SONY®

TV Tuner Unit

TU-1041U

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

Mode d'emploi

Avant la mise en service de cet appareil, prière de lire attentivement ce mode d'emploi et de le conserver pour toute référence ultérieure.

Manual de instrucciones

Antes de emplear la unidad, lea detenidamente este manual de instrucciones, y consérvelo para futuras referencias.

Owner's Record

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

Model No. _____   Serial No. ___ _____

For the customers in the USA and Canada

RECYCLING NICKEL-CADMIUM BATTERIES

NICKEL-CADMIUM BATTERY.
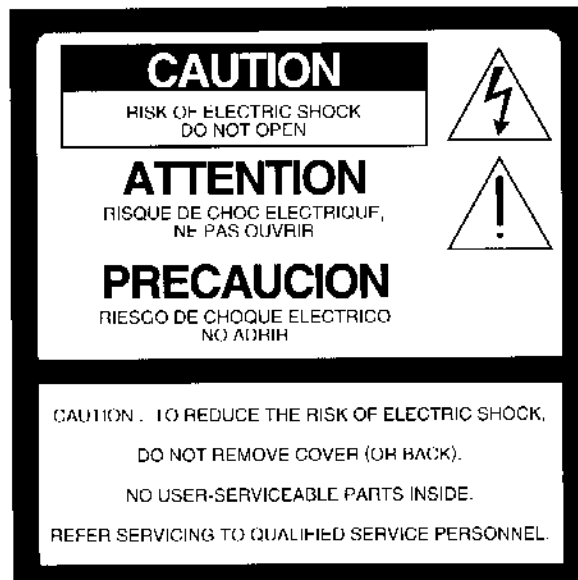**MUST BE DISPOSED OF PROPERLY.**

Ni-Cd

Nickel-Cadmium batteries are recyclable. You can help preserve our environment by returning your unwanted batteries to your nearest Sony Service Center or Factory Service Center for collection, recycling or proper disposal.

Note: In some areas the disposal of nickel-cadmium batteries in household or business trash may be prohibited.

For the Sony Service Center nearest you call 1-800-222-SONY(United States only)
For the Factory Service Center nearest you call 416-499-SONY(Canada only)

Caution: Do not handle damaged or leaking nickel-cadmium batteries.

WARNING

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

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

ATTENTION
RISQUE DE CHOC ELECTRIQUE,
NE PAS OUVRIR

PRECAUCION
RIESCO DE CHOQUE ELECTRICO
NO ADRIR

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,

DO NOT REMOVE COVER (OR BACK).

NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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.

CAUTION:
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

Table of Contents

Precautions

On safety

- Operate the unit on 120 V AC or 12 V DC.
  For the battery operation, use only the Sony NP-1B
  battery pack (not supplied). Do not use any other
  batteries.
- Should any liquid or solid object fall into the cabinet,
  unplug the unit and have it checked by qualified
  personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used
  for several days.
- To disconnect the AC power cord, pull it out by the plug.
  Never pull the cord itself.

On installation

- Allow adequate air circulation to prevent internal heat
  build-up. Do not place the unit on surfaces (rugs,
  blankets, etc.) or near materials (curtains, draperies) that
  may block the ventilation holes.
- Do not install the unit near heat sources such as radiators
  or air ducts, or in a place subject to direct sunlight,
  excessive dust, mechanical vibration or shock.

On cleaning

Clean the unit with a slightly dampened soft cloth. Use a
mild household detergent. Never use strong solvents such
as thinner or benzine as they might damage the finish of the
cabinet.
As a safety precaution, unplug the unit before cleaning it.

On repacking

Retain the original carton and packing materials for safe
transport of this unit in the future.

If you have any questions about this unit, contact your
authorized Sony dealer.

Features

Automatic programming

You can automatically preset all receivable channels in your
area with the automatic programming function. Manual
programming is also available (See page 8).

Combined with a monitor

By using the Sony MB-512 bracket (not supplied), the tuner
can be easily combined with a Sony video monitor (9 inch or
6 inch). For details, see the instruction manual of the
MB-512.

Battery operation

The tuner can operate with a battery pack (See page 7).

