

PROTECH®

Compact Live Switcher *VSE-200*

Operating Instructions

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



Attention on safety

Please guard.

The case where it is used by professional Tec commodity common optional AC is contained.

It explains the guard without fail to prevent the damage to harm and the property to the person and other people who use it beforehand as follows.

- It divides in the following table, and it explains the level of harm and the damage caused when a usage wrong as the content of the display is disregarded is done.


	Warning	The column of this display is "The possibility of owing the death or the serious injury, etc. is assumed" content.
	Attention	The column of this display is "The possibility that only the possibility or the physical loss or damage in which the trouble is owed occurs is assumed" content.

- It divides by the following picture display, and it explains the kind of the guarded content. (The following are one picture display example.)

	Such a picture display is an attentive "Attention rousing" content that wants to hold.
	Such a picture display is "Prohibition" content that cannot be done.
	Such a picture display is "Compulsion" content executed without fail.






About the installation

 Warning

	It doesn't put it on an unstable place.		A heavy thing is not put on the power supply code.		It doesn't set it up in the water place.
Prohibition		Prohibition		Water place use prohibition	

About the processing in abnormal circumstances

 Warning

	When this machine is dropped or is damaged, the power on/off switch is cut.		When water etc. enter in this machine, the power on/off switch is cut.		When the foreign body enters in this machine, the power on/off switch is cut.
The power supply is pulled out.	The power supply is pulled out.	The power supply is pulled out.			
	Smoke has risen, and when it is abnormal of hearing a strange smell and the sound etc. the power on/off switch is cut.		When the power supply code hurts, it exchanges it.		
The power supply is pulled out.	Compulsion				

Attention on safety

Please guard.

About use



Warning

 <p>Neither a container where water entered on this machine nor a small metallic thing are put.</p> <p>Prohibition</p>	 <p>The foreign body is not inserted, and not dropped from the opening of the equipment.</p> <p>Prohibition</p>	 <p>This machine is not remodeled.</p> <p>Resolution prohibition</p>
 <p>It doesn't use it in the water place.</p> <p>Water place use prohibition</p>	 <p>Neither the back cap, the cabinet nor the cover, etc. of this machine are removed.</p> <p>Resolution prohibition</p>	 <p>It is done to wet the equipment and watertight.</p> <p>Prohibition</p>

About use



Attention

About maintenance

 <p>A heavy thing is not put on this machine.</p> <p>Prohibition</p>	 <p>It doesn't take this machine.</p> <p>Prohibition</p>	 <p>When maintaining it, the switch is turned off for safety.</p> <p>The power supply is pulled out.</p>
 <p>When not using it, the power supply is pulled out for safety.</p> <p>The power supply is pulled out.</p>	 <p>The power supply is pulled out, and an external code is removed when moving.</p> <p>The power supply is pulled out.</p>	 <p>The consultation of an internal cleaning is : to the shop about once a year.</p> <p>Compulsion</p>

About after-sales service

Our product is a free repair guarantee of one year.
(I hope the carriage etc. in the customer's share.)

It does to a repair for a fee for the commodity that passes a free guaranteed term.

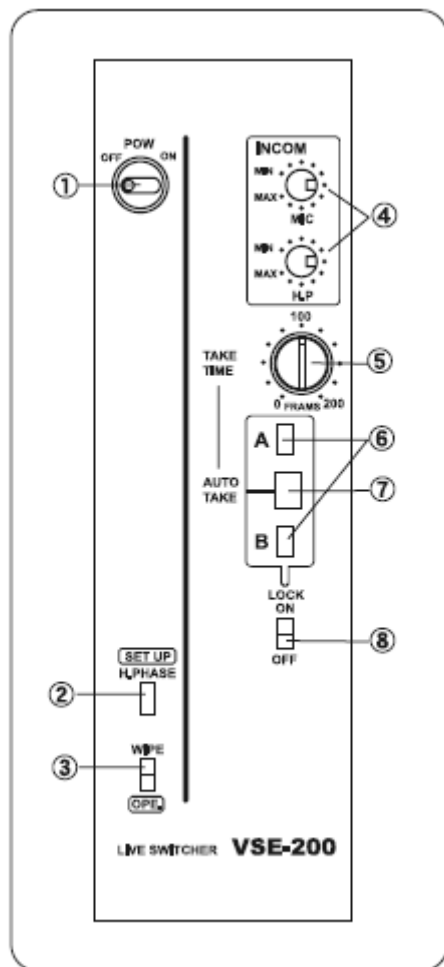
Please request the repair to the shop or our support center of purchase.

