

FM/AM Clock Radio/ Home Security Light Control System

Operating Instructions

HOME SECURITY LIGHT CONTROL SYSTEM

DREAM MACHINE

Dream Machine is a trademark of Sony Corporation.

ICF-C900HS

Sony Corporation © 1998 Printed in Malaysia

Owner's Record

The model numbers and the serial numbers are located at the rear on the main unit (Clock Radio with Light Control) and module (Light Control Module).

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

Model No. ICF-C900HS
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 at the rear on the main unit (Clock Radio with Light Control) and at the bottom on the module (Light Control Module).

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.

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 clock radio. This will give you many hours of reliable service and listening pleasure. Before operating the clock radio, please read these instructions thoroughly and retain them for future reference.

Features

- Home Security Light Control System added to a Clock Radio.
- Home Security Light Control System which you can program the ON/OFF time of your lights or you can use the built-in program which automatically operates the ON/OFF time of your lights.
- Random Function—The preset ON/OFF time will automatically shift. The ON/OFF time is different everyday, which improves the security function.
- Date button to display the year, month and date.
- D.S.T. (Daylight Saving Time)—Summer time calculation (one-hour skip function).
- Dual alarm FM/AM clock radio.
- Radio and buzzer alarms with the snooze function.
- Power backup of the clock, and preset time of the Light Control and alarm (radio and buzzer) during a power interruption, with a 6F22 battery (not supplied).

Precautions

- Operate the unit only on 120 V AC, 60 Hz.
- Disconnect the cord by grasping the plug. Never pull it by the cord.
- Do not leave the unit in a location near a heat source such as a radiator or airt duct, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that block the ventilation holes.
- Should any liquid or solid object fall into the unit, unplug the unit and have it checked by qualified personnel before operating it further.
- When the casing becomes soiled, clean it with a soft cloth dampened with a mild detergent solution. Never use abrasive cleaners or chemical solvents, as they may mar the casing.

If you have any questions, please consult your nearest Sony dealer.

Specifications

Clock Radio section

Frequency range

FM: 87.5-108 MHz
AM: 530-1605 kHz

Time display

12-hour system

Speaker

Approx. 6.6 cm (2⁵/₈ in) dia.

Power output

150 mW (at 10% harmonic distortion)

Power requirements

120 V AC, 60 Hz
For power backup: 9V DC, one 6F22 battery

Dimensions

Approx. 250 × 90 × 112 mm (w/h/d)
(9⁷/₈ × 3⁵/₈ × 4¹/₂ in) incl. projecting parts and controls

Mass

Approx. 830 g (1lb 13 oz)

Light Control Module section

Power output

300 W (MAX), 2A (MAX)

Power requirements

120 V AC, 60 Hz

Dimensions

Approx. 68 × 80 × 47 mm (w/h/d)
(2³/₄ × 3¹/₄ × 1⁷/₈ in) not incl. projecting parts and controls

Mass

Approx. 120 g (4.2 oz)

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 described in the operating instructions supplied with the appliance by Sony.

INSTALLATION

Water and Moisture

Do not install the appliance near water: for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.

Heat

Do not install the appliance near sources of heat such as radiators, heat registers, stoves, or other appliances that produce heat.

Ventilation

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

Do not place the appliance on a bed, sofa, rug or other similar surface which may block the slots and openings.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.

Carts and Stands

Do not install the appliance on an unstable table, shelf, cart or stand. Use only a cart or stand 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

Connect the appliance to a power supply only of the type described in the operating instructions or as marked on the appliance.

Grounding or Polarization

Do not defeat the grounding or polarization feature of the AC power cord. If your AC receptacle will not accept the power cord plug, contact your electrician to install a proper AC receptacle.

AC Receptacle

Check to make sure that the AC receptacle holds the power cord plug firmly and securely. If the power cord plug is loose, contact your electrician to replace the defective and unsafe AC receptacle.

Power-Cord Protection

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

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.

Foreign Objects

Be careful that foreign objects and liquids do not enter the enclosure through openings.

