

DENON *PROFESSIONAL*

PROFESSIONAL SOLID STATE PLAYER

DN-F400

OPERATING INSTRUCTIONS



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.

FCC INFORMATION **(For US customers)**

1. COMPLIANCE INFORMATION

Product Name: Solid state player

Model Number: DN-F400

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

Denon Professional div. D&M Professional
1100 Maplewood Drive Itasca, IL 60143
Tel. 630-741-0330

2. IMPORTANT NOTICE: DO NOT MODIFY THIS PRODUCT

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modification not expressly approved by DENON may void your authority, granted by the FCC, to use the product.

3. NOTE

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the local retailer authorized to distribute this type of product or an experienced radio/TV technician for help.

This Class B apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

IMPORTANT SAFETY INSTRUCTIONS

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 manufacturer'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. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
10. Only use attachments/accessories specified by the manufacturer.
11. 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.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. 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.
14. Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.



CAUTION:

(English)

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:

(Deutsch)

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:

(Français)

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:

(Italiano)

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:

(Español)

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:

(Nederlands)

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:

(Svenska)

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.

ATENÇÃO:

(Português)

Para desligar completamente este produto da corrente, desligue a ficha da tomada eléctrica.

A ficha eléctrica é utilizada para interromper completamente a alimentação da unidade e deve estar num local onde o utilizador lhe possa aceder facilmente.

NOTE ON USE

- Avoid high temperatures.
Allow for sufficient heat dispersion when installed in a rack.
- Handle the power cord carefully.
Hold the plug when unplugging the cord.
- Keep the unit free from moisture, water, and dust.
- Unplug the power cord when not using the unit for long periods of time.
- Do not obstruct the ventilation holes.
- Do not let foreign objects into the unit.
- Do not let insecticides, benzene, and thinner come in contact with the unit.
- Never disassemble or modify the unit in any way.

HINWEISE ZUM GEBRAUCH

- Vermeiden Sie hohe Temperaturen.
Beachten Sie, dass eine ausreichende Belüftung gewährleistet wird, wenn das Gerät auf ein Regal gestellt wird.
- Gehen Sie vorsichtig mit dem Netzkabel um.
Halten Sie das Kabel am Stecker, wenn Sie den Stecker herausziehen.
- Halten Sie das Gerät von Feuchtigkeit, Wasser und Staub fern.
- Wenn das Gerät längere Zeit nicht verwendet werden soll, trennen Sie das Netzkabel vom Netzstecker.
- Decken Sie den Lüftungsbereich nicht ab.
- Lassen Sie keine fremden Gegenstände in das Gerät kommen.
- Lassen Sie das Gerät nicht mit Insektiziden, Benzin oder Verdünnungsmitteln in Berührung kommen.
- Versuchen Sie niemals das Gerät auseinander zu nehmen oder zu verändern.

OBSERVATIONS RELATIVES A L'UTILISATION

- Eviter des températures élevées.
Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.
- Manipuler le cordon d'alimentation avec précaution.
Tenir la prise lors du débranchement du cordon.
- Protéger l'appareil contre l'humidité, l'eau et la poussière.
- Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.
- Ne pas obstruer les trous d'aération.
- Ne pas laisser des objets étrangers dans l'appareil.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.

NOTE SULL'USO

- Evitate di esporre l'unità a temperature elevate.
Assicuratevi che vi sia un'adeguata dispersione del calore quando installate l'unità in un mobile per componenti audio.
- Manneggiate il cavo di alimentazione con attenzione.
Tenete ferma la spina quando scollegate il cavo dalla presa.
- Tenete l'unità lontana dall'umidità, dall'acqua e dalla polvere.
- Scollegate il cavo di alimentazione quando prevedete di non utilizzare l'unità per un lungo periodo di tempo.
- Non coprite i fori di ventilazione.
- Non inserite corpi estranei all'interno dell'unità.
- Assicuratevi che l'unità non entri in contatto con insetticidi, benzolo o solventi.
- Non smontate né modificate l'unità in alcun modo.

(English)

NOTAS SOBRE EL USO

- Evite altas temperaturas.
Permite la suficiente dispersión del calor cuando está instalado en la consola.
- Maneje el cordón de energía con cuidado.
Sostenga el enchufe cuando desconecte el cordón de energía.
- Mantenga el equipo libre de humedad, agua y polvo.
- Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.
- No obstruya los orificios de ventilación.
- No deje objetos extraños dentro del equipo.
- No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.
- Nunca desarme o modifique el equipo de ninguna manera.

(Español)

(Deutsch)

ALVORENS TE GEBRUIKEN

- Vermijd hoge temperaturen.
Zorg er bij installatie in een audiorack voor, dat de door het toestel geproduceerde warmte goed kan worden afgevoerd.
- Hanteer het netsnoer voorzichtig.
Houd het snoer bij de stekker vast wanneer deze moet worden aan- of losgekoppeld.
- Laat geen vochtigheid, water of stof in het apparaat binnendringen.
- Neem altijd het netsnoer uit het stopcontact wanneer het apparaat gedurende een lange periode niet wordt gebruikt.
- De ventilatieopeningen mogen niet worden geblokkeerd.
- Laat geen vreemde voorwerpen in dit apparaat vallen.
- Voorkom dat insecticiden, benzeen of verfverdunner met dit toestel in contact komen.
- Dit toestel mag niet gedemonteerd of aangepast worden.

(Nederlands)

(Français)

OBSERVERA ANGÅENDE ANVÄNDNINGEN

- Undvik höga temperaturer.
Se till att det finns möjlighet till god värmeavledning vid montering i ett rack.
- Hantera nätkabeln varsamt.
Håll i kabeln när den kopplas från el-uttaget.
- Utsätt inte apparaten för fukt, vatten och damm.
- Koppla loss nätkabeln om apparaten inte kommer att användas i lång tid.
- Täpp inte till ventilationsöppningarna.
- Se till att främmande föremål inte tränger in i apparaten.
- Se till att inte insektsmedel på spraybruk, bensen och thinner kommer i kontakt med apparatens hölje.
- Ta inte isär apparaten och försök inte bygga om den.

(Svenska)

(Italiano)

CAUTION:**(English)**

- 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 unit.
- Do not expose the unit to dripping or splashing fluids.
- Do not place objects filled with liquids, such as vases, on the unit.

ACHTUNG:**(Deutsch)**

- 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 direkte Feuerquellen wie beispielsweise angezündete Kerzen aufgestellt werden.
- Das Gerät sollte keiner tropfenden oder spritzenden Flüssigkeit ausgesetzt werden.
- Auf dem Gerät sollten keine mit Flüssigkeit gefüllten Behälter wie beispielsweise Vasen aufgestellt werden.

ATTENTION:**(Français)**

- 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.
- L'appareil ne doit pas être exposé à l'eau ou à l'humidité.
- Ne pas poser d'objet contenant du liquide, par exemple un vase, sur l'appareil.

ATTENZIONE:**(Italiano)**

- Le aperture di ventilazione non devono essere ostruite coprendole con oggetti, quali giornali, tovaglie, tende e così via.
- Non posizionate sull'unità fiamme libere, come ad esempio candele accese.
- L'apparecchiatura non deve essere esposta a gocciolii o spruzzi.
- Non posizionate sull'unità alcun oggetto contenente liquidi, come ad esempio i vasi.

PRECAUCIÓN:**(Español)**

- La ventilación no debe quedar obstruida por haberse cubierto las aperturas con objetos como periódicos, manteles, cortinas, etc.
- No debe colocarse sobre el aparato ninguna fuente inflamable sin protección, como velas encendidas.
- No exponer el aparato al goteo o salpicaduras cuando se utilice.
- No colocar sobre el aparato objetos llenos de líquido, como jarras.

WAARSCHUWING:**(Nederlands)**

- 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.
- Stel het apparaat niet bloot aan druppels of spatten.
- Plaats geen voorwerpen gevuld met water, bijvoorbeeld een vaas, op het apparaat.

OBSERVERA:**(Svenska)**

- Ventilationen bör inte förhindras genom att täcka för ventilationsöppningarna med föremål såsom tidningar, bordsdukar, gardiner osv.
- Inga blottade brandkällor, såsom tända ljus, får placeras på apparaten.
- Apparaten får inte utsättas för vätska.
- Placera inte föremål fyllda med vätska, t.ex. vaser, på apparaten.

•DECLARATION OF CONFORMITY**(English)**

We declare under our sole responsibility that this product, to which this declaration relates, is in conformity with the following standards:
EN60950-1, EN55022, EN55024, EN61000-3-2 and EN61000-3-3.
Following the provisions of 2006/95/EC and 2004/108/EC Directive.

•ÜBEREINSTIMMUNGSERKLÄRUNG**(Deutsch)**

Wir erklären unter unserer Verantwortung, daß dieses Produkt, auf das sich diese Erklärung bezieht, den folgenden Standards entspricht:
EN60950-1, EN55022, EN55024, EN61000-3-2 und EN61000-3-3.
Entspricht den Bestimmungen der Richtlinien 2006/95/EG und 2004/108/EG.

•DECLARATION DE CONFORMITE**(Français)**

Nous déclarons sous notre seule responsabilité que l'appareil, auquel se réfère cette déclaration, est conforme aux standards suivants:
EN60950-1, EN55022, EN55024, EN61000-3-2 et EN61000-3-3.
Conforme aux dispositions des directives 2006/95/EC et 2004/108/EC.

