

Vincent

Instructions for use

한글 사용 설명서



PHO-701

MM/MC Phono Preamplifier

진공관 Hybrid 포노 프리앰프

친애하는 고객님께:

본 제품을 구입하는데 보여 주신 고객님의 신뢰에 감사드립니다.

본 제품은 사운드나 제품 품질에 있어서 고객님의 높은 기대에 부응할 것입니다.

본 제품의 즉각적인 Plug and Play를 원하실지 모르지만 사용설명서를 충분히 읽고 난 후에 설치하시기 바랍니다.

본 설명서는 본 기기를 취급하고 사용하는 방법 뿐만 아니라 최상의 성능을 얻도록 도와 줄 것이기 때문입니다.

주의사항 중 몇가지는 상식적인 것일 수 있으나, 본 설명서의 안전상 주의사항을 준수하시기 바랍니다. 만약 제품에 의문 사항이 있을 경우, 수리에 관한 일이 있을 경우, 오디오 전문가나 구입하신 판매대리점에 문의하여 주시기 바랍니다.

본 제품으로 커다란 즐거움을 갖길 바랍니다. 감사합니다.

Vincent-Team

Dear Customer,

we thank you for the confidence you prove in purchasing our product. It will match your high demands towards sound and manufacturing quality. Though it is understandable that you want to plug and play this product instantaneously, we encourage you to read this manual carefully before installation.

It will help you in handling and operating this machine in your system and obtaining the best possible performance, even if it was installed by your dealer.

Please follow the security precautions, though some of those things may seem obvious.

In the appendix to this manual you will find a glossary explaining some established technical terms.

If there are open questions your audio specialist dealer will help you. He also represents your contact person in case of needed warranty service or repairs after the warranty period and is interested to hear from your experiences with Vincent products.

We wish you plenty of joy with your / our product,

your Vincent-Team

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안전 수칙 SAFETY GUIDELINES

본 기기는 엄격한 품질관리 하에 각국의 안전기준에 적합하게 생산되었습니다. 그러나 사용자
의 안전을 위해 본 지침을 준수바랍니다.

This appliance was produced under strict quality controls.
It complies with all established international safety standards. Nonetheless, the following instructions should be
fully read and observed in order to prevent any hazard:



본 제품을 열지 마십시오.
감전의 위험이 있으며 내부에 사용자가 임의로 수리할 수 있는 부품이 없습니다.
Do not open the appliance! Risk of electric shock!



There are no parts in the appliance that require maintenance by the user.



수리 및 변경 금지 Maintenance/Alterations

제품을 변경하거나 임의로 수리하지 마십시오. 품질
보증에서 제외됩니다.

All equipment that is connected to the domestic mains voltage can be dangerous to the user if not handled properly. Leave maintenance work to qualified professionals. The product is only permitted for connection to AC 230Volt/50Hz, for earthed sockets and use in enclosed areas. Altering the product or manipulating its serial number voids the warranty. After a fault, leave the appliance's fuse to be replaced only by a professional with one of the same kind.

전원코드관리 Power Cable Connection

전원코드는 꺾이거나 손상되지 않도록 관리하고
젖은 손으로 만지지 마십시오.

Always pull the plug and never the power cable if you want to disconnect the appliance from the mains power. Make sure when setting up the appliance that the power cable is not squashed, severely bent or damaged by sharp edges. Do not touch the power lead with wet or damp hands. Use the power cable supplied or another one from

Vincent.

작업 전 전원끄기 Switching Off



기기나 케이블을 연결하거나 제거할 때는 반드시
전원스위치를 끈 다음 하십시오.

Switch the appliance off every time before you connect or remove other components or loudspeakers, disconnect or connect it to the mains power, leave it unused for a longer period or want to clean its outside. On all amplifiers and receivers, wait approx. 1 minute after this before disconnecting or reconnecting the cable.



습기/열/진동 Moisture/Heat/Vibration

본 기기는 습기, 열, 진동에 노출되지 않는 곳에 설치
하십시오.

Contact of electrically operated equipment with liquids, moisture, rain or water vapour is dangerous

for such equipment and the user and must be avoided without fail. Take care that no liquids or objects get inside the appliance (ventilation slots etc.). Never expose the appliance to high temperatures (direct sunshine) or strong vibration.



통풍 및 환기 Heat Build-up

본 기기는 통풍이 잘 되는 곳에 설치하고 주변의 다
른 물체와 최소 5cm 거리를 두십시오.

Make sure that a gap of 5 cm remains around the appliance and that the surrounding air can circulate (do not install in enclosed cupboards). Vents must not be covered up.

청취 음량 Volume



청각에 손상을 입지 않도록 볼륨을 적당히 조절
하십시오. 전원스위치를 켜기가 입력을 변경할
때는 먼저 볼륨을 최저로 줄인 다음 하십시오.

The maximum tolerable volume is always reached well below the maximum possible setting on the amplifier. Be careful with the volume setting, in order to prevent damage to hearing. do not expose yourself to high volumes unintentionally, always set to a low level before changing the input channel.



청소 Cleaning

청소할 때는 먼저 전원코드를 제거한 다음에 부드
러운 천으로 가볍게 닦아주십시오.

Pull out the power plug before cleaning the outside of the product. Whenever possible, use a soft, lint-free cloth that has been dampened. Do not use abrasives, solvents, thinners, flammable chemicals, polishes and other cleaning products that leave marks.

