

01. Supply, Installation and Commissioning of the Live Studio Multi cam A/V Recording System – (01 No.)

02.1. Video Switcher

NO	Minimum Technical Specifications of the Video Switcher	Bidder's Response (Yes/No)	Any Remarks
Connections			
01.	Video Inputs	10 x 10-bit SD/HD/Ultra HD 4K switchable	
02.	Video Outputs	1 x Ultra HD 4K to HD 2 x SDI	
03.	Aux Outputs	3	
04.	HDMI Video Input	1 x HDMI type A. 10-bit SD/HD/Ultra HD 4K switchable.	
05.	HDMI Program Outputs	1 x HDMI type A, 10-bit SD/HD/Ultra HD 4K switchable.	
06.	SDI Preview Output	1 x 10-bit SD/HD/Ultra HD 4K switchable.	
07.	SDI Rates	270Mb, 1.5G, 3G, 6G	
08.	Control Panel Connection	Ethernet supports 10/100/1000	
09.	Total Audio Inputs	2 x XLR & 2 x RCA.	
10.	Total Audio Outputs	2 x XLR Program.	
11.	SDI Audio Outputs	2 Chanel embedded into SDI output	
12.	Tally Output	Added via Ethernet connection to GPI and Tally Interface product	
13.	Reference Input	Tri-Sync or Black Burst	
14.	Computer Interface	1 x USB 2.0 port.	
15.	04 Nos. 40m long Coax cable with BNC Connector for connect camera & vision mixer		
16.	02 Nos. HDMI Cable for connect Multi Viewer out to Video Monitor		
Standards			
17.	SD Video Standards	525i59.94 NTSC, 625i50 PAL	
18.	HD Video Standards	720p50, 1080p25, 1080p50, 1080i50	
19.	SDI Compliance	SMPTE 259M, SMPTE 292M, SMPTE 424M.	
20.	Video Sampling	4:2:2.	
21.	Color Precision	10-bit	

22.	Color Space	REC 601, REC 709, REC 2020.		
23.	HDMI Input Resolutions for Computers	720 x 576i 50Hz, 1280 x 720 50Hz, 1920 x 1080 50Hz, 3840 x 2160 25Hz,		
Product Specifics				
24.	Upstream Keyers	4 with Chroma/Linear/Luma key.		
25.	Downstream Keyers	2		
26.	Chroma Keyers	4		
27.	Linear/Luma Keyers	7		
28.	Transition Keyer(Stinger/DVE)	1 Stinger, 1 DVE.		
29.	Total Number of Layers	8		
30.	Pattern Generators	7		
31.	Color Generators	2		
32.	DVE with 3D Borders & Drop Shadow	1		

Media-Player				
33.	Media-Players	2		
34.	Channels	Fill and key for each media-player.		
35.	Media Pool Still Image Capacity	32 with fill and key.		
36.	Media Pool Clip Capacity	2 with fill and key.		
37.	media-player Clip Length in 720 HD	1600 frames.		
38.	media-player Clip Length in 1080 HD	720 frames.		
39.	media-player Clip Length in Ultra HD	180 frames		
40.	Maximum Clip Length in NTSC/PAL	3600 frames.		
41.	Media Pool Still Image Format	PNG, TGA, BMP, GIF, JPEG and TIFF.		
42.	Media Pool Video File Format	TGA Sequence.		
43.	Media Pool Audio File Format	WAV, MP3 and AIFF.		

Multi View Monitoring				
44.	Multi View Monitoring	1 x 10 views.		
45.	Routable Windows	8		
46.	Tally	Red for program and green for preview indication.		
47.	Windows Source Labels	Yes		
48.	Multi View Video Standard	HD		

Processing				
49.	Color space Conversion	Hardware based real time.		

50.	Processing Delay	< 2 Lines.		
51.	Audio Mixer	10 input x 2 channel mixer. Selectable On/Off/Audio-Follow-Video. Level and Peak metering. Master gain control. Analog outputs may be used for separate monitoring.		
52.	4K to HD Down Conversion	Program x 1.		
Power				
53.	Power consumption	230VAC ± 10% ,50Hz		
54.	Temperature	32-104 F, (5-40 C)		
55.	Humidity	15-80% non-condensing		
56.	Warranty	3 or more years		

Video Switcher Brand (Should be Specify)	
Video Switcher Model (Should be Specify)	
Video Switcher Country of Origin (Should be Specify)	
Video Switcher Country of Manufacture (Should be Specify)	
Video Switcher Year of Manufacture (Should be Specify)	

