

# **GY-HD250U Studio Systems Reference Manual**



**JVC**  
The Perfect Experience

## Table of contents

	Page
<b><u>Section I - Short Length Multi Core Studio Configurations</u></b>	<b>4</b>
SD Studio System:	4
■SD System with RM-P210U	4
■SD Studio System Components Price List	5
■SD Studio Key features and users benefits	6
■Additional Information	7
HD Studio System:	8
■HD System Diagram with RM-HP250AU SYSTEM 1 (HD SDI)	8
■HD System Diagram with RM-HP250AU SYSTEM 2 (HD analog component)	9
■HD System Diagram with RM-P210U	10
■HD Studio System Components Price List	11
■HD Studio Key features and user benefits	12
■Additional Information	13
<b><u>Section II - Medium Length Fiber Cable Studio Configurations</u></b>	<b>14</b>
CAMPLEX:	14
■Shoulder CP-301C/CP-701C studio system diagram	15
■Shoulder Studio Components Price List (Fiber)	16
■Tripod mounted CP-301C/CP-701C studio system diagram w/o Sled	17
■Tripod Mounted Studio Components Price List (Fiber)	18
■Sled mounted CP-301C/CP-701C studio system diagram	19
■Sled Mounted Studio with Sled Components Price List (Fiber)	20
■CAMPLEX System Key features and Customer Benefit	21
■Additional Information and Limitations	22
<b><u>Section III - Long Length Fiber Cable connected Studio Configurations</u></b>	<b>23</b>
Telecast Fiber:	23
■Key Features and Customer Benefit	23
■Shoulder/w power studio system diagram	24
■Shoulder Studio with Power Components Price List (Fiber)	25
■Tripod mounted/w power studio system diagram	26
■Tripod Mounted Studio with Power Components Price List (Fiber)	27

## Table of contents

	Page
■Sled Mounted/w Power studio system diagram	28
■Sled Mounted Studio with Power Studio Components List (Fiber)	29
■Telecast System Key Features and User Benefit	30
■Additional Information	31
■Telecast Fiber CCU locally Power	32
■Shoulder battery powered studio system diagram	33
■Shoulder Battery Powered Studio Components Price List (fiber)	34
■Tripod Mounted w/o Sled battery powered studio system diagram	35
■Tripod Mounted Battery Powered Studio Components Price List (Fiber)	36
■Sled Mounted with battery or off board of on board AC power studio system diagram	37
■Sled Mounted Battery Powered Studio Components Price List (Fiber)	38
 <u>Section IV - POV System configuration</u>	 39
POV Pan/Tilt System:	39
■POV Pan/Tilt system diagram	39
■POV System Components Price List	40
■Key features and user benefits	40
RCU control of cameras up to 2000 feet with ESI Model 55 System:	41
■RCU control of cameras up to 2000 feet system diagram	41
■RCU control of cameras up to 2000 feet with ESI Model 55 System Components Price List	42
■Key features and user benefits	42
 <u>Section V - Supplementary Information</u>	 43
■“VF SIGNAL” Menu	43
■How to use Sony 26Pin Cable with KA-HD250U	44
■How to use Sony 26Pin cable with RM-P210U	45
■GY-HD250U/KA-HD250U and JVC CCUs Power connectivity table	45
■HD-SDI Cable Lengths	46
■Telecast Fiber Rattler – Fiber Tx/Rx	46

## Table of contents

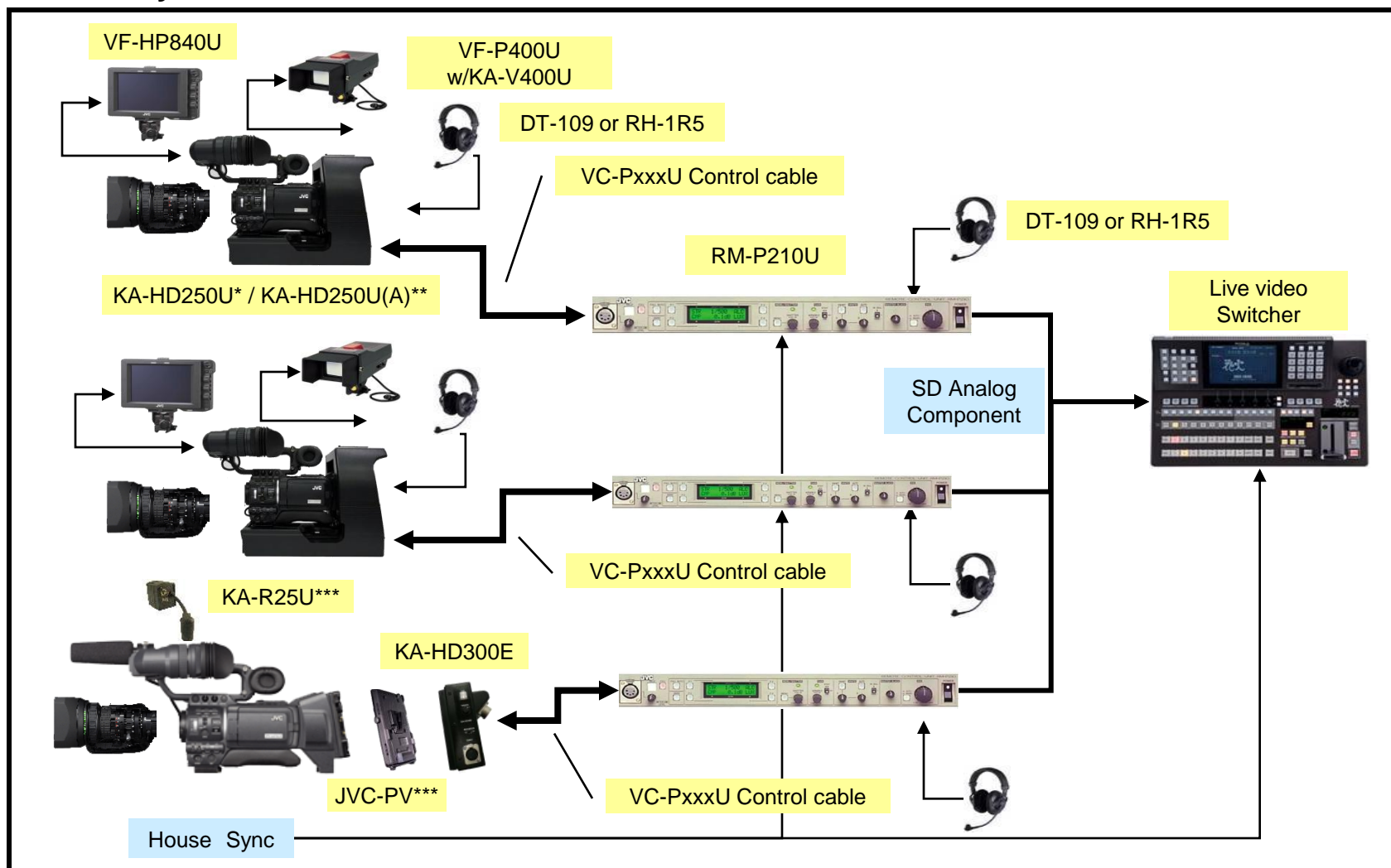
	Page
<b><u>Section VI - Accessories</u></b>	<b>47</b>
KA-R25U: Return Video Box	47
KA-BP250: Intermediate Plate (handled by JPC)	48
HD 1/3" mount bayonet lenses:	49
KA-V400U: 6pin/20pin Viewfinder Adapter	50
RM-LP25U: Local Remote Control Panel	51
RM-HP250AU: HD/SD 26Pin CCU	52
■RM-HP250AU Interconnect Diagram	53
■Interfacing RM-HP250AU with common Intercom system:	54
■Connection to an unbalanced audio Intercom system	55
■Connection to a balanced audio Intercom system	56
VF-HP840U: Color Studio View Finder	57
■VF-HP840U and KA-HD250U Interconnect Diagram	58
VC-P840U: 20Pin Viewfinder Cable	59
■Power applied to GY-HD250U/GY-HD200UB via Battery Mount	60
■Power applied to GY-HD250U/GY-HD200UB via 4 pin XLR	61
KA-HD300U: Portable HD Studio Adapter	62
KM-H3000U/KM-H2500U: Multi Format HD-SDI Production Switcher	63
Studio System Components Weight and Power Dissipation List for Tripod Mounted	64

## Section I - Short Length Multi Core Studio Configurations

### SD Studio System:

Typical Application: SD -production studio, Schools etc

#### ■ SD System with RM-P210U



\* Use KA-HD250U / KA-HD250U(A) with VF-P400U.

\*\* Use KA-HD250U(A) with VF-HP840U.

\*\*\* Supplied with KA-HD300E

## ■ SD Studio System Components Price List

Model	Description	Price	Note
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
KA-HD250U(A)	Studio Adapter	\$3,000.00	For Tripod mount
KA-HD300E	Studio Adapter (for shoulder mount)	TBD	with KA-R25U and JVC-PV
VF-HP840U	8.4" HD/SD Studio Viewfinder	\$3,200.00	
VF-P400U	4" Viewfinder	\$875.00	
KA-V400U	Viewfinder Cable	\$225.00	20-pin/6-pin Adapter
RM-P210U	SD Camera Control Unit	\$1,995.00	
VC-P110U	Multi core Camera Cable 5M	\$480.00	5m
VC-P112U	Multi core Camera Cable 20M	\$1,050.00	20m
VC-P113U	Multi core Camera Cable 50M	\$1,850.00	50m
VC-P114U	Multi core Camera Cable 100M	\$3,250.00	100m

### Optional Components

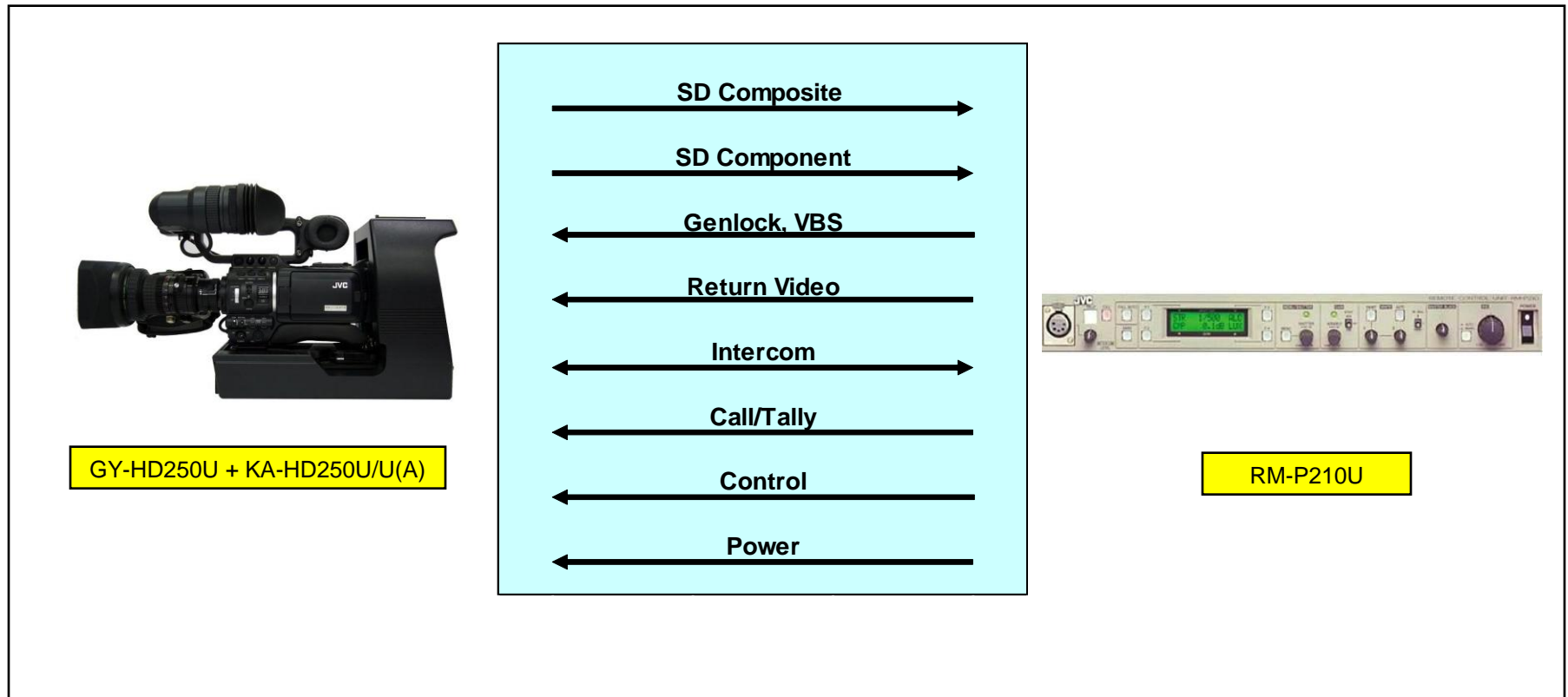
Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X

### Third Party Components

Model	Description	Price	Note
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex

## ■ SD Studio Key features and users benefits

- The GY-HD250U w/KA-HD250U/U(A) can be used to construct an economical SD studio system that produces stunning 16:9 or 4:3 SD images.
- Investment is future proofed. Upgrading from an SD to an HD system will require changing the video interface only.
- When replacing a GY-DV550U, the original CCU the RM-P210U; the 26pin control cable and the studio viewfinder VF-P400U can continue to be used.
- When needed, the GY-HD250U can be used as an ENG camera by detaching it from the KA-HD250U/U(A).



**Fig. 1 Signal Flow between CCU and Camera**

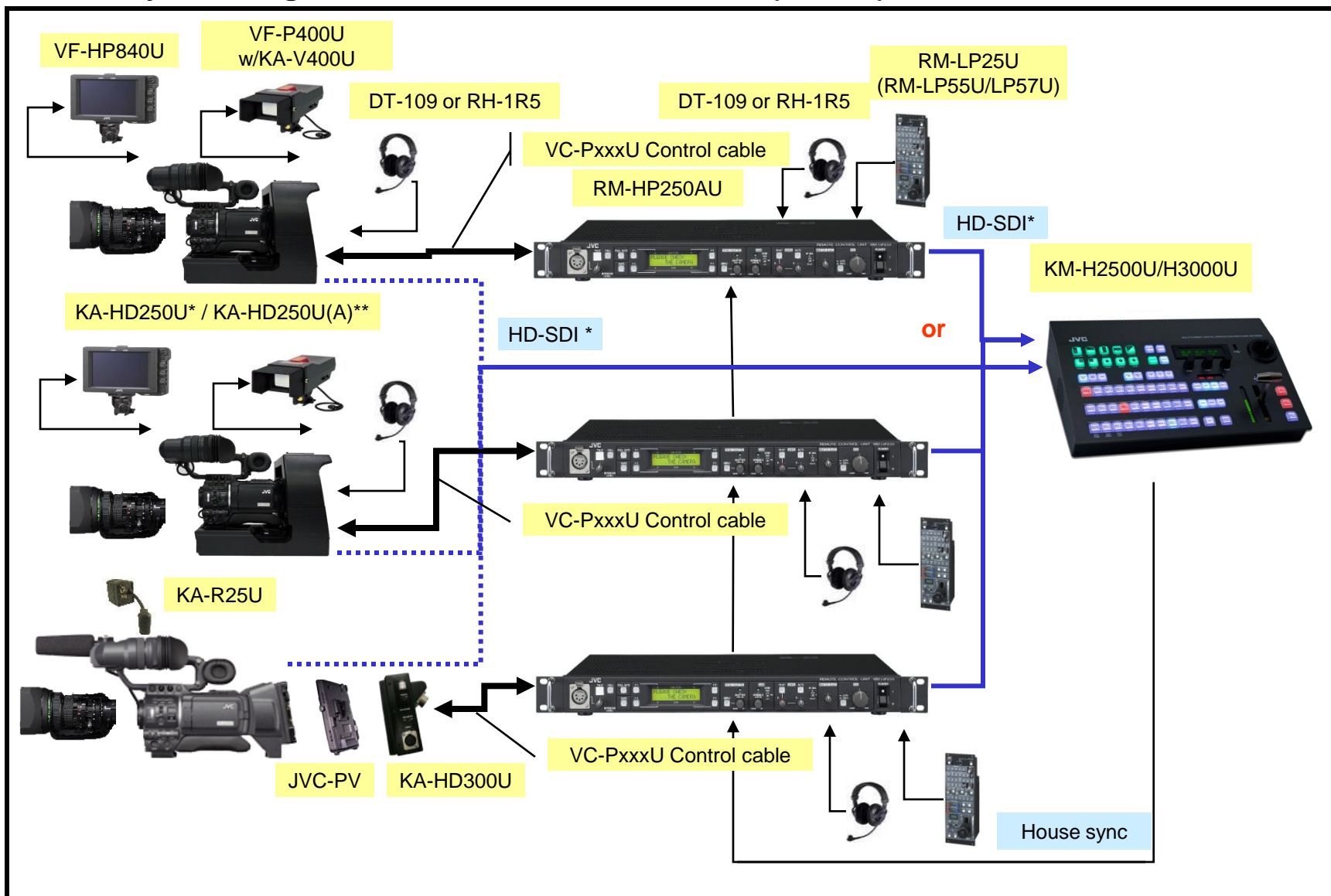
## ■ Additional Information

- GY-HD250U's "**VF SIGNAL**" menu should be set to "**RGB**" when VF-P400U is used. All VF displays are available except focus assist.
- When using VF-HP840U in a SD studio, Set the GY-HD250U's "**VF SIGNAL**" menu to "**RGB**".
- SD CMP available only; RM-P210U can not pass full bandwidth HD Y, R-Y, B-Y.
- Genlock must be NTSC VBS only – HD Tri level sync can not be passed by RM-P210U back to the GY-HD250U.
- GY-HD250U's "**ANALOG OUT CHAR.**" menu should be set to "**OFF**", – otherwise they will appear at RM-P210U component outputs.
- GY-HD250U's "**TALLY SYSTEM**" menu should be set to "**STUDIO**".
- Sony 26pin Cable can be used to connect RM-P210U with the KA-HD250U/U(A).



