

FM/AM Digital Tuner

Operating Instructions



XDR-F1HD

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<http://www.sony.net/>

Owner's Record

The model number and the serial number are located on the bottom.

Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. XDR-F1HD

Serial No. _____

For customers who purchased this product in the USA Please register this product on line at <http://www.sony.com/productregistration>. Proper registration will enable us to send you periodic mailings about new products, services, and other important announcements. Registering your product will also allow us to contact you in the unlikely event that the product needs adjustment or modification. Thank you.

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To reduce the risk of fire, do not cover the ventilation of the apparatus with newspapers, tablecloths, curtains, etc. And do not place lighted candles on the apparatus. To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Do not expose the batteries (battery pack or batteries installed) to excessive heat such as sunshine, fire or the like for a long time.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

These following indications are located on the bottom exterior.



This symbol 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.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION

This equipment 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 equipment 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 equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment 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 equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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) 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.

HD Radio™ Technology Manufactured Under License From iBiquity Digital Corp. U.S. and Foreign Patents. HD Radio™ and the HD Radio logo are proprietary trademarks of iBiquity Digital Corp.

What is HD Radio™ Technology?

HD Radio Broadcasting was approved by the Federal Communications Commission in October 2002 as the system for digital AM and FM broadcasting in the U.S.

HD Radio technology features include:

- Static-free, clear radio reception.
- FM Multicasting – the ability to broadcast multiple program streams over a single FM frequency.
- A variety of "data services," including text-based information – artist name, song title, etc. scrolled across your receiver display.
- Digital broadcasts in the same frequencies as analog broadcasts; listeners do not need to learn a new station number and today's stations remain at their current place on the dial.

HD Radio technology is developed and licensed by iBiquity Digital Corporation and supported by the leaders of the broadcasting, consumer electronics and automotive industries.

Features

- Compact size HD Radio™ tuner unit.
- Large LCD display to show information about the content.
- Up to 20 presets for FM and AM stations.
- Audio-output (Stereo: pin jack.)
- Full function remote control.

Precautions

- Play the unit on the power source specified in "Specifications".
- To disconnect the AC power cord (mains lead), pull it out by the plug, not the cord.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- The nameplate, the symbol for CLASS II and the dating code are located on the bottom exterior.
- Do not leave the unit in a location near a heat source such as a radiator or airduct, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on a surface (a rug, a blanket, etc.) or near materials (a curtain) which might block the ventilation holes.
- Should any solid object or liquid fall into the unit, unplug the unit and have it checked by a qualified personnel before operating it any further.
- To clean the casing, use a soft cloth dampened with a mild detergent solution.
- Never touch the wire of the external FM antenna during a thunderstorm. Furthermore, immediately disconnect the AC power cord from the radio.

If you have any questions or problems concerning your unit, please consult your nearest Sony dealer.

Troubleshooting

Should any problem persist after you have made the following checks, consult your nearest Sony dealer.

Only analog broadcast is received in an HD Radio reception area.

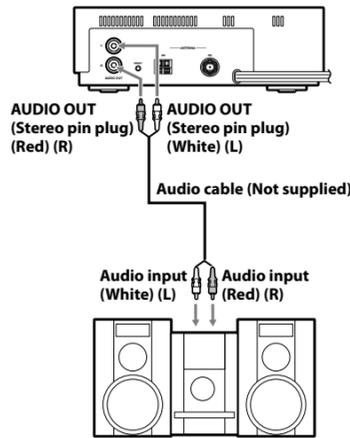
- Depending on the conditions, if the incoming signal strength is too weak or unstable, the HD indicator will not flash or light up. In that case, the HD Radio broadcast will be received as an analog signal.

Noise occurs.

- Ensure that the unit and the antenna are not near a digital amplifier or any other components that emits noise.

Connecting the system

This section describes how to hook up the unit to the audio system. Be sure to turn off the power of each component before making the connections.



Notes

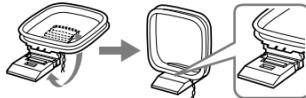
- Install this system so that the power cord can be unplugged from the wall socket immediately in the event of trouble.
- If noise occurs, separate the unit from other components.
- Noise may occur during AM reception if the unit is connected to a digital amplifier or a component equipped with a digital amplifier.