INCLUDED IN DELIVERY (제공되는 악세서리)

Please check the contents of the packaging, which in addition to the appliance should contain the following accessories:

- **1 power supply “PHO-701ps”**
- **1 cable with DC plugs**
- **1 power cable**
- **USB cable**
- **this manual**

DESCRIPTION OF THE APPLIANCE (본 제품의 특징)

Your PHO-701 meets the high demands towards analogue audio playback. It performs the correction of the RIAA distortion with highest precision and thus allows you to connect a record player to an amplifier without special Phono input. By app-

lying an external power supply, interferences are minimized. The design of the appliances' housing has been created to fit the Vincent tube Line. Highest quality of workmanship and an outstanding price performance ratio are self-evident.

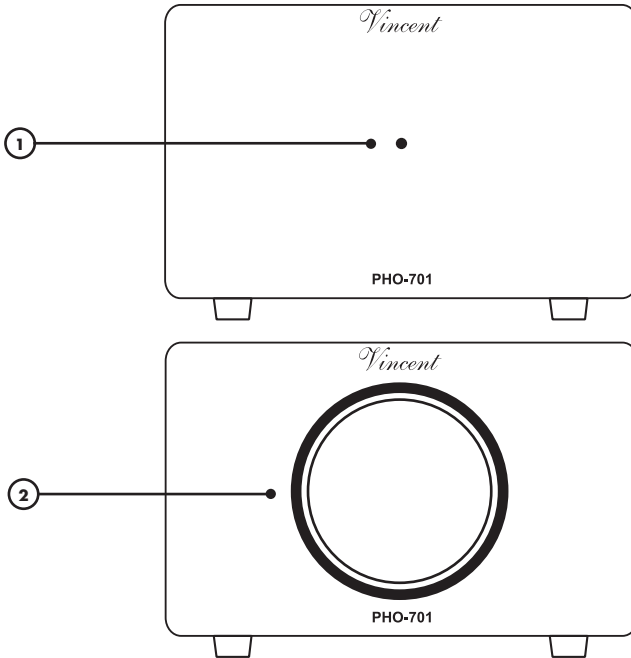
본 포노 앰프는 아날로그 오디오 재생에 요구되는 높은 수준을 만족시켜 줍니다.

본 포노 앰프는 정확한 RIAA 성능으로 포노단이 없는 앰프에 턴테이블을 사용할 수 있게 해줍니다.

게다가 외장 파워 서플라이를 채용하므로써 신호의 간섭을 최소화하였습니다.

본 기기의 디자인은 Vincent의 tube line에 매칭되도록 디자인되어 있으며, 높은 수준의 만듦새와 뛰어난 가성비는 더 말할 나위가 없습니다.

FRONT VIEW 전면 패널



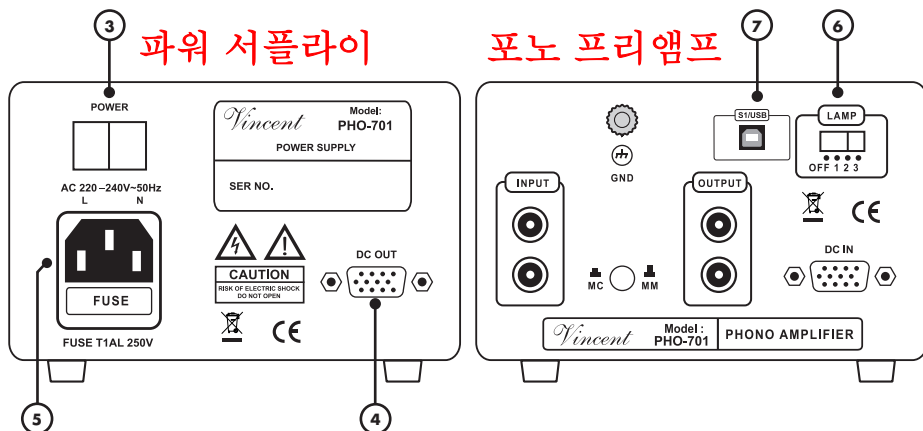
1. POWER LED of the PHO-701ps (파워 서플라이 전원표시 LED)

This LED is lit as long as the power supply PHO-701ps is connected to a vivid power grid (mains socket) and the device is switched on (3).

이 LED는 전원이 켜져 있는 동안 항상 켜져 있습니다.

2. Display window for the tube (진공관 표시 창)

REAR VIEW 후면 패널



3. POWER: mains switch (전원 스위치)

This is the main power switch for turning on and off the PHO-701. Always switch on the PHO-701 before you switch on the amplifier/preamplifier.

4. DC OUT: Power supply output to PHO 701 (DC OUT 출력단자)

Make a connection to the power supply input of the PHO-701 using the supplied DIN cable. 앰프의 DC IN 단자와 DIN 케이블로 연결하십시오.

5. AC/FUSE: power connector and fuse holder (전원케이블 소켓/퓨즈홀더)

To establish the power supply, connect the plugs of the power cable to the device and to a wall power outlet. The small plastic housing beneath the mains socket holds the fuse. Refer to the Safety Guidelines.

전원 소켓 밑에 있는 퓨즈 홀더에 퓨즈가 내장되어 있습니다.

포노 프리앰프

6. LAMP: Dimmer for the tube illumination (전면 조명 밝기 조절)

The setting of this switch affects the brightness of the illumination of the tube display window [2].

전면의 진공관 표시창의 불빛 밝기를 조절합니다.

