SONY

3-229-096-**31**(1)

TV/WEATHER/FM/AM PLL Synthesized Radio

Operating Instructions

OWNER'S RECORD

The model number is located on the rear and serial number on the rear exterior. Record the serial number in the space provide below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. ICF-M410V Serial No. _____

For customers 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.

ICF-M410V

Sony Corporation © 2002 Printed in Malaysia

http://www.sony.net/

LIMITED WARRANTY
(Portable Audio)

FOB 30$以上

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.
To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

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

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.

If you have any questions about the product, you may call:
Sony Direct Response Center 1-(800)-222-7669 or write to:
Sony Direct Response Center 12451 Gateway Blvd. Fort Myers, FL 33913

Declaration of Conformity

Trade Name:	SONY
Model:	ICF-M410V
Responsible Party:	Sony Electronics Inc.
Address:	680 Kinderkamack Road, Oradell, NJ 07649 USA
Telephone Number:	201-930-6972

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

Before You Begin

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

Features

- PLL synthesized tuning 4 band radio.
- A total of 20 channels can be preset, 5 TV channels, 5 WEATHER channels, 5 FM channels and 5 AM channels.
- Easy to tune in preset stations with 5 direct access buttons.
- Sleep timer function switches the radio off automatically (can be set to turn off after 15, 30, 45 or 60 minutes).
- Standby timer function switches the radio on automatically at the time you want.

Notes on AM Channel Step

The AM channel step differs depending on areas. See "Changing AM Channel Step".

Precautions

- Operate the unit only on 4.5 V DC. For battery operation, use three size AA (R6) batteries. For AC operation, use only the recommended AC power adaptor.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to a wall outlet, even if the unit itself has been turned off.
- The nameplate indicating operating voltage, etc. is located on the bottom exterior.
- Avoid exposure to temperature extremes, direct sunlight, moisture, sand, dust or mechanical shock. Never leave in a car parked under the sun.
- Should any solid object or liquid fall into the unit, disconnect the AC power adaptor and remove the batteries, and have the unit checked by qualified personnel before operating it any further. Make sure that no liquid or foreign material enters the DC IN 4.5 V jack of the unit. This may lead to the malfunction of the unit.
- In vehicles or buildings, radio reception may be difficult or subject to interference. Try listening near a window.
- Since a strong magnet is used for the speakers, keep away personal credit cards using magnetic coding or spring-wound watches from the unit to prevent possible damage from the magnet.
- When the casing becomes soiled, clean it with a soft dry cloth moistened with mild detergent solution. Never use abrasive cleansers or chemical solvents, as they may deform the casing.

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

Troubleshooting Guide

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

The front panel buttons do not operate at all.
- " 🔑 " is displayed. Slide **HOLD** so that " 🔑 " disappears.

Display is dim, or no indication is displayed.
- Weak batteries.
- The unit is being used in extremely high or low temperatures or in a place with excessive moisture.

Very weak or interrupted sound, or unsatisfactory reception.
- Weak batteries.
- When in a vehicle or building, move closer to a window.

A station cannot be received when a preset tuning button is pressed.
- The station has not been preset.
- The memory of the station has been initialized, or another station is preset. Preset the station again.

Sound is not heard and " 🔈 " appears in the display.
- Batteries are exhausted.

The preset stations may be initialized, if a maintenance service is performed.
Please note down your settings in case you want to preset them again.

Specifications

Time display:
12-hour system

Frequency range:

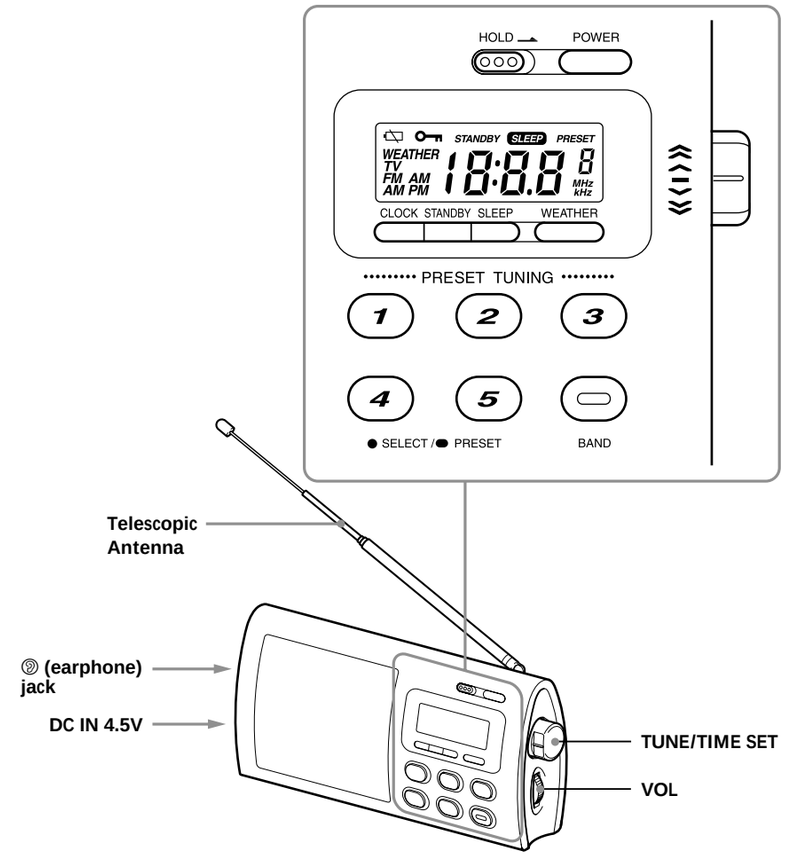
Band	Range	Channel step
TV	2 ch - 13 ch	1 channel
WEATHER	1 ch - 7 ch	1 channel
FM	87.5 – 108 MHz	0.1 MHz
AM	530 – 1 710 kHz	10 kHz

Speaker: 7.7 cm (3 1/8 inches) 8 Ω
Power output: 200 mW (at 10% harmonic distortion)
Output: ⏀ (earphone) jack (ø 3.5 mm minijack)
Power requirements: 4.5 V DC, three size AA (R6) batteries
External power source: DC IN 4.5 V
Dimensions:
Approx. 205 × 104 × 40.5 mm (w/h/d)
(Approx. 8 1/3 × 4 1/8 × 1 5/8 inches) not incl. projecting parts and controls
Approx. 212 × 104 × 42.5 mm (w/h/d)
(Approx. 8 3/8 × 4 1/8 × 1 11/16 inches) incl. projecting parts and controls
Mass: Approx. 504 g (17.8 oz) incl. batteries

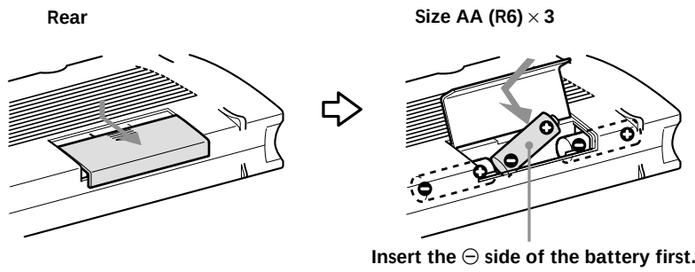
Optional accessory
AC power adaptor AC-E45HG*
* Specifications for AC-E45HG vary for each area. Check your local voltage and the polarity of the plug before purchasing.

Design and specifications are subject to change without notice.

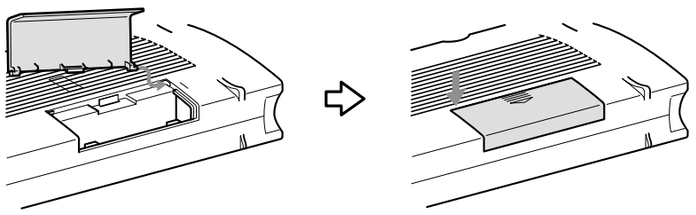
Your Sony dealer may not handle all of the above listed optional accessory. Please ask your dealer for detailed information on the optional accessory available in your country.