## HD Studio System:

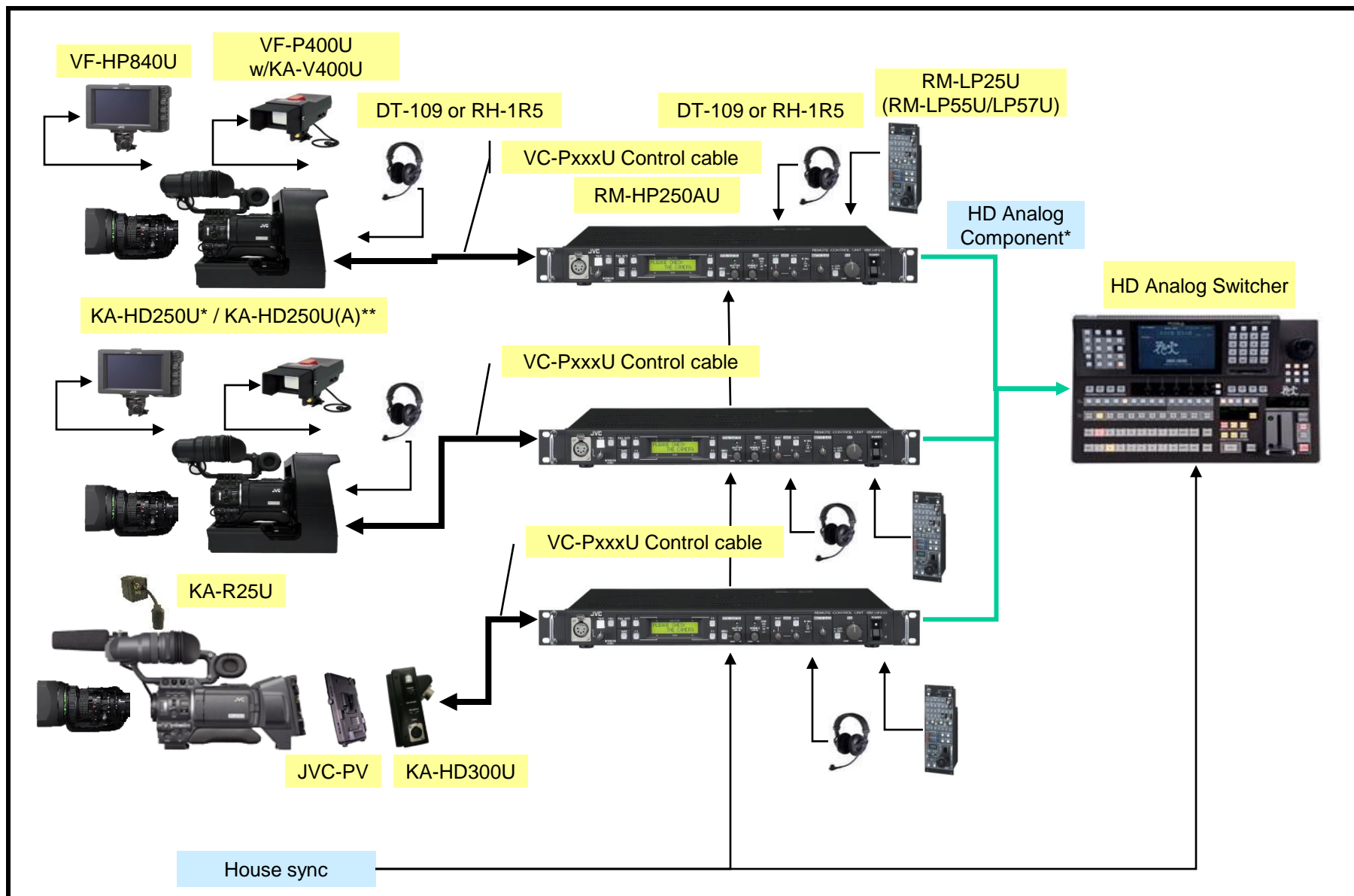
### ■ HD System Diagram with RM-HP250AU SYSTEM 1 (HD SDI)



\* Either the HD-SDI outputs of the RM-HP250AU derived from the HD component signal or the HD-SDI output of the GY-HD250U can be applied to the HD-SDI switcher inputs.

\*\* When using VF-HP840U as viewfinder, camera adapter must be KA-HD250U(A).

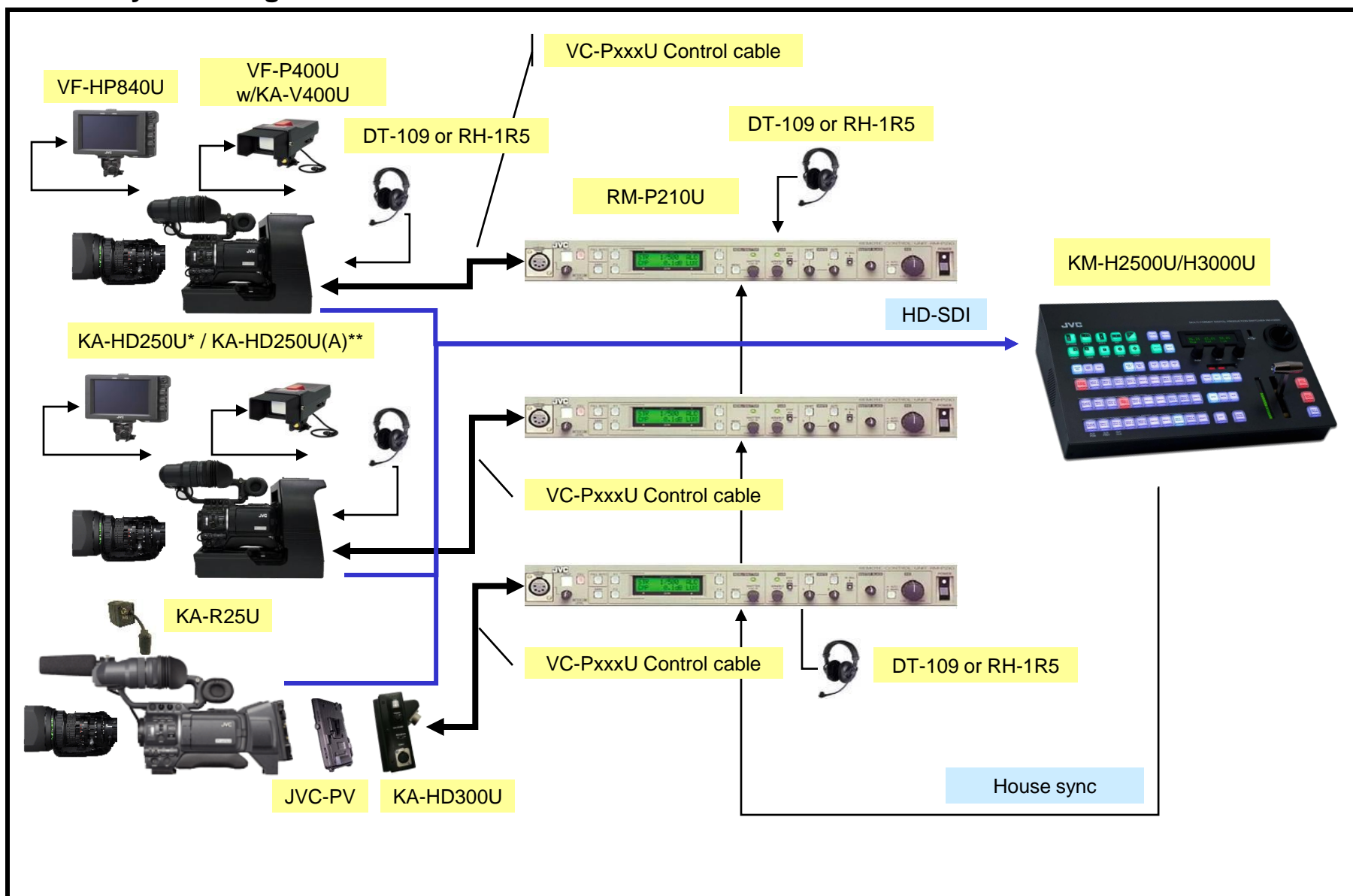
## ■ HD System Diagram with RM-HP250AU SYSTEM 2 (HD analog component)



\* The component HD signal output of the RM-HP250AU can be applied to a HD component analog switcher.

\*\* When using VF-HP840U as viewfinder, camera adapter must be KA-HD250U(A).

## ■ HD System Diagram with RM-P210U



\*\* When using VF-HP840U as viewfinder, camera adapter must be KA-HD250U(A).

## ■ HD Studio System Components Price List

Model	Description	Price	Note
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
KA-HD250U(A)	Studio Adapter	\$3,000.00	For Tripod mount
KA-HD300E	Studio Adapter (for shoulder mount)	TBD	with KA-R25U and JVC-PV
VF-P400U	4" Viewfinder	\$875.00	
KA-V400U	Viewfinder Cable	\$225.00	20-pin/6-pin Adapter
VF-HP840U	8.4" HD/SD Studio Viewfinder	\$3,200.00	
RM-P210U	SD Camera Control Unit	\$1,995.00	
RM-HP250AU	HD Camera Control Unit	\$3,495.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input
VC-P110U	Multi core Camera Cable 5M	\$480.00	5m
VC-P112U	Multi core Camera Cable 20M	\$1,050.00	20m
VC-P113U	Multi core Camera Cable 50M	\$1,850.00	50m
VC-P114U	Multi core Camera Cable 100M	\$3,250.00	100m

### Options

Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X

### Third Party Components

Model	Description	Price	Note
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex
RG-59 or RG6 or RG 11	HD-SDI Cable		Belden, Canare

## ■ HD Studio Key features and user benefits

- The GY-HD250U w/KA-HD250U/U(A) can be used to build an economical HD studio system that produces stunning images.
- Both HD component and HD-SDI video is supported giving user flexibility of using a component switcher or a HD-SDI switcher.
- The new RM-HP250AU gives the user the flexibility of connecting an additional local remote control to the studio system.
- A live 720P or 1080i signal can be outputted depending on the user's switcher requirements.
- When replacing a GY-DV550U based studio system, the original 26pin control cable and studio viewfinder VF-P400U can continue to be used, or replaced with the new VF-HP840U HD/SD viewfinder.
- Existing user's 26Pin Sony Cable can be used to connect RM-HP250AU and KA-HD250U/U(A).
- When needed, the GY-HD250U can be readily detached from the KA-HD250U/U(A)(Sled) and used as an ENG camera.

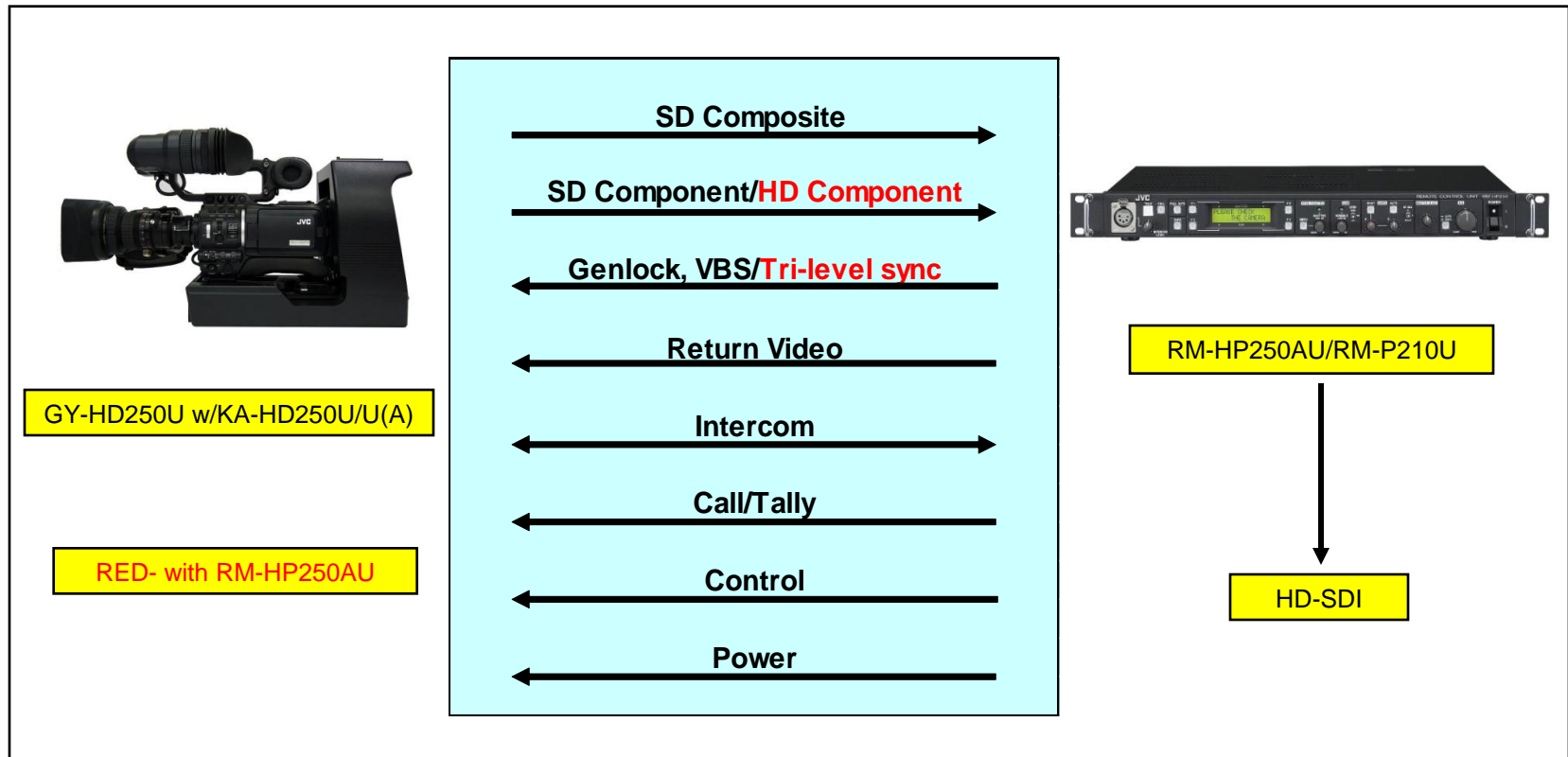


Fig 2 HD System Signal Flow between CCU and Studio Camera

## ■ Additional Information

- When using a VF-HP840U and a component or digital switcher:  
GY-HD250U's **"ANALOG OUT CHAR."** menu should be set to **"OFF"**.  
Set the **"VF SIGNAL"** menu to **"COMPONENT"**.
- If a VF-P400U is used as the view finder, set the GY-HD250U's **"VF SIGNAL"** menu to **"RGB"**.  
Do not turn **"SDI OUT CHAR."** menu setting to **"ON"**.
- GY-HD250U's **"TALLY SYSTEM"** menu should be set to **"STUDIO"**.

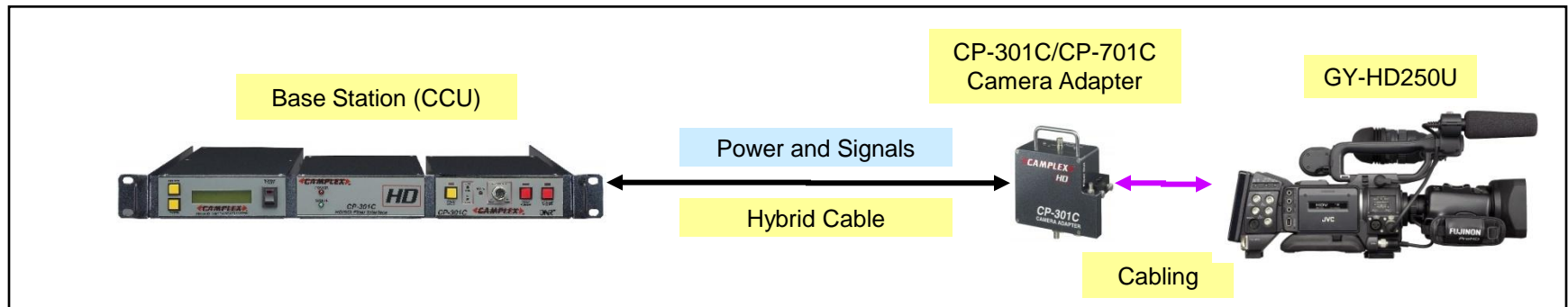
## Section II - Medium Length Fiber Cable Studio Configurations

### Typical Applications:

Medium length Fiber Cable Studio Configurations are used for EFP, Sports and Events requiring the CCU to be located more than 100m from the Camera's location. When multi-core cable lengths exceed 100m, the multi-Core cable weight becomes excessive. For lengths greater than 100m a fiber cable can be used for applications that do not need power to be delivered to the camera or a hybrid (combined fiber and copper cable) that also delivers power is used to connect the Studio Camera to the base station. Camplex and Telecast Fiber are two companies that produce systems that use either fiber or hybrid cables to connect the camera to the CCU.

### **CAMPLEX:**

CAMPLEX produces economical hybrid cable connected systems that integrate with the GY-HD250U. Their system consists of a Camera Adapter mounted on the Camera, a Hybrid Fiber Cable and a Base Station.



**Complex System Diagram**

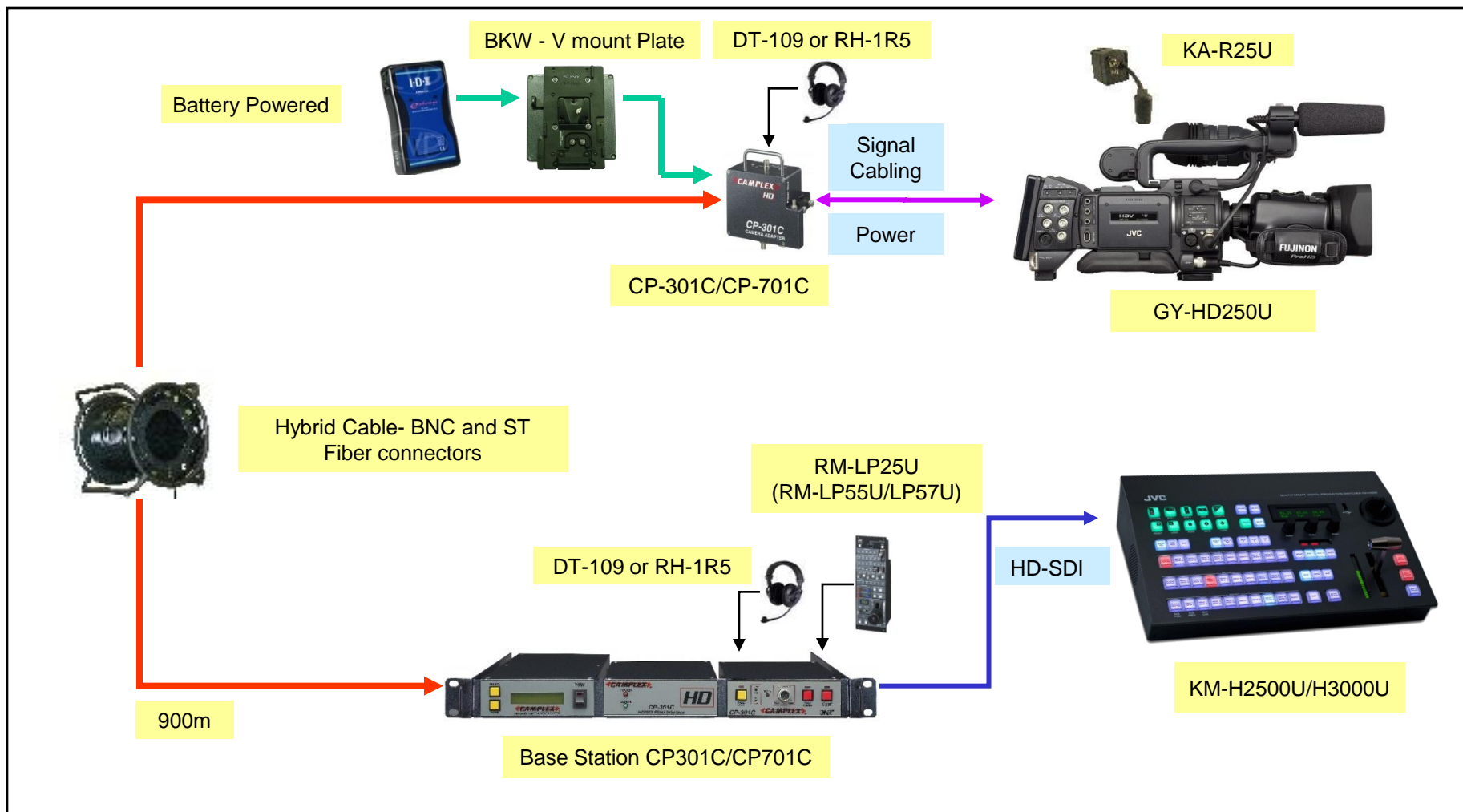
The Camera Adapter with additional cabling provides a signal interface between the camera and the Hybrid Cable. The Hybrid cable consists of a coaxial cable whose center conductor gauge depends on the customer's power requirements and a fiber cable. Both are enclosed in a single sheath.

The Fiber cable carries the HD-SDI optical signal back to the base station where it is converted back to an electrical signal HD-SDI signal.

The center conductor in the coax carries both power and all the required signals between the Base station and the Camera adapter.



