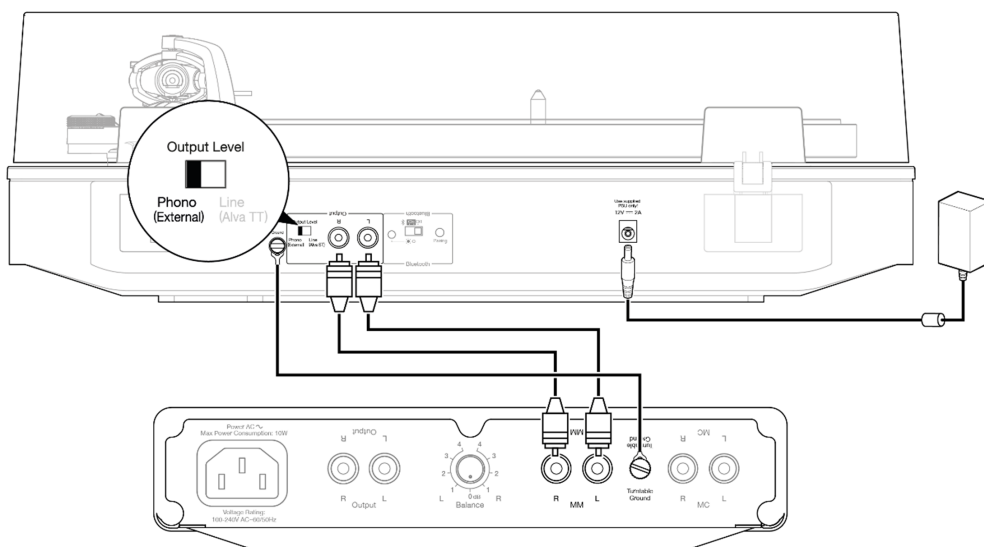
#### Line Level Connection

1. Switch the 'output level switch' to 'line'.
  2. Using high-quality RCA interconnects, connect the audio output of the Alva ST to a line-level input on your amplifier.
- Note:** Do not connect to an external phono-stage, or phono-level input with the turntable set to 'line'.



#### Phono Connection

1. Switch the 'output level switch' to 'phono'.
  2. Connect a ground lead to the ground connection screw on the Alva ST, and the equipment that it is being connected to.
  3. Using high-quality RCA interconnects, connect the audio output of the Alva ST to the phono input of your external phono-stage, or amplifier.
- Note:** Do not connect to a line-level input with the turntable set to output at phono-level.

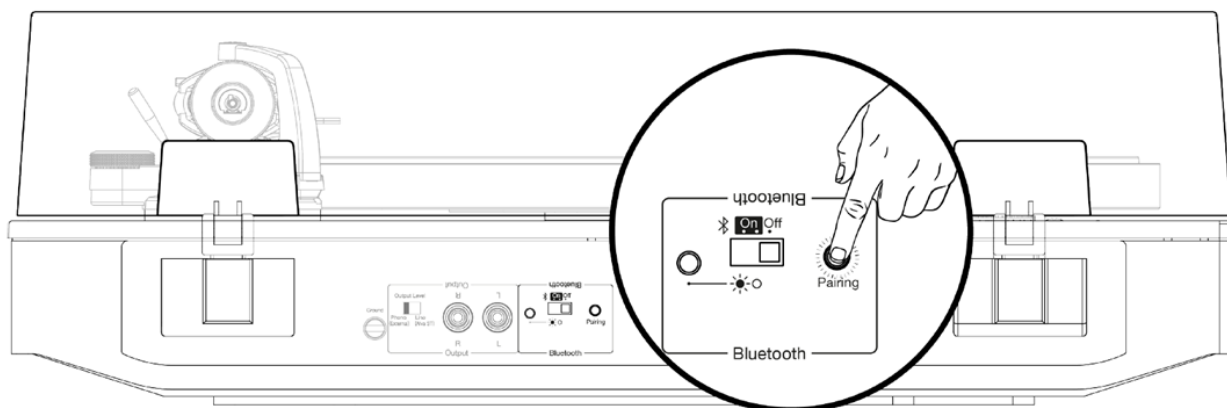


## Bluetooth Connection

### Pairing:

1. Make sure BT switch is set to ON.
2. Press and hold the Pairing button for 2 seconds to enter pairing mode.
3. If you haven't connected your turntable to a Bluetooth device previously, make sure your Bluetooth device is set to pairing mode (see your Bluetooth device instructions for how to do this).
4. Make sure that there are no other Bluetooth devices in pairing mode near the turntable, such as portable speakers, laptops, or smart TVs.
5. The turntable will automatically pair to your Bluetooth device.
6. Press and hold the Pairing button for 10 seconds to clear connections and turn off Bluetooth.