•DICHIARAZIONE DI CONFORMITÀ**(Italiano)**

Dichiariamo con piena responsabilità che questo prodotto, al quale la nostra dichiarazione si riferisce, è conforme alle seguenti normative:
EN60950-1, EN55022, EN55024, EN61000-3-2 e EN61000-3-3.
Conforme alle norme delle direttive 2006/95/EC e 2004/108/EC.
QUESTO PRODOTTO E' CONFORME
AL D.M. 28/08/95 N. 548

•DECLARACIÓN DE CONFORMIDAD**(Español)**

Declaramos bajo nuestra exclusiva responsabilidad que este producto al que hace referencia esta declaración, está conforme con los siguientes estándares:
EN60950-1, EN55022, EN55024, EN61000-3-2 y EN61000-3-3.
Siguiendo las disposiciones de las Directivas 2006/95/CE y 2004/108/CE.

•EENVORMIGHEIDSVERKLARING**(Nederlands)**

Wij verklaren uitsluitend op onze verantwoordelijkheid dat dit produkt, waarop deze verklaring betrekking heeft, in overeenstemming is met de volgende normen:
EN60950-1, EN55022, EN55024, EN61000-3-2 en EN61000-3-3.
Voldoet aan de bepalingen van de EC-richtlijnen 2006/95/EC en 2004/108/EC.

•ÖVERENSSTÄMMELSEINTYG**(Svenska)**

Härmed intygas helt på eget ansvar att denna produkt, vilken detta intyg avser, uppfyller följande standarder:
EN60950-1, EN55022, EN55024, EN61000-3-2 och EN61000-3-3.
Följer bestämmelserna i Direktiv 2006/95/EC och 2004/108/EC.

•DECLARAÇÃO DE CONFORMIDADE**(Português)**

Declaramos sob nossa exclusiva responsabilidade que este produto, ao qual se refere esta declaração, se encontra em conformidade com as seguintes normas:
EN60950-1, EN55022, EN55024, EN61000-3-2 e EN61000-3-3.
De acordo com as disposições da Directiva 2006/95/CE e 2004/108/CE.

DMi D&M Installation EuropeKingsbridge House, Padbury Oaks Longford
Middlesex UB7 0EH UK

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 battery disposal.

This product and the supplied accessories, excluding the batteries, constitute the applicable product according to the WEEE directive.

HINWEIS ZUM RECYCLING:

Das Verpackungsmaterial dieses Produktes ist 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 entsorgen Sie die Batterien gemäß der örtlichen Vorschriften.

Dieses Produkt und das im Lieferumfang enthaltene Zubehör (mit Ausnahme der Batterien!) entsprechen der WEEE-Direktive.

UNE REMARQUE CONCERNANT LE RECYCLAGE:

Les matériaux d'emballage de ce produit sont recyclables et peuvent être réutilisés. Veuillez disposer des matériaux conformément aux lois sur le recyclage en vigueur.

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

Les piles ne doivent jamais être jetées ou incinérées, mais mises au rebut conformément aux lois en vigueur sur la mise au rebut des piles.

Ce produit et les accessoires inclus, à l'exception des piles, sont des produits conformes à la directive DEEE.

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 lo smaltimento dell'unità, osservare le normative o le leggi locali in vigore.

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.



Pb

ACERCA DEL RICICLAJE:

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 empacutados es el producto aplicable a la directiva RAEE excepto pilas.

EEN AANTEKENING MET BETREKKING TOT DE RECYCLING:

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.

OBSERVERA ANGÅENDE ÅTERVINNING:

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.


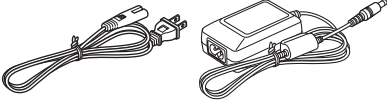


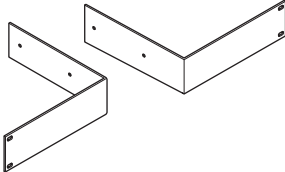

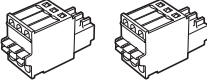
Denna apparat och de tillbehör som levereras med den uppfyller gällande WEEE-direktiv, med undantag av batterierna.

– TABLE OF CONTENTS –

1. GENERAL INFORMATION	2
FEATURES	2
PART NAMES AND FUNCTIONS	2
2. PREPARATIONS	6
INSTALLATION	6
CONNECTIONS	6
3. DEVICE OPERATION	8
FILE FORMAT FOR PLAYBACK	8
NORMAL PLAYBACK	10
ADVANCED PLAYBACK	11
4. CONTROL FEATURES	15
RS232C CONTROL	15
PARALLEL CONTROL	19
5. TROUBLESHOOTING	20
6. SPECIFICATIONS	21

■ ACCESSORIES

Check first that the following accessories are included in the box:

① Stereo Audio Cable	1
	
② AC adaptor	1
	
③ AC adaptor cord holder	1
	
④ Screw for fixing an AC adaptor cord holder	1
	
⑤ 19-inch rack mount bracket	2
	
⑥ Screws for attaching a 19-inch rack mount brackets	4
	
⑦ PHOENIX plug (for balanced output)	2
	
⑧ Operating Instructions	1
⑨ CD-ROM for multi-language manuals	1

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.



1. GENERAL INFORMATION

FEATURES

■ Standard function

- Playback of music files recorded on an SD card/SDHC card (see page 8)
- Supporting WAV, MP3 (MPEG-1 Layer III)
- Displaying the ID3 tags of MP3 (See page 9)
- Headphones output with trim (see pages 2 and 6)
- Analog audio output with trim (balanced/unbalanced) (See pages 3 and 6)

■ Advanced Playback

- Settings for various playback options with the rear-panel MODE switch. (See page 11)

■ 19-inch 1U half-sized Rack

RC-F400S

■ Standard function

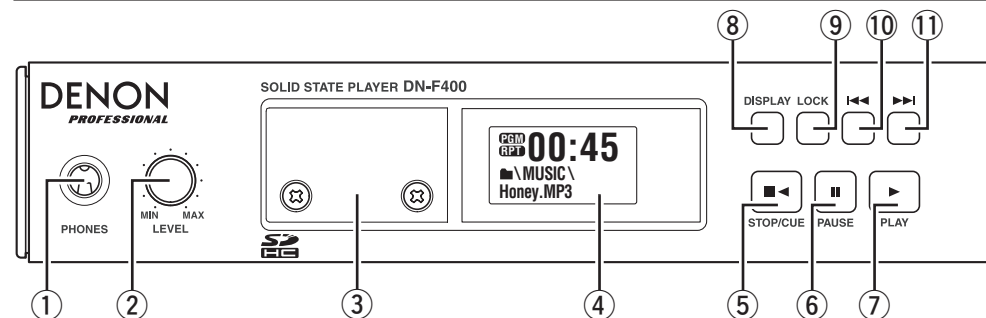
- Quick Track Search with Jog Wheel (See page 10)
- 3.8-inch large size display (320 x 240 dots) (See page 5)
- Operation with the desktop panel

■ Advanced Playback

- File playback in file-list mode (See pages 12 to 14)
- Hot-start playback (See page 13)

PART NAMES AND FUNCTIONS

DN-F400 Front panel



① PHONES Jack

- You can connect your headphones to this jack. (Stereo phone 1/4" jack)

② LEVEL control

- Use this knob to adjust the output level of the headphones.
- Push the knob. The knob pops out and controls the level. When control is finished, push the knob back in.

Warning!

- When using headphones, take care not to turn the volume too high. Listening at high volumes for extended periods of time may result in permanent hearing damage.

③ SD slot

- Insert an SD card into the slot, label side upwards. (See page 7)

④ Display unit

⑤ ■◀ button and indicator (Amber)

- Press this button to stop playback.

⑥ || button

- Press this button to pause playback.

⑦ ▶ button and indicator (Green)

- Press this button to start playback.

⑧ **DISPLAY button**

- The elapsed time, remaining time, or display off is displayed in order by pressing this button. (See page 9)

⑨ **LOCK button**

- Hold the button pressed for more than 1 second to lock out key operation on the front panel.
- Hold the button pressed for more than 1 second additionally to release lock-out of key operation on the front panel.

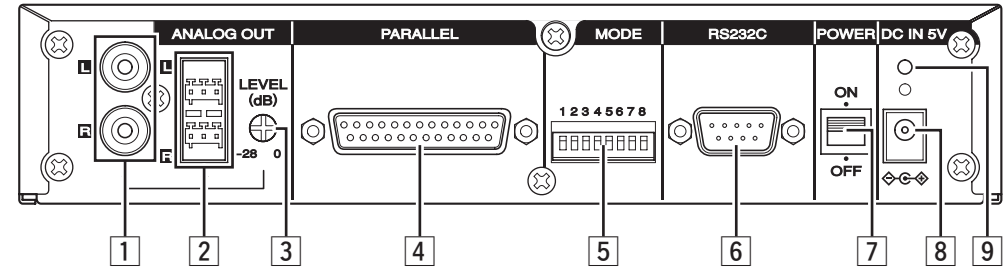
⑩ **◀◀ button**

- Press this button once to skip to the beginning of the current track or to the previous track.
- Hold the button pressed to start playback as FR. (See page 11)

⑪ **▶▶ button**

- Press this button once to skip to the next track.
- Hold the button pressed to start playback as FF. (See page 11)

DN-F400 Rear panel



1 **ANALOG OUTPUT jacks**

- These are analog unbalanced outputs using RCA type pin jacks.

2 **ANALOG OUTPUT jacks**

- These are analog balanced outputs using PHOENIX balanced output jacks.

3 **Output LEVEL control**

- Use this to control the audio output level.
- This controls signal output from the analog balanced and unbalanced jacks simultaneously.

4 **PARALLEL connector**

(See page 19)

5 **MODE switch**

- Use this switch to set various playback modes. (See page 11)

6 **RS-232C serial connector**

- Use this connector to control with a host device externally.
- Connect the RC-F400S using the RS-232C straight cable supplied with the RC-F400S. (See pages 6, and 15 to 18.)

7 **POWER ON/OFF switch**

- Slide the knob to turn the power on or off.

