

SPK-TRA2

Operation Manual

A

Models with the screw hole located in front.

Models sold in U.S.A.

CCD-TR42/TR70/TR72/TR80/TR82/TR400

Models sold in the other countries

CCD-TR430/TR250/TR750

CCD-TR530E/TR530E/TR570E/TR600E/TR750E

Models with the screw hole located in back. (List of correspondence)

Models sold in U.S.A.

arrow number	model
1	CCD-TR51/TR71/TR77
2	CCD-TR4/TR5/TR7/TR81
3	CCD-TR101
4	CCD-TR21/TR28/TR30/TR31/ CCD-TR40/TR61/TR65
5	CCD-TR91/TR700

Models sold in the other countries

arrow number	model
1	CCD-TR105/TR305/TR405/TR105E/TR305E
2	CCD-TR45/TR55/TR75/TR705 CCD-TR45E/TR55E/TR75E/TR705E
3	CCD-TR805/TR805E/TR808E
4	CCD-TR212/TR303/TR360/TR323/TR353 CCD-TR202E/TR303E/TR323E/TR350E/TR353E/ CCD-TR402E/TR470E
5	CCD-TR636/TR2000 CCD-TR606E/TR2000E

B

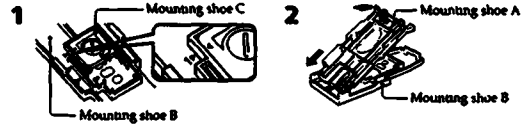
Models with the screw hole located in front



To disassemble after using



Models with the screw hole located in back



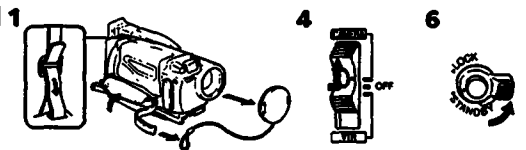
To disassemble after using



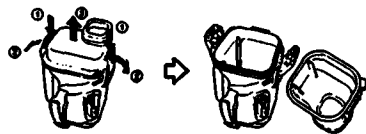
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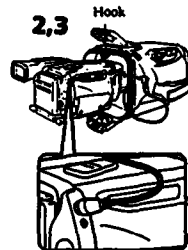
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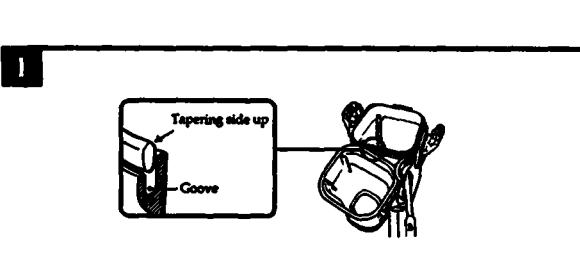
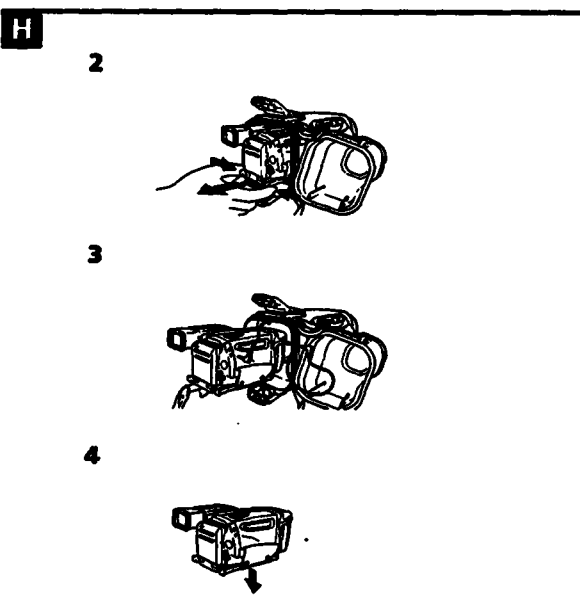
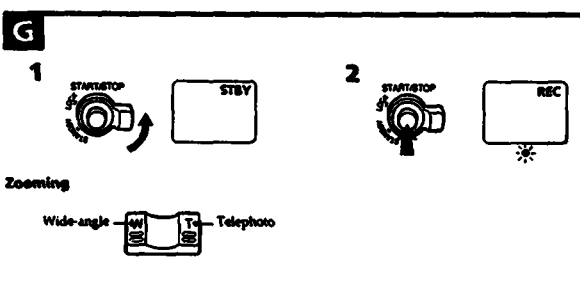
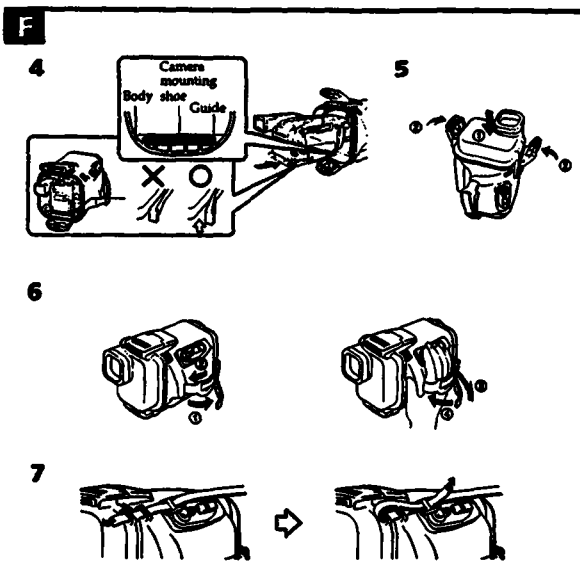


