

# JVC<sup>®</sup>

The Perfect Experience / —  
/

ProHD Fiber Remote System

# FS-790

## ProHD



*Integrated Simplicity*

Picture shows GY-HM790 with KA-F790NG Camera Adapter and KA-PW790AG Power Wafer



FS-790 is marketed under Telecast brand.



## An Integrated Fiber-based System for Remote Applications

Ideal for a range of ENG and EFP applications, the FS-790 fiber optic multiplexing system replaces bulky multicore cables with durable, lightweight fiber cable for robust two-way communication between cameras and control systems.



### **KA-F790 Remote Fiber Adapter**

Ideal for use in studio/EFP applications, the KA-F790 does not require any external cabling and offers a clean interface without clutter.

### **RM-FP790 Fiber Base Station**

Easily integrated into any studio, portable flypack or OB van, the lightweight, 1U rack-mountable Base Station plugs directly into a facility's switcher, router, intercom and house sync systems.





Edge Hill University



WZVN



Ole Miss Athletics & Media Support Group

### Realize full studio functionality for field applications with one single fiber cable

The KA-F790 custom designed camera back transceiver module attaches directly to the GY-HM790 body using a hidden 68-pin connector and enables broadcasters to leverage the GY-HM790's full studio functionality in the field. It connects the camera via SMPTE hybrid (powered) or tactical (unpowered) fiber optic cable to the RM-FP790 CopperHead base station typically located in a control room, flypack or OB van.



# Professional System Solutions for a Range of Remote Applications

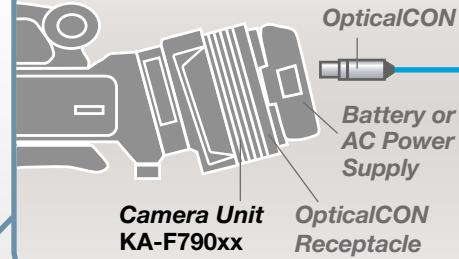
The JVC ProHD fiber systems include a camera adapter (for the GY-HM790) and base station, with either RTS intercom or CC (Clear-Com) compatibility. Additionally all units have a standard 4-Wire intercom interface. Two types of fiber connections options are offered, Neutrik OpticalCON connectors (powered or unpowered) and SMPTE 304M (powered).



