

DENON

OPERATING INSTRUCTIONS
SERVO-CONTROLLED DIRECT DRIVE RECORD PLAYER

•
INSTRUCTIONS D'UTILISATION
DE PLATINE TOURNE-DISQUES
A ENTRAINEMENT DIRECT ET SERVOCOMMANDE

•
BEDIENUNGSANLEITUNG
PLATTENSPIELER MIT SERVO-GESTEUERTEM
DIREKTANTRIEB

DP-30L



NIPPON COLUMBIA CO., LTD.

IMPORTANT TO SAFETY

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

1. Handle the power supply cord carefully

Do not damage or deform the power supply cord. If it is damaged or deformed, it may cause electric shock or malfunction when used. When removing from wall outlet, be sure to remove by holding the plug attachment and not by pulling the cord.

2. Do not open bottom cover

In order to prevent electric shock, do not open the bottom cover. If problems occur, contact your **DENON** dealer.

3. Do not insert anything inside

Do not insert metal objects or spill liquid inside the record player. Electric shock or malfunction may result.

Model DP. _____

Serial No. _____

Please, record and retain the Model name and serial number of your set shown on the rating label.

AVERTISSEMENTS CONCERNANT LA SECURITE

1. Pour prevenir tout risque d'incendie ou d'electrocution, ne pas soumettre cet appareil a la pluie ou a l'humidite.

2. Manipulez avec soin le cordon d'alimentation

N'abimez pas et ne déformez pas le cordon d'alimentation, sinon vous risqueriez des chocs électriques ou un mauvais fonctionnement. Lorsque vous retirez la prise de courant, faites-le en tenant la fiche et ne tirez pas sur le cordon.

3. N'ouvrez pas le couvercle du fond

Afin d'éviter les chocs électriques, n'ouvrez pas le couvercle du fond. En cas de panne, consultez le magasin ou vous avez acheté votre appareil, le centre de dépannage ou le concessionnaire **DENON** le plus proche.

4. N'insérez rien dans l'appareil

N'insérez pas d'objets métalliques et ne renversez pas de liquide sur la platine, sinon vous risqueriez un choc électrique ou un mauvais fonctionnement.

SICHERHEITS-HINWEIS:

1. Schützen Sie das Gerät vor Feuchtigkeit oder Nässe!

2. Das Netzkabel vorsichtig behandeln

Das Kabel darf nicht beschädigt oder deformiert werden. Ein beschädigtes oder deformiertes Kabel kann zu elektrischem Schlag oder Funktionsstörungen führen. Beim Abziehen von der Netzsteckdose am Stecker und nicht direkt an der Schnur ziehen.

3. Bodenplatte nicht abmontieren

Montieren Sie den Boden des Geräts nicht ab, da sonst die Gefahr eines elektrischen Schlags besteht. Wenden Sie sich an Ihren **DENON**-Händler.

4. Keine Gegenstände ins Geräteinnere fallen lassen

Lassen Sie keine Metallgegenstände in das Geräteinnere fallen und verschütten Sie keine Flüssigkeiten darauf, da sonst die Gefahr eines elektrischen Schlags besteht.

Each of DENON high performance audio component series is designed and created to offer the technology that is actively in service at NHK (Japanese Broadcasting Corporation) and other private radio and TV stations to a wide range of audio enthusiasts and music lovers.

Chaque série des composantes audio à hautes performances DENON a été conçue et fabriquée pour offrir une technologie mise en service par la NHK et d'autres stations privées de radiodiffusion et de télévision, ainsi que par de nombreux et enthousiastes amateurs d'audio et de musique.

Die Hochleistungs-Bausteine der DENON Hi-Fi-Komponentenserie wurden entwickelt, um dem Hi-Fi-Fan und Musikliebhaber Technik zugänglich zu machen, die sich bei NHK (Japanische Rundfunkgesellschaft) sowie bei privaten Rundfunk- und Fernsehstationen bewährt hat.

IMPORTANT

(BRITISH MODEL ONLY)

The wires in this mains lead are coloured in accordance with the following code:

- Green-and-yellow: Earth
- Blue: Neutral
- Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol \perp or coloured green or green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

FOR YOUR SAFETY

(AUSTRALIAN MODEL ONLY)

To ensure safe operation, the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring.

Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities.

The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, contact a qualified electrician.

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FEATURES

1. Auto-lift mechanism with non-contact record-end sensor

The automatic arm lift (auto-lift) mechanism functions in such a way that when a record playback is finished, the tonearm is automatically lifted and the turntable rotation stops. This eliminates worry about unexpected wear of the stylus by leaving record at play. At the end of play, a non-contact record-end sensor senses the velocity change of the tonearm with an opto-electronic transducer, eliminating unnecessary load on the record or stylus, consequently sound quality is not impaired.