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Names and Functions of Parts

Front panel



(1) Power switch

Turn ON/OFF the power supplied from Sony lithium battery holder or Canon 4P.

(Note) Power is supplied to camera if this switch is OFF.

(2) H. PHASE adjustment monitor

LED to display H. PHASE adjustment condition of camera A (IN A). If H. PHASE is not adjusted, it lights up to red. If the phase is adjusted by the camera adjustment, it changes to green.

(3) SET UP switch

When it is set to WIPE side, camera B picture is displayed in the lower-half and camera A picture is displayed in the upper-half of PGM OUT. Set both of camera A and B to Color Bar, and adjust SC and H. PHASE. After adjustment, set it to OPE.

Main panel (Front panel)

(4) INCOM volume

Volume to adjust MIC level and H.P level of the headset (FL-301) connected to INCON (ϕ 3.5) (9) of the connector panel.

(5) TAKE TIME volume

Volume to adjust auto take time by AUTO TAKE switch from 0 to 200 frames. If this volume is set to 0, it becomes cut.

(6) A, B output display

LED to display the output status of camera A, B. Camera A or B is output status, A or B lights up. Both LED blink on the way of AUTO TAKE. Both LED light up at the manual MIX by REMOTE lever operation.

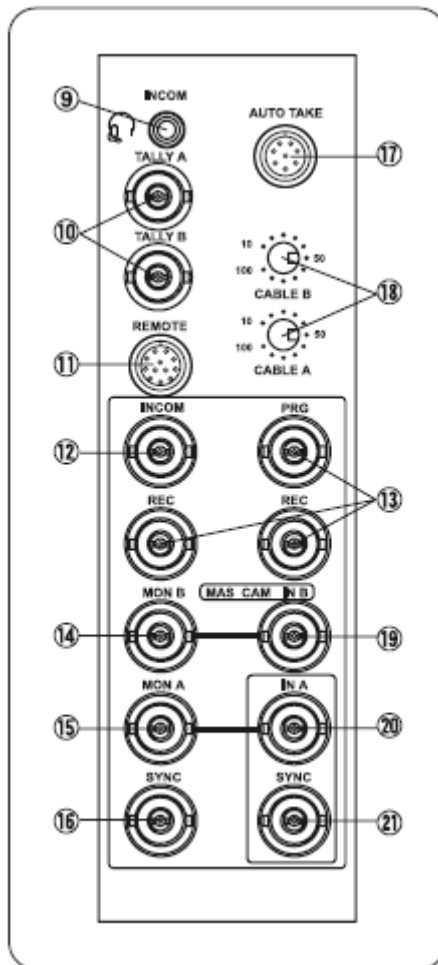
(7) AUTO TAKE switch

Switch for AUTO TAKE by main unit. If push this switch, output changes A to B, B to A by TAKE TIME.

(8) AUTO TAKE LOCK switch

Switch to lock AUTO TAKE switch (7) and not to operate. If this switch is ON, operation from outside is possible.

Connector panel



(9) INCOM headset connector

Connector to input the headset (FL-301) when INCOM is used.

(10) TALLY A, B connector

Connector to connect BNC cable when the optional tally unit is used.

(11) REMOTE connector

Connector to connect lever kit (VSE-RM200).

(12) INCOM line connector

Connector to connect PROTECH FD-300A with BNC cable.

Connector panel

(13) PGM, REC output connector

Connector to output the video signal with effect. Use this video out for recording and monitoring.

(14) MON B output connector

Connector to monitor the video signal of camera B (INB). This output is including special buff amplifier.

(15) MON A output connector

Connector to monitor the video signal of camera A (INA). This output is including special buff amplifier.

