Integrated Simplicity

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

The FS-790 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 digital (bi-directional) fiber optic cable to the RM-FP790 base station typically located in a control room, flypack or OB van. 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.

Specifications

<table>
<thead>
<tr>
<th>Fiber Cable Type</th>
<th>Max Distance (m)</th>
<th>Connector Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS-CABHYB700S</td>
<td>700</td>
<td>OptiCON</td>
</tr>
<tr>
<td>FS-CABHYB500S</td>
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<td>FS-CABHYB200S</td>
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<td>FS-CABHYB100S</td>
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</tr>
<tr>
<td>FS-CABTAC2000</td>
<td>2000</td>
<td>Tactical</td>
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<tr>
<td>FS-CABTAC1000</td>
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<td>Tactical</td>
</tr>
<tr>
<td>FS-CABTAC500</td>
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<tr>
<td>FS-CABTAC200</td>
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<td>Tactical</td>
</tr>
<tr>
<td>FS-CABTAC100</td>
<td>100</td>
<td>Tactical</td>
</tr>
</tbody>
</table>

Frequency Response:

- +3dB: 8MHz
- -3dB: 30Hz - 4.2MHz

Quantization: 24 bits, 20Hz to 20KHz

Max Input Level: 24dB

Impedance: >15K

Type: Balanced, Line Level

Number of Channels: 1 – 2

Differential Phase: < 1

Differential Gain: < 2%

Video Signal to Noise Ratio:

- 48dB: 8MHz
- 20dB: 30Hz - 4.2MHz

Interface: RS170, NTSC, PAL

Rise/Fall Times: < 270ps

Jitter (pathological data): < 0.2UI

Bit-Error Rate (@ -22 dBm): 10 – 12

Output Impedance: 75

Input/Output Impedance: 75

Input Level: 800mV (peak to peak)

Data Rate: 270Mbps or 1.5Gbps

Interface: SMPTE 259M, 292M

Specifications Available with Each System

- Remote Cable
- Power Supply
- Power Wafer
- Base Station
- Adapter
- Camera

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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 7-pin Hirose interface. Two types of fiber connections options are offered, Neutrik OpticalCON connectors (powered or unpowered) and SMPTE 304M (powered).

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 camera and control systems.

One single fiber cable covers all signals necessary in ENG and EFP applications. The system simultaneously transports bi-directional digital (SDI or HD-SDI) and analog (NTSC or PAL) video, as well as all two-way camera control, audio, video, data, sync, tally signals and other camera control signals to a remote Base Station.

Unpowered Tactical Fiber Solution for Extended Distances

Offering up to 10km (6.2 miles) on Tactical or Infrastructure Single Mode Fiber

Proposal:

- JVC ProHD fiber systems
- GY-HM790 camera adapter
- RM-FP790U Base Station
- KA-F790NG Camera Adapter
- KA-PW790AG Power Wafer
- VC-P790RMG Tactical Fiber Cable
- RM-LP25U/LP55U OpticalCON Plug

Powered Hybrid Fiber Solution with OpticalCON Connectors

Offering up to 500m (1640 feet) on SMPTE Hybrid Fiber

Proposal:

- JVC ProHD fiber systems
- GY-HM790 camera adapter
- RM-FP790PN Base Station
- KA-F790NG Camera Adapter
- KA-PW790AG Power Wafer
- VC-P790RMG Hybrid Fiber Cable

Full Control through Extended Base Station Connections

Designed for full integration with existing systems, the RM-FP790U base station offers complete connections for video (SDI, HD-SDI), audio (2-way), intercom and remote control data (for all SDI and HD-SDI systems) in a range of field applications.
Realize full studio functionality for field applications with one single fiber cable.

The FS-790 is a custom designed camera-back transceiver module that connects to the RM-FP790, typically located in a control room, flypack or OB van. It connects via SMPTE hybrid (powered) or over tactical (unpowered) fiber optic cable to the RM-FP790. It leverages the GY-HM790’s full studio functionality in the field.

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 realize full studio functionality for field applications with one single fiber cable.

**Specifications**

- **Remote Cable**
  - FS-CABHYB700S: 700 feet Hybrid Cable/SMPTE304M Connector
  - FS-CABHYB700: 700 feet Hybrid Cable/OpticalCON Connector
- **Power Supply**
  - FS-CABTAC2000: 2000 feet with reel Tactical Cable/OpticalCON Connector
  - FS-CABTAC1000: 1000 feet with reel Tactical Cable/OpticalCON Connector
- **Power Wafer**
  - FS-CABTAC500: 500 feet with reel Tactical Cable/OpticalCON Connector
  - FS-CABTAC200: 200 feet Tactical Cable/OpticalCON Connector
  - FS-CABTAC100: 100 feet Tactical Cable/OpticalCON Connector

**Audio**

- Frequency Response: 80Hz to 20kHz
- Sample Rate: 48kS/sec.
- Quantization: 24bits, 128x (oversampled)
- Maximum Input Level: 24dB
- Impedance: >15K
- Type: Balanced, Line Level
- Number of Channels: 1 – 2
- Differential Phase: < 1
- Differential Gain: < 2%

