

AC/DC Adaptor/Charger AC Adaptor/Charger

Operating Instructions
Mode d'emploi

AC-VQ1050D AC-VQ1050B



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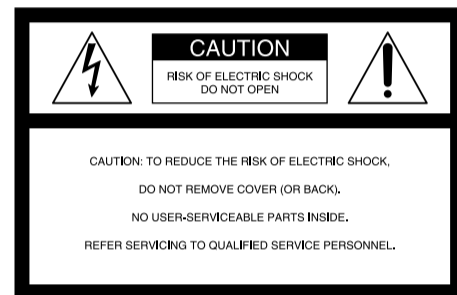
Owner's Record

The model and serial numbers are located on the bottom of the unit. 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. AC- _____ Serial No. _____

WARNING

To reduce 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.

CAUTION

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

NOTICE FOR THE CUSTOMERS IN THE U.S.A AND CANADA

The Graphical Symbols with Supplemental Marking is located on the bottom of the unit.

Note:

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:

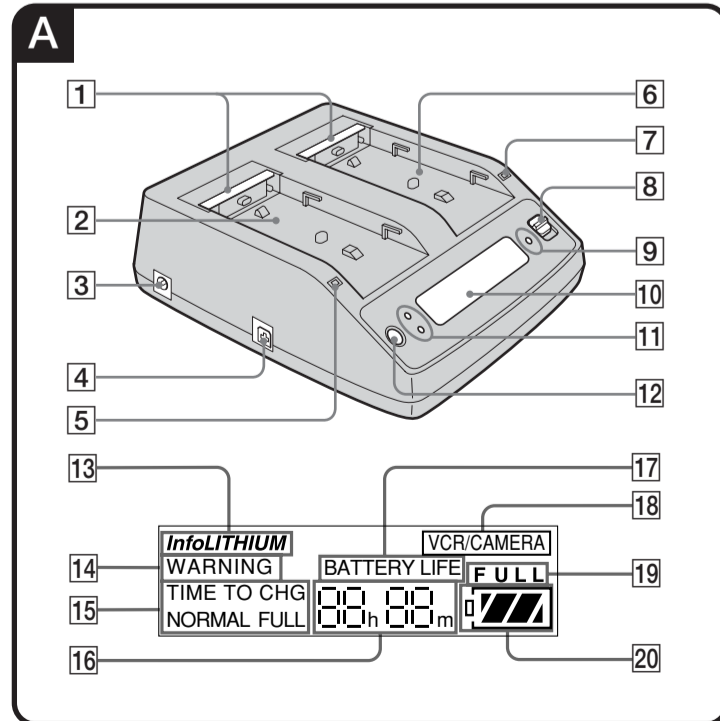
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTICE FOR THE CUSTOMERS IN THE UNITED KINGDOM

A moulded plug complying with BS 1363 is fitted to this equipment for your safety and convenience.

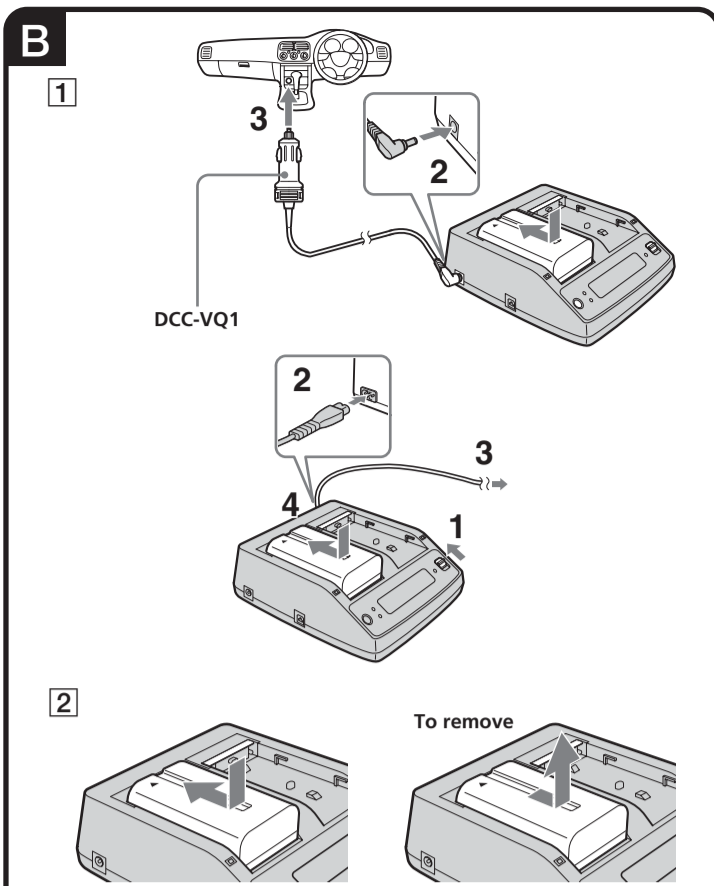
Should the fuse in the plug supplied need to be replaced, a fuse of the same rating as the supplied one and approved by ASTA or BSI to BS1362 (i.e., marked with Ⓢ or Ⓡ mark) must be used.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.

