

# DENON

**USB MIDI / AUDIO INTERFACE & CONTROLLER**

**USB MIDI / AUDIO インタフェース & コントローラ**

# DN-HC4500

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**OPERATING INSTRUCTIONS**

**BEDIENUNGSANLEITUNG**

**MODE D'EMPLOI**

**INSTRUCCIONES DE FUNCIONAMIENTO**

**取扱説明書**



**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**



**CAUTION:**

**TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**IMPORTANT TO SAFETY**

**WARNING:**

**To reduce the risk of fire and electric shock, this apparatus should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.**

**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 the rear cover**

In order to prevent electric shock, do not open the top cover. If problems occur, contact your DENON DEALER.

**3. Do not place anything inside**

Do not place metal objects or spill liquid inside the system. Electric shock or malfunction may result.

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

Model No. DN-HC4500

Serial No. \_\_\_\_\_

**CAUTION:**

**USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. THIS PRODUCT SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

**IMPORTANT SAFETY INSTRUCTIONS**

**READ BEFORE OPERATING EQUIPMENT**

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.




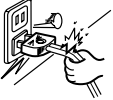


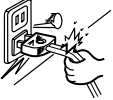


1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacture's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



**Additional Safety Information!**

15. Marked terminals are HAZARDOUS LIVE and that the external wiring connected to those terminal requires installation by an instructed person or the use of ready-made leads or cords.

**NOTE ON USE / HINWEISE ZUM GEBRAUCH /  
OBSERVATIONS RELATIVES A L'UTILISATION / NOTE SULL'USO /  
NOTAS SOBRE EL USO / ALVORENS TE GEBRUIKEN / OBSERVERA**

 <ul style="list-style-type: none"> <li>• Avoid high temperatures. Allow for sufficient heat dispersion when installed in a rack.</li> <li>• Vermeiden Sie hohe Temperaturen. Beachten Sie, daß eine ausreichend Luftzirkulation gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird.</li> <li>• Eviter des températures élevées. Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.</li> <li>• Evitate di esporre l'unità a temperature alte. Assicuratevi che ci sia un'adeguata dispersione del calore quando installate l'unità in un mobile per componenti audio.</li> <li>• Evite altas temperaturas. Permite la suficiente dispersión del calor cuando está instalado en la consola.</li> <li>• Vermijd hoge temperaturen. Zorg voor een degelijke hitteafvoer indien het apparaat op een rek wordt geplaatst.</li> <li>• Undvik höga temperaturer. Se till att det finns möjlighet till god värmeavledning vid montering i ett rack.</li> </ul>	 <ul style="list-style-type: none"> <li>• Keep the apparatus free from moisture, water, and dust.</li> <li>• Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.</li> <li>• Protéger l'appareil contre l'humidité, l'eau et la poussière.</li> <li>• Tenete l'unità lontana dall'umidità, dall'acqua e dalla polvere.</li> <li>• Mantenga el equipo libre de humedad, agua y polvo.</li> <li>• Laat geen vochtigheid, water of stof in het apparaat binnendringen.</li> <li>• Utsätt inte apparaten för fukt, vatten och damm.</li> </ul>	 <ul style="list-style-type: none"> <li>• Do not let foreign objects in the set.</li> <li>• Keine fremden Gegenstände in das Gerät kommen lassen.</li> <li>• Ne pas laisser des objets étrangers dans l'appareil.</li> <li>• E' importante che nessun oggetto è inserito all'interno dell'unità.</li> <li>• No deje objetos extraños dentro del equipo.</li> <li>• Laat geen vreemde voorwerpen in dit apparaat vallen.</li> <li>• Se till att främmande föremål inte tränger in i apparaten.</li> </ul>
 <ul style="list-style-type: none"> <li>• Handle the power cord carefully. Hold the plug when unplugging the cord.</li> <li>• Gehen Sie vorsichtig mit dem Netzkabel um. Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.</li> <li>• Manipuler le cordon d'alimentation avec précaution. Tenir la prise lors du débranchement du cordon.</li> <li>• Maneggiare il filo di alimentazione con cura. Agite per la spina quando scollegate il cavo dalla presa.</li> <li>• Maneje el cordón de energía con cuidado. Sostenga el enchufe cuando desconecte el cordón de energía.</li> <li>• Hanteer het netsnoer voorzichtig. Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeld.</li> <li>• Hantera nätkabeln varsamt. Håll i kabeln när den kopplas från el-uttaget.</li> </ul>	 <ul style="list-style-type: none"> <li>• Unplug the power cord when not using the apparatus for long periods of time.</li> <li>• Wenn das Gerät eine längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker.</li> <li>• Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.</li> <li>• Disinnestate il filo di alimentazione quando avete l'intenzione di non usare il filo di alimentazione per un lungo periodo di tempo.</li> <li>• Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.</li> <li>• Neem altijd het netsnoer uit het stopcontact wanneer het apparaat gedurende een lange periode niet wordt gebruikt.</li> <li>• Koppla ur nätkabeln om apparaten inte kommer att användas i lång tid.</li> </ul>	 <ul style="list-style-type: none"> <li>• Do not let insecticides, benzene, and thinner come in contact with the set.</li> <li>• Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen.</li> <li>• Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.</li> <li>• Assicuratevi che l'unità non venga in contatto con insetticidi, benzolo o solventi.</li> <li>• No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.</li> <li>• Laat geen insektenverdelgende middelen, benzine of ververdunner met dit apparaat in contact komen.</li> <li>• Se till att inte insektsmedel på spraybruk, bensin och thinner kommer i kontakt med apparatens hölje.</li> </ul>
 <ul style="list-style-type: none"> <li>• Handle the power cord carefully. Hold the plug when unplugging the cord.</li> <li>• Gehen Sie vorsichtig mit dem Netzkabel um. Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.</li> <li>• Manipuler le cordon d'alimentation avec précaution. Tenir la prise lors du débranchement du cordon.</li> <li>• Maneggiare il filo di alimentazione con cura. Agite per la spina quando scollegate il cavo dalla presa.</li> <li>• Maneje el cordón de energía con cuidado. Sostenga el enchufe cuando desconecte el cordón de energía.</li> <li>• Hanteer het netsnoer voorzichtig. Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeld.</li> <li>• Hantera nätkabeln varsamt. Håll i kabeln när den kopplas från el-uttaget.</li> </ul>	 <p>* (For apparatuses with ventilation holes)</p> <ul style="list-style-type: none"> <li>• Do not obstruct the ventilation holes.</li> <li>• Die Belüftungsöffnungen dürfen nicht verdeckt werden.</li> <li>• Ne pas obstruer les trous d'aération.</li> <li>• Non coprite i fori di ventilazione.</li> <li>• No obstruya los orificios de ventilación.</li> <li>• De ventilatieopeningen mogen niet worden geblokkeerd.</li> <li>• Tåpp inte till ventilationsöppningarna.</li> </ul>	 <ul style="list-style-type: none"> <li>• Never disassemble or modify the apparatus in any way.</li> <li>• Versuchen Sie niemals das Gerät auseinander zu nehmen oder auf jegliche Art zu verändern.</li> <li>• Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.</li> <li>• Non smontate mai, né modificate l'unità in nessun modo.</li> <li>• Nunca desarme o modifique el equipo de ninguna manera.</li> <li>• Nooit dit apparaat demonteren of op andere wijze modificeren.</li> <li>• Ta inte isär apparaten och försök inte bygga om den.</li> </ul>

**CAUTION:**

- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Attention should be drawn to the environmental aspects of battery disposal.
- Do not expose the set to dripping or splashing fluids.
- No objects filled with liquids, such as vases, shall be placed on the apparatus.

**ACHTUNG:**

- Die Belüftung sollte auf keinen Fall durch das Abdecken der Belüftungsöffnungen durch Gegenstände wie beispielsweise Zeitungen, Tischtücher, Vorhänge o. Ä. behindert werden.
- Auf dem Gerät sollten keinerlei direkten Feuerquellen wie beispielsweise angezündete Kerzen aufgestellt werden.
- Bitte beachten Sie bei der Entsorgung der Batterien die geltenden Umweltbestimmungen.
- Das Gerät sollte keinerlei Flüssigkeit, also keinem Tropfen oder Spritzen ausgesetzt werden.
- Auf dem Gerät sollten keinerlei mit Flüssigkeit gefüllten Behälter wie beispielsweise Vasen aufgestellt werden.

**ATTENTION:**

- La ventilation ne doit pas être gênée en recouvrant les ouvertures de la ventilation avec des objets tels que journaux, rideaux, tissus, etc.
- Aucune flamme nue, par exemple une bougie, ne doit être placée sur l'appareil.
- Veuillez à respecter l'environnement lorsque vous jetez les piles usagées.
- L'appareil ne doit pas être exposé à l'eau ou à l'humidité.
- Aucun objet contenant du liquide, par exemple un vase, ne doit être placé sur l'appareil.

**PRECAUZIONI:**

- Le aperture di ventilazione non devono essere ostruite coprendole con oggetti, quali giornali, tovaglie, tende e così via.
- Non posizionare sull'apparechiatura fiamme libere, come ad esempio le candele accese.

- Prestare attenzione agli aspetti legati alla tutela dell'ambiente quando si smaltisce la batteria.
- L'apparechiatura non deve essere esposta a gocciolii o spruzzi.
- Non posizionare sull'apparechiatura nessun oggetto contenete liquidi, come ad esempio i vasi.

**PRECAUCIÓN:**

- La ventilación no debe quedar obstruida por hacerse cubierto las aperturas con objetos como periódicos, manteles, cortinas, etc.
- No debe colocarse sobre el aparato ninguna fuente inflamable sin protección, como velas encendidas.
- A la hora de deshacerse de las pilas, respete la normativa para el cuidado del medio ambiente.
- No se expondrá el aparato al goteo o salpicaduras cuando se utilice.
- No se colocarán sobre el aparato objetos llenos de líquido, como jarros.

**WAARSCHUWING:**

- De ventilatie mag niet worden belemmerd door de ventilatieopeningen af te dekken met bijvoorbeeld kranten, een tafelkleed, gordijnen, enz.
- Plaats geen open vlammen, bijvoorbeeld een brandende kaars, op het apparaat.
- Houd u steeds aan de milieuvoorschriften wanneer u gebruikte batterijen wegdoet.
- Stel het apparaat niet bloot aan druppels of spatten.
- Plaats geen voorwerpen gevuld met water, bijvoorbeeld een vaas, op het apparaat.

**OBSERVERA:**

- Ventilationen bör inte förhindras genom att täcka för ventilationsöppningarna med föremål såsom tidningar, bordsdukar, gardiner osv.
- Inga blottade brandkällor, såsom tända ljus, bör placeras på apparaten.
- Tänk på miljöspekterna när du bortskaffar batteri.
- Apparaten får inte utsättas för vätska.
- Inga objekt med vätskor, såsom vaser, får placeras på apparaten.

**DECLARATION OF CONFORMITY**

We declare under our sole responsibility that this product, to which this declaration relates, is in conformity with the following standards: EN60065, EN55013, EN55020, EN61000-3-2 and EN61000-3-3. Following the provisions of 73/23/EEC, 2004/108/EC and 93/68/EEC Directive.