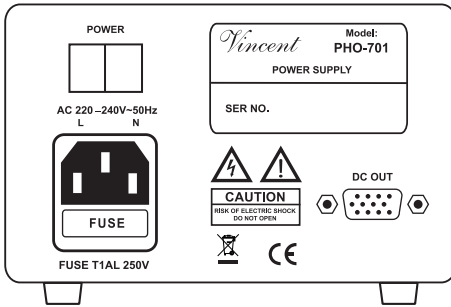
7. USB-Connection (PC 연결 USB단자)

Connect the PHO-701 with your computer by USB cable to digitize your vinyl collection. (More information on page 27)

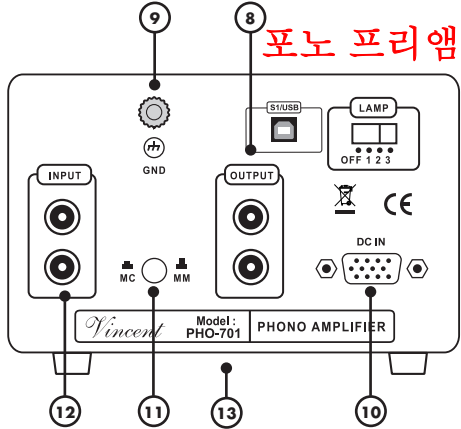
USB 케이블로 PC와 연결하여 디지털 녹음 할 수 있습니다. (27쪽 및 부록 참조)

REAR VIEW 후면 패널(2)

파워 서플라이



포노 프리앰프



8. OUT: signal output to the amplifier (앰프 연결 아나로그 출력단자)

A pair of RCA input sockets of your system's audio amplifier must be connected with these output sockets. 앰프/프리앰프의 입력단자와 이 출력단자를 연결하십시오.

9. GND: Ground clamp for the record player (턴테이블 접지 단자)

In addition to the stereo signal connection cable most record players are equipped with a grounding cable that can be recognized by the cable lug at the end of the cable. This lug has to be fitted to the clamp "GND". 턴테이블의 신호 케이블에 붙어있는 그라운드 접지선의 단자를 이 단자에 연결하십시오.

10. DC IN: power supply input of the PHO-701 (DC IN 입력단자)

Make a connection to the power supply output of the PHO-701ps using the supplied DIN cable. 이곳에 파워 서플라이 후면의 DC OUT 단자와 DIN 케이블로 연결하십시오.

11. MC/MM: pickup type switch MC/MM 카트리지 선택 스위치

At this switch the type of record player pickupsystem has to be selected to adapt the phono pre-amplifier PHO-701 to that system. See section "Setting the type of pickup system".

12. IN: signal input (MC/MM) from the record player (포노 입력단자)

The audio output (or as well an attached audio cable) of the record player must be connected to these input sockets

13. Fine adjustment mechanism (Bottom) 임피던스 조절 핀

for MM/MMC cartridges (more information on page 29)

본체 바닥면에는 MC/MM 임피던스에 맞게 세팅하는 DIP 스위치가 있습니다 (20쪽 참조)

INSTALLATION (설치)

Set up the cable links in a sequence as follows. Connect the power cable between device and power supply only after all other connections have been made.

다른 케이블이 모두 연결된 다음, **전원 케이블은 맨 마지막에 연결하십시오.**

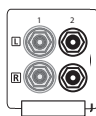


DURING INSTALLATION PLEASE OBSERVE THE FOLLOWING ADVICE:



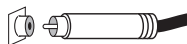
Protective caps **단자 보호캡**

케이블 연결시 단자의 보호캡을 제거하십시오.



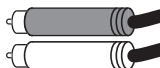
RCA connections **RCA 단자연결**

디지털 케이블은 아날로그 케이블과 겉모양이 같습니다. 혼동에 주의 바랍니다. Mechanically identical RCA plugs are available for analogue and digital outputs. Make sure that you do not get these connections confused during installation!



전원이 켜진 상태에서 연결하면 앰프에 손상이 갈 수 있으니 **전원코드를 제거한 상태에서 연결하십시오.** R과 L을 맞추어 연결하십시오.

Make sure that you do not mix up the analogue connectors for right and left. The RCA plugs for these are mostly colour coded as follows: red for the right channel, black or white for the left channel.

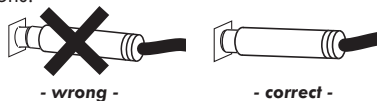


주의: 오디오에 **전원이 켜진 상태에서 RCA**케이블 단자의 중간 핀이 앰프의 사시 또는 그라운드 선과 접촉하면 충격음으로 앰프, 스피커, 청각에 손상을 줄 수 있습니다. 이런 사고를 방지하기 위해 반드시 **전원코드를 제거한 상태에서 연결하십시오.**

Contacting the middle pin of the RCA plugs with the outer ring of the RCA chassis jack may lead to damages to the main amplifier if it is switched on! To avoid this hazard, connect or disconnect only in switched-off state and more than one minute after deactivating!

Cable connections

Make sure that all plugs fit tightly. Inadequate connections can cause noise interference, failures and malfunctions.



To make the most of the components' sound potential, only high quality loudspeakers and connecting cables, for example Vincent cables, should be used. Your local stockist will be glad to advise you about this.