Remote control

The tuner allows you to control your TV and other Sony
equipment with one remote commander via the CONTROL
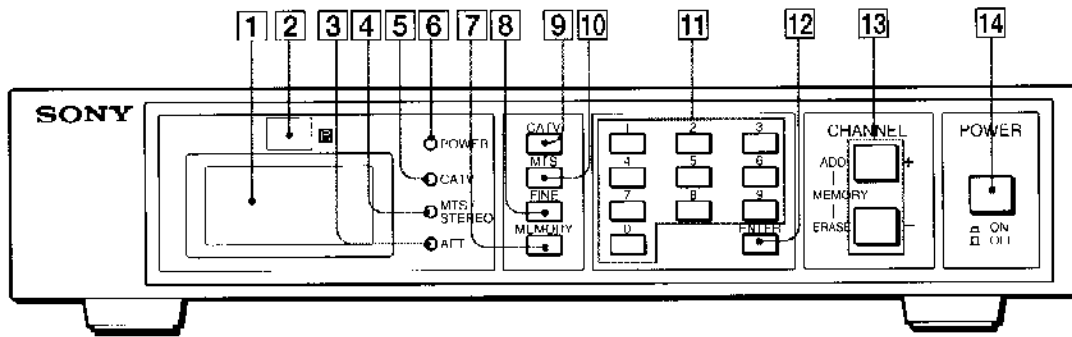S jacks.

MTS and stereo sound

The tuner can receive Multichannel TV Sound (MTS) so you
can enjoy stereo sound or the Second Audio Programs
(SAP) when available.

EIA standard 19-inch rack mounting

By using the Sony MB-510 mounting bracket (not supplied),
the tuner can be mounted in an EIA standard 19-inch rack.
For details on mounting, see the instruction manual of the
MB-510.

English

Front

[1] Program indicator
Indicates the selected channel number.

[2] Remote Control sensor

[3] AFT indicator
Usually this indicator lights. When you do fine tuning manually it goes off.

[4] MTS/STEREO indicator
The indicator lights in four modes as follows:

Green : The tuner is receiving main sound when the broadcast is not in stereo, and is ready to receive stereo sound.

Amber : The tuner is receiving stereo (main) sound.

Off : If the indicator goes off, the tuner is receiving monaural (main) sound.

Red : The tuner is receiving the Second Audio Programs (SAP) broadcast.

Note

When the indicator is green or amber, the reception mode automatically switches according to the broadcast.

[5] CATV indicator
When CATV is selected, the indicator lights up.

[6] POWER indicator
When the tuner is turned on, the indicator lights up. The POWER indicator also functions as the battery indicator. When the internal battery becomes weak, the indicator flashes.

[7] MEMORY button
Use this button to add or erase a channel in the channel scan memory.

[8] FINE button
Press this button for a few seconds to adjust the fine tuning.

[9] CATV button
Use this button to select the CATV.

[10] MTS button
Press this button to switch the reception modes of the tuner. Each time you press this button, the reception mode switches in order of main, monaural, SAP, and back to main.
When the tuner is in the stereo mode, press this button to switch between stereo and monaural.
Main mode refers to monaural main sound when the broadcast is not in stereo, or stereo sound when the broadcast is in stereo.

[11] 0-9 buttons
Use these buttons to select a channel.

[12] ENTER button
Press this button to tune in the selected channel. To select channel 14, for example, press 1→4→ENTER.
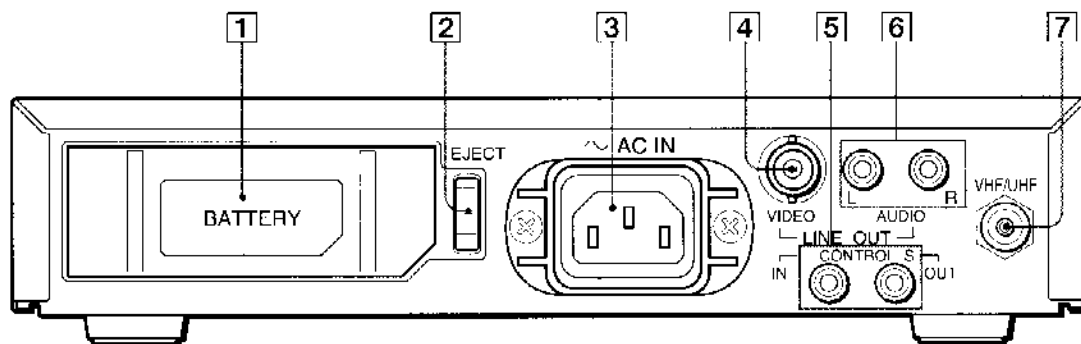
[13] CHANNEL +/−, MEMORY ADD/ERASE buttons
Use these buttons to scan channels, to add/erase channels in the channel scan memory, or to adjust the fine tuning.