(16) SYNC output connector

Connector to output GENLOCK signal. It is used to synchronize deck etc connected with VSE-200.

(17) AUTO TAKE connector

Connector to connect supplied AUTO TAKE switch or PROTECH AS-520 (8p). Can operate AUTO TAKE by pushing REC button.

(18) CABLE A, B volume

Volume to adjust the level different by the cable length of camera A, B.

(19) IN B connector

Connector to connect video signal (composite) of camera B. Camera without gen-lock (consumer type camera) can be connected.

(20) IN A connector

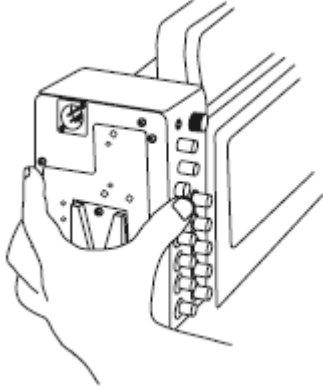
Connector to connect video signal (composite) of camera A. If use optional cable (in TU-200), connection becomes compact. Connect professional camera (with gen-lock).

(21) SYNC connector

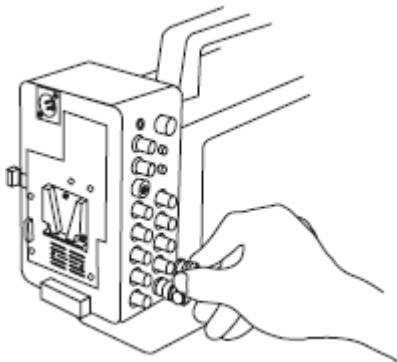
Connector to connect GEN LOCK IN of camera A. It makes SYNC signal from the signal of camera B. If use optional cable (in TU-200), connection becomes compact.

Main operation instructions

1. Fix VSE-200 to V shoe of the battery installation part of a camera.

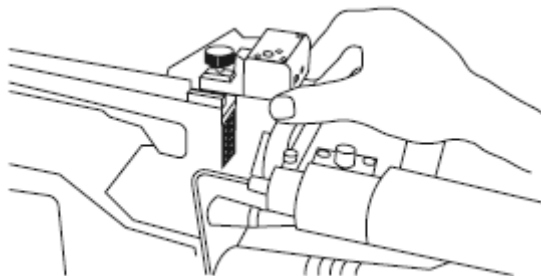


2. Connect IN A of VSE-200 and VIDEO OUT of a camera with BNC cable and connect SYNC of VSE-200 and GENLOCK of a camera with an another BNC cable.

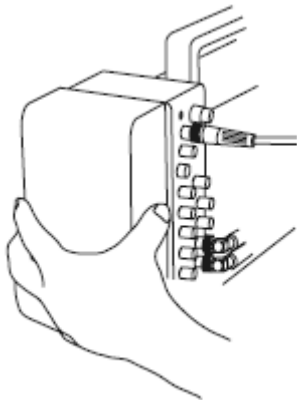


Camera	VSE-200
VIDEO OUT	- IN A
GENLOCK	- SYNC

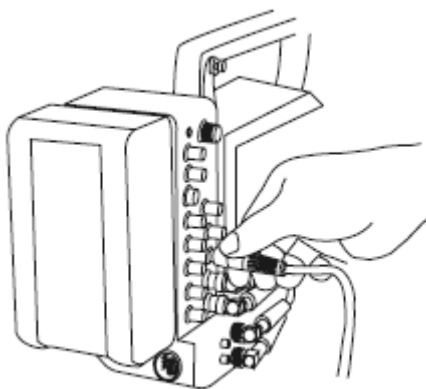
3. If use Tally unit (Option: TU-200), install it to the front part of the handle or accessory shoe of the view finder. Connect the connector of Tally unit and TALLY A of VSE-200.



