

Adaptacam

Hand Held Studio Camera Adapter for the GY-HD250U

KA-250HH

Instruction Manual



March 2009 v1.0

These are general important safeguards to follow
Some items listed below may not apply to this adapter.

Important Safeguards

1. Read all these instructions
2. Save these instructions for later use
3. All warnings on the product and in the operating instructions should be adhered to.
4. Unplug this adapter system from its power source before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
5. Do not use attachments not recommended by the adapter manufacturer as they may cause hazards.
6. Do not use this adapter near water - for example near bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement or near a swimming pool etc.
7. Do not place this adapter on an unstable cart, stand or table. The adapter may fall, causing serious injury to a child or adult, and serious damage to the adapter. Use only with a cart or stand recommended by the manufacturer or sold with the adapter. Wall or shelf mounting should follow the manufacturer's instructions and should use a mounting kit approved by the manufacturer. An adapter and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the adapter and cart combination to overturn.
8. Slots and openings in the back or bottom of the adapter are provided to insure reliable operation of the adapter and to protect it from overheating; these openings must not be blocked or covered. The openings should never be blocked by placing the adapter on a bed, sofa, rug or other similar surface. This adapter should never be placed near or over a radiator or heater. This adapter should not be placed in a built-in installation, such as a bookcase unless proper ventilation is provided.
9. This adapter should be operated only from the type of power source indicated in this instruction manual
10. Do not allow anything to rest on the power cord. Do not place this adapter where the cord will be abused by persons walking on it.
11. Follow all warnings and instructions marked on the adapter.
12. Do not overload wall outlets and extension cords. As this can result in fire or electrical shock.
13. Never push objects of any kind into this adapter through cabinet slots as they may touch dangerous voltage points or short parts that could result in a fire or electrical shock. Never spill liquid of any kind on the adapter.
14. Do not attempt to service this adapter yourself as opening or removing the covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
15. Disconnect this adapter from the 26Pin connector and have it serviced by qualified service personnel under the following conditions:
 - a. Liquid has been spilled into the adapter.
 - b. The adapter has been exposed to rain or water
 - c. The adapter does not operate normally by following the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the adapter to normal operation.
 - d. The adapter has been dropped or the housing has been damaged.
 - e. The adapter exhibits a distinct change in performance - this indicates a need for service.
16. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original parts. Unauthorized substitution may result in fire, electrical shock or other hazards.
17. Upon completion of any service or repairs to this adapter, ask the service technician to perform routine safety checks to determine that the adapter is in safe operating condition.

Thank you for purchasing the KA-250HH. Before operating this device, read the instruction manual carefully to ensure that the best possible performance is obtained

Main Features

Multi core 26 Pin Camera Connector

This connector carries power and signals between the KA-250HH and the connected camera control unit such as the RM-P210/ RM-HP250 (sold separately from JVC). The remote control unit can control this device from up to 100m away. The remote control unit provides power for both the KA-250HH and the connected GY-HD250U camera. Thus there is no requirement for a separate power supply for the camera.

Intercom Terminal

This terminal enables camera operator to use a headset to communicate with the remote control unit operator. Only a headset with a dynamic microphone can be used, such as a PH-1R5 manufactured by Telex .

Operational Controls for Intercom

Volume adjustment and microphone mute control is provided.

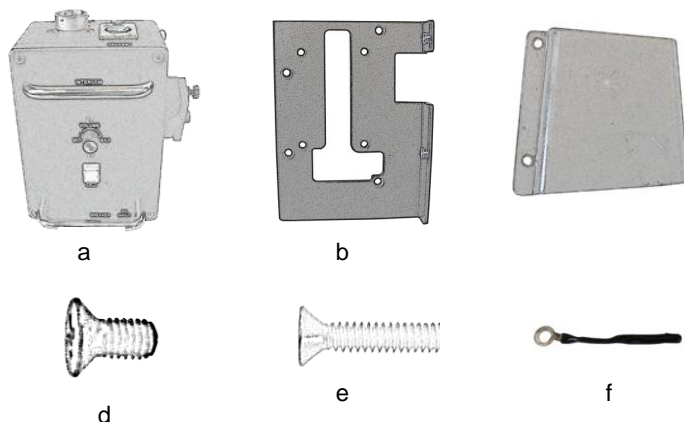
GY-HD250U Connections

The KA-250HH has a set of connectors to connect to the following GY-HD250U terminals:

- Component-PGM (Y, Pr, Pb)
- Video
- Genlock
- Remote connector
- Studio connector
- Return video
- Return control line
- Power

Package contents

- 1 - 26Pin Camera adapter
- 1 - Shield mount bracket
- 1 - Cable shield
- 4 - Small shield mount screws in bag labeled (S-1)
- 4 - Long Anton Bauer Cold mount plate screws in bag labeled (S-2)
- 2 - Cable tie downs