Cleaning

Clean the appliance only as recommended by Sony.

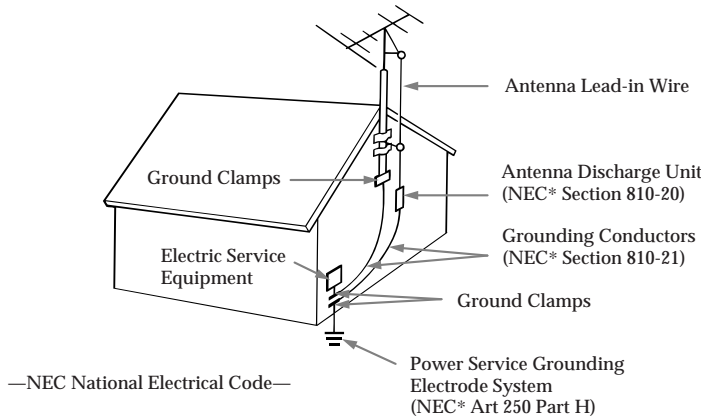
ANTENNAS

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

Unplug the appliance from the wall outlet and consult qualified service personnel when:

- the power cord or the plug has been damaged.
- a solid object or liquid has fallen into the cabinet.
- the appliance has been exposed to rain or moisture.
- the appliance does not appear to operate normally or exhibits a marked change in performance.
- the appliance has been dropped, or the enclosure damaged.

Do not attempt to service the appliance beyond that described in the operating instructions. For all other servicing refer to qualified service personnel only.

SONY®

Tape Cassette Player/Recorder/CD Player/Mini Disc DAT/Radio/Head Phone/Speaker/MIC/Personals

LIMITED WARRANTY

Portable Audio

Sony Electronics Inc. ("Sony") warrants this Product (including any accessories) against defects in material or workmanship as follows:

1. LABOR: For a period of one (1) year from the date of purchase, if this Product is determined to be defective, Sony will repair or replace the Product, at its option, at no charge, or pay the labor charges to any Sony authorized service facility. After the Warranty Period, you must pay for all labor charges.
2. PARTS: In addition, Sony will supply, at no charge, new or rebuilt replacements in exchange for defective parts for a period of one (1) year. After the warranty period, you must pay for all parts costs.
3. ACCESSORIES: Parts and labor for all accessories are for one (1) year.

To obtain warranty service, you must take the Product, or deliver the Product freight prepaid, in either its original packaging or packaging affording an equal degree of protection, to any authorized Sony service facility.

This warranty does not cover customer instruction, installation, set up adjustments or signal reception problems.

This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of, or to any part of the Product, including the antenna. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply, or attempted repair by anyone other than a facility authorized by Sony to service the Product. This warranty does not cover Products sold AS IS or WITH ALL FAULTS, or consumables (such as fuses or batteries). This warranty is valid only in the United States.

Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.

This warranty is invalid if the factory applied serial number has been altered or removed from the Product.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. SONY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. 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. In addition, if you enter into a service contract with the Sony Partnership within 90 days of the date of sale, the limitation on how long an implied warranty lasts does not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

