

# FLUANCE®

RT82, RT83, RT84, RT85  
Reference High Fidelity Vinyl Turntable  
User Manual v2.4

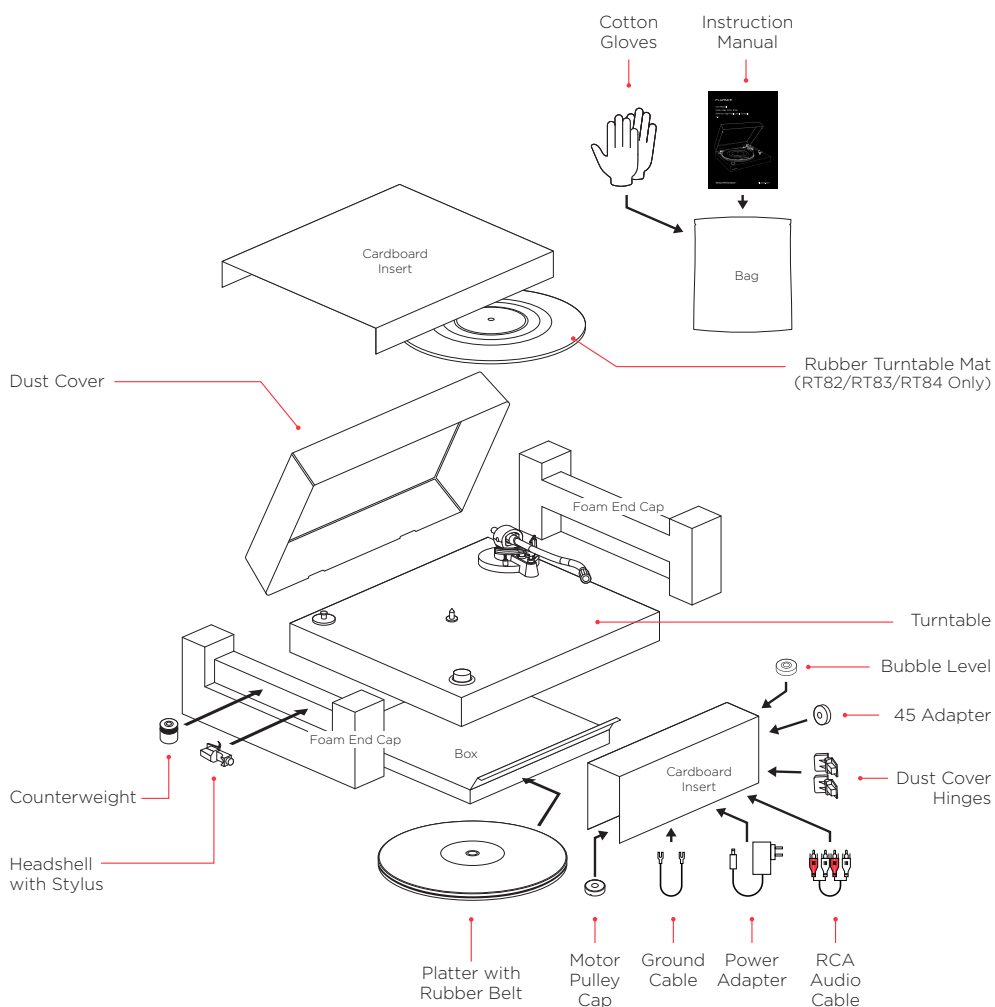


Serious Performance™

Fluance.com

## Introduction

Fluance believes everyone should experience audio in its truest form, recreating the performance the way the artist intended. Utilizing only superior components and expert audio engineering, their products are a testament to the performance that can be achieved when a passion for music takes center stage. The perfect complement to any audiophile's lifestyle, you'll be enjoying live performances in your home for years to come.



Thank you for your purchase of this Fluance® product.  
We hope you enjoy your experience.

Questions?  
Give us a chance to help, we're just a click away.



[Fluance.com/resources](https://fluance.com/resources)



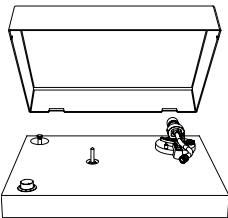
[Fluance.com/support](https://fluance.com/support)



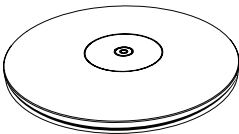
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Don't forget to register your product with us!  
[Fluance.com/registration](https://fluance.com/registration)

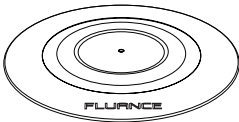
# What's Included



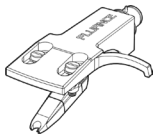
Turntable with  
Dust Cover



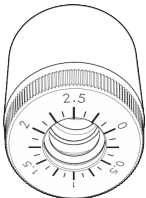
Platter with  
Rubber Belt  
RT82/RT83/RT84 - Metal  
RT85 - Acrylic