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Operating Precautions

In order to extend the service life of this device, avoid storing or using it under the following conditions:

- Extremely hot or cold places
- Strong vibrations
- Dusty places
- High humidity
- Near loud noise sources
- Do not subject this device to strong vibration or impact when installing or moving it.
- Do not plug in or unplug the 26 pin camera cable connector when this device is powered on.
- Use only the designated CCUs as power sources. Use either RM-P210 or RM-HP250
- To reduce power consumption, turn off use.
- When a wireless radio or mobile phone is used near this device, noise may occur in the intercom speaker or a monitor screen. This is not a malfunction.
- * Use only the specified maximum length camera cable. Otherwise cable compensation may be insufficient.
- * Grounding the intercom G (GND) terminal is recommended otherwise noise may be induced depending on the Intercom headset used.
- * Only SD Return-Video can be used.

Genlock Signal and Adjustment of System Phase

When using the RM-P210 or RM-HP250 remote Control unit, with this system, input the genlock signal either to the GY-HD250 or the RM-P210/ RM-HP250. If the genlock signal is applied to the GY-HD250 and the RM-P210 / RM-HP250, the View finder screen image will appear choppy. Perform system phase adjustment on the equipment where the genlock signal has been input. Take note that the RM-LP55 remote controller is prioritized, when connected to the camera and a genlock signal is supplied to the RM-P210/RM-HP250. Adjust the phase by adjusting the RM-P210/RM-HP250's H and SC phases.

In case the genlock signal is input directly into the GY-HD250, adjust the H phase on the RMP210/RM-HP250's and the SC phase on the GY-HD250.

How to use this manual:

Symbols used in this Manual

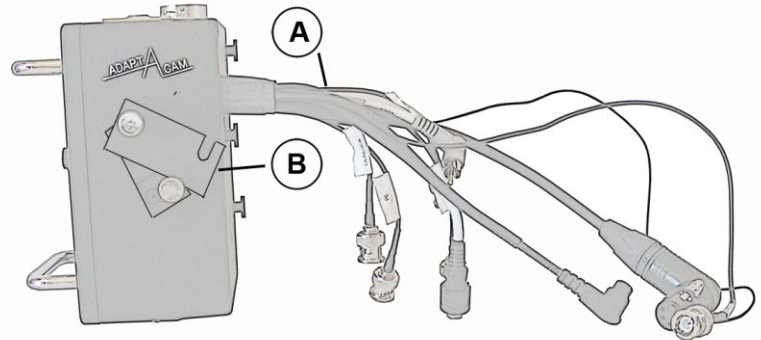
CAUTION:	Points to pay attention to during operation
MEMO:	Details for reference, such as functions or constraints during use

Notation used in this manual

- All product names that appear in this document are the trademark or registered trademarks of their respective companies. Marks and symbols, such as ™, ® and © do not appear in this document
- The design specifications, etc found in this manual are subject to change without notice.

Controls, Indicators and Connectors

Right Side 26 Pin adapter



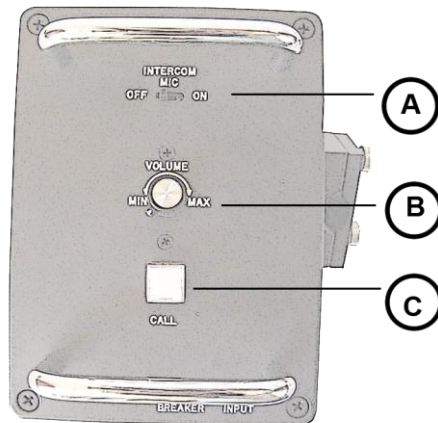
A This cable harness contains the following connectors:

1. **Video-Input (RCA)** – connects to composite video-out of the GY-HD250U. Signal applied to this input will be output on the Video (output) terminal of the connected Camera Control Unit (CCU).
2. **Genlock-output (BNC)**– Synchronizing signal that connects to the Genlock/Aux input of the GY-HD250U.
3. **Y, Pr,Pb (BNC)** inputs – connect to the Y, Pr, Pb outputs of the GY-HD250U.
4. **6 Pin Remote** – connect to 6 Pin remote connector on the GY-HD250U. Provides camera control.
5. **Return video output** – connects to either a *KA-R25 return video box for hand held applications or the Studio Viewfinder (*VF-HP840U) for tripod mounted applications.
6. **Return Video Control line** – used to control switching between Camera video and return video. This line is applied to the *KA-R25 in hand held applications.
7. **10 Pin Studio connector** – connect to GY-HD250U studio connector.
8. **4 Pin XLR Power output**– connect to GY-HD250U's 4 Pin XLR input. Powers up the GY-HD250U.