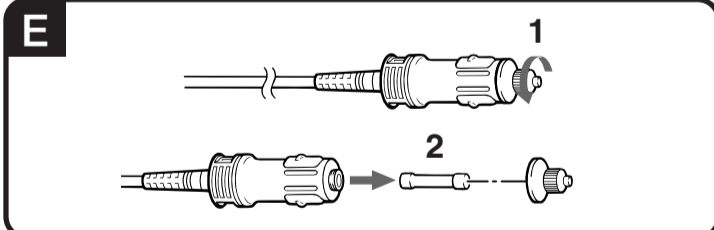
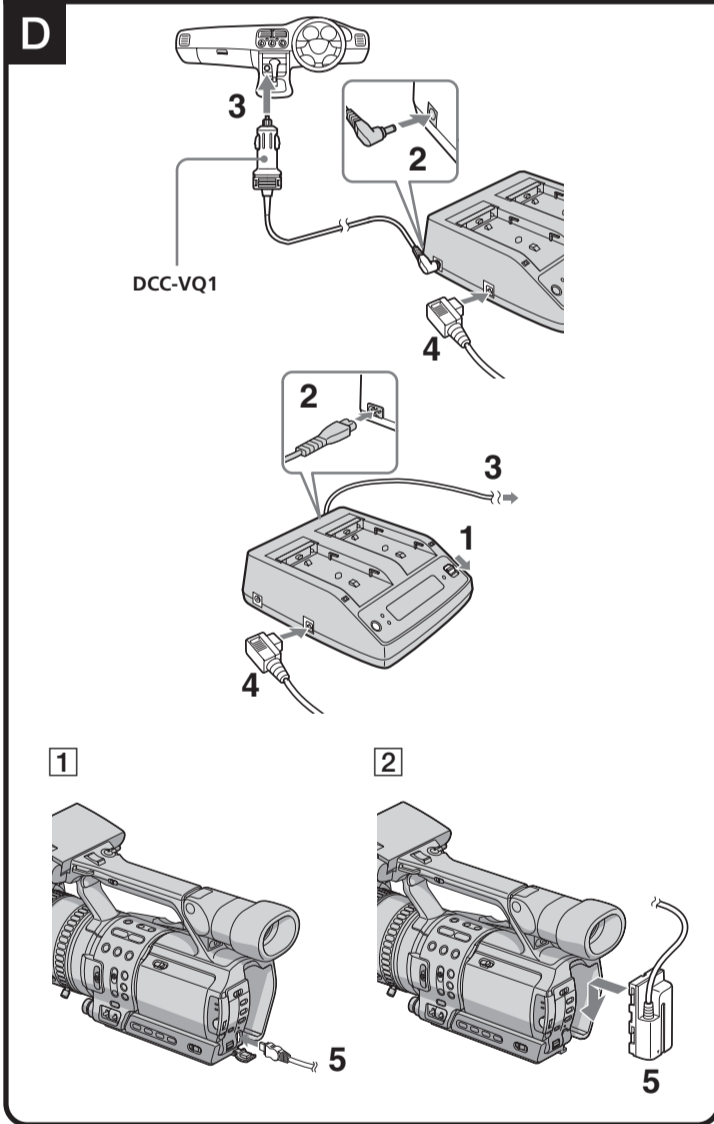
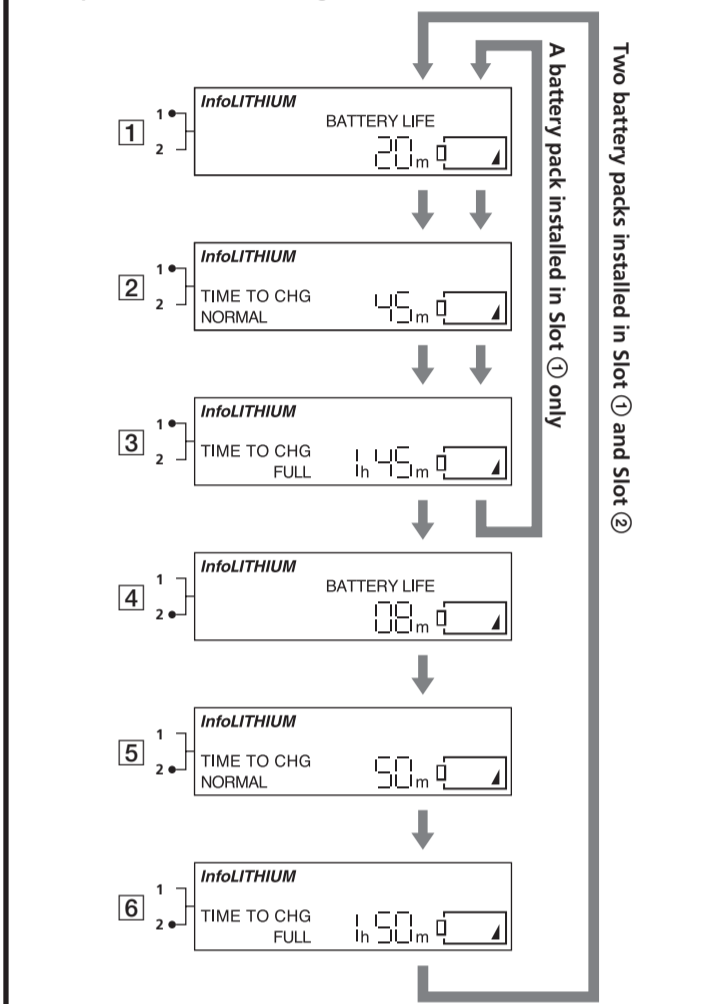