Connecting the antenna

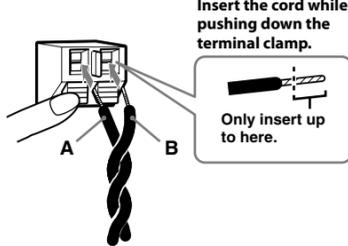
To connect the AM loop antenna

The shape and the length of the antenna is designed to receive AM signals. Do not dismantle or roll up the antenna.

- 1 Remove only the loop part from the plastic stand.
- 2 Set up the AM loop antenna.



- 3 Connect the cords to the AM antenna terminals. Cord (A) or cord (B) can be connected to either terminal.



- 4 Make sure the AM loop antenna is connected firmly by pulling softly.

Adjusting the AM loop antenna

Find a place and an orientation that provide good reception.

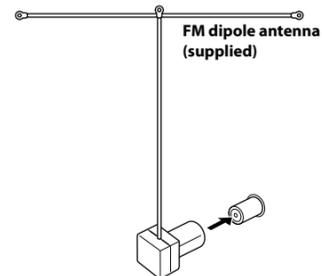
- Do not place the AM loop antenna near the unit or other AV equipment, as noise may result.
- If you use an external polarized AM antenna, be sure to connect the ground cord to the \perp terminal. The supplied AM antenna cord has no polarity.

Tip

Adjust the direction of the AM loop antenna for best AM broadcast sound.

To connect the FM antenna

This unit comes supplied with an FM dipole antenna. Connect an antenna that provides good reception to the FM antenna terminal.

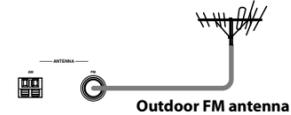


Adjusting the FM dipole antenna

Be sure to fully extend the FM dipole antenna. Attach the antenna in the shape of a T to a high position on a wall away from this unit.

Tip

If you have poor FM reception, use a 75 Ω coaxial cable (not supplied) to connect the unit to an outdoor FM antenna as shown below.



SONY

Portable Audio

LIMITED WARRANTY (U.S. Only)

Sony Electronics Inc. ("Sony") warrants this product against defects in material or workmanship for the time periods and as set forth below. Pursuant to this Limited Warranty, Sony will, at its option, (i) repair the product using new or refurbished parts or (ii) replace the product with a new or refurbished product. For purposes of this Limited Warranty, "refurbished" means a product or part that has been returned to its original specifications. **In the event of a defect, these are your exclusive remedies.**

Labor: For a period of one (1) year from the original date of purchase of the product ("Labor Warranty"), Sony will, at its option, repair or replace with new or refurbished product, product determined to be defective. If Sony elects to replace the product after this Labor Warranty has expired but while the Parts Warranty below is still in effect, it will do so for the applicable labor charge.

Parts: For a period of one (1) year from the original date of purchase of product ("Parts Warranty"), Sony will supply new or refurbished replacement parts in exchange for parts determined to be defective.

This Limited Warranty covers only the hardware components packaged with the Product. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the Product; any such software is provided "AS IS" unless expressly provided for in any enclosed software Limited Warranty. Please refer to the End User License Agreements included with the Product for your rights and obligations with respect to the software.

Instructions: To obtain warranty service, you must deliver the product, freight prepaid, in either its original packaging or packaging affording an equal degree of protection to the Sony authorized service facility specified. **It is your responsibility to backup any data, software or other materials you may have stored or preserved on your unit. It is likely that such data, software, or other materials will be lost or reformatted during service and Sony will not be responsible for any such damage or loss.** A dated purchase receipt is required. For specific instructions on how to obtain warranty service for your product,

Visit Sony's Web Site:
www.sony.com/service

Or call the **Sony Customer Information Service Center**
1-800-222-SONY (7669)

For an accessory or part not available from your authorized dealer, call:

1-800-488-SONY (7669)