* The KA-R25 and the VF-HP840U are available for purchase from JPC.

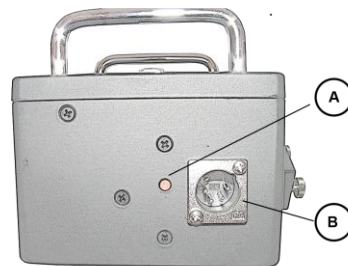
B. Multi core cable clamp – Used to secure connected multi core cable.

Front



- A. Intercom MIC ON/OFF-switch**
[ON/OFF]- switch to control the intercom headset microphone. Set to [ON] to use headset microphone.
- B. Intercom Receiver Volume**
Use for adjusting the intercom headset receiver volume level.
- C. Call Button / Power indicator**
Lights green, when the studio-adapter is turned on. Lights up amber, when the camera is turned off. Press to send CALL-signals to the remote control unit operator, if no intercom-headset is in use. Button indicator changes from green to red, when the button is pressed. When this button is pressed and held down, a call signal is sent to the remote control unit and the [TALLY]-indicator blinks. Once the CALL-button is released, [CALL]-signal is no longer sent and the [TALLY] indicator on the remote control unit

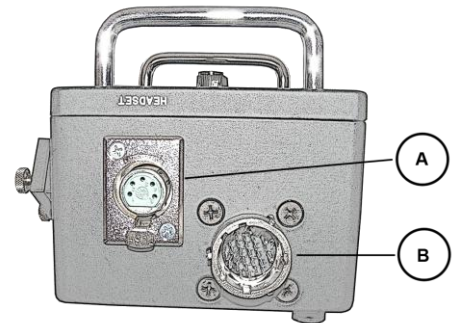
Bottom



- A. Breaker Switch**
Breaker switch trips and cuts off power if the power consumed is higher than the rated capacity. If the breaker switch trips, confirm that there are no abnormalities and that the power consumption does not exceed the rated wattage. If no abnormalities are detected, press the breaker switch before turning the power on again to put this device into operating status. If this device still does not function properly, contact AdaptaCam for service.

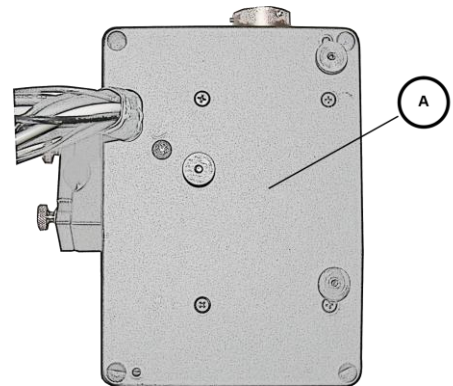
C. DC Power Input Terminal (XLR 4 Pin) Connect DC power to this terminal if Remote Control Unit RM-P210/RM-P250 is not connected. For DC power supply, use the IDX IA-60a or VL-2PLUS

Top



- A. Intercom Input Terminal (XLR 5 Pin)**
Input terminal for intercom headset. (Dynamic only) Recommended headset: Telex
- B. 26 Pin Multicore Connector** Connect 26 Pin camera cable to this input:
VC-P110 (5 m)
VC-P112 (20 m)
VC-P113 (50 m)
VC-P114 (100 m)