CARACTERISTIQUES

1. Mécanisme de lève-bras automatique employant un senseur de fin de disque sans contact.

Le mécanisme du lève-bras automatique (auto-lift) fonctionne de la façon suivante. A la fin de la lecture d'un disque, la pointe de lecture se soulève automatiquement et le plateau de lecture s'arrête. Ainsi la pointe de lecture ne s'use pas de façon immodérée lorsqu'on lit le disque.

Un senseur de fin de disque du type sans contact, qui analyse le changement de vitesse à l'aide d'un transmetteur opto-électronique, est utilisé pour la détection de la fin du disque, évitant ainsi une surcharge sur le disque ou sur la pointe de lecture, et une détérioration du son.

2. Newly developed angular control motor for arm lift

The arm lifting device employs a servo controlled angular control motor newly developed by DENON, resulting in a smooth and silent up-and-down tonearm motion.

3. New material employed for base

Newly developed special compound, having larger specific mass and superior vibration damping characteristic than conventional aluminum diecasting is employed for the base. Direct sound pressure from speakers or vibration from floor are isolated and, thus acoustic feedback is effectively eliminated.

2. Un moteur de commande angulaire, nouvelle-ment mis au point, est utilisé pour soulever le bras.

Le système du lève-bras emploie un nouveau moteur de commande angulaire servocom-mandé développé par DENON. Il permet une course verticale régulière du bras de lecture.

Un nouveau composé spécialement mis au point, possédant une masse spécifique plus importante, et des caractéristiques d'amortissement de vibrations supérieures au moulage en aluminium classique, est utilisé pour le support. La pression directe du son des hauts-parleurs et les vibrations du sol sont isolées, éliminant ainsi efficacement la réaction acoustique.

BESONDERHEITEN

1. Tonarmlift-Automatik mit kontaktloser Endabschaltung

Die Tonarmlift-Automatik (AutoLift) hebt die Nadelspitze am Ende der Schallplatte von der Platte ab und stoppt den Plattenteiler. Hierdurch wird verhindert, daß sich die Nadel vorzeitig abnutzt.

Ein kontaktloser Sensor für die Endabschaltung ermittelt das Ende der Schallplatte, indem er die Geschwindigkeitsänderung des Tonarms über einen optisch-elektronischen Umformer erfaßt. Hierdurch wird eine unnötige Belastung der Platte und der Nadel vermieden und die Klangqualität aufrechterhalten.

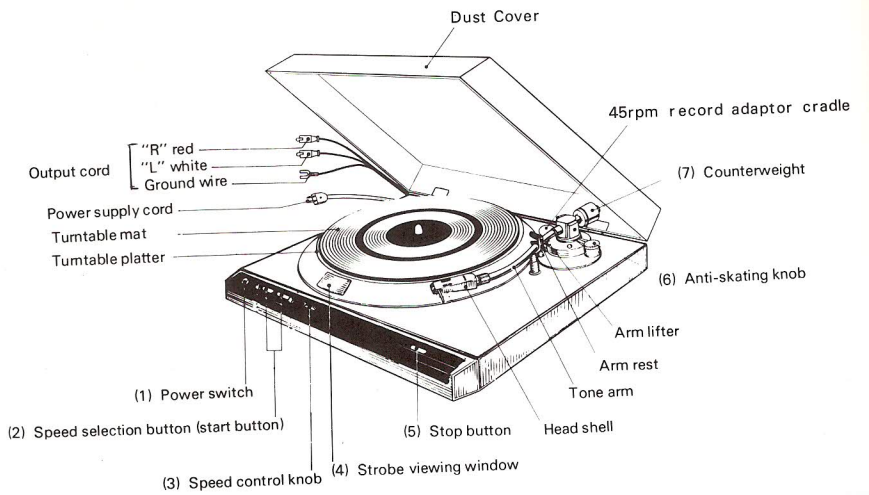
2. Tonarmlift mit neu entwickeltem Spezialmotor

Der servogesteuerte Motor sorgt für glattes Heben und Senken des Tonarms.