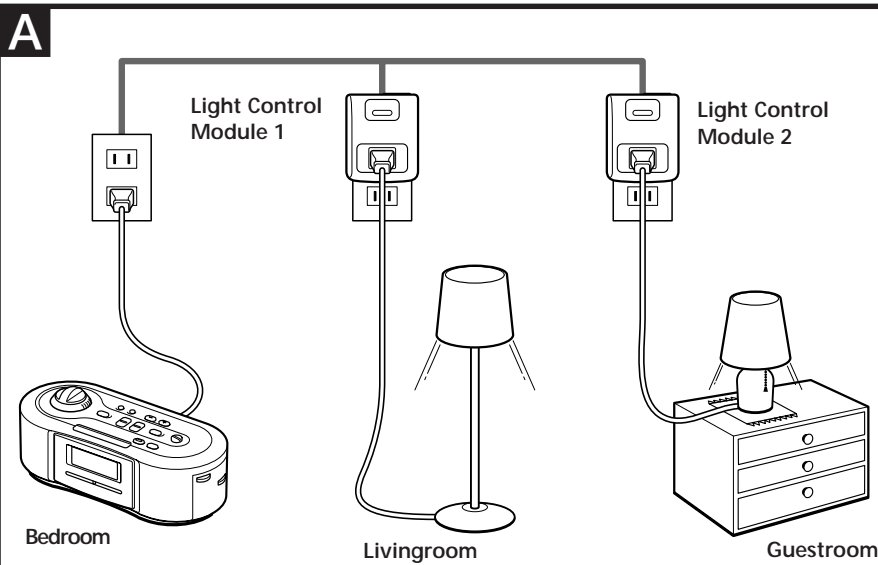
For your convenience, Sony Electronics Inc. has established telephone numbers for frequently asked questions:

To locate the servicer or dealer nearest you, or for service assistance or resolution of a service problem, or for product information or operation, call:

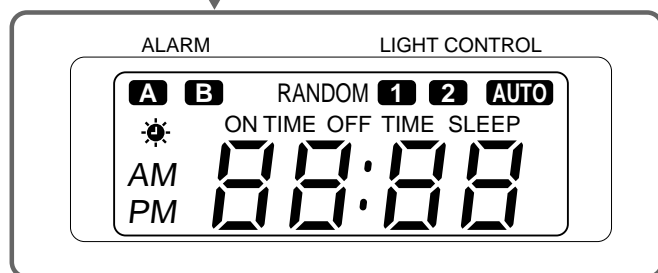
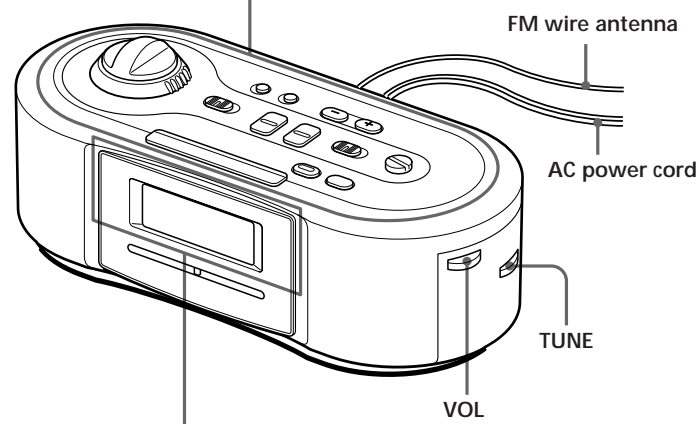
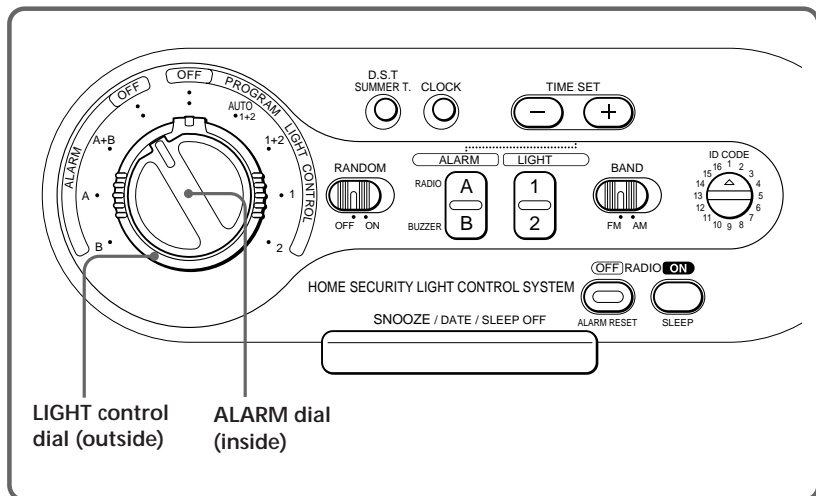
Sony Direct Response Center
1-(800)-222-7669
or write to:
Sony Direct Response Center
12451 Gateway Blvd.
Fort Myers, FL 33913