http://www.sony.com/

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The contents of the display window change each time you press the DISPLAY change button.



English

Thank you for purchasing the Sony AC/DC Adaptor/Charger.

AC-VQ1050D/AC-VQ1050B is the model name for the AC-VQ1050 and its accessories.

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

The AC-VQ1050 AC Adaptor/Charger can be used as follows:

The AC-VQ1050 AC Adaptor/Charger can be used in your home or car. Connect the power cord (supplied) to a wall outlet, or connect the car battery cord DCC-VQ1 to the cigarette lighter socket in your car. (For negative (-) grounded vehicles only.)

- Connection cords are included with this unit to operate Sony equipment (camcorder, etc.).
- For charging Sony rechargeable battery packs (L series). The following functions are available when charging "InfoLITHIUM" battery packs:
 - Quick charging (Faster than charging with your camcorder, etc.)
 - Approximate charging time and battery life can be displayed.

- For charging lithium ion type battery packs. Cannot be used to recharge Ni-Cd or Ni-MH type batteries.
- Cannot be used with some models of equipment (camcorder, etc.). Confirm the compatibility of your equipment before use.
- Some L series batteries may not have an L mark on the battery pack.

What is "InfoLITHIUM" ?

"InfoLITHIUM" is a lithium ion battery pack which can exchange data with compatible electronic equipment about its battery consumption. We recommend that you use an "InfoLITHIUM" battery pack (L series) with electronic equipment that has the InfoLITHIUM mark.

"InfoLITHIUM" is a trademark of Sony Corporation.

WARNING

To reduce 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.

The AC Power cord must only be changed at a qualified service shop.

CAUTION

Replace the battery with the specified type only. Otherwise, fire or injury may result.

PRECAUTION

The set is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the set itself has been turned off.



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)
This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Notes on Use

This unit does not have dust-proof, splash-proof or water-proof specifications.