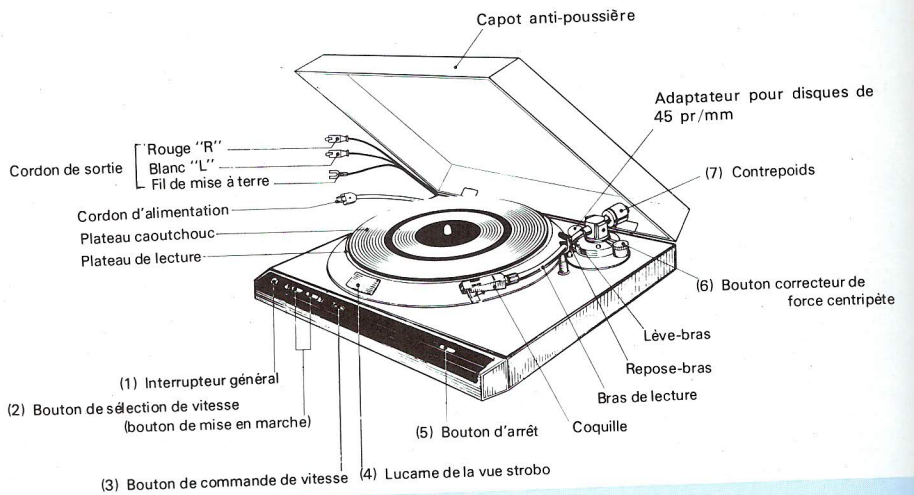
3. Untersatz aus neuem Werkstoff

Zur Herstellung des Untersatzes wurde eine neu entwickelte Spezialwerkstoffverbindung verwendet, die ein höheres spezifisches Gewicht und bessere schwingungsdämpfende Eigenschaften als konventionelles Gießaluminium aufweist. Direkter Schalldruck von übertragene Schwingungen werden abgefangen, so daß keine akustische Rückkopplung auftreten kann.

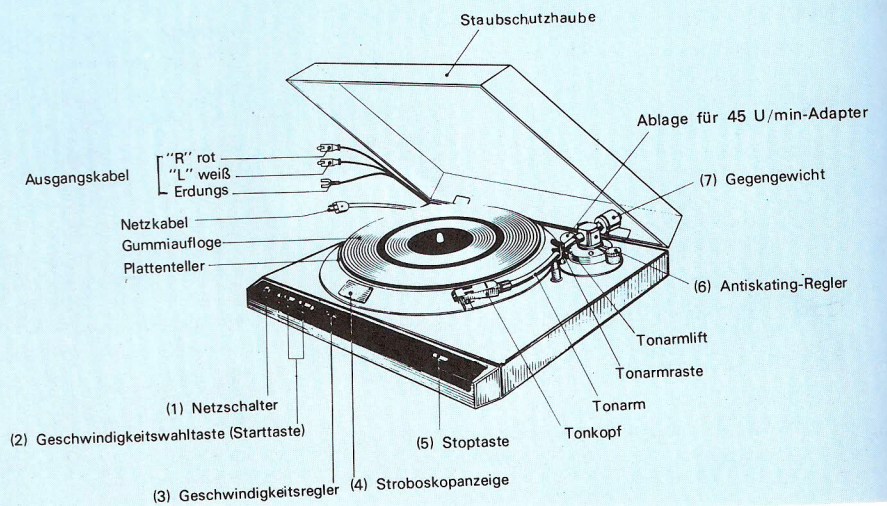
NAMES OF PARTS AND FUNCTIONS



NOM DES PIÈCES ET FONCTIONS



BEZEICHNUNG DER TEILE UND REGLER



- (1) **Netzschalter**
Schaltet den Strom ein (ON =) und aus (OFF ■).
(2) Geschwindigkeitswahltaete (gleichzeitig Starttaete)
Durch Druck auf diese Taete wird die Geschwindigkeit umgeschaltet, der Plattenteiler beginnt sich zu drehen und der Tonarmlift senkt sich. Drücken Sie die Taete
"33" für 33-1/3 U/M Platten und
"45" für 45 U/M Platten.
(3) **Geschwindigkeitstregler**
Durch Drehen dieses Reglers nach links oder rechts kann die Geschwindigkeit reguliert werden.
(4) **Stroboskopanzeige**
Beobachten Sie die Bewegung der Stroboskopmarke, während Sie die Geschwindigkeit
- (1) **Netzschalter**
regulieren.
(5) **Stopptaete**
Durch Druck auf diese Taete hebt sich der Tonarm und der Plattenteiler kommt zum Stillstand.
(6) **Antiskating-Regler**
Bei der Wiedergabe von Schallplatten entsteht eine Kraft, die die Nadel zur Plattenmitte hin drängt. Durch entsprechende Einstellung dieses Reglers kann diese Kraft ausgeglichen werden. Die Einstellung ist auf Seite (15) beschrieben.
(7) **Gegengewicht**
Mit Hilfe dieses Gewichts wird die Auflagekraft justiert. Die Einstellung ist auf Seite (15) beschrieben.

- (1) **Interrupteur général.**
Il met en marche (ON =) ou arrête (OFF ■) le courant.
(2) **Bouton de sélection de vitesse (il sert aussi à la mise en marche).**
Lorsqu'on appuie sur ce bouton, la vitesse change, le plateau se met à tourner et en même temps le lève-bras s'abaisse. Appuyez sur les boutons:
"33" pour les disques de 33 tours 1/3,
"45" pour les disques de 45 tours.
(3) **Bouton de commande de vitesse.**
Tournez ce bouton vers la gauche ou la droite pour faire varier la vitesse.
(4) **Lucarne de vue strob**
Contrôlez le diagramme strob, pendant que vous réglez la vitesse.
- (5) **Bouton d'arrêt.**
Appuyez sur ce bouton, le lève-bras se lève, et le plateau continue à tourner pendant un petit moment avant de s'arrêter.
(6) **Bouton correcteur de force centriféde**
Lors de la lecture du disque, une force d'attraction vers l'intérieur du disque est introduite à la pointe de lecture. Cette force s'affaiblit à la pointe et le réglage se fait au moyen de ce bouton. Pour le réglage, lisez à la page (15).
(7) **Contrepoids.**
Ce poids sert à régler la force d'appui verticale appliquée sur la tête de lecture. Lisez à la page (15) pour le réglage.