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

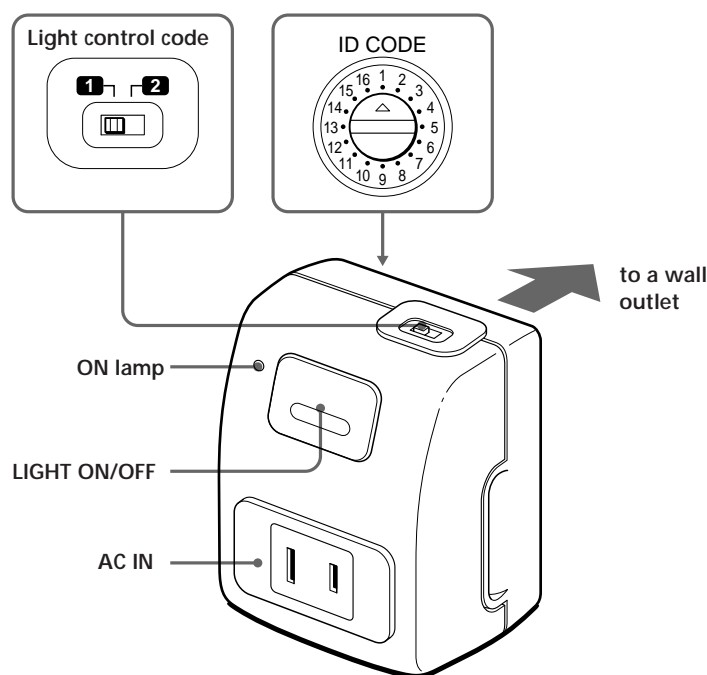
1-(800)-488-SONY (7669)



Clock Radio with Light Control



Light Control Module



How the Home Security Light Control System Works (see Fig. A)

You can easily assemble the Home Security Light Control System by using the main unit and the supplied Light Control Modules (2 modules are included in the package). The main unit sends signals through your house wiring system to the Light Control Modules and automatically turn the connected lights on or off to give your home a lived-in look while you are away.

About the ID CODE

You can choose from 16 transmission codes to prevent signal interference from other similar systems used in the same household or apartment complex, etc.

About the Light Control Code

You can choose from Light control code 1 or 2 on the Light Control Module. Light control code 1 and 2 are linked to LIGHT•1 and 2, respectively, of the main unit, and can be controlled separately.

Installing the Battery

To keep accurate time, your Dream Machine requires one 6F22 battery (not supplied), in addition to the house current. The battery keeps the clock operating in the event of a power interruption. Before setting the time and light control on your Dream Machine, open the lid at the bottom of the unit, install the battery with correct polarity and then close the lid.

Note
When you are not going to use the unit for a long time, remove the battery to avoid damage from battery leakage and corrosion.

To check when to replace the battery

To check the remaining battery power, unplug the power cord from the wall outlet and plug it in again after a few minutes. If the displayed time is incorrect or the display does not show at all, replace the battery with a new one.

Installing the Home Security Light Control System

Complete this built-in ON/OFF control setup before you proceed to the next section. This will enable the successful control of your lights from your Dream Machine.

- Turn ID CODE selector on the main unit with a coin or a flat-blade screwdriver to select the desired code.
- Turn the ID CODE selector on the module with a coin or a flat-blade screwdriver to match the code on the main unit.
- Set the Light control mode switch to 1 or 2 on the modules. 1 is for LIGHT•1 and 2 is for LIGHT•2.
- Insert the module to a desired wall outlet in your house.
- Insert the plug of a desired light fixture to the module and turn on the power switch for the light.

Note
You may also turn the light on or off manually using the LIGHT•ON/OFF button on the module.

Cautions

- Do not connect light fixtures that use over 300 W (MAX), 2A (MAX).
- The system should only be used to control lights. Do not connect a coffee maker, toaster, or other heating appliances, as this may lead to a fire hazard.

