

# Panasonic

ideas for life

Digital TRIAX Transmission System

AJ-BS901  
Digital Triax Base Station

AJ-CA901  
Digital Triax Camera Adaptor

## DIGITAL TRIAX TRANSMISSION



### High-Quality, Long-Distance Digital Transmission for Sports Relay Broadcasting and Event Recording

#### **Digital Transmission — Outstanding Quality, High Reliability**

This system provides high-quality digital transmission of non-compressed 10-bit 4:2:2 images. Because the system is digital, transmission characteristics are not affected by temperature or the earth's magnetism and do not change over time. Lengthening the cable does not degrade the video signal. The result is high quality, reliable operation, and less maintenance.

#### **Easy to Mount Camera Adaptor**

The adaptor mounts to the camera/recorder's back with a single touch. You can switch quickly and easily between standalone and remote operation.

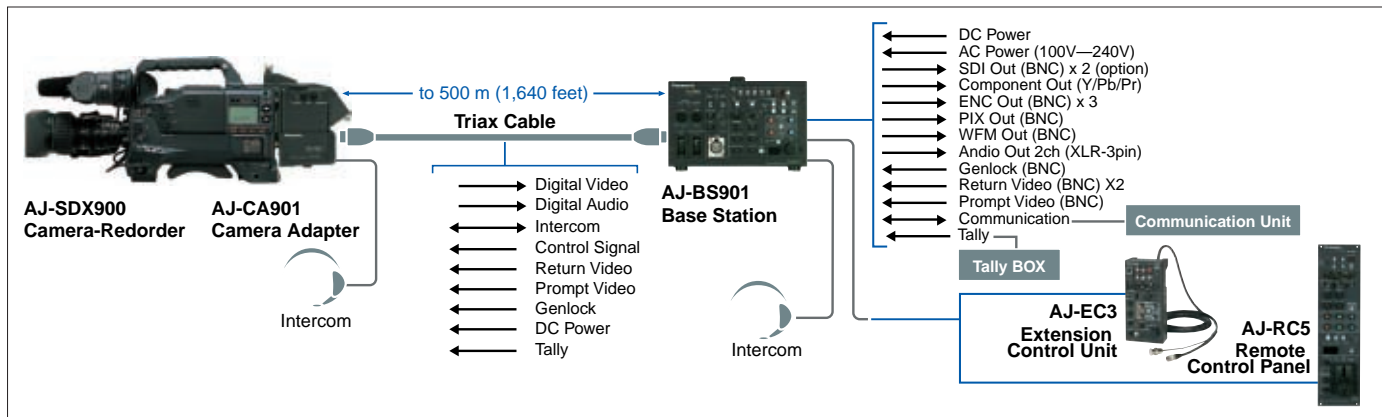
#### **Data Transmission and Remote Operation to 500 m (1,640 feet)\***

The cable between camera/recorder and base station can be extended to 500 m (1,640 feet)\*, with video and audio transmission, remote camera/recorder operation (including camera set-up), and supply of DC power all possible. Intercom, return video, and prompt video functions are also provided.

\*Using cable with 14.5-mm diameter.

#### **A Variety of Outputs, Including SDI**

Mounting the optional AJ-YA901P SDI Output Board to the base station allows serial digital output, for use with a D-5 VTR or DVCPRO50 VTR for component digital production. Analog outputs include component, composite (ENC), PIX and WFM.



## DIGITAL TRIAX SYSTEM SPECIFICATIONS

### Transmission System

#### Transmission

Signal Transmission Rate:	360 Mbps
Transmission Distance:	300 m (984 feet) with ø8.6 cable (Fujikura) 500 m (1,640 feet) with ø14.5 cable (Fujikura)
Connector Type:	NTSC: Kings Type PAL: Fischer Type

#### Video Signal

Y:	18 MHz Sample Rate, 10-bit
R-Y:	9 MHz Sample Rate, 10-bit
B-Y:	9 MHz Sample Rate, 10-bit
RET:	FM Modulation Format
Prompt:	FM Modulation Format

#### Audio Signal

Camera to Base Station:	46.875 kHz Sample Rate, 16-bit
Base Station to Camera:	11.71875 kHz Sample Rate, 16-bit

#### Intercom

Mic Input:	Dynamic Mic/Carbon Mic
Input/Output Level:	4-wire/2-wire: 0 dBm (600 Ω balanced) RTS: 1 Vp-p (200 Ω) PGM: 0 dB (600 Ω balanced)
Format:	4-wire/2-wire/RTS Switchable
Line:	BS to Camera x 2 (ENG, PGM) Camera to BS x 1 (ENG)