- (1) **Power switch**
Turns the power ON (=) and OFF (■).
(2) **Speed selection button (Start button at the same time)**
When this button is pressed, the speed is selected, the platter starts rotation and at the same time the arm lifter lowers. Press buttons, "33" for record at 33-1/3 rpm
"45" for record at 45 rpm.
(3) **Speed control knob**
Turn this knob left or right to vary speed.
(4) **Strobe viewing window**
Monitor flow of strobe pattern while adjusting the speed.
- (5) **Stop button**
Press this button, and the arm lifter ascends and the motor stops. Because of inertia, the platter continues rotation for a while before it stops.
(6) **Anti-skating knob**
In playback of record, an attraction force toward inside of record is introduced at the stylus. This force is varied by adjustment of this knob. Refer to page (14) for adjustment.
(7) **Counterweight**
The stylus force applied to the cartridge is adjusted by this weight. Refer to page (14) for adjustment.

HOW TO ASSEMBLE

Do not connect power supply cord until the assembly is completed.

1. Mounting turntable platter

- (1) Insert your fingers into the two holes of the turntable platter as shown in Fig. 1 and slowly mount on the motor shaft. For removing the turntable platter pull it up in the same way.

Note: The magnetic coating surface (inside part of the rim) must be handled with care so as not to be injured.

- (2) After mounting the turntable platter, place the turntable mat aligning the hole to the motor shaft.

2. Attaching counterweight

Push in the counterweight at the rear end of tonearm as shown in Fig. 2 with the stylus force scale facing front. While pushing the counterweight, turn it in the arrow direction. After attaching, make sure that it moves back and forth by turning it.

3. Mounting the cartridge

When mounting a cartridge on this record player, follow the instruction manual of the cartridge to be used as well as referring to Fig. 3 and following instruction.

Cartridges weighing 5g to 10g can be mounted with the use of the attached head shell. Be sure to protect the stylus from damage by leaving the stylus cover attached while mounting.

- (1) Be sure to make correct connections. Follow the color coding on the lead wires (Fig. 3).
- (2) When fixing the cartridge, at first, lightly fix it with screws so that it will move slightly. Adjust so that the head shell and the cartridge are in parallel and in right angle (Fig. 4).

Securely fix the screws after positioning the cartridge in the dimension shown in Fig. 5. At this position, a specified overhang can be obtained when mounted on the tonearm.

Note: When the cartridge is replaced, its weight will be different and so will be the stylus force. Be sure to adjust the stylus force, anti-skating and the aim lifter height.

It is easier if you replace cartridges readily mounted on a head shell than to replace cartridge alone. Therefore it is recommended to obtain a head shell together when you purchase another cartridge. The combined weight of 14g to 19g of the head shell and accessories is acceptable.

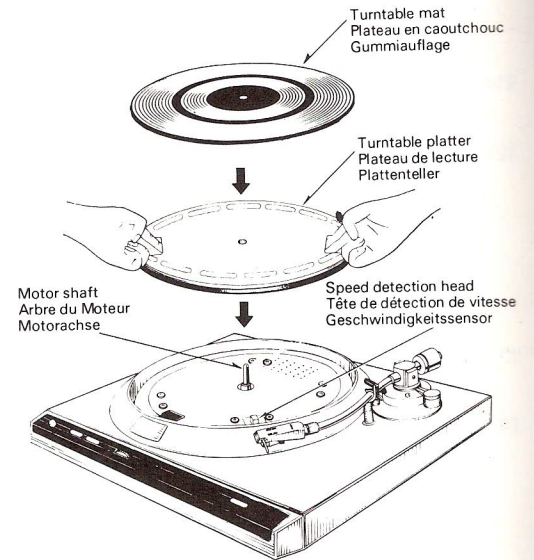


Fig. 1 Mounting turntable platter
Fig. 1 Montage du plateau de lecture
Abb. 1 Aufsetzen des Plattentellers

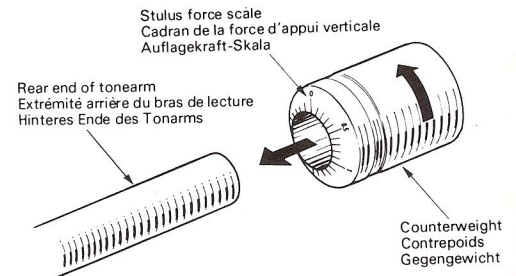


Fig. 2 Attaching counterweight
Fig. 2 Montage du contrepoids
Abb. 2 Befestigung des Gegengewichts