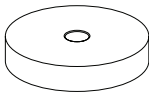
Rubber  
Turntable Mat  
RT82/RT83/RT84 Only  
RT85 - Mat Not Included



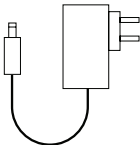
Headshell with  
Stylus  
RT82 - OM 10  
RT83 - 2M Red  
RT84/RT85 - 2M Blue  
RT85N - MP-110



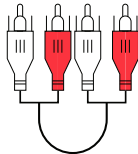
Counterweight



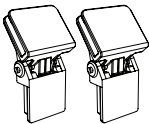
45 Adapter



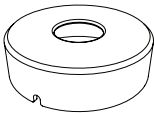
Power  
Adapter



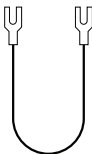
RCA Audio  
Cable



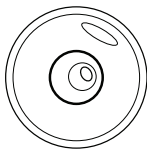
Dust Cover  
Hinges



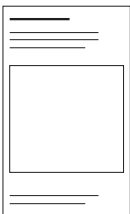
Motor Pulley  
Cap



Ground Cable



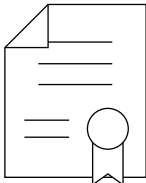
Bubble Level



Manual

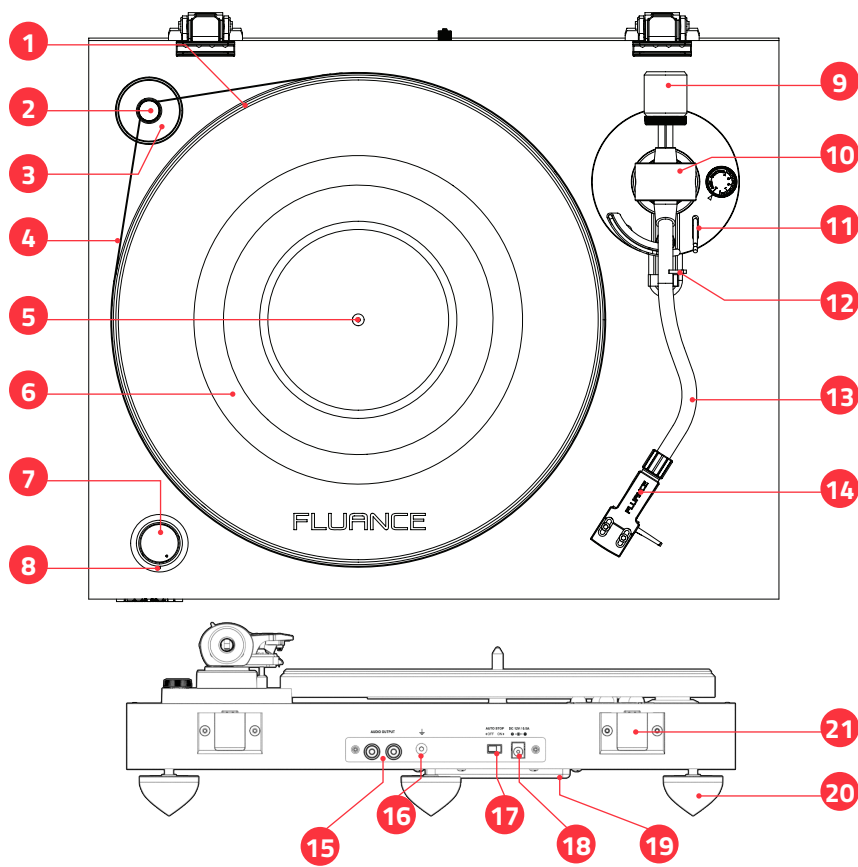


Lifetime Customer  
Support



2 Year  
Warranty

# Components and Connections



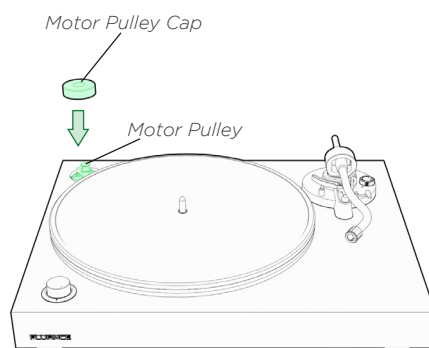
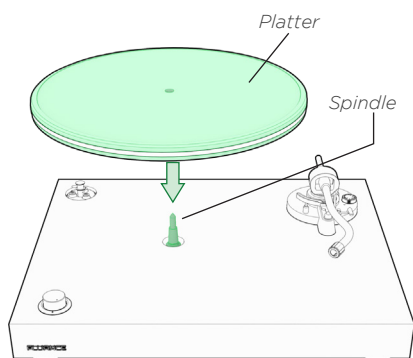
- |  |                        |
|--|------------------------|
| 1. Platter                                       | 11. Cueing Lever       |
| 2. Motor Pulley                                  | 12. Tonearm Lock       |
| 3. Motor Pulley Cap                              | 13. Tonearm            |
| 4. Rubber Belt                                   | 14. Headshell & Stylus |
| 5. Spindle                                       | 15. RCA Audio Outputs  |
| 6. Rubber Turntable Mat<br>(RT82/RT83/RT84 Only) | 16. Ground Terminal    |
| 7. Speed Selection                               | 17. Auto Stop Switch   |
| 8. Power LED                                     | 18. Power Input        |
| 9. Counterweight                                 | 19. Motor Servo        |
| 10. Anti-Skating Control                         | 20. Isolation Feet     |
|  | 21. Hinge              |