**ÜBEREINSTIMMUNGSKLÄRUNG**

Wir erklären unter unserer Verantwortung, daß dieses Produkt, auf das sich diese Erklärung bezieht, den folgenden Standards entspricht: EN60065, EN55013, EN55020, EN61000-3-2 und EN61000-3-3. Entspricht den Verordnungen der Direktive 73/23/EEC, 2004/108/EC und 93/68/EEC.

**DECLARATION DE CONFORMITE**

Nous déclarons sous notre seule responsabilité que l'appareil, auquel se réfère cette déclaration, est conforme aux standards suivants: EN60065, EN55013, EN55020, EN61000-3-2 et EN61000-3-3. D'après les dispositions de la Directive 73/23/EEC, 2004/108/EC et 93/68/EEC.

**DICHIARAZIONE DI CONFORMITÀ**

Dichiariamo con piena responsabilità che questo prodotto, al quale la nostra dichiarazione si riferisce, è conforme alle seguenti normative: EN60065, EN55013, EN55020, EN61000-3-2 e EN61000-3-3. In conformità con le condizioni delle direttive 73/23/EEC, 2004/108/EC e 93/68/EEC. QUESTO PRODOTTO E' CONFORME AL D. M. 28/08/95 N. 548

**DECLARACIÓN DE CONFORMIDAD**

Declaramos bajo nuestra exclusiva responsabilidad que este producto al que hace referencia esta declaración, está conforme con los siguientes estándares: EN60065, EN55013, EN55020, EN61000-3-2 y EN61000-3-3. Siguiendo las provisiones de las Directivas 73/23/EEC, 2004/108/EC y 93/68/EEC.

**EENVORMIGHEIDSVKLAARING**

Wij verklaren uitsluitend op onze verantwoordelijkheid dat dit product, waarop deze verklaring betrekking heeft, in overeenstemming is met de volgende normen: EN60065, EN55013, EN55020, EN61000-3-2 en EN61000-3-3. Volgens de bepalingen van de Richtlijnen 73/23/EEC, 2004/108/EC en 93/68/EEC.

**ÖVERENSSTÄMMELSEINTYG**

Härmed intygas helt på eget ansvar att denna produkt, vilken detta intyg avser, uppfyller följande standarder: EN60065, EN55013, EN55020, EN61000-3-2 och EN61000-3-3. Enligt stadgarna i direktiv 73/23/EEC, 2004/108/EC och 93/68/EEC.

**A NOTE ABOUT RECYCLING:**

This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with the local recycling regulations.

When discarding the unit, comply with local rules or regulations.

Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning chemical waste.

This product and the accessories packed together constitute the applicable product according to the WEEE directive except batteries.

**HINWEIS ZUM RECYCLING:**

Das Verpackungsmaterial dieses Produktes ist für zum Recyceln geeignet und kann wieder verwendet werden. Bitte entsorgen Sie alle Materialien entsprechend der örtlichen Recycling-Vorschriften.

Beachten Sie bei der Entsorgung des Gerätes die örtlichen Vorschriften und Bestimmungen.

Die Batterien dürfen nicht in den Hausmüll geworfen oder verbrannt werden; bitte geben Sie die Batterien gemäß örtlichen Bestimmungen an den Sammelstellen oder Sondermüllplätzen ab.

Dieses Produkt zusammen mit den Zubehörteilen ist das geltende Produkt der WEEE-Direktive, davon ausgenommen sind die Batterien.

**UNE REMARQUE CONCERNANT LE RECYCLAGE:**

Les matériaux d'emballage de ce produit sont recyclables et peuvent être réutilisés. Veuillez disposer de tout matériau conformément aux règlements de recyclage locaux.

Lorsque vous mettez cet appareil au rebut, respectez les lois ou réglementations locales.

Les piles ne doivent jamais être jetées ou incinérées, mais mises au rebut conformément aux règlements locaux concernant les déchets chimiques.

Ce produit et les accessoires emballés ensemble sont des produits conformes à la directive DEEE sauf pour les piles.

**NOTA RELATIVA AL RICICLAGGIO:**

I materiali di imballaggio di questo prodotto sono riutilizzabili e riciclabili. Smaltire i materiali conformemente alle normative locali sul riciclaggio.

Per smaltire l'unità, osservare la normativa in vigore nel luogo di utilizzo.

Non gettare le batterie, né incenerirle, ma smaltirle conformemente alla normativa locale sui rifiuti chimici.

Questo prodotto e gli accessori inclusi nell'imballaggio sono applicabili alla direttiva RAEE, ad eccezione delle batterie.

**ACERCA DEL RECICLAJE:**

Los materiales de embalaje de este producto son reciclables y se pueden volver a utilizar. Disponga de estos materiales siguiendo los reglamentos de reciclaje de su localidad.

Cuando se deshaga de la unidad, cumpla con las reglas o reglamentos locales.

Las pilas nunca deberán tirarse ni incinerarse. Deberá disponer de ellas siguiendo los reglamentos de su localidad relacionados con los desperdicios químicos.

Este producto junto con los accesorios empaquetados es el producto aplicable a la directiva RAEE excepto pilas.

**EEN AANTEKENING WAT BETREFT HET RECYCLEREN:**

Het inpakmateriaal van dit product is recycleerbaar en kan opnieuw gebruikt worden. Er wordt verzocht om zich van elk afvalmateriaal te ontdoen volgens de plaatselijke voorschriften.

Volg voor het wegdoen van de speler de voorschriften voor de verwijdering van wit- en bruingoed op.

Batterijen mogen nooit worden weggegooid of verbrand, maar moeten volgens de plaatselijke voorschriften betreffende chemisch afval worden verwijderd.

Op dit product en de meegeleverde accessoires, m.u.v. de batterijen is de richtlijn voor afgedankte elektrische en elektronische apparaten (WEEE) van toepassing.

**EN KOMMENTAR OM ÅTERTVINNING:**

Produktens emballage är återvinningsbart och kan återanvändas. Kassera det enligt lokala återvinningsbestämmelser.

När du kasserar enheten ska du göra det i överensstämmelse med lokala regler och bestämmelser.

Batterier får absolut inte kastas i soporna eller brännas. Kassera dem enligt lokala bestämmelser för kemiskt avfall.

Denna apparat och de tillbehör som levereras med den är de som uppfyller gällande WEEE-direktiv, med undantag av batterierna.

**CAUTION:**

To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet.

The mains plug is used to completely interrupt the power supply to the unit and must be within easy access by the user.

**VORSICHT:**

Um dieses Gerät vollständig von der Stromversorgung abzutrennen, trennen Sie bitte den Netzstecker von der Wandsteckdose ab.

Die Hauptstecker werden verwendet, um die Stromversorgung zum Gerät völlig zu unterbrechen; er muss für den Benutzer gut und einfach zu erreichen sein.

**PRECAUTION:**

Pour déconnecter complètement ce produit du courant secteur, débranchez la prise de la prise murale.

La prise secteur est utilisée pour couper complètement l'alimentation de l'appareil et l'utilisateur doit pouvoir y accéder facilement.

**ATTENZIONE:**

Per scollegare definitivamente questo prodotto dalla rete di alimentazione elettrica, togliere la spina dalla relativa presa.

La spina di rete viene utilizzata per interrompere completamente l'alimentazione all'unità e deve essere facilmente accessibile all'utente.

**PRECAUCIÓN:**

Para desconectar completamente este producto de la alimentación eléctrica, desconecte el enchufe del enchufe de la pared.

El enchufe de la alimentación se utiliza para interrumpir por completo el suministro de alimentación a la unidad y debe de encontrarse en un lugar al que el usuario tenga fácil acceso.

**VOORZICHTIGHEID:**

Om de voeding van dit product volledig te onderbreken moet de stekker uit het stopcontact worden getrokken.

De netstekker wordt gebruikt om de stroomtoevoer naar het toestel volledig te onderbreken en moet voor de gebruiker gemakkelijk bereikbaar zijn.

**FÖRSIKTIGHETSMÅTT:**

Koppla loss stickproppen från eluttaget för att helt skilja produkten från nätet.

Stickproppen används för att helt bryta strömförsörjningen till apparaten, och den måste vara lättillgänglig för användaren.

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### ACCESSORIES

Check that the following parts are included in addition to the main unit:

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## 1 FEATURES

### ■ Internal 24-Bit Processing & USB Audio

Unlike most DJ midi controllers that are only USB bus powered, the DN-HC4500 encompasses its own internal power supply to achieve the highest electrical specifications, resulting in best possible performance. The DN-HC4500 features industry leading Burr Brown (a product of TI) 24 bit DAC processing for superior output audio fidelity. USB Audio interface includes 2-Channel Stereo output pair, 44.1/48/96 kHz sampling ranges and low latency ASIO / OSX Core Audio support.

### ■ BU4500 Drive Support

The sold separately and optional BU4500 dual CD/MP3 player allows DJ's to continue playing from their CD collection (whenever required) while still controlling your favorite DJ software. The BU4500 can also be seen and used as a "backup" system without having to rewire a thing in the case of computer failure. Just select the SOURCE button on either deck to switch off over to CD playback seamlessly. This clever combo system makes the DN-HC4500 the most powerful and flexible DJ hardware controller on the planet. In addition, current DENON DN-D4500 / DN-D4000 owners are welcome to enjoy all these benefits by purchasing the DN-HC4500 and upgrading your system to be computer performance ready.

### ■ Multi Functional Touch Sensitive Jog Disc

The 71mm JOG Disc is constructed with an ultra high-resolution pulse and touch sensor to accurately reproduce the most subtle or swift scratching movements made by the human hand. Of course, the Jog Disc can be mapped to perform other vital functions too such as, pitch bending, scanning, file searching and dry/wet control for effects.

### ■ Vibrant Tube Display w/ 2-line Character Text Support

Another unique quality of the DN-HC4500 is its informative & animated tube display. The display offers two lines of character information to quickly navigate through your files, crates, folders and confirms you loaded the correct file without having to look up at your monitor. A visual 32-position Marker Point indicator follows your hand movements at lighting speeds without drift. Other indicators include Looping, Hot Starts, BPM info, Elapsed/Remain Time, MP3/WAV file types, and other useable indicators.

### ■ Highly Responsive Soft Rubber Buttons, Switches & Knobs

- 5 easily accessible function keys at top of each deck
- 45mm Pitch Sliders capable of deep resolution or wide pitch ranges
- Vibrant CUE/PLAY button illumination
- 2 level illumination of certain buttons
- Multi color illumination of certain buttons for layering functions
- Multi color LED' for layering functions
- Pitch Bend buttons
- Parameter Knob, Range, Sync, Playlist, Back, Fast Search and other keys are available to configure accordingly

### ■ Traditional & Intuitive Dual CD Player Style Layout

### ■ High Speed USB 2.0 Interface

### ■ Fader Start

Supports traditional Fader Start, including all DENON Mixers

### ■ X-Control

When the DN-HC4500 is combined with DENON's DN-X500/DN-X900 mixers, the crossfader of these mixers can actually be mapped to crossfade your software players by one simple 3.5mm stereo mini cable

### ■ Recessed Side Panel for Easy Connections

### ■ Versatile Rackmount and Tabletop design

### ■ User Adjustable Presets

### ■ Software Upgradeable by USB

From time to time DENON DJ will make subtle improvements to current features or add new compelling ones based on valuable user feedback. These new Plug Ins are always free and made available via our [www.denondj.com](http://www.denondj.com) website.