8 **DC power inlet**

- Connect the included AC power adaptor.

9 **Mounting hole for the DC power cord holder**

- Attach the holder to prevent disconnection of the cord from the connector. (See page 7)

1. GENERAL INFORMATION

DN-F400 Display




(1) Playback mode indicator

- Displays the playback mode. (See page 11)
PGM: Programmed playback
RND: Random playback

(2) Repeat playback indicator

- Lights when the repeat playback is set with the MODE switch. (See page 11)

(3) Current folder name

- Displays the name of the currently selected folder.
- If an SD card is not inserted, “—” is displayed on the right of the  symbol.

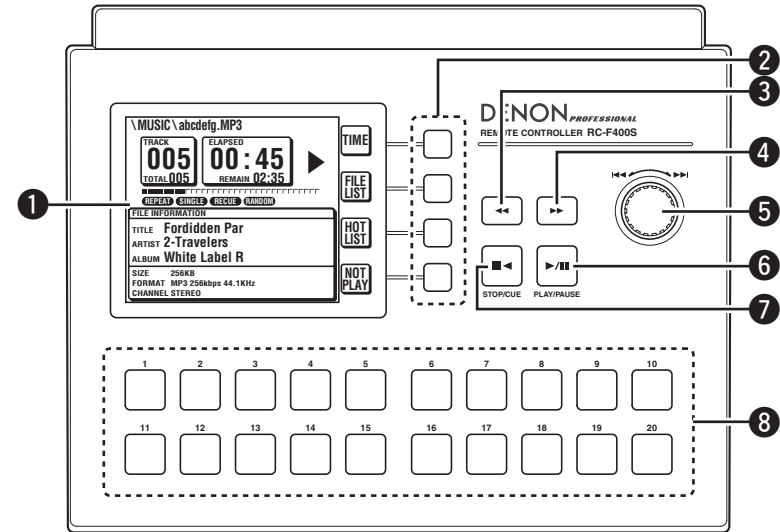
(4) Current filename

- Displays the name of the currently selected file.
- If there is no file to be played, “—” is displayed.

(5) Time display

- The elapsed time, remaining time, or display off is displayed in order by pressing the DISPLAY button. (See page 9)
- For more than 100 minutes, “99:59” is displayed.
- If an SD card is not inserted, “-:-” is displayed.

RC-F400S Top Panel



① Display unit

② Function buttons

- Corresponds to the function display. (See page 5)

③ <<< button

- Hold the button pressed to start playback as FR. (See page 11)

④ >>> button

- Hold the button pressed to start playback as FF. (See page 11)

⑤ <<</>>> jog wheel

- Turn the jog wheel to skip the track or to change the menu item.
- Press the jog wheel to register the settings in menu mode.

⑥ >/II button and indicator (Green)

- Press this button to start playback or pause playback.

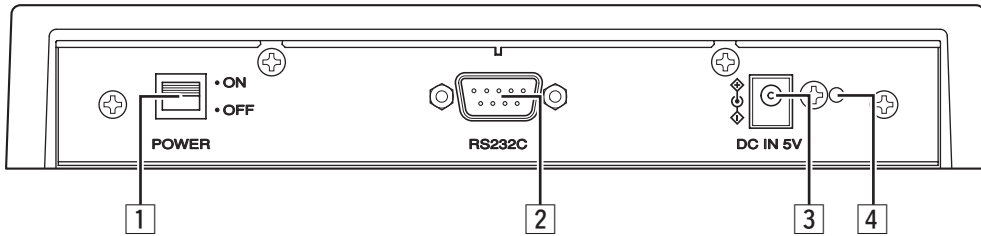
⑦ </II button and indicator (Amber)

- Press this button to stop playback.
- Press this to cancel key input.

⑧ Hot start buttons 1 – 20 and indicators (Green)

- Correspond to the hot-start list. (See page 14)

RC-F400S Rear panel



1 POWER ON/OFF switch

- Slide the knob to turn the power on or off.

2 RS-232C serial connector

- Connect the DN-F400 using the RS-232C straight cable supplied with the RC-F400S. (See pages 6, and 15 to 18.)

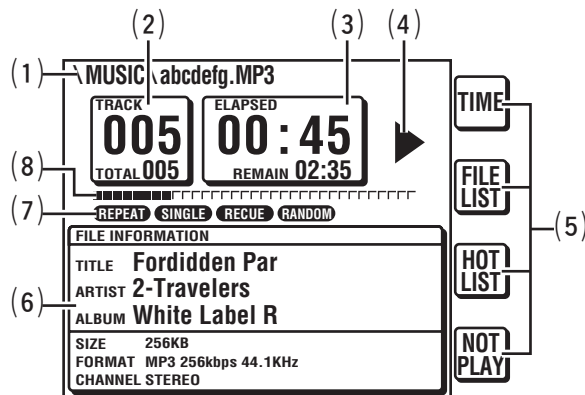
3 DC power inlet

- Connect the included AC power adaptor.

4 Mounting hole for the DC power cord holder

- Attach the holder to prevent disconnection of the cord from the connector. (See page 7)

RC-F400S Display



(1) Filename display

- Displays the filename.

(2) Track number display

- Displays the track number of a file being played and the total number of tracks.

(3) Time display

- Displays ELAPSED (elapsed playback time) and REMAIN (remaining playback time).
- If the TIME button of the function buttons is pressed, the displayed item is switched.
- For more than 100 minutes, "99:59" is displayed.

(4) Playback display

- Displays the playback status of the DN-F400 with an icon.
 - ▶ : Playback ; || : Pause ; ■◀ : Stop ; ▶▶ : FF ; ◀◀ : FR
 - ▶▶▶ : Play the playback point repeatedly. (Press the ▶▶▶ button to release it.)

(5) Function display

- TIME : Press the corresponding function button to change the time display.
- FILE LIST : Press the corresponding function button to play a file in file-list mode.
- HOT LIST : Press the corresponding function button to check the hot-start list.
- NOT PLAY : Press the corresponding function button to set the files that are not to be played. This is not displayed in programmed playback mode.

(6) FILE INFORMATION display

Information regarding a file is displayed. If there is no information, nothing is displayed.

- TITLE: The title of a file is displayed.
- ARTIST: The artist of a file is displayed.
- ALBUM: The album name of a file is displayed.
- SIZE: The file size is displayed.
- FORMAT: MP3 or WAV is displayed. (For MP3, the bit rate is also displayed, in kbps.)
- CHANNEL: STEREO or MONO is displayed.

(7) Playback mode display

- Displays the playback mode currently set.

(8) Progress bar

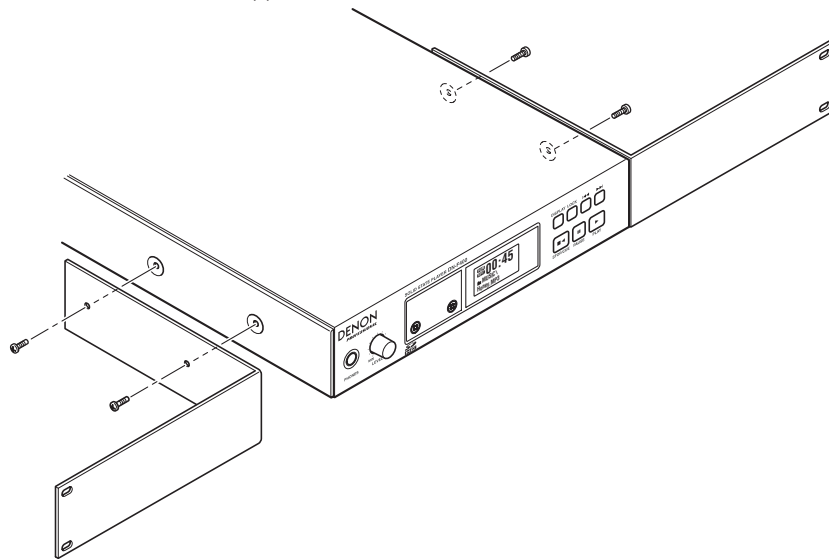
- Displays the playing point of a file.

2. PREPARATIONS

INSTALLATION

■ Attaching the mounting brackets for a 19-inch 1U half-sized rack

- The DN-F400 is half the size of 1U. Attach the included rack mounting brackets to the DN-F400. Then it can be mounted in an EIA 19-inch rack.
 - The RC-F400S is of desktop type only.
1. Remove two screws on the side panel of the DN-F400.
 2. Attach the rack mounting bracket to the DN-F400 with the included two screws. Attach the bracket on the opposite side.