Caution on battery life (Read carefully before use.)

While charging the battery pack, this unit shows the battery life if used with your video equipment, etc. so long as the following conditions are met.

- Using the "InfoLITHIUM" battery pack
- Using electronic equipment with the InfoLITHIUM mark
- Make sure that you use a battery pack with the InfoLITHIUM mark. Check in the instruction manual supplied with your video equipment whether it is "InfoLITHIUM" compatible.

If you use a battery pack with electronic equipment that does not have the InfoLITHIUM mark, the battery life will not be indicated in minutes.*

*The indication may not be accurate due to the conditions and environment of use.

Warranty for Recorded Content

Contents of the recording cannot be compensated if recording or playback is not made due to a malfunction of the battery pack, AC Power Adaptor, AC Power Adaptor/Charger, etc.

We cannot provide compensation for image content

We cannot provide compensation for recorded content such as images and sound, if images are not recorded or played back due to a malfunction in the AC Adaptor/Charger, etc.

Charging

Use only a lithium ion type battery pack. This unit cannot be used to charge a Ni-Cd/Ni-MH type battery pack.

- Attach the battery pack firmly.
- Charge the battery pack on a flat surface without vibration.

Charging temperature

- For maximum battery efficiency, the recommended temperature range when charging is +10 °C to +30 °C (+50 °F to +86 °F). Charging becomes more difficult at lower temperatures.
- Although this unit enables quick charging, charging outside the recommended temperature range may lead to a longer charging time in order to protect the battery pack. Once the charging time has been extended, quick charging will not be restored even if the temperature is brought within the recommended temperature range. Remove and reinstall the battery to recharge it again.

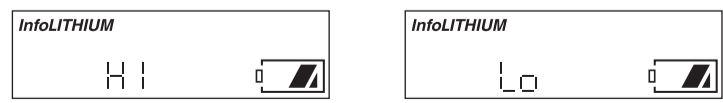
Others

- A negligible amount of electric current will flow into the AC Adaptor/Charger as long as it is plugged into a wall outlet.
- Unplug the unit from the wall outlet if it will not be used for an extended period of time. To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Do not operate the unit with a damaged cord or if it has been dropped or damaged.
- Use this unit close to a wall outlet. This ensures that the power plug can be quickly unplugged from the wall outlet to turn off the power if a malfunction occurs during use.
- Only use this car battery Charger with a car that has a 12 or 24 volt battery.
- Some cars are negatively grounded and others are positively grounded. This unit is for negatively grounded cars only.
- Use the unit with the car engine running. If you use the unit with the car engine stopped, the car battery may go flat.
- Unplug the car battery cord from the cigarette lighter socket when not in use. To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- The nameplate indicating the operating voltage, power consumption, etc. is located on the bottom.
- Make sure that nothing metallic comes into contact with the metal parts of the unit or connecting plate. If it does, a short may occur.
- Always keep the metal contacts clean.
- Do not disassemble or convert the unit.
- Do not apply mechanical shock or drop the unit.
- The unit becomes warm when in use. This is not a malfunction.
- Keep the unit away from AM receivers, otherwise it may disturb AM reception.
- Do not place the unit in a location where it is:
 - Extremely hot or cold
 - Dusty or dirty
 - Very humid
 - Vibrating
- Placing this unit in locations subject to direct sunlight such as on dashboards or near heating apparatus may cause the unit to deform or malfunction.

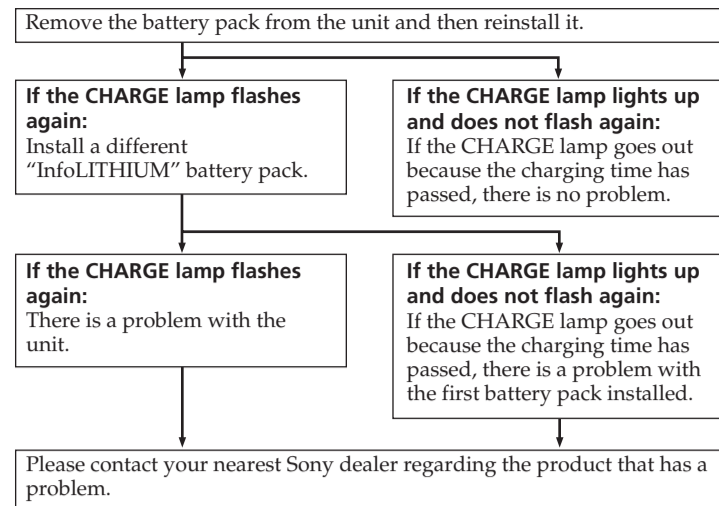
If any difficulty should arise, unplug the unit and contact your nearest Sony dealer.