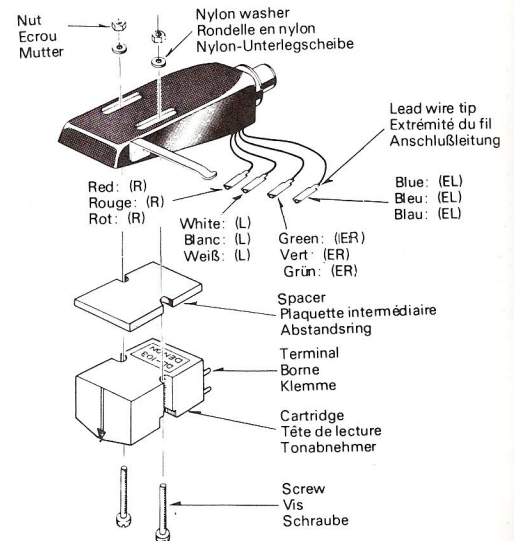


Fig. 3 Mounting the cartridge in the head shell
Fig. 3 Fixation de la cellule sur la coque
Abb. 3 Einbau des Tonabnehmer-Systems in den Tonkopf

4. Attaching and detaching head shell on/from tonearm

- (1) As shown in Fig. 6, align the guide pin with the slot at the tonearm end and insert.
- (2) Turn the lock nut in the arrow direction in Fig. 6 until it stops and fix the head shell to the tonearm.
- (3) For removing the head shell, turn the lock nut in the opposite direction of the arrow and gently pull it off.

5. Mounting dust cover

Hold the dust cover near the hinges by both hands as shown in Fig. 7 and push the "metal parts" of the hinges deep enough unto the "hinge catchers" of the cabinet. For removing the dust cover, open it fully and pull it off in the same manner.

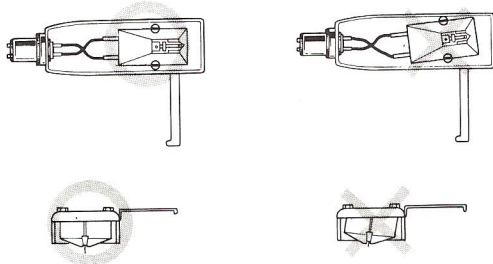
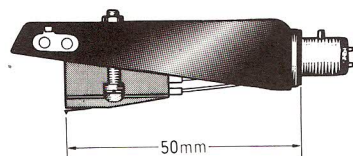


Fig. 4 Cartridge alignment
Fig. 4 Alignement de la cellule
Abb. 4 Ausrichtung des Tonabnehmers



Stylus to rubber washer end
 Ecart de pointe de lecture a tapis caoutchouc
 Von der diamantspitz zur Gummischeibe

Fig. 5 Stylus point
Fig. 5 Pointe de lecture
Abb. 5 Diamantspitz

HOW TO CONNECT

After assembly, make the following connections. Make correct and firm connections. Be sure that the power of amplifier is "off".

- (1) Connect the L and R pin plugs of output cord to the L and R "phono" inputs of the amplifier to be used. (Fig. 8)
 Also connect the Y-shaped lug of ground wire (combined with the output cord) to the "GND" terminal of the amplifier.

Note: Some cartridges may require a step-up transformer or a head amplifier depending on their type.

- (2) Plug in the power supply cord to AC receptacle. (Or else, if AC outlet is provided on your amplifier connect the power supply cord thereto, referring to Fig. 8. Make sure at this time that the power capacity of the outlet is sufficient.)

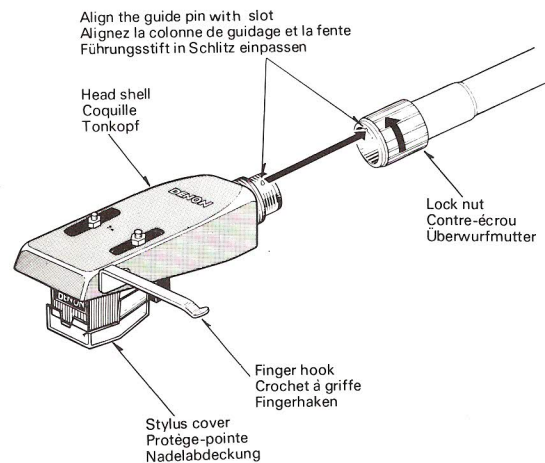


Fig. 6 Attaching head shell
Fig. 6 Installation de la coquille
Fig. 6 Aufsetzen des Tonkopfes

ADJUSTMENT

1. Adjustment of stylus force

Set to the optimum stylus force for your cartridge as follows. If it is used with improper stylus force, mistracking or distorted sound may result. Use the cartridge always at optimum stylus force.