## First Time Setup

### Step One: Installing the Platter

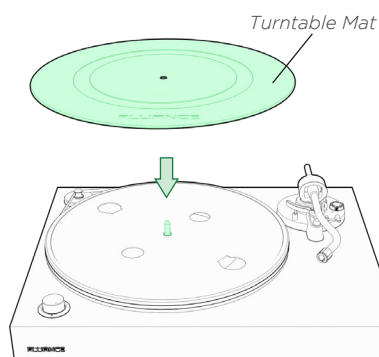
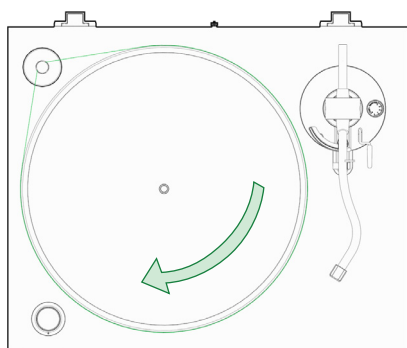
1. Remove the protective packaging and ensure the turntable is placed on a sturdy and level surface. Place the platter onto the spindle located in the middle of the turntable.
2. Place the motor pulley cap over the motor pulley. Ensure the arrows are aligned so that the motor pulley cap is installed properly.

*Tip: The arrows help to align the notch on the motor cap with the post on the motor.*



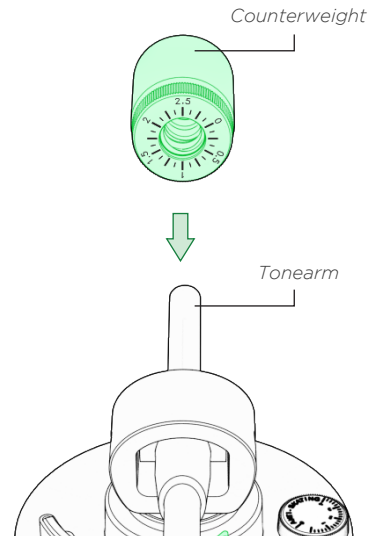
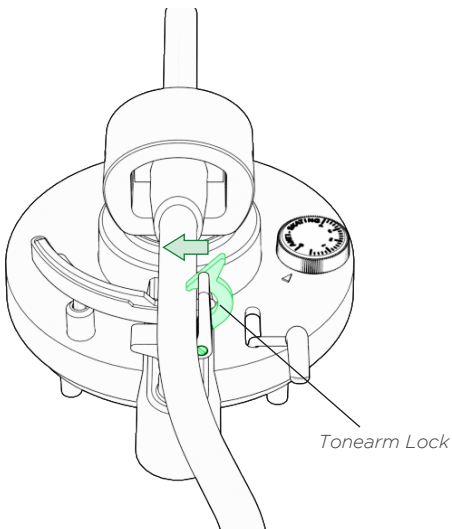
3. Lift the rubber belt and place it around the motor pulley. Rotate the platter several times to ensure the rubber belt is secure and not twisted.
4. RT82/83/84: Place the turntable mat on top of the platter. Make sure the logo side is facing up

*Note: RT85-Turntable mat is not included. When using an acrylic platter a turntable mat is not required.*



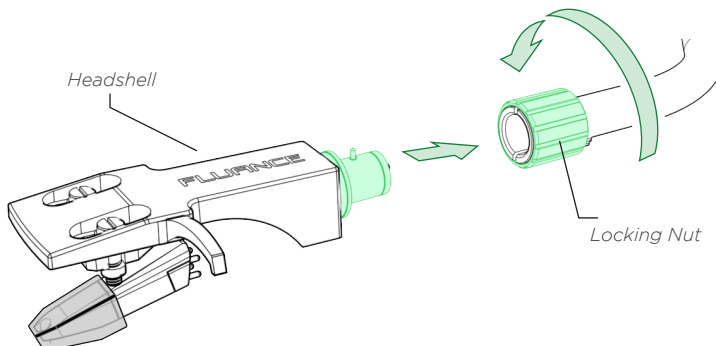
## Step Two: Installing the Counterweight

1. Secure the tonearm using the tonearm lock.
2. Slide the counterweight onto the end of the tonearm with numbers facing forward until it clicks and is fully installed on the tonearm.