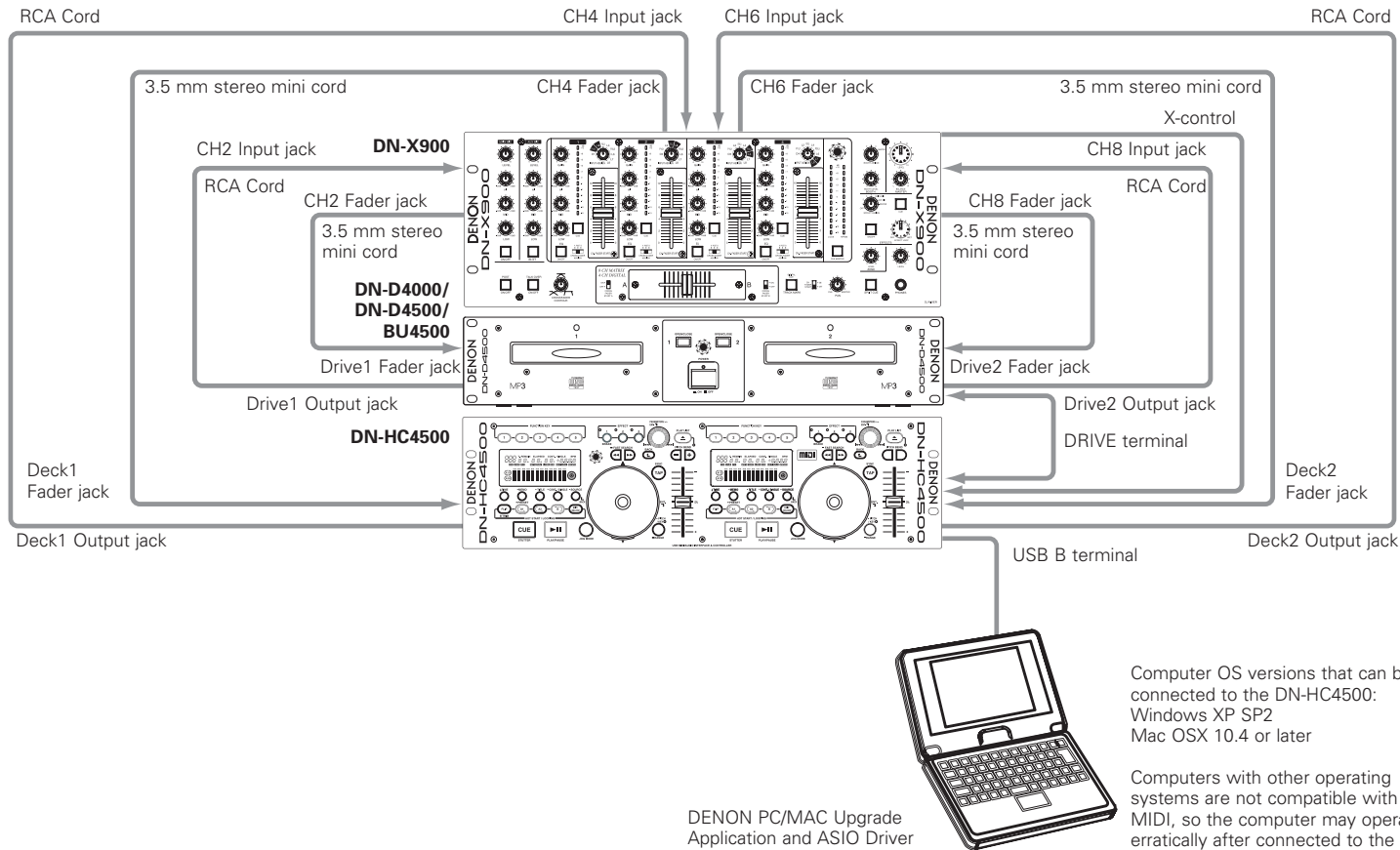
## 2 CONNECTIONS

### CONNECTIONS

1. Turn off the POWER switch.
2. Connect the RCA pin cords to the inputs on your mixer.

#### CAUTION:

- Be sure to use the supplied control cord. Using another type of cable may result in damage.
- Be sure the power is off when connecting the control cord. Otherwise the units may not work properly.

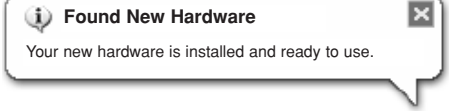


### Connection to a PC

- The DN-HC4500 is a plug-and-play device. This means that when the DN-HC4500 is first connected to your computer, the driver is installed automatically.
- To connect the DN-HC4500 and a PC via a usable USB port, use the included USB cable.
- When connected, the display below appears at the bottom right of the PC's screen.



Once installation is completed, the message "Your new hardware is installed and ready to use." is displayed, as shown below.



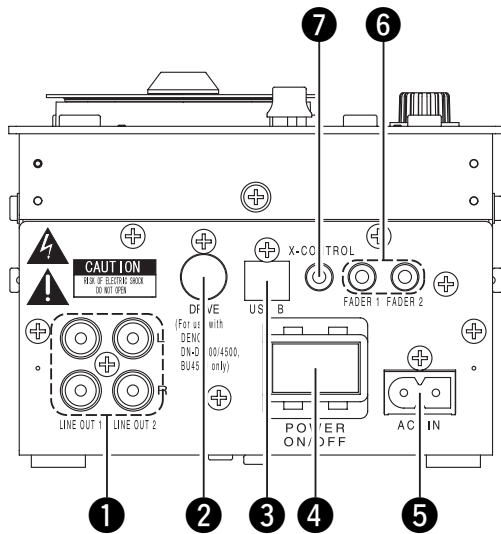
Installation is now complete. The DN-HC4500 is now usable.

### Connection to a Macintosh computer

- The DN-HC4500 is plug-and-play device based on the Macintosh OS, and is immediately ready for use when connected.
- To connect the DN-HC4500 and Macintosh computer via a usable USB port, use the included USB cable.

### 3 PART NAMES AND FUNCTION

#### (1) Side Panel



**1 Analog out put terminal (LINE OUT)**

- This is unbalanced RCA output terminals.
- Audio signals outputs.

**2 DRIVE terminal**

- Connect the DN-D4000/D4500/BU4500 drive unit.
- For instructions on operating the DN-D4000/D4500/BU4500, refer to the respective model's operating instructions.

**3 USB B terminal**

- Connect to a computer.
- Sends the USB MIDI and HID commands from the DN-HC4500.
- Sends the USB audio signals from a PC.

**4 POWER button**

- Push this button to turn power on and off.

**5 AC Inlet terminal**

- Inlet the power cord's plug into DN-HC4500's AC inlet terminal.

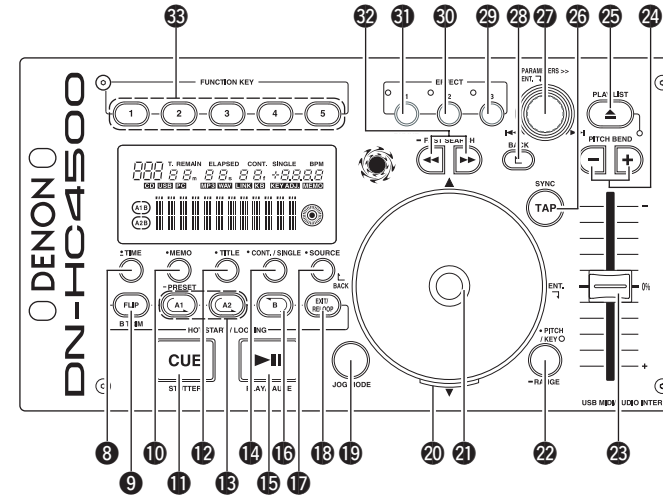
**6 Fader start terminals**

- Use this when your mixer has the Fader Start function.

**7 X-CONROL output terminal**

- Use this when connected to a DENON DN-X900 or DN-X500 mixer that offers X-Control.
- With the DN-HC4500 it is possible to convert the input fader position into a MIDI signal and send it from the USB terminal.

#### (2) Front panel



**CAUTION:**  
 Note that there are many buttons working two different function selected by short time pushing or long pushing (1second or more). The "•" mark indicates short time push function and "—" mark indicates long time push function.

**8 • TIME, — Total**

**[When PCDJ connected]**

Refer to the PCDJ's manual.

**[When DN-D4500 connected]**

• **TIME:**

When this button is pressed, the time indicator switches between "ELAPSED" (elapsed time), "REMAIN" (remaining time).

• **Total:**

When this button is pushed for more 1 second, you can display the total time.

**9 FLIP/B TRIM**

**[When PCDJ connected]**

Refer to the PCDJ's manual.

**[When DN-D4500 connected]**

- Push this button to switch between the loop mode/hot start mode and stutter mode.

- After setting the B point, the B TRIM MODE can be selected.

**10 • MEMO, — PRESET**

**[When PCDJ connected]**

Refer to the PCDJ's manual.

**[When DN-D4500 connected]**

• **MEMO:**

The MEMO mode starts when this button is pushed once in the Cue/Pause mode.

• **PRESET:**

When this button is pushed for more than 1 sec, the PRESET mode menu is displayed.

**11 CUE/STUTTER**

**[When PCDJ connected],**

**[When DN-D4500 connected]**

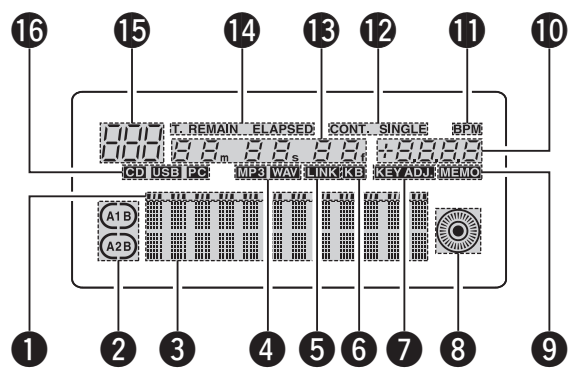
- Pushing this button in play mode will force the file back to the position which playback started.