Picture shows GY-HM790 with KA-F790NG Camera Adapter and KA-PW790AG Power Wafer

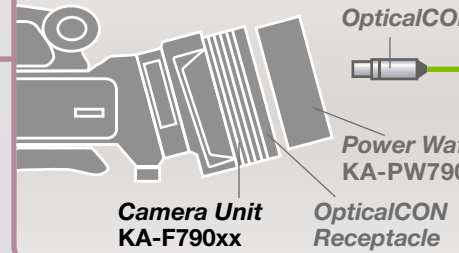
## Unpowered Tactical Fib

Offering up to 10km (6.2 miles) on



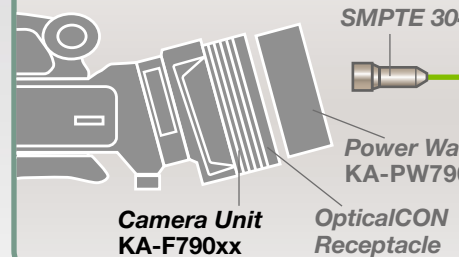
## Powered Hybrid Fiber S

Offering up to 500m (1640 feet) on

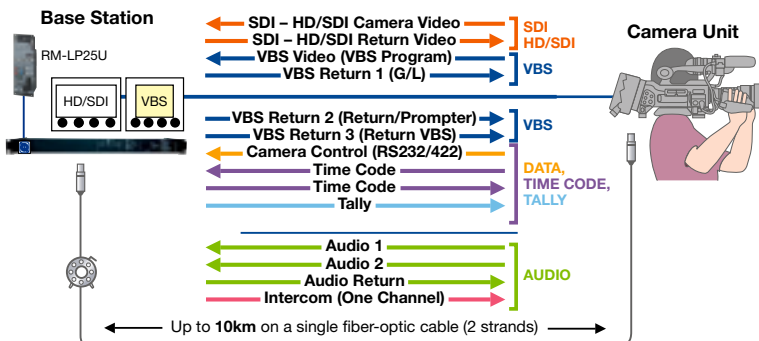


## Powered Hybrid Fiber S

Offering up to 500m (1640 feet) on



Offers a direct connection to the camcorder without requiring external cables

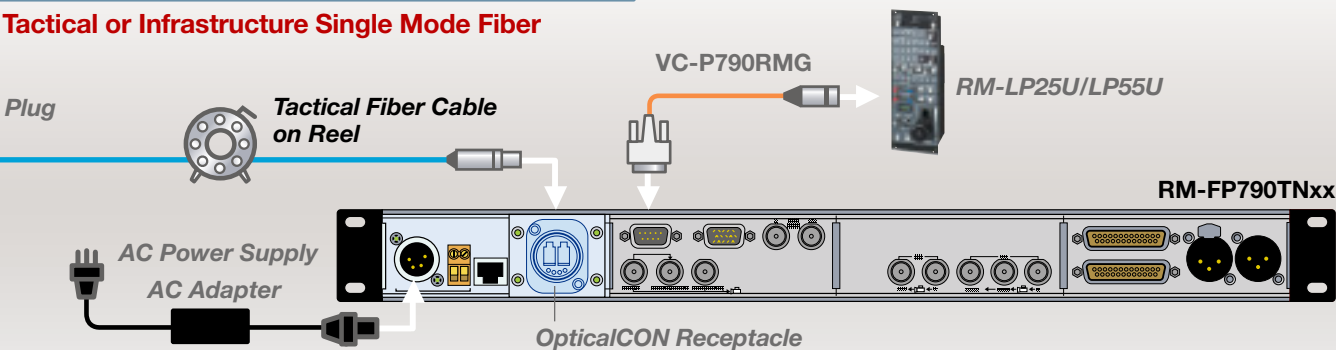


One single fiber cable covers all signals necessary in ENG and EFP applications

The system simultaneously transports bidirectional digital (SDI or HD-SDI) and analog (NTSC or PAL) video, as well as all two-way camera control, audio, video, data, sync, tally/call, prompter, and intercom signals between the camera head and the remote Base Station. The lightweight, 1 RU RM-FP790 Base Station is easily integrated into any studio, mobile truck, or portable flypack — and plugs directly into a facility's switcher, router, intercom, and house sync systems.