[14] POWER switch
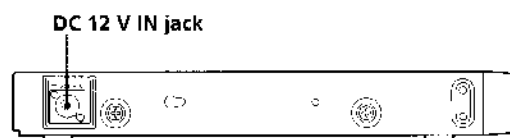Depress to turn the tuner on.

Rear

[1] **BATTERY compartment**
Insert the NP-1B battery pack (not supplied).

[2] **EJECT button**
Push the button to remove the battery pack.

[3] **AC IN socket**
Connect the AC power cord (supplied) to the socket and to a wall outlet.

[4] **VIDEO output connector (BNC)**
Connect to the video input of a monitor.

[5] **CONTROL S IN/OUT connectors (stereo mini jack)**
IN: To control the tuner with the remote commander of other Sony equipment. Connect the CONTROL S output of the equipment to this jack.
OUT: To control other Sony equipment with the tuner's remote commander. Connect the CONTROL S input of the equipment to this jack.

Note

Be sure to use stereo mini plug cables for CONTROL S connection. Other types of cables may prevent correct control.
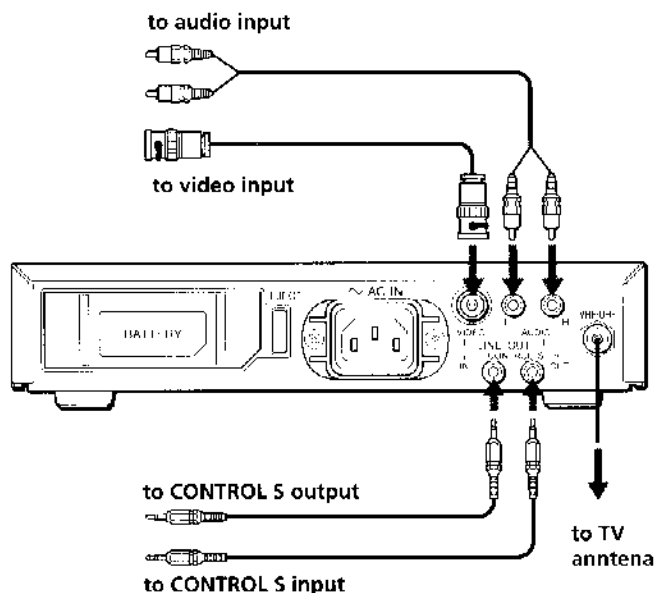
[6] **AUDIO L/R output connectors (phono jack)**
Connect to the audio inputs of a monitor.

[7] **VHF/UHF antenna connector**
Connect the antenna cable.

Side

DC 12 V IN jack (XLR, 4 pin)
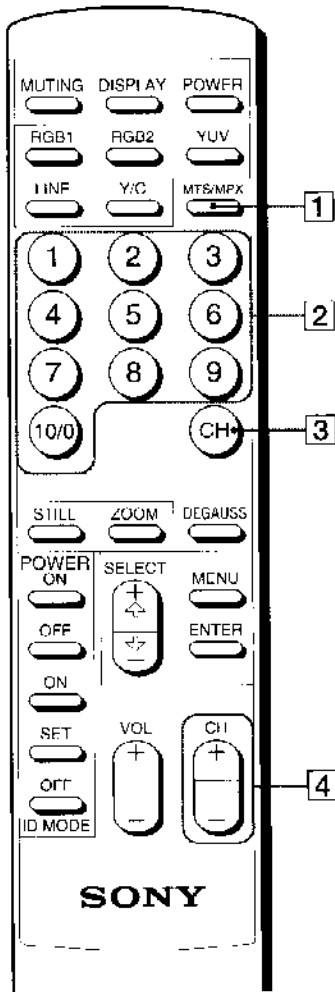Connect the Sony AC-550 AC adaptor (not supplied).