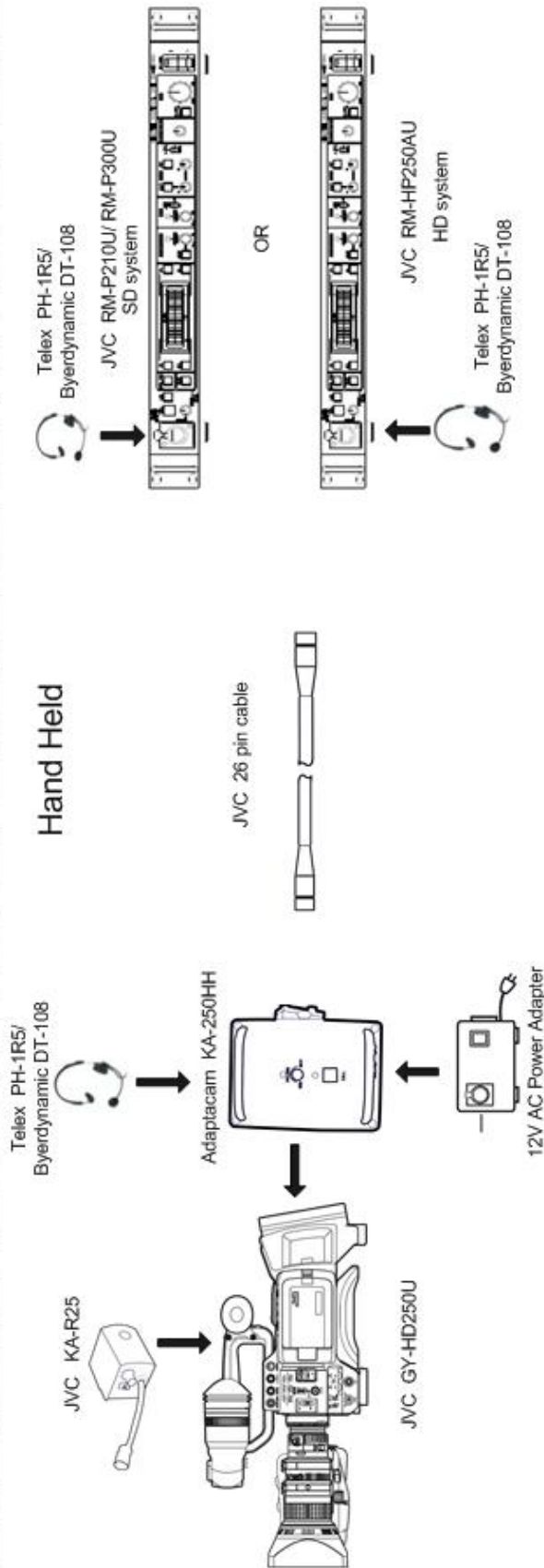
Back



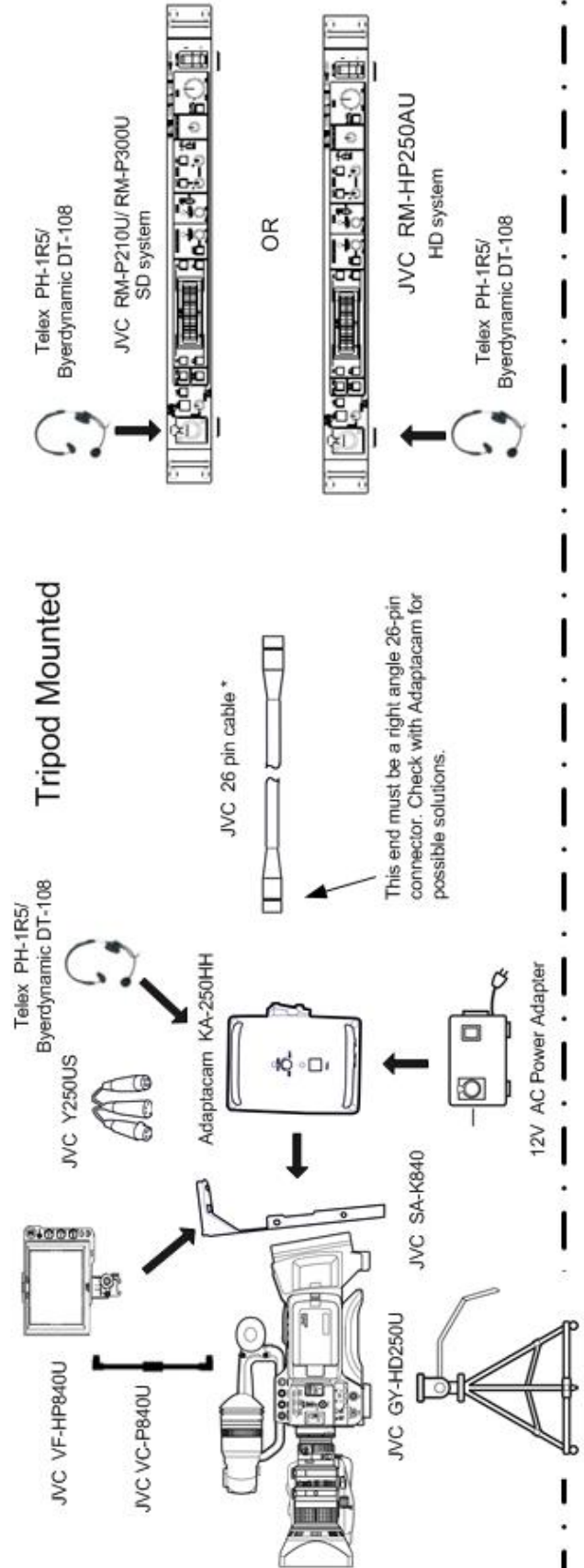
- A. Anton Bauer Gold mount plate –**
Used to mount adapter to GY-HD250U.

