

# FM/AM CD Kitchen Clock Radio

## Operating Instructions

## DREAM MACHINE

Dream Machine is a trademark of Sony Corporation.

## ICF-CD513

Sony Corporation © 2000 Printed in Thailand

Sony online <http://www.world.sony.com/>

LIMITED WARRANTY  
(Portable Audio)

FOB 30\$ 以上

## Owner's Record

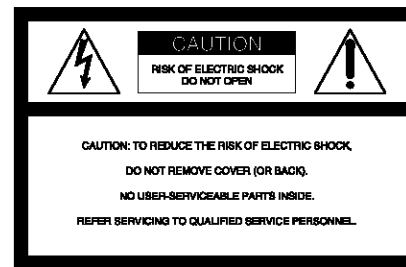
The model number and the serial number are located on the top.  
Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. ICF-CD513

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

## WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



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.

\* The graphical symbols are on the top of the enclosure.

## 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.

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

**CAUTION**  
The use of optical instruments with this product will increase eye hazard.

## Before You Begin

Thank you for choosing the Sony CD kitchen clock radio! It will give you many hours of reliable service and listening pleasure. Before operating the unit, please read these instructions thoroughly and retain them for future reference.

## Features

- Built-in CD player with Shuffle/Repeat function.
- PLL (Phase Locked Loop) Synthesized Tuner with 15 memory presets for easy one button tuning.
- Powerful bass with MEGABASS sound system.
- Single alarm function - which can be used as timer.
- Summer time (daylight saving time) calculation.

### Notes on AM channel step

The AM channel step differs depending on the areas.

The channel step of this unit is factory-set to 10 kHz.

Area	Channel step
North and South American countries	10 kHz
Other countries	9 kHz

## Precautions

- Operate the unit on the power source specified in the "Specifications."
- To disconnect the power cord (mains lead), pull it out by the plug, not the cord.
- Do not leave the unit in a location near a heat source such as a radiator or air duct, 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.

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

## Troubleshooting

Should any problem occur with the unit, make the following checks to determine whether or not servicing is required. If the problem persists, consult the nearest Sony dealer.

**The clock does not show the correct time.**

- Has an electrical power outage lasting more than one minute occurred?

**The CD player does not operate.**

- Did you close the CD lid?
- Did you place the disc correctly?  
The disc should be placed with the labeled side up.
- Dusty or defective disc—Clean the disc with an optional cleaning cloth. Wipe the disc from the center out.
- Take out the CD and leave the CD compartment open for about an hour to get rid of moisture condensation.

**Sporadic loss of sound in CD operation.**

- Dusty or defective disc—Clean or replace the disc.
- Volume too high—Reduce the volume.
- Strong vibration.

## Specifications

### CD player section

**System:** Compact disc digital audio system

**Laser diode properties:** Material: GaAlAs  
Wavelength: 780 nm  
Emission duration: Continuous  
Laser output: Less than 44.6 μW  
(This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7mm aperture.)

**Frequency response:** 20-20 000 Hz  $\pm 1/3$  dB

**Wow and flutter:** Below measurable limit

### Radio section

**Frequency range:**

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

**Channel step:**

FM: 0.1 MHz (fixed)  
AM: 10 kHz (fixed)

### General

**Time display:**  
12-hour system

**Speaker:**  
66 mm (2 5/8 inches) dia, 4 Ω

**Power outputs:**  
1.2W + 1.2W (at 10% harmonic distortion)

**Power requirements:**  
120 V AC, 60 Hz

**Dimensions:**  
Approx. 365 × 106 × 281 mm (w/h/d)  
(Approx. 14 1/8 × 4 1/4 × 11 1/8 inches) incl. projecting parts and controls

**Mass:**

Approx. 2.9 kg (6 lb 6 oz)

**Supplied accessories:**

Mounting screws (4), Template (1),  
Spacers (4), Cord clamp (1)

Design and specifications are subject to change without notice.