- In Cue mode, by pushing the CUE button makes a Stutter sound from the Cue point. This is called Stutter play. (Stutter)

- 12 TITLE**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• **CD TEXT:**  
CD text is displayed.  
• **MP3:**  
The ID3 tag information switches each time the button is pressed.
- 13 A1, A2**  
**[When PCDJ connected],**  
**[When DN-D4500 connected]**  
• Using this button you can create starting point for Hot Start, Seamless Loop and Stutter.
- 14 • CONT./SINGLE, – RELAY**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• **CONT./SINGLE:**  
A short tap of this button will toggle between 3 possible END modes for playback CONT. (continue: plays all files) SINGLE (stops playing and ReCUE's back to your original set point), PLAYLOCK.  
• **RELAY:**  
When this button is pushed for more than 1 sec, you can turn on and off RELAY PLAY mode.
- 15 PLAY/PAUSE**  
**[When PCDJ connected],**  
**[When DN-D4500 connected]**  
• This button will start or pause playback.
- 16 B**  
**[When PCDJ connected],**  
**[When DN-D4500 connected]**  
• Use this to set the B point for to create a Seamless Loop after the A point has been set.
- 17 SOURCE**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• Press this button to select the source, PC or CD.
- 18 EXIT/RELOOP**  
**[When PCDJ connected],**  
**[When DN-D4500 connected]**  
• Use this to exit or return back again to Seamless loop playback.  
You can add variety to looping with this function.
- 19 JOG MODE**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
Select from Bend mode or Manual Frame Search mode.
- 20 JOG indicator**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• This vibrant blue bar provides JOG modes at a glance such as, Pitch Bend and Frame Search.
- 21 JOG disc**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• Use this vinyl JOG for manual search, Pitch Bend operations.
- 22 • PITCH/KEY, – RANGE**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• **PITCH/KEY:**  
The display toggles as follows each time the key is pressed:  
Pitch on → Key Adjust → both off  
• **RANGE:**  
Push this button for more than 1 sec to select the pitch range.
- 23 Pitch Slider**  
**[When PCDJ connected],**  
**[When DN-D4500 connected]**  
• Use this slider to adjust playing speed.  
• The playing speed decreases when sliding upwards and increases downwards.
- 24 PITCH BEND±**  
**[When PCDJ connected],**  
**[When DN-D4500 connected]**  
• While pushing these buttons will change main playing speed temporarily.  
• When release button, playing speed returns to the previous speed.
- 25 PLAY LIST**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• Push this button to open and close the disc holder.  
• The disc holder will not open during playback.  
Stop playback before pushing this button.
- 26 TAP**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• Does not function.
- 27 PARAMETERS Knob**  
**[When PCDJ connected],**  
**[When DN-D4500 connected]**  
• **Turn:**  
Select the Track/File or preset parameters.  
• **Press:**  
Set the selected parameters.
- 28 BACK**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• Does not function.
- 29 EFFECT3**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• Does not function.
- 30 EFFECT2**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• Does not function.
- 31 EFFECT1**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• Turns the Brake mode ON or OFF.
- 32 FAST SEARCH (◀◀/▶▶) QUICK JUMP**  
**[When PCDJ connected],**  
**[When DN-D4500 connected]**  
• **QUICK JUMP:**  
When one of these buttons is tapped shortly, the playback position jumps in the reverse (◀◀) or forward (▶▶) direction.  
• **FAST SEARCH:**  
When one of these buttons is pressed and held in, the disc is fast-searched in the reverse (◀◀) or forward (▶▶) direction.
- 33 FUNCTION**  
**[When PCDJ connected]**  
Refer to the PCDJ's manual.  
**[When DN-D4500 connected]**  
• Does not function.



**(3) Display**



- 1 Play Position indicators**
  - The white position indicator lights during normal playback, and the position in the track is indicated by the elapsed time.
  - If the time to the end of the track is shorter than the specified time, the playback position indicator flashes according to the track's remaining time (EOM) to indicate the end of the track.
- 2 Loop mode indicators**
  - The DN-HC4500 has two loop mode indicators, A and B. The A and B indicators light when A and B are set.
- 3 Character display**
  - This block displays various operational information, text message, etc.
- 4 File data indicators**
  - These indicate the type of file being played.
- 5 External device connection confirmation indicator**
  - This lights when MIDI signals have been sent or received between the DN-HC4500 and an external device.
- 6 Keyboard indicator**
  - This lights when the light command is received from a computer.

- 7 KEY ADJ. indicator**
  - "KEY ADJ." lights when in the key adjust mode.
- 8 Visual Marker**
  - The playback position is indicated according to the playback status of the different decks.
- 9 MEMO indicator**
  - The "MEMO" indicator lights when there is memo data stored for the track that is currently playing or set to standby.
- 10 Pitch indicator**
  - This indicates the playing speed (pitch).
- 11 BPM indicator**
  - This lights when the BPM is displayed in the pitch display section.
- 12 Play mode indicators**
  - These indicate the play mode.
    - CONT.:**  
Once playback of a track finishes, the next track is played.
    - SINGLE:**  
Playback stops once the end of that track is reached.
- 13 Minute, second and frame displays**
  - This indicates the position currently playing or at which the standby mode is set.

- 14 Time mode indicators**
  - The display switches as follows when the Time button is pressed:
    - ELAPSED:**  
The elapsed playing time from the beginning of the track is displayed.
    - REMAIN:**  
The track's remaining time is displayed.
    - T.ELAPSED:**  
The playing time from the first track on the disc is displayed.
    - T.REMAIN:**  
The remaining time of all the tracks on the disc is displayed.

- 15 Track indicator**
  - This indicates the number of the currently playing track.
- 16 Connection indicators**
  - These indicate the connected devices controlled by the DN-HC4500.
    - PC:**  
The DN-HC4500 is controlling the DJ software on a PC/MAC.
    - CD:**  
The DN-HC4500 is controlling a DN-D4000/D4500/BU4500.
  - \* Playback of the USB audio signals from a PC continues while in the CD mode.

**4 DEVICE CHANGE**

Press the SOURCE button to display the "SOURCE" selection screen.

**Note:**

- When the BACK button is pressed, source switching is completed and the mode returns to the normal model.

Turn the PARAMETERS knob to select the device. Press the knob again to enter.

**"OK to CHANGE" is displayed.**

**Note:**

- The mode switches to "NO" when the PARAMETERS knob is turned while "OK to CHANGE?↓" is displayed.
- When in the "NO" mode, press the PARAMETERS knob or BACK button to return to step 1.

Press the knob again to enter. "Completed!" is displayed and source switching is completed.

## 5 BASIC OPERATION

This section describes the basic operations when connected to a DN-D4000/D4500/BU4500.

### PLAY and PAUSE

- Each push of the PLAY/PAUSE button switches between playback and pause. PLAY/PAUSE button illuminates solid green during playback and flashes in pause.
- When the PLAY/PAUSE button is pushed during play, the DN-D4500 pauses playback at that point. Push PLAY/PAUSE button once again and playback resumes.



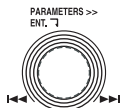
### PLAY and Cue

- When the CUE button is pushed during playback, the track/file stops and returns to the original position of which playback started from, the (Cue point). This function is also called Back-Cue. With the Back-Cue function, you can start from exactly same position. The CUE button illuminates solid red when DN-D4000/D4500/BU4500 is ready to start playback.
- You can set and change Cue point as follows.
  - When you started playback.
  - File select finished.
  - Manual search.



### Select the File

- Turn the PARAMETERS knob.



### Adjusting the pitch

With Pitch slider you can adjust the playback speed (Pitch).

<b>1</b>	<p>Push the PITCH button to light the PITCH LED.</p>
<b>2</b>	<p>Pitch decreases ↑                  ↓ Pitch increases</p> <p>Move the Pitch Slider to adjust the pitch. The current pitch setting is displayed on the display.</p>
<b>3</b>	<p>The DN-D4000/D4500/BU4500 has several pitch ranges. When the RANGE button is pushed for more than 1 sec, the pitch range can be selected with the PARAMETERS knob.</p> <ul style="list-style-type: none"> <li>• When the PARAMETERS knob is pushed the pitch range is entered and the pitch range selection mode is cancelled.</li> </ul>

### Pitch Bend

With PITCH BEND function you can change pitch temporary. DN-D4000/D4500/BU4500 has two ways for this function PITCH BEND buttons and JOG disc.

<b>1</b>	<p><b>[PITCH BEND +/- buttons]</b></p> <ul style="list-style-type: none"> <li>• Push the PITCH BEND button for momentary change of pitch. While holding these buttons down, the pitch continues to change up to the limitation.</li> <li>• After releasing the PITCH BEND buttons, playback pitch returns to slider setting.</li> </ul>
<b>2</b>	<p><b>[JOG disc]</b></p> <ul style="list-style-type: none"> <li>• The playback speed can be changed by turning JOG disc during playback.</li> </ul>

### Power on play

- |          |  |
|----------|--|
| <b>1</b> | <p>When the DN-D4000/D4500/BU4500's "Power On Play" presetting is set to "ON", playback starts from the beginning of the disc when the power is turned on.</p> |
|----------|--|

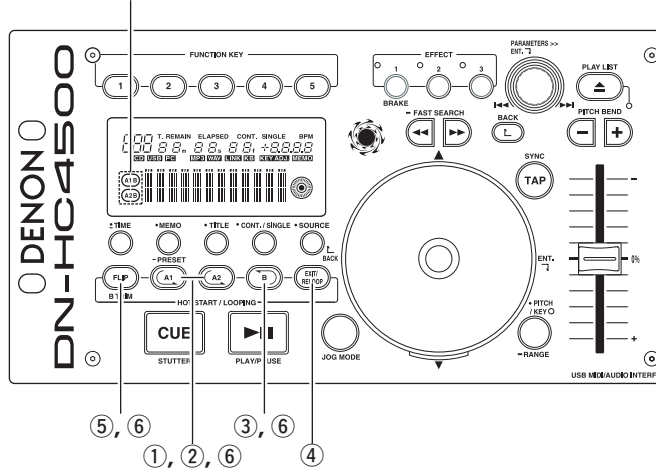
### Relay playback

For instructions on relay playback, refer to the manual of the DN-D4000/D4500/BU4500.

## 6 SEAMLESS LOOP/HOT START/STUTTER

### Seamless Loop/Hot Start/Stutter (A1,A2 buttons)

Operation display  
(refer to the section describing the display)



<b>1</b>	<p><b>Setting the A point (loading the Hot Start data)</b></p> <p>① Push the A1 or A2 button to set the A point and Hot Start data loading starts.</p> <ul style="list-style-type: none"> <li>• A1 and A2 buttons can be used separately for each Hot Start.</li> <li>• When an A point is set, the corresponding A button and “C” display light and that button is set to the Hot Start mode.</li> </ul>
<b>2</b>	<p><b>Starts Hot Start</b></p> <p>② When A1 or A2 button is pushed, Hot Start playback starts from the corresponding A point.</p>

<b>3</b>	<p><b>Setting the B point for Seamless Loop</b></p> <p>③ When the B button is pushed after setting the A point or after starting Hot start playback, the B point is set and Seamless Loop playback starts from the A point.</p> <ul style="list-style-type: none"> <li>• The B button works with respect to the A point operated before the B button was pushed.</li> <li>• If the B button is pushed during Seamless Loop playback or after EXIT playback, the B point moves to the point at which the button was pushed.</li> <li>• When the B point is set, the B and “B” displays light.</li> </ul>
----------	---

<b>4</b>	<p><b>Playing Seamless Loops</b></p> <ul style="list-style-type: none"> <li>• When the B point for A1 is detected after playback started from A1 point, playback returns to A1 point with seamless. While A1 to B looping, B point for A2 ignored.</li> <li>• When the B point for A2 is detected after playback started from A2 point, playback returns to A2 point with seamless. While A2 to B looping, B point for A1 ignored.</li> </ul>
<b>5</b>	<p><b>Exit/ReLoop</b></p> <p>④ In Seamless Loop playback, you can force exit from or return to the loop.</p> <p><b>EXIT:</b> While the Seamless Loop playback, push the EXIT/RELOOP button to exit from loop. DN-D4000/D4500/BU4500 continues playback after the B point.</p> <p><b>RELOOP:</b> When the EXIT/RELOOP button is pushed after exit the loop, Seamless Loop playback resumes from the A point.</p>

<b>6</b>	<p><b>Stutter</b></p> <ul style="list-style-type: none"> <li>• A1 and A2 points can be also used for Stutter playback.</li> </ul> <p>⑤ To enable stutter playback, push FLIP button for A1/A2 buttons, then “C” display turns off. Press the FLIP button to switch between the Hot Start/Seamless Loop and Stutter modes.</p>
<b>7</b>	<p><b>Clear the A1/A2 point</b></p> <p>⑥ While pressing the FLIP button, push the A1 or A2 button to clear the corresponding A and B points. Or push the FLIP button for more than 1 sec to clear both A1 and A2 points at once.</p> <p>Quickly pressing the “FLIP” button first and then A1, A2 or B buttons will clear these points individually.</p>

## 7 TRIM

For instructions on the trim function, refer to the manual of the DN-D4000/D4500/BU4500.