### AJ-CA901 Camera Adaptor

Input Voltage:	100V±10% DC (supplied from AJ-BS901), 450mA 12V DC (11.5V to 17V/supplied from EXT DC input), 3.2 A
Power Consumption:	40W (including camera and 1.5" VF) 10W (only AJ-CA901)
Dimensions (W x H x D):	156 x 200 x 168 mm (6-3/16" x 7-7/8" x 6-5/8")
Weight:	2.5 kg (5.5 lbs.)
Operating Temperature:	32 °F to 104 °F (0 °C to 40 °C)
Storage Temperature:	4 °F to 140 °F (-20 °C to +60 °C)
Operating Humidity:	less than 85 %
Prompt Video Output:	1.0 Vp-p (when 1.0 Vp-p Input to AJ-BS901)

RET Video Output:	1.0 Vp-p (when 1.0 Vp-p Input to AJ-BS901)
Input Connector:	Intercom: XLR 5-pin External DC In: XLR 4-pin RET SW: 8-pin
Output Connector:	Prompt Video: BNC VBS, 1Vp-p, 75Ω EXT Out: XLR 4-pin RET Video: BNC VBS, 1Vp-p, 75Ω PGM Audio: XLR 3-pin

### AJ-BS901 Base Station

#### General

Input Voltage:	NTSC: 120 V ±10 %AC, 50/60 Hz, 180 W PAL: 220 to 240 VAC, 50/60 Hz, 170 W 12V DC (11 V to 17 V/supplied from EXT DC supply), 12 A
Power Supply:	100 V DC, 850 mA
Dimensions (W x H x D):	211 x 151 x 456 mm (8-5/16" x 6" x 18")
Weight:	9.6 kg (21.2 lbs.)
Operating Temperature:	32 °F to 104 °F (0 °C to 40 °C)
Storage Temperature:	4 °F to 140 °F (-20 °C to +60 °C)
Operating Humidity:	less than 85 %

#### Analog Video Output

Frequency Response:	NTSC: 60Hz to 8MHz (±3 dB), (Y, ENC) PAL: 50Hz to 8MHz (±3 dB)
Frequency Response:	NTSC: 60Hz to 4MHz (±3 dB), (PR, PB) PAL: 50Hz to 4MHz (±3 dB)
Component Signal:	Y, PR, PB/G, R, B switchable
SYNC:	Y/G (with SYNC/without SYNC switchable)
PR, PB/R, B:	without SYNC
Signal Level:	ENC: VBS, 1.0 Vp-p, 75 Ω Y: VS, 1.0 Vp-p, 75 Ω PR, PB: 757 m (NTSC), 525 m (PAL) Vp-p, 75 Ω G: VS, 1.0 Vp-p, 75 Ω R, B: 714 m (NTSC), 700 m (PAL) Vp-p, 75 Ω WFM: VS, 1.0 Vp-p, 75 Ω PIX: VS, 1.0 Vp-p, 75 Ω

#### Analog Mic Output

Output Level:	0 dBm (0/-20 dBm switchable)
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#### Analog Video Input

Genlock Input:	VBS: 1.0 Vp-p, 75 Ω, active BBS: 0.45 Vp-p, 75 Ω, active
RET1, RET2 Input:	VBS: 1.0 Vp-p, 75 Ω, active
Prompt Input:	VBS: 1.0 Vp-p, 75 Ω, active

#### Tally

Input:	Red Tally/Green Tally, Contact/DC voltage supply, switchable
Output:	Red tally/Green Tally (Open Collector) DC 12V (Max 10 mA)

#### Sync Signal

Standard:	SMPT E 170 M (NTSC), ITU-R601 (PAL)
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#### Input Connector

Genlock Input:	BNC, 75 Ω Bridge
RET1, RET2:	BNC, 75 Ω Bridge
Prompt Input:	BNC, 75 Ω Bridge
Tally Input:	5-pin (balanced)
Communication:	24-pin
EXT DC Input:	XLR 4-pin
AC Input:	3-pin

#### Output Connector

ENC Output:	BNC x 3, 75 Ω
Component Output:	BNC x 3, 75 Ω
PIX Output:	BNC x 1, 75 Ω
WFM Output:	BNC x 1, 75 Ω
Audio Output:	XLR 3-pin x 2, 600 Ω (balanced)
Tally Output:	5-pin, Open Collector (LOW within Tally Input)
WFM Control:	7-pin

#### AJ-YA901 Optional SDI Board

SDI Output:	BNC x 2, 75 Ω (Serial Digital Component)
Dimensions(W x H x D):	235 x 100 x 10 mm (9-1/4" x 3-15/16" x 7/16")
Weight:	0.2 kg (0.44 lbs.)

Weight and dimensions shown are approximate. Specifications are subject to change without notice. These products may be subject to export regulations.

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