Connections

to audio input

to video input

to CONTROL S output

to CONTROL S input

to TV antenna

TV antenna
Although you can use either an indoor or outdoor antenna with the tuner, an outdoor antenna will provide you with better picture quality. You can receive cable TV by connecting a cable supplied by your local cable company.

Remote Commander

[1] MTS/MPX button

This button works in the same manner as the MTS button on the tuner.

Press this button to switch the reception modes of the tuner. Each time you press this button, the reception mode switches in order of main, monaural, SAP, and back to main.

When the tuner is in the stereo mode, press this button to switch between stereo and monaural.

[2] 0-9 buttons

These buttons work in the same manner as the 0-9 buttons on the tuner.

Use these buttons to select a channel.

[3] CH button

This button works in the same manner as the ENTER button on the tuner.

Press this button to tune in the selected channel.
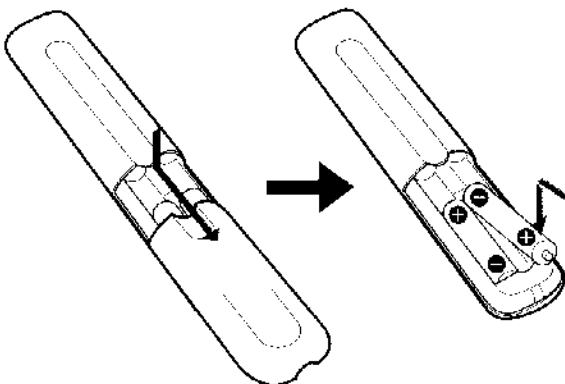To select channel 14, for example, press 1→4→CH.

[4] CH +/- buttons

Use these buttons to scan channels.

Notes

- The buttons other than those described above function only when other Sony equipment is connected to the CONTROL S OUT jack on the tuner. Refer to the operating instructions of the equipment for the button operations.
- If a cable is connected to the CONTROL S IN jack on the tuner, the tuner's remote commander will not work.

Inserting batteries

Insert two size AA (R6) batteries (supplied) by matching the + and – on the battery to the diagram inside the battery compartment.
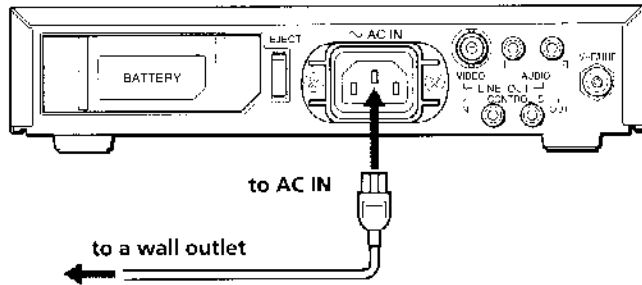