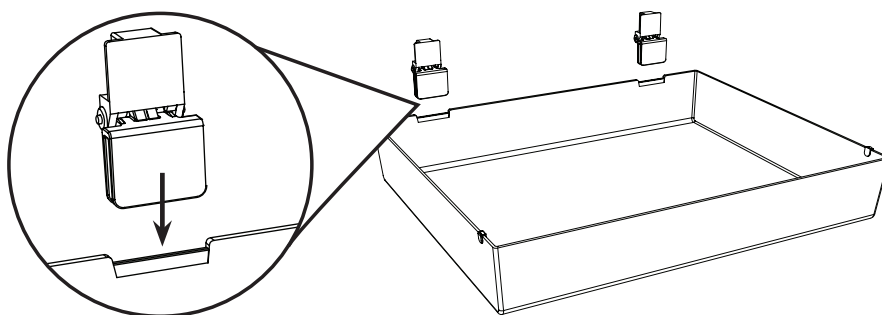
## Step Three: Installing the Headshell

1. Remove the headshell from the protective packaging and insert into the end of the tonearm.
2. Tighten the locking nut until the headshell is secure.

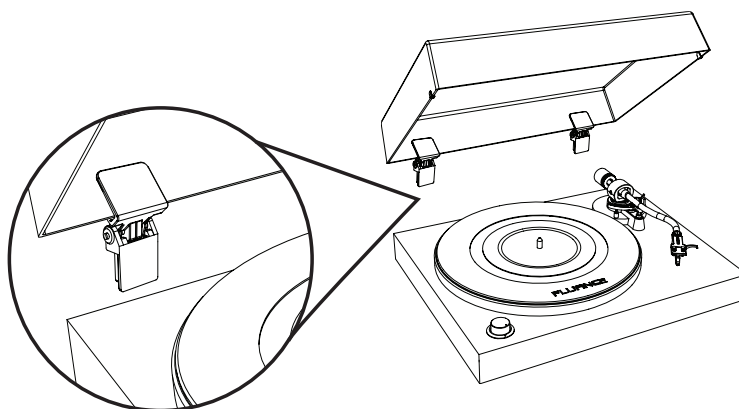


## Step Four: Installing the Dust Cover

1. **Important:** Place dust cover on a soft surface to avoid scratching it. Install the hinges on the provided grooves located on the back of the dust cover.  
**CAUTION:** The hinges are spring loaded and can close with strong force. Use caution when installing.

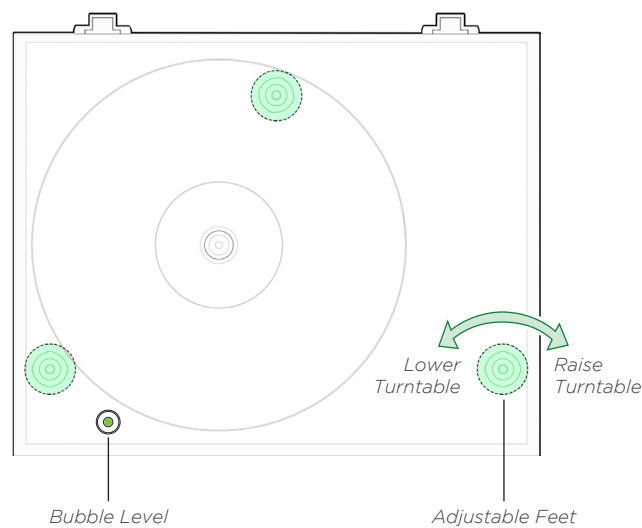


2. Carefully open the hinges on the dust cover and insert into the hinge mounts pre-installed on the back of the turntable.







Step Five: Leveling the Turntable

This turntable features 3 adjustable feet to ensure the turntable is level regardless of the surface the turntable is resting upon.



Use the table below with the included bubble level to adjust the feet and level the turntable.

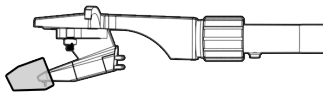
*Note: The turntable comes in the fully lowered position.*

Bubble Position	Turntable Adjustment
	Turntable is level when the bubble is within the circle
	Lower Back or Raise Front
	Lower Left or Raise Right
	Lower Back or Raise Front and Lower Left or Raise Right

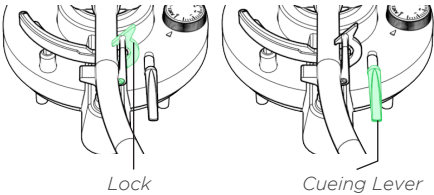
Step Six: Balancing the Tonearm

*Important!*  
Complete all steps for balancing the tonearm. Incorrect tonearm balancing can cause damage to the stylus and to your records. For additional assistance go to [www.fluance.com/support](http://www.fluance.com/support) to watch a tutorial video for this process.