Placement **위치 선정**

The phono preamplifier processes very sensitive electric signals. That is why you should place both appliances at maximum distance to potential sources of disturbance like mains cables, mobile phones, switching power supplies, transformers, computers and main amplifiers. **포노앰프는 전기신호에 아주 민감하게 반응합니다. 따라서 전기잡음이 우려되는 전원케이블, 모바일폰, 스위칭 전원회로, 트랜스포머, PC, 앰프 등에서 최대한 떨어져 설치하십시오.**

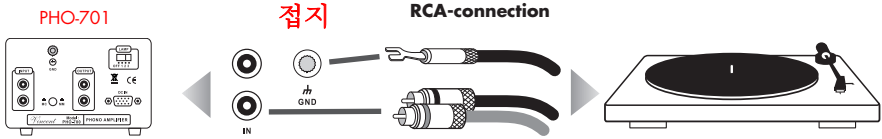
Power Supply

Use the supplied PHO-701ps exclusively. In case of a failure, please contact your HiFi specialist.

본 포노프리앰프와 함께 제공되는 전용 파워 서플라이를 사용하십시오. 다른 파워 서플라이를 사용하면 음질의 저하 및 고장의 원인이 될 수 있습니다.

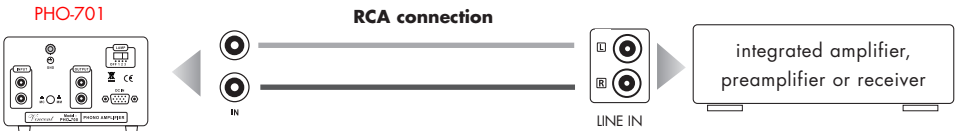
CONNECTION OF THE RECORD PLAYER (TURNTABLE) (턴테이블 연결)

Connect the audio cable of the record player to the RCA sockets "MC/MM IN" (11) of the PHO-701. Establish a tight connection of the grounding cable at the clamp "GND" (8). Some record players are not equipped with a separate grounding cable. 턴테이블의 RCA선과 접지선을 후면 MC/MM입력단자와 접지단자에 연결하십시오.



CONNECTION OF THE AMPLIFIER (앰프/프리앰프 연결)

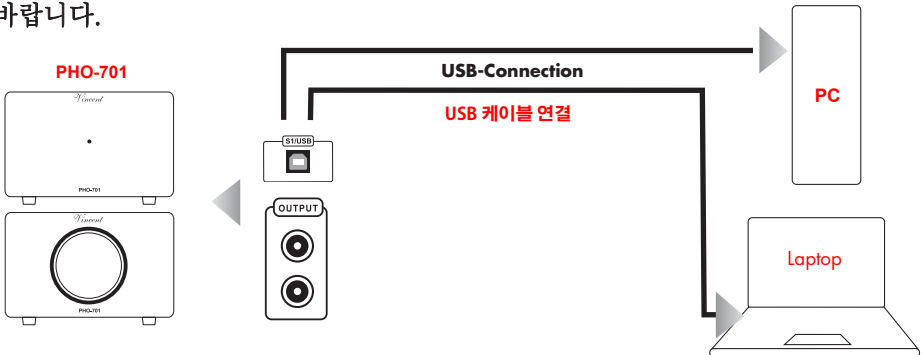
Connect the output sockets "OUT" (8) of the PHO-701 to a standard line level input of your integrated amplifier or preamplifier. These inputs are in most cases named "CD", "TUNER", "AUX", "S1" or "LINE1". Do never connect an amplifier input that is named "PHONO". 이 OUT 출력단자를 인티 앰프(프리앰프)의 라인레벨 입력단자에 연결하십시오.



CONNECTION TO THE COMPUTER (DIGITIZATION FUNCTION (PC 연결 녹음))

Connect the USB socket of the PHO-701 (7) by using the USB cable with the USB socket of your computer. PHO-701 will be recognized by the name "USB-Audio". NOTE: You can download freeware software called Audacity. Manual how to use Audacity is provided by the developer website.

PC에 AUDACITY 프로그램 (www.audacityteam.org/download/) 을 설치하여 24bit MP3 파일로 녹음할 수 있습니다. 이 USB-B단자와 PC의 USB 단자를 연결하면 PC 제어판에서 "USB-AUDIO"로 인식됩니다. 자세한 내용은 본 설명서 후면의 부록을 참조 바랍니다.



CONNECTION OF THE POWER SUPPLY (파워서플라이 연결)

The purpose of the PHO-701ps is to convert the mains alternating power to a low DC voltage that is more appropriate to supply the phono preamplifier PHO-701. So in the first place both devices must be inter-connected using the supplied DIN cable (4)(9). After all other cable connections have been made, push the plug of the supplied power cable firmly into the power socket (5) on the back of the appliance. Plug the other end of the power cable into a mains socket. **제공된 DIN 케이블로 파워서플라이 이와 본체를 연결하십시오.**

Always switch on the PHO-701 before you switch on the amplifier/preamplifier!
항상 포노앰프 스위치를 먼저 켜고, 앰프의 전원스위치는 나중에 켜십시오.

SETTING THE TYPE OF THE PICKUP SYSTEM (픽업 타입의 선택)

Depending on the record player pickup system, the PHO-701 must be adjusted to the correct operating mode using the switch "MC/MM" (10). The two pickup types that are used in most cases are named "MM" (moving magnet) and "MC" (moving coil). All information you need should be written in the pickup system data sheet or the record player user manual. In case of doubt ask your local HiFi specialist. If your record player is equipped with an MC system that is no "high output MC system", the mode switch "MC/MM" (10) must be set to "MC". Any additional adaption to the pickup system is not possible.