Terms and General Conditions				
57.	Should be provide at least 3 year comprehensive warranty			
58.	Service Level Agreement (SLA) after warranty period should be mentioned separately for 4 th , 5 th , 6 th , 7 th , 8 th years (five years) payable annually.			
59.	The bidder shall supply the original printed version of the User Manual (English)			
60.	The bidder shall submit a letter from the Distributor /Agent stating the capability authorization for the sale and support of the quoted product.			
61.	Spares must be available for a minimum period of 5 years from the date of purchase.			
62.	Local Supplier/Agent shall have the capacity and professional expertise locally to attend to after sales service in case of emergencies and must produce evidence of the same.			
63.	Software updates and/or modifications, if applicable, shall be available free of charge electronically from the manufacturer's web site or via email or through the local supplier on CD/DVD. (Details to be specified).			
64.	Detailed original catalogues and supporting documents should be supplied with the quotation to confirm the requested technical specifications indicating cross reference to each item in the compilation chart.			
65.	If any supported software Should be supplied.			
66.	Should work. Support and compatible with the quoted Video Recorder/Player, GPI and TALLY Interface, Video switcher			

	control panel, Intercom system and other accessories in the Live studio Multi cam A/V Recording system.		
67.	A duly completed point by point compliance statement in respect of all the features & specifications laid down in these documents should be enclosed along with the offer.		
68.	Installation, configuration and commissioning of the entire system should carried out by the bidder with accordance with Department of Government Information		
69.	Maintenance and operational training should be carried out by the bidder with the experience and knowledgeable trainer with relevant to the system for Department of Government Information's Film Unit Technical staff		
70.	Bidder's failure to provide the Information requested in the relevant columns may be a reason for the rejection of the bid.		

Sample Document

02.2. Video Switcher Control Panel

NO 02	Minimum Technical Specifications of the Video Switcher Control Panel	Bidder's Response (Yes/No)	Any Remarks
Product Specifics			
01.	Direct Cross Points	10	
02.	Shifted Cross Points	20	
03.	Cross point Button Type	Tri-Color LED	
04.	Cross point Label	3 rows 24 character LCD	
05.	Next Transition Selectors	BKG, Key 1 - Key 4.	
06.	On-Air indicator	4	
07.	DSK Transition Selectors	Auto, Cut, Tie/Preview.	
08.	Preview Transition	1	
09.	Transition Rate Displays	Via main menu	
10.	LCD Menu Displays	3	
11.	Menu Control	20 buttons	
12.	Dedicated Macro Buttons	10	
13.	Destination Bus	1	
14.	Source Select Bus	1	
15.	Fader Bar	1	
16.	3 Axis Joystick	1	
17.	Numeric Keypad	1	
18.	Power consumption	230VAC \pm 10% ,50Hz	
19.	Temperature	32-104 F, (5-40 C)	
20.	Humidity	15-80% non-condensing	
21.	Warranty	3 or more years	

Video Switcher Control Panel_Brand (Should be Specify)	
Video Switcher Control Panel_Model (Should be Specify)	
Video Switcher Control Panel_Country of Origin (Should be Specify)	
Video Switcher Control Panel_Country of Manufacture (Should be Specify)	
Video Switcher Control Panel_Year of Manufacture (Should be Specify)	

Terms and General Conditions			
22.	Should be provide at least 3 year comprehensive warranty		
23.	Service Level Agreement (SLA) after warranty period should be mentioned separately for 4 th , 5 th , 6 th , 7 th , 8 th years (five years) payable annually.		
24.	The bidder shall supply the original printed version of the User Manual (English)		
25.	The bidder shall submit a letter from the Distributor /Agent stating the capability authorization for the sale and support of the quoted product.		
26.	Spares must be available for a minimum period of 5 years from the date of purchase.		

27.	Local Supplier/Agent shall have the capacity and professional expertise locally to attend to after sales service in case of emergencies and must produce evidence of the same.		
28.	Software updates and/or modifications, if applicable, shall be available free of charge electronically from the manufacturer's web site or via email or through the local supplier on CD/DVD. (Details to be specified).		
29.	Detailed original catalogues and supporting documents should be supplied with the quotation to confirm the requested technical specifications indicating cross reference to each item in the compilation chart.		
30.	If any supported software Should be supplied.		
31.	Should work. Support and compatible with the quoted Video Recorder/Player, Video Switcher, GPI and TALLY Interface, Intercom system and other accessories in the Live studio Multi cam A/V Recording system.		
32.	A duly completed point by point compliance statement in respect of all the features & specifications laid down in these documents should be enclosed along with the offer.		
33.	Installation, configuration and commissioning of the entire system should carried out by the bidder with accordance with Department of Government Information		
34.	Maintenance and operational training should be carried out by the bidder with the experience and knowledgeable trainer with relevant to the system for Department of Government Information's Film Unit Technical staff		
35.	Bidder's failure to provide the Information requested in the relevant columns may be a reason for the rejection of the bid.		