To check the control function

- Turn LIGHT CONTROL to the right side from OFF to AUTO 1+2. "AUTO" will appear in the display.
- Confirm if the light is on. If the light is not lit, repeat steps 1 to 5 again in "Installing the Home Security Light Control System" or check that the switch on the light stand is turned on.

Setting the Light Control ON/OFF times

You can preset the ON/OFF time of your lights. Before setting the lights, be sure to set the remote control function (See "Installing the Home Security Light Control System"). Example: To set the ON/OFF time for LIGHT•1.

- To set the ON time, press LIGHT•1 for a few seconds. A short beep sounds. The "ON TIME" and "1" indications and the hour will flash in the display.
- Press either TIME SET + or - until the desired hour appears in the display.
- Press LIGHT•1 to set the minutes. The minutes will flash in the display.
- Press either TIME SET + or - until the desired minutes appear in the display.
- Press LIGHT•1 to set the OFF time. A short beep sounds. The "OFF TIME" and "1" indications and the hour will flash in the display.
- Press either TIME SET + or - until the desired hour appears in the display.
- Press LIGHT•1 to set the minutes. The minutes will flash in the display.
- Press either TIME SET + or - until the desired minutes appear in the display.
- Press LIGHT•1. Two short beeps sound to indicate successful presetting.

Note
You can check the ON/OFF time setting by pressing LIGHT•1 or 2.

Turning the lights ON/OFF

Turn the light control dial to "AUTO 1+2" to turn on the lights immediately. Turn the light control dial to "OFF" to turn off the lights immediately.

Note
The AUTO 1+2 function can be used as an instant light control switch besides to control the ON/OFF times of the lights (see Setting the Light Control Mode - AUTO 1+2). However, this setting will turn the lights on and off as described in Setting the Light Control Mode.

Setting the Light Control Mode

If you adjust the Light Control dial to the position shown in the table, the Light Control Modules will operate as described below.

Light Control Position	The Light Control Modules will
OFF	turn off.
AUTO 1+2	turn on and off repeatedly every 2 hours for Module 1 and every 3.5 hours for Module 2.
1+2	turn on/off, Module 1 at the setting of LIGHT•1 and Module 2 at the setting of LIGHT•2.
1	turn on/off for Module 1 only, the ON/OFF time for LIGHT•1 will operate as preset.
2	turn on/off for Module 2 only, the ON/OFF time for LIGHT•2 will operate as preset.

Notes

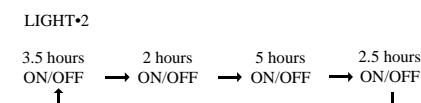
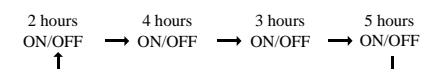
- A beep will sound each time you reset the LIGHT CONTROL dial.
- The ON/OFF time for AUTO is factory set.
- If you do not set the preset time for LIGHT•1 and 2, the Light control mode will not operate even when you set the LIGHT CONTROL dial to 1, 2 and 1+2.

To Use the Random Function

You can randomize the on and off times to give your home a lived-in look while you are away.

Set the RANDOM switch to ON. The on and off times will operate as preset on the first day, with a 24 minutes advance on the second day, a 48 minutes advance on the third day, and a 36 minutes advance on the fourth day. The four day cycle will then be repeated from the fifth day.

AUTO mode with or without the RANDOM function:
When the RANDOM function is not activated, LIGHT•1 will alternate between on and off every 2 hours and LIGHT•2 every 3.5 hours. When the RANDOM function is activated, the ON/OFF times will follow the cycles below:
LIGHT•1



To cancel the RANDOM function, set RANDOM to OFF.

Setting the Clock

- Plug in the clock radio. "AM 12:00" will flash in the display.
- Press CLOCK for a few seconds. You will hear a beep and the year will start to flash in the display.
- Press TIME SET + or - until the correct year appears in the display.
- Press CLOCK once.
- Repeat steps 3 and 4 to set the month, date, hour, and minutes. After setting the minutes, press and release CLOCK to activate the clock.