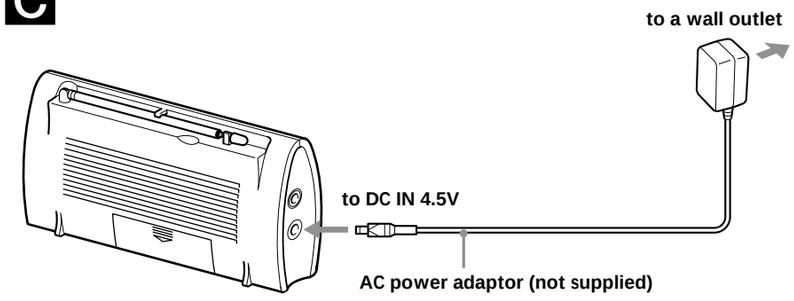
A



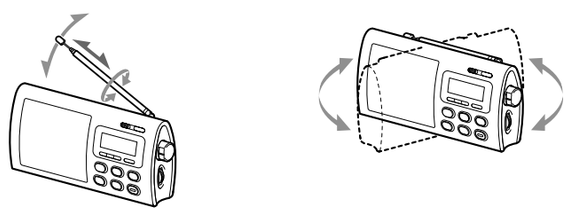
B



C



D



Choosing Power Source

Installing Batteries (See fig. A)

1 Open the lid of the battery compartment at the rear of the unit.
2 Install three size AA (R6) batteries (not supplied) with correct polarity and then close the lid.
"AM 12:00" flashes on the display when you first install the batteries. To stop the flashing, set the clock. (See "Setting the Clock")

Battery Life (Approx. hours) (JEITA*)

	TV	WEATHER	FM	AM
Sony alkaline size AA (LR6) batteries	28	28	29	41
Sony size AA (R6) batteries	16	16	17	24

* Measured by JEITA (Japan Electronics and Information Technology Industries Association) standards.
The actual battery life may vary depending on the circumstance of the unit.

When to replace the batteries

When the batteries become weak, the sound may become weak or distorted, and "🔈" will flash in the display. After that, when the batteries are used up, "🔈" will light and the power of the unit will be turned off. If this happens, replace the batteries with new ones.
After the batteries are replaced, press **POWER** to turn the indication off.

Note on replacing the batteries

Do not take more than 40 seconds to replace the batteries, otherwise the clock, standby settings and preset stations will be initialized. Should that happen, reset the functions.

Notes on batteries

- Do not charge the dry batteries.
- Do not carry the dry batteries together with coins or other metallic objects. It can generate heat if the positive and negative terminals of the batteries accidentally come into contact with metallic objects.
- When you are not going to use the unit for a long time, remove the batteries to avoid damage from battery leakage and corrosion.
- Do not use different types of batteries at the same time.
- When you replace the batteries, replace all with new ones.

To attach the battery compartment lid if it is accidentally detached (See Fig. B)

1 Insert one side of the lid as illustrated.
2 Push the other side to attach.

Using House Current (See fig. C)

Connect the Sony AC power adaptor (not supplied) to the DC IN 4.5 V jack firmly, and plug it into a wall outlet.

Notes on the AC power adaptor

- When operating the unit with an external power source, do not remove the batteries.
These batteries serve to backup settings stored to memory. Since batteries discharge in this case as well, we recommend changing them about once a year.
- Before connecting and disconnecting the external power source plug, be sure to turn off the radio. Otherwise, "🔈" may be displayed.
When this occurs, turn on the radio so that "🔈" disappears.
- When operating the unit with the internal batteries, remove the AC power adaptor from the wall outlet and the DC IN 4.5 V jack. Make sure that the plug of the external power source is disconnected before operating the unit.
- Use the recommended Sony AC power adaptor* only. The polarity of the plugs of other manufacturers may be different. Failure to use the recommended AC power adaptor may cause the unit to malfunction.

* For details on the optional AC power adaptor, see "Specifications".

Preventing Accidental Change – HOLD function

Slide **HOLD**. " 🔑 " is displayed, indicating that all the functions of the buttons are locked.
To release the key protection, slide **HOLD** again so that " 🔑 " disappears.

Setting the Clock

The display will flash "AM 12:00" when the batteries are installed or the AC power adaptor is plugged in for the first time.

1 To stop the display from flashing, press **CLOCK** when the radio is off.
2 While holding down **CLOCK**, turn **TUNE/TIME SET** to set the clock to the current time.
When you turn **TUNE/TIME SET** a little to ∧ or ∨, the clock digits move forward or backward one by one, and when you turn **TUNE/TIME SET** further to ⩓ or ⩔, the clock digits move rapidly.

When you release **CLOCK**, the clock starts operating, and ":" starts flashing.