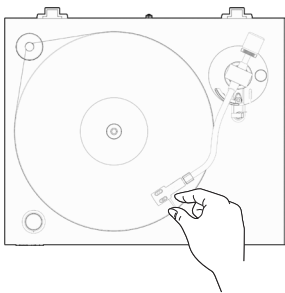
1. Remove the stylus protector.



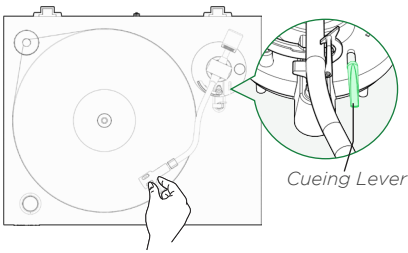
2. Unlock the tonearm and lift the cueing lever.



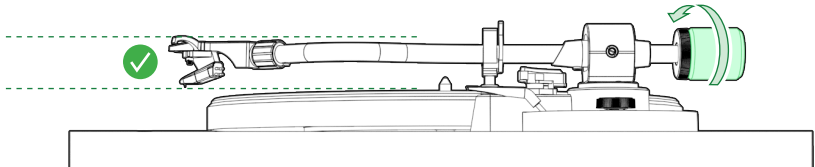
3. Position the tonearm over the platter.



4. Hold the headshell and lower the cueing lever completely. Protect the stylus from touching the platter.

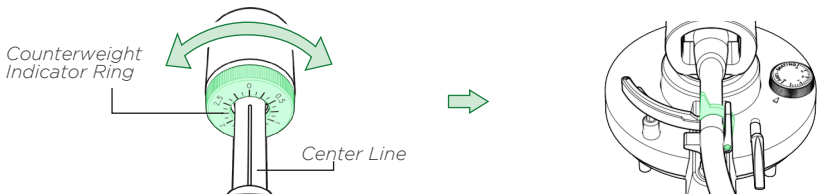


5. With the cueing lever now lowered, turn the entire counterweight until the tonearm is balanced and floating horizontally when headshell is released. Do not allow the stylus to touch the platter.



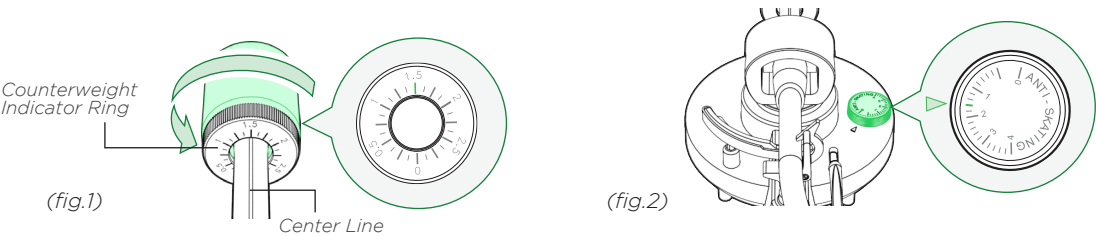
**Tip:** When balancing the tonearm make sure the cueing lever is down and the anti-skating control is set to 0.

6. Set only the counterweight indicator ring to "0" on the center line while keeping the tonearm balanced then lock the tonearm on the tonearm rest.



Step Six (Continued): Balancing the Tonearm

- 7. Use the chart below to determine the recommended tracking force for your cartridge. Rotate the entire counterweight counterclockwise until the indicator ring is set to the correct value on the center line. (fig.1)
- 8. Set the anti-skating control value to match the recommended tracking force. (fig.2)



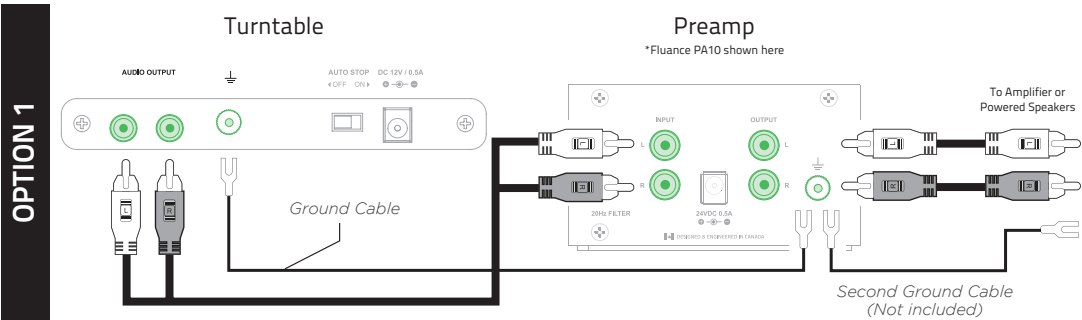
Tip: When setting the counterweight make sure you are turning the entire weight and not just the counterweight indicator ring.