턴테이블에 장착된 픽업의 타입에 따라 후면의 셀렉터 버튼을 눌러서 MM 또는 MC를 선택하십시오.



High output MC systems are MC systems with a nominal output voltage of more than 1.5 mV.
1.5mV이상의 출력을 갖는 고출력 MC픽업은 MM으로 간주하십시오.

If your record player is equipped with an MM system or a "high output MC system", the mode switch "MC/MM" (10) must be set to "MM".

고출력 MC카트리지와 MM카트리는 MM을 선택하십시오.



If your record player is equipped with a crystal pickup system or if it contains a phono preamplifier then the record player must be connected to the amplifier's line level input directly and an external phono preamplifier is not necessary.

만약 구형 크리스탈 픽업이거나 포노앰프가 내장된 턴테이블인 경우, 본 포노앰프를 사용하지 말고 직접 앰프에 턴테이블을 연결하십시오.

Your local HiFi specialist will assist you if there is any help needed. He will set up your record player if you let him. **도움이 필요한 경우 전문가나 판매점에 문의하십시오.**

CONFIGURATION (환경 설정)

Configuration for use with MM- and MC-pickup-systems (MM & MC 픽업에 맞는 세팅)

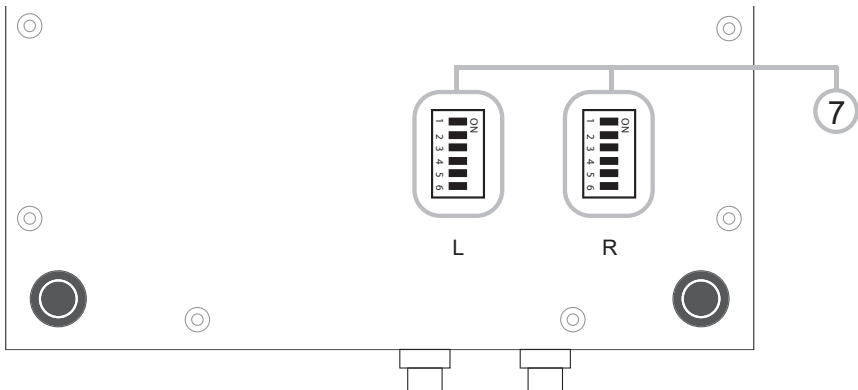
There are two different kinds of pickup systems on the market, the so called MM (Moving Magnet) and MC (Moving Coil) systems. Having a MM system, a magnet attached to the pickup system moves inside a MM system, a magnet attached to the pickup system moves inside a coil and a voltage proportional to the vibration amplitude is induced. On the other hand, when you have a MC system, the coil is wrapped around the needle and the magnets are arranged around the coil. As the coils used in MM systems have to be rather small to save weight, a higher output voltage is needed. While MM systems usually deploy a voltage of several mVolts, most MC systems only use 100 μ V. Now a days you often find mixed types as well, they are called high-output MC systems and have a voltage of up to 2.5 mV.

MM MC 두가지 타입의 픽업이 있습니다. MM타입은 코일 안에 자석과 바늘이 있고 자석이 움직임에 따라 전류가 발생하고, MC 타입은 바늘을 코일이 감싸고 둘레에 자석이 있어 바늘과 코일이 움직임에 따라 전류가 발생합니다. MM타입은 출력이 수 밀리볼트 (mVolt)이고, MC타입은 출력이 수 마이크로 볼트입니다. 요즘엔 두가지 타입을 겸한 고출력 MC카트리지도 있으며 2.5mV의 출력을 갖습니다.

Due to the better sampling resolution today, most high quality turntables make use of the MC system. However, there are still some very sophisticated MM systems available.

The PHO-701 was designed to handle both systems without any loss in quality. To handle the differences between them (MC: higher amplification, adjusted by resistors MM: adjusted by capacitors) there are four adjustment units on the bottom of the appliance (two for each channel – on the left: left channel, on the right: right channel):

본 포노 앰프는 MM MC 카트리지 모두 신호의 손실없이 처리할 수 있습니다. 차이점에 대응할 수 있도록 (MM은 저항값으로 조정하고, MC는 캐패시터 값으로 조정), 본체 바닥면에는 아래 그림과 같이 좌 우 각각의 채널에 4개의 DIP 스위치가 있습니다.



CONFIGURATION (환경 설정 2)

The following steps don't have to be repeated until you change your pickup system.
Keep in mind to set both channels to the same value!

픽업 카트리지를 교체하기 전에는 일단 세팅 한 후에는 다시 할 필요가 없습니다.
좌우 세팅 값은 동일해야 합니다.

Now you can conduct your fine tuning. Most manufacturers of pickup systems don't give any recommendations regarding the ideal settings, they suggest that you adjust the system to your personal taste (e.g.while listening to your favorite record). 대부분의 카트리지 메이커는 이상적인 세팅을 제시하지 않고 사용자의 취향에 맞추어 조정하도록 권장하고 있습니다.

Adjustments for MM systems MM 카트리지 세팅
Input impedance: 47 kohms 입력 임피던스 : 47k옴
Input capacitance: 15 pF 입력 캐패시턴스: 15pF

By using switches 1 and 2 (adjustment units (7)) you can connect additional matching capacitances.
For an overview over possible settings and values, please refer to the following chart.

스위치 1번과 스위치 2번을 사용해서 (조정 유닛 7), 추가적으로 매칭 캐피시턴스를 연결할 수 있습니다. 아래 차트를 참고 하십시오.