## ■ Shoulder CP-301C/CP-701C studio system diagram





## ■ Shoulder Studio Components Price List (Fiber)

Model	Description	Price	Note
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
RM-LP25U	Local Remote Control Panel	\$3,995.00	
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input
KA-R25U	Return Video Box	\$599.00	

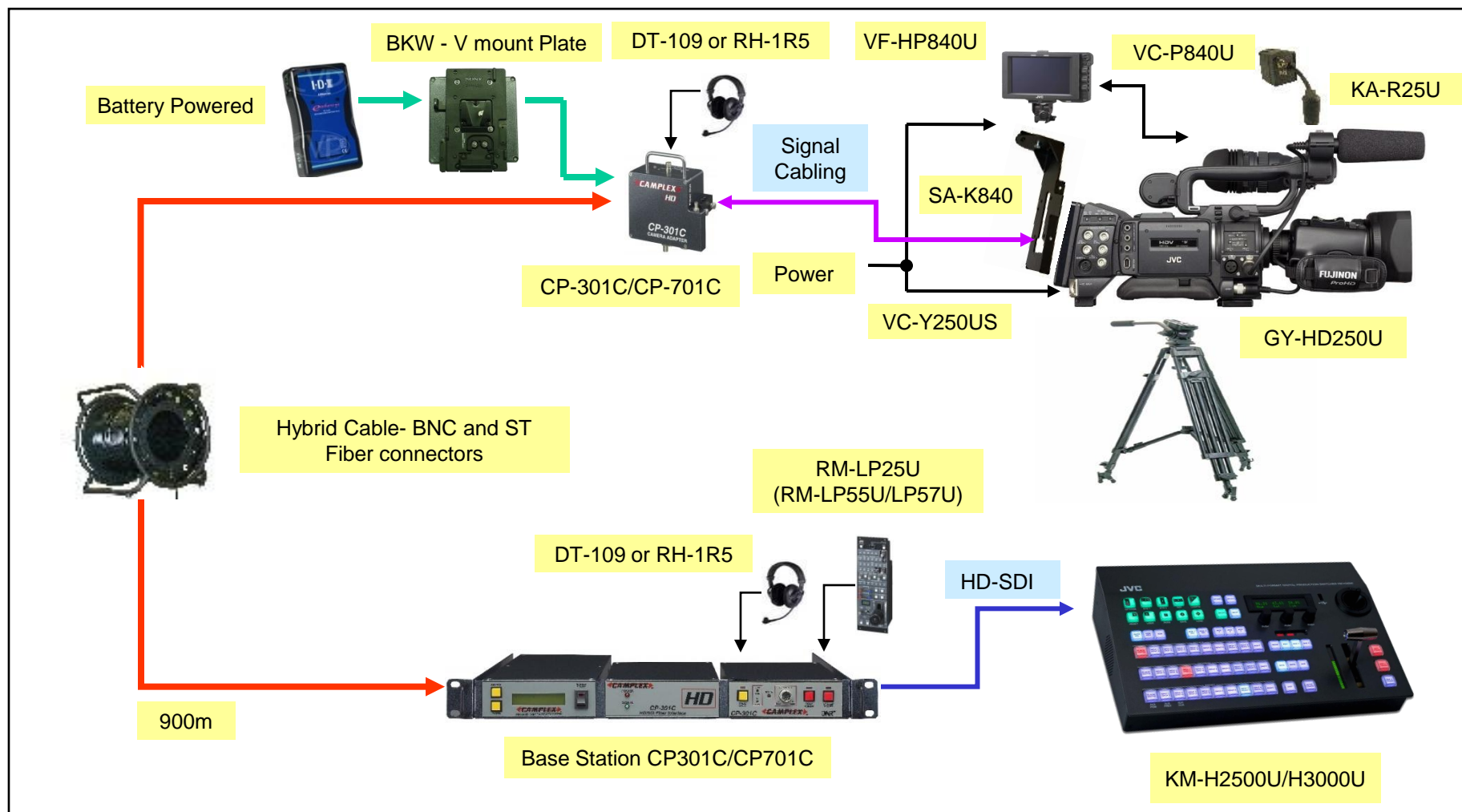
### Options

Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

Model	Description	Price	Note
CP701	Camera Adapter + Base station + Pwr	\$13,335.00	This price includes all necessary options
CP301C S5	Camera Adapter + Base stationm + Pwr	\$10,134.00	This price includes all necessary options
CP301C S2	Camera Adapter + Base Station + Battery Mount	\$8,984.00	For Battery powered applications
Hybrid cable	2 Fibers + Coax	\$1.50	Complex
	Power Surge Absorber	\$625.00	Absorbs additional current draw used
	Reel	\$500.00	Complex
	Interface Cabling	\$425.00	Complex Fiber \$400 to \$450
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex

## ■ Tripod mounted CP-301C/CP-701C studio system diagram w/o Sled



## ■ Tripod Mounted Studio Components Price List (Fiber)

Model	Description	Price	Note
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
RM-LP25U	Local Remote Control Panel	\$3,995.00	
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input
KA-R25U	Return Video Box	\$599.00	
VF-HP840U	8.4" HD/SD Studio Viewfinder	\$3,200.00	
SA-K840	Viewfinder Bracket	\$300.00	For VF-HP840U without KA-HD250U
VC-P840U	Viewfinder Cable	\$315.00	For VF-HP840U without KA-HD250U
VC-Y250US	Y XLR Power Cable	\$75.00	

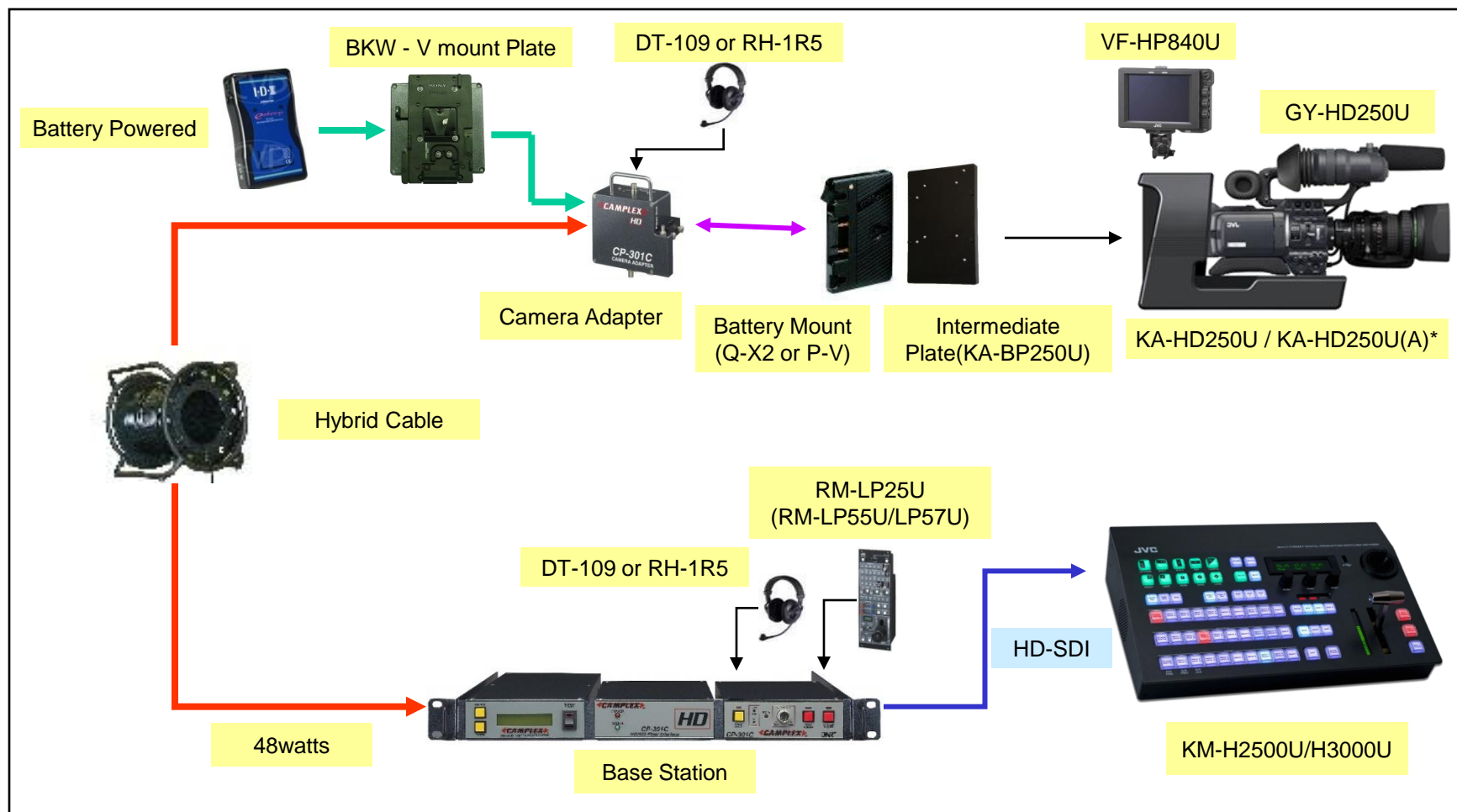
### Options

Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

Model	Description	Price	Note
CP701	Camera Adapter + Base station + Pwr	\$13,335.00	This price includes all necessary options
CP301C S5	Camera Adapter + Base stationm + Pwr	\$10,134.00	This price includes all necessary options
CP301C S2	Camera Adapter + Base Station + Battery Mount	\$8,984.00	For Battery powered applications
Hybrid cable	2 Fibers + Coax	\$1.50	Camplex
	Power Surge Absorber	\$625.00	Absorbs additional current draw used
	Reel	\$500.00	Camplex
	Interface Cabling	\$425.00	Camplex Fiber \$400 to \$450
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex

## ■ Sled mounted CP-301C/CP-701C studio system diagram



\* When using VF-HP840U as viewfinder, camera adapter must be KA-HD250U(A).

## ■ Sled Mounted Studio with Sled Components Price List (Fiber)

Model	Description	Price	Note
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
KA-HD250U(A)	Studio Adapter	\$3,000.00	For Tripod mount
VF-HP840U	8.4" HD/SD Studio Viewfinder	\$3,200.00	
KA-BP250	Intermediate Plate	N.C.	Call JVC branch
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input

### Options

Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	
JVC-PV	IDX Mount plate	\$125.00	For Mounting Copperhead / KA-HD300U

### Third Party Components

Model	Description	Price	Note
CP301C S5	Camera Adapter + Base stationm + Pwr	\$10,134.00	This price includes all necessary options
Hybrid cable	2 Fibers + Coax	\$1.50	Complex
	2 Fibers + Coax	\$2.00	Complex/Clark RG6 Medium cable run
	2 Fibers + Coax	\$2.25	Complex/Clark RG11 Long cable run
PSA-31	Power Surge Absorber	\$625.00	Complex Absorbs additional current draw
	Reel	\$500.00	Complex
Q-X2	Anton Bauer Plate	\$119.95	For Mounting Copperhead
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex

## ■ CAMPLEX System Key features and Customer Benefit

### [Tripod Mounted]

- Complex's (CP-301C and CP-701C) systems provide an economical medium cable length (up to 900m) solution.
- Due to the camera adapter's light weight (CP301C – 2lbs/CP701 -2.5 lbs) the camera can be shoulder mounted and operated for long periods of time without fatiguing the user.
- The CP-301C CCU and the CP-701C CCU primarily differ in their signal handling capabilities. The CP-701C can pass Component SD signals between the camera and the base station and has a asynchronous return video path back to the camera.

### [Sled Mounted]

- The CP-301C/CP-701C Sled mounted configuration is an economical medium distance CCU solution.
- This configuration enables viewing and focusing the camera images on a high definition studio monitor..
- Up to 48 Watts of power is supplied to the camera and attached options at an economical price.
- GY-HD250U can be quickly detached from the Sled and used as an ENG camera.
- Flexibility of both hand held and tripod mounted operation.

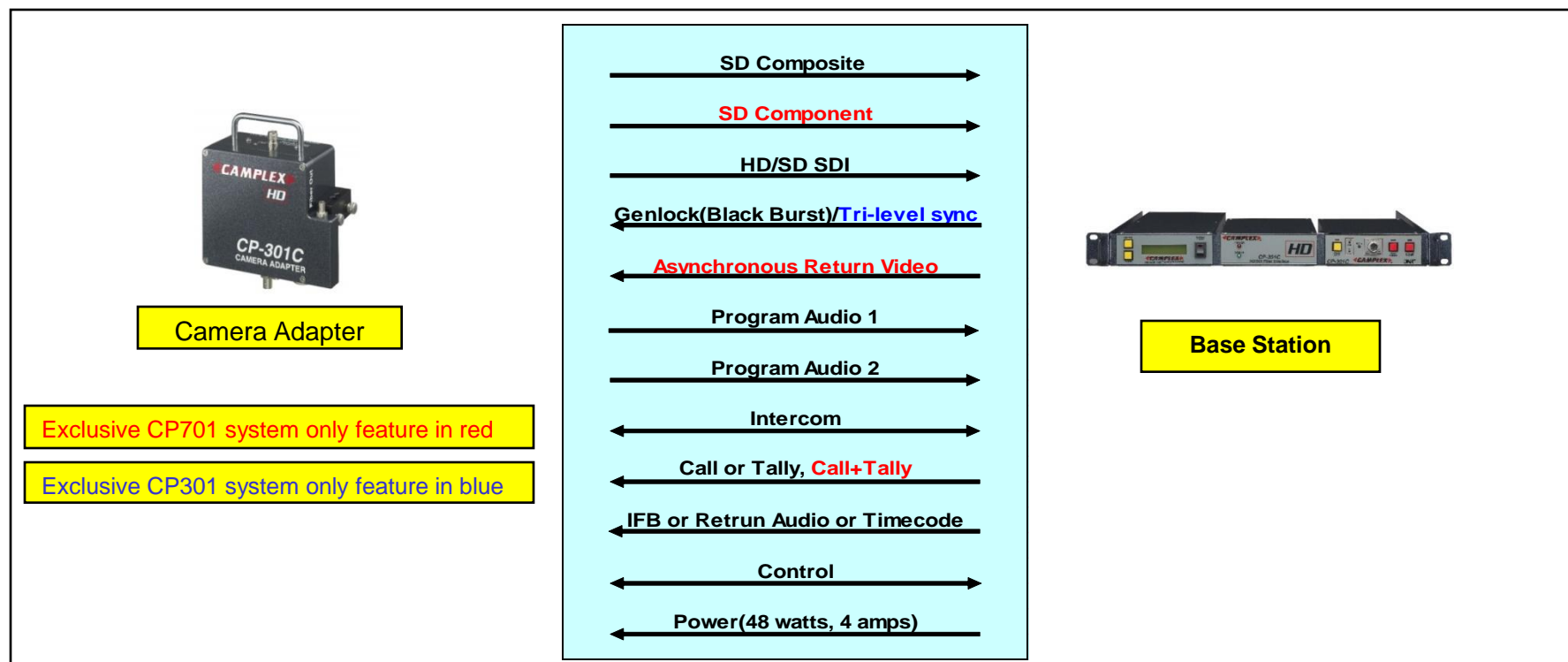


Fig 3. Signal Flow between Camera Adapter and Base Station

## ■ Additional Information and Limitations

### Additional Information

- In the CP-301C system, there is no separate return video signal. The return video signal, providing it is genlocked, can be applied to the CP-301C's Genlock input. On the camera side, the Genlock signal can be used simultaneously as a Genlock and a return video signal. When using the CP301C's camera adapter's Genlock signal for Genlock and for return video, the signal must be an NTSC VBS.
- Set GY-HD250U "**TALLY SYSTEM**" menu setting to "**STUDIO**".
- When using VF-HP840U set "**VF SIGNAL**" menu setting to "**COMPONENT**".

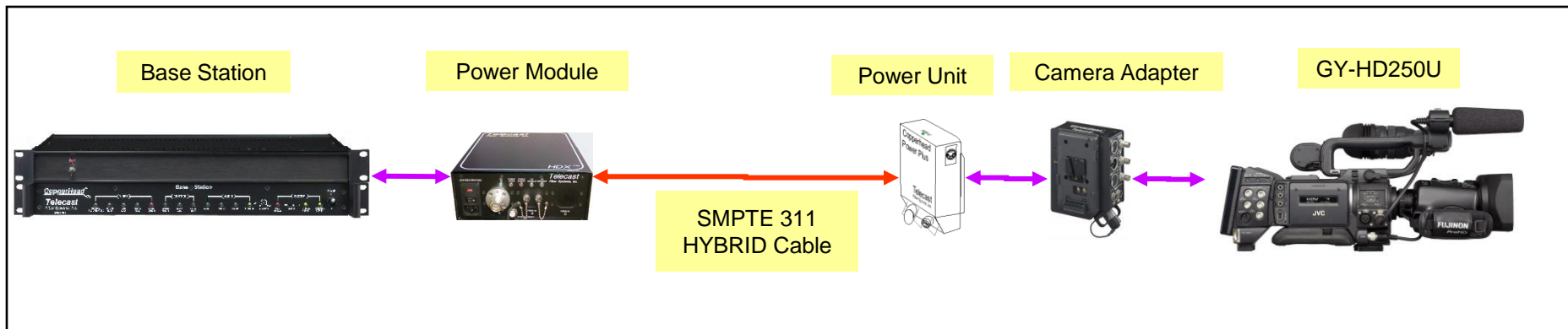
### Limitations

- Maximum cable length is limited to 900m with RG11.
- The Hybrid cable becomes very heavy as the cable length increases.
- If the cable is abused, internal fiber or coax can be damaged. It is not as reliable and robust as the tactical fiber cable. In the case that the optical fiber is damaged a spare fiber that is part of the cable can be substituted.
- The CP-301C can pass an HD Tri level genlock signal, but the CP-701C can not pass an HD Tri level genlock signal.

## Section III - Long Length Fiber Cable connected Studio Configurations

### Telecast Fiber:

Telecast Fiber also produces a fiber connected CCU. Their system consists of a Camera Adapter(Copper Head) , a Power Module (Power Plus) connected to the GY-HD250U; a Hybrid Fiber Cable connects the Camera adapter to the Base Station and an optional Power module. This Configuration can be operated with cable lengths of up to 2K meters



### *Telecast Fiber system with Power*

The Camera Adapter provides a signal interface between the camera and the two fibers inside the Hybrid Cable. The Power module converts the 250V AC signal on the copper conductors inside the Hybrid cable to 12V Camera power. The two fibers within the cable handle the signal transmission between the camera and the base station.

One fiber strand is dedicated to carrying the HD-SDI signal from the camera back to the base station.

