VPI Titan Direct Turntable Manual

Setup and Instruction Manual

VPI Industries, Inc., 77 Cliffwood Ave. #5D, Cliffwood, NJ 07721

http://www.vpiindustries.com

Titan Direct Turntable Packing List

Serial #: _____

Titan Direct Chassis		Titan Direct Platter	
Titan Direct Dust Cover Screws (Located in small plastic bag)		Signature Weight 	
Periphery Ring Clamp 		Counter Weight 	
Finger Lift 		Power Cord 	
Alignment Jig 		Force Gauge 	

Dear VPI Customer,

Thankyou for purchasing our Titan Direct and being part of our VPI Family. Harry Weisfeld's 2012 Classic Direct drive turntable was an outstanding technical achievement, earning Stereophile Magazine's Class A+ rating.

We furthered the original design with our 40th Anniversary Titan Direct turntable. Today pushing engineering even further we bring you the VPI Titan Direct. This table features the latest cutting edge Direct Drive technology and engineering.

With the combination of 40 years of global award-winning table design, the inclusion of the new 3D Gimbal Fat-Boy tonearm, our new state of the art direct drive technology, and an isolation system that lowers all noise levels, VPI has created a turntable that truly demonstrates what is possible from vinyl playback technology in 2022: the VPI Titan Direct!

The following manual will help guide you through everything you need to know about your Titan Direct turntable. If you run into trouble, you can check out our set-up videos and online guides:

https://www.vpiindustries.com/videos

I want to invite you to join our VPI community on our VPI forum where fellow VPI owners share and communicate ideas, questions, and tips with each other and VPI staff members:

http://vpiforum.com/

I also want to invite you to join the VPI fan group, "I love my VPI turntable" on Facebook where everyone shares pictures of their tables and what they are listening to:

https://www.facebook.com/groups/VPIturntablegroup/

If you have any further questions or concerns, please contact your dealer, but also feel free to contact us at info@vpiindustries.com.

Again, welcome to the VPI Family!

Mat Weisfeld

President of VPI

This date:_____this turntable was

Constructed by: _____

And packaged by: _____

Safety Instructions

Read and follow the Safety Instructions below and remember to save all packing material. The Titan Direct and all VPI products should only be moved/shipped in original packaging to ensure the product's safety. Also, be sure to place the table and components on a flat, level surface for easier setup.

The following instructions are to reduce risk of electrical hazard or injury.

- To avoid electrical shock/hazard, do not open and remove the bottom panel.
- If the power cord provided with the Titan Direct does not reach an outlet, use a heavy-duty, grounded extension cord.
- To avoid electrical shock, always plug the Titan Direct into a grounded (three prong) outlet.
- Do not expose the Titan Direct to rain or excessive moisture.
- Do not turn your Titan Direct motor on/off at high volumes. To be safe, it is always good practice to mute your system before turning any motor or electrical component on or off.
- Your 3D arm is heat resistant and UV Light resistant; however, it is still not recommended to leave your arm in extremely hot environments.

Minimum Specifications

- Chassis Composition: Acrylic, Aluminum, and Acrylic
- Platter Type & Size: 12" Aluminum, 29lbs
- Tonearm Included: Fatboy Gimbal with VTA on the Fly
- Wow and Flutter: <.008%
- Speed Accuracy: .01%
- Power Consumption: 30W pk
- Footprint: 21 ¾" X16 ¾"

  (55.24 X 42.54mm)
- Overall Size: 22" X 17" X 10"

  (55.88 X 43.18 X 25.4mm)
- Total Weight: 90lb

Anatomy of the Gimbal Fatboy Tonearm

Figure 3 – Tonearm Anatomy

Unpacking the Box

The packaging for the Titan Direct has been carefully designed to avoid shipping damage and high-impact stress. It is important to **save the packaging** in the event you move or ship your turntable.