Table of values (capacitance) 캐패시턴스 값 설정

| Switch "ON" | Capacitance |
|--------------|-------------|
| none 사용하지 않음 | 15 pF |
| 1 | 115 pF |
| 2 | 235 pF |
| 1+2 | 350 pF |

CONFIGURATION (환경 설정 3)

Adjustments for MC systemsMC 카트리지 세팅

Input impedance: 1000 ohms
Input capacitance: 15 pF

입력 임피던스 1000옴
입력 캐패시턴스 15pF

The permanent input resistor cannot be deactivated. The input impedance can be adjusted by using switches **3** to **6** (adjustment units **(7)**). All matching resistors are connected in parallel, therefore allowing impedance values between 99 ohms (all resistors used) and 1000 ohms (no additional resistors used).

고정 입력 저항은 없앨 수 없습니다. 입력 임피던스는 스위치 3번 ~ 6번을 사용하여 조정할 수 있습니다. 참고로 모든 저항은 직렬로 연결되어 있어서 모두 사용하면 99옴, 전혀 사용하지 않으면 1000옴이 됩니다.

This is how you can find the best settings: 최적의 세팅값을 찾는 방법

First listen to your favorite record using the highest impedance, then the lowest, and finally select a resistor with a value of about 600 ohms. Now try different adjustments until you get the results you want. All values can be found in the table below.

가장 즐겨듣는 레코드를 가장 높은 임피던스를 선택해서 들어보시고 마지막으로 600 옴으로 맞추어 들어 보십시오. 그 다음에 스위치를 조정을 해가면 들어 보시고 최적의 값을 찾아 보십시오.

Keep in mind to set both channels to the same value!

Table of values (impedance) DIP 스위치 조합에 따른 임피던스 값

| Position „ON“ | Impedance | Position „ON“ | Impedance |
|---------------|-----------|---------------|-----------|
| No 사용하지 않음 | 1000 Ohm | | |
| 6 | 783 Ohm | 3 | 130 Ohm |
| 5 | 600 Ohm | 3+6 | 126 Ohm |
| 5+6 | 514 Ohm | 3+5 | 120 Ohm |
| 4 | 405 Ohm | 3+5+6 | 116 Ohm |
| 4+6 | 364 Ohm | 3+4 | 109 Ohm |
| 4+5 | 319 Ohm | 3+4+5 | 102 Ohm |
| 4+5+6 | 293 Ohm | 3+4+5+6 | 99 Ohm |

Burn in/ Warm up (번인/워밍업)

오디오 기기가 최고의 성능을 발휘하려면 워밍업 시간이 필요합니다. 최상의 음질을 얻으려면 앰프에 항상 전원이 들어오게 하는 것이 좋습니다. 보다 상세한 정보는 전문가의 자문을 받으십시오.

Your audio components need a certain time period until they reach maximum performance. The duration of this "warm up" time is very different for the various elements of your audio system. Higher and homogeneous sound quality is achieved while keeping the device switched on. Your audio specialist dealer has enough experience to give you more information.

Net frequency noise 전원 노이즈

어떤 오디오 기기는 앰프에 연결하면 스피커에서 험 - 전원 주파수 노이즈가 들리는 경우가 있습니다. 이 잡음의 특징은 볼륨을 키우면 같이 커집니다. 기계의 이상이 있는 것은 아니지만 바로 잡지 않으면 안됩니다. 일반적으로 전원의 접지에 연결된 모든 기기는 앰프에 험을 발생시킬 가능성이 있습니다. 경험적으로 보면, 입력에 연결된 기기들 중 안테나가 달린 기기(TV, 튜너 등), PC, 정전형 스피커, 턴테이블, 헤드폰 앰프 등이 주로 잡음을 발생시킵니다.

Some audio source devices may in combination with the amplifier cause a humming noise at power line frequency audible from your speakers. Usually, its volume varies with the volume setting of the amplifier. This is no sign of a defect or fault of your audio products but has to be eliminated. Generally, every wall-powered device connected to the ground wire of the power plug can cause this problem when connected to the amplifier. Experience shows that this problem is mainly caused by antenna-connected components (as TV-sets or Tuners), personal computers, electrostatic loud-

speakers, sub-woofers, record players or headphone amplifiers that are connected to the audio inputs of the amplifier. Another possible reason for humming noise is electro-magnetic interference of other components' power supplies with pick-up systems of record players (change the place of the record player for a test).

험 노이즈의 또 다른 원인은 다른 기기의 전원 장치로부터 발생하는 전자파 영향일 수 있습니다. 이 경우 해결 방법으로 오디오 기기의 접지에 전원의 중앙 접지 (혹은 대지 접지)를 연결하므로써 오디오 케이스는 외부의 노이즈로부터 내부회로 차단하고 시그널을 보호할 수 있습니다. 어떤 파워앰프는 "접지 차단" (ground lift) 스위치를 갖고있는 경우가 있습니다. 이 스위치는 사시 그라운드와 회로상의 그라운드를 분리 차단합니다. 때로는 험을 제거하는데 효과적인 때가 있습니다. 온갖 시도에도 불구하고 험이 지속될 때는 전문가의 자문을 받으시길 바랍니다.