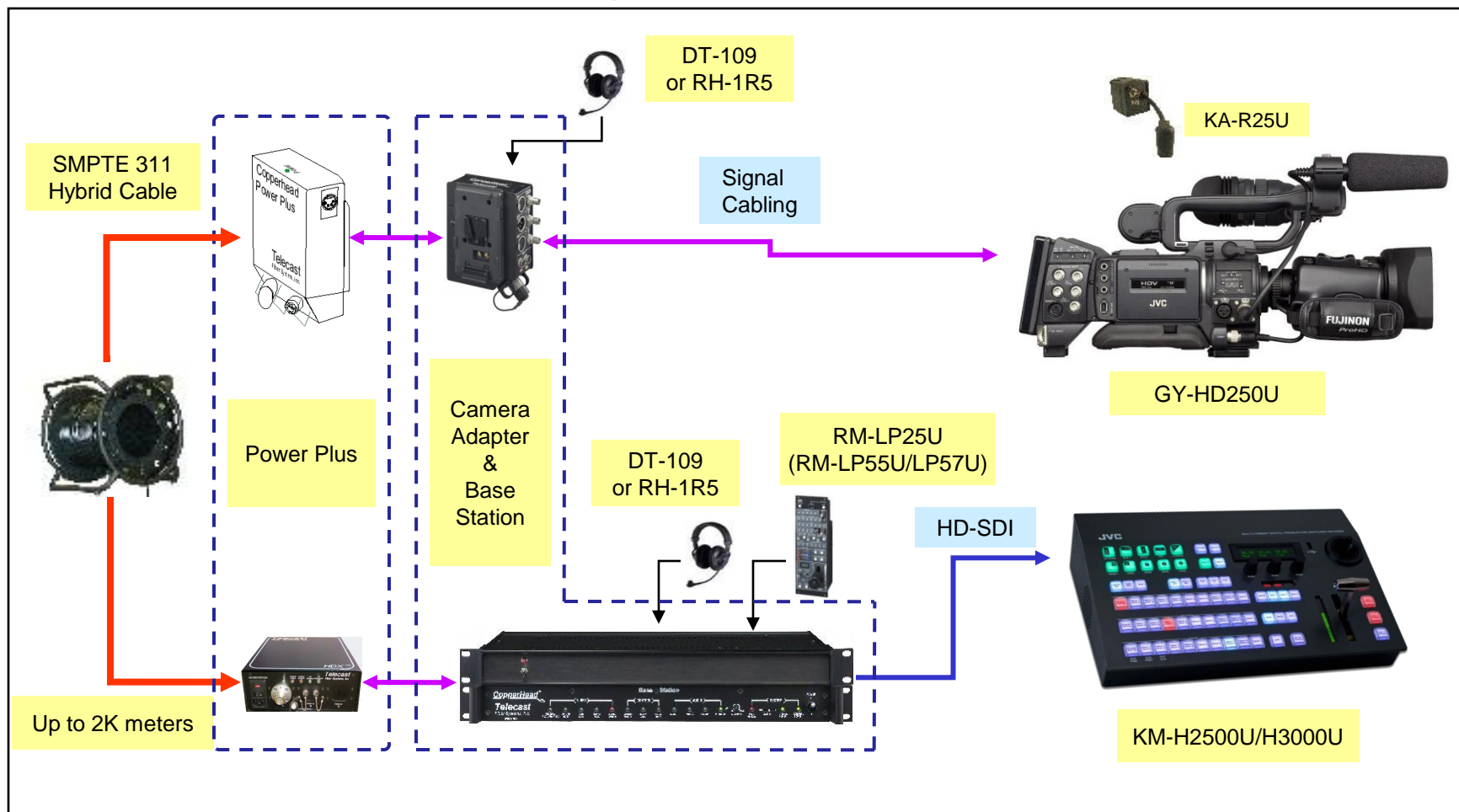
The second fiber strand carries all of the other required signals between the camera adapter and the base station.

### ■ Key Features and Customer Benefit

- Up to 150Watts of power is supplied to the studio camera and attached accessories.
- Telecast Fiber system can pass a both a SD VBS or a HD Tri level sync Genlock signal.
- Flexibility of Hand held or Tripod mounted operation
- GY-HD250U can be powered and operated with cable lengths up to 2K meters.



## ■ Shoulder/w power studio system diagram



## ■ Shoulder Studio with Power Components Price List (Fiber)

Model	Description	Price	Notes
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input
KA-R25U	Return Video Box	\$599.00	

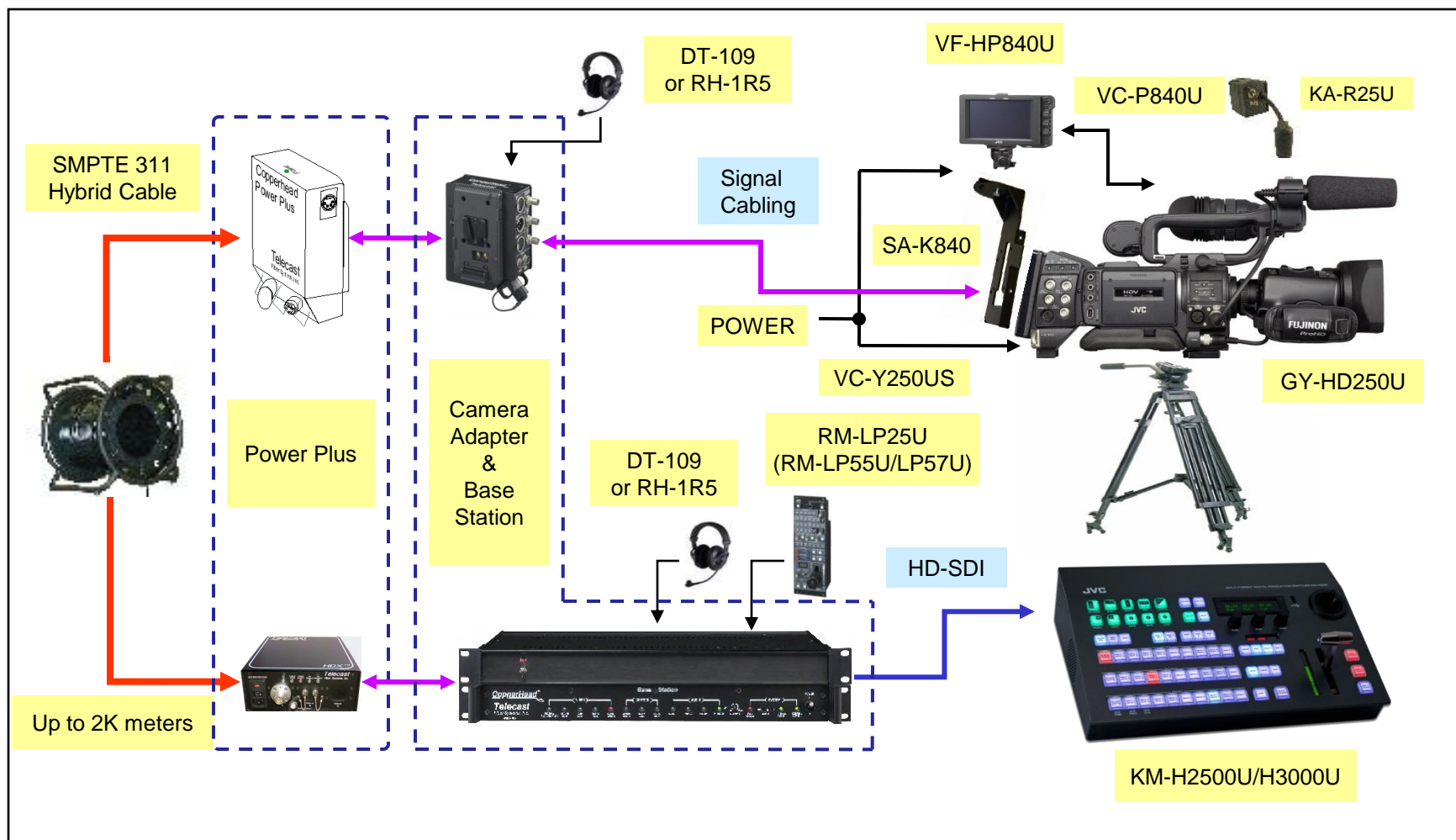
### Options

Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

Model	Description	Price	Notes
Copperhead+ Base Station	Camera Tx/Rx	\$15,000.00	Telecast Fiber
	Reel	\$500.00	Telecast Fiber
Power Plus	150 Watt supply	\$4,500.00	150W power module at base station and at camera
SMPTE hybrid cable	Has 2 fibers + copper for power	\$1.45	Telecast Fiber Cost per foot
	Additional Camera cabling	\$500.00	Telecast Fiber \$400 to \$600
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex

## ■ Tripod mounted/w power studio system diagram



## ■ Tripod Mounted Studio with Power Components Price List (Fiber)

Model	Description	Price	Notes
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input
KA-R25U	Return Video Box	\$599.00	
VF-HP840U	8.4" HD/SD Studio Viewfinder	\$3,200.00	
SA-K840	Viewfinder Bracket	\$300.00	For VF-HP840U without KA-HD250U
VC-P840U	Viewfinder Cable	\$315.00	For VF-HP840U without KA-HD250U
VC-Y250US	Y XLR Power Cable	\$75.00	

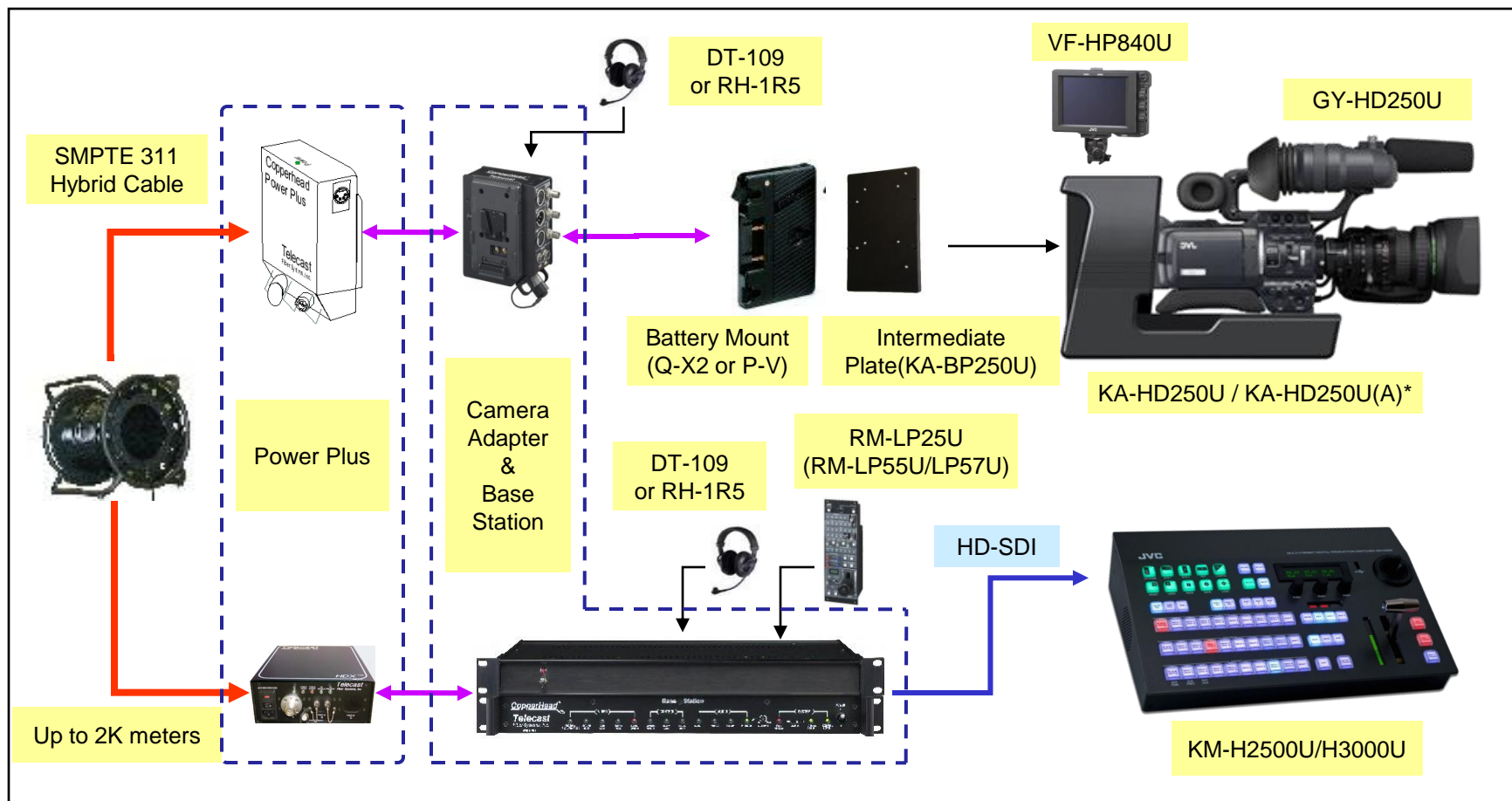
### Options

Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

Model	Description	Price	Notes
Copperhead+ Base Station	Camera Tx/Rx	\$15,000.00	Telecast Fiber
	Reel	\$500.00	Telecast Fiber
Power Plus	150 Watt supply	\$4,500.00	150W power module at base station and at camera
SMPTE hybrid cable	Has 2 fibers + copper for power	\$1.45	Telecast Fiber Cost per foot
	Additional Camera cabling	\$500.00	Telecast Fiber \$400 to \$600
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex

## ■ Sled Mounted/w Power studio system diagram



\* When using VF-HP840U as viewfinder, camera adapter must be KA-HD250U(A).

## ■ Sled Mounted Studio with Power Studio Components List (Fiber)

Model	Description	Price	Note
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
KA-HD250U(A)	Studio Adapter	\$3,000.00	For Tripod mount
VF-P400U	4" Viewfinder	\$875.00	
KA-V400U	Viewfinder Cable	\$225.00	20-pin/6-pin Adapter
VF-HP840U	8.4" HD/SD Studio Viewfinder	\$3,200.00	
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input
KA-BP250	Intermediate Plate	N.C.	Call JVC branch

### Options

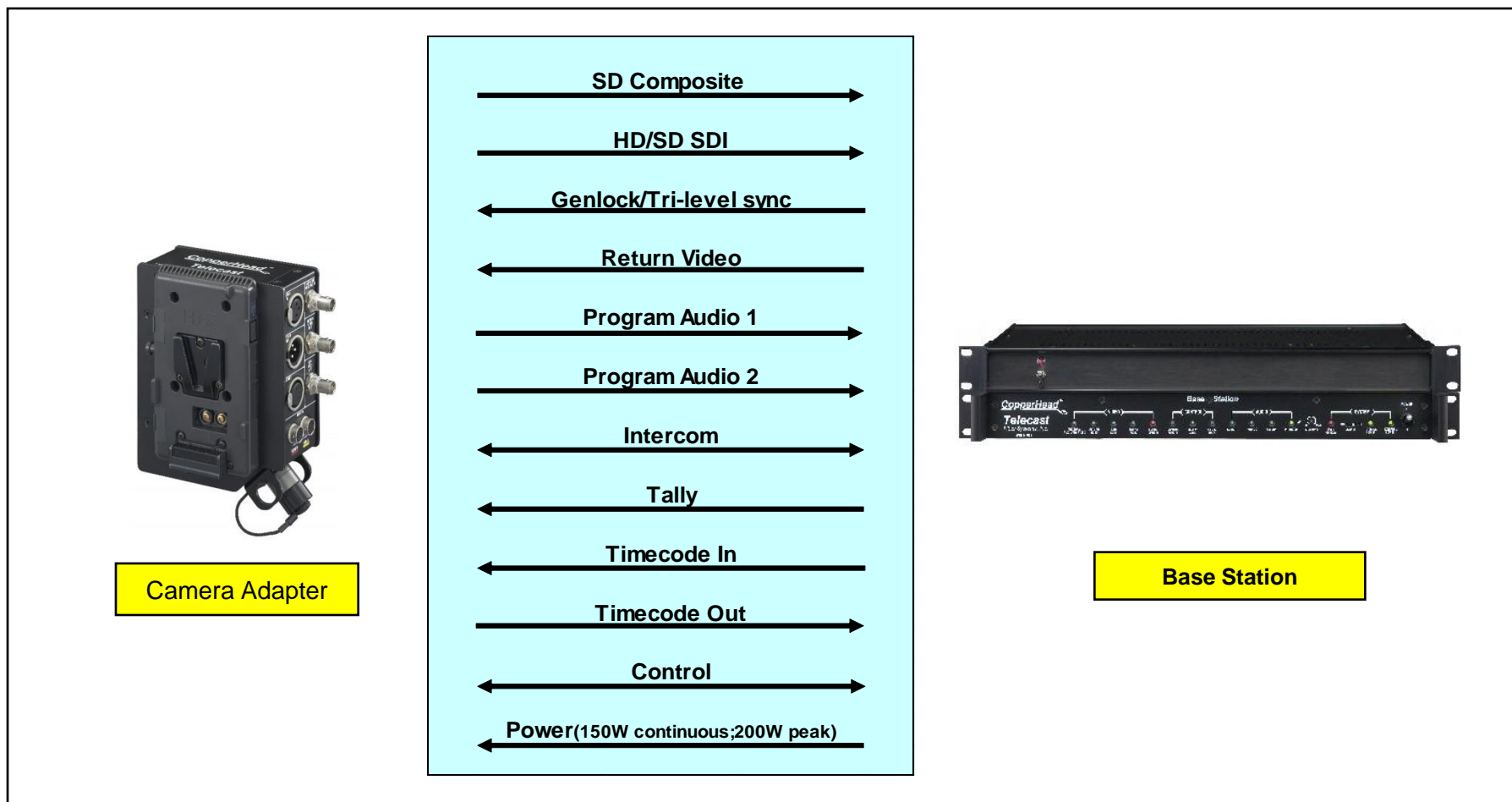
Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
JVC-PV	IDX Mount plate	\$125.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

Model	Description	Price	Note
Copperhead+ Base Station	Camera Tx/Rx	\$15,000.00	Telecast Fiber
	Reel	\$500.00	
Power Plus	150 Watt supply	\$4,500.00	150W power module at base station and at camera
SMPTE Hybrid cable	Has 2 fibers + copper for power	\$1.45	Telecast Fiber Cost per foot
	Camera cabling	\$500.00	\$400 to \$600 Telecast Fiber
Q-X2	Anton Bauer Plate	\$119.95	For Mounting Copperhead
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex

## ■ Telecast System Key Features and User Benefit

- Sled mounted configuration provides reliable CCU camera operation using SMPTE approved hybrid cable.
- This configuration enables viewing and precise focusing of the camera images on a high definition studio monitor..
- Up to 150Watts of continuous power and 200Watts of peak power is supplied to the camera and attached accessories.
- GY-HD250U can be quickly detached from the Sled and used as an ENG camera.



**Fig 4 Signal Flow between Camera Adapter and Base Station**

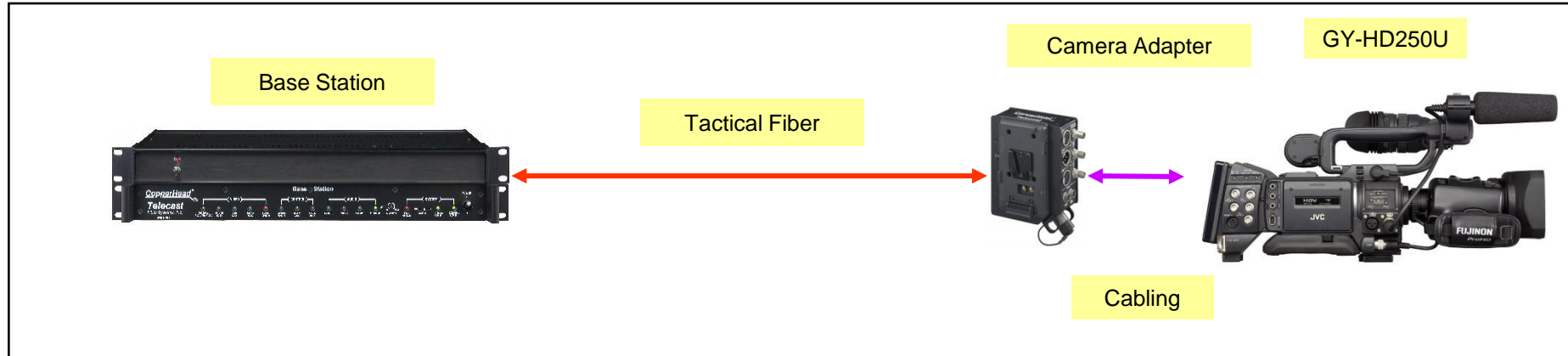
## ■ Additional Information

- When using VF-HP840U, set “**VF SIGNAL**” menu setting to “**COMPONNET**”.
- Set GY-HD250U “**TALLY SYSTEM**” menu setting to “**STUDIO**”.
- When using KA-R25U, set “**VF SIGNAL**” menu setting to “**RGB**”.