E



F





- 4 Install the camcorder.
- Align the camera mounting shoe with the guide on the front body.
 - Insert the camcorder by pushing the rear of the camera mounting shoe until it clicks.
- Check the knobs on both sides of the camera mounting shoe to ensure that the camera mounting shoe is locked properly. (See illustration **F**.)
- 5 Close the rear body.
- Before closing the sports pack body, check there is no sand, dust or cracks on the water-proof gasket or the surface where it touches, and grease them slightly.
- Securing the rear body.
 - Fasten the buckles until it clicks.
- 6 Adjust the grip Strap
- Holding the sports pack so that the tips of your fingers can easily touch the STANDBY switch, START/STOP button and ZOOM button, pull the strap to adjust its length.
- 7 Attach the shoulder strap
- Attach the supplied shoulder strap to the hooks for the shoulder strap. The Sony mark should be on the outside.

- Notes on the Water-proof Gasket**
- Check that there are no scratches or cracks on the water-proof gasket. Scratches or cracks on the water-proof gasket may cause water to leak in. If there are any, replace it damaged water-proof gasket with a new or Do not remove the water-proof gasket from the groove with a metal tool or a tool with sharp point.
 - Remove foreign materials such as dust, soil or hair from the water-proof gasket, the groove and from any surface it touches. If the body is closed with such materials present, these areas may be damaged and water may leak in.
 - Put the water-proof gasket in the grooves evenly, with the tapering side up. Never twist them (See illustration **F**.)
 - After checking that there are no cracks or dust on the water-proof gasket, grease it over slightly with the supplied grease using a finger. It prevents wearing. During greasing, recheck for cracks or dust. Never use cloth or paper for greasing as the fibers may cling.
 - Do not use any type of grease other than that supplied, as it may damage the water-proof gasket.
 - The useful life of the water-proof gasket depends upon the maintenance and the frequency of use, but we recommend changing it once a year. To replace the water-proof gasket, please consult the nearest Sony dealer.

Using the Sports Pack

- G Recording**
- Turn the STANDBY switch to STANDBY.
 - Press START/STOP to start recording. The recording lamp lights in the viewfinder, and recording starts.
 - To stop recording, press START/STOP. Press again to resume recording. To finish recording Press START/STOP to stop recording. Then turn STANDBY to LOCK.

- Zooming**
- Keep the W side pressed for wide-angle
 - Keep the T side pressed for telephoto. Press the button firmly for high-speed zoom. Press it softly for a relatively slow zoom. (Depending on the models of your camcorder, whether the function works or not.)

Notes on recording.

If you leave the camcorder for 5 minutes or more with cassette inserted in Standby mode, the camcorder goes off automatically. This prevents battery and tape wear. To resume Standby mode, turn the STANDBY switch to LOCK and then turn it to STANDBY again. To start recording, press the START/STOP button.