Model	Cartridge	Tracking Force	Anti-Skating Value
RT82	OM 10	1.5g	1.5
RT83	2M Red	1.8g	1.8
RT84 / RT85	2M Blue	1.8g	1.8
RT85N	MP-110	1.8g	1.8

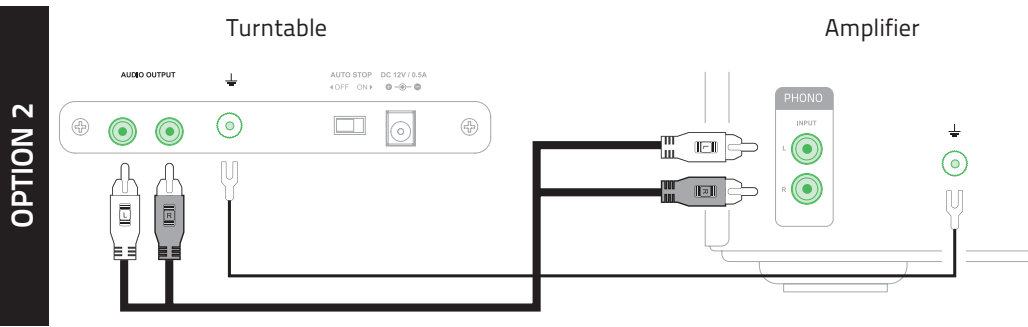
Step Seven: Connecting the RCA and Ground Cables

This turntable does not have an internal preamp so an external preamp or an amplifier with a PHONO input must be used. Connect the RCA and ground cable to the back of the turntable and then connect the other end to your external preamp or the PHONO input and ground terminal on your amplifier. Ensure the cable colors are matched to the RCA connector colors.

*Note: The included RCA cable is a high quality cable with a <90pF capacitance rating. For best performance it is recommended that any other RCA connections use a similarly rated cable. The Fluance RCA cable is available at [www.fluance.com/turntable-accessories](http://www.fluance.com/turntable-accessories)*



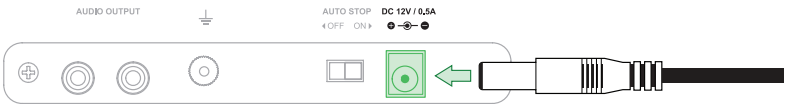
*Important: When using an external preamp one ground cable should be connected between the turntable and the preamp. A second ground cable (Not Included) should be connected between the preamp and the amplifier/powered speakers. Failure to connect both ground cables can result in unwanted noise/hum.*



*Important: The ground cable must be connected to both turntable and amplifier. Failure to connect to both can result in unwanted noise/humming.*

Step Eight: Connecting the Power Adapter

Ensure the power adapter is securely connected to a power outlet. Insert the power cable into the power input on the back of the turntable. It is recommended to reconfirm with the bubble level that the turntable is still level after setup is complete.



*Important: Only use the official power adapter included with your turntable.*

## Step Nine: Playing a Record

**Tip:** For best audio performance the dust cover should be removed during playback.

1. Lift the dust cover

2. Place a record on the spindle (use the 45 Adapter if necessary)

3. Turn the speed selection knob to the correct RPM typically listed on your record (Normal LP playback speed is 33 RPM)
4. Unlock the tonearm lock

5. Lift the cueing lever

6. Move the tonearm to the desired starting point

7. Lower the cueing lever

*Note:* When the turntable is not in use the speed selection knob should be set to OFF to turn the turntable completely off.

The turntable setup is now complete! Enjoy your Fluance turntable. Should you require any further assistance please visit us at [www.fluance.com/support](http://www.fluance.com/support) for how-to videos and guides.

## Break In Period

To experience the peak performance of your turntable, it is recommended to allow the cartridge to break in. The break in period for cartridges included with Fluance turntables is 20 hours of normal playback.

## Auto Stop Function

The auto stop function is designed to extend the life of your stylus. At the end of a record, the platter will automatically stop spinning if auto stop is enabled. **This feature will also require that the tonearm is moved over the record before the platter will start spinning at the selected speed.**

If the auto stop switch is set to the OFF position the platter will begin spinning as soon as the speed selection knob is set to 33 or 45. To stop the record from spinning set the speed selection knob to the OFF position.



*Note:* The auto stop function will take approximately 30 seconds at the end of the record before the turntable stops spinning. Due to variances in vinyl record production some records may not work correctly with the auto stop function.

# Maintenance

## Replacing the Stylus

Use the chart below to ensure you replace your stylus with the correct model.  
Replacement stylus and instructions are available at [www.fluance.com/turntable-accessories](http://www.fluance.com/turntable-accessories)

Model	Cartridge	Stylus
RT82	OM 10	Stylus 10 E
RT83	2M Red	Stylus 2M Red
RT84 / RT85	2M Blue	Stylus 2M Blue
RT85N	MP-110	JN-P110



## Upgrading the Cartridge

The turntable supports the option of upgrading the cartridge. A complete cartridge replacement guide and video are available at [www.fluance.com/resources](http://www.fluance.com/resources)  
There is also a Cartridge Alignment Protractor at the end of the manual for your convenience.