## ■ Telecast Fiber CCU locally Power

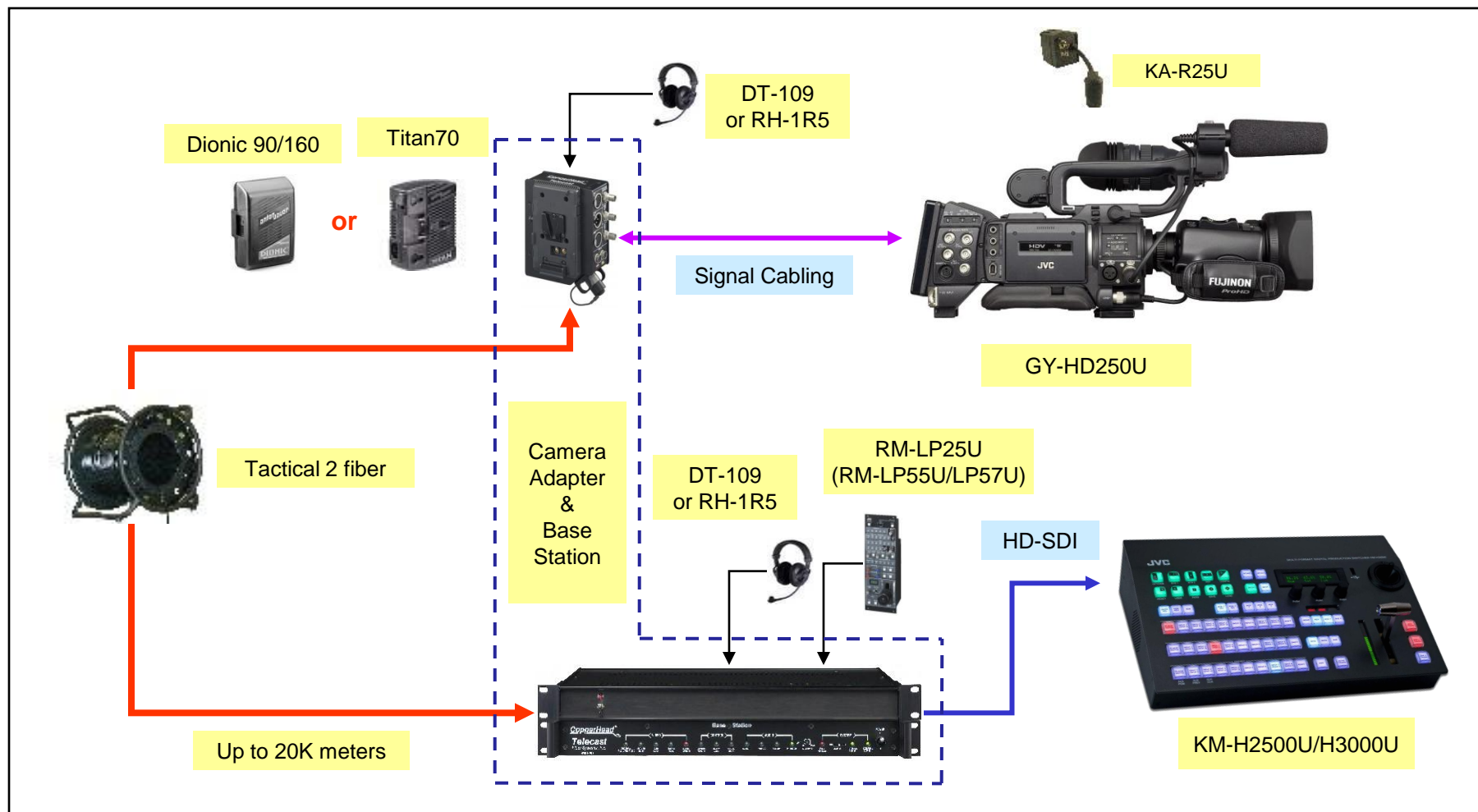
For applications requiring light weight and long cable lengths of up to 20K meters, Telecast Fiber's Camera Adapter (Copper Head) can be connected to the base station via two Tactical fibers. Power to the camera can be supplied via a battery, an off-board four-pin XLR power supply or on-board AC Power supply.



### *Extremely long length Telecast Fiber Studio System*

There are two fibers contained within the Tactical fiber cable. One fiber is used to carry the HD-SDI signal between the camera and the Base station. The second fiber carries all of the other required signals between the Camera Adapter and the Base station. Power must be supplied either locally or via an attached battery. One fiber contains the HD-SDI signal. The second fiber contains all of the other required signals.

## ■ Shoulder battery powered studio system diagram



## ■ Shoulder Battery Powered Studio Components Price List (fiber)

Model	Description	Price	Notes
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input
KA-R25U	Return Video Box	\$599.00	

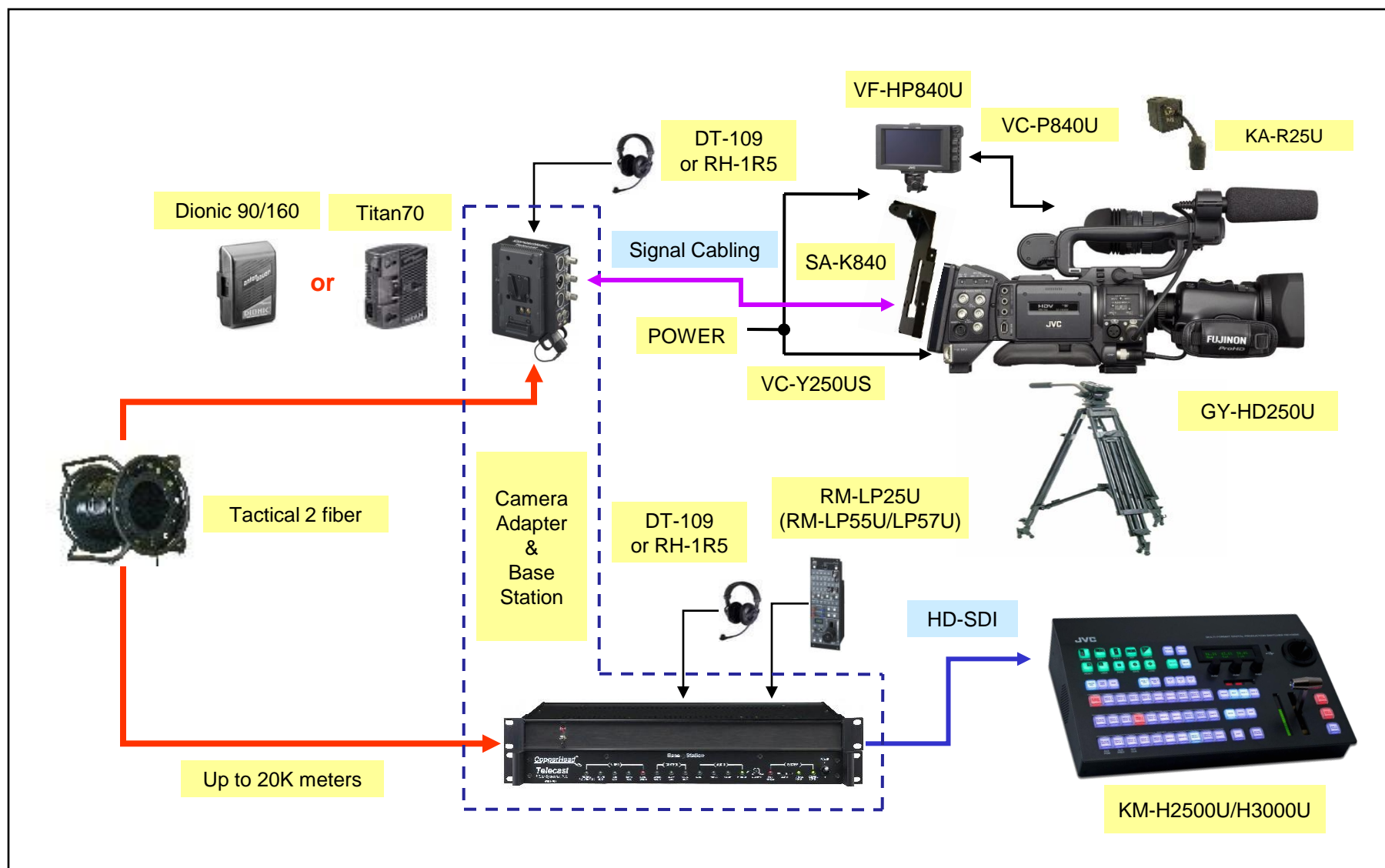
### Options

Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

Model	Description	Price	Notes
Copperhead+ Base Station	Camera Tx/Rx	\$15,000.00	Telecast Fiber
Tactical Fiber 2	2 fibers in cable	\$1.35	Telecast Fiber Cost per foot
	Reel	\$500.00	Telecast Fiber
	Hermaphrodite connectors	\$500.00	Telecast Fiber need two per system
	Additional Camera cabling	\$500.00	Telecast Fiber \$400 to \$600
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex

# ■ Tripod Mounted w/o Sled battery powered studio system diagram



## ■ Tripod Mounted Battery Powered Studio Components Price List (Fiber)

Model	Description	Price	Notes
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input
KA-R25U	Return Video Box	\$599.00	
VF-HP840U	8.4" HD/SD Studio Viewfinder	\$3,200.00	
SA-K840	Viewfinder Bracket	\$300.00	For VF-HP840U without KA-HD250U
VC-P840U	Viewfinder Cable	\$315.00	For VF-HP840U without KA-HD250U
VC-Y250US	Y XLR Power Cable	\$75.00	

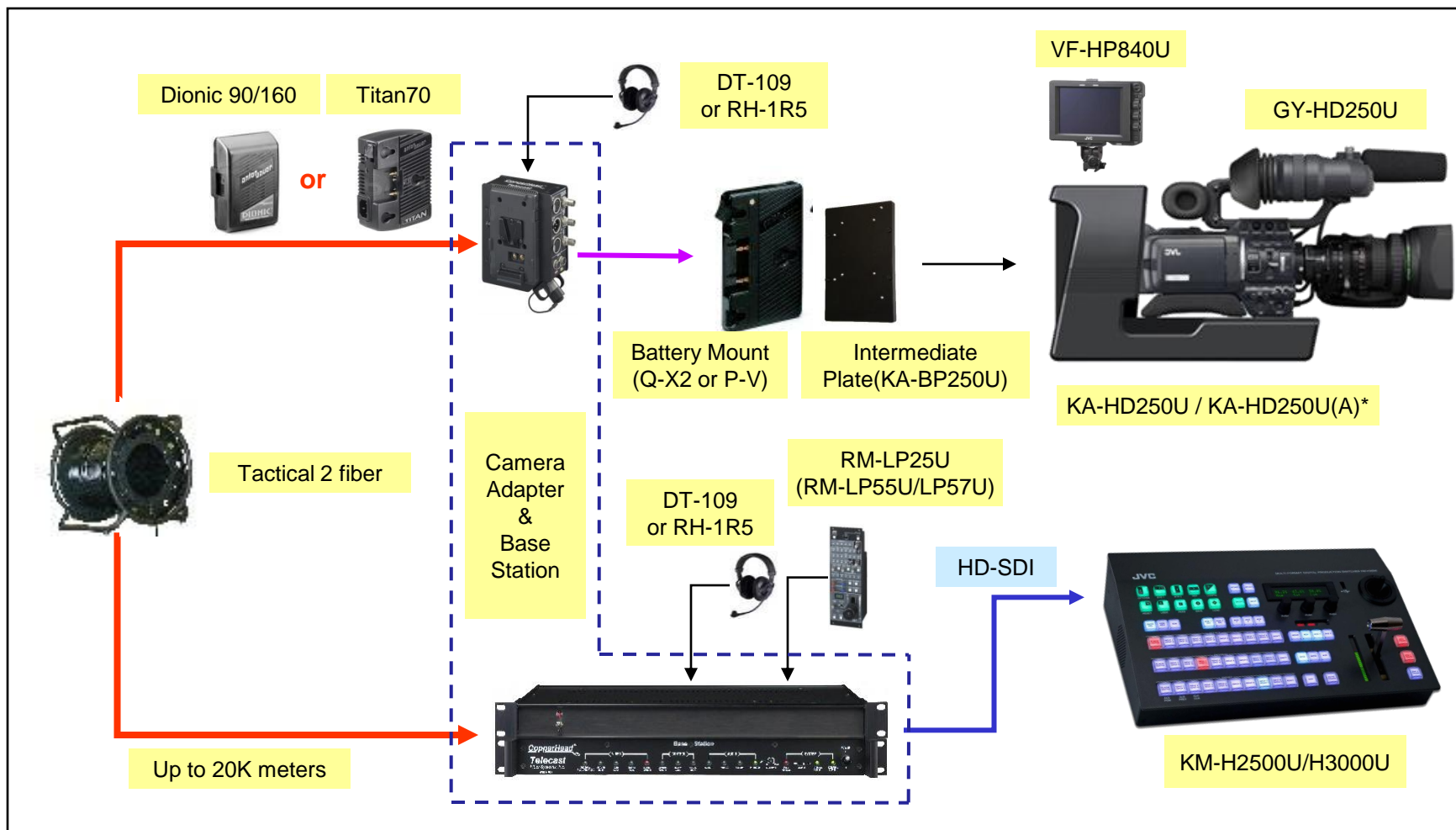
### Options

Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

Model	Description	Price	Notes
Copperhead+ Base Station	Camera Tx/Rx	\$15,000.00	Telecast Fiber
Tactical Fiber 2	2 fibers in cable	\$1.35	Telecast Fiber Cost per foot
	Reel	\$500.00	Telecast Fiber
	Hermaphrodite connectors	\$500.00	Telecast Fiber need two per system
	Additional Camera cabling	\$500.00	Telecast Fiber \$400 to \$600
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex

## ■ Sled Mounted with battery or off board of on board AC power studio system diagram



\* When using VF-HP840U as viewfinder, camera adapter must be KA-HD250U(A).

## ■ Sled Mounted Battery Powered Studio Components Price List (Fiber)

Model	Description	Price	Note
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD250U	Pro HD Camcorder	\$10,995.00	With 16X Lens
KA-HD250U(A)	Studio Adapter	\$3,000.00	For Tripod mount
VF-P400U	4" Viewfinder	\$875.00	
KA-V400U	Viewfinder Cable	\$225.00	20-pin/6-pin Adapter
VF-HP840U	8.4" HD/SD Studio Viewfinder	\$3,200.00	
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input
KA-BP250	Intermediate Plate	N.C.	Call JVC branch

### Options

Th13X3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17X5BRM	Fujinon Wide Angle	\$3,300.00	
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
JVC-PV	IDX Mount plate	\$125.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

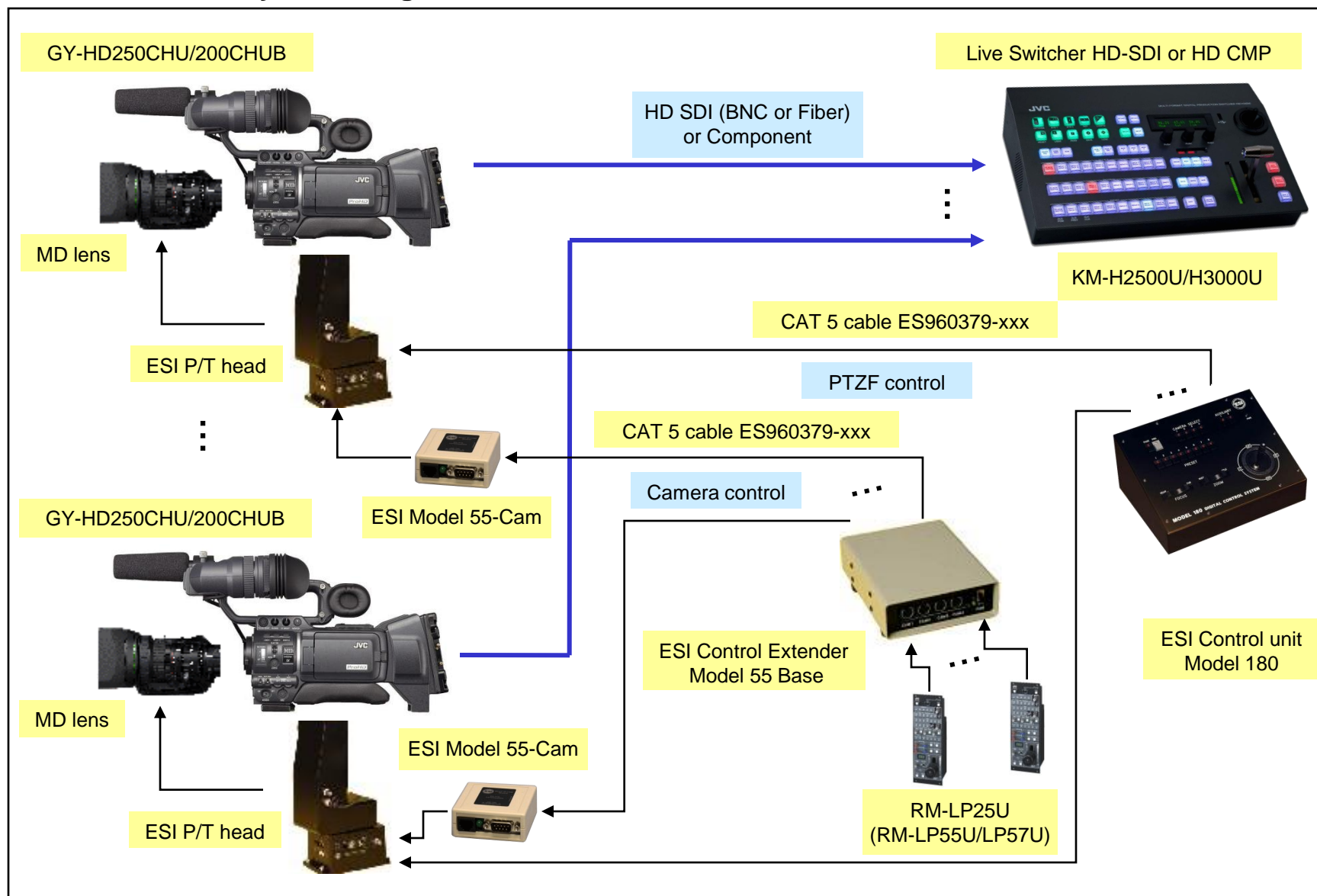
Model	Description	Price	Note
Copperhead+ Base Station	Camera Tx/Rx	\$15,000.00	Telecast Fiber
Tactical Fiber 2	2 fibers in cable	\$1.35	Telecast Fiber Cost per foot
	Reel	\$500.00	
	Hermaphrodite connectors	\$500.00	Telecast Fiber need two per system
	Camera cabling	\$500.00	\$400 to \$600 Telecast Fiber
Q-X2	Anton Bauer Plate	\$119.95	For Mounting Copperhead
DT-109	Headset	\$209.95	BeyerDynamic
K109.38	1.5m DT-109 Connecting cable	\$49.50	BeyerDynamic
PH-1R5	Headset	\$175.50	Telex



## Section IV - POV System configuration

### POV Pan/Tilt System:

#### ■ POV Pan/Tilt system diagram





## ■ POV System Components Price List

Model	Description	Price	Note
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD200CHUB	Pro HD Camcorder	\$5,695.00	without 16X lens
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input

### Options

Th17x5BMD	Fujinon 17x MD Lens	\$4,000.00	Motorized Lens
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