**Note:** By default, the Bluetooth will attempt to connect to the last paired device every time the unit is turned on.



### Bluetooth LED Status

**Fast flashing** - In pairing mode.

**Slow flashing** - Searching for the last paired device.

**Solid** - Paired to a device.

**Long solid intervals** - Paired to a device using aptX/aptX HD codec.

## Operating instructions

Last updated: July 13, 2022 09:36. Revision #5167

### Playing Records

1. Place your record over the spindle and onto the platter, then press the power button on the top panel.
2. Press required platter rotation speed button (33 or 45) on the top panel.
3. Raise the tonearm by moving the lift lever towards the rear of the turntable.
4. Position the tonearm over the desired location (groove) on the record.
5. Lower the tonearm slowly by moving the lift lever towards the front of the turntable.

### Ending Play

1. Lift the tonearm with the lift lever.
2. Move the tonearm back onto the tonearm rest.
3. Secure the tonearm with the tonearm clamp.
4. Press the platter speed button to stop the platter rotation.
5. Press the power button to enter standby.

### Auto Power Down (APD)

The Alva ST comes set up with Auto Power Down (APD) enabled and will automatically switch to standby mode after 20 minutes of inactivity.

**To disable APD:** Press and hold the power button for 5 seconds when in standby.

**To re-enable APD:** Hold down the power button when plugging the mains power cable into the turntable.

**Note:** APD is automatically disabled when Phono output is selected.

## Troubleshooting

Last updated: June 28, 2022 02:35. Revision #4951

### **No sound through both channels.**

- Check that the amplifier is turned on.
- Ensure that the correct input source is selected on the amplifier.
- Confirm that all connections between the amplifier and turntable are secure.
- Check that the stylus is making sufficient contact with the record.
- Check that the connections between the amplifier and loudspeakers are secure.

### **There is a distorted or inconsistent sound.**

- Check the setting of the internal preamp and ensure that the turntable is connected to the correct amplifier input.
- Check that the record is playing at the correct speed.
- Confirm that your tracking force is set correctly using a stylus force gauge. Match the anti-skate value to this measurement.
- Check the ground wire connection to be solid if output level switch is set to 'Phono.
- Check the condition of the record and stylus.
- Ensure that the turntable is sat level, and isn't picking up any external vibrations.

### **Stylus skips across the record.**

- Check that the stylus guard has been removed.
- Confirm that your tracking force is set correctly using a stylus force gauge. Match the anti-skate value to this measurement.
- Check the condition of the record.
- Ensure that the turntable is sat level and isn't picking up any external vibrations.
- Check the condition of the stylus.

### **Turntable will not connect to a Bluetooth playback device.**

- Ensure that the turntable and device are not too far apart.
- Check that the device is in pairing mode.
- Check that the turntable is in pairing mode.

### **Turntable is connecting to an incorrect Bluetooth playback device.**

- Disable/switch off all other Bluetooth devices.
- Clear all paired devices on the turntable.

### **Inconsistent sound or playback whilst listening via Bluetooth.**

- Check that the Bluetooth signal is not being blocked or interrupted.
- Bring the Bluetooth playback device closer to the turntable.

## Technical specifications

Last updated: July 13, 2022 09:38. Revision #5169

### Turntable

**Turntable Type**

Belt Drive

**Turntable Speeds**

33 1/3, 45 RPM

**Wow and Flutter**

<0.12%

**Platter Material**

Aluminium die-casting

**Platter Diameter**

305mm

### Tonearm

**Type**

Static balanced tonearm with removable headshell

**Effective Length**

221.5mm

**Overhang**

19mm

**Effective Mass**

19.8g

### Internal Phono Stage

**Gain @ 1kHz**

42dB

**Nominal Output (supplied cartridge)**

250m VRMS

**Equivalent Input Noise (A weighted)**

0.1u VRMS

**RIAA Curve Accuracy**

+/- 0.3dB 30Hz-20kHz

**Signal/Noise Ratio (Ref 1V OUT, 20-20k BW)**

>90dB

**THD+N 1kHz**

0.0025%

**Input Impedance**

47k $\Omega$

**Input Capacitance**

330pF



## Outputs

### Audio Output

RCA phono/line level (switchable)

### Bluetooth

SBC/aptX/aptX HD

## General

### Power Supply

DC 12V

### Power Consumption

10W max, <0.3W (Standby)

### Dimensions (W x H x D)

435 x 139 x 366.7mm

### Weight

9kg

## Cartridge

### Type

Moving magnet cartridge

### Frequency Response

+/- 0.5dB 30Hz-20kHz

### Stylus

Elliptical

### Cantilever

Alloy tube

### Output Level

1.8~3.6mV @ 1kHz

### Recommended Tracking Force

2g

### Recommended Load

47k $\Omega$