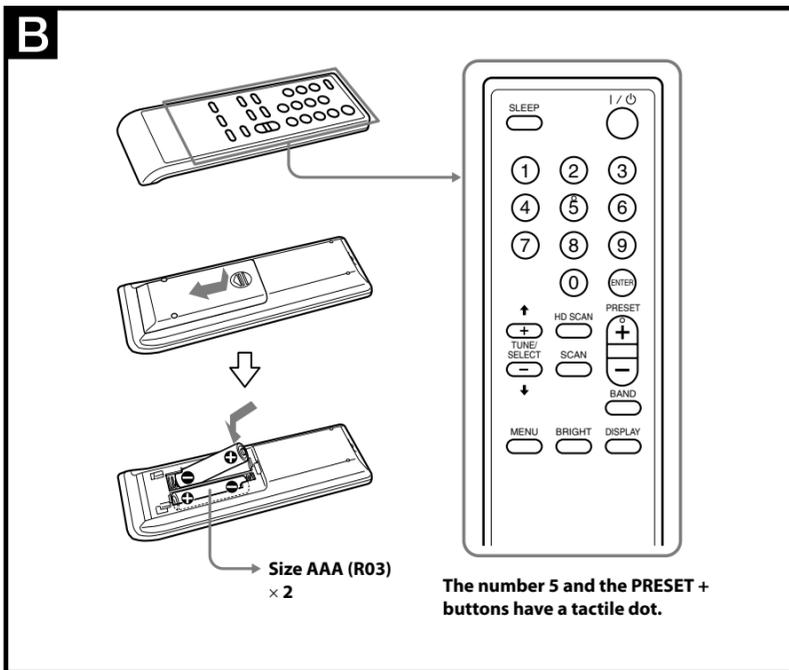
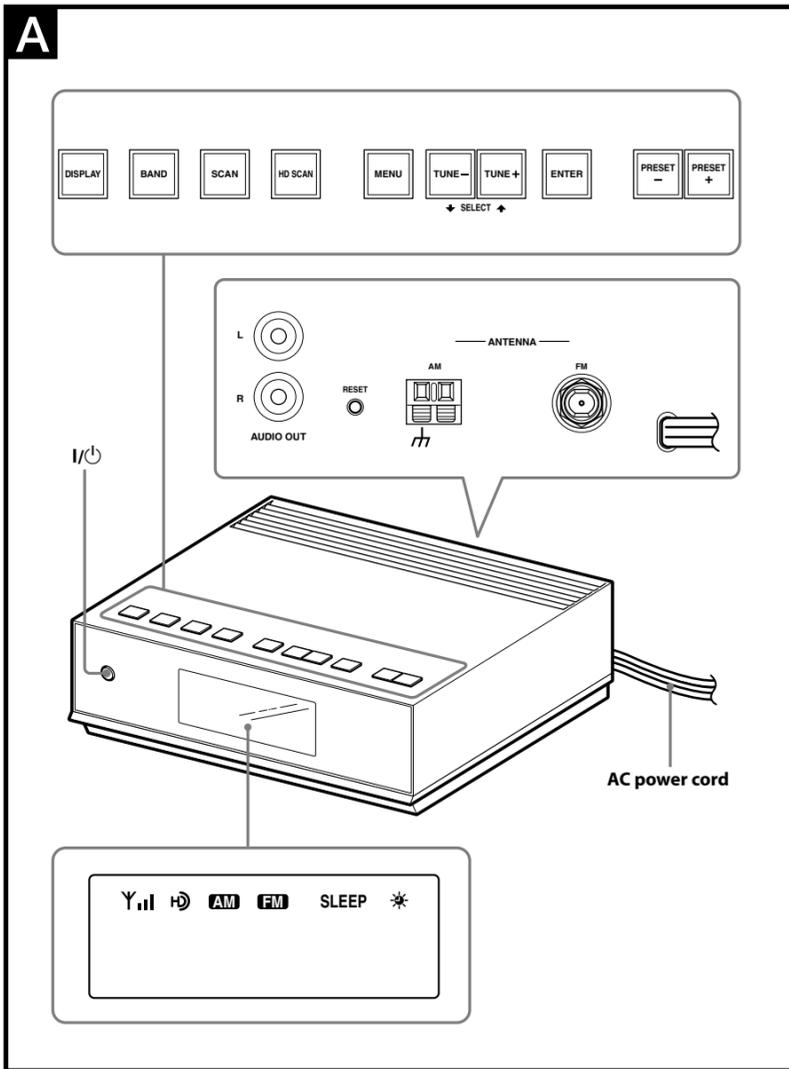
Repair / Replacement Warranty: This Limited Warranty shall apply to any repair, replacement part or replacement product for the remainder of the original Limited Warranty period or for ninety (90) days, whichever is longer. Any parts or product replaced under this Limited Warranty will become the property of Sony.