### NOTE:

If the setting made at the "CD Mode Sel" presetting does not correspond to what is actually connected, the unit may not operate properly.

## 8 PRESET

- This function is only valid when the "PC" source is selected.  
(When the DN-D4000/D4500/BU4500 is connected, the corresponding preset operation is performed.)
- The DN-HC4500 is equipped with a preset function allowing users to store and recall the devices' operation modes. The function includes the items and values described below.

### 1. Preset mode

- ① Press and hold in the PRESET button for at least 1 second to enter the preset mode.
- ② Use the PARAMETERS knob to select the preset item.
- ③ Select the item and press the PARAMETERS knob to set the preset item to be changed.
- ④ Next, turn the PARAMETERS knob. The preset data is selected.
- ⑤ Select the data and press the PARAMETERS knob to set the preset data to be changed.
- ⑥ To make multiple presettings, repeat steps ② ~ ⑤.
- ⑦ The preset mode is turned off when the PRESET button is pressed.

### 2. Preset items and data

The "\*" mark next to the data indicates the default value.

- (1) USB Mode Sel: HC4500 MIDI\*  
Selects the USB communications mode.  
The DN-HC4500 uses unique MIDI specifications.
- (2) CD Model Sel: DN-D4500\* / DN-D4000  
Select the name of the model to be connected to the DRIVE terminal and controlled.  
The BU4500 is the same as the DN-D4500's drive, so the PRESET setting is "DN-D4500".
- (3) Audio Fs Sel: 44.1k\* / 48k / 96k / Auto  
44.1 kHz: The sampling frequency (Fs) is fixed at 44.1 kHz, regardless of the data sent from the PC.  
48 kHz: The sampling frequency (Fs) is fixed at 48 kHz, regardless of the data sent from the PC.  
96 kHz: The sampling frequency (Fs) is fixed at 96 kHz, regardless of the data sent from the PC.  
AUTO: The sampling frequency (Fs) switches automatically according to the data sent from the PC.
  - ① To set "Fs", press PARAMETERS.  
"OK to CHANGE?↓" is displayed on the character display.
  - ② Push the PARAMETERS knob again.
  - ③ After the sampling frequency is changed, "Audio Fs Sel" is displayed.

- (4) Unit No. Set: 1 to 15 / ALL\*  
Sets the device's unit number.  
For example, when two devices are connected to a PC, set one device to "No. 2" or the like.
- (5) MIDI CH Set: 1&2\* / 3&4 / 5&6  
Sets the MIDI channel.
- (6) JOG Pulse Sel: 1480\* / 740 / 555 / 370 count/cycle  
Selects the number of pulses output per one revolution of the jog wheel.
- (7) FaderIn Mode: 1-PLAY/CUE / 2-PLAY / CUE
- (8) X-CONT XFD: OFF / ON\*  
Sets whether to enable or disable X-control input signal cross fader input.
- (9) Preset Init.: Set all the preset data back to the factory defaults.
  - ① To clear the PRESET data, push the PARAMETERS knob.  
"Preset Init" flashes on the character display.
  - ② Push the PARAMETERS knob again.  
"Push to Exe↓" is displayed on the character display.
  - ③ Push the PARAMETERS knob again.  
"OK to CHANGE?↓" is displayed on the character display.
  - ④ Once clearing is completed, "Completed!" is displayed.

## 9 ASIO CONTROL PANEL (Windows version only)

### Installing the ASIO driver

**1** Double-click the installer. The ASIO Driver Setup Wizard is launched. Press "Next>".



Diagram: ASIO Driver Setup Wizard window

**2** The license agreement screen appears. If you agree, select "I Agree". The "Next>" button can now be selected. Press the "Next>" button.

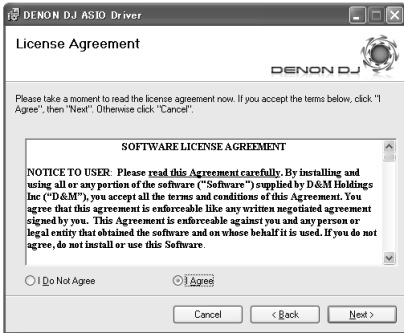


Diagram: License Agreement window

**3** A screen for verifying the folder in which the ASIO driver is to be installed appears. Press the "Next>" button.

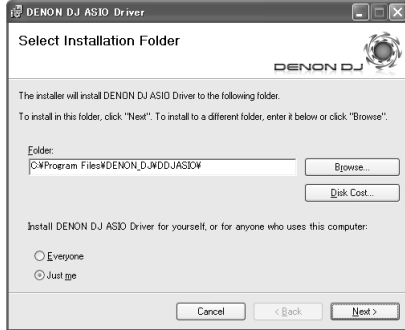


Diagram: Select Installation Folder window

By default, the ASIO driver is installed in "C:\Program Files\DENON\_DJ\DDJASIO". To change this, select "Browse", then choose the desired folder. Choose "Everyone" if "everyone" uses the computer on which the update program is to be installed, "Just me" if you are the only user.

**4** A window for verifying whether or not to create icons on the desktop appears. If you want to create the icons on the desktop, check the checkbox, then press the "Next>" button.




Diagram: Create Icons window

**5** Press the "Next>" button. Installation begins.




Diagram: Confirm Installation window

**6** This is the window displayed during installation.




Diagram: Installing window

**7** This window is displayed when installation is finished. Press the "Close" button.




Diagram: Installation Complete window

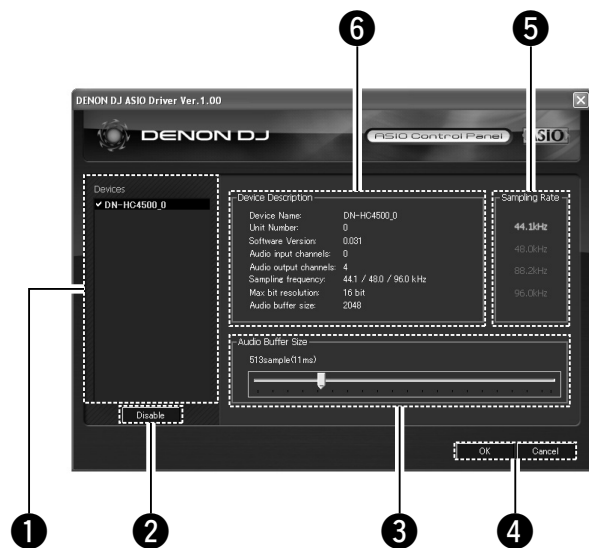
### ■ Uninstalling

Uninstall at the "Add or Remove Programs" control panel.

## Starting Up

When the DENON DJ ASIO driver's "ASIO Control Panel" is called out from the host application, the DENON DJ ASIO driver displays the ASIO control panel.

## About the control panel screen



### 1 Device

This is the area in which the list of compatible DENON DJ devices is displayed automatically. (Example: DN-HC4500-1)

- Select the device to be set from the list to display the selected device's current settings on the right.
- If the device is double-clicked, the status of the ASIO device specifications device switches between enabled and disabled.

#### NOTE:

- Only one device can be selected.
- The device currently being used as the ASIO device is displayed in bold characters. (Multiple devices can be enabled simultaneously.)

### 2 Enable/Disable

This button is for activating the device selected in the device display list as the ASIO device.

### 3 Audio Buffer Size

Use this slider to adjust the buffer size.

#### NOTE:

- The range of values is 88 to 2048 (sample units), in steps of 1 ms.
- When multiple devices are activated, the settings of all the active devices are shared.

### 4 OK/Cancel

#### OK:

Use this button to close the ASIO control panel, reflecting the changes to the settings.

#### Cancel:

Use this button to close the ASIO control panel without reflecting the changes to the settings.

### 5 Sampling Rate

The sampling rate selection is displayed here. The frequencies with which the DENON DJ ASIO driver is compatible are as follows:

- 44.1kHz/48kHz/96kHz

### 6 Device Description

This is the area in which information for the device selected in the device information list is displayed.

The following are displayed:

- Device name
- Unit number
- Software version
- Audio input channels
- Audio output channels
- Sampling frequency
- Max bit resolution
- Audio buffer size

#### NOTE:

If the device's information cannot be acquired, "-" (hyphens) are displayed for all items.

## 10 UPDATING

Product are updated using the product version update software via our “www.denondj.com” website. Check www.denondj.com for latest updates.

### Installing the update program (Windows version)

**1** Double-click the installer. The update program setup wizard is launched. Press “Next>”.

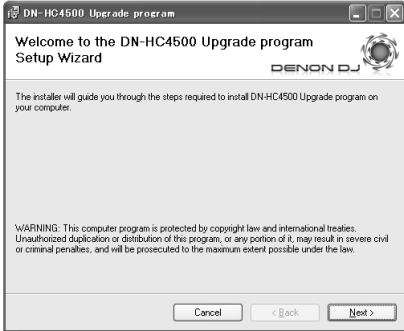


Diagram: Setup Wizard window

**2** The license agreement screen appears. If you agree, select “I Agree”. The “Next>” button can now be selected. Press the “Next>” button.

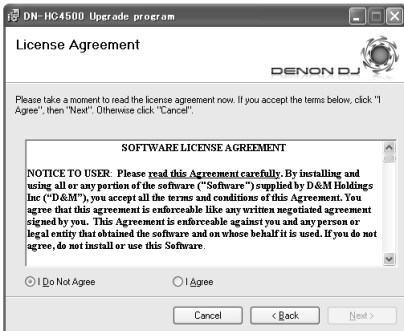


Diagram: License Agreement window

**3** A screen for verifying the folder in which the update program is to be installed appears. Press the “Next>” button.

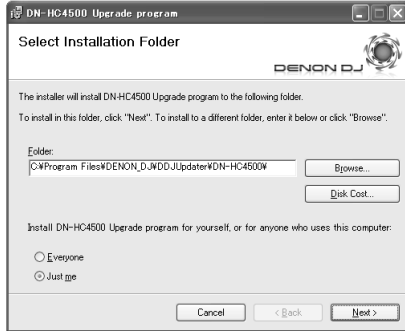


Diagram: Select Installation Folder window

By default, the update program is installed in “C:\Program Files\DENON\_DJ\DDJUpdater\DN-HC4500”. To change this, select “Browse”, then choose the desired folder. Choose “Everyone” if “everyone” uses the computer on which the update program is to be installed, “Just me” if you are the only user.

**4** A window for verifying whether or not to create icons on the desktop appears. If you want to create the icons on the desktop, check the checkbox, then press the “Next>” button.