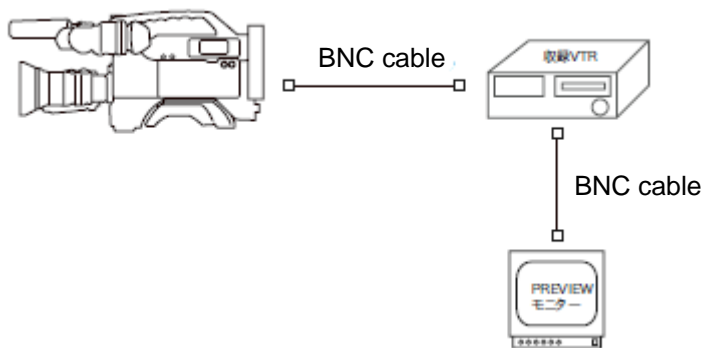
4. Attach battery, AC adaptor, etc to VSE-200, and fix it to tripod.



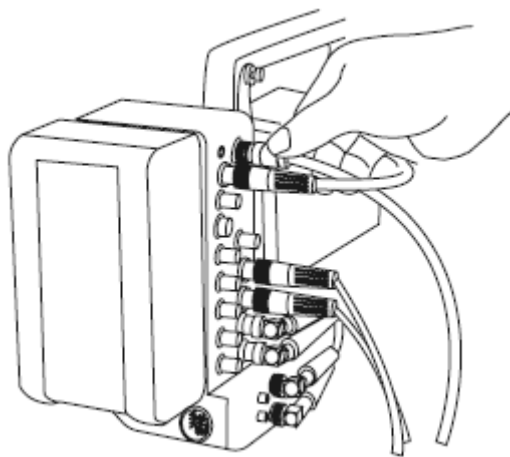
5. Connect VIDEO out of one more camera to IN B of VSE-200 by BNC cable. Consumer type camera without gen-lock can be used as one more camera.



6. Connect REC of VSE-200 and VIDEO IN of recording VTR. Connect VIDEO out to monitor.



7. Fix Auto Take Switch 'AR050) to the handle of tripod, and connect to AUTO TAKE of VSE-200.



8. Connect the input of recording VTR to LINE of the event place or the microphone to the.

■ Camera adjustment

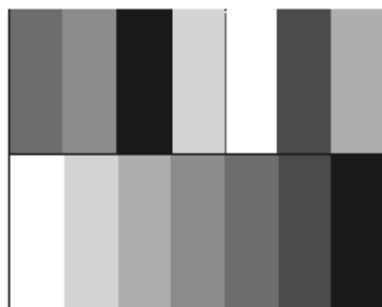
Adjust H. PHASE and S.C of camera A. Adjustment method is different by the model and manufacture.
Please refer to the operation manual of the camera.

① Adjustment of S.C (Sub Carrier)

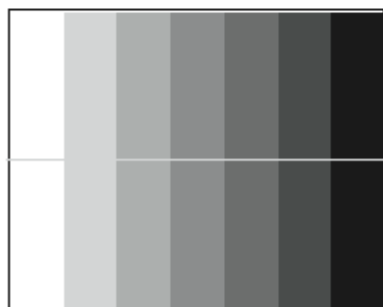
1. Generate Color Bar of 2 cameras. (refer to the operation manual of camera about generation method.)
2. Change SET UP switch of VSE-200 to WIPE.
3. Adjust S.C of camera while seeing the monitor connected to REC OUT.



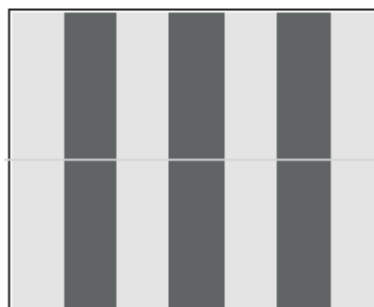
SET UP is OPE status.



WIPE mode status.
Color of upper color bar is not right.



SC was adjusted.
Adjustment was finished



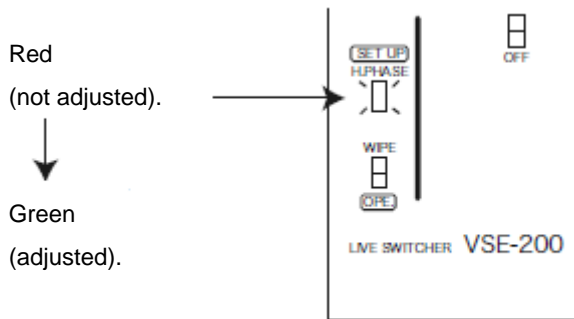
Good color bar status seen in
blue only mode by the monitor
Equipped with blue only function.