## IMPORTANT SAFEGUARDS

For your protection, please read these safety instructions completely before operating the appliance, and keep this manual for future reference. Carefully observe all warnings, precautions and instructions on the appliance and in the operating instructions, and adhere to them.

## INSTALLATION

### Water and Moisture

Do not use powerline operated appliances near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.

### Heat

Do not place the appliance near or over a radiator or heat register, or where it is exposed to direct sunlight.

### Ventilation

The slots and openings in the cabinet are provided for necessary ventilation. To ensure reliable operation of the appliance, and to protect it from overheating, these slots and openings must never be blocked or covered.

-Never cover the slots and openings with a cloth or other materials.

-Never block the slots and openings by placing the appliance on a bed, sofa, rug or other similar surface.

-Never place the appliance in a confined space, such as a bookcase, or built-in cabinet, unless proper ventilation is provided.

### Accessories

Do not place the appliance on an unstable cart, stand, tripod, bracket, or table. The appliance may fall, causing serious injury to a child or an adult, and serious damage to the appliance. Use only a cart, stand, tripod, bracket, or table recommended by Sony.

-An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

### Wall or Ceiling Mounting

If your appliance can be mounted to a wall or ceiling, mount it only as recommended by Sony.

## USE

### Power Source

This appliance should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of electrical power supplied to your home, consult your dealer or local power company. For those appliances designed to operate from battery power, or other sources, refer to the operating instructions.

### Grounding or Polarization

This appliance is equipped with a polarized AC power cord plug (a plug having one blade wider than the other), or with a three-wire grounding type plug (a plug having a third pin for grounding). Follow the instructions below:

#### -For the appliance with a polarized AC power cord plug:

This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the polarized plug by forcing it in.

#### -For the appliance with a three-wire grounding type AC plug:

This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the grounding plug.

### Overloading

Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.

### When not in use

Unplug the power cord of the appliance from the outlet when left unused for a long period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the plug out by the cord.

### Power-Cord Protection

Route the power cord so that it is not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the plugs, receptacles, and the point where the cord exits from the appliance.

### Lightning

For added protection for this appliance during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the appliance due to lightning and powerline surges.

### Object and Liquid Entry

Never push objects of any kind into the appliance through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the appliance.

### Cleaning

Unplug the appliance from the wall outlet before cleaning or polishing it. Do not use liquid cleaners or aerosol cleaners. Use a cloth lightly dampened with water for cleaning the exterior of the appliance. Clean the appliance only as recommended by Sony.

### Attachments

Do not use attachments not recommended by Sony, as they may cause hazards.

## ANTENNAS

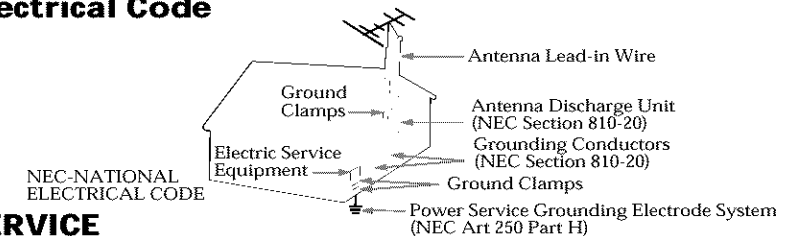
### Outdoor Antenna Grounding

If an outdoor antenna or cable system is installed, follow the precautions below.

An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits. WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

## Antenna Grounding According to the National Electrical Code



## SERVICE

### Damage Requiring Service

Unplug the appliance from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power cord or plug is damage or frayed.
- If liquid has been spilled or objects have fallen into the appliance.
- If the appliance has been exposed to rain or water.
- The appliance does not appear to operate normally or exhibits a marked change in performance.
- This indicates a need for service.
- If the appliance does not operate normally when following the operating instructions, adjust only those controls that are specified in the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the appliance to normal operation.
- If the appliance has been subject to excessive shock by being dropped, or the cabinet has been damaged.