- (1) Turn the power switch ON (■).
- (2) Press either "33" or "45" speed selection button. Make sure the arm lifter is down and then turn OFF the power switch.
- (3) Turn the anti-skating knob and set "0" to the reference line as in Fig. 9.
- (4) Remove the stylus cover of the cartridge

(5) See Fig.10 and unlock the arm clasper. Hold the finger hook of the head shell (Fig. 6) with your fingers and remove the tonearm from the arm rest.

- (6) Turn the counter weight to obtain horizontal balance as shown in Fig.11, taking your fingers off momentarily to check.

Note: Carefully and only momentarily remove your fingers to see the balance so that the stylus or tonearm will not be damaged.

- (7) After the horizontal balance is obtained, return the tonearm to the arm rest and clamp it by the arm clasper. Put the stylus cover as well.
- (8) Then, being careful not to turn the counterweight, turn only the stylus force scale to bring "0" reading to the reference line. (This condition gives zero stylus force since the horizontal balance of the tonearm has been obtained.)
- (9) Lastly, turn the counterweight in the arrow direction and bring the desired stylus force "2 (grams)", for example, on the scale ring to the reference line on the tonearm. (When the counterweight is turned, so is the stylus force scale ring. The number shows the stylus force in grams when turned in the arrow direction after "0" balance. One division corresponds to 0.1 g.) Use whatever stylus force setting is recommended for your cartridge.

2. Adjustment of anti-skating

Turn the anti-skating knob and set the reading of scale to almost the same number as the stylus force. Read the scale at the reference line. Set to "2" on the reference line in the case of stylus force of 2 grams. (Fig. 12)

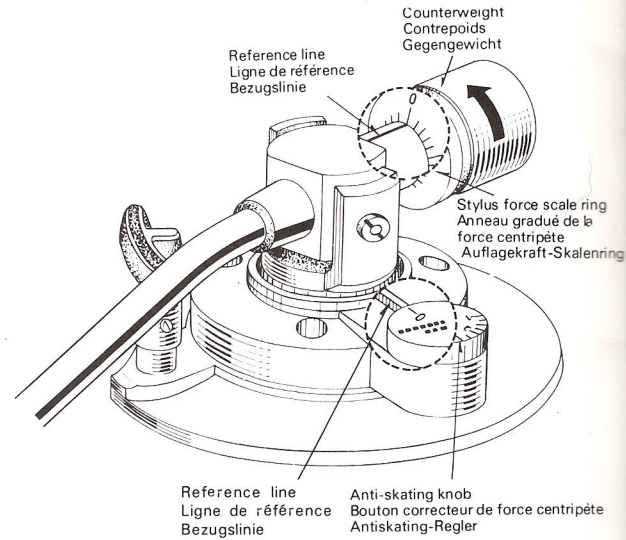


Fig. 9 "0" Setting
Fig. 9 Mise sur "0"
Fig. 9 Nulleinstellung "0"

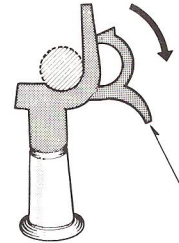


Fig. 10 Arm clasper
Fig. 10 Serre-bra
Abb. 10 Bezugnahme



Turn the counterweight in the arrow direction in Fig. 9
Faites tourner le contrepoids dans le sens de la flèche sur la Fig. 9
Das Gegengewicht laut Abb. 9 in Pfeilrichtung drehen.



Horizontally balanced
Équilibré horizontalement
Waagerecht ausbalanciert



Turn the counterweight in the opposite direction of the arrow in Fig. 9
Faites tourner le contrepoids dans le sens contraire à celui indiqué sur la Fig. 9
Das gegengewicht in entgegengesetzter Pfeilrichtung gemäß Abb. 9 drehen.

Fig. 11 Obtaining horizontal balance
Fig. 11 Obtenant un équilibre horizontal
Abb. 11 Horizontal ausbalancieren

3. Adjustment of arm lifter

Adjust the height of arm lifter as follows. (Fig. 13)

- (1) Turn the power switch ON (I) and press either of "33" or "45" speed selection buttons. Making sure the arm lifter is lowered, turn OFF (II) the power switch.
- (2) Loosen the height fixing screw and let the arm lifter to the most lowered position.
- (3) Remove stylus cover, release clasper and place the tonearm over the record.
- (4) With this condition, adjust the height of the arm lifter so that the gap between the arm lifter and the tonearm pipe is around 0.5 mm, and tighten the loosened screw.

Note: In order to avoid damaging the stylus, always put the stylus cover in place except when checking the gap by placing the stylus on the record.