In most electric devices the ground potentials of all signals are connected to each other at one central point, where they have one common connection. If the device uses the protective conductor of the wall outlet, the corresponding wire of the line cord is connected intractably to the metal housing of the device. This is the mostly the point where the central grounding point is attached to. By doing this the housing is able to shield all signals from external radiated noise. Some main amplifiers are equipped with a "Ground Lift"-switch. If it is activated, ground potential of the chassis and the protective ground wire are being separated from the central signal ground point. The protective ground wire keeps its function. Sometimes this helps prevent noise caused by errors in grounding.

If the problem occurs and cannot be solved by yourself your audio specialist dealer will help you.

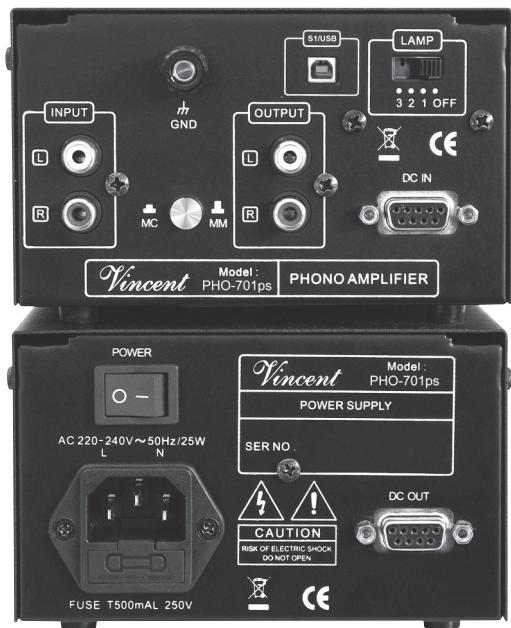
SEARCH FOR ERRORS (이상 증상 대처 요령)

| Symptom 증상 | Possible cause 예상 원인 | Countermeasure 대처 방법 |
|---|---|--|
| Unit does not work after pressing the "POWER" button 전원이 들어 오지 않음 | Mains cable is not connected to a suitable mains wall outlet. 전원 케이블 Mains cable has not been firmly inserted into wall power socket and the power supply mains socket. Mains cable is defective. The interconnection cable between PHO-701ps and PHO-701 has not been installed correctly or it is defective. 파워서플라이 연결 불량. Unit fuse or one of the appliances is defective. 퓨즈 불량 | Connect to a functioning socket using a suitable mains voltage. 전원케이블 확인 Check the power cable. If necessary, exchange it with a suitable mains cable and push its plug firmly into wall socket and the device's power socket. Check this cable connection. 파워 서플라이 연결 확인 Contact your dealer. 퓨즈 교체 |
| No sound on both channels although the unit is ready for use (the LED (1) is lit). 양쪽 채널에서 소리가 안 남 | The record player is giving no signal. 턴테이블 문제 & 연결 불량 The output of the PHO-701 is not connected or is wrongly connected to the selected input channel terminal of the amplifier. Wrong input channel has been selected at the amplifier. 입력 선택 오류 Volume setting is too low at the amplifier. 볼륨이 낮음 The amplifier is muted (MUTE function). 뮤트 작동 중 | Check the record player (in combination with a different Phono amplifier and stereo amplifier, if possible). 턴테이블 연결 확인 Correct the connection of the PHO-701 to the amplifier. 앰프 연결 확인 Select the input that your PHO-701 is connected to. 입력 선택 확인 Cautiously increase the volume setting. 볼륨 확인 Deactivate mute function. 뮤트 확인 |
| Poor sound quality 음질이 안 좋음. | The cable connections are not tight, the connectors are dirty or a cable is defective. 케이블 연결 불량 The type of pickup system has not been set correctly at the PHO-701 switch "MC/MM" (11). 픽업 세팅 불량 The PHO-701 has been connected to a phono input of the amplifier. 입력 오류 | Check the cables and cable connections. 연결 케이블 상태 확인 Correct this setting. 픽업 세팅 수정 Use this Phono preamplifier only at line level inputs. 앰프의 라인레벨 입력단 연결 |
| Humming low frequency noise is audible, even as no audio source is playing back. 험 소리 심함 | See section "Net frequency noise" in the chapter "Tips". 접지단자 및 그라운드 연결 불량 | See section "Net frequency noise" in the chapter "Tips". Ground 접지단자 연결을 확실히 하십시오. |

TECHNICAL SPECIFICATIONS 제품 사양

| | |
|---------------------------|---|
| RIAA tolerance/deviation: | 10 Hz - 20 kHz (max. 0.5dB) |
| Output Impedance: | 250 Ω |
| Input Sensitivity (MM): | 58 mV |
| Input Sensitivity (MC): | 6.8 mV |
| Input Impedance (MM): | 47 k Ω |
| Input Impedance (MC): | 100 Ω |
| Distortion: | < 0.05% |
| Signal-Noise-Ratio: | MM > 81 dB MC > 69 dB |
| Power Supply: | 220V, 60Hz (15 watts max.) |
| Inputs: | 1x RCA stereo, 1x DIN (DC IN PHO-701) |
| Outputs: | 1x RCA stereo, 1x DIN (DC OUT PHO-701ps), 1x USB |
| Tubes: | 1 x 12AU7 |
| Dimensions (W x H x D): | 130 x 82 x 225 mm (2x) |
| Weight: | 1.5 kg (PHO-701ps), 1.2 kg (PHO-701) |
| Colour front plate: | black / silver |

Vincent



Please keep the receipt, store it together with this manual. The receipt is your proof for the beginning of the warranty period. Note the serial number in the following box, you can read it from the rear side of the device.