System Diagrams

Hand Held

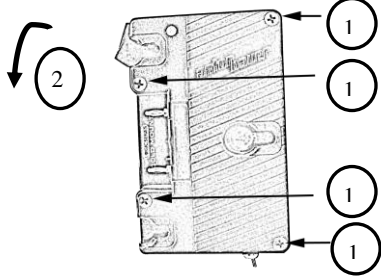


Tripod Mounted

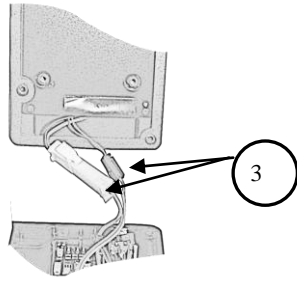


The following instructions are for mounting a KA-250HH on a GY-HD250U for hand held applications. This application requires a return video box (KA-R25U) that can be purchased from JPC.

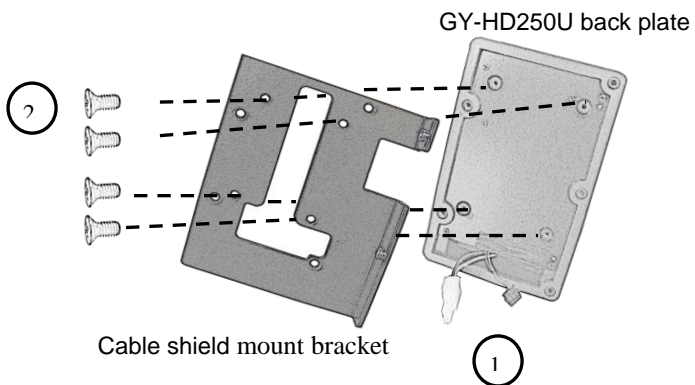
A. Remove AB plate from the GY-HD250U.



1. Remove the four screws.
2. Carefully rotate the AB plate toward yourself.
3. Disconnect the two connectors. Set aside the AB plate

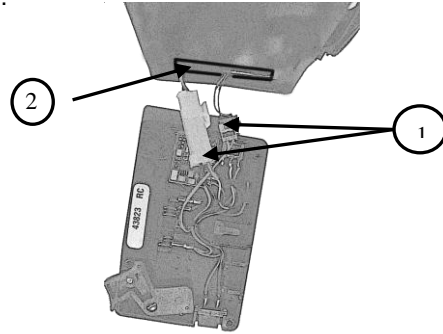


B. Mount cable shield bracket for hand held applications.

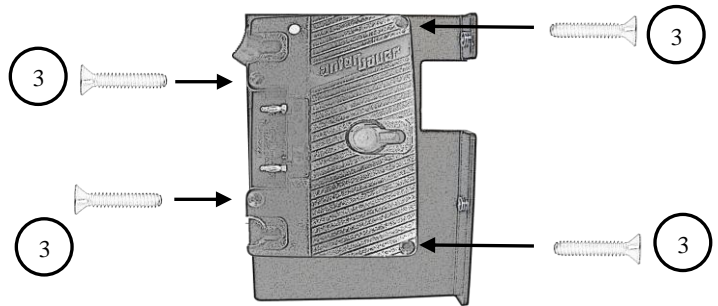


1. Route connectors through supplied cable shield mount bracket.
2. Secure cable shield mount bracket to back of GY-HD250U using supplied S-1 screws.

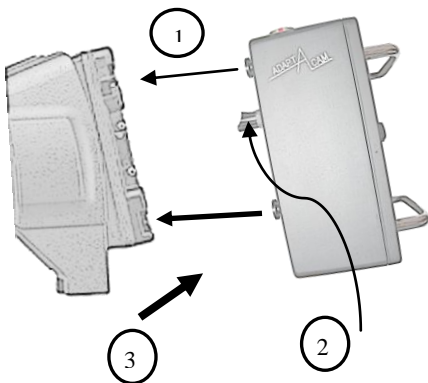
C. Mount AB plate removed in step A to the cable shield mount bracket



1. Attach connectors to Anton Bauer plate.
2. Carefully tuck the two connectors inside the opening.
3. Using the S-2 screws, secure the Anton Bauer mount to the cable shield bracket as shown below.

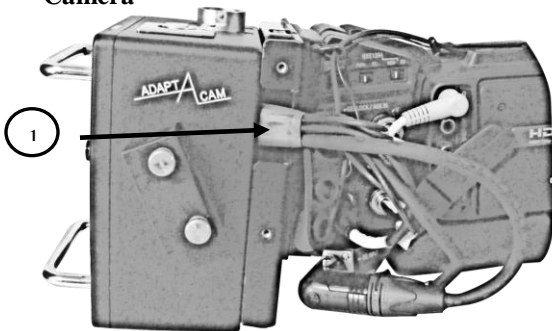


D. Attach the 26-pin adapter to the Camera.



1. Align mounting pins on 26-pin adapter with mounting slots in the Anton Bauer plate.
2. *Be careful to position the 26-pin wire harness in the cutout in the shield mount bracket.*
3. Carefully slide the 26-pin adapter in the horizontal direction until it clicks and locks.