4. S.C adjustment has finished.

(Note) It is not necessary to adjust camera A every time if the same cable is connected.

② Adjustment of H. PHASE (Horizontal Phase)

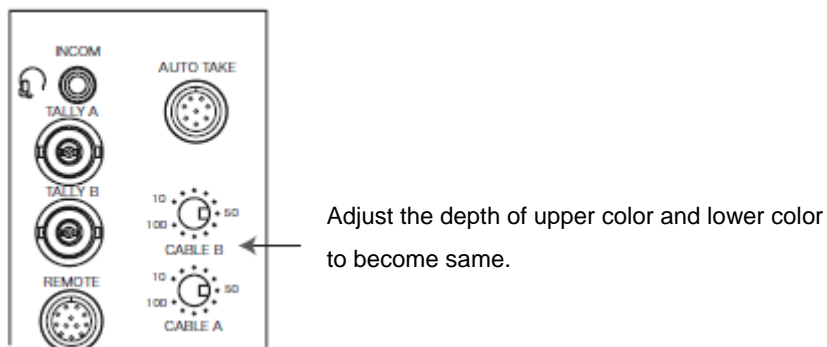
1. Confirm if H PHASE LED of VSE-200 lights up. If it does not light up, confirm the power of camera A or connection.
2. Adjust H. PHASE of camera so that H PHASE LED changes to green from red. PHASE is adjusted if LED lights up to Green.



■ VSE-200 adjustment

① Adjustment of CABLE A, B

1. If attach VSE-200 to camera A and connect them with short cable, adjust CABLE A to 10m (to the full on the left).
2. Adjust at the volume of CABLE B for the depth of the color bar to approach as much as possible after adjustment of camera ① Adjustment of S.C.

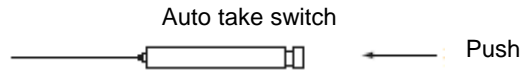


3. Return SET UP switch of VSE-200 to OPE. Adjustment finished.

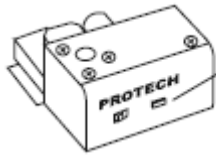
■ Camera operation

1. Change A to B, B to A by pushing auto take switch (AR-50).

Adjust transition time (changing time by dissolve) by TAKE TIME volume.