### Cartridge Connections

Wire	Channel
White	Left (+)
Blue	Left (-)
Red	Right (+)
Green	Right (-)

### Turntable Cartridge Specifications

Supported Cartridge Weight	5.0 to 7.5 grams	
Effective Tonearm Mass	RT82	21.78 grams
	RT83	27.5 grams
	RT84	
	RT85	
	RT85N	21.1 grams
Overhang	19.2 mm	
Effective Tonearm Length	224 mm	
Headshell Cartridge Mount	Half-inch Mount	
Fluance Headshell Weight	9 grams	

## Replacing the Rubber Belt

1. With the platter installed remove the defective rubber belt from the motor pulley and platter.
2. Wrap the new rubber belt around the platter being careful to not overstretch the belt. Ensure it is not twisted.
3. Lift the rubber belt and place it over the motor pulley.
4. Rotate the turntable several times to ensure the rubber belt is secure and not twisted.

Parts and Accessories

Replacement parts and turntable accessories are available at [www.fluance.com/turntable-accessories](http://www.fluance.com/turntable-accessories)

Part Number	Description
PA10	High Fidelity Phono Preamp
VB52	Vinyl Record & Stylus Cleaning Kit
AP03	Frosted Acrylic Platter
BL21	Bubble Level
CA03	90pF RCA Cable
CW02	102g Counterweight
CW12	112g Counterweight
GW03	Ground Wire
HS82	RT82-RT85 Headshell with wires
PFHTDU	Dust Cover
PFHTRP	Rubber Turntable Mat
RB35	RT82-RT85 Rubber Belt
TA21	Cork Turntable Mat

Turntable Care

1. Use a soft dry microfiber cloth to wipe dust from the turntable surface.
2. Keep the dust cover closed to ensure the turntable components remain dust free.
3. When cleaning the acrylic platter only use microfiber cloth to avoid scratching the surface.

Record Care

1. Records should be stored vertically in a dry environment away from sources of heat.
2. An anti-static brush can be used to remove dirt from the record’s grooved surface. Use a record cleaning solution to further clean your records to ensure crystal clear playback.
3. It is important to use the cueing lever when lifting or lowering the tonearm to prevent accidental slipping and scratching.

Stylus Care

1. When the turntable is not in use always keep the provided stylus protector installed to prevent accidental damage.
2. A stylus cleaning brush can be used to remove dust and debris from the stylus.
3. Enabling the auto stop function will reduce wear and tear on the stylus by stopping the turntable after playback is completed.

## Troubleshooting

### Turntable Not Spinning

- Turn the speed selection knob to 33 or 45 (power LED should light up). Lift the tonearm over the platter and it should start spinning.
- The turntable should be connected to a known good power outlet and the power cable should be securely inserted into the unit.
- Ensure the rubber belt is intact and hooked around the platter and the motor pulley.

### No Power

- The turntable should be connected to a known good power outlet and the power cable should be securely inserted into the unit.
- The power LED should light up when the speed selection knob is set to 33 or 45.

### Wrong Speed

- Check the record label for the correct playback speed and that the speed selection knob is set to match it. Normal LP playback speed is 33 1/3 RPM, but some play at 45 RPM.

### Skipping

- Ensure the record surface is clear of dirt and debris. Also check that the record is not warped or deformed.
- Inspect the stylus tip for built up dirt or debris. Use a stylus cleaning brush to clean if necessary.
- Ensure the turntable is on a sturdy and level surface and properly leveled using the adjustable feet.
- Use the instructions in step four of the first time setup instructions to confirm the tonearm was balanced correctly and set to the correct tracking force for the included cartridge.
- Check that the anti-skating control is set to match the tracking force.

### Audio Feedback

- If audio feedback occurs ensure the speakers are positioned away from the turntable. The turntable should not be placed in front of the speakers or on the same surface as the speakers.
- For best audio performance the dust cover should be removed during playback.
- Playback at excessive volume can cause feedback. If feedback is occurring decrease volume or lower bass levels.
- If using an external preamp with a rumble filter, turn it on to reduce resonance feedback.

## Cueing Lever Not Lowering Tonearm

- Use instructions in step four of the first time setup instructions to confirm the tonearm was balanced and set to the correct tracking force.
- Lock the tonearm and lower the cueing lever. Gently press down on the tonearm bridge until fully lowered to reset the tonearm lowering mechanism.

## Low Volume

- Check the RCA connections are correct and fully inserted. (See Step Seven)
- If the turntable is directly connected to an amplifier it must have a PHONO input.
- The turntable does not include an internal preamp so an external preamp or amplifier with PHONO input must be used with the turntable. The Fluance High Fidelity Phono Preamp (PA10) is designed for the Reference Series turntables and is available on [www.fluance.com](http://www.fluance.com).