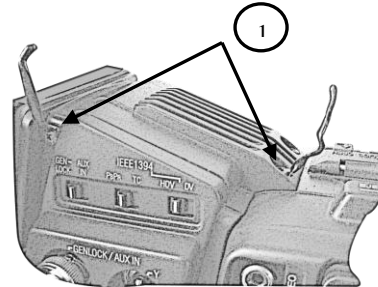
E. Connect the wire harness cables to the Camera



1. Connect the following KA-250HH harness cables to the corresponding GY-HD250U connectors.

KA-250HH	GY-HD250U
Video	Video
GenLock	GenLock
Y	Y
R-Y	P _R
B-Y	P _B
Remote	Remote
Studio	Studio
4-pin XLR female	DCin

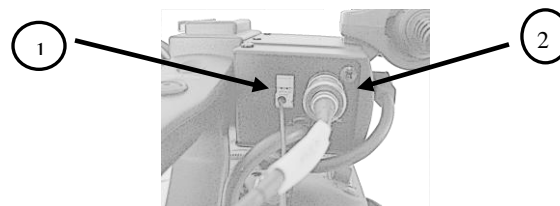
F. Attach cable tie downs.



1. Remove screws and use these same screws to secure supplied cable tie downs.

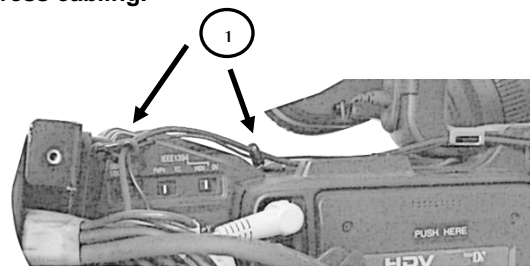
G. Mount the KA-R25U using instructions provided with the KA-R25U. Make sure the GY-HD250U Viewfinder menu is set to output R,G,B.

H. Connect return control line and return video to KA-R25U.



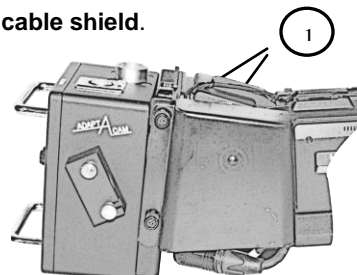
1. Depress spring loaded button and insert return control line into hole. Release button. Make sure that wire does not pull out.
2. Connect return video to KA-R25.

I. Dress cabling.



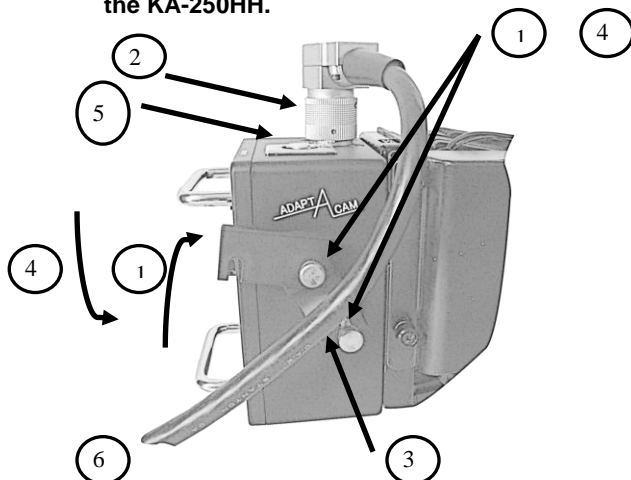
1. Use wire ties installed in step G to tie down the return video cables.

J. Mount cable shield.



1. Attach the cable shield to the cable shield mount bracket using the two captive screws on the shield.

K. Connect headset and the multicore cable to the KA-250HH.



1. Loosen the two screws and rotate cable clamp CW.
2. Make sure that the CCU is powered off. Connect 26pin* cable to adapter.
3. Route 26-pin cable through cable clamp.
4. Rotate cable clamp CCW over the cable and tighten the two screws. Do not over tighten and damage the cable.
5. Connect only a dynamic headset to intercom input terminal.
6. Connect other side of 26-pin cable to CCU. For details see user manual for connected CCU.