Troubleshooting

Symptom	Cause/Solution
Video equipment does not work.	<ul style="list-style-type: none"> • The power plug is disconnected from the wall outlet. • The car battery cord DCC-VQ1 is disconnected from the cigarette lighter socket. <ul style="list-style-type: none"> → Insert into a wall outlet or cigarette lighter socket. • The connector cable is not properly connected. <ul style="list-style-type: none"> → Connect properly. • The mode change switch is set to CHARGE. <ul style="list-style-type: none"> → Set the mode change switch to VCR/CAMERA.
Power immediately turns off even though there is sufficient battery life, or the displayed battery life differs from the actual battery life.	<ul style="list-style-type: none"> • The mode change switch is set to VCR/CAMERA. <ul style="list-style-type: none"> → Set the mode change switch to CHARGE. • Fully charge again. <ul style="list-style-type: none"> → The battery life will be correctly displayed.
The display is not changed.	→ Refer to "Caution on battery life (Read carefully before use.)".
Quick charging is not performed.	<ul style="list-style-type: none"> • Quick charging is only performed with "InfoLITHIUM" battery packs. The display shown below may appear if a battery pack is charged outside of the recommended charging temperature range of +10 °C to +30 °C (+50 °F to +86 °F). Charging can still be performed in this case, but in order to protect the battery pack, quick charging is not performed.



The CHARGE lamp blinks and "WARNING" is displayed in the display window. → Check through the following chart.



Specifications

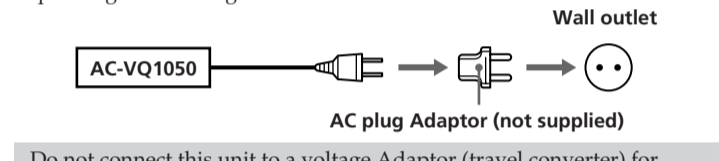
AC-VQ1050	
Power requirements	100 V - 240 V AC 50/60 Hz 22 W 12/24 V DC (only for negative grounded cars) DC OUT: 8.4 V 2.0 A in operating mode Battery charge terminal: 8.4 V 1.8 A in charge mode
Output voltage	0 °C to +40 °C (+32 °F to +104 °F) -20 °C to +60 °C (-4 °F to +140 °F) Approx. 123 × 53 × 135 mm (w/h/d) (4 7/8 × 2 1/4 × 5 1/4 inches) Approx. 390 g (13.8 oz.)
Operating temperature	
Storage temperature	
Dimensions	
Mass	
DCC-VQ1	
Input voltage	DC 12/24 V
Fuse rating	125 V 4 A
Cord length	Approx. 1.5 m
Mass	Approx. 80 g (3.0 oz.)
Included items	
AC/DC Adaptor/Charger AC-VQ1050D	
AC Adaptor/Charger (AC-VQ1050)	(1)
Connecting cord (DK-215)	(1)
Connecting cord (DK-415)	(1)
AC Power cord	(1)
Car battery cord (DCC-VQ1)	(1)
Set of printed documentation	
AC Adaptor/Charger AC-VQ1050B	
AC Adaptor/Charger (AC-VQ1050)	(1)
Connecting cord (DK-215)	(1)
AC Power cord	(1)
Set of printed documentation	

Design and specifications are subject to change without notice.

Note

AC-VQ1050B is not supplied with Connecting cord (DK-415) and Car battery cord (DCC-VQ1).

Use a commercially available AC plug Adaptor (not supplied), if necessary, depending on the design of the wall outlet.



Do not connect this unit to a voltage Adaptor (travel converter) for overseas travel. This may result in overheating or other malfunction.