**Video**

- Frequency Response
  - 8MHz: -3dB
  - 30Hz - 4.2MHz: ±0.15dB
  - ±6dB
  - 8MHz: ±0.5%
- Interface: RS170, NTSC, PAL
- Rise/Fall Times: < 270ps
- Jitter (pathological data): < 0.2UI
- Bit-Error Rate (@ -22 dBm): 10 – 12
- Output Impedance: 75
- Input Level: 800mV (peak to peak)
- Data Rate: 270Mbps or 1.5Gbps
- Interface: SMPTE 259M, 292M
- Operating Wavelengths: 1300nm/1550nm
- RX Sensitivity, HD/SDI: -22 dBm
- TX Laser Output Power (std./opt): -6dBm/0dBm
- Fiber Compatibility: Single Mode
- Fiber Cables

**Electro-Optical**

- Max Distortion: 24dB
- Frequency Response: 200 – 18KHz
- Interface Types (Base): RTS or Clear-Com and 4-Wire
- Number or Channels: 1
- Max Gain (RTS or Clear-Com): 24dB
- Noise: < -60dB
- Min Gain (RTS or Clear-Com): -45dB
- Power Consumption
  - Base Station (Tac Fiber): 10 watts@10-18VDC
  - Camera Unit: 8 watts@10-18VDC
- Weight:
  - Power Wafer: 1.5 lbs./0.68 kg
  - Base Station: 5.0 lbs./2.27 kg
  - Camera Unit: 2.5" x 6.5" x 2.2"/6.35 x 16.51 x 5.58 cm
- Dimensions (W x L x D):
  - Power Wafer: 5" x 6.12" x 2.2"/12.7 x 15.54 x 5.58 cm
  - Base Station: 17.5" x 9" x 1.75"/44.45 x 22.86 x 4.44 cm
  - Camera Unit: 2.5" x 6.5" x 2.2"/6.35 x 16.51 x 5.58 cm

**Mechanical/Environmental**

- Temperature Range: -25°C to +55°C
- Humidity Range: 0 to 95% RH, Non-condensing
- Frequency Response: 20Hz to 20KHz
- ±0.1dB, 20Hz to 20KHz
- ±0.5%
- ±6dB
- ±3dB

**Integrated Simplicity**

Realtime full studio functionality for field applications with one single fiber cable.

The FS-790 is a custom designed camera-back transceiver module that connects to the RM-FP790, typically located in a control room, flypack or OB van. It connects via SMPTE hybrid (powered) or over tactical (unpowered) fiber optic cable to the RM-FP790. It leverages the GY-HM790’s full studio functionality in the field.

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 realize full studio functionality for field applications with one single fiber cable.
An Integrated Fiber-based System for 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 an external fiber intercom interface. Two types of fiber connections options are offered, Neutrik OpticalCON connectors (powered or unpowered) and SMPTE 304M connectors.

Professional System Solutions for a Range of 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.

Full Control through Extended Base Station Connections

Designed for full integration with existing systems, the RM-FP790 base station offers complete connections for video (two HD-SDI), 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.

Unpowered Tactical Fiber Solution for Extended Distances

Offering up to 10km (6.2 miles) on Tactical or Infrastructure Single Mode Fiber

Powered Hybrid Fiber Solution with OpticalCON Connectors

Offering up to 500m (1640 feet) on SMPTE Hybrid Fiber

Powered Hybrid Fiber Solution with SMPTE 304M Connectors

Offering up to 500m (1640 feet) on SMPTE Hybrid Fiber

One single fiber cable covers all signals necessary in ENG and EFP applications. The system simultaneously transports bi-directional 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.
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 OpticalCON fiber interface. Two types of fiber connections options are offered, Neutrik OpticalCON connectors (powered or unpowered) and SMPTE 304M (powered).

An Integrated Fiber-based System for Remote Applications

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

RM-LP25U
RM-FP790xxxx Base Station Connections

Power Wafer
KA-PW790xx
OpticalCON Receptacle
RM-FP790xx
OpticalCON Receptacle

Offers a direct connection to the camcorder without requiring external cables

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

Full Control through Extended Base Station Connections

The system simultaneously transmits bi-directional digital (SDI or HD-SDI) and analogue (NTSC or PAL) signals, as well as all two-way camera control, audio, video, data, sync, tally, intercom, and even GPI signals.

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

RM-LP25U/LP55U

Proprietary System Solutions for a Range of Remote Applications

Unpowered Tactical Fiber Solution for Extended Distances

Offering up to 10km (6.2 miles) on Tactical or Infrastructure Single Mode Fiber

Powered Hybrid Fiber Solution with OpticalCON Connectors

Offering up to 500m (1640 feet) on SMPTE Hybrid Fiber

Powered Hybrid Fiber Solution with SMPTE 304M Connectors

Offering up to 500m (1640 feet) on SMPTE Hybrid Fiber

RM-LP25U/LP55U

RM-LP25U

Ideal for use in studio/EFP applications, the KA-F790 does not require any external cables and offers a clean interface without clutter.
CopperHead base station typically located in a control tactical (unpowered) fiber optic cable to the RM-FP790. It connects the camera via SMPTE hybrid (powered) or leverages the GY-HM790’s full studio functionality in the field. 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 realize full studio functionality for field applications with one single fiber cable.