- Using a knife or scissor, carefully cut open the Titan Direct Box packaging tape.
- Prepare solid surface to place the Titan Direct, with platter installed the table weighs over 70lbs
- Remove the following tools and items and set safely to the side:

  - ✔ Alignment Jig
  - ✔ Signature Center Weight
  - ✔ Periphery Ring Clamp
  - ✔ Counterweight
  - ✔ Power cord

- Having a clear space ready, remove the Titan Direct Chassis from the box and place it carefully on an isolated platform.
- Remove Platter from bottom of box, place on motor hub, with power off spin platter and verify it is properly seated on hub by observing the lower platter edge distance relative to the top plate. There should be no relative motion.

Setting up the Titan Direct

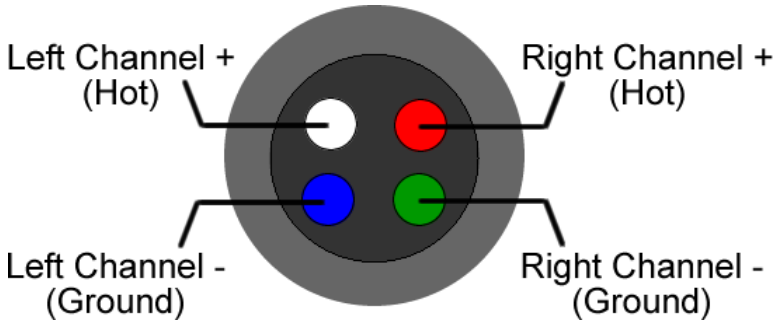
- With table place on solid surface and platter installed plug supplied IEC type power cord into 115/230 VAC power source.
- Switch power on using a switch located adjacent to the power cord on the AC input module located on the left rear of the back panel. There is an 8 second delay before the blue ring in the stop switch located in the left front corner of the top plate illuminates.
- Pressing either 33/45 RPM momentary switch will start the platter rotation and ramp the platter up to speed in approximately 1 second.
- Pressing 45 RPM will change speed to 45PRM, pressing stop will decelerate the platter to a stop in approximately 1 second.

Installing your Tonearm and Aligning the Cartridge

- The metal armboard must be placed and secured onto the steel corner post. All three steel corner posts are viable for mounting pending upon user preference. Make sure the mounting screw on the side of the base is loose. The armboard will already have the VTA base mounted.
- Using your included VPI alignment jig, place the visible hole on the platter spindle and affix the opposite V-groove shape end to the bearing of your tonearm. Adjust the angel of the arm until the alignment jig drops into place.
- Lock in the mounting screw at the collar of the armboard mounted around the steel corner post.
- The counterweight is located in the accessories pocket in the top foam insert of the packaging.
- First, inspect counterweight collar on the tonearm and look for the slot/keyway.
- Take the counterweight and identify which side has a larger diameter opening. You would then slide this end on the back of the tonearm with the larger side facing the front of the turntable.
- Rotate the counterweight until the set screw at the top is at the 12:00 position.
- Using the supplied 5-64 Allen wrench, tighten the setscrew to hold the counterweight on the adjustment collar. Tighten until the counterweight cannot slide, but do not overtighten as this might cause counterweight to bind.
- The arm should be placed in the arm rest when you are not playing a record.

- To avoid damage to the 3D tonearm, you can use the provided washers, finger lift, or both to be placed under the mounting screw head.
- For cartridges with pass-through mounting holes, use the hardware supplied with the tonearm. Be sure to use washers under the screw heads.
- VPI provides 2 short and long screws for mounting your cartridge. If the provided screws do not work with your cartridge, we recommend you use the screws provided by the cartridge manufacturer.

- The tonearm wires are color-coded as follows:



Note: The Left Channel may sometimes be identified as black.

If your phono section inverts phase, the hot color becomes the ground color.

- It is recommended to use tweezers or needle nose plyers to connect the tonearm leads to the cartridge terminals. You can also use your fingers if you are careful.
- Connect the remaining connectors in the same way. To avoid damage to the cartridge, do not push the connectors all the way on.