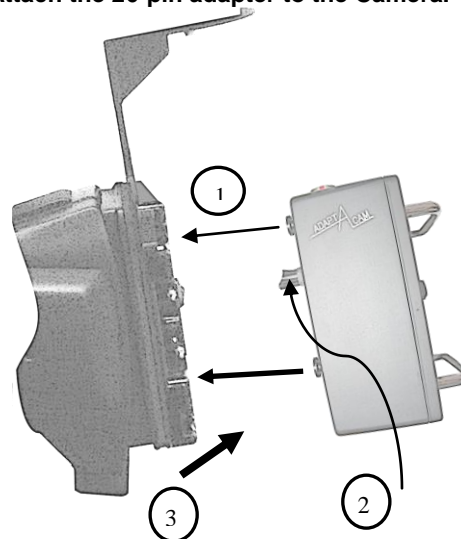
* Your 26-pin cable connector may not be a right hand connector as shown in diagram.

The following instructions are for mounting KA-250HH onto a GY-HD250U for tripod mounted applications. This application requires the additional purchase of:

1. Studio Viewfinder VF-HP840U
2. VC-P840U view finder connector
3. Y-250US Y power cable
4. Right angle 26-pin connector.

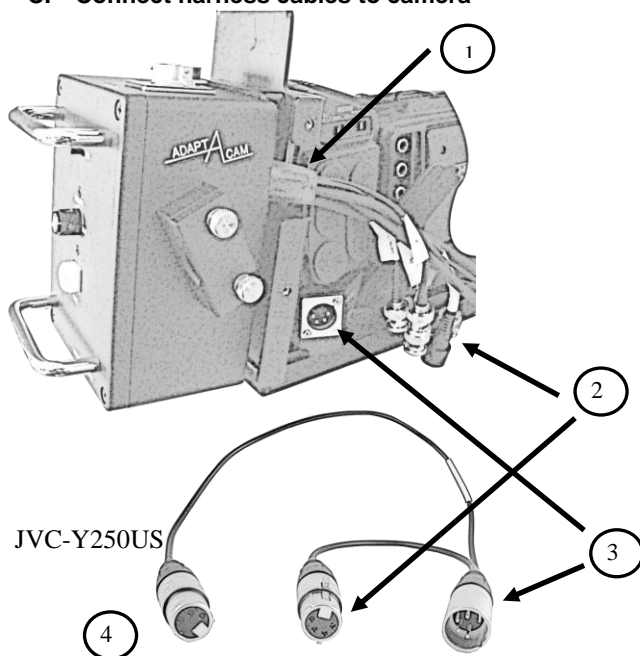
A. Mount SA-K840U bracket with Anton Bauer mount using instructions supplied with bracket.

B. Attach the 26-pin adapter to the Camera.



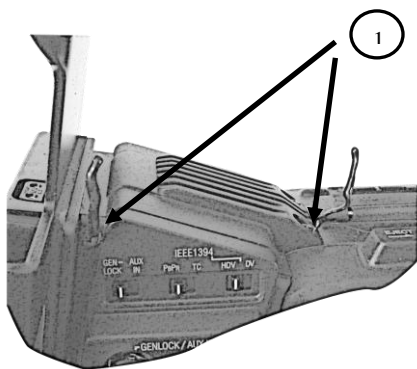
1. Align mounting pins on 26-pin adapter with mounting slots in the Anton Bauer plate.
2. *Be careful to position the 26-pin wire harness in the cutout in the shield mount bracket.*
3. Carefully slide the 26-pin adapter in the horizontal direction until it clicks and locks.

C. Connect harness cables to camera



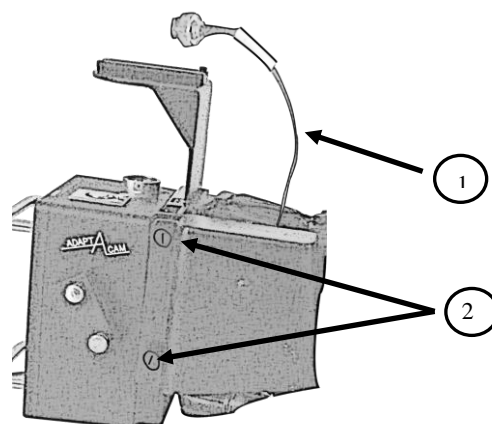
1. Connect the following KA-250HH harness cables to the corresponding GY-HD250U connectors.
2. Using JVC-Y250U power splitter, connect the male XLR connector to the cable harness female 4-pin connector.
3. Connect the female XLR connector to the GY-HD250U's XLR power input.
4. This connector will be used to supply power to the VF-HP840U in step S -3 .
5. Using electrical tape insulate the return video control line. It will not be used to control return video switching.
6. Do not connect the return video at this time