- Removing the Camcorder**
- Release the buckles, and open the rear body. (See illustration **H**) Before opening the sports pack, wipe moisture off the sports pack and yourself. Do not allow water on the camcorder.
 - Holding the cameramounting shoe by the knobs on both sides of it, press the knobs and extract the camcorder. While extracting the camcorder, stop extracting at the point that the remote control plug is come out from the sports pack to disconnect the REMOTE & (LANC) control jack.
 - Disconnect the MIC plug from the MIC jack.
 - Detach the camera mounting shoe.

Maintenance and Precautions

Water Leakage

If water happens to leak in, remove the sports pack from the place exposed to water as soon as possible.

If the camcorder gets wet, take it to the nearest Sony service facility immediately.

Checking for the water leakage after replacing the water-proof gasket

Check for the water leakage before installing the camcorder.

Close the sports pack without installing the camcorder, and keep the sports pack submerged under water at a depth of about 11 cm (6 inches) for about 3 minutes and then check the water leakage.

After recording

After recording at a location subjects to see breezes, wash the sports pack with fresh water with the buckles fastened thoroughly, then wipe with a soft dry cloth. If water remains on the sports pack, the metal parts may rust.

Clean the inside of the pack with a soft dry cloth. Do not wash the inside of the pack. Do not use any type of solvent such as alcohol, benzene or thinner for cleaning, as this might damage the finish.

Preventing the surface of the glass from fogging up

Grease the surface of the glass with the supplied anti-fogging lens solution. This is effective in preventing from fogging.

When storing the sports pack

- Close the pack without fastening the buckles to prevent wear of the water-proof gasket.
- Avoid the dust not to touch the water proof gasket.
- Avoid storing the sports pack in a cold, very hot or humid space, or together with naphthalene or camphor, otherwise this might damage the unit.

Specifications

- Material**
- Plastic (ABS), glass
- Water-proof**
- Water-proof gasket, buckles
- Built-in microphone**
- Stereo
- Dimensions**
- Approx. 7 x 6 7/8 x 10 1/2 inches (w/h/d) (177 x 173 x 265 mm)
- Mass**
- Approx. 1 lb 10 oz (735 g) (only sports pack)
- Supplied accessories**
- Shoulder strap (1), Camera mounting shoe (1), Grease (1), Anti-fogging lens solution (1) and Operation Manual(1)
- Design and specifications subject to change without notice.

Trouble Check

Symptom	Cause	Corrective Actions
The sound is not recorded.	The microphone plug is not connected.	Connect it to the MIC jack on the camcorder
There are drops of water inside of the sports pack.	<ul style="list-style-type: none"> The buckle is not fastened. The water-proof gasket is not in correct. There are scratches or cracks on the water-proof gasket. 	<ul style="list-style-type: none"> Fasten the buckle until it clicks. Put it in the groove evenly. Replace it with a new one.
The recording and playing back function does not work.	<ul style="list-style-type: none"> The battery pack is run out. The tape has run out. The safety tab on the cassette is out. 	<ul style="list-style-type: none"> Charge the battery pack fully. Rewind the tape or use a new one. Slide the safety tab or install a new cassette tape.

Owner's Record

The model and serial number are located on the inside of the front body. 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. SPK-TRA2 Serial No. _____

For the Customers in U.S.A.

Motor

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.

For the Customers in Canada
THIS APPARATUS COMPLIES WITH THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS SET OUT IN RADIO INTERFERENCE REGULATIONS.



This mark indicates that this product is a genuine product related to our film video equipment.

When purchasing our film video equipment, we recommend that you purchase related film video products provided with the same mark or products provided with our logotype mark.

The sports pack SPK-TRA2 cannot be used under water.

When recording under water use the Sony marine pack.

For using your video camera recorder with this pack, refer to the operation manual of the recorder. The splash-proof sports pack SPK-TRA2 has some resistance to water and moisture, making it possible to use the Sony film video camera recorders such as CCD-TR700(Sold in U.S.A./TR2000E(Sold in the other countries), etc. in the rain or on the beach.

Notice

- Before you start recording, ensure that the video camera recorder is working correctly and there is no water leakage.
- Sony does not accept liability for damage to the camcorder, battery, etc. in the sports pack or for the cost of recording if water leakage occurs as a result of an incorrect operation.