2. Tally unit (option) of view finder side lights up according to output.



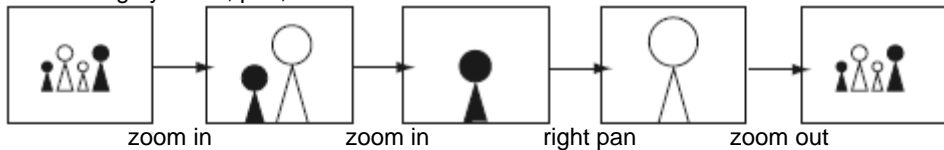
Light up: Camera A output

Blink: A, B mixed by dissolve

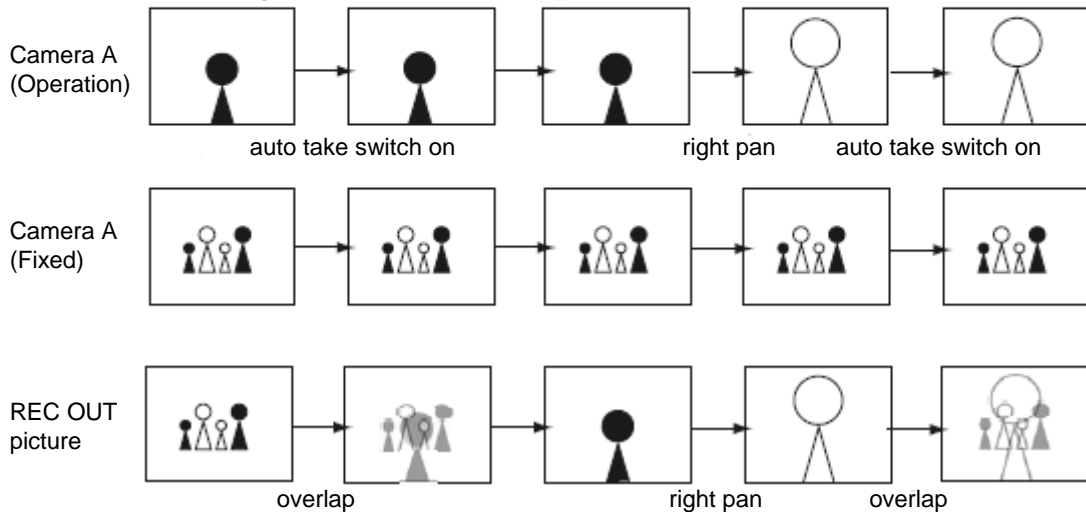
No light: No output of camera A

3. All adjustments finished. Start recording by 2 cameras by pushing AUTO TAKE according to necessity, changing A to B, B to A.

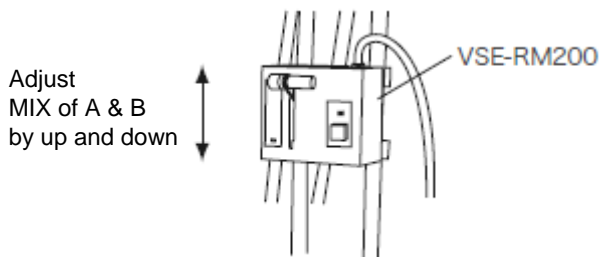
1 camera shooting by zoom, pan, tilt.



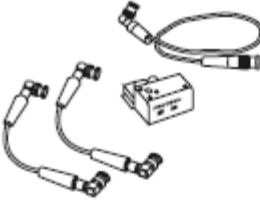


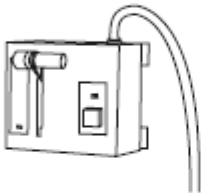
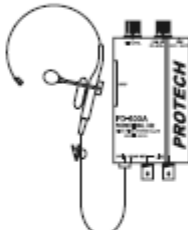




2 camera shooting / 1 person with VSE-200 by zoom, pan, tilt, dissolve, cut.