### Servicing

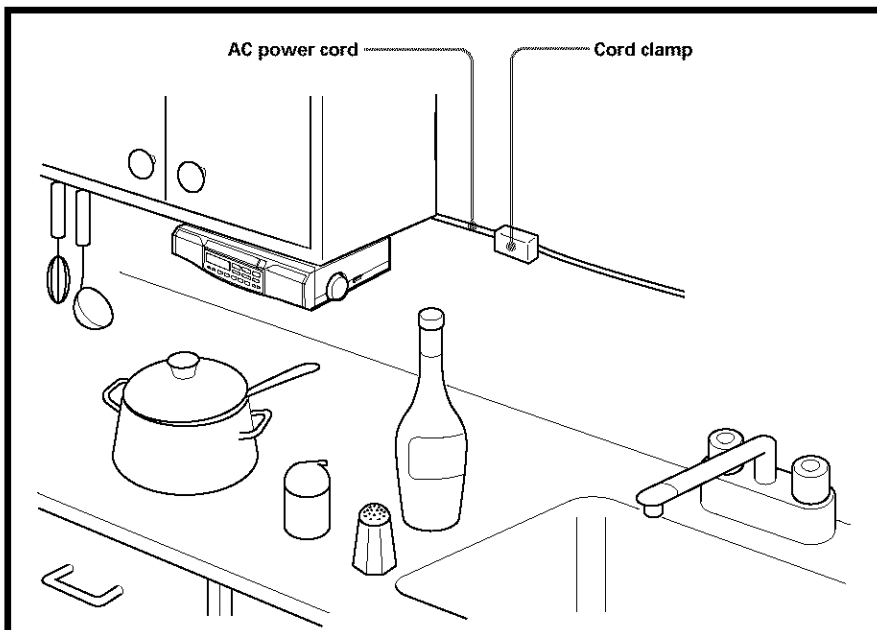
Do not attempt to service the appliance yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

### Replacement parts

When replacement parts are required, be sure the service technician has used replacement parts specified by Sony that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.

### Safety Check

Upon completion of any service or repairs to the appliance, ask the service technician to perform routine safety checks (as specified by Sony) to determine that the appliance is in safe operating condition.



## Installing the Unit Under a Cabinet

(See Fig. A)

The unit can be installed without the spacer.

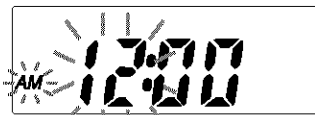
- 1 Mark the position of the 4 holes by using the supplied template. Use a drill to make the holes (size 6.5 mm dia., 9/32 inch). (See Fig. A-①)
- 2 When the cabinet door overhangs the shelf and obstructs the unit, you can adjust the height. First set the L mark to the dot which becomes the lowest position, then you can adjust the height in 4 steps (H••L) by turning the spacer counterclockwise. (See Fig. A-②)
- 3 Install the unit with the supplied mounting screws. (See Fig. A-③)

### Caution

- Since the unit is very heavy, be careful when installing the unit.
- To reduce the risk of fire, do not place any heating or cooking appliance beneath this unit.
- Install the unit so that its AC power cord can be connected directly to a wall outlet. Do not use a converter or extension cord.
- Be sure that the AC power cord has no slack when using the unit, since the cord acts as an FM wire antenna. If the AC power cord has some slack, wind it up to the cord hook until the cord has no slack.
- The unit has a built-in ferrite bar antenna for AM radio reception. Check the condition of AM reception before fixing in position.
- Install the unit as far as possible from a source of noise. (for example, refrigerator, microwave oven, fluorescent lamp, etc.)

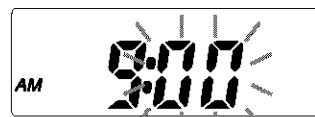
## Setting the Clock

- 1 Plug in the clock radio. The display will flash "AM 12:00".
- 2 Press **CLOCK** for a few seconds. You will hear a beep and the hour will start to flash in the display.



- 3 Press **TUNE/TRACK/TIME SET +** or **-** until the correct hour appears in the display.

- 4 Press **CLOCK** once. The minute will flash.



- 5 Repeat steps 3 and 4 to set the minute. After setting the minute, press **CLOCK** to start the counting of the seconds, and you will hear two short beeps.