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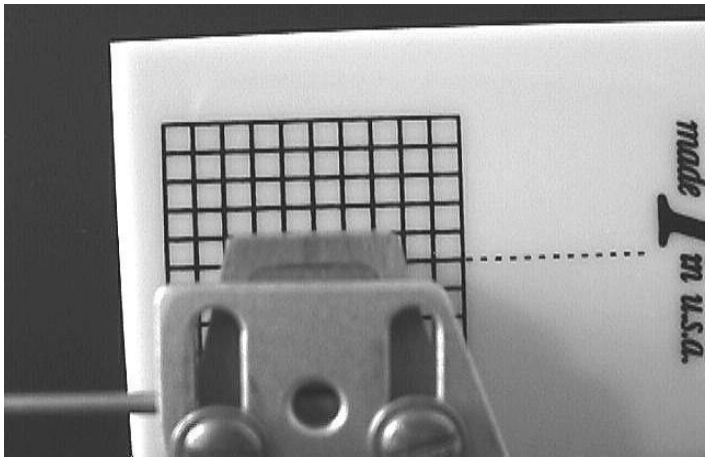
- Place the Alignment Jig on the spindle with the V-groove against the base of the male bearing.
- Tighten the screws of the jig to fit snug against the male bearing and over the record spindle.
- Place the arm tube assembly on the male pivot point, using caution with the 4-color wire and Lemo connector. Set the arm in its rest.
- If the cartridge has a guard, remove it.
- The arm should be placed in the arm rest when you are not playing a record.

- Swing the tonearm over the jig so the stylus is as close as possible to the dot in the center of the grid. If you find your arm moving while resting on the jig, set the counterweight for enough downward force to keep the stylus from moving

- Look down at the cartridge and align it between the lines of the grid. You should have the diamond stylus on the white dot and the cantilever lined up with the lines on the grid. Use a flashlight to look from the front and line up the cantilever with the grid lines. The only alignment that matters is the cantilever lined up with the white lines, and the diamond on the white dot. The angle of the cartridge is irrelevant.

- Adjust the cartridge mounting screws and the counterweight as needed until the cartridge is centered between the grid lines and the stylus is resting on the dot of the grid. The picture below shows the setup, the jig is in white for clarity, the provided jig is black.



- When the cartridge is properly positioned, tighten the cartridge mounting screws and remove the alignment jig. Do not make them overly tight, the 3D arm is self-damping and you can damage the surface by over tightening.

CONICAL LINE CONTACT

VIEW OF CONICAL AND LINE CONTACT STYLI AND GROOVE-TRACKING DIFFERENCES

Setting the Tracking Force and Tonearm Height

Tracking force is adjusted by moving the adjustment knob. Clockwise rotation moves weight away from bearings for less weight while counter clockwise rotation of knob increases weight.

The Tonearm does not have a built-in tracking force gauge but we supply a quality digital tracking force gauge.

- Place the gauge on the platter (no record).
- Loosen the two black thumb screws in the base of the tonearm and raise the arm so it looks parallel to the platter when it is on the stylus force gauge. When the arm is at the desired height, lightly tighten the thumbscrews.
- If you do not make the arm parallel when doing this, you will be between .2 to .4 grams light or heavy when you are on the record. THIS IS VERY IMPORTANT!!
- Set the tracking force according to the cartridge manufacturer's recommendation. We recommend always going with the heavier side of tracking force. High frequency vibrations on a light-tracking cartridge can cause more damage to the grooves of a record than running a cartridge at a heavy setting. We usually recommend .1 gram higher than the max tracking force if you are not using anti-skate (recommended way of setting). This does not apply to Lyra cartridges that sound best at 1.73 to 1.76 grams tracking force with or without anti-skate.

Setting the Anti-Skating – Two Solutions

- VPI does not support the need to have anti-skate but does respect the customer's interest in having it enabled. Therefore, we provide a mechanism for anti-skate and the option of engaging it.
- For normal music listening all the anti-skate you need will be supplied by the lead out wire of the tonearm to junction box unless you are using test records and measuring sine waves.