4. If use optional VSE-RM200, free mixing by fader lever becomes possible.

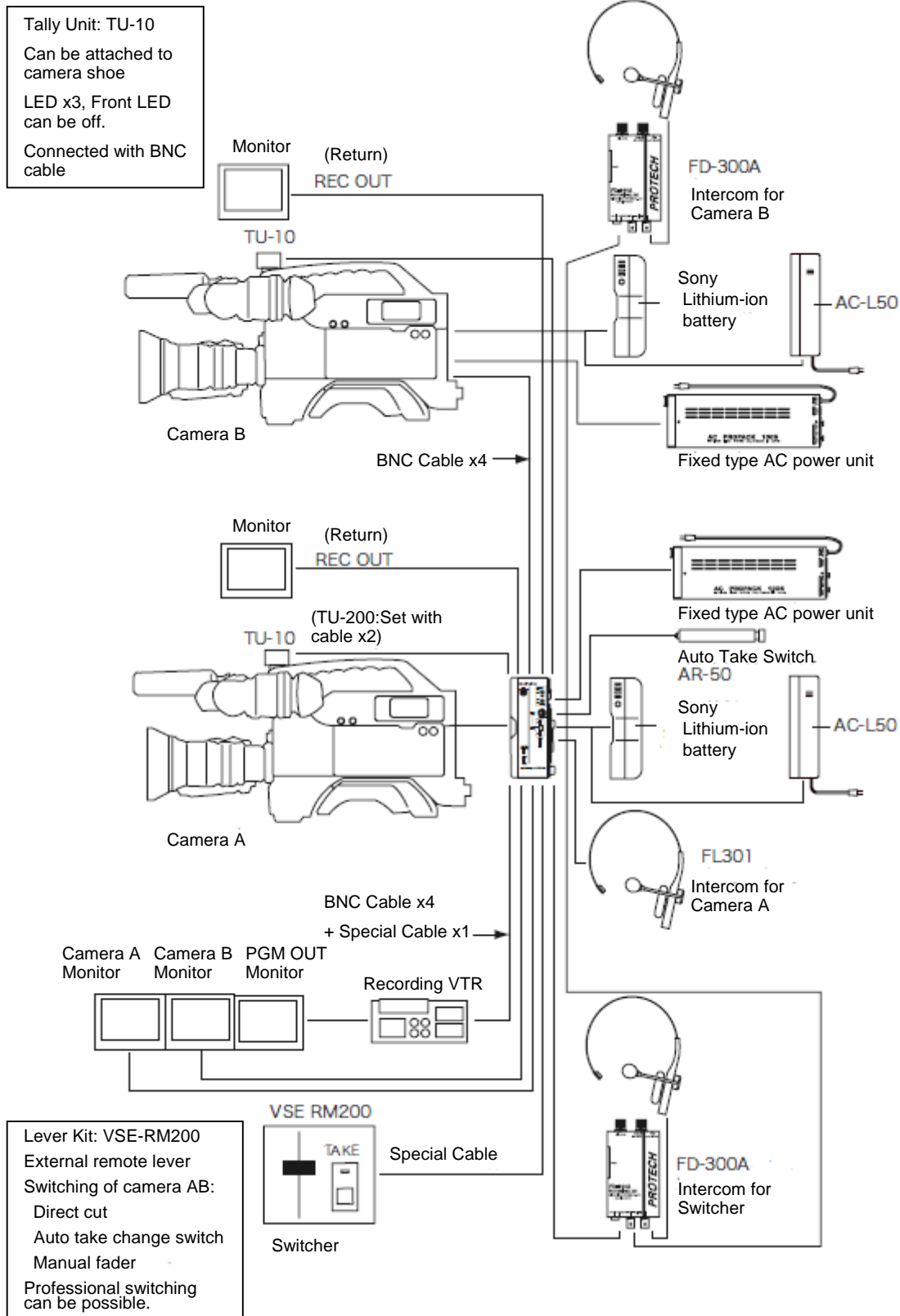


Option

		
<p>Tally Unit TU-200 The set of Tally unit and cables.</p> <p>Tally unit can be used as attaching to the accessory – shoe of the camera and display A/B. Cables connect the input A/SYNC of VSE-200 and Sony DSR-300./500 type, Ikegami HL-DV5/7 type.</p>	<p>Tally Unit TU-10</p> <p>Tally unit can be used as attaching to the accessory – shoe of the camera and display A/B.</p>	<p>Headset FL-301</p> <p>Headset for Intercom. Headset for VSE-500/200/FD-300A.</p>
		
<p>Lever Kit VSE-RM200</p> <p>External remote lever. As the fixed machine, it is possible to install to the leg of the tripod.</p>	<p>Wired Intercom FD-300A</p>	<p>AC Power Unit ACPROPAC 100S</p>
		
<p>AC Power Unit AC-L50</p>	<p>DC Cable M3 DC-C40M3</p> <p>Canon 4pin – Canon 4pin, 3m</p>	<p>BNC Cable BNC-10M</p> <p>BNC-BNC cable, 10m</p>