This Limited Warranty only covers product issues caused by defects in material or workmanship during ordinary consumer use; it does not cover product issues caused by any other reason, including but not limited to product issues due to commercial use, acts of God, misuse, limitations of technology, or modification of or to any part of the Sony product. This Limited Warranty does not cover Sony products sold AS IS or WITH ALL FAULTS or consumables (such as fuses or batteries). This Limited Warranty is invalid if the factory-applied serial number has been altered or removed from the product. This Limited Warranty is valid only in the United States.

LIMITATION ON DAMAGES: SONY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT.

DURATION OF IMPLIED WARRANTIES: EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This Limited Warranty gives you specific legal rights and you may have other rights which vary from state to state.



Preparing the remote commander

Installing the batteries into the remote commander (See Fig. B)

Insert two size AAA (R03) batteries (not supplied).

When to replace the batteries

With normal use, the batteries should last for about six months. When the remote commander no longer operates the unit, replace all the batteries with new ones.

Notes

- Do not charge dry batteries.
- When you are not going to use the remote commander for a long time, remove the batteries to avoid any damage caused by leakage and corrosion.

Setting the clock

- Plug in the unit. The display will flash "AM 12:00."
- Press **MENU** to show the menu display.



- Press **SELECT** ↑ or ↓ to select "TIME SET," then press **ENTER**. The hour will start to flash in the display.



- Press **SELECT** ↑ or ↓ until current hour appears in the display, then press **ENTER**. The hour is set and the minutes start to flash.
- Repeat step 4 to set the minute.

Note

If you do not set the menu within 65 seconds, the setting mode is canceled.

To change the display to the daylight saving time (summer time) indication

- Press **MENU** to show the menu display.
- Press **SELECT** ↑ or ↓ to select "DST," then press **ENTER**.
- Press **SELECT** ↑ or ↓ to select "ON," then press **ENTER**. "*" appears and the time indication changes to summer time.

To deactivate the DST function, select "OFF" in step 3.

Playing the radio

-Manual tuning

- Press **I/O** to turn on the radio.
- Press **BAND** to select the band AM or FM.
- Press **TUNE +** or **-** to tune in to a desired frequency.

Note

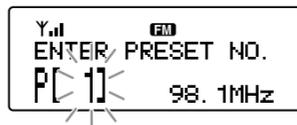
The frequency cannot be input with the number buttons of the remote commander.

-Preset tuning

You can preset 20 stations each for AM and FM.

Presetting a station

- Follow steps 1 to 3 in "Manual tuning" to tune the frequency you wish to preset.
- Press and hold **ENTER** for a few seconds. The display changes as follows:



- Press **PRESET +** or **-** to select the preset number, then press **ENTER**. The frequency is stored in the selected preset number.

To preset another station, repeat these steps.

Note

If you try to store another station in the same preset number, the previously stored station will be replaced.

Tuning in to a station

- Press **I/O** to turn on the radio.
- Press **BAND** to select the band AM or FM.
- Press **PRESET +** or **-** to select the desired preset number.

Tip

The preset can be selected by pressing the number button of the remote commander. Press **ENTER** after the preset number is selected.

-Scan tuning

The unit will automatically scan the selected band. In HD scan, HD Radio stations are scanned.

- Press **I/O** to turn on the radio.
- Press **BAND** to select the band AM or FM.
- Press **SCAN** or **HD SCAN** on the unit or remote commander. Scanning of the selected band starts. When a station is received, scanning pauses for 3 seconds and then continues.
- When the unit tunes in to the desired station, do any of the following operations to stop scanning.
 - Press **ENTER** on the unit or remote commander.
 - Press **SCAN** or **HD SCAN**.
- If necessary, press **TUNE +** or **-** to tune in to the station more precisely.

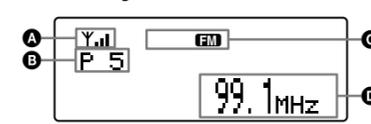
Changing the display mode and settings

To change the display mode

Press **DISPLAY**.

The display changes as follows:

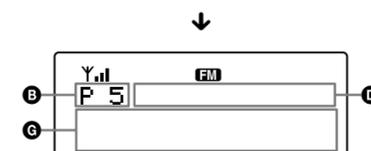
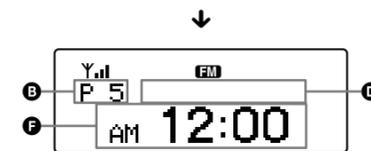
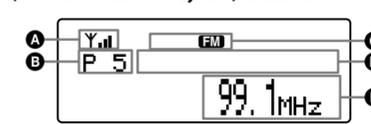
When an analog radio station is received



- A Field strength level indicator
- B Preset number*
- C Band
- D Frequency
- E Current time

* When you tune in a station by selecting a preset number.