- To set the current time rapidly, hold down **TUNE/TRACK/TIME SET +** or **-**.
- The clock system varies depending on the model you own. 12-hour system: "AM 12:00" = midnight
- In step 5, when you press **CLOCK** after the minute setting to activate the clock, the seconds start counting from zero.

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

Press **D.S.T./SUMMER T.**. "★" is displayed and the time indication changes to summer time. To deactivate the summer time function, press **D.S.T./SUMMER T.** again.

## Changing AM Channel Step

The AM channel step differs depending on areas. The channel step of this unit is factory-set to 9 kHz or 10 kHz to match the frequency allocation system of the country as listed. You can change the channel step.

Area	Channel step	
	AM	FM
North and South American countries	10 kHz	0.1 MHz
Other countries	9 kHz	0.05 MHz

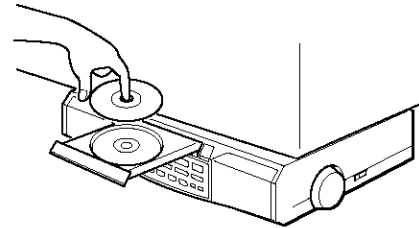
- 1 Press **OFF** to turn off the power.
- 2 While holding down **OFF**, keep pressing **PRESET 1** for more than 5 second. Two short beeps will sound, and the AM channel step will be changed. If you proceed step 2 again, the channel step changes again.

- When the AM channel step is changed, the preset stations will be erased.
- When the AM channel step is changed, the FM channel step is also changed.

## Playing a CD

An 8 cm (3-inch) CD can be played without an adaptor.

- 1 Press **▲ OPEN/CLOSE** and place a CD on the disc tray.



- 2 Press **▲ OPEN/CLOSE** to close the disc tray.

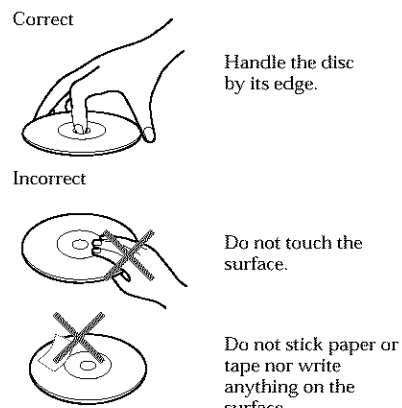
- 3 Press **CD ▶▶**. The player plays all the tracks once.
- 4 Adjust volume using **VOLUME**.

To	Press
Pause	<b>CD ▶▶</b>
Resume play after pause	<b>CD ▶▶</b> again
Locate the beginning of the current track (AMS*)	<b>◀◀ **</b>
Locate the next track (AMS)	<b>▶▶ **</b>
Go back at high speed	Hold down <b>◀◀ **</b>
Go forward at high speed	Hold down <b>▶▶ **</b>
Locate the previous track (AMS)	<b>◀◀ repeatedly**</b>
Locate the succeeding track (AMS)	<b>▶▶ repeatedly**</b>
Stop play	<b>■</b>

\* AMS = Automatic Music Sensor

\*\*These operations are possible during both play and pause.

• To handle compact discs



### Note

If you press **CD ▶▶** when there is no disc in the CD compartment, "00" flashes for about 5 seconds on the display and the unit turns off automatically.

## Various Modes of CD Playback

You can play tracks repeatedly or in random order.

Press **CD PLAY MODE**.

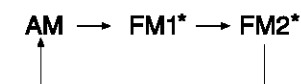
Each press changes the play mode as follows:

Display indication	Play mode
none	(normal play)
All the tracks are played once.	↓
"REP 1"	(single repeat)
A single track is played repeatedly.	↓
"REP ALL"	(all repeat)
All the tracks are played repeatedly.	↓
"SHUFFLE"	(shuffle play)
All the tracks are played once in random order.	↓
"SHUFFLE REP"	(shuffle repeat)
All the tracks are played repeatedly in random order.	