Identifying the parts

Terminal shutter	Display window
1 Slot ①	13 "InfoLITHIUM" indicator
2 DC IN connector	14 WARNING indicator
3 DC OUT connector	15 TIME TO CHG (charge) indicator
4 CHARGE lamp ①	16 Time indicator
5 DC OUT connector	17 BATTERY LIFE indicator
6 Slot ②	18 VCR/CAMERA indicator
7 CHARGE lamp ②	19 Full charge indicator
8 Mode change switch	20 Battery life indicator
9 QUICK MODE lamp	
10 Display window	
11 Slot indicator lamp	
12 DISPLAY change button	

To Charge the Battery Pack

See illustration B-1.

When the AC Power cord and car battery cord DCC-VQ1 are connected at the same time, power input from the battery cord is given priority. Also refer to the instruction manual of your video equipment.

- 1 Set the mode change switch to CHARGE.
- 2 Connect the AC Power cord or the car battery cord to this unit.
- 3 Connect the AC Power cord to a wall outlet or a cigarette lighter socket. There is a beep and the display window comes on.
- 4 Install the battery pack. Charging begins. When the battery life indicator becomes and the CHARGE lamp lights up, normal charge is completed. The QUICK MODE lamp lights up during quick charging. For a full charge, which allows you to use the battery slightly longer than a "normal charge", leave the battery pack installed until the battery life indicator becomes and the CHARGE lamp goes out. Remove the battery pack when required. It can be used even if charging is not completed.
- 5 When charging is complete, remove the battery pack.

Installing two battery packs simultaneously

This unit allows installation of two battery packs simultaneously. Charging starts with the battery pack installed in Slot ①. When two battery packs are installed but not simultaneously, charging starts with the battery pack installed first regardless of whether it is in Slot ① or ②.

Note

This unit cannot charge two battery packs simultaneously.

PRECAUTION

The set is not disconnected from the AC power source (wall outlet) as long as it is connected to the wall outlet, even if the set itself has been turned off.

To install the battery pack

See illustration B-2.

- ① Place the battery pack on this unit with the ◀ mark facing the terminal shutter.
- ② Slide the battery pack in the direction of the arrow. Press the battery pack until the terminal shutter completely enters the unit.

To remove the battery pack

See illustration B-2.

Slide the battery pack in the direction of the arrow and lift it straight out.

Notes

- Do not lift the unit by holding the battery pack.
- When installing the battery pack, be sure not to hit it against the terminal shutter.
- Be careful not to pinch your fingers while installing or removing the battery pack.

Charging time

The following table shows the charging time for a main battery pack that has been completely discharged.

Quick Charge	NP-F970	NP-F770	NP-F570	NP-F730
Normal charge	250 min	170 min	85 min	100 min
Full charge	310 min	230 min	145 min	160 min

- For how to check the battery life, refer to the instruction manual of your video equipment.
- The charging time may differ depending on the condition of the battery pack or the ambient temperature.
- The approximate times shown are when charging an empty battery pack with this unit at +25 °C.

Notes

- If the mode change switch is set to VCR/CAMERA during charging, charging stops.
- If the CHARGE lamp does not light up or flash, check that the battery pack is correctly attached to the AC Adaptor/Charger. If it is not attached correctly, it will not be charged.
- Quick charging is only performed with "InfoLITHIUM" battery packs.
- If anything goes wrong during charging, the charge lamp blinks and "WARNING" appears on the display. For details, see "Troubleshooting".

To Check Charging

See illustration B.

You can check the charging time on the display during charging. About one minute after charging starts, BATTERY LIFE lights up on the display. The battery life displayed is the approximate time remaining for taking photographs using the viewfinder. The battery life is shorter if the LCD display is used.

The battery life may not be displayed with certain video equipment. For details, refer to "Caution on battery life (Read carefully before use)".

Press DISPLAY during charging.

Once about one minute has passed after installing the battery pack, the contents of the display window change each time you press the DISPLAY change button. The slot indicator lamp shows the slot number for the battery information displayed. When two battery packs are installed simultaneously, the time display of the battery pack not being charged returns automatically after about 10 seconds to the time display of the battery pack being charged. Here is an example of installing a battery pack in Slot ① followed by another in Slot ②. The slot indicator lamp corresponds to the slot number.