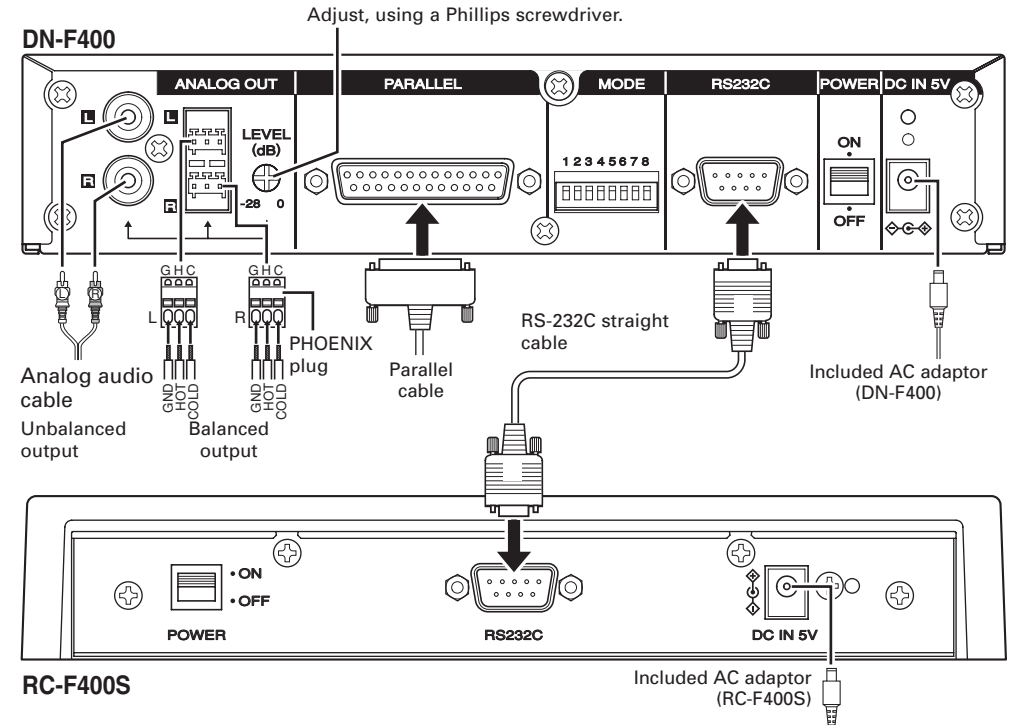
■ Mounting in a rack

- Do not cover the top of the unit. Remember, heat is dispersed from the DN-F400's upper surface.
- Set up the installation environment carefully. For example, take care to protect the DN-F400 from heat from other devices. If necessary, use forced ventilation. The surrounding conditions must meet the specifications described in "SPECIFICATIONS" on Page 21.
- If the DN-F400 is placed near an amplifier, tuner or other components, noise (induced hum) or beat interference may result (especially during AM or FM reception). If interference occurs, disconnect the DN-F400 or change the installation place.
- If the unit is not to be mounted in a rack, remove the rack mount brackets and attach the included feet.

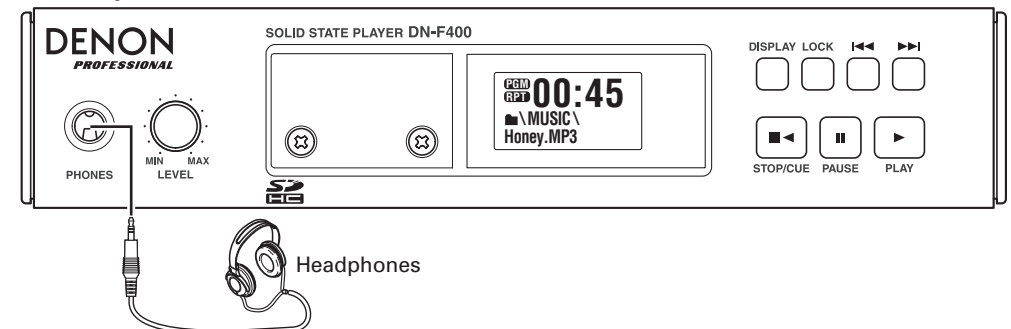
CONNECTIONS

■ Basic connection

1. Rear panel



2. Front panel



■ Connecting the DN-F400 and RC-F400S

- Use the RS-232C straight cable supplied with the RC-F400S.
- After connecting, fix the connector by turning the screws on the connector.

■ Connecting an audio device

- Connect an audio device to the analog audio output jacks using the analog audio cables.
- For audio connections, balanced type and unbalanced type are available. For connecting to the balanced output connectors, use the included PHOENIX plugs.
- After connecting, adjust the output level, using a Phillips screwdriver as required.
- Adjust the output level of both balanced and unbalanced-type connectors.

Connection precautions

- Before proceeding with connections or disconnections of cables and AC adaptor, be sure to turn all system components off.
- Ensure that analog audio cables are connected properly to the L (left) and R (right) jacks.
- Insert plugs fully into the terminals.
- Connect the output jacks to the amplifier CD or AUX input jacks.

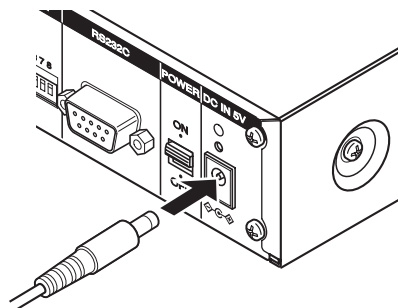
Cautions:

- Before connection, set the POWER ON/OFF switch to OFF.
- Do not touch the power cord with wet hands.
- When disconnecting the power cord, always make sure that you take hold of the plug. Yanking out or bending the cord can damage it and/or cause electric shocks or a fire.

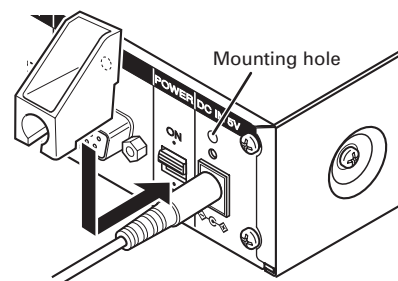
■ Attaching the power cord holder

- The procedures below are for the DN-F400.
- For the RC-F400S, attach the holder turning it by 90-degree.

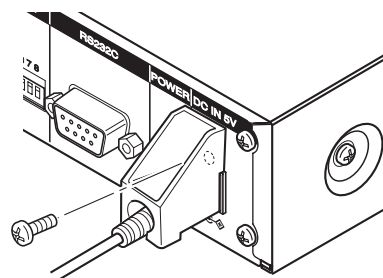
1. Connect the plug of the AC adaptor to the DC power inlet.



2. Pass the hole of the power cord holder to the cord of the AC adaptor. Then insert the holder to the mounting hole.

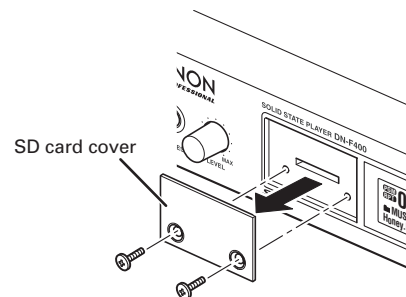


3. Fix the holder to the DN-F400 using the included screw.

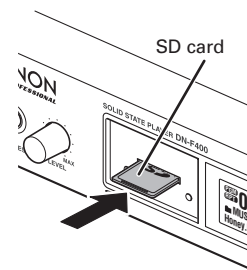


■ Inserting an SD card

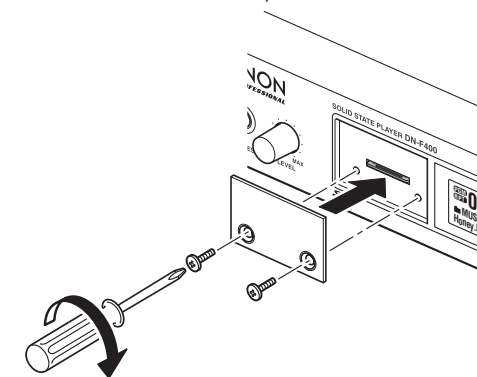
1. Turn the DN-F400 on using the POWER ON/OFF switch.
2. Remove the SD card cover fixing screws, and remove the cover.



3. Insert an SD card in the SD card slot, and push it until locked.

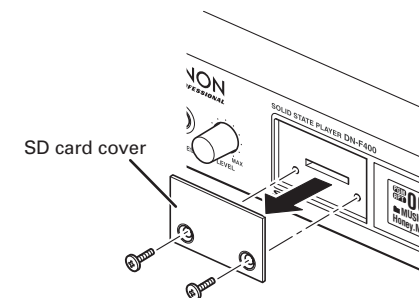


4. Attach the SD card cover using the screws if necessary.

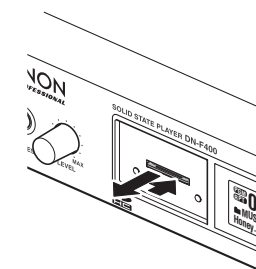


■ Removing an SD card

1. Press the 7 button if the unit is in playback status. If the unit is being operated, wait until operation is completed.
2. Remove the SD card cover fixing screws, and remove the cover.



3. Push the SD card to remove it.



3. DEVICE OPERATION

FILE FORMAT FOR PLAYBACK

■ PCM file format

Format	Sampling frequency	Quantization Bit number	Channel	File extension
PCM	44.1kHz	16bit	Stereo	wav
			Mono	
	48kHz		Stereo	
			Mono	

■ MP3 file format

Format	Sampling frequency	Quantization Bit number	Channel	Bit rate (kbps)	File extension
MP3	44.1kHz	16bit	Stereo	32- 320, VBR	mp3
	48kHz		Mono		

■ Supported media format

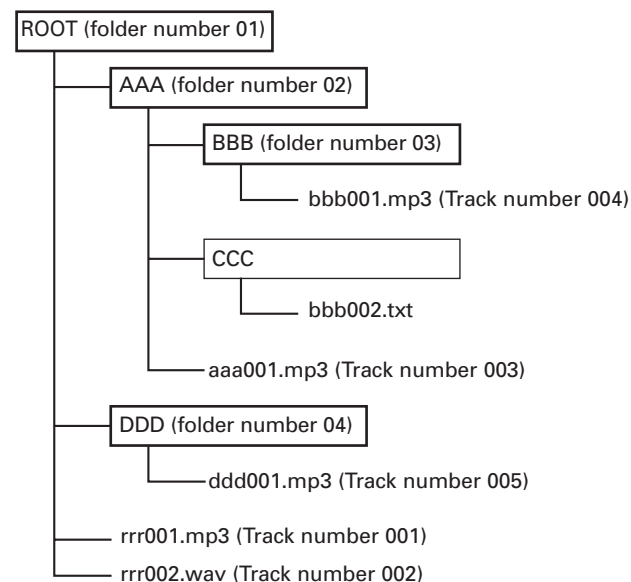
Media	Logical format
SD	FAT16, FAT32
SDHC (32 GB maximum)	



* SDHC logo is a trademark.