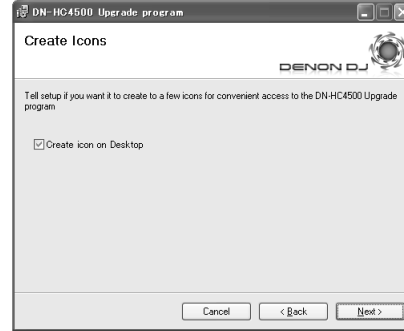


Diagram: Create Icons window

**5** Press the “Next>” button. Installation begins.

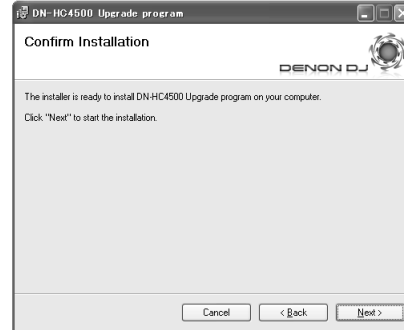


Diagram: Confirm Installation window

**6** This is the window displayed during installation.

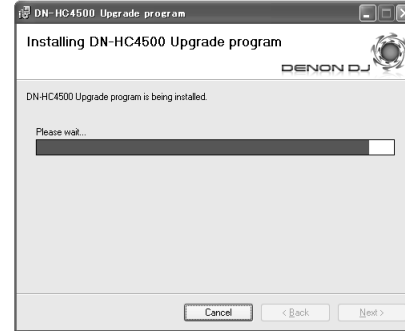


Diagram: Installing window

**7** This window is displayed when installation is finished. Press the “Close” button.

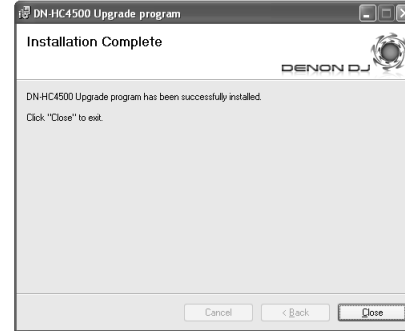


Diagram: Installation Complete window

■ **Uninstalling (Windows version only)**  
Uninstall at the “Add or Remove Programs” control panel.

### Installing the update program (Macintosh version)

With installation of the Macintosh version of the update program, the program itself is copied onto the computer.

## Updating procedure

**1** Connect the computer by USB cable.

Turn on the device's power in the update mode.  
**Turning on the power in the update mode:**  
 Press the BACK and SOURCE buttons simultaneously on Deck1 or Deck2.

The following appears on the device's panel display:

U	p	d	a	t	e		M	o	d	e
V	e	r	*	*	*	*				

on Deck1                      The version information is displayed.

**2**

P	C		L	i	n	k	e	d		
D	o	n'	t		T	o	u	c	h	!


on Deck2

If the device is not yet connected, the following appears on the device's panel display:

P	C		D	i	s	c	o	n	n	.
.										

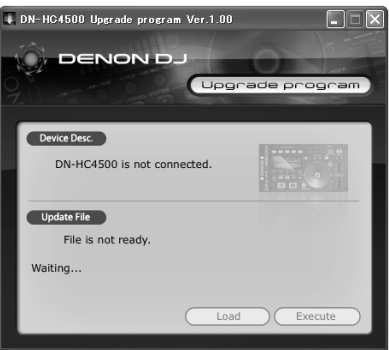
on Deck2

Launch the DN-HC4500 update program. The screen shown below appears on the computer.



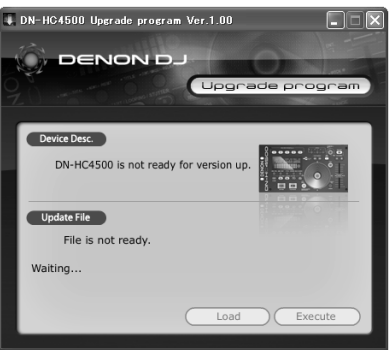
Current version information  
 The identified device name is displayed.

If the device is not connected or not in the update mode at this time, the screen shown below is displayed.  
 If the update file has not been loaded, "File is not ready." is displayed.

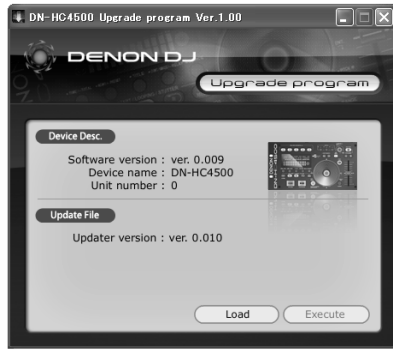


Update file not loaded

**3**



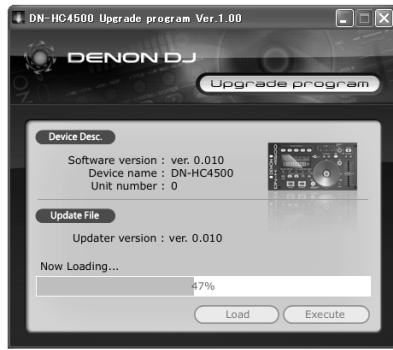
Drag and drop the update file to the "DENON DJ Upgrade program" screen. The Load button can now be selected.




The Load button can be selected.

**4**

Press the Load button to transfer the update file.



**5**



The following is displayed on the device's panel:

During file transfer:

U	p	d	a	t	e		M	o	d	e
L	o	a	d	i	n	g				

on Deck1

Once file transfer is finished;

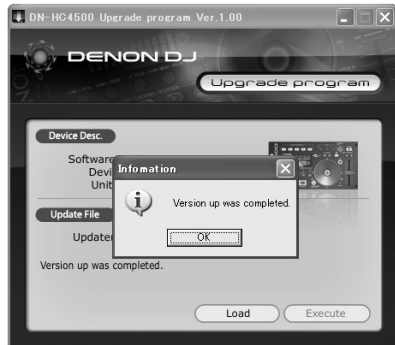
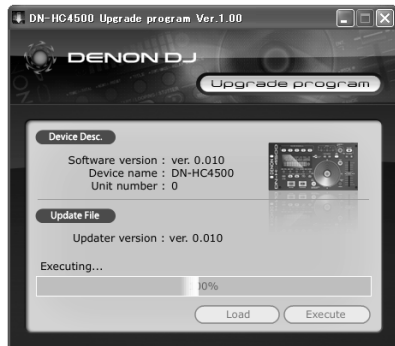
U	p	d	a	t	e		M	o	d	e
*	*	*	*		>	>		*	*	*

(Left side: Old version; Right side: New version)

Once file transfer is finished, press the OK button. The Execute button is now enabled (can be pressed).



Press the Execute button to begin updating the version.  
Once version updating is completed, "Version up was completed." is displayed.



6

The following is displayed on the device's panel during version updating:

On Deck1:

U	p	d	a	t	e		M	o	d	e			
U	p	d	a	t	i	n	g						

Once version updating is completed:

U	p	d	a	t	e		M	o	d	e			
C	o	m	p	l	e	t	e	d					

If version updating has failed, "Version up was not completed." is displayed and the screen returns to as it was before the Execute button was pressed. Press the Execute button again.

Press the OK button to finish.  
The following is displayed on the device's panel:

On Deck2:

7

P	C	L	i	n	k	e	d						
P	o	w	e	r		O	f	f	!	!			

Quit the updating program and turn off the DN-HC4500's power.

**NOTE:**

- Do not turn off the set's power or disconnect the cable connecting it to the computer during loading or version updating. Also, do not press any buttons on the set or any keys on the computer's keyboard.
- If an error message appears during loading or version updating, repeat from step 1.

**Other error messages are as follows:**

**"File is invalid"**

When the loaded update file was invalid.

**"Load failed. Check the connection, and retry"**

When a transfer error has occurred during transfer of the update file to the device.

**"Loaded data is invalid. Check the file."**

When a SUM check error has occurred after transfer of the update file to the device.

**"Version up was not completed."**

When version updating was not completed normally.

## 11 MIDI COMMANDS

### Data transmission

The panel operation data is transmitted by MIDI command, as per the table below.

### Send command to PC

	items	MIDI command			Message type
		Command	Number	Value	
1	Playlist	SW ON : 0x9n SW OFF : 0x8n	0x02	SW ON : 0x40 SW OFF : 0x00	Note ON/OFF
2	JOG mode	↑	0x04	↑	↑
3	Pitch/KEY	↑	0x05	↑	↑
4	TAP	↑	0x07	↑	↑
5	Pitch Bend+	↑	0x08	↑	↑
6	Pitch Bend-	↑	0x09	↑	↑
7	Fast search+	↑	0x10	↑	↑
8	Fast search-	↑	0x11	↑	↑
9	EFX1/ECHO/LOOP	↑	0x12	↑	↑
10	EFX2/FLANGER	↑	0x13	↑	↑
11	EFX3/FILTER	↑	0x14	↑	↑
12	HOT1	↑	0x17	↑	↑
13	HOT2	↑	0x18	↑	↑
14	HOT3	↑	0x19	↑	↑
15	HOT4	↑	0x20	↑	↑
16	HOT5	↑	0x21	↑	↑
17	TIME/TOTAL	↑	0x23	↑	↑
18	MEMO/PRESET	↑	0x24	↑	↑
19	TITLE	↑	0x25	↑	↑
20	CONT./SINGLE	↑	0x26	↑	↑
21	Parameters KNOB SW	↑	0x28	↑	↑
22	BACK	↑	0x30	↑	↑
23	SOURCE mode	↑	0x31	↑	↑
24	FLIP	↑	0x36	↑	↑
25	A1	↑	0x37	↑	↑
26	A2	↑	0x38	↑	↑
27	B	↑	0x39	↑	↑
28	EXIT/Reloop	↑	0x40	↑	↑
29	Cue	↑	0x42	↑	↑
30	Play	↑	0x43	↑	↑
31	JOG UP	↑	0x47	↑	↑
32	JOG DOWN	↑	0x48	↑	↑
33	JOG LEFT	↑	0x49	↑	↑
34	JOG RIGHT	↑	0x50	↑	↑
35	Jogwheel touch	↑	0x51	↑	↑

	items	MIDI command			Message type
		Command	Number	Value	
36	Preset Mode	SW ON : 0x9n SW OFF : 0x8n	0x52	SW ON : 0x40 SW OFF : 0x00	Note ON/OFF
37	D4500 Cont. mode	↑	0x53	↑	↑
38	Jogwheel fwd/rev	0xBn	0x51	Reverse 0x3F ~ 0x00 Forward 0x41 ~ 0x7F slow → fast * relative data	Control change
39	X-Control fader	↑	0x53	0x00 (min) → 0x7F (max)	↑
40	Parameters KNOB Increment/Decrement	↑	0x54	Increment : 0x00 Decrement : 0x7F	↑
41	Pitch Slider	0xE <sub>n</sub>	0x1 <sub>lh</sub> (LSB)  -100% : 0x7F7F (MSB/LSB) 0% : 0x4000 (MSB/LSB) +100% : 0x0000 (MSB/LSB)	0x <sub>mmh</sub> (MSB)	Pitch bend change

n = MIDI CH

**Data reception**

**LED data reception**

The panel's LEDs can be set to on, off or blinking by MIDI command, as per the table below.