Serial number:

www.vincent-tac.de

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서울 서초구 서초동 1545-3 (계산빌딩2층) www.daawoong.com T. 02-597-4100

[부록]

PHO-701 을 이용한 PC 에 디지털 녹음 방법

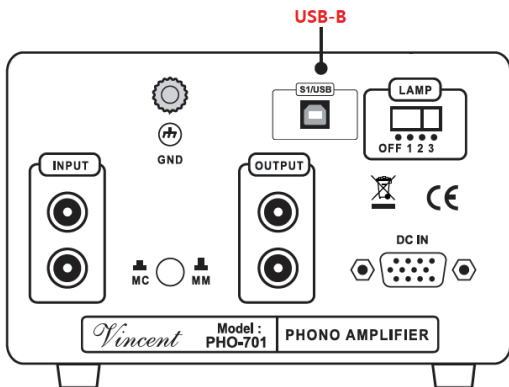
1. Audacity 소프트웨어를 다운로드 하고 설치하십시오.

www.audacityteam.org/download/windows/ 에서 다운로드하고 PC 에 설치 하십시오.

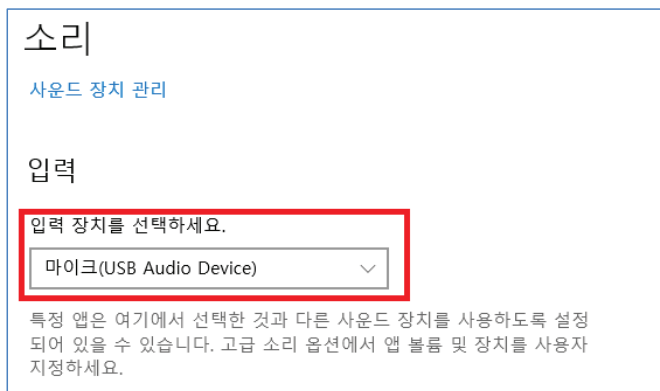


2. PHO-701 과 PC 연결하십시오.

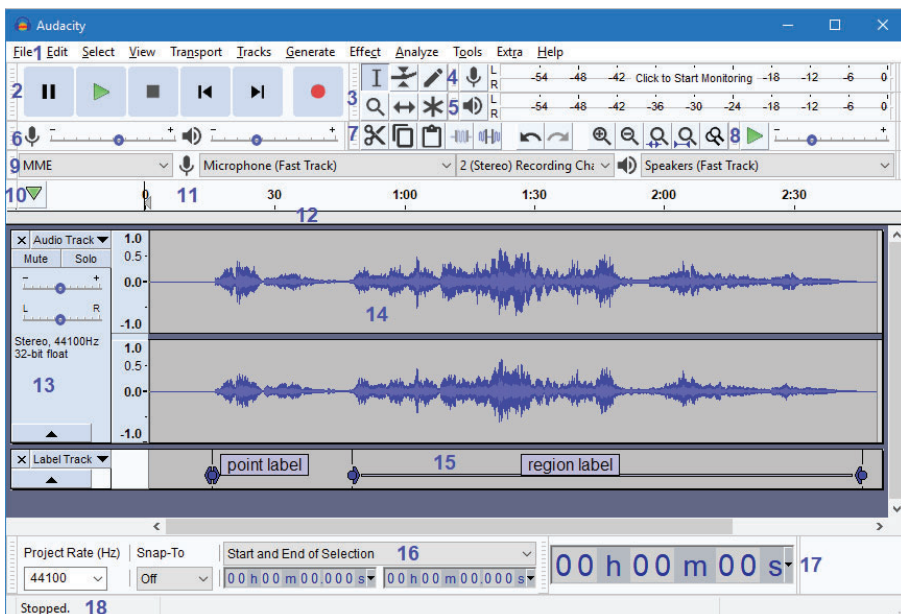
USB 케이블로 PHO-701 후면의 USB-B 단자와 PC 의 USB 단자를 연결하십시오.



3. 윈도우 환경설정에서 사운드 장치를 USB AUDIO DEVICE 로 선택하십시오.



4. AUDACITY 프로그램을 실행하시고, 다양한 메뉴를 활용하여 사용하십시오.



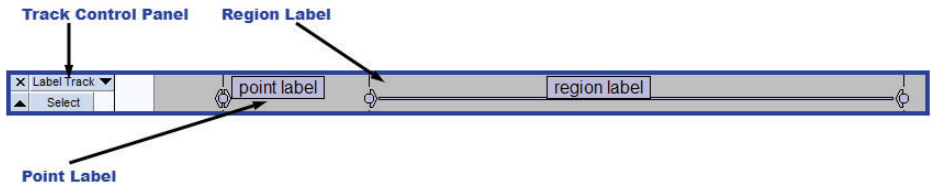
Guide to the Audacity Project Window

- 1 [Menu Bar](#)
- 2 [Transport Toolbar](#)
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Label Tracks (레이블 트랙)

From Audacity Development Manual (AUDACITY 매뉴얼에서)

A **Label Track** is an additional track that can be created in your project. The labels in the label track can be used to reference points or regions in the project's audio tracks but the label track itself does not contain audio. 레이블트랙은 추가 가능한 트랙입니다. 보통 여러 트랙 중에서 분리할 지점, 참고할 지점 등을 표시하기 위해 사용되며, 그 자체는 오디오신호를 갖지 않는 공백 트랙입니다.



기타 사항은 AUDACITY 온라인 매뉴얼을 이용하십시오.