- 1 Battery life if the first installed battery pack is installed in your "InfoLITHIUM" electronic equipment. The battery life is not displayed if it is less than five minutes.
- 2 Remaining time until normal charging of the first installed battery pack is complete. The normal charge time is not displayed after normal charging is complete.
- 3 Remaining time until full charging of the first installed battery pack is complete. The full charge time is not displayed after full charging is complete.
- 4 Battery life if the last installed battery pack is installed in your "InfoLITHIUM" electronic equipment. The battery life is not displayed if it is less than five minutes.
- 5 Remaining time until normal charging of the last installed battery pack is complete. The normal charge time is not displayed after normal charging is complete.
- 6 Remaining time until full charging of the last installed battery pack is complete. The full charge time is not displayed after full charging is complete.

Notes

- The time display shows the approximate time when charging at +25 °C. The time display may differ from the actual charging time due to the environment of use.
- The time display of the battery pack on the side not being charged may take some time to appear.
- The time display may show "----" in the following cases. This is not a malfunction.
 - The battery life is less than 5 minutes.
 - There is a difference between the displayed time and actual charging time. Even if this happens, continue charging.
 - When charging a battery other than an "InfoLITHIUM" battery pack (Battery life display and other functions are not available.)
- Full charging requires about one hour after normal charging is complete. If you remove the battery pack between normal charge and full charge, the charging time may not be displayed properly in the next charging.
- When charging a battery that has not been used for a long time, the displayed battery life and full charge time sometimes differ from the actual times. This is not a malfunction. If this happens, fully charge the battery pack. The correct times can then be displayed.
- If you install a fully charged battery pack in this unit, "TIME TO CHG FULL Lh" may appear on the display. This is not a malfunction.
- It may take some time after pressing DISPLAY for the time to be displayed.
- To display the battery life of a new battery, first install it in your video camera recorder and use it for about 20 seconds, and then charge it with this unit.
- It may take some time for the time to be displayed for the battery pack that is not being charged. Sometimes the time may not be displayed at all due to the condition of the battery pack. Neither case is a malfunction.
- In the following cases, some deviance may occur in the time displayed. This is not due to any malfunction.
 - If the battery pack is removed from this unit after normal charge is finished but before full charge is finished. (It takes about one hour from when normal charge is complete to when full charge is complete.)
 - When charging a battery pack that has not been used for a long time. (Fully charge once first.)

To Operate Video Equipment

See illustration B.

For details of connection, refer to the instruction manual of the video equipment.

- 1 Set the mode change switch to VCR/CAMERA.
- 2 Connect the AC Power cord or car battery cord to this unit.
- 3 Connect the AC Power cord to a wall outlet or cigarette lighter socket.
- 4 Connect the connecting cord to the DC OUT connector of this unit.
- 5 Connect the connecting cord to the video equipment. When using the connecting cord DK-215 (ill. B-1) When using the connecting cord DK-415 (ill. B-2)

Notes

- Setting the mode change switch to CHARGE while operating the video equipment cuts the power supply to the video equipment.
- You cannot charge a battery pack installed in this unit when in VCR/CAMERA mode.
- Keep this unit away from your video equipment if the image is distorted.
- The DK-415 connecting cord is only for use with devices compatible with Rechargeable battery packs (L series). Confirm the compatibility of your device.
- The connecting cord supplied with this unit may be unusable with your video camera. In this case, use the connecting cord supplied with your video camera.
- The illustrated example is of connection to an HDR-FX1 digital HD video camera recorder.

Fuse Replacement

See illustration B.

If this unit does not work properly while using DCC-VQ1, check to see if the fuse has blown. If it has, replace it as follows.

- 1 Twist the end of the plug and remove it.
- 2 Remove the blown fuse.
- 3 Insert a new fuse and twist the end of the plug to tighten.

Notes

- Replace the fuse with a fuse with the same rating (4 A, 125 V).
- If your car's cigarette lighter socket is dirty with ash, etc., the plug part can become hot due to a poor connection. Always clean before use.
- Do not replace the fuse with anything except a fuse with the specified rating.
- If the new fuse blows soon after replacement, consult your nearest Sony dealer.

Contact your car dealer about the polarity of your car's grounding, the voltage of your car battery, etc.