■ **Receive command for LED**

	items	MIDI command			Message type	Notes
		Command	Number	Value		
LED		0xBn	ON TRG : 0x4A OFF TRG : 0x4B Blink ON TRG : 0x4C	↓	Control Change	
1	Playlist			0x02		
2	Pitch match LED			0x04		
3	JOG mode Green			0x05		
4	JOG mode Orange			0x06		
5	Pitch/KEY Green			0x07		
6	Pitch/KEY Orange			0x08		
7	TAP Green			0x09		
8	TAP Orange			0x0A		
9	EFX1/ECHO/LOOP RED			0x0B		
10	EFX1 Green			0x0C		
11	EFX2/FLANGER RED			0x0D		
12	EFX2 Green			0x0E		
13	EFX3/FILTER RED			0x0F		
14	EFX3 Green			0x10		
15	HOT1			0x11		
16	HOT1 Dimmer			0x12		
17	HOT2			0x13		
18	HOT2 Dimmer			0x14		
19	HOT3			0x15		
20	HOT3 Dimmer			0x16		
21	HOT4			0x17		
22	HOT4 Dimmer			0x18		
23	HOT5			0x19		
24	HOT5 Dimmer			0x1A		
25	Parameter KNOB			0x1E		
26	A1			0x24		
27	A1 Dimmer			0x3C		
28	A2			0x25		
29	A2 Dimmer			0x3D		
30	Cue			0x26		
31	Play			0x27		
32	Jogwheel			0x3B		
33	Pitch slider request		only Use 0x4A (request TRG)	0x3C		DN-HC4500 return pitch slider position
34	X-Control fader request		only Use 0x4A (request TRG)	0x3D		DN-HC4500 return X- Control fader position

n = MIDI CH

**VFD symbol data reception**

The various VFD symbols can be set to on, off or blinking, as per the table below.

■ **Receive command for VFD Symbol**

	items	MIDI command			Message type
		Command	Number	Value	
VFD Symbol		0xBn	ON TRG : 0x4D OFF TRG : 0x4E Blink ON TRG : 0x4F	↓	Control Change
1	T.			0x01	
2	REMAIN			0x02	
3	ELAPSED			0x03	
4	CONT.			0x04	
5	SINGLE			0x05	
6	BPM			0x06	
7	m			0x07	
8	s			0x08	
9	f			0x09	
10	Pitch dot Right			0x0A	
11	Pitch dot center			0x0B	
12	Pitch dot left			0x0C	
13	MP3			0x10	
14	WAV			0x11	
15	KB			0x13	
16	KEY ADJ.			0x14	
17	MEMO			0x15	
18	( : A1 side			0x16	
19	( : A2 side			0x17	
20	) : A1 side			0x18	
21	) : A2 side			0x19	
22	A1			0x1A	
23	A2			0x1B	
24	B : A1 side			0x1C	
25	B : A2 side			0x1D	
26	Scratch Ring out side			0x1E	
27	Scratch Ring in side			0x1F	
28	Touch dot			0x20	
29	Track Position Blink		only Use 0x4F/0x4E	0x21	
30	Scratch Position 1 (Top right)		only Use 0x4D/0x4E	0x22	
31	Scratch Position 2		only Use 0x4D/0x4E	0x23	
32	Scratch Position 3		only Use 0x4D/0x4E	0x24	
33	Scratch Position 4		only Use 0x4D/0x4E	0x25	
34	Scratch Position 5		only Use 0x4D/0x4E	0x26	
35	Scratch Position 6		only Use 0x4D/0x4E	0x27	
36	Scratch Position 7		only Use 0x4D/0x4E	0x28	

	items	MIDI command			Message type
		Command	Number	Value	
VFD Symbol		0xBn	ON TRG : 0x4D OFF TRG : 0x4E Blink ON TRG : 0x4F	↓	Control Change
37	Scratch Position 8		only Use 0x4D/0x4E	0x29	
38	Scratch Position 9		only Use 0x4D/0x4E	0x2A	
39	Scratch Position 10		only Use 0x4D/0x4E	0x2B	
40	Scratch Position 11		only Use 0x4D/0x4E	0x2C	
41	Scratch Position 12		only Use 0x4D/0x4E	0x2D	
42	Scratch Position 13		only Use 0x4D/0x4E	0x2E	
43	Scratch Position 14		only Use 0x4D/0x4E	0x2F	
44	Scratch Position 15		only Use 0x4D/0x4E	0x30	
45	Scratch Position 16 (Bottom)		only Use 0x4D/0x4E	0x31	
46	Scratch Position 17		only Use 0x4D/0x4E	0x32	
47	Scratch Position 18		only Use 0x4D/0x4E	0x33	
48	Scratch Position 19		only Use 0x4D/0x4E	0x34	
49	Scratch Position 20		only Use 0x4D/0x4E	0x35	
50	Scratch Position 21		only Use 0x4D/0x4E	0x36	
51	Scratch Position 22		only Use 0x4D/0x4E	0x37	
52	Scratch Position 23		only Use 0x4D/0x4E	0x38	
53	Scratch Position 24		only Use 0x4D/0x4E	0x39	
54	Scratch Position 25		only Use 0x4D/0x4E	0x3A	
55	Scratch Position 26		only Use 0x4D/0x4E	0x3B	
56	Scratch Position 27		only Use 0x4D/0x4E	0x3C	
57	Scratch Position 28		only Use 0x4D/0x4E	0x3D	
58	Scratch Position 29		only Use 0x4D/0x4E	0x3E	
59	Scratch Position 30		only Use 0x4D/0x4E	0x3F	
60	Scratch Position 31		only Use 0x4D/0x4E	0x40	
61	Scratch Position 32 (Top)		only Use 0x4D/0x4E	0x41	

n = MIDI CH

\* "Track Position Blink" sets blinking of the entire track position display segment on or off.

**VFD parameter data reception**

The time-related display and segment display can be set by MIDI command, as per the table below.

■ Receive command for VFD Parameter

	Items	MIDI command			Message Type
		Command	Number	Value	
VFD Parameter					
1	Tr number MSB	0xBn	0x40	0-99 100-109 : "-0" to "-9" 110 : "--", 111 : " "	Control Change
2	Tr number LSB	↑	0x41	↑	↑
3	Time mini	↑	0x42	↑	↑
4	Time sec	↑	0x43	↑	↑
5	Time frame	↑	0x44	↑	↑
6	Pitch POL	↑	0x45	" " 0x00 "+ " 0x01 "- " 0x02	↑
7	Pitch MSB	↑	0x46	↑	↑
8	Pitch LSB	↑	0x47	↑	↑
9	Track Position	↑	0x48 normal 0x49 reverse	0-100%	↑
10	Segment 1-1 MSB	↑	0x01	0x00 ~ 0x0F	↑
11	Segment 1-2 MSB	↑	0x02	↑	↑
12	Segment 1-3 MSB	↑	0x03	↑	↑
13	Segment 1-4 MSB	↑	0x04	↑	↑
14	Segment 1-5 MSB	↑	0x05	↑	↑
15	Segment 1-6 MSB	↑	0x07	↑	↑
16	Segment 1-7 MSB	↑	0x08	↑	↑
17	Segment 1-8 MSB	↑	0x09	↑	↑
18	Segment 1-9 MSB	↑	0x0A	↑	↑
19	Segment 1-10 MSB	↑	0x0B	↑	↑
20	Segment 1-11 MSB	↑	0x0C	↑	↑
21	Segment 1-12 MSB	↑	0x0D	↑	↑
22	Segment 1-1 LSB	↑	0x21	↑	↑
23	Segment 1-2 LSB	↑	0x22	↑	↑
24	Segment 1-3 LSB	↑	0x23	↑	↑
25	Segment 1-4 LSB	↑	0x24	↑	↑
26	Segment 1-5 LSB	↑	0x25	↑	↑
27	Segment 1-6 LSB	↑	0x27	↑	↑
28	Segment 1-7 LSB	↑	0x28	↑	↑
29	Segment 1-8 LSB	↑	0x29	↑	↑
30	Segment 1-9 LSB	↑	0x2A	↑	↑
31	Segment 1-10 LSB	↑	0x2B	↑	↑
32	Segment 1-11 LSB	↑	0x2C	↑	↑

Items	MIDI command			Message Type	
	Command	Number	Value		
<b>VFD Parameter</b>					
33	Segment 1-12 LSB	0xBn	0x2D	0x00 ~ 0x0F	Control Change
34	Segment 2-1 MSB	↑	0x0E	↑	↑
35	Segment 2-2 MSB	↑	0x0F	↑	↑
36	Segment 2-3 MSB	↑	0x10	↑	↑
37	Segment 2-4 MSB	↑	0x11	↑	↑
38	Segment 2-5 MSB	↑	0x12	↑	↑
39	Segment 2-6 MSB	↑	0x13	↑	↑
40	Segment 2-7 MSB	↑	0x14	↑	↑
41	Segment 2-8 MSB	↑	0x15	↑	↑
42	Segment 2-9 MSB	↑	0x16	↑	↑
43	Segment 2-10 MSB	↑	0x17	↑	↑
44	Segment 2-11 MSB	↑	0x18	↑	↑
45	Segment 2-12 MSB	↑	0x19	↑	↑
46	Segment 2-1 LSB	↑	0x2E	↑	↑
47	Segment 2-2 LSB	↑	0x2F	↑	↑
48	Segment 2-3 LSB	↑	0x30	↑	↑
49	Segment 2-4 LSB	↑	0x31	↑	↑
50	Segment 2-5 LSB	↑	0x32	↑	↑
51	Segment 2-6 LSB	↑	0x33	↑	↑
52	Segment 2-7 LSB	↑	0x34	↑	↑
53	Segment 2-8 LSB	↑	0x35	↑	↑
54	Segment 2-9 LSB	↑	0x36	↑	↑
55	Segment 2-10 LSB	↑	0x37	↑	↑
56	Segment 2-11 LSB	↑	0x38	↑	↑
57	Segment 2-12 LSB	↑	0x39	↑	↑

n = MIDI CH

**VFD segment data reception**

The various segments are set by 2-byte data, as per the following font code. (0x00/0x00 to 0x00/0x07 cannot be used.)

**Font codes for segments**

MSB LSB	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111
0000	RAM0	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E
0001	RAM1	!	"	#	\$	%	&	'	(	)	*	+	,	-	.	/
0010	RAM2	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E
0011	RAM3	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
0100	RAM4	U	V	W	X	Y	Z	[	\	]	^	_	~	?	@	A
0101	RAM5	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
0110	RAM6	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
0111	RAM7	~	?	@	A	B	C	D	E	F	G	H	I	J	K	L
1000		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E
1001		F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1010		U	V	W	X	Y	Z	[	\	]	^	_	~	?	@	A
1011		B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1100		Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
1101		~	?	@	A	B	C	D	E	F	G	H	I	J	K	L
1110		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E
1111		F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T

**Preset data**

The DN-HC4500's presettings can be loaded and some items can be set from an external device using the DENON DJ's MIDI system exclusive format.