D. Attach cable tie downs.



1. Remove screws and use these same screws to secure supplied cable tie downs.

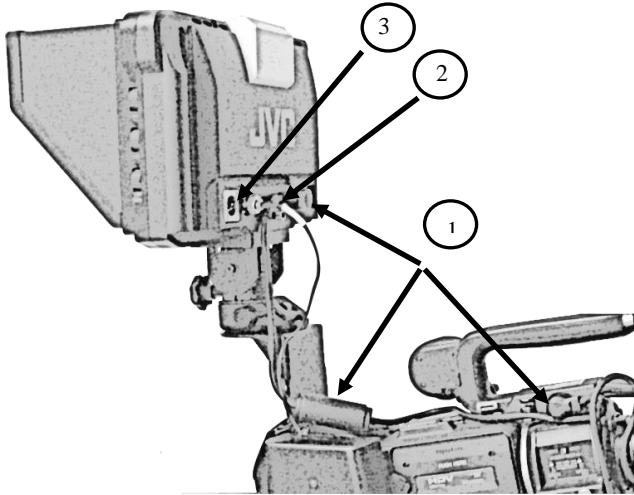
E. Mount cable shield.



1. Route return video line outside cable shield
2. Attach the cable shield to the cable shield mount bracket using the two captive screws on the shield.
3. Tuck the video control line behind the shield.

F. Mount VF-HP840U on SA-K840U. See SA-K840U instructions for details.

G. Connect cables to VF-HP840U



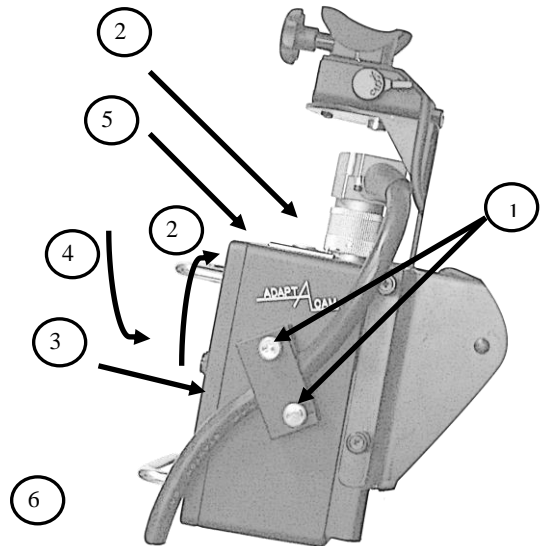
1. Using JVC VC-P840U cable, connect the VF-HP840U viewfinder and the GY-HD250U viewfinder input. **
2. Connect the return video line to the studio viewfinder.
3. Connect the unconnected 4-pin XLR connector left unconnected in step N-4 to the VF-HP840U's 4-pin XLR power input.*
4. Use cable ties to neatly dress the attached cables.

* When using the VC-P840U:

- Set the GY-HD250U Camera's "VF Signal" in the "LCD/VF" menu group to "COMPONENT".
- Set the VF-HP840U's Dip Switch1 to "ON". This turns the VF-HP840U's back light on.
- Set the VF-HP840U's Dip Switch4 to "OFF". This terminates the video inputted into the studio Viewfinder with 75 ohms. For more details see VF-HP840U user manual.

** If the camcorder shuts during start up, disconnect the 4-pin XLR from the VF-HP840U. Turn the CCU on. Power up the GY-HD250U. Once the GY-HD250U is powered up, reattach the 4-pin XLR to the VF-HP840U.

H. Connect headset and the multicore cable to the KA-250HH.



1. Loosen the two screws and rotate cable clamp CW.
2. Make sure that the CCU is powered off. Connect 26pin* cable to adapter.
3. Route 26-pin cable through cable clamp.
4. Rotate cable clamp CCW over the cable and tighten the two screws. Do not over tighten and damage the cable.
5. Connect only a dynamic headset to intercom input terminal.
6. Connect other side of 26-pin cable to CCU. For details see user manual for connected CCU.

* Your 26-pin cable connector must be a right angle connector as shown in diagram. To get a right angle connector, please contact Adaptacam.

Specifications *		
Inputs		
Video	RCA	Composite
CMP	BNC X3	Y, R-Y,B-Y SD/HD
Outputs		
Genlock	BNC X1	Black Burst/Tri level sync
Return video	BNC X 1	Composite
Interfaces		
Headset	5-Pin XLR	
Remote	6-Pin Mini Din	TTL levels
Multi-core cable	26-Pin	
Return	Wire	Trigger for KA-R25
Studio connector	10-Pin	Tally and Return
Power		
12V out	4-Pin XLR	
12V in	26-Pin/4-Pin XLR	
Consumption	400mW	
Controls		
Volume	Rotary knob	Variable Resistor
Intercom	Switch	On/Off
Circuit Breaker	Button	Push to reset
Call	Button	Push to call
Dimensions	6 ³ / ₈ " X 5 ³ / ₈ " 4 ¹ / ₂ "	
Weight	Approximately 4lbs	