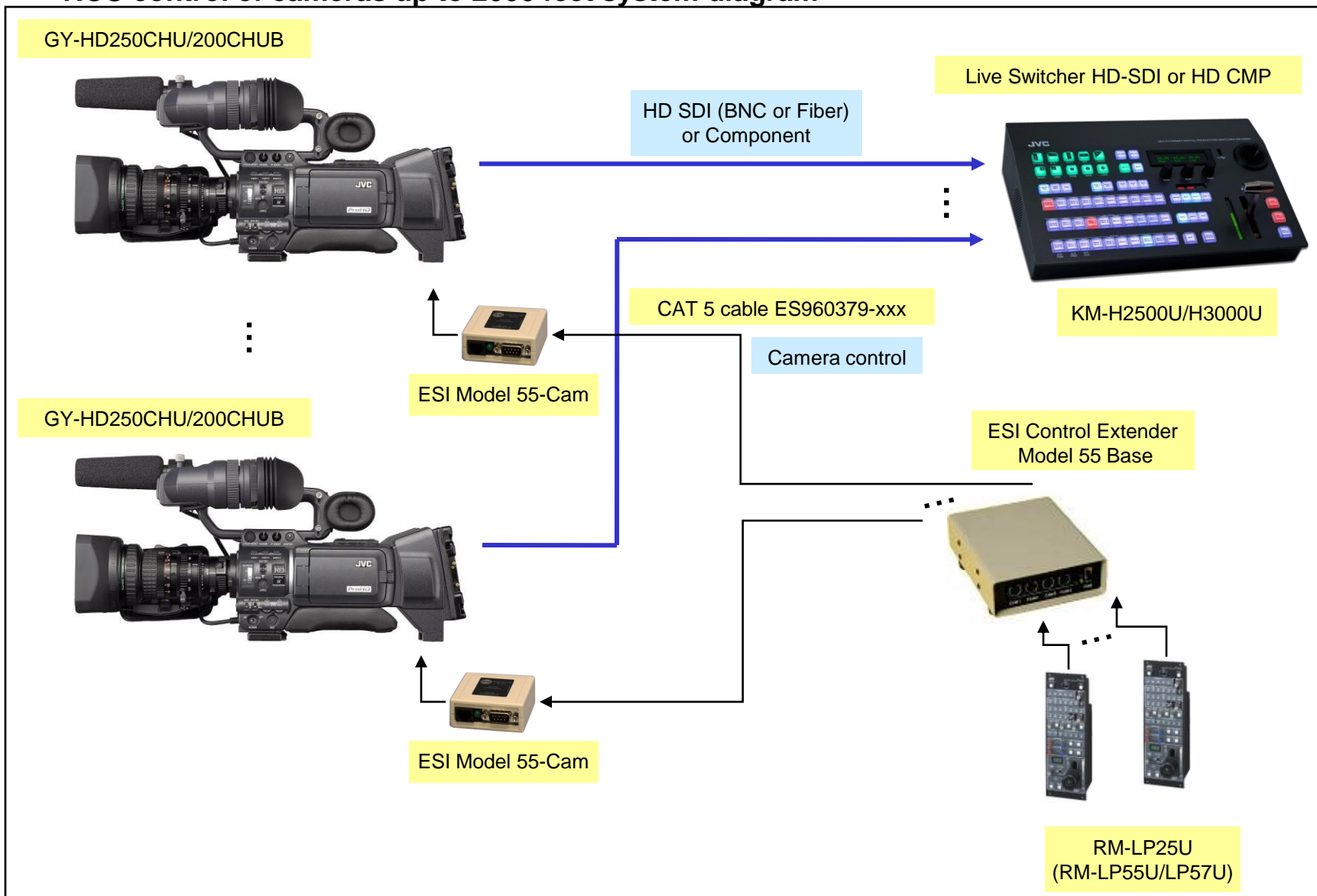
Model	Description	Price	Note
DPT130	Pan/Tilt Head	\$5,735.00	from ESI
Model 180	Pan/Tilt Controller	\$3,950.00	Controls up to 4 P/T heads
ES960379-xxx	RS-422 Cable	\$2.15	price per foot of cable ESI
IA60a	IDX Battery charger/Supply	\$395.00	for GY-HD200/250
Model 55 Base	Base Unit	\$1,020.00	ESI Camera remote control extender - extends up to 4 RM-LPxxU
Model 55 Cam unit	RS-422 to RS-232C Converter	\$305.00	One for each camera in system.

## ■ Key features and user benefits

- Affordable HD POV pan tilt system replacement for the SD POV KY-560U system. If user is converting from a SD Pan Tilt system some of the existing components such as Pan/Tilt controller, cables, power supplies, etc. can be reused.
- A live 1080i or 720P60 HD-SDI or HD Component signal can be outputted and applied to the switcher.
- Cameras can be controlled from up to 2000 ft.
- When needed the GY-HD250U/GY-HD200U can be easily used as an ENG camera by detaching it from the Pan/Tilt head.
- Upon request ESI can supply camera power to the camera from the Pan/Tilt head.

## RCU control of cameras up to 2000 feet with ESI Model 55 System:

### ■ RCU control of cameras up to 2000 feet system diagram



## ■ RCU control of cameras up to 2000 feet with ESI Model 55 System Components Price List

Model	Description	Price	Note
GY-HD250CHU	Pro HD Camcorder	\$9,995.00	without 16X lens
GY-HD200CHUB	Pro HD Camcorder	\$5,695.00	without 16X lens
RM-LP55U	Local Remote Control Unit	\$815.00	
RM-LP57U	Local Remote Control Panel	\$910.00	
RM-LP25U	Local Remote Control Panel	\$3,995.00	
KM-H2500U	HD-SDI Switcher	\$14,500.00	6 SDI MultiDefinition Input
KM-H3000U	HD-SDI Switcher	\$17,500.00	12 SDI MultiDefinition Input

### Options

Th13x3.5BRMU	Fujinon Wide Angle	\$7,650.00	
Th17x5BMD	Fujinon 17x MD Lens	\$4,000.00	Motorized Lens
HTs18x4.2BRM	Fujinon 18x High Quality Lens	\$10,800.00	
KT20x5BKRS	Canon 20x High Quality Lens	\$9,800.00	
HZ-FM15U	Manual Focus Control	\$685.00	Canon 20X
HZ-FM13U	Manual Focus Control	\$685.00	Fujinon 17X, 13X
HZ-FM500	Manual Focus Control	\$820.00	Fujinon 16X
HZ-ZS13U	Zoom Servo Control	\$750.00	Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens	\$2,880.00	Fujinon 18X
ACM-12	1/2" to 1/3" Mount Converter	\$799.00	
ACM-17	1/2" to 2/3" Mount Converter	\$799.00	

### Third Party Components

Model	Description	Price	Note
ES960379-xxx	RS-422 Cable	\$2.15	price per foot of cable ESI
IA60a	IDX Battery charger/Supply	\$395.00	for GY-HD200/250
Model 55 Base	Base Unit	\$1,020.00	ESI Camera remote control extender - extends up to 4 RM-LPxxU
Model 55 Cam unit	RS-422 to RS-232C Converter	\$305.00	One for each camera in system.

## ■ Key features and user benefits

- A live 1080i or 720P60 HD-SDI or HD Component signal can be outputted and applied to the switcher.
- Cameras can be controlled from up to 2000 ft.

## Section V - Supplementary Information

### ■ “VF SIGNAL” Menu

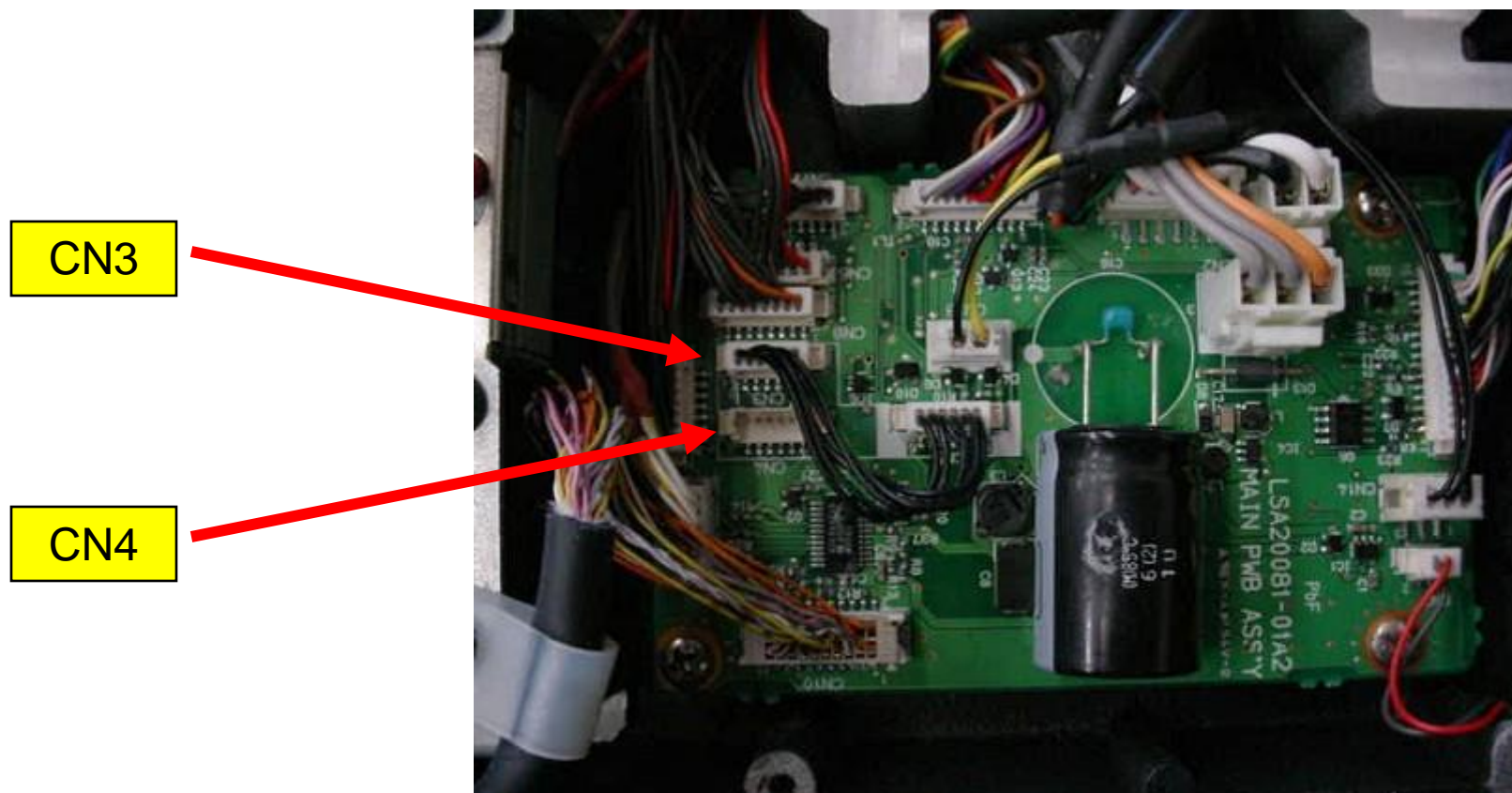


Mode	MENU	Video Signal Output			Application
	“VF SIGNAL”	Y, Pr, Pb (COMPONENT)	20-Pin out (VF out)	Eng VF Status	
HD	RGB	Y, Pr, Pb 720p or 1080i	RGB 480i	OK	ENG with Eng VF
	COMPOSITE	No output	CPS 480i	No visible video	
	COMPONENT	Y, Pr, Pb 720p or 1080i	Y, Pr, Pb 720p or 1080i	No visible video	HD STUDIO with VF-HP840U
	Y	No output	Y 480i	No visible video	
SD	RGB	Y, Pr, Pb 480i	RGB 480i	OK	ENG with Eng VF
	COMPOSITE		CPS 480i	No visible video	
	COMPONENT		Y, Pr, Pb 480i	No visible video	SD STUDIO with VF-HP840U
	Y		Y 480i	No visible video	SD STUDIO with VF-P400U

## ■ How to use Sony 26Pin Cable with KA-HD250U

1. Disconnect the CABLE from the CN3 on the KA-HD250U's MAIN board \*.
2. Reconnect cable to CN4 on the MAIN board.

\* See service manual for disassembly instructions



## ■ How to use Sony 26Pin cable with RM-P210U

### 1- Setup for Sony Cable

Remove the top-cover and change the setting of S35 & S36 dip-switch blocks located on the 26-pin connector board.

(a) S35: All switches must be set UP.

(b) S36: All switches must be set DOWN.

### 2- Adjustment

Re-adjustment of the transmit Voltage (refer to SM).

(a) VOLT ADJ 15V: adjust to 15VDC +/- 0.2V

(b) VOLT ADJ 17V: adjust to 16VDC +/- 0.2V

(c) VOLT ADJ 19V: adjust to 16VDC +/- 0.2V

*Note 1: If the Voltage is not correct, the viewfinder may be damaged due to over heating.*

*Note 2: Receive Voltage at pin-A and pin-B of the 26-pin **MUST** be lower than 15V. If the voltage exceeds 15VDC, adjustment of (a) "VOLT ADJ 17V" and (b) "VOLT ADJ 19V" must be re-adjusted from 16VDC to 15VDC.*

## ■ GY-HD250U/KA-HD250U and JVC CCUs Power connectivity table

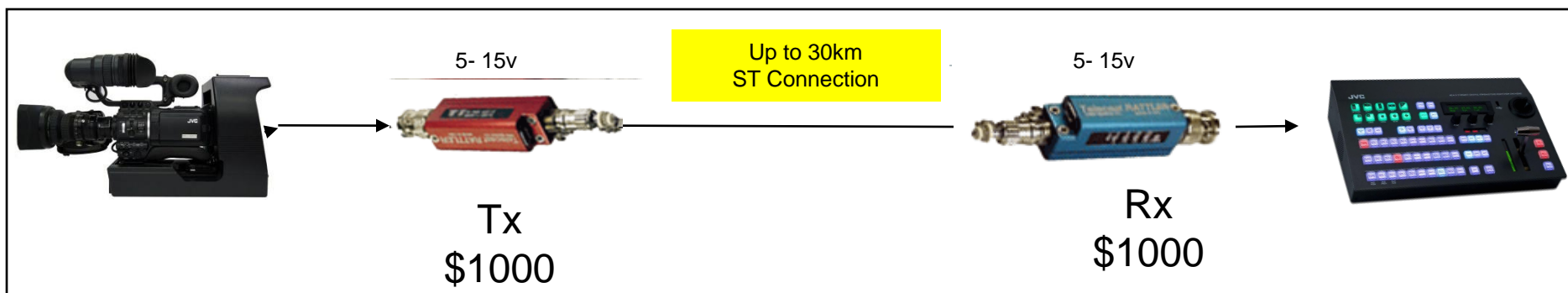
		RM-P210U		RM-P200U		RM-P300U	
		VF-P400	VF-P550B	VF-P400	VF-P550B	VF-P400	VF-P550B
20m(VC-P112)	Operation	OK	OK	NG	NG	OK	OK
50m(VC-P113)	Operation	OK	OK	NG	NG	OK	OK
100m(VC-P114)	Operation	OK	OK	NG	NG	NG	NG

## ■ HD-SDI Cable Lengths

HD-SDI BNC Cable	Distance (m)	Distance (ft)
RG-11	150	500
RG-7	125	400
RG-6	100	330
RG-59	80	260

## ■ Telecast Fiber Rattler – Fiber Tx/Rx

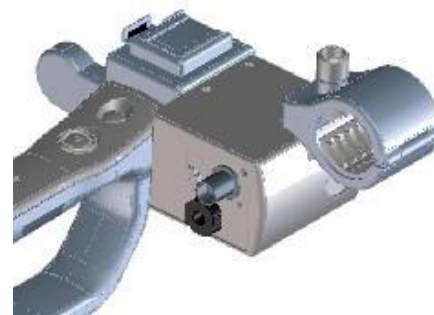
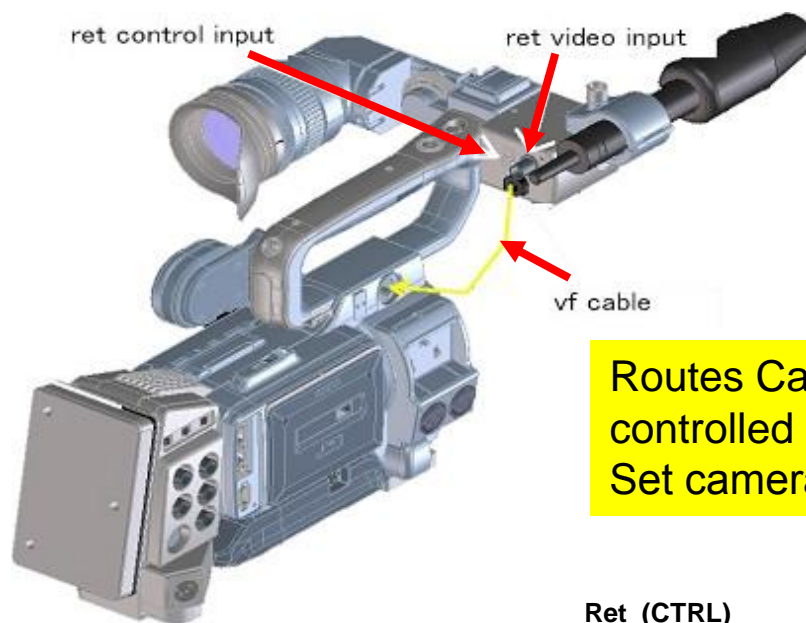
The rattler Tx and Rx converts a electrical digital signal to an optical signal at the Tx end and from a optical signal to a digital signal at the Rx end. It is used to extend the transmission distance of a HD/SD SDI signal up to 30K meters



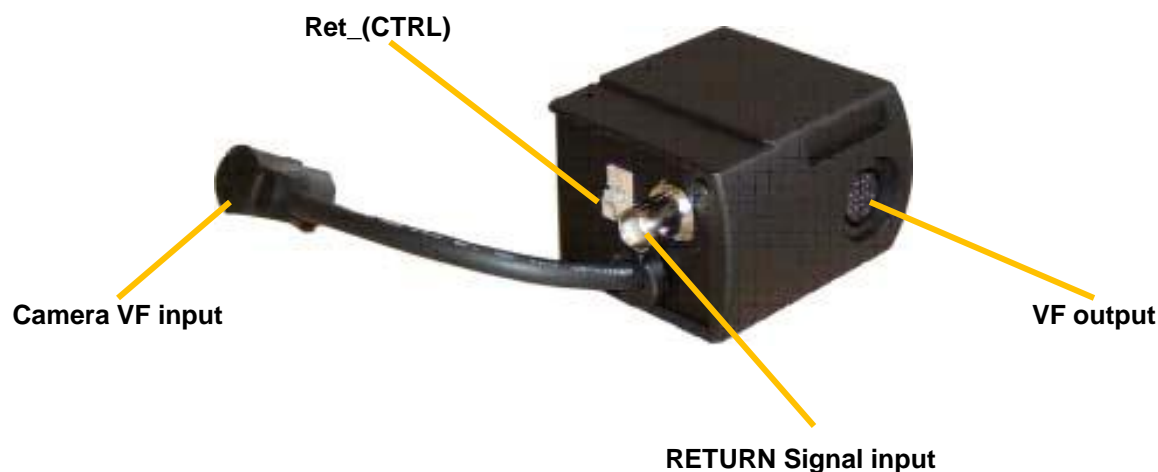


## Section VI - Accessories

### KA-R25U: Return Video Box



Routes Camera video or Return video to ENG view finder controlled by Lens Return button requires third party cabling. Set camera TALLY MENU to "STUDIO".