## Playing the Radio

### Manual Tuning

- 1 Press **RADIO ON•BAND** to turn on the radio. "RADIO" appears in the display. The display shows the band and frequency for a few seconds and then changes back to the current time.
- 2 Press **RADIO ON•BAND** repeatedly to select the desired band. Each press changes the band as follows:



\* When using FM1 or FM2 preset mode, you may listen to the radio on either mode (See "Preset Tuning").

- 3 Use **TUNE/TRACK/TIME SET +** or **-** to tune in to the desired station.

The FM channel step is set to 0.1 MHz and the AM channel step is set to 10 kHz.

Two short beeps sound when the minimum frequency of each band is received during tuning.

- 4 Adjust volume using **VOLUME**.

- To turn off the radio, press **OFF**.
- To improve radio reception
- **FM:** Extend the AC power cord fully to improve FM reception.
- **AM:** When installing the unit, rotate the unit horizontally for optimum reception and then install the unit. A ferrite bar antenna is built into the unit.

- To check the station being received, press **RADIO ON•BAND** lightly. The display shows the band and frequency for a few seconds and then changes back to the current time.

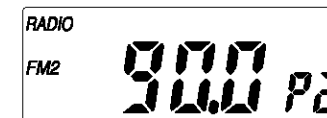
## Preset Tuning

You can preset 10 stations in FM (5 stations in FM1, 5 stations in FM2) and 5 stations in AM.

### Presetting a Station

Example: To preset FM90 MHz onto preset button 2 for FM2.

- 1 Press **RADIO ON•BAND** to turn on the radio.
- 2 Press **RADIO ON•BAND** to select FM2.
- 3 Tune in to the station on FM90 MHz (See "Manual Tuning").
- 4 Hold down the **PRESET TUNING** button 2 until you hear two short beeps.



The display shows the frequency for a few seconds and then changes back to the current time.

### To change a preset station

Tune in manually to the station you want to store and hold down the **PRESET TUNING** buttons(1-5) until you hear two short beeps. The previously stored station will be replaced by the new one.

### Tuning in to a preset station

- 1 Press **RADIO ON•BAND** to turn on the radio.
- 2 Press **RADIO ON•BAND** to select the band.
- 3 Press the **PRESET TUNING** button lightly where the desired station is stored.
- 4 Adjust the volume using **VOLUME**. After a few seconds, the display returns to the current time but the preset button number remains.

### Note

When the **PRESET TUNING** buttons(1-5) are pressed lightly, the radio station that is preset will be selected. When they are pressed for a while, the station that is on will be newly preset.

## Useful Functions

### To Obtain Powerful Bass

Switch **MEGA BASS** to **ON**. The "MEGA BASS" system produces a powerful bass sound.

## Setting the Alarm

Before setting the alarm, make sure to set the clock (see "Setting the Clock").

### To Set the Alarm Time

- 1 Turn off the radio.
- 2 Press **ALARM** for a few seconds. You will hear a beep and the hour will start to flash in the display.
- 3 Press **TUNE/TRACK/TIME SET +** or **-** until the desired time appears in the display.
- 4 Press **ALARM** once. The minutes starts to flash.
- 5 Repeat steps 3 and 4 to set the minute. Two short beeps will confirm the setting, and the display will show the current time.

When **TUNE/TRACK/TIME SET +** or **-** is held down, the displayed time initially changes in one-minute steps, and after about a second, switches to ten-minute steps.

### To Check the Alarm Time

Press **ALARM**. The display shows the alarm time for a few seconds and then returns to show the current time.

### ALARM ON —

#### To Set the Alarm Mode

Press **ALARM ON/OFF** to set the alarm. "⏰" will appear in the display. When the alarm comes on at the preset time, "⏰" flashes in the display.

### ALARM OFF —

The alarm is turned off automatically after 59 minutes.

### To Stop the Alarm

Press **OFF•ALARM RESET** to turn off the alarm. The alarm will come on again at the same time the next day.

### To Cancel the Alarm

Press **ALARM ON/OFF**. "⏰" will disappear from the display.