Precautions

- Do not subject the front and rear glass to strong shock, as it may crack.
- Do not leave the sports pack under direct sunlight for a long period of time, as extreme temperatures may cause damage to the equipment.
- If you cannot avoid leaving the sports pack under direct sunlight, be sure to cover the pack with a towel or other protection.
- Avoid opening the sports pack in the sun or at the beach. Precautions such as installing and changing a cassette tape should be made in a place with low humidity and no salty air.
- If the sports pack is taken to a cold place or put in the water after being opened in heat or humidity, moisture condensation may occur, causing the glass to fog up and perhaps damaging the equipment.
- The water-proof integrity of the sports pack is maintained by the water-proof gasket and the grooved surface it touches. Be especially careful not to damage or deform those areas.
- Do not expose the microphone to strong waves.
- Do not throw the sports pack into the water.
- Use the pack for no longer than one hour at a time in temperatures of 60°C (140°F). You can use the pack normally at temperatures lower than 15°C (59°F).
- When using the sports pack in cold places, keep the unit in a bag, etc., except when recording pictures, this prevents the unit from getting extremely cold.
- Using the sports pack when the air temperature is freezing point or below is not recommended. But, in unavoidable situations, wrap the unit in something to insulate it.

Before You Begin

To make sure that you do not miss good shooting opportunities, go over the following checklist before attaching your camcorder to the sports pack.

- Battery pack
- Cassette tape
- Water-proof gasket
- Fully charged.
- The tape length will cover the planned recording time.
- The tape is wound to the point where you want to start recording.
- The safety tab on the cassette is in the correct position. (The window is not red.)
- No scratches or cracks.
- No dust, sand or hair around them.
- Correctly set in the groove. (See "Notes on the Water-proof gasket" in detail.)

Installing the Camcorder

The video camera recorder CCD-TR700 (Sold in U.S.A./TR2000E (Sold in the other countries)) is used for the illustrations. For details, please refer to the operation manual supplied with your camcorder.

A Selecting the camera mounting shoe

Depending on the location of the screw hole for attaching the camera mounting shoe of your camcorder, you have a choice of two types of camera mounting shoe. (See illustration **A**) If you have a camera with the screw hole located in the front part of the bottom of your camera, you should attach the camera to camera mounting shoes A and C together.

If the screw hole is located relatively back of the bottom of your camera, you should choose camera mounting shoes B and C.

In the latter case when you attach the camera mounting shoes together, the position where camera mounting shoe C is placed on the camera mounting shoe B differs depending upon the type of camera you have. Check list **B** to identify the appropriate position.

B Preparing the camera mounting shoe

Models with the screw hole located in front

- 1 Align mounting shoe C to the guide of mounting shoe A, and slide the mounting shoe C in the direction of the arrow.

Models with the screw hole located in back

- 1 Indication number and arrow on mounting shoe B and C identify the models of camcorder. Align the arrow of mounting shoe C to the arrow of mounting shoe B depending upon the model of camcorder, and attach them.
- 2 Place mounting shoe A upon mounting shoe B as illustrated and attach them together.

C Attaching the camera mounting shoe

Use metal parts of shoulder belt as shown in the illustration.

D Preparing the Camcorder

- 1 Remove the shoulder strap and lens cap from the camcorder.
- 2 Install the battery pack.
- 3 Insert the cassette tape.
- 4 Set the POWER switch to CAMERA.
- 5 Set to AUTO LOCK mode for automatic adjustment.
- 6 Turn the STANDBY switch to STANDBY.

E Operating the Sports Pack

- 1 Release the buckles.
 - While pressing up the unlock button.
 - Release the buckles.
 - Open the rear body.

F Installing the Camcorder

- 1 Turn the view finder down until it clicks.
- 2 Connect the microphone plug to MIC jack.
- 3 Connect the remote control plug to REMOTE Ⓜ(LANC) control jack. If the REMOTE Ⓜ(LANC) control jack is located on the upper right side of the camcorder, as it is on the CCD-TR700/CCD-TR2000E, the remote control plug should be plugged into the REMOTE Ⓜ(LANC) control jack as illustrated. (See illustration 2.3.)

If your camcorder is CCD-TRA (Sold in U.S.A./TR45/TR45E (Sold in the other countries)), remove the cord of the remote control plug from the hook of the sports pack.