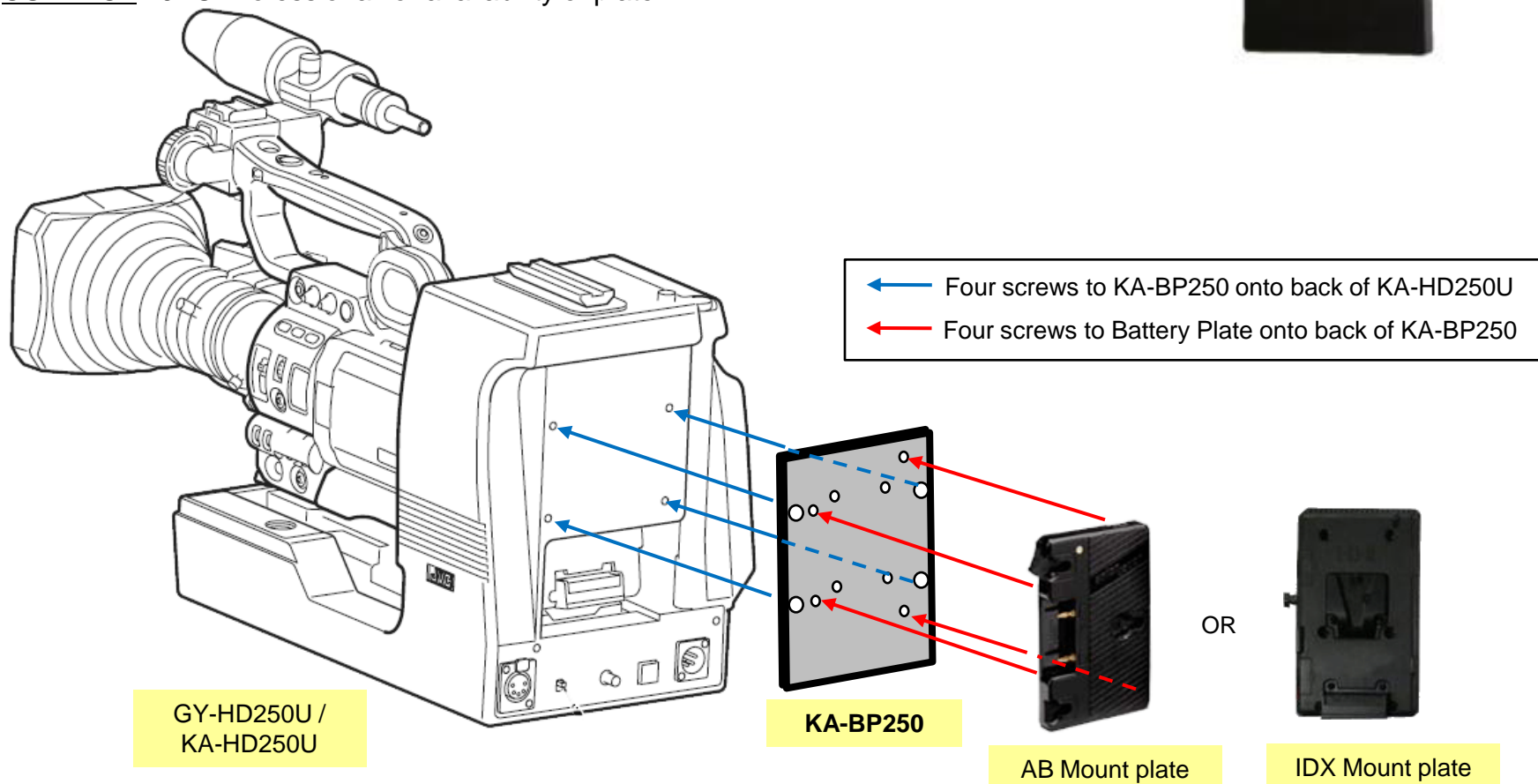


## KA-BP250: Intermediate Plate (handled by JPC)

The intermediate plate mounts on the back of the KA-HD250U. To this plate either an Anton Bauer or an IDX mount plate can be attached. The Camplex or Telecast Fiber Camera adapter can then be attached to the KA-HD250U.

- Enables mounting an Anton Bauer or IDX Mount on the back of the KA-HD250U
- AB Mount plate: QX2
- IDX Mount plate: JVC-PV

**CONTACT** : JVC Professional for availability of plate.



## HD 1/3"mount bayonet lenses :

Model	Focal Length mm	Angle of View	Filter Screw	IRIS Range
Th13x3.5BRMU Fujinon	3.5-46	74° - 6.3°	82mmx0.75mm	F1.4 – F16
Th16x5.5BRMU Fujinon	5.5-88	51° - 3.2°	82mmx0.75mm	F1.4 – F16
Th17x5BRM Fujinon	5.0-85	55° - 3.3°	82mmx0.75mm	F1.4 – F16
Th17x5BMD Fujinon	5.0-85	55° - 3.3°	82mmx0.75mm	F1.4 – F16
HTs18x4.2BRM Fujinon	4.2-76	63° - 4.0°	82mmx0.75mm	F1.4 – F16
HTs18x4.2BERM Fujinon	4.2-76 8.4-152 (w/2x)	63° - 4.0° 34° - 1.0° (w/2x)	82mmx0.75mm	F1.4 – F16
KT20x5BKRS Canon	5.0-100	52° - 2.8°	82mmx0.75mm	F1.4 – F16

## KA-V400U: 6pin/20pin Viewfinder Adapter

Enables owners of VF-P400 to reuse their SD VF with a KA-HD250 studio adapter  
This cable supplies video and power to the VF-P400U from the KA-HD250U.  
The built in RGB matrix circuit allows the VF-P400U to display all VF functions except focus assist.

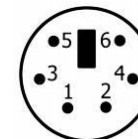


## RM-LP25U: Local Remote Control Panel

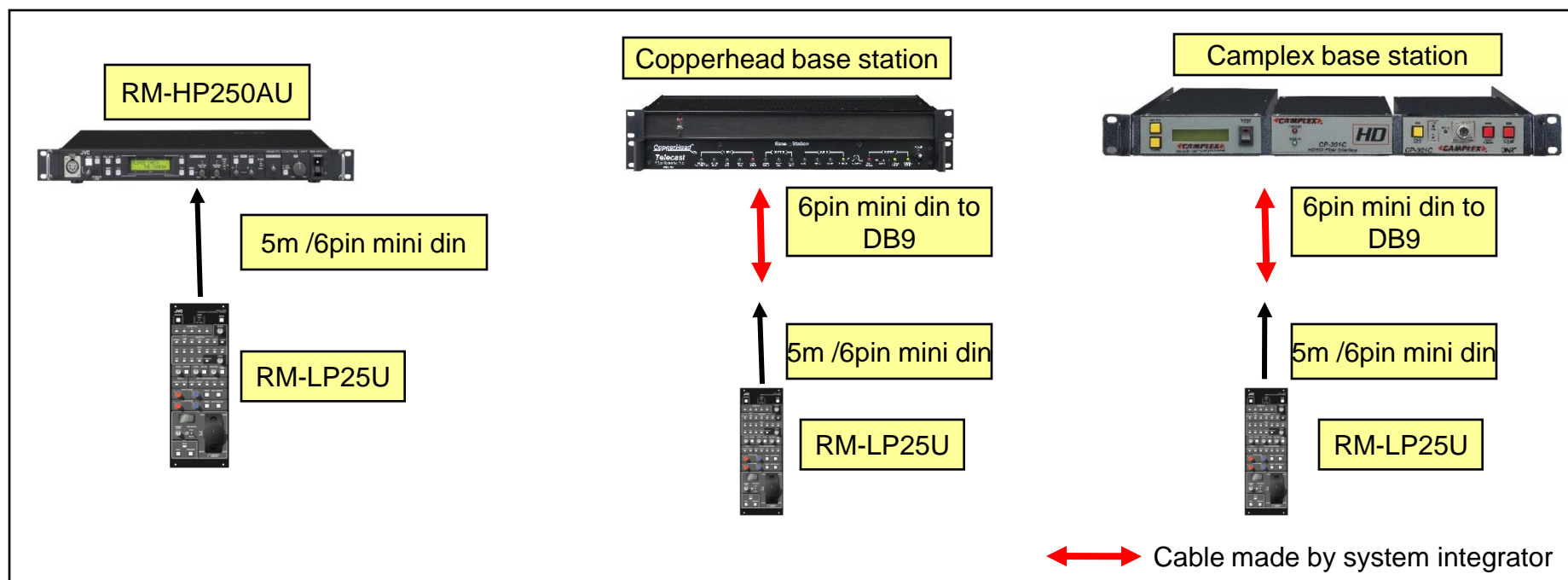
Local remote control panel with granular control of the GY-HD250U's video image. Includes a robust joystick for control of IRIS and Master Black.

To use all of the RM-LP25U's features the GY-HD250U firmware must be updated. The GY-HD250U has the proper firmware if the camcorder has a "Tally" menu. The "Tally" menu item should be on page two of the GY-HD250U's "Others" menu. If the "Tally" menus is not there the camcorder's firmware should be updated. To update the camcorder's firmware visit JVC's professional products website at <http://pro.jvc.com/> Click on the support tab; then click on the firmware update link. Follow the firmware update page instructions.

Interface cable - 5m cable with mini-din male connector  
9V supply voltage  
2W power dissipation



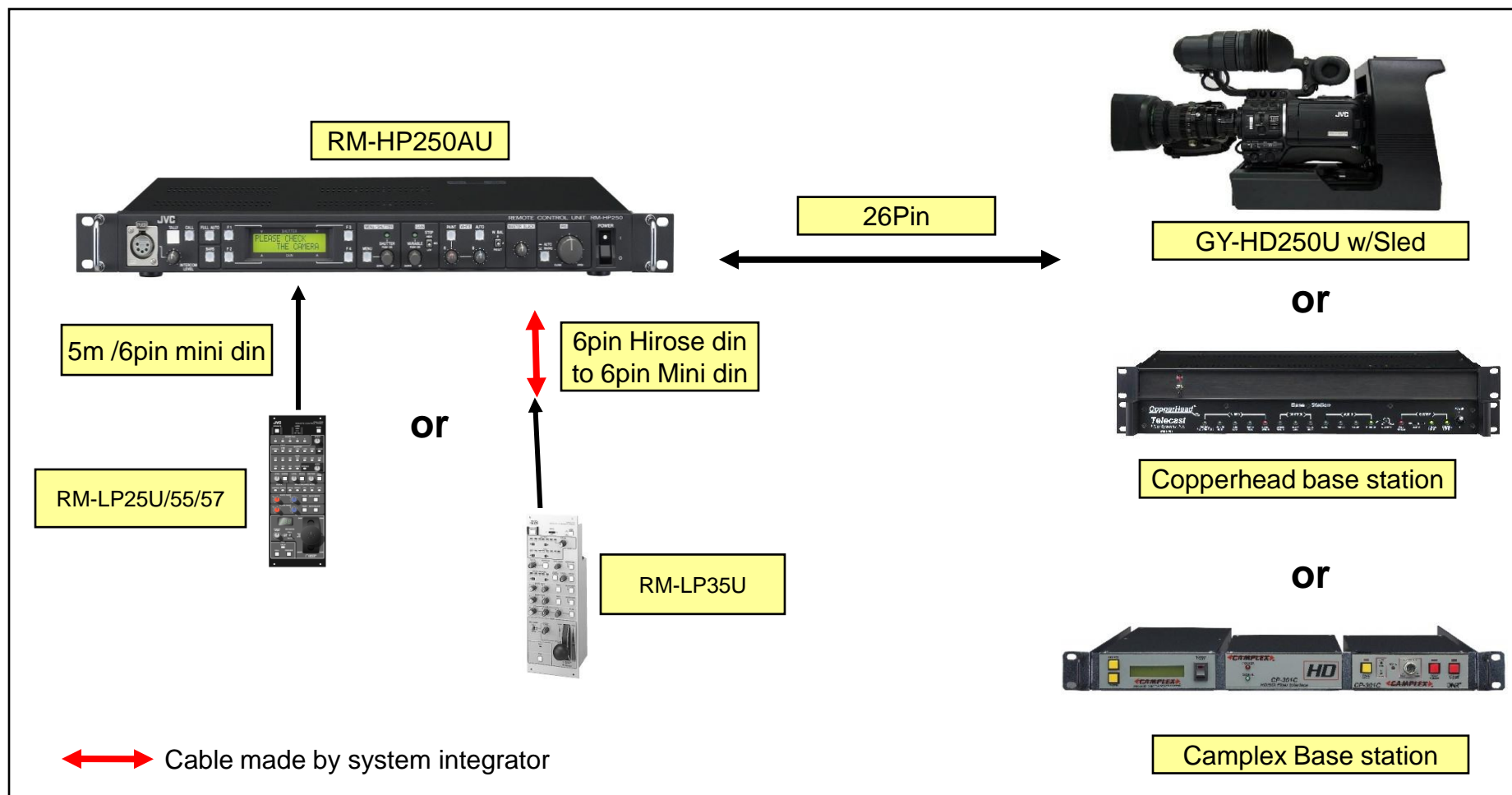
(Male 6pin: Pin side view)



RM - LP25U Interconnect Diagram



## ■ RM-HP250AU Interconnect Diagram

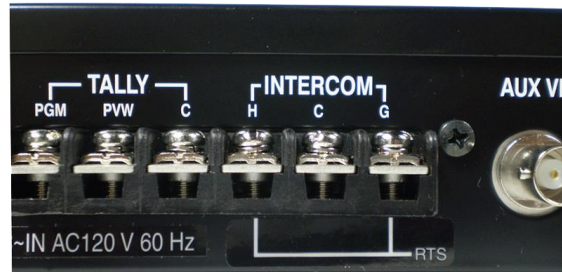


## ■ Interfacing RM-HP250AU with common Intercom system

The RM-HP250AU can be connected either a two wire balanced or two wire unbalanced intercom system. The table below lists common intercom systems, audio type (balanced or unbalanced), system impedance and manufacture.

Intercom System	Audio type	Termination Spec	Manufacturer
RTS™	Unbalanced	200Ω	Telex Communications, Inc.
Clear-Com	Unbalanced	200Ω	Clear-Com Intercom Systems
Audiocom®	Balanced	300Ω	Telex Communications, Inc.

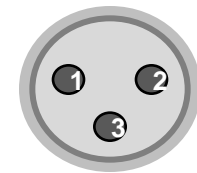
The RM-HP250AU has three terminals that are used to interface with balanced and unbalanced two wire audio intercom systems. These terminals are labeled G (ground) C (cold) H (hot).



**RM-HP250AU REAR PANEL**

The table below shows the signals carried on the 3 pin XLR microphone cables used by the most common intercom system providers.

Pin #	RTS™	Clear-Com	Audiocom®
Pin-1	GND	GND	GND
Pin-2	CH1 Unbalanced Audio + DC Power (+30V)	DC Power (+30V)	Balanced Audio(C) + DC Power
Pin-3	CH2 Unbalanced Audio	Unbalanced Audio	Balanced Audio(H) + DC Power



**XLR-3pin Male  
(on Cable)**

## ■ Connection to an unbalanced audio Intercom system

### Connection between XLR-3pin and the RM-HP250AU

When connecting to a 2W RTS™ system, wire the three pin microphone XLRs that are used to connect the RTS™ intercom system to the RM-HP250AU as shown in Fig. 1. As indicated below connect the RTS™ XLR's pin-2 to the RM-HP250AU's H terminal if audio CH1 is being used. If audio CH2 is used, then connect pin-3 to the RM-HP250AU's H terminal.

When connecting to a 2 wire Clear-Com system, wire the Clear-Com three pin microphone XLRs to the RM-HP250AU as shown in Fig. 2.

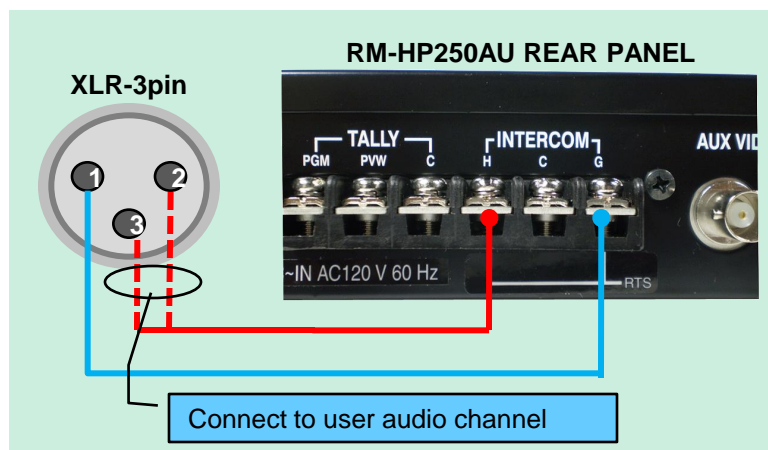


Fig. 1 RTS™ system

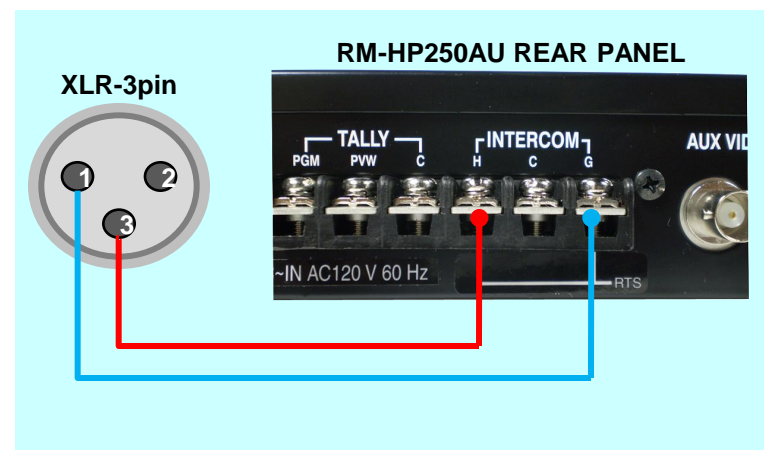


Fig. 2 Clear-Com system

### XLR pin assignment of each intercom

Pin #	RTS™	Clear-Com
Pin-1	GND	GND
Pin-2	CH1 Unbalanced Audio + DC Power (+30V)	DC Power (+30V)
Pin-3	CH2 Unbalanced Audio	Unbalanced Audio

### Settings of the RM-HP250AU

- S301 on the MAIN board is set to "RTS" (Factory default position).



## ■ Connection to a balanced audio Intercom system

### Connection between XLR-3pin and the RM-HP250AU

When connecting to a 2 wire balanced system such as Audio-com ® connect three pin microphone XLRs to the RM-HP250AU as shown in Fig. 3.

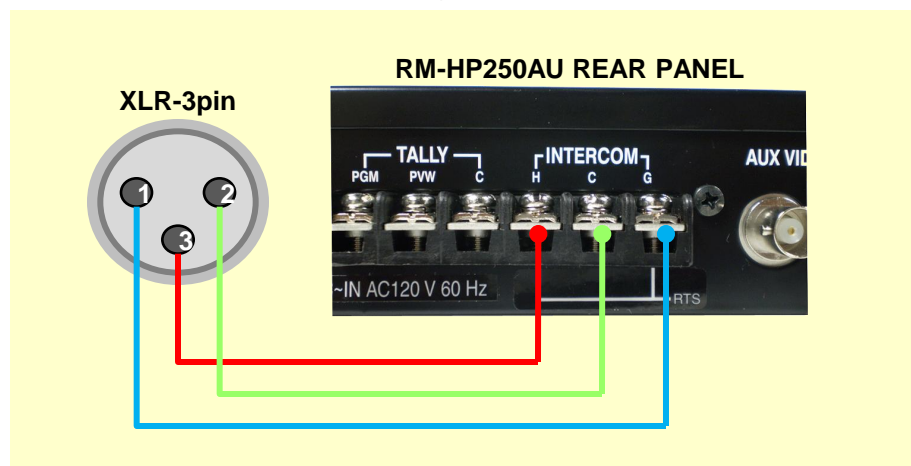


Fig. 3 Audiocom ® system

### XLR pin assignment of each intercom

Pin #	Audiocom
Pin-1	GND
Pin-2	Balanced Audio(C) + DC Power
Pin-3	Balanced Audio(H) + DC Power

### Settings of the RM-HP250AU

- **S301** on the MAIN board is set to “2W” (Side tone adjustment\* is required).