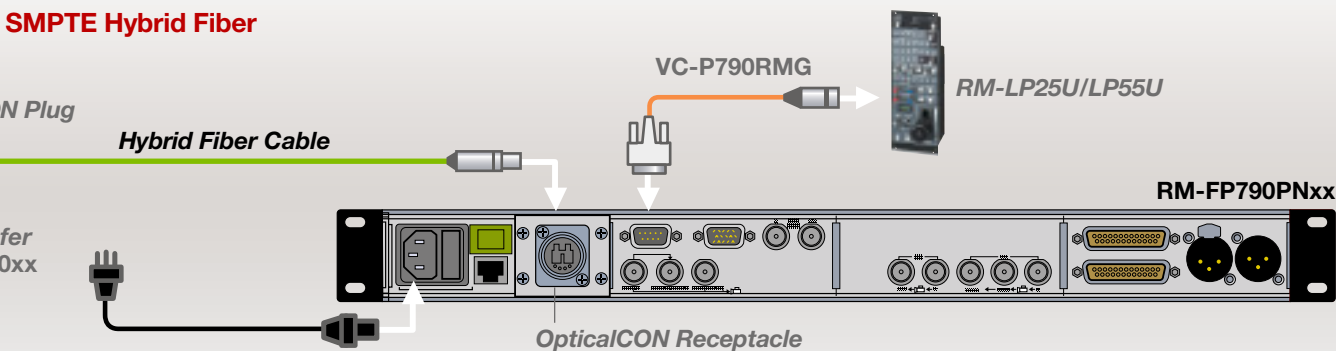
## er Solution for Extended Distances

### Tactical or Infrastructure Single Mode Fiber



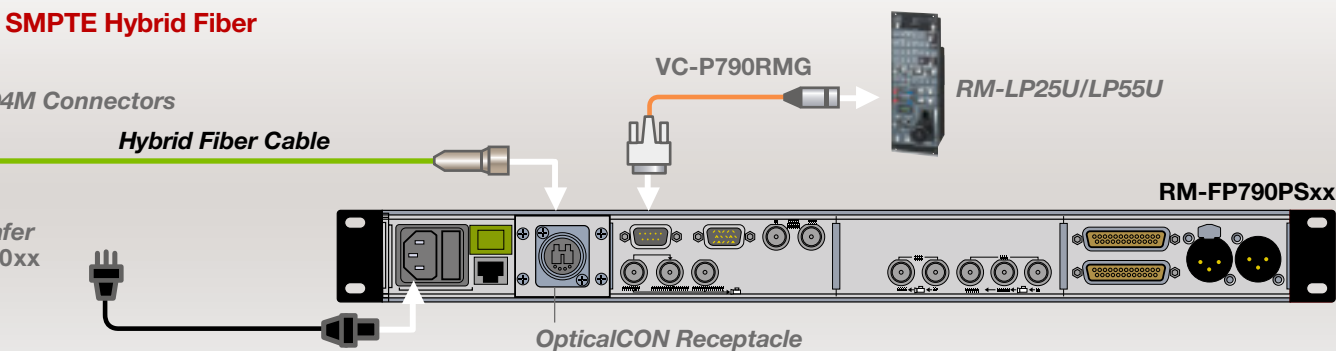
## olution with OpticalCON Connectors

### SMPTE Hybrid Fiber



## olution with SMPTE 304M Connectors

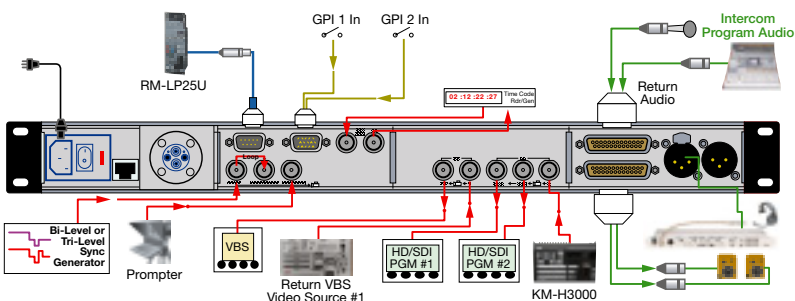
### SMPTE Hybrid Fiber



## Full Control through Extended Base Station Connections

Designed for total integration with existing systems, the RM-FP790 base station offers complete connections for video (two HD/SDI outputs with return SDI and VBS connections for analog signals), audio (RTS TW intercom module) and sync/control functions (bi-level or tri-level sync, prompter input, time code, GPI signals and remote camera control input), providing unprecedented control for a range of field applications.

### RM-FP790xxxx Base Station Connections



Specifications Available with Each System

Type		FS-790TNRG	FS-790TNCG	FS-790PNARG	FS-790PNACG	FS-790PNVRG	FS-790PNVCG	FS-790PSARG	FS-790PSACG	FS-790PSVRG	FS-790PSVCG
Camera Adapter	KA-F790NG	●	●	●	●	●	●				
	KA-F790SG							◆	◆	◆	◆
Base Station	RM-FP790TNRG	●									
	RM-FP790TNCG		●								
	RM-FP790PNRG			●		●					
	RM-FP790PNCG				●		●				
	RM-FP790PSRG							◆		◆	
RM-FP790PSCG								◆		◆	
Power Wafer	KA-PW790AG			■	■			■	■		
	KA-PW790VG					■	■			■	■
Power Supply	AA-FP790G	■	■								
Remote Cable	VC-P790RMG	■	■	■	■	■	■	■	■	■	■