## Humming Sound

- Connect the ground wire to your external preamp or amplifier. If using an external preamp ensure the second ground wire is connected from the preamp to the amplifier /powered speakers.
- Ensure the headshell is fully tightened and secured.
- The turntable and other devices should be directly connected to a power outlet. It is recommended to avoid power bars or extension cables.
- Ensure the speakers are positioned away from the turntable. The turntable should not be placed in front of the speakers or on the same surface as the speakers.

## Audio From Only One Channel

- Test the speakers with another device such as a CD Player or Smartphone.
- Confirm the tonearm is balanced and using the correct tracking force.
- Disconnect and reconnect the RCA cables ensuring they are fully inserted.
- Try a different set of RCA cables.
- Remove the headshell from the tonearm and use rubbing alcohol on a cotton swab to clean the contacts on the back of the headshell. Reinstall the headshell ensuring the locking nut is tightened completely.

## Need Additional Help?

- Do not return this product to the store.
- Please contact Fluance Customer Experience first, regarding any additional information on product features, specifications or assistance with setup.
- Online web chat or Support: [www.fluance.com/contact](http://www.fluance.com/contact)
- Online support videos and guides: [www.fluance.com/resources](http://www.fluance.com/resources)

## Specifications

Specifications	RT82	RT83	RT84	RT85	RT85N
Cabinet Specifications					
Material	MDF				
Dust Cover	Yes - Tinted				
Turntable Specifications					
Drive System	Belt Drive				
Motor	DC Motor with Servo Controller				
Motor Isolation	Seven-Point Rubber Isolation with Decoupling Isolation Ring				
Speed	33 1/3 RPM, 45 RPM				
Platter	Aluminum			Acrylic	
Diameter of Platter	12" (30 cm)				
Auto-Stop	Yes				
Turntable Mat	Rubber			None	
Tonearm Specifications					
Type	Static Balanced, S-Type				
Supported Cartridge Weight	5.0 to 7.5 grams				
Counterweight	Yes				
Anti-skating Adjustment	Yes				
Pivot Bearing	Yes				
Cueing Lever	Yes				
Material	Aluminum				
Tonearm Wire	36 AWG Litz Cable / 7 Strand				
Effective Tonearm Mass	21.78 grams	27.5 grams			21.1 grams
Overhang	19.2 mm				
Effective Tonearm Length	224 mm				
Headshell Mount	H-4 Bayonet Mount				
Cartridge Specifications					
Type	Moving Magnet (MM)				
Cartridge Model	Ortofon OM10	Ortofon 2M Red	Ortofon 2M Blue	Ortofon 2M Blue	Nagaoka MP-110
Replacement Stylus	Stylus 10	Stylus 2M Red	Stylus 2M Blue	Stylus 2M Blue	JN-P110
Stylus	0.3 x 0.7 mil				0.4 x 0.7 mil
Cantilever	Aluminum				
Mount	Half-inch				
Frequency Range	20-22,000 Hz	20-22,000 Hz	20-25,000 Hz	20-25,000 Hz	20-20,000 Hz
Channel Separation	22 dB at 1 kHz	22 dB	25 dB	25 dB	23 dB
Channel Balance	< 1.5 dB	1.5 dB	1.5 dB	1.5 dB	> 1.5 dB

Specifications	RT82	RT83	RT84	RT85	RT85N
Load Impedance/ Capacitance	47k Ohms/200 - 500 pF	47k Ohms/150-300 pF			47k Ohms/100 pF
Output Voltage	4.0 mV	5.5 mV	5.5 mV	5.5 mV	5.0 mV
Cartridge Weight	5 grams	7.2 grams	7.2 grams	7.2 grams	6.5 grams
Headshell Weight	9 grams				
Recommended Tracking Force	1.5 grams	1.6 - 2.0 grams			1.5 - 2.0 grams
Vertical Tracking Angle	20°				31°
Rubber Belt Specifications					
Thickness	0.6 mm				
Width	4.5 mm				
Length	915 mm				
Output Specifications					
Connector	RCA (Gold-plated)				
Preamp	No - Separate Phono Preamp Required				
Phono Output	4 mV	5.5 mV	5.5 mV	5.5 mV	5.0 mV
Ground Terminal	Yes				
Power Specifications					
Input	100 - 240 V AC (50/60 Hz)				
Output	12 V / 500 mA				
Consumption	1.5 W				
General Specifications					
Unit Dimensions ( W x H x D )	16.5 x 5.5 x 13.75 inches (419.1 x 139.7 x 349.25 mm)				
Unit Weight	6.8 kg (14.99 lbs)			7.6 kg (16.76 lbs)	
Optimal Operating Temperature	5°C to 35°C				