\* Refer on page 1-9 of the RM-HP250AU service manual(No. HC025)

## VF-HP840U: Color Studio View Finder

### Feature:

- 8.4" - 1024 X 768 resolution
- 16:9 mode - 1024 X 576 pixels
- Multi Format monitor –HD/SD 60Hz/50Hz SD RGB, HD/SD CMP, Y,
- 1:1 pixel display mode
- Return video input – B&W: CPS or HD Y
- PWR requirements – 12V, 12W
- 20Pin - Signal/Power input
- Front and rear Tally light
- Power Input – XLR or 20Pin KA-HD250U VF cable

### Built in:

1. Aspect and safety zone markers
2. Customizable Zebra settings
3. Focus assist – Red, Green, Blue

### Included Accessories:

- Hood
- 20Pin KA-HD250U VF cable

### Additional Accessory

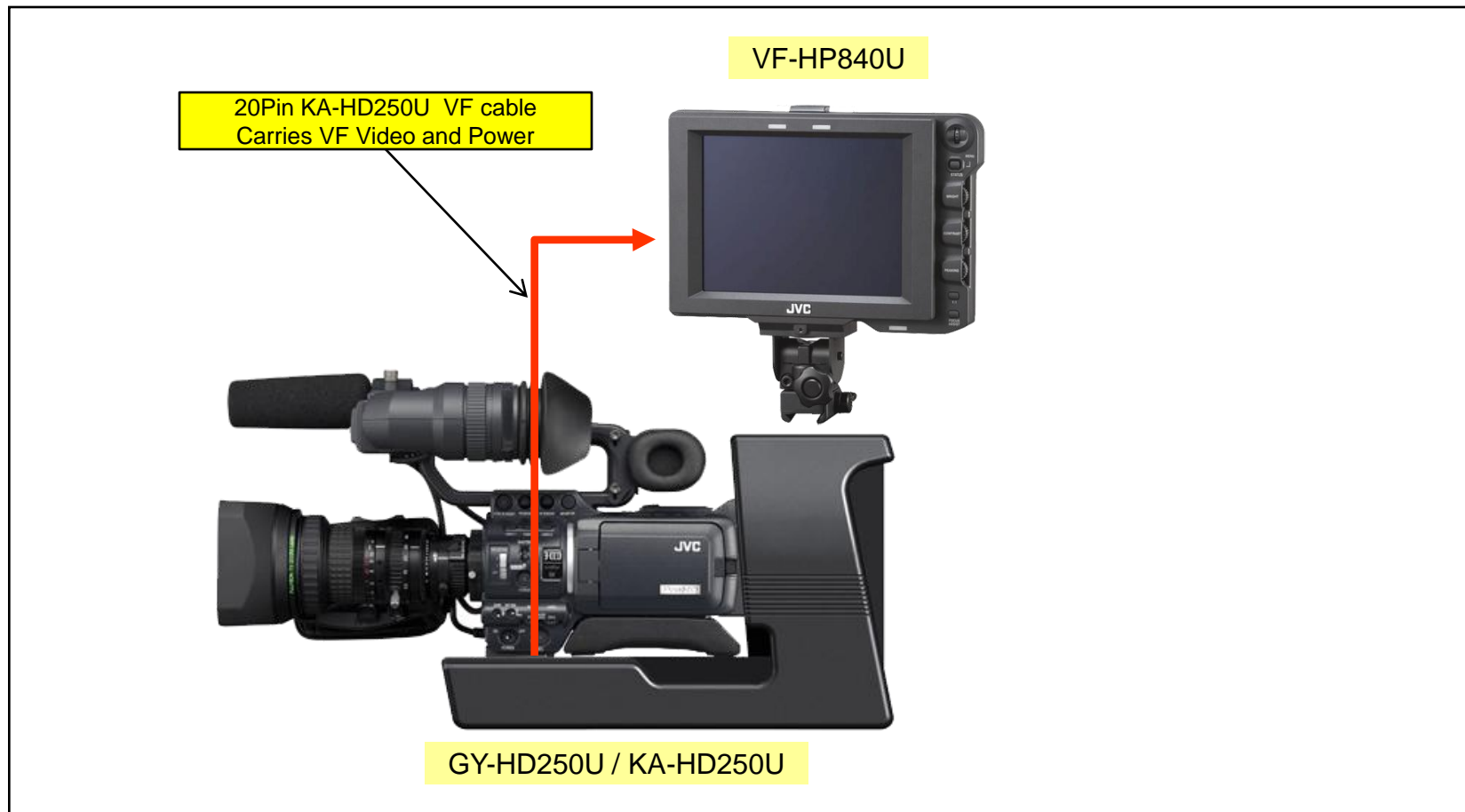
- **VC-P840U:** 20Pin GY-HD250U/GY-HD200UB Viewfinder cable
- **SA-K840:** Viewfinder Bracket
- **VC-Y250US:** Y XLR Power Cable

### Firmware Upgrade:

Firmware upgrade of GY-HD250U is required for the VF-HP840U return video switching and tally display to work. To check if your camcorder has the required firmware visit JVC's professional products website at <http://pro.jvc.com/>; click on the support tab; then click on the firmware update link. Follow the firmware update page instructions.



## ■ VF-HP840U and KA-HD250U Interconnect Diagram

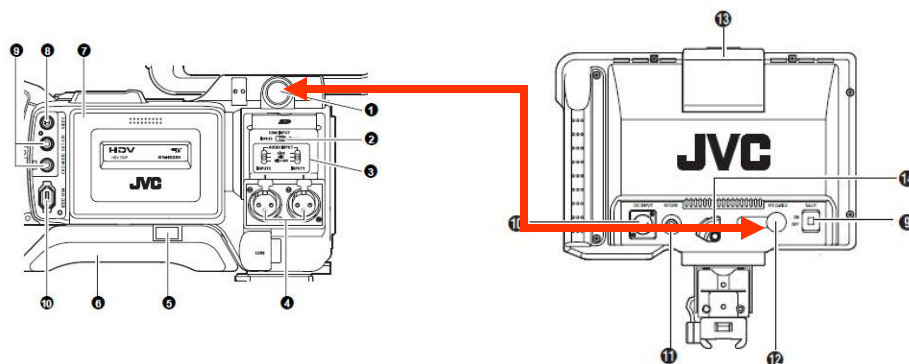


## VC-P840U: 20Pin Viewfinder Cable

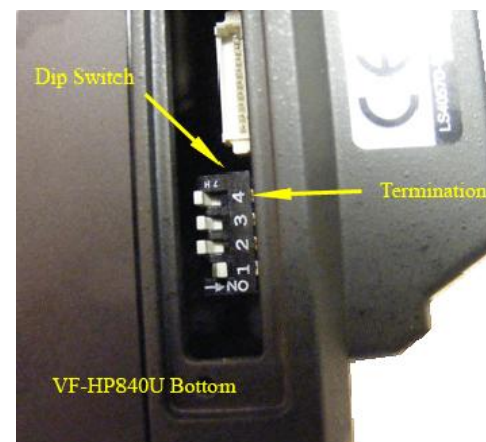
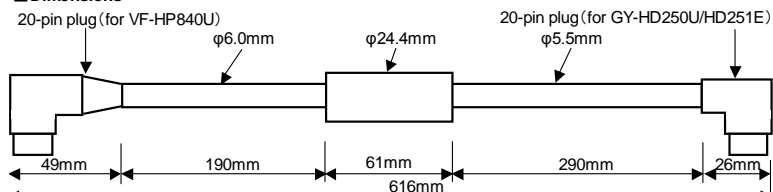
Provides a direct video signal connection between the VF-HP840U and the GY-HD250U/GY-HD200UB without KA-HD250U.

### Required Camcorder and VF-HP840U settings:

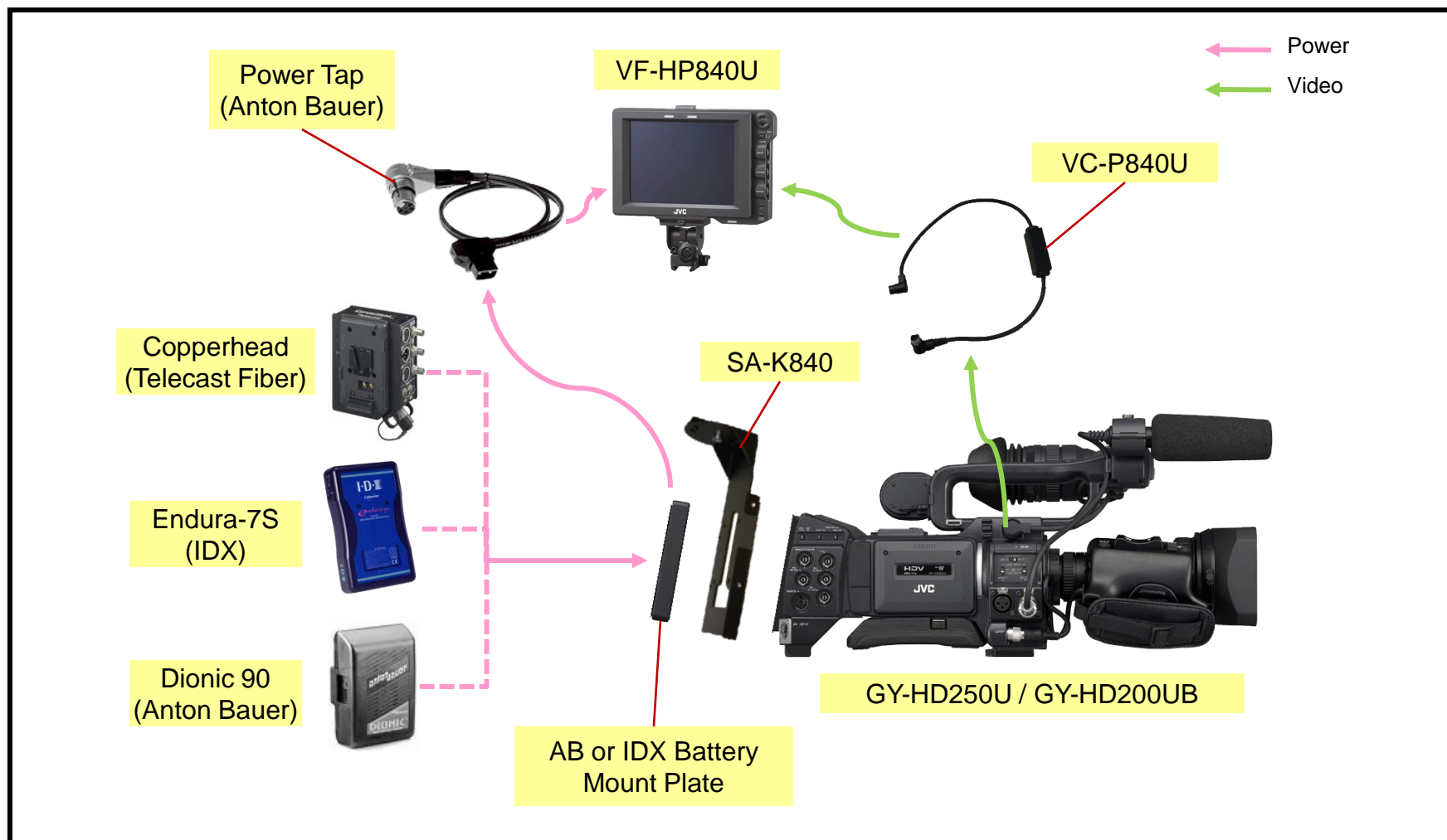
- Set the GY-HD250U/GY-HD200UB Camera's **"VF SIGNAL"** in the **"LCD/VF"** menu to **"COMPONENT"** (GY-HD200U does not have this function).
- Set the VF-HP840U's DIP switch 4 to **"OFF"** position. This terminates the video inputted into the VF-HP840U with 75Ω.



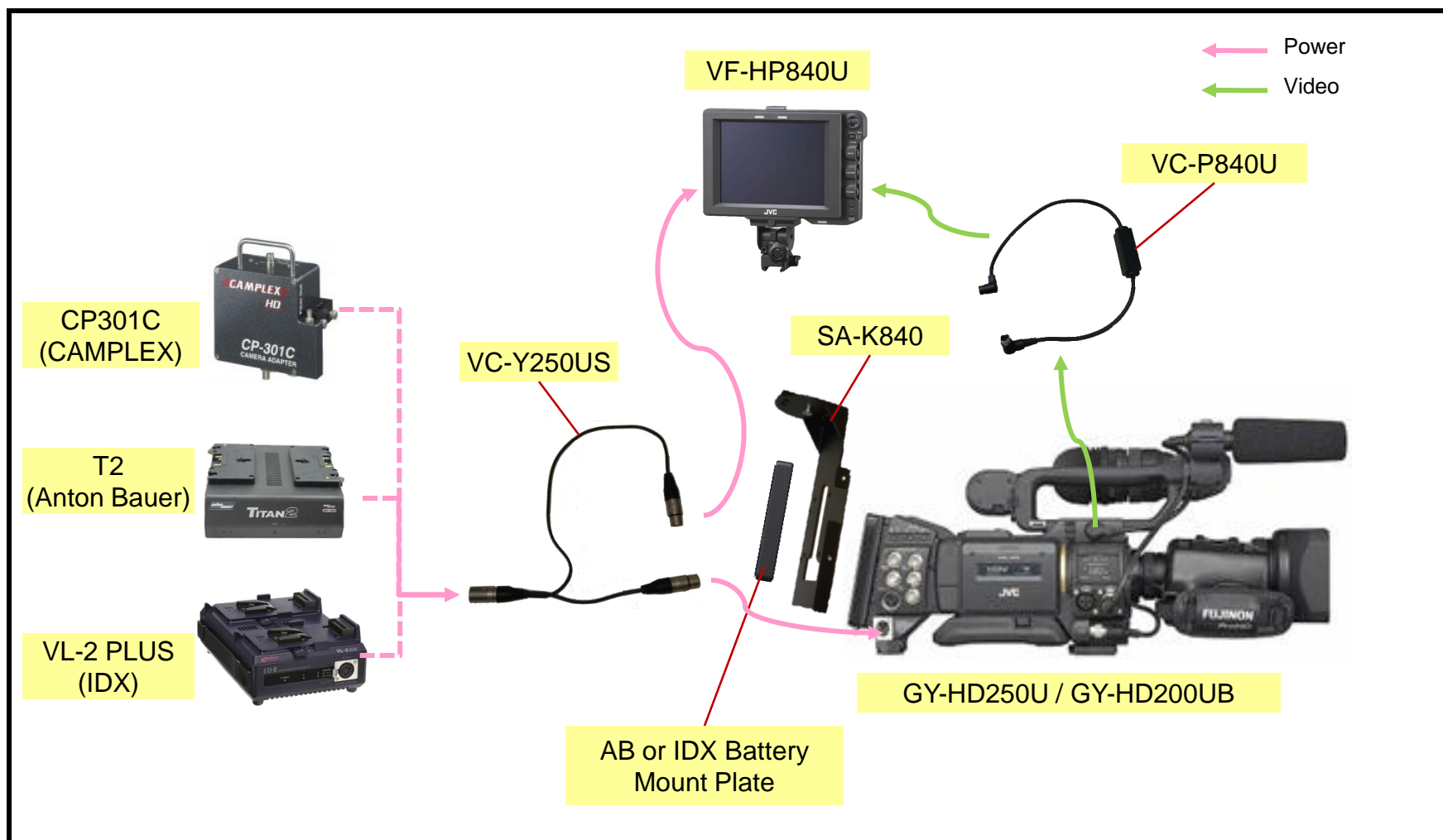
### ■ Dimensions



## ■ Power applied to GY-HD250U/GY-HD200UB via Battery Mount



■ Power applied to GY-HD250U/GY-HD200UB via 4 pin XLR



## **KA-HD300U: Portable HD Studio Adapter**

### **Key Features :**

- Complete mobile 26-pin studio solution for GY-HD250U
- Easy V-mount click-on mounting, small, compact and lightweight
- Intercom and Genlock functionality in SD and HD mode
- Return video support with KA-R25U (Supplied)
- Extra 12V power output for additional camera peripherals
- Horizontal exit position of multi-core cable allows camera to rest upright on a flat surface
- Interfaces with RM-P210U and RM-HP250AU camera control units
- Supports 26-pin multi-core cable over distance up to 300 feet
- Substitute for KA-HD250U in portable application

### **Included Accessories:**

- KA-R25U Return Video Adapter
- JVC-PV (V-mount Battery Plate)
- BNC-BNCx3 (for COMPONENT)
- BNC-BNCx1 (for GENLOCK)
- BNC-RCAx1 (for COMPOSITE)
- DSUB 15pin-DIN 6pin (for REMOTE), Round 10pin (for STUDIO), BNC (for RETURN video) and Wire (for RETURN switch)



**Available Dec. 2008**

## KM-H3000U / KM-H2500U: Multi Format HD-SDI Production Switcher

Available Jan. 2009

### Key Features:

- 12(KM-H3000) / 6(KM-H2500) multi format SDI inputs, 720p, 1080i, 480i
- 3(KM-H3000) / 2(KM-H2500) Keyers
- 4 inputs with frame synchronizers
- 4 up/down converters
- 2 2D DVEs with crop and resize functionality
- 2 internal media store sources with animation support
- Pattern generator with circle and pattern rotation
- Wash generator
- Floating high quality chroma keyer
- 6 HD-SDI outputs; 2 programs, preview, AUX1, AUX2 and AUX3
- Analog composite output
- Sync generator with 3 independently timed outputs
- Remote control using RS-422 and 24 GPI inputs
- 10 memories, 8 tallies
- Positional Joystick (KM-H3000 only)

### Accessories not included:

- Desk / Rack mount frame
- Redundant power supply



**KM-H3000**



## Studio System Components Weight and Power Dissipation List for Tripod Mounted:

Component	Description	Weight [lbs]	Power Dissipation [W]	Note
GY-HD250CHU	Pro HD Camcorder	5.6	23.0	Without lens
GY-HD250U	Pro HD Camcorder	8.4	23.0	With 16X lens
KA-HD250U	Studio Adapter	10.5	6.0	
KA-HD300E	Studio Adapter	2.6	6.0	
VF-P400U	SD 4" B&W monitor CRT	4.0	9.0	SD View Finder
VF-HP840U	8.4" HD/SD Viewfinder	4.4	12.0	
VC-P840U	VF-HP840U to GY-HD250U Viewfinder cable		N.A.	Viewfinder cable for Tripod mount applications
VC-Y250US	Y XLR Power cable		N.A.	Distribute power to VF-HP840U
KA-BP250U	Intermediate plate	0.6	N.A.	Call JVC branch
KA-R25U	Return Video Box	0.2	0.2	
Th 13X3.5BRM	Fujinon Wide Angle		N.A.	
Th 17X5BRM	Fujinon Zoom Lens	2.8	N.A.	
HTs 18x4.2BRM	Fujinon 18x High Quality Lens	3.4	N.A.	
KT20x5BKRS	Canon 20x High Quality Lens	2.6	N.A.	
HZ-FM15U	Manual Focus Control		N.A.	Canon 20X
HZ-FM13U	Manual Focus Control		N.A.	Fujinon 13X, 17X
HZ-FM-500	Manual Focus Control		N.A.	Fujinon 16X
HZ-ZS13U	Zoom Servo Control			Fujinon 13X, 16X, 17X, Canon 20X
MS-11	Zoom & Focus kit Fuji 18X lens			Fujinon 18X
CP701	Part of Camera Adapter	2.5	6.0	
CP301C	Part of Camera Adapter	2.0	6.0	
Q-X2	Anton Bauer Mount plate		N.A.	For mounting CP301C to back of sled
JVC-PV	IDX Mount Plate		N.A.	For mounting CP301C to back of sled
Copperhead	Part of Camera Adapter	1.5	7.0	
Power Plus	150 Watt supply			power module at camera

**End**

**JVC**

The Perfect Experience / —  
/