■ Handled audio files as “track” and playing audio file

- A folder (also called a “directory”) is a hierarchical level.
- After setting media device and searching for all audio files, the DN-F400 assigns each audio file a track number.
For example in the illustration below, at first each audio file is assigned a track number.
- Folder-AAA, folder-BBB, and folder-DDD contain audio files and can be selected for operations. But folder-CCC is excluded from operations. Folder-CCC does not contain audio files, and is excluded from operations.



- The maximum number of folders is 256 (including the root directory).
- If 1,000 or more files exist, files 1 to 999 will be played.
Files 1,000 and after will not be played back.
- Folder layers are a maximum of 3 (including the root directory).
- A maximum of 64 characters for a filename and 32 characters for a folder name can be used. (alphanumerics in upper- and lower-case letters, numerics, symbols (complying with FAT))
- A folder that does not include the file to be played has no folder number.

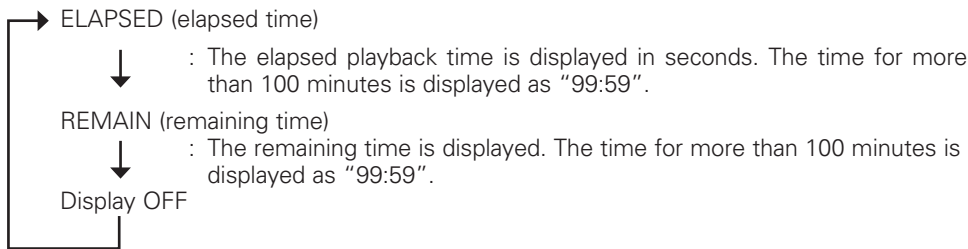
■ DN-F400 display information

When an SD card is inserted in the DN-F400, setting information, time information, and text information are displayed on the display unit of the DN-F400.



■ Time information

The following information is displayed in order by pressing the DISPLAY button on the DN-F400.



- If there is no media device detected, "--:" is displayed.

■ Setting information

Playback mode indicator

- This is displayed when programmed playback mode (PGM) or random playback mode (RND) is set.
- For setting random playback, use switches 2 and 4 of the MODE switch on the rear panel. (See page 11)

Repeat indicator

- This is displayed only when repeat playback (RPT) is set.
- For setting repeat playback, use switch 3 of the MODE switch. (See page 11)

■ Text information

Folder symbol and folder name

- Displays the name of the currently selected folder.
- If there is no media device detected, "--" is displayed on the right of the folder symbol.

Filename

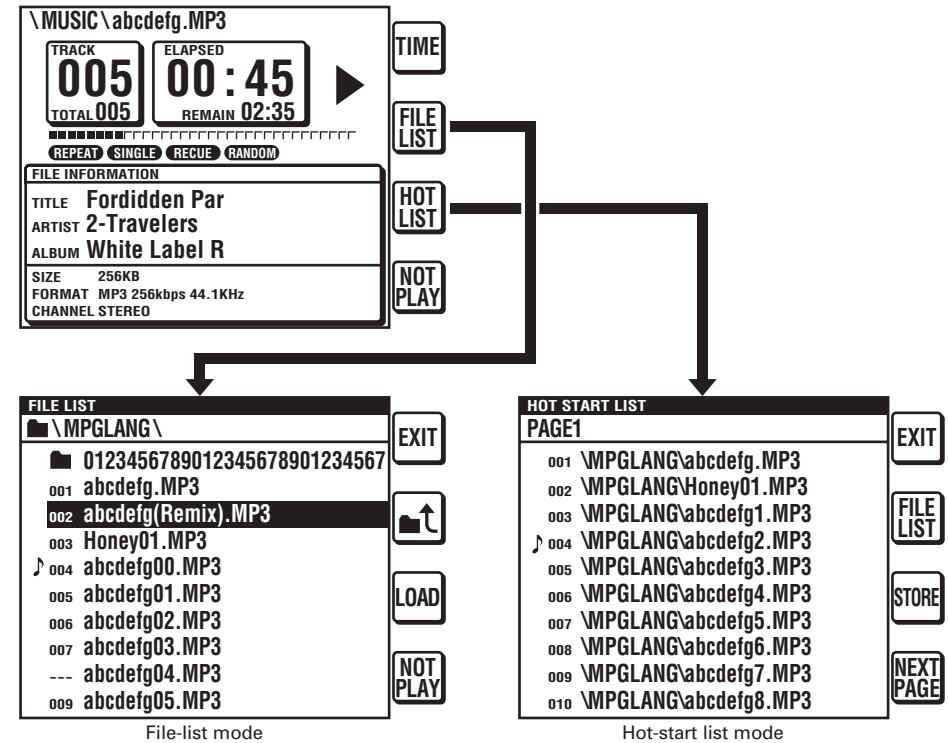
- Displays the filename of the currently selected file.
- If there is no filename, "--" is displayed.

Note:

- Two-byte characters like Japanese are not displayed correctly.

■ RC-F400S display information

- When the RC-F400S is connected to the DN-F400, and an SD card is inserted, the main mode is displayed on the display unit of the RC-F400S.
- The display unit of the RC-F400S has two display modes: file-list mode and hot-start list mode.



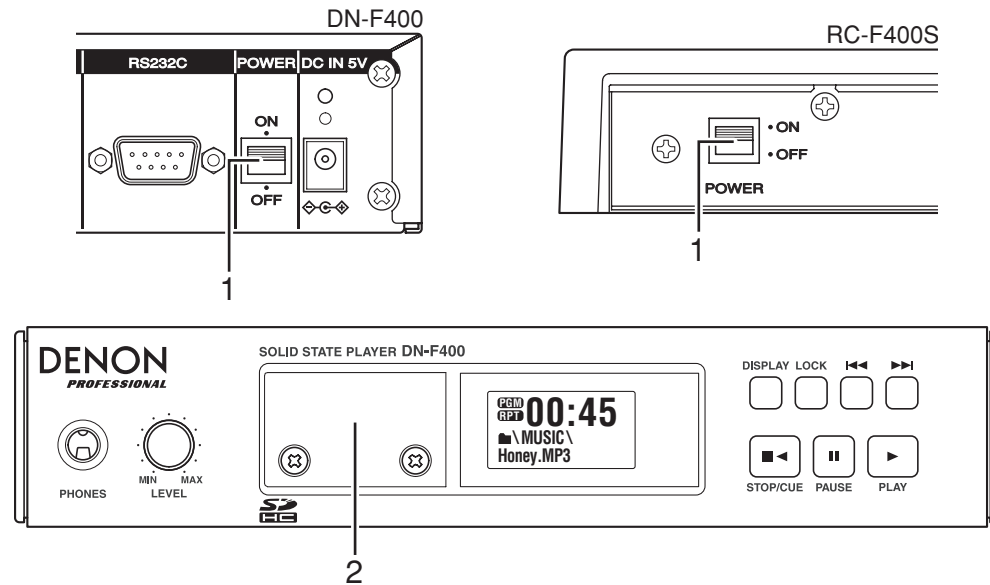
3. DEVICE OPERATION

NORMAL PLAYBACK

Before starting playback

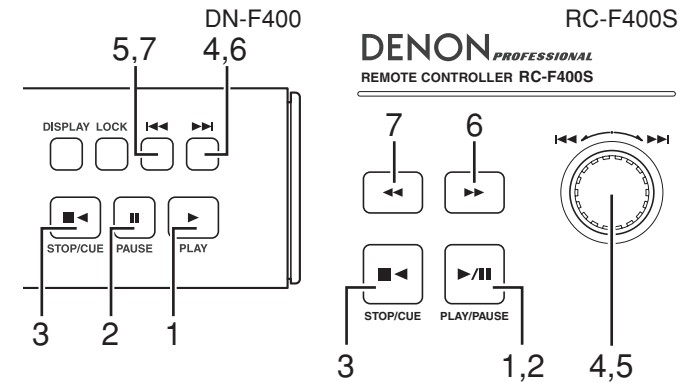
Before turning the power on, set the MODE switch on the rear panel of the DN-F400 according to the intended use. (See page 11)

1. Set the POWER ON/OFF switch of each device to ON after connecting the DN-F400 and RC-F400S.



- On the display of the RC-F400S, the startup display "DENON PROFESSIONAL" appears.
 - The version information is displayed on the DN-F400 during startup. (Example: "A-1.00")
 - Once startup completes, file information is displayed on the display unit of each device. (See page 4)
2. Insert the SD card to be played into the slot of the DN-F400. (See page 7)
 - If the storage medium is formatted other than for FAT16 or FAT32, "Unformat" is displayed.

NORMAL PLAYBACK



1. Starting playback
 - Press the ► button (DN-F400) or the ► / || button (RC-F400S). The button lights in green, and playback of a track starts.
2. Pausing playback
 - Press the || button (DN-F400) or the ► / || button (RC-F400S) during playback.
 - The play button flashes.
 - Press the ► button (DN-F400) or the ► / || button (RC-F400S) to resume playback.
3. Stopping playback
 - Press the ■◀ button.
4. Advancing to the next track during playback
 - DN-F400: Press the ►► button.
 - RC-F400S: Turn the ◀◀/►► jog wheel clockwise.
5. Returning to the beginning of the current track during playback
 - DN-F400: Press the ◀◀ button.
 - RC-F400S: Turn the ◀◀/►► jog wheel counterclockwise.
 - If the jog dial is turned within 1 second from the top of the track, playback skips to the beginning of the previous track.
6. Manual search forward
 - DN-F400: Press the ►► button.
 - RC-F400S: Press the ►► button.
 - Every time the ►► button is pressed, the playback point advanced one file.