Notes

- Under normal conditions, batteries will last up to six months.
  If the remote commander does not operate properly, the batteries may be worn out. When replacing batteries, replace both of them with new ones.
- Do not mix old batteries with new ones or mix different types of batteries together.
- If the electrolyte inside the battery should leak, wipe the contaminated area of the battery compartment with a cloth and replace the old batteries with new ones. To prevent the electrolyte from leaking, remove the batteries when you do not plan to use the remote commander for a long period of time.
- Do not handle the remote commander roughly. Do not drop it, step on it or let it get wet.
- Do not place the remote commander in direct sunlight, near a heater, or where the humidity is high.
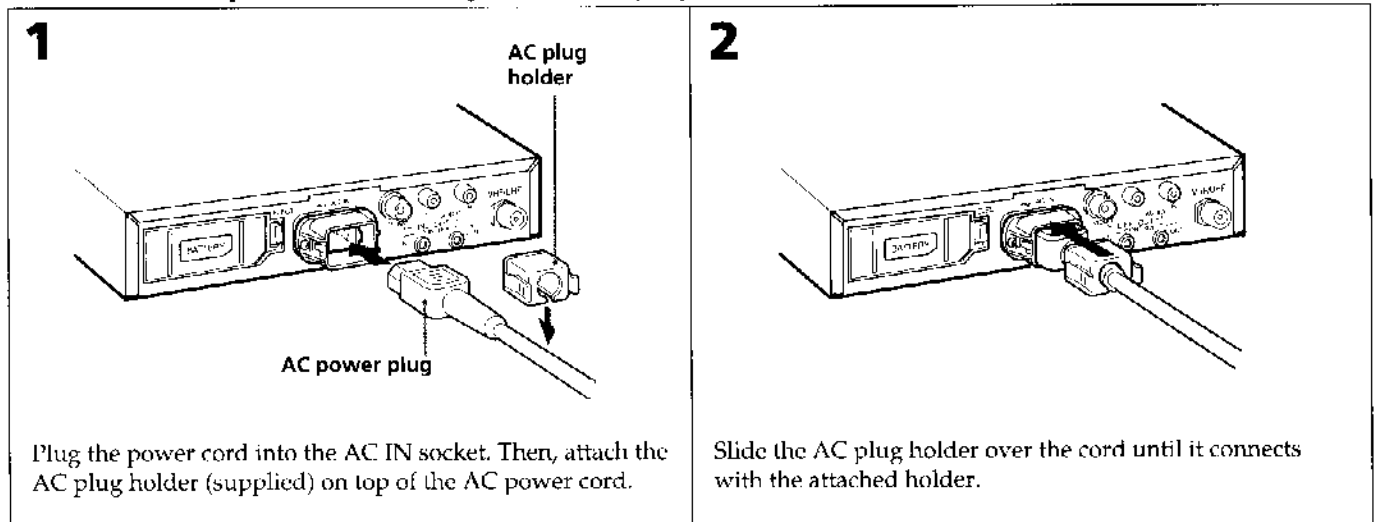
Power Sources

House Current

Connect the AC power cord (supplied) to the AC IN socket and to a wall outlet.

When the AC power cord is plugged into the AC IN socket, the battery pack (if installed) will automatically be disconnected.

to AC IN

to a wall outlet

To connect an AC power cord securely with an AC plug holder

1

AC plug holder

AC power plug

Plug the power cord into the AC IN socket. Then, attach the AC plug holder (supplied) on top of the AC power cord.

2

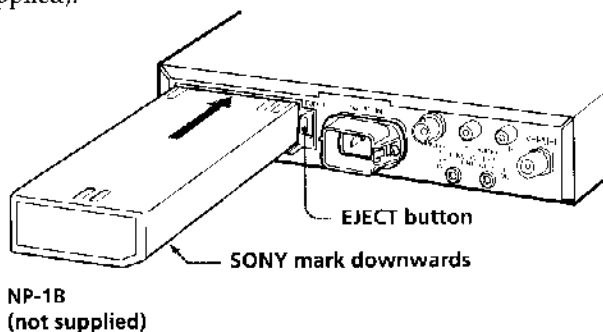Slide the AC plug holder over the cord until it connects with the attached holder.

To remove the AC power cord
Pull out the AC plug holder by squeezing the left and right sides.

Rechargeable Battery

The tuner can operate with the NP-1B battery pack (not supplied).

EJECT button

SONY mark downwards

NP-1B
(not supplied)

To conserve the battery
While pressing the MEMORY button, press the 2 button. The channel number on the program indicator disappears and the tuner goes into the energy saving mode.
To return to the normal mode, repeat the same procedure.

Notes
• Make sure that the AC power cord is disconnected from the tuner. Otherwise, the tuner cannot operate on the battery pack.
• The tuner can not charge the battery. For charging, use the battery charger (not supplied).

DC 12V IN jack

Connect DC 12V power source to the DC 12V IN jack.
Use AC-550 AC adaptor (not supplied) to connect this jack to a wall outlet.

7

Presetting Channels

Automatic and manual programming are available. Automatic programming presets receivable channels automatically from the lowest frequency to the highest. With manual programming, the active channels can be preset in any desired sequence.