HOW TO PLAY

● Starting of play

- (1) Turn the power switch ON (I). The neon lamp in the strobe viewing window lights.
- (2) Place a record on the platter, remove the stylus cover on the cartridge and release the arm clasper.
- (3) Bring the tonearm over the desired position of the record and press either "33" or "45" speed selection button proper to the record. The indication lamp of the selected speed lights and at the same time, the turntable starts rotation and the stylus is lowered onto the record to start playing.
- (4) When the last cut of one side is over, the stylus is automatically lifted off the record (auto-lift), and turntable rotation stops.

● Stopping play in the middle

Press the stop button. The stylus is automatically lifted off the record and the turntable rotation stops.

● Adjustment of speed

Speed can be adjusted at both "33" and "45" by a single speed control knob. After lowering the stylus on the record, adjust the speed control knob so that the flow of strobe pattern in the strobe viewing window stops. The strobe patterns are lined up as in Fig. 14.

If the strobe pattern is flowing to the left (speed is fast), turn the speed control knob from left to right (to slow down speed), and if it is flowing to the right, turn it from right to left. This control knob changes speed more than $\pm 3\%$. (Fig. 15)

Note: Even the strobe pattern stands still, it may flow a little, after a while. Since the neon lamp of this record player is lit by commercial power source, the strobe pattern flows if the power source frequency fluctuates even while the turntable speed is constant.

Note: The strobe pattern may sway a little front-and-backward. This is because of eccentricity of strobe pattern and not the turntable platter. This causes no wow and flutter.

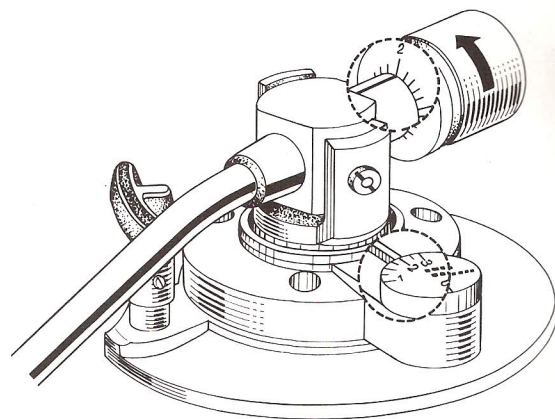


Fig. 12 Stylus force at 2g

Fig. 12 Force d'appui verticale à 2g

Abb. 12 Auflagekraft 2g

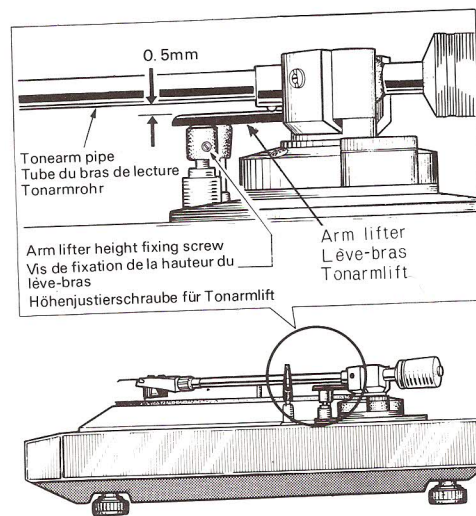


Fig. 13 Arm lifter height adjustment

Fig. 13 Reglage de hauteur du lève-bras

Abb. 13 Justieren der tonermlifhöhe

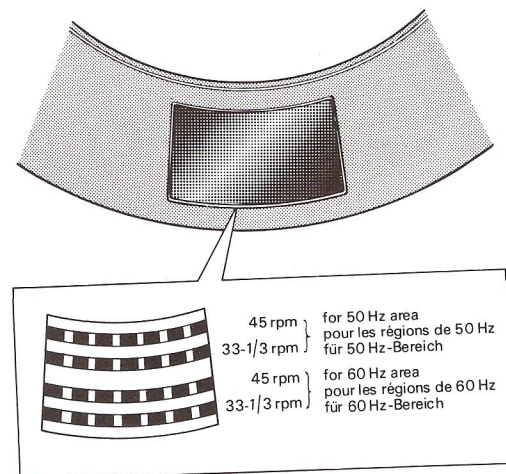


Fig. 14 Line-up of strobe pattern

Fig. 14 Aligement du diagramme strobo

Abb. 14 Anordnung der Stroboskopmarken

MAIN SPECIFICATIONS

●Phono motor

Drive system	Direct drive by AC motor
Speed	33-1/3 rpm, 45 rpm
Variable speed adjustment range	Over $\pm 3\%$
Wow/flutter	Less than 0.018% wrms (1)
S/N	More than 75dB (DIN-B)
Starting time	Less than 1.5 sec. to reach 33-1/3 rpm nominal speed.
Turntable platter	Diecast aluminum 300 mm diam. Weight: 1.5 Kg Moment of inertia: 190 Kg-cm ² (including turntable mat)
Motor	AC servomotor

Speed control system	Servo control by frequency detection.
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●Tonearm