If you try adjusting the anti-skate with a groove less record, you will ruin the twist in the tonearm wire and void your warranty. Do this with the mechanical anti-skate if you want that much anti-skate.

General Use

- Before playing a record, make sure that both of the tonearm VTA thumbscrews are slightly tight.
- Allow at least 20 hours of break-in time.
- The motor will make some low-level noise. This will not get into the system. The motor and bearings will become quieter as you use your Titan Direct.
- If you notice hum in the system, remove the turntable to phono section interconnects and replace them with very cheap, standard VCR interconnects. These are well shielded and should eliminate the hum. If the hum goes away, get quality, well shielded interconnects.

Possible Problems:

- **Noise in the system: a hum or buzz:**
    - the answer is to ground the motor and system properly. A line filter that floats the grounds will not allow proper grounding of the phono system; the phono system must be grounded! Phono is not like a CD player and if this is your first table or your return to vinyl after a decade or so you must remember that phono amplification can be 1,000 times higher than CD or streaming so any noise that gets into the system will be amplified much more. Kill the noise with proper grounding and your system will sound better.
- **A pop on motor turns on or turn off:**
    - in some systems the phono section is not well shielded and will pick up the EMF created by the switch opening to turn off the turntable. If your system is like that you can get into the habit of muting (the preferred method as you should really do that) or you can experiment with capacitors across the on-off switch. We supply the table with a .001 microfarad cap, you can change it to a .01 microfarad cap and it may eliminate to lower the problem to a tolerable level. A judicious grounding will many times solve this problem also.
- **Distortion in left channel:**
    - Too much anti-skate.
- **Distortion in right channel:**
    - Too little anti-skate.
- **Noise at startup:**
    - If you get a screeching sound on startup, simply powder the drive belt with talc powder and the noise will dissipate.
- **Sibilance and distortion in both channels:**
    - Azimuth not set correctly or diamond stylus misaligned on cartridge. This is usually a setup or cartridge issue, not a tonearm issue. It can also be caused by a tracking force that is too light even if it reads correctly. Tracking force needed is determined by the temperature in the room, below 70 degrees requires greater tracking force. We have found almost all cartridges work and sound best at 72 degrees.
    - A 60-watt light put above a turntable in a cold room will heat up the cartridge just enough to make it much more compliant and track better.
    - Before going crazy try a slightly higher tracking force, it usually solves all the problems and zero in on the azimuth adjustment.
    - Another possibility is probably not as bad as the next photo but will definitely cause distortion and sibilance even in small amounts.

VPI Industries, Inc. Limited Warranty

VPI Industries, Inc. (VPI) warrants this unit against defects in materials and/or workmanship for five (5) years from the date of purchase by the original retail purchaser. VPI's sole obligation under this warranty is limited to the repair or replacement, at VPI's option, of any part(s) found to be defective. VPI's obligation to repair or replace defective parts is the purchaser's sole and exclusive remedy, and VPI shall not be liable for any direct or indirect injury and/or property damage arising out of the use of the product or defect in or failure of the product.

This warranty does not extend to any unit whose serial number has been defaced or altered. Any product that VPI determines causes a defect or malfunction due to incorrect installation, modification, misuse, or servicing by the purchaser, or service technician not authorized by VPI to perform such service will not be warranted. This warranty does not cover trivial or cosmetic defects that do not impair the unit's normal function.

VPI reserves the right to make changes in this product without assuming any obligation to install such change in any product previously manufactured. This warranty to repair or replace defective parts is in lieu of all other express or implied warranties of merchantability or fitness for a particular purpose. There are not warranties that extend beyond the description herein.

Some states do not allow exclusion of implied warranties or limitation of incidental or consequential damages, so the above exclusion or limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

Register your Product Online:

http://vpiindustries.com/warranty/