Changing AM Channel Step

The AM channel step differs depending on areas. The channel step of this unit is factory-set to 10 kHz. Change the settings as shown below to be able to listen to the radio.

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

Note

When the AM channel step is changed, the preset stations for AM will be initialized.

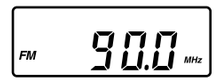
1 Press **POWER** to turn off the power.
2 While holding down **CLOCK**, keep pressing **POWER** for more than 5 seconds.
Two short beeps sound, and the AM channel step will be changed.
"9 kHz" (or "10 kHz") is displayed for about 3 seconds.
If you proceed to step 2 again, the channel step changes again.

Playing the Radio – Manual Tuning

1 Press **POWER** to turn on the radio.
2 Press **BAND** repeatedly to select the band.
Each press changes the band as follows:

AM → FM → TV

Each band memorizes the frequency you had tuned previously.
To change the band to WEATHER, press **WEATHER**. You can return to the previous frequency by pressing **BAND**.
3 Turn **TUNE/TIME SET**.
When you turn **TUNE/TIME SET** a little to ∧ or ∨, the frequency digits move forward or backward one step at a time, and when you turn **TUNE/TIME SET** further to ⩓ or ⩔, the frequency digits move rapidly.



4 Adjust the volume using **VOL**.

To turn off the radio

Press **POWER** again.

To listen with an earphone (not supplied)

Connect an earphone (not supplied) to the ⓟ jack. The sound through the speaker will not be heard.

Improving the Reception (See fig. D)

TV/WEATHER/FM: Extend the telescopic antenna and adjust the length and the angle for best reception.
AM: Rotate the unit horizontally for optimum reception. A ferrite bar antenna is built in the unit.

Note

Adjust the direction of the antenna, holding the bottom of it. The antenna can be damaged when you move the antenna with excessive force.

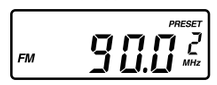
Presetting Your Favorite Station – Preset Tuning

You can preset up to 5 stations in each TV, WEATHER, FM and AM.

Presetting a Station

1 Follow steps 1 to 4 in "Playing the Radio" and manually tune in to the station you wish to preset.
2 Press the PRESET TUNING button you wish to preset for more than a few seconds.
You will hear two confirmation beeps and preset number appears in the display
To preset another station, repeat these steps.
To change the preset station, preset a new station. The previous station will be cancelled.

Example: Display window when you preset FM 90.0 MHz in preset number 2.



Tuning in a Preset Station

1 Press **POWER** to turn on the radio.
2 Select the band with **BAND** or **WEATHER**.
3 Press the desired PRESET TUNING button.
4 Adjust the volume using **VOL**.

Note

Holding down the desired PRESET TUNING button for more than a few seconds will replace the previous station on the PRESET TUNING button with the station you tuned in to.

Setting the Standby Timer

You can set the radio to turn on at a preset time.
You can set the standby timer whether or not the radio is turned on.

1 Hold down **STANDBY** until "STANDBY" starts flashing.
2 While holding down **STANDBY**, turn **TUNE/TIME SET** to set the time for the radio to be turned on.
3 When **STANDBY** is released, the standby timer is activated and "STANDBY" stops flashing.

The radio is turned on and "SLEEP" is displayed at the preset time. After 60 minutes, the radio will automatically turn off.
Once you set the standby timer, the radio will turn on at the same time everyday.

Deactivating the standby timer

Press **STANDBY** so that "STANDBY" disappears.
If holding down **STANDBY** for more than about a second, the standby timer is activated.

Setting the Sleep Timer

By setting the sleep timer, the radio turns off automatically after a set time (60, 45, 30 or 15 minutes).

1 Press **SLEEP**.
The sleep timer setting of "60" is displayed and "SLEEP" flashes.
If you press **SLEEP** while the radio is off, the radio turns on.
2 Press **SLEEP** repeatedly to select the desired sleep timer setting while "SLEEP" is flashing.
Each press changes the display as follows:

60 → 45 → 30 → 15

"SLEEP" is displayed for about three seconds and the frequency is displayed.
The sleep timer starts operating.
The radio will turn off automatically after the set time.

To cancel the sleep timer

Press **POWER** to turn off the radio before the set time has elapsed, and press **POWER** again to turn on the radio.

To extend the time

Reset the sleep timer to a longer one.