- When the button is held pressed for more than 1 second, playback is in FF or FR of 2 times speed. (with audio output)
- When the button is held pressed for more than 4 seconds, playback is in FF or FR of 10 times speed. (with audio output)
- When the button is held pressed for more than 7 seconds, playback is in FF or FR of 100 times speed. (without audio output)
- When the button is held pressed for more than 10 seconds, playback is in FF or FR of 200 times speed. (without audio output)
- At the end of the final track, the playback is in pause mode.

7. Manual search in reverse

DN-F400: Press the ◀◀ button.

RC-F400S: Press the ◀◀ button.

- Every time the ◀◀ button is pressed, the playback point retreats one file.
- When the button is held pressed for more than 1 second, playback is in FF or FR of 2 times speed. (with audio output)
- When the button is held pressed for more than 4 seconds, playback is in FF or FR of 10 times speed. (with audio output)
- When the button is held pressed for more than 7 seconds, playback is in FF or FR of 100 times speed. (without audio output)
- When the button is held pressed for more than 10 seconds, playback is in FF or FR of 200 times speed. (without audio output)
- At the beginning of the track, the playback point moves to the end of the previous track and playback starts in FR.
At the beginning of the first track, playback is in pause mode.

Note:

- If a track with short length is manually searched for at high speed, the intended speed may not be achieved. With this unit, n-time-speed search is achieved by repeated playback for a duration of 0.5 seconds at the intervals of n-time-speed searching.

8. Finishing manual search

DN-F400: Release the ◀◀ or ▶▶ button.

RC-F400S: Release the ◀◀ or ▶▶ button.

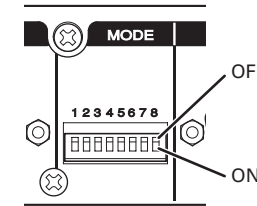
- If manual search is started during stop or pause, the searched point is reproduced repeatedly after manual search is finished.
- If manual search is started during playback, after manual search is finished, playback restarts from the point where the button is released.
- During 0.2 second after hot-start playback is started, no command, including searching, can be accepted.

9. Frame jump

While a searched point is reproduced repeatedly in Step 8, if the ◀◀ or ▶▶ button of the RC-F400S is pressed then released within 1 second, a reproduced point will jump by one frame.

ADVANCED PLAYBACK

Setting of the MODE switch



Various playback modes shown in the table below are available by setting the MODE switch on the rear panel of the DN-F400.

Note:

- Be sure to turn the power off before setting.

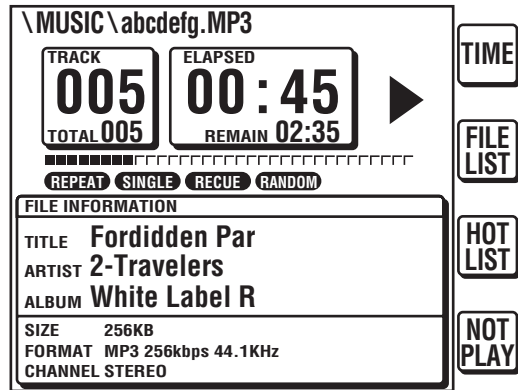
Switch No.	Items	Setting	Default setting
1	POWER ON PLAY	ON : Playback starts automatically when the power is turned on. OFF : Playback does not start automatically when the power is turned on.	OFF
2	PLAY MODE	ON : SINGLE mode (When playback ends, it stops.) OFF : CONT. mode (When playback ends, the next track is played back.)	OFF
3	REPEAT	ON : Repeat playback OFF : No repeat playback	OFF
4	RANDOM	ON : Random playback OFF : No random playback * enabled when SW2 (PLAY MODE) is set to OFF	OFF
5	FINISH MODE	ON : RECUE mode (When playback ends, the playback point moves to the playback starting point, and the unit enters CUE mode.) OFF : NEXT mode (When playback ends, the playback point moves to the beginning of the next track and the unit enters the CUE mode.) * enabled when SW2 (PLAY MODE) is set to OFF	OFF
6	PARALLEL	Setting of the parallel remote connector ON : Hot-start mode OFF : Normal mode	OFF
7, 8	RESERVE	For system setup. Never change the settings.	OFF

3. DEVICE OPERATION

Advanced playback using the RC-F400S

■ Main mode

When the RC-F400S is turned on, the main mode is displayed on the display unit.



For file operation using the RC-F400S, 2 modes are available: file-list mode and hot-start list mode.

1. File-list mode: Press the FILE LIST button.
 - In file-list mode, a file is selected from the file list and is played.
 - NOT PLAY setting: Set the files not to be played.
 - ENABLE setting: Cancel the NOT PLAY setting.
2. Hot-start list mode: Press the HOT LIST button.
In hot-start list mode, the hot-start list can be checked.

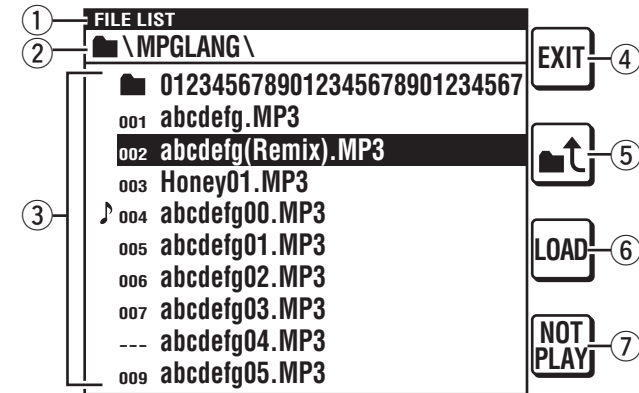
According to the operation mode, the following is shown on the display unit.

Display	Contents
Loading. . .	A file-list is being loaded from the DN-F400.
Not Connected	Not connected. The cable is disconnected.
Not Supported	A device other than the DN-F400 is connected.
No Card	An SD card insertion is not detected.
Error xxxxx	Error messages
Please select HOT START button	Files are set on the hot-start list.
Completed	Displayed after setting is completed.

■ File-list mode

1.Normal playback

If a file with the extension "m3u"(playlist file) is not found under the root in SD card, playback is in normal playback mode.

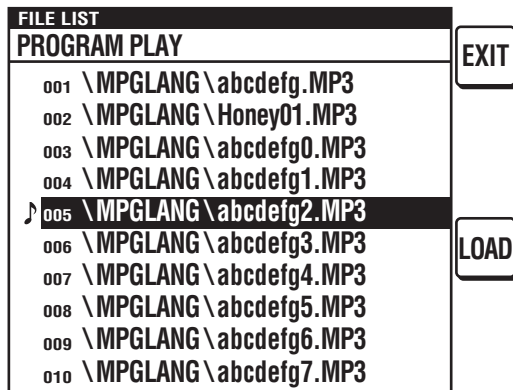


- ① **Title display**
Displays the "FILE LIST".
- ② **Folder display**
Displays the folder name.
A maximum of 256 characters can be displayed as a folder name.
- ③ **File list**
Displays the folder name or filename.
The "♪" symbol indicates the file being played.
- ④ **EXIT button**
Moves to the main mode .
- ⑤ **Folder up button**
Moves to the upper folder from the displayed one. (This is not displayed in ROOT.)
- ⑥ **LOAD button**
Set the selected file to any of Hot start 1 to 20.
- ⑦ **NOT PLAY button**
Set the files not to be played.

1. Select a folder with the ◀◀/▶▶ jog wheel, and press it. Then the files in the folder are displayed.
2. Press the ◀◀/▶▶ jog wheel to determine the file selection then press the ▶/|| button to start playback.

2. Programmed playback

- For a file with the extension “m3u”(playlist file) under the root in an SD card, programmed playback is performed in the order described in the file.
- Any file that is not described in the m3u file is excluded from playback and is not displayed on the file list. The full path of each file is displayed.



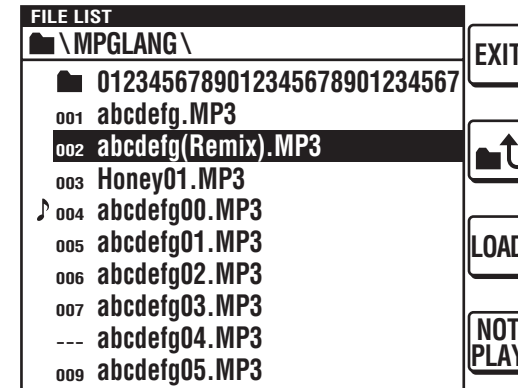
1. Press the ▶/|| button to start programmed playback.

3. Hot-start playback

- You can register files to the hot start buttons 1–20 of the RC-F400S and play back a registered file by merely pressing the corresponding button.
- See page 14 for details on how to register.

■ NOT PLAY setting

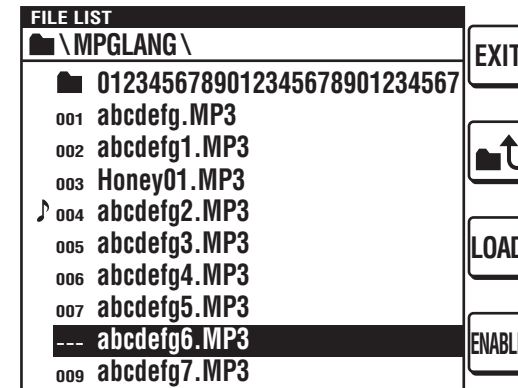
Set the files not to be played.



1. Select a file not to be played with the ◀◀/▶▶ jog wheel.
2. Press the NOT PLAY button.
3. “Completed” is displayed on the display unit.
4. When setting is completed, Track No display is changed to “—”. (Example: “Track008” changes to “—”.)