Optional Fiber Cable and Connector Type

Fiber Cables	
FS-CABTAC100	100 feet Tactical Cable/OpticalCON Connector
FS-CABTAC200	200 feet Tactical Cable/OpticalCON Connector
FS-CABTAC500	500 feet with reel Tactical Cable/OpticalCON Connector
FS-CABTAC1000	1000 feet with reel Tactical Cable/OpticalCON Connector
FS-CABTAC2000	2000 feet with reel Tactical Cable/OpticalCON Connector
FS-CABHYB100	100 feet Hybrid Cable/OpticalCON Connector
FS-CABHYB200	200 feet Hybrid Cable/OpticalCON Connector
FS-CABHYB500	500 feet Hybrid Cable/OpticalCON Connector
FS-CABHYB700	700 feet Hybrid Cable/OpticalCON Connector
FS-CABHYB100S	100 feet Hybrid Cable/SMPTE304M Connector
FS-CABHYB200S	200 feet Hybrid Cable/SMPTE304M Connector
FS-CABHYB500S	500 feet Hybrid Cable/SMPTE304M Connector
FS-CABHYB700S	700 feet Hybrid Cable/SMPTE304M Connector

●	Round = Neutrik plug
◆	Diamond = SMPTE plug
■	Square = Plug type irrelevant
■ ◆ ●	Green = Anton Bauer mount
■ ◆ ●	Red = IDX mount
■ ◆ ●	Black = Battery type irrelevant
	White field = RTS intercom
	Greyed field = ClearCom intercom

## Specifications

### Video, Digital (bi-directional)

Interface: SMPTE 259M, 292M  
 Data Rate: 270Mbps or 1.5Gbps  
 Input Level: 800mV (peak to peak)  
 Input/Output Impedance: 75Ω  
 Output Impedance: 75Ω  
 Bit-Error Rate (@ -22 dBm): 10 – 12  
 Jitter (pathological data): < 0.2UI  
 Rise/Fall Times: < 270ps

### Video, Analog (bi-directional)

Interface: RS170, NTSC, PAL  
 Frequency Response  
 30Hz - 4.2MHz: ±0.15dB  
 8MHz: -3dB  
 Video Signal to Noise Ratio: ≥ 72dB  
 Differential Gain: < 2%  
 Differential Phase: < 1°

### Audio

Number of Channels: 1 – 2  
 Type: Balanced, Line Level  
 Impedance: >15KΩ  
 Maximum Input Level: 24dBμ  
 Quantization: 24bits, 128x (oversampled)  
 Sample Rate: 48kS/sec.  
 Frequency Response: ±0.1dB, 20Hz to 20KHz

### Intercom

Number of Channels: 1  
 Interface Types (Base): RTS or Clear-Com and 4-Wire  
 Frequency Response: 200 – 18KHz ± 3dB  
 Max Distortion: ≤ 0.5%  
 Noise: < -60dBμ  
 Max Gain (RTS or Clear-Com): ≥ 24dB  
 Min Gain (RTS or Clear-Com): ≤ -45dB

### Electro-Optical

Operating Wavelengths: 1300nm/1550nm  
 TX Laser Output Power (std./opt): -6dBm/0dBm  
 RX Sensitivity, HD/SDI: -22 dBm  
 Fiber Compatibility: Single Mode

### Mechanical/Environmental

Dimensions (W x L x D):  
 Camera Unit: 2.5" x 6.5" x 2.2"/6.35 x 16.51 x 5.58 cm  
 Base Station: 17.5" x 9" x 1.75"/44.45 x 22.86 x 4.44 cm  
 Power Wafer: 5" x 6.12" x 2.2"/12.7 x 15.54 x 5.58 cm

### Weight:

Camera Unit: 1.5 lbs./0.68 kg  
 Base Station: 5.0 lbs./2.27 kg  
 Power Wafer: 1.5 lbs./0.68 kg

### Power Consumption

Camera Unit: 8 watts@10-18VDC  
 Base Station (Tac Fiber): 10 watts@10-18VDC  
 Temperature Range: -25° to +55°C  
 Humidity Range: 0 to 95% RH, Non-condensing

Product and company names mentioned here are trademarks or registered trademarks of their respective owners

Simulated pictures.  
 The values for weight and dimensions are approximate.  
 E.&O.E. Design and specifications subject to change without notice.



DISTRIBUTED BY



JMI-0181



091

Business Solution Division of Victor Company of Japan, Ltd. has received ISO9001 Certifications.