**(1) Configuration command format**

The basic configuration supported by the DN-HC4500 is as follows:

CMD	Item	Data	Length
SOX	Start of System Exclusive	0xF0	1Byte
IDC	ID code → DENON DJ ID	0x004003	3Byte
FMT	Communication format	0x12: one way	1Byte
MDN	Model number	0x41 (DN-HC4500)	1Byte
UN	Unit number	depends on preset mode (0x00 to 0x0F)	1Byte
MCH	MIDI channel	depends on preset mode (0x00 to 0x05)	1Byte
MST	Message Type	0x53: Selecting, 0x50: Polling,	1Byte
CMD	Command	0x20: Preset set/ 0x21: Preset request	1Byte
DL	Data Length	0x** number of the data Byte	1Byte
Data	Preset data	refer the preset data table	****
BCC	Block check character	0x** EVEN parity of the Data block	1Byte
EOX	End of System Exclusive	0xF7	1Byte

**(2) Loading preset data from an external device**



Issue the commands shown below from the PC to the DN-HC4500. [DRM]

CMD	Item	Data	Length
SOX	Start of System Exclusive	0xF0	1Byte
IDC	ID code → DENON DJ ID	0x004003	3Byte
FMT	Communication format	0x12: one way	1Byte
MDN	Model number	0x41 (DN-HC4500) or 0x7F (ALL model)	1Byte
UN	Unit number	depends on preset mode (0x00 to 0x0F)	1Byte
MCH	MIDI channel	depends on preset mode (0x00 to 0x05)	1Byte
MST	Message Type	0x50: Polling	1Byte
CMD	Command	0x21: Preset request	1Byte
EOX	End of System Exclusive	0xF7	1Byte

The text shown below is returned from the DN-HC4500. [DSM]

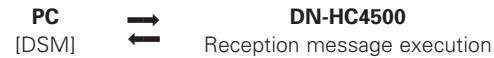
CMD	Item	Data	Length
SOX	Start of System Exclusive	0xF0	1Byte
IDC	ID code → DENON DJ ID	0x004003	3Byte
FMT	Communication format	0x12: one way	1Byte
MDN	Model number	0x41 (DN-HC4500)	1Byte
UN	Unit number	depends on preset mode (0x00 to 0x0F)	1Byte
MCH	MIDI channel	depends on preset mode (0x00 to 0x05)	1Byte
MST	Message Type	0x53: Selecting	1Byte
CMD	Command	0x21: Preset request (Return)	1Byte
DL	Data Length	0x** number of the data Byte	1Byte
Data	Preset data	refer the preset data table	****
BCC	Block check character	0x** EVEN parity of the Data block	1Byte
EOX	End of System Exclusive	0xF7	1Byte

The structure of the reply data to the preset request command is as shown below.

**Return data table for Preset request command**

Preset name	Item	Data	Length
USB mode Sel	USB Control mode select	0x00: HC4500 MIDI, 0x02 to 0x0F: Reserve	1Byte
CD Model Sel	Drive control model select	0x00: DN-D4500, 0x01: DN-D4000	1Byte
Audio Fs Sel	Audio sampling frequency select	0x01: 44.1kHz, 0x02: 48kHz, 0x08: 96kHz, 0x04: AUTO (AUTO: Automatically follow Fs by USB data)	1Byte
Unit number Set	Unit number	0x00 to 0x0F	1Byte
MIDI CH Set	MIDI CH	0x00: CH1&2, 0x01: CH3&4, 0x02: CH5&6	1Byte
JOG Pulse Sel	JOG count number per cycle	0x00: 1480, 0x01: 740, 0x02: 555, 0x03: 370	1Byte
Fader In Mode	Fader In mode select	0x00: 2wire Play/Cue, 0x01: 1wire Play/Cue	1Byte
Xcont XFD	X-control mode select	0x00: OFF, 0x01: ON	1Byte
Audio buffer	Audio buffer size	0x0040 to 0x0810 (2Byte)	2Byte
Model code	Model number	0x41	1Byte

### (3) Setting the preset data from an external device.



Issue the selecting message shown below from the PC to the DN-HC4500. [DSM]

CMD	Item	Data	Length
SOX	Start of System Exclusive	0xF0	1Byte
IDC	ID code → DENON DJ ID	0x004003	3Byte
FMT	Communication format	0x12: one way	1Byte
MDN	Model number	0x41 (DN-HC4500)	1Byte
UN	Unit number	depends on preset mode (0x00 to 0x0F)	1Byte
MCH	MIDI channel	depends on preset mode (0x00 to 0x05)	1Byte
MST	Message Type	0x53: Selecting,	1Byte
CMD	Command	0x20: Preset set	1Byte
DL	Data Length	0x** number of the data Byte	1Byte
Data	Preset data	refer the preset data table	****
BCC	Block check character	0x** EVEN parity of the Data block	1Byte
EOX	End of System Exclusive	0xF7	1Byte

When the DN-HC4500 identifies that the model number and unit number match, the preset data for the items settable from an external device are updated according to the received message's data table.

The structure of the preset set command's data is as shown below.

#### ■ Preset set data table

Preset name	Item	Data	Length
USB mode Sel	USB Control mode select	0x00: HC4500 MIDI, 0x02 to 0x0F: Reserve	1Byte
CD Model Sel	Drive control model select	0x00: DN-D4500, 0x01: DN-D4000	1Byte
Audio Fs Sel	Audio sampling frequency select	0x01: 44.1kHz, 0x02: 48kHz, 0x08: 96kHz, 0x04; AUTO (AUTO: Automatically follow Fs by USB data)	1Byte
JOG Pulse Sel	JOG count number per cycle	0x00: 1480, 0x01: 740, 0x02: 555, 0x03: 370	1Byte
Fader In Mode	Fader In mode select	0x00: 2wire Play/Cue, 0x01: 1wire Play/Cue	1Byte
Xcont XFD	X-control mode select	0x00: OFF, 0x01: ON	1Byte

## 12 TROUBLESHOOTING

### ■ DN-HC4500 does not operate normally or no sound is produced

- **Are the USB cable, audio cables, etc., properly connected?**
- **Is the volume setting for the source, audio device, application, OS, etc., properly raised?**
- **Is the appropriate device selected on your audio application?**
- **Is the sampling frequency setting appropriate?**  
 ➔ Either make the same settings in the DN-HC4500's preset mode and on the application or set the DN-HC4500's preset mode to "AUTO".
- **Are there WAV files with different sampling frequencies and bit rates?**  
 ➔ Depending on your audio application, it may not be possible to play WAV files with different sampling frequencies and bit rates simultaneously.
- **Is other USB equipment in use?**  
 ➔ If other USB devices are connected, try connecting only DN-HC4500 to check for problems.
- **Is the USB connector of the connected computer compatible with USB 2.0 (Hi-Speed)?**  
 ➔ Use a USB 2.0-compatible cable.

### ■ Sound is broken or distorted

- **Are other applications or device drivers operating?**  
 ➔ Close any unneeded applications.
- **Are you playing multiple WAV files?**  
 ➔ When playing multiple WAV files simultaneously, depending on the capacity of your computer, the sound may be broken.

### 13 SPECIFICATIONS

■ **General**

**Power requirement:** U.S.A, CANADA model: AC 120 V 60 Hz  
 European model: AC 235 V 50 Hz  
 Japan model: AC 100 V 50 Hz/60 Hz

**Power consumption:** U.S.A, CANADA model: 12 W  
 European model: 12 W  
 Japan model: 10 W

**Ambient operation temperature:** 0 °C to 40 °C

**Dimensions:** 482 (W) x 132 (H) x 88 (max106) (D) mm  
 rack space: EIA 3U

**Weight:** 3.7 kg

**Finish:** Front panel: Black (Painted steel)  
 Rear & Enclosure: Black (Painted steel)

■ **Audio**

**Analog output:** 1, 2 RCA pin: unbalanced  
 2Vrms = 0dBFS

**DA converter:** Type 24bit 32times oversampling Fs: 44.1 kHz/48 kHz/96 kHz  
 D-range 106 dB (TYP)  
 S/N 106 dB (TYP) (DIN)

**Frequency response:** 20 to 22 kHz, ±0.5 dB

**T.H.D:** Less than 0.05 % (input = output = 2Vrms/1 KHz, RL: 10 kΩ)

**Residual noise:** Less than -94 dBV (TYP)

**Crosstalk:** Less than -110 dB (TYP @1 kHz)

■ **USB I/F**

**USB B connector:** USB2.0 (Max480 Mbps)  
 PC/MAC (Host) ↔ DN-HC4500 (Slave) application  
 USB Audio (Speaker)  
 PCM 16bit/24bit 44.1 kHz/48 kHz/96 kHz 4ch  
 USB MIDI I/O  
 IN: 1 port, OUT: 1 port  
 USB HID I/O (General)  
 32Byte packet

■ **Control I/F**

**Fader start:** FADER 1  
 3.5 mm stereo mini jack (Tip/Ring:signal, Sleeve: GND), 0,5VDC  
 FADER 2  
 3.5 mm stereo mini jack (Tip/Ring:signal, Sleeve: GND), 0,5VDC

**X-CONTROL:**

Input  
 3.5 mm stereo mini jack (Tip/Ring:signal, Sleeve: GND), 0,5VDC

**CD Drive control:**

Mini-DIN 8pin connector (DN-D4500/D4000/BU4500 Drive unit control)

■ **Others**

**Display:** 40 mm x 100 mm VFD  
 Character w/12digitx2line dot matrix & Scratch marker

**Jog wheel:** 71 mm, touch moving detection  
 (Touch ON/OFF, Dir FWD/RVS, Pulse count) MIDI: Note ON/OFF  
 1480/740/555/370 Pulse/cycle MIDI: Control Change

**Rubber SW:** Function SW  
 5 w/LED  
 for HOT start and LOAD SW and others MIDI: Note ON/OFF  
 Other SW  
 10 w/LED  
 for CUE/PLAY/HOT start/EFX/LOAD and others MIDI: Note ON/OFF  
 Other SW  
 14 w/o LED  
 for Fast search / Pitch bend and others MIDI: Note ON/OFF

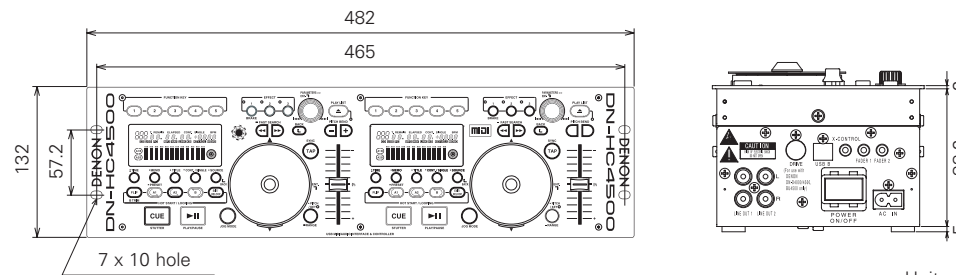
**Pitch Fader:** 60 mm w/center tap 1024 steps  
 MIDI: Pitch bend  
 (MIDI data -100 %: 0x7F7F / ±0 %: 0x4000 / +100 %: 0x0000)

**Parameter knob:** SW for Enter and others MIDI: Note ON/OFF  
 FWD/RVS 24 Pulse/cycle MIDI: Control Change

■ **DENON DJ ASIO Driver**

**Control parameter:** Buffer size  
 88 (Fs: 44.1 kHz/48 kHz) /188 (Fs: 96 kHz) sample to 2048 sample  
 Hardware buffer control  
 Sampling Freq.  
 44.1 kHz/48 kHz/96 kHz (follow DN-HC4500 setting)

- \* ASIO is a trademark of Steinberg Media Technologies GmbH
- \* MAC is a trademark of Apple Computer, Inc.
- \* MIDI is a trademark of AMEI



Unit: mm



D&M Holdings Inc.