Type	Static balance type with automatic arm lift
Effective length	220 mm
Overhang	16 mm
Tracking error	Within 3°
Stylus force range	0—2.5 g/rot. (1 division is 0.1 g) direct reading
Acceptable cartridge weight	5—10 g (with head shell provided)
Weight of head shell	8 g (excluding screws, nuts and spacer)

SPECIFICATIONS PRINCIPALES

●Moteur de phone

Système de commande	commande directe par moteur AC
Vitesse	33-1/3 tr/mn, 45 tr/mn
Gamme de réglage de vitesse	supérieure à $\pm 3\%$
Pleurage	moins de 0,018% wrms (1)
Rapport signal/bruit	supérieur à 75 dB (DIN-B)
Temps de démarrage	moins de 2,0 sec. pour atteindre une vitesse nominale de 33-1/3 tr/mn
Plateau de lecture	aluminium moulé, diamètre de 300 mm poids de 1,5 kg moment d'inertie de 190 kg-cm ² (y compris le plateau en caoutchouc)

Moteur	asservi AC
Système de commande de vitesse	servocommandé par détection de fréquence

●Bras de lecture

Type	type équilibré statique avec lève-bras automatique
Longueur réelle	220 mm
Suspension	16 mm
Erreur de piste	moins de 3°
Gamme de la force d'appui verticale	0—2,5 g/tour (une division correspond à 0,1 g) lecture directe

WICHTIGSTE TECHNISCHE DATEN

●Antriebsmotor

Antriebssystem	Direktantrieb über Wechselstrommotor
Geschwindigkeiten	33-1/3 U/M, 45 U/M
Drehzahl-Regelbereich	größer als $\pm 3\%$
Gleichlaufschwankungen	weniger als 0,018% WRMS (1)
Störabstand	mehr als 75 dB (DIN-B)
Hochlaufzeit	Weniger als 2,0 s bis Erreichen der Nennzahl 33 1/3 U/M
Plattenteller	Aluminium-Druckguß, 300 mm ϕ 1,5 kg schwer Trägheitsmoment: 190 kg-cm ² (einschl. Gummiauflage)

Motor	Wechselstrom-Servomotor
Drehzahlkontrolle	Frequenzgesteuerte Servoregelung

●Tonarm

Typ	Statisch ausgeglichener Tonarm mit automatischem Tonarmlift
Nutzlänge	220 mm
Überhang	16 mm
Spurfehlwinkel	innerhalb 3°
Auflagekraftbereich	0—2,5 g/Drehung (1 Teilstrich entspricht 0,1 g) Direktablesung
Passendes Tonabnehmergewicht	5—10 g (im Tonkopf)
Gewicht des Tonopfes	8 g (ausschl. Schrauben, Muttern und Abstandsring)

Note: (1) Measured by DENON's method using magnetic pulse wheel.
 (2) AC voltage preset to match that in country of original import.

● General
 Shell connector EIA standard 4P connector
 Arm lifter Servo controlled by angular control motor
 Power supply AC 120V 60Hz, AC 200V 220V 240V 50Hz (2)
 Power consumption 15 W
 Dimension 450W × 403D × 140H (mm)
 Weight (dust cover closed) 9.5 kg Approx.

● Généralités
 Poids acceptable de la tête de lecture 5-10 g (avec coquille)
 Poids de la coquille 8g (non compris les vis, écrous et plaquette intermédiaires)
 Connecteur de coquille connecteur 4P norme ETA
 Lève-bras servocommandé par moteur à commande angulaire
 Alimentation AC 120 V 60 Hz, AC 200, 220, 240 V 50 Hz (2)
 Consommation de courant 15 W

** Les spécifications ci-dessus et l'appareil extérieur sont sujets à des modifications en vue d'améliorations.

Dimensions
 450L × 403P × 104H (mm)
 Poids environ 9.5 kg
 Remarque: (1) Mesurée selon la méthode DENON avec volant à pulsation magnétique.
 (2) Tension AC préajustée pour correspondre à celle du pays de l'importation d'origine.

● Allgemeine
 Tonkopf-Steckverbinder 4-Stift-Stecker nach EIA-Standard
 Tonarmlift Servogesteuerter Motor mit Scheitelpunktregelung
 Stromquelle 120V WS 60Hz, 200V, 220V, 240V WS 50 Hz (2)
 Stromverbrauch 15 W
 Abmessungen 450 (b) × 403 (T) × 140 (H) mm (bei geschlossener Haube)
 Gewicht ca. 9.5 Kg

** Änderungen an technischen Daten und am Äußeren sind im Laufe von Verbesserungen vorbehalten.

ANMERKUNGEN: (1) Nach dem DENON-Verfahren mit einem magnetischen Pulsrads gemessen.
 (2) Die Nennspannung ist entsprechend der Spannung im Bestimmungsland vor eingestellt und auf dem Typenschild des Geräts angegeben.