■ ENABLE setting

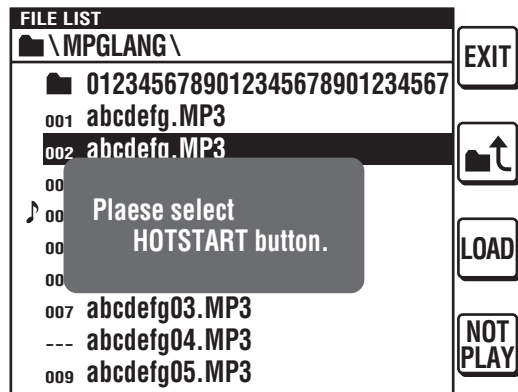
Cancel the setting of NOT PLAY to enable a file played back.



1. Select a file to be played with the ◀◀/▶▶ jog wheel.
2. Press the ENABLE button.
3. “Completed” is displayed on the display unit.
4. When setting is completed, Track No display “—” is changed to “XXX”. (Example: the display for Track002 changes to “002”.)

3. DEVICE OPERATION

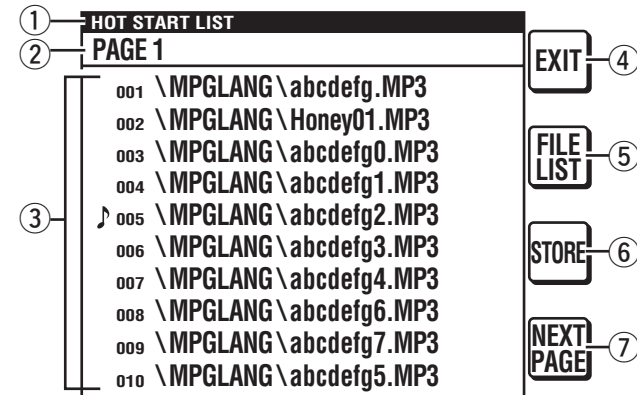
■ Hot-start setting



1. Select a file to be set in file-list mode with the ◀◀/▶▶ jog wheel.
2. Pause the playback at the point where playback of the set file is to be started.
3. Press the LOAD button.
4. "Please select HOT START button" is displayed on the display unit, and the unit enters the hot-start list mode.
Press the ■ button to cancel.
5. Press the hot start button for setting.
6. "Completed" is displayed on the display unit, and registration of new settings is completed.
7. Press the set button. Playback of the file set on the button starts promptly.
This operation is possible only during stop or playback pause.

■ Hot-start list mode

When playback starts by pressing the hot start button, the hot start button is lit during playback.



- ① **Title display**
Displays the "HOT START LIST".
- ② **PAGE display**
Displays the page number.
- ③ **Hot start list**
Displays the set filenames.
The "♪" symbol indicates the file being played.
- ④ **EXIT button**
Moves to the Main mode.
- ⑤ **FILE LIST button**
Moves to the File list.
- ⑥ **STORE button**
The set hot-start list is saved in a file.
The file is saved under the root with the name "DN-F400.ppl".
- ⑦ **NEXT PAGE or PREV PAGE**
Displays the list on the next or previous page.

4. CONTROL FEATURES

RS232C CONTROL

Connect the RS-232C straight cable to the RS-232C serial port (D-sub 9-pin). Then the unit can be controlled from external host equipment.

- The DN-F400 automatically transmits status data when status is changed.
- The DN-F400 will respond to status requests by transmitting the associated status data RS232C specifications.

Connections

- Applicable connector : 9-pin D-sub (male)
- Baud rate : 38400 bps
- Data Bit : 8bit
- Parity : None
- Stop bit : 1bit
- Flow control : None

Pin layout

Pin No	Signal Name
1	Ground
6	NC
2	TxD
7	NC
3	RxD
8	NC
4	NC
9	NC
5	S. Ground

Control command codes

The control command packets have a data length of 7 bytes or more. Each packet starts with "@" and ends with 0x0D.

Example: Control command code for number 5 (ASCII code @02005CR)

@	0	2	0	0	5	CR
0x40	0x30	0x32	0x30	0x30	0x35	0x0d

Response timeout is 100 mSec.

Status Request and Status Information codes

Example: Status Information code "Disc In" (ASCII code @0CDCI CR)

@	0	C	D	C	I	CR
0x40	0x30	0x43	0x44	0x43	0x49	0x0d

4.CONTROL FEATURES

Table of Control command codes

Code	Command
@0TRnnn+CR	Track Jump nnn
@02311+CR	DISPLAY
@02332+CR	Track Jump ►►I
@02333+CR	Track Jump I◄◄
@02348+CR	PAUSE
@02350+CR	RWD : ON
@0235001+CR	RWD : OFF
@02352+CR	FF : ON
@0235201+CR	FF : OFF
@02353+CR	PLAY
@02354+CR	STOP
@0HPnn+CR	HOT START PLAY : Hot Start No nn
@0FAENnnn+CR	File Attribute : Enable Track No. nnn
@0FAEEnnn+CR	File Attribute : Disable(Not Play) Track No. nnn
@0HSN Nnnn+CR	HotStart Set NN : Hot Start No. nnn : Track No
@0HSSR+CR	Hot Start List Store

Table of Status Request and Status information codes

When a Status Request Command from the host is received by the DN-F400, the DN-F400 sends the Status Information to the host.
 When the DN-F400 changes status, the DN-F400 automatically sends Status Information to the host.

Mode		Request Code	Status		Answer Code
Card		@0?CD +CR	Card	No Card	@0CDNC+CR
				Card In	@0CDCI+CR
				Unformat	@0CDUF+CR
				Write Protect	@0CDWP+CR
Status		@0?ST+CR	STOP	STOP	@0STST+CR
				PLAY/STOP	@0STTS+CR
				PLAY	@0STPL+CR
			PLAY	PLAYPAUSE	@0STPP+CR
				REPEAT PLAY PAUSE	@0STRP+CR
				FF	@0STFF+CR
				RWD	@0STRW+CR
			OTHER	Operation Error	@0STER+CR
				Busy	@0STBY+CR
			Total Track Number		@0?TT+CR
Track Number		@0?TR+CR	Track Number	XXX	@0TRnnn+CR
Elapse Time		@0?ET+CR	Elapse Time	hhmmss	@0ETHhmmss+CR
Remain Time		@0?RM+CR	Remain Time	hhmmss	@0RMhmmss+CR
Play Track Algo/File	CH	@0?ch+CR	CH	STEREO	@0chST+CR
				MONO	@0chMO+CR
	Algo	@0?af+CR	Algo	PCM, bit length xx	@0afPMxx+CR
				MP3, bit rate xxx(kbps)	@0afM3xxx+CR (VBR:"VBR")
Play Track Algo/File	FS	@0?fs+CR	FS	XX	@0fsXX+CR (48k:"48" 44.1k:"44")
	Artist	@0?at+CR	Artist	XXXXXX	@0atXXXXXX+CR
	Title	@0?ti+CR	Title	XXXXXX	@0tiXXXXXX+CR
	Album	@0?al+CR	Album	XXXXXX	@0alXXXXXX+CR
File Name	nnn:Track No	@0?Tnnn+CR	File Name	XXXXXX	@0Tnxxxxxx+CR
Fils Size	nnn:Track No	@0?Tsnnn+CR	Fils Size	XXXXXX	@0Tsxxxxxx+CR
Hot Start Set	nn:Hot Start No	@0?HSnn+CR	Hot Start Set	nn	@0HSNNnnHHHMMSSmm+CR NN: Hot Start No. nnn: Track No HHH MM SS mm hours min. sec. msec

4.CONTROL FEATURES

Mode		Request Code	Status		Answer Code
Play attribute (Enable /Disabel(Not Play))		@0?FAnnn+CR	Play attribute	Enable	@0FAENnnn+CR
				Disable (Not Play)	@0FADEnnn+CR
Program Play/Nomal Play		@0?PG+CR	Program Play/Nomal Play	Nomal Play	@0PG00+CR
				Program Play	@0PG01+CR
PlayMode		@0?PM+CR	PlayMode	Nomal	@0PMOF+CR
				Single Play	@0PMSP+CR
				RANDOM	@0PMRD+CR
Finish Mode		@0?FM+CR	Finish Mode	Next	@0FMNT+CR
				Recue	@0FMRC+CR
Repeat Mode		@0?RE+CR	Repeat Mode	On	@0RE00+CR
				OFF	@0RE01+CR
Version		@0?VN+CR	Version	xxxxxxx	@0VNxxxxxxxx+CR
Record Time	nnn: Track No	@0?rtnnn	Record Time	YYYY MM DD hh mm ss	@0rt YYYYMMDDhhmmss+CR
HOT START Play No		@0?HP+CR	HOT START Play No	HOT START Play No. nn	@0HPnn+CR
				STOP Normal Play etc	@0HP00+CR

■ Play Mode commands

Setting of the MODE switch on the DN-F400		Playback mode
PLAY MODE	RANDOM	
Nomal	ON	Random (@0PMRD)
Single	ON	Single (@0MPSP)
Nomal	OFF	Nomal (@0PMOF)
Single	OFF	Single (@0MPSP)

PARALLEL CONTROL

Connections

The settings of Pins No. 16 to 20 can be changed with switch No. 6 PARALLEL of the MODE switch on the rear panel of the DN-F400. (See page 11)