Automatic Programming

While pressing the MEMORY button, press the 1 button. All receivable channels will be tuned in and memorized automatically from the lowest-frequency channel to the highest. When no more channels can be found, the programming mode will be automatically released and the lowest channel number will appear on the program indicator.

Notes

- The channels previously preset will not remain in the tuner's memory.
- Do not press the MEMORY ADD/ERASE buttons or turn the tuner off while automatic programming. The channel scan memory may be erased.

Manual Programming

To add desired channels

1 Press the 0-9 buttons and ENTER to select the channel you want to add in the channel scan memory.
   For example, to select channel 25, press 2, 5 and ENTER.
2 While pressing the MEMORY button, press the ADD button.
   "Add" appears on the program indicator and the channel is added in the channel scan memory.

To add other channels, repeat steps 1 and 2.

To erase unnecessary channels

1 Press the CHANNEL +/- buttons to select the channel you want to erase.
2 While pressing the MEMORY button, press the ERASE button.
   "- - -" appears on the program indicator and the channel is erased from the channel scan memory. The next time you press the CHANNEL +/- buttons, the channel you erased will be skipped.

To erase other channels, repeat steps 1 and 2.

To clear the channel settings

While pressing the MEMORY button, press the 3 button. The tuner will restore the factory settings.

Fine Tuning

When the image of the selected channel is unclear:
1 Press the CHANNEL +/- button to select the channel you want to fine-tune.
2 Press the FINE button for a few seconds until the AFT indicator flashes.
3 Press the CHANNEL + or the CHANNEL - button to get the best image and sound quality.
4 Press the FINE button.

If you manually fine-tune a channel, the AFT circuit will not function and the AFT indicator will not light up on the channel.

Notes

- If you do not press the CHANNEL +/- button within a few seconds after step 2, the tuner will return to its status in step 1.
- To reset a manually tuned channel to automatic fine tuning, following "Manual Programming" on this page, erase the channel once and add the channel again.

Cable TV channel chart*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

Number on this tuner	Corresponding cable TV channel
1	A-8
5	A-7
6	A-6
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	W+1
38	W+2
39	W+3
⋮	⋮
93	W+57
94	W+58
95	A-5
96	A-4
97	A-3
98	A-2
99	A-1
100	W+59
101	W+60
102	W+61
⋮	⋮
123	W+82
124	W+83
125	W+84

* This designation of cable TV channels conforms to the EIA/ NCTA recommendation. Check with your local cable TV company for more complete information on the available channels.

Specifications

Television system	American TV standard
Channel coverage	VHF: 2 – 13
	UHF: 14 – 69
	Cable: 1 – 125
Antenna	75 Ω external antenna terminal for VHF/UHF
VIDEO output	BNC connector
	1 V p-p, 75 Ω, sync negative
AUDIO L/R outputs	phono jacks, 2 channels
	less than 5 kΩ, –5 dBu
CONTROL S IN/OUT	connectors
	stereo mini jacks
Power consumption	12 W at AC operation
	10 W at DC operation
Power requirements	120 V AC, 50/60 Hz
	12 V DC with AC-550 AC adaptor (not supplied),
	NP-1B battery pack (not supplied)
Operating temperature	
	0 – 35°C
Storage temperature	–10 – +40°C
Humidity	0 – 90 %, without condensation
Dimensions	212 × 49.3 × 361 mm (w/h/d)
	(8 3/8 × 2 × 14 1/4 inches)
Mass	2.05 kg (4 lb 8 oz)
Supplied accessories	Remote Commander RM-921 (1)
	Size AA (R6) batteries for RM-921 (2)
	AC power cord (1)
	AC plug holder (1)
	Antenna connector (1)
	Operating Instructions (1)
Accessories (not supplied)	
	Battery Case DC-640
	Battery Pack BP-90A (used with DC-640)
	VHF/UHF Indoor Antenna kit AN-1040
	Mounting Bracket MB-510/512
	Battery Pack NP-1B
	Car Battery Cord DCC-XLR4

Design and specifications are subject to change without notice.