When an analog FM broadcast that supports RBDS (Radio Broadcast Data System) is received



- A Field strength level indicator
- B Preset number*
- C Band
- D Station name
- E Frequency
- F Current time
- G Text information

* When you tune in a station by selecting a preset number.

Note

The display item differs depending on the content of a broadcast or the station.

When an HD Radio station is received



- A HD indicator
 - B HD indicator Reception status
- | | |
|---------------|--------------------------------------|
| Stays lit | Strong HD signal, digital reception* |
| Flashes | Weak HD signal, analog reception |
| Not displayed | No HD signal, analog reception |

* The HD indicator flashes momentarily at first, and then stays lit.

- B Field strength level indicator
 - C Preset number*
 - D Call sign
 - E Band
 - F Song title/artist name
 - G Channel number (FM only)
- Appears when HD Radio broadcasts multiple program. Press **TUNE +** or **-** to select a sub channel.

- H Frequency
- I Current time
- J Station name
- K Text information

* When you tune in a station by selecting a preset number

Note
The display item differs depending on the content of a broadcast or the station.

To change the display settings (BRIGHTNESS/CONTRAST)

- Press **MENU** to show the menu display.
- Press **SELECT** ↑ or ↓ to select "BRIGHTNESS" or "CONTRAST," then press **ENTER**.
- Press **SELECT** ↑ or ↓ to select the setting or to adjust the level, then press **ENTER**.

BRIGHTNESS:

The brightness of the display is selected from "HIGH," "MIDDLE" or "LOW."

CONTRAST:

The contrast of the display can be adjusted by 11 levels.

Note

If you do not set the menu within 10 seconds, the setting mode is off.

Tip

You can adjust "BRIGHTNESS" directly by pressing **BRIGHT** on the remote commander.

Setting the sleep timer

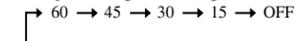
You can enjoy falling asleep to the radio using the built-in sleep timer that turns off the radio automatically after a preset duration.

- Press **SLEEP** on the remote commander. "SLEEP" and the digits for the sleep timer duration appear.



If you press **SLEEP** while the unit is turned off, the unit is turned on.

- Press **SLEEP** repeatedly to select the desired sleep timer setting. Each press changes the setting time as follows:



After about 4 seconds, "SLEEP" lights in the display when the duration time is set.

The unit automatically turns off when the duration time is passed.

To change the sleep timer setting

You can press **SLEEP** repeatedly to select the desired sleep timer setting even after the sleep timer has been activated.

To deactivate the sleep timer

Press **I/O** to turn off the unit before the setting time has elapsed, or press **SLEEP** repeatedly to set the sleep timer to "SLEEP OFF" in step 2.

Note

These operations are available only when using the remote commander.

Resetting the unit

The RESET button is located on the rear of the unit. Press this button with a pointed object if the radio fails to function properly. The clock settings and stations you have preset, etc., will revert to the factory preset.

Using the remote commander

Buttons shared on both the remote commander and the unit control the same functions.

HD SCAN button

The selected band is scanned, and receivable HD Radio stations are received for 3 seconds in order of frequency.

SCAN button

The selected band is scanned, and receivable radio stations are received for 3 seconds in order of frequency.

BRIGHT button

To adjust the brightness of the display.

Specifications

Time display

12-hour system

Frequency range

FM : 87.5 - 108 MHz
AM : 530 - 1,710 kHz

Audio output

Output level 0.7 Vrms at 47 kΩ
Recommended load impedance over 10 kΩ

Antenna terminal

75 Ω antenna terminal for FM
Antenna terminal for AM

Power requirements

120 V AC, 60 Hz

Dimensions

Approx. 180 × 60 × 160 mm (w/h/d)
(7 1/8 × 2 3/8 × 6 3/8 inches) not incl. projecting parts and controls

Mass

Approx. 1.1 kg (2 lb 6.8 oz)

Supplied accessories

Remote commander (1)
FM dipole antenna (1)
AM loop antenna (1)

Design and specifications are subject to change without notice.