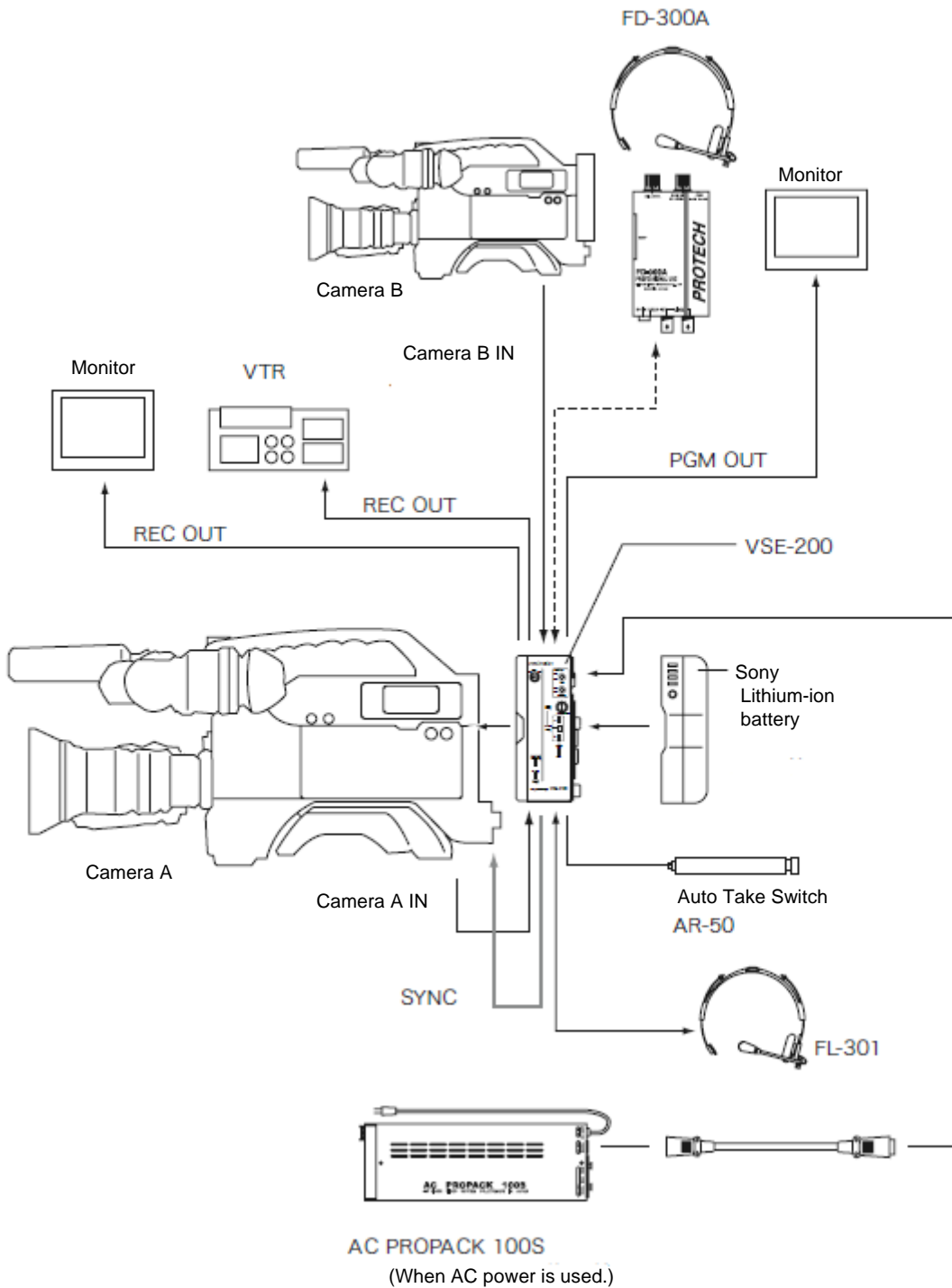
2-camera / 2-person standard system

Example of the professional live broadcasting by 2 cameras.



Lever Kit: VSE-RM200
 External remote lever
 Switching of camera AB:
 Direct cut
 Auto take change switch
 Manual fader
 Professional switching can be possible.

2-camera / 1-person standard system



Main Specifications

Input / Output	Input	NTSC signal BNC x2 (Composite 1.0Vp-p 75ohm)
	Output	BNC x3 (REC: Composite 1.0Vp-p 75ohm) / BNC x2 (Input monitor) BNC x2 (SYNC)
	Others	BNC x1 (for FD-300A) Mini-jack (Headset) / 8P connector (Auto take) / 12P connector (Remote)
Power	Input signal	DC 12V (V mount/XLR 4-pin)
General	Power consumption	approx. 3.2W
	Dimension	70x169x101mm (WxHxD)
	Weight	approx. 890g