- To display the year and date, press SNOOZE/DATE/SLEEP OFF once for the date and within 2 seconds press it again for the year. The date or year will appear in the display for a few seconds and then the display returns to the current time. When SNOOZE/DATE/SLEEP OFF is pressed while the SNOOZE function is operating, the year and date will not appear in the display.
- To set the current time rapidly, hold down the + or - button.
- To set the current time from zero seconds, release CLOCK with the time signal at step 5.

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

Press D.S.T./SUMMER T. "Σ" is displayed and the time indication changes to summer time. To cancel the summer time indication, press D.S.T./SUMMER T. again.

Playing the Radio

- Press RADIO ON to turn on the radio.
- Set BAND to FM or AM.
- Use TUNE to tune into the desired station.
- Adjust volume using VOL.

- To turn off the radio, press RADIO OFF.
- To improve reception
FM: Extend the FM wire antenna fully to increase FM reception sensitivity.
AM: Rotate the unit horizontally for optimum reception. A ferrite bar antenna is built in to the unit.

Setting the Alarm

You can set the radio and buzzer alarms at the preset time. Before setting the alarm, be sure to set the clock (See "Setting the Clock").

- Hold down ALARM•RADIO A or ALARM•BUZZER B until a short beep sounds. The "A" or "B" indication and the hour will flash in the display.
- Press either TIME SET + or - until the desired hour appears in the display.
- Press ALARM•RADIO A or ALARM•BUZZER B to set the minutes. The minutes will flash in the display.
- Press either TIME SET + or - until the desired minutes appear in the display.
- Press ALARM•RADIO A or ALARM•BUZZER B. Two short beeps sound to indicate successful presetting.
- Turn ALARM dial to the left side from OFF to set the desired alarm mode. At the preset alarm time, the radio or buzzer sounds for 60 minutes or until turned off.

Note
A beep will sound each time you change the ALARM dial setting.

To stop the alarm

Press ALARM RESET while the alarm is activated. The alarm will come on at the same time the next day.

To cancel the alarm

Turn ALARM dial to OFF so that neither the "A" nor "B" indication is displayed.

Notes

- The alarm does not function, unless you set the clock, ALARM•RADIO A or ALARM•BUZZER B function.
- If both the radio and buzzer alarm are set for the same time, the radio alarm takes precedence.
- You can check the alarm time setting by pressing ALARM•RADIO A or ALARM•BUZZER B.

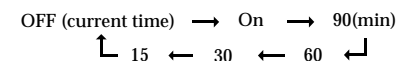
To doze for a few more minutes

- Press SNOOZE/DATE/SLEEP OFF. The radio or buzzer will shut off but will automatically come on again after about 8 minutes. You can repeat this process as many times as you like.

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. The radio turns on. It will go off after the preset duration. You can set the sleep timer to 90, 60, 30, or 15 minutes. When you press SLEEP repeatedly, the display changes as follows.



The radio will play for the duration you set, and then shut off.

- To turn off the radio before the preset time, press SNOOZE/DATE/SLEEP OFF.

To Use Both Sleep Timer and Alarm

You can fall asleep to the radio sound and be awakened by the radio or buzzer alarm at the preset time.

- Set the alarm. (See "Setting the Alarm".)
- Set the sleep timer. (See "Setting the Sleep Timer".)

Troubleshooting

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

The radio or buzzer alarm does not sound at the preset alarm time.

- Has the desired radio and/or buzzer alarm mode been activated with the ALARM dial ("A" and/or "B" indication shown in the display)?

The module does not respond to the control of the Dream Machine.

- Be sure the Dream Machine and module are set to the same ID code.
- Be sure the power switch for the light is turned on.

Lights turn on or off by themselves.

- Interference from a neighbor's HOME SECURITY LIGHT CONTROL SYSTEM Dream Machine. Change your system's ID code.