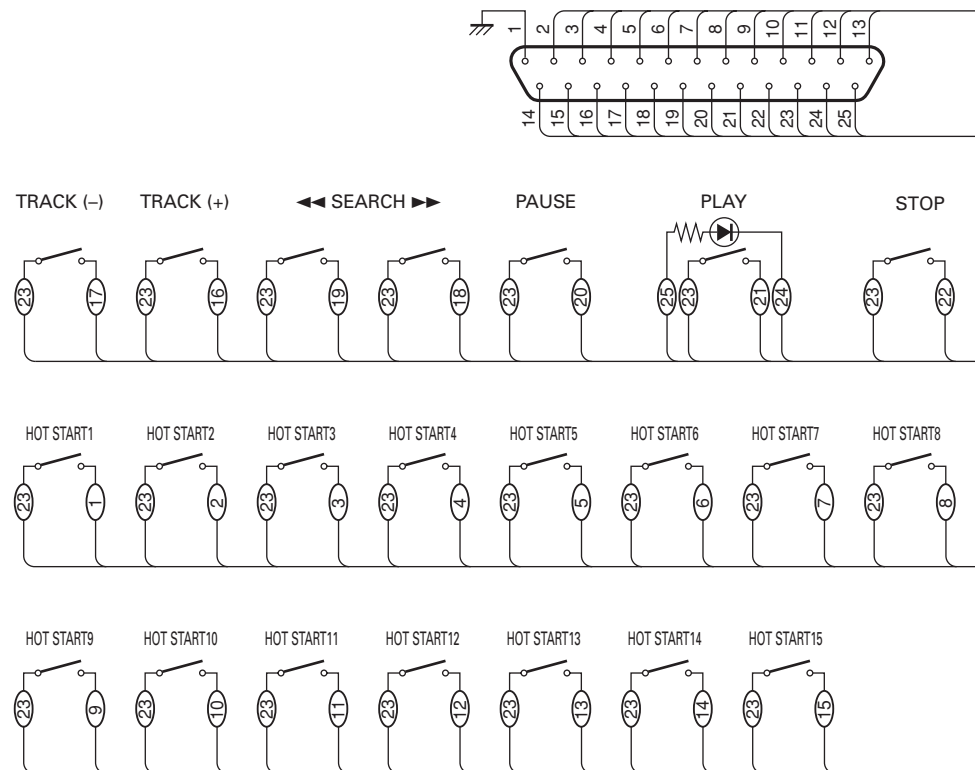
- Switch No.6:
Set to ON (Hot start mode).
- Switch No.6:
Set to OFF (Normal mode).

Pin No.	Signal Name	I/O
1	Hot Start 1	
2	Hot Start 2	
3	Hot Start 3	
4	Hot Start 4	
5	Hot Start 5	
6	Hot Start 6	
7	Hot Start 7	
8	Hot Start 8	
9	Hot Start 9	
10	Hot Start 10	
11	Hot Start 11	
12	Hot Start 12	
13	Hot Start 13	
14	Hot Start 14	
15	Hot Start 15	
16	Hot Start 16	
17	Hot Start 17	
18	Hot Start 18	
19	Hot Start 19	
20	Hot Start 20	
21	PLAY	
22	STOP	
23	Command Common	-
24	PLAY Tally	O
25	Tally Power supply	-

Pin No.	Signal Name	I/O
1	Hot Start 1	
2	Hot Start 2	
3	Hot Start 3	
4	Hot Start 4	
5	Hot Start 5	
6	Hot Start 6	
7	Hot Start 7	
8	Hot Start 8	
9	Hot Start 9	
10	Hot Start 10	
11	Hot Start 11	
12	Hot Start 12	
13	Hot Start 13	
14	Hot Start 14	
15	Hot Start 15	
16	Track Jump +	
17	Track Jump -	
18	FWD	
19	RWD	
20	PAUSE	
21	PLAY	
22	STOP	
23	Command Common	-
24	PLAY Tally	O
25	Tally Power supply	-

Remote control circuit

- Remote control connections (Normal mode)



Note:

- The rating of REMOTE connector pin 25 (TALLY POWER SUPPLY) is +5 VDC, 100 mA maximum.
Avoid currents in excess of the rating, or it may cause a malfunction or a risk of fire.

Note:

- The tally output pin has open collector IC specifications (I_{max}. 10mA, V_{max}. 5.5V).
- The tally input pin has LVTTTL IC specifications (V_{cc} 3.3V).
- Maximum current for Tally power supply (Pin 25) is 100mA.

5. TROUBLESHOOTING

Make sure of the followings before you consider as any malfunctions :

1. Are all the connections correct?
2. Are all system components being operated correctly in accordance with the operating instructions?
3. Are the speakers and amplifier/receiver functioning correctly?

If the Unit still does not function properly, check the symptom against the list below. If the symptom is not covered on the check list, contact your dealer or service centers. Service centers are listed at <http://www.d-mpro.com>.

Problem	Cause	Remedy
"No Media" is displayed when an SD card is inserted.	An SD card is not inserted correctly.	Remove and reinsert the SD card.
"Unformat" is displayed.	Sound is not recorded correctly or the media device is not supported.	Use correctly recorded and supported media device.
Pressing the PLAY button cannot start playback.	The connector of the SD card is dirty.	Clean the connector of the SD card.
Sound is not output or is distorted.	The cable is not connected correctly. The amplifier is not adjusted correctly.	Connect the cable correctly. Adjust the amplifier.
A specific part cannot be played correctly.	Sound is not recorded correctly. Or the media device is not supported.	Use the correctly recorded and supported media device.
Programmed playback does not function.	For programmed playback, an error is found in the m3u file list.	Check the programmed playback again.
A file cannot be played.	Decode error	Check that the file to be played has an extension supported by the DN-F400. Check that the filename extension matches the file type.

■ Details on error messages and remedies

Problem	Display	Cause	Remedy
An SD card cannot be detected.	No Media	An SD card is not inserted correctly.	Remove and reinsert the SD card.
An SD card cannot be recognized.	Unformat	The SD card is formatted other than for FAT16 or FAT32.	Format it for FAT16 or FAT32, using a PC.
A target file cannot be found.	No File	A target file cannot be found.	Check the file.
Operation cannot be accepted.	Key Locked	Operation is performed in key-lock mode.	Check if the unit is in key-lock mode.
Writing to an SD card cannot be performed.	Card Locked	The SD card is write-protected.	Check the notch of the SD card.
Playback in FWD or RWD cannot be performed.	VBR (Limit For VBR Error)	A VBR file is played in FWD or RWD.	Check the MP3 file.
Operation cannot be accepted.	Can not.	An illegal operation was attempted.	Check the operation.
Upgrading cannot be done.	Err Update File	Error in upgrading a file or file system.	Download the upgrading file again.
An SD card cannot be read.	Err Media 11 (read error)	An error occurred with an SD card. (including a card of slow writing speed)	Change the media.
	Err Media 12 (timeout)		
	Err Media 13 (underrun error)		
	Err Flash ROM		
Operation cannot be accepted.	No RC-F400S	An RC-F400S is not connected.	Check the serial connection.
File format error	Err Format	The MP3 or WAV file format is abnormal or not supported.	Format it for the supported content again.
No status response (RC-F400S).	"NOT CONNECT"	Not connected.	Check the connections.

6. SPECIFICATIONS

■ SYSTEM

Playback Media :	SD/SDHC
Playback File Format :	WAV, MP3 (MPEG-1 Layer III)
Media Format :	FAT16/FAT32
MP3 Bit Rate :	32-320 kbps
Sampling Frequency :	44.1/48 kHz
Quantization :	16 bit

■ AUDIO SECTION

Audio channel :	2 (Stereo) / 1 Monaural
Frequency response :	20 to 20,000 Hz \pm 1.0 dB
Dynamic range :	95 dB
Signal-to-noise Ratio :	96 dB (1 kHz, 0 dB playback, A filter)
Channel separation :	85 dB (1 kHz, 0 dB playback, A filter)
Total Harmonic Distortion :	0.005% (1 kHz, 0 dB playback, A filter)

Analog unbalanced output (RCA) level (load)/output impedance :
+6 dBV (10 k Ω) 0 dB playback
/400 Ω minimum output -22 dBV

Analog balanced maximum output level (load)/output impedance :
+24 dBm (600 Ω) 0 dB playback
/22 Ω minimum output -4 dBm

Headphone Output :
20 mW / 32 ohms

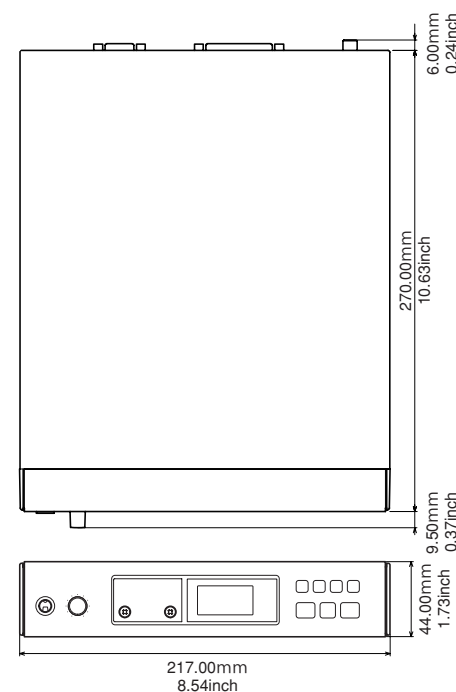
■ GENERAL

Power Source :	DC 5 V
Power Consumption :	5.0 W (in playback)
Weight :	1.6 kg (3 lbs)
Dimensions (W x H x D) incl. rack kits :	217 (8.54") x 44(1.73") x 285.5 (11.24") mm
Installation :	19-inch 1U rack space (detachable)

■ ENVIRONMENTAL CONDITIONS

Operating temperature :	+5 °C to +35 °C
Operating humidity :	25 % to 85 %, non condensing
Storage temperature :	-20 °C to +60 °C
Storage humidity :	25 % to 85 %, non condensing

■ DIMENSIONS



Note:

- Some part may not be played back correctly depending on the format or recording status.
- For improvement purposes, specifications and design are subject to change without notice.

D&M Holdings Inc.