02.3. GPI and TALLY Interface

NO 02.3	Minimum Technical Specifications of the GPI and Tally Interface	Bidder's Response (Yes/No)	Any Remarks
Connections			
01.	Contact Closure	25 pin D-type connector providing 8 Output to isolated inputs and 8 relay contact closure outputs.	
02.	Computer Interface	1 x USB 2.0 high speed interface for configuration and firmware updates.	
03.	Inputs	Optical isolators triggered by connection to ground. Max 5V at 14mA.	
04.	Outputs	Mechanical relay contact closure to ground. Max 30V at 1A.	
05.	Ethernet	10/100 BaseT with loop through for connecting to other Ethernet enabled equipment.	
06.	Power	12V power supply included with international socket adaptors 230VAC \pm 10% ,50Hz	
07.	Temperature	32-104 F, (5-40 C)	
08.	Humidity	15-80% non-condensing	
09.	Warranty	3 or more years	

GPI and TALLY Interface Brand (Should be Specify)	
GPI and TALLY Interface Model (Should be Specify)	
GPI and TALLY Interface Country of Origin (Should be Specify)	
GPI and TALLY Interface Country of Manufacture (Should be Specify)	
GPI and TALLY Interface Year of Manufacture (Should be Specify)	

Terms and General Conditions			
10.	Should be provide at least 3 year comprehensive warranty		
11.	Service Level Agreement (SLA) after warranty period should be mentioned separately for 4 th , 5 th , 6 th , 7 th , 8 th years (five years) payable annually.		
12.	The bidder shall supply the original printed version of the User Manual (English)		
13.	The bidder shall submit a letter from the Distributor /Agent stating the capability authorization for the sale and support of the quoted product.		

14.	Spares must be available for a minimum period of 5 years from the date of purchase.		
15.	Local Supplier/Agent shall have the capacity and professional expertise locally to attend to after sales service in case of emergencies and must produce evidence of the same.		
16.	Software updates and/or modifications, if applicable, shall be available free of charge electronically from the manufacturer's web site or via email or through the local supplier on CD/DVD. (Details to be specified).		
17.	Detailed original catalogues and supporting documents should be supplied with the quotation to confirm the requested technical specifications indicating cross reference to each item in the compilation chart.		
18.	If any supported software Should be supplied.		
19.	Should work. Support and compatible with the quoted Video Recorder/Player, Video Switcher, Video Switcher control panel, Intercom system and other accessories in the Live studio Multi cam A/V Recording system.		
20.	A duly completed point by point compliance statement in respect of all the features & specifications laid down in these documents should be enclosed along with the offer.		
21.	Installation, configuration and commissioning of the entire system should carried out by the bidder with accordance with Department of Government Information		
22.	Maintenance and operational training should be carried out by the bidder with the experience and knowledgeable trainer with relevant to the system for Department of Government Information's Film Unit Technical staff		
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02.4. Intercom System

NO 02.4	Minimum Technical Specifications of the Intercom System	Bidder's Response (Yes/No)	Any Remarks
Features - Front Panel			
01.	Combined XLR and 1/4' (6.3 mm) microphone input		
02.	Dynamic / Condenser microphone selection switch		
03.	1/4' (6.3mm) Jack for Headphones without microphone		
04.	3.5mm Jack for Headset with microphone		
05.	Speaker with volume control knob		
06.	Channel buttons 1 – 8 for communicating with individual channels		
07.	ALL button to activate communication with all channels		
08.	Base Unit MUTE button		
Features - Rear Panel			
09.	8 x 5pin XLR connectors for cable connection to Belt Packs.		
10.	5pin XLR Male to XLR Female cable which allows cable connection up to 200m		
11.	2 x 15pin D Sub Tally Input sockets for tally communication from the switcher to tally light box		
Features - Belt Pack for Crew members			
12.	Call Button for sending paging signal to Base Unit		
13.	Press and hold the Talk button to communicate with the director on the Base Unit end		
14.	Headset volume control knob		
15.	Bi-Color Tally LED on Belt Pack Unit		
16.	Camera Tally Indicator connected to the Belt Pack		
17.	04 Nos. 40m long 5pin XLR to XLR cable for connect Intercom system & belt pack		
Technical Data - Base Unit			
18.	Power	12 V / 1A (8 W)	
19.	Tally	2 x 15 PIN D Sub Sockets for Tally A and B	
20.	MIC / Headset	3.5 mm Stereo Jack Socket for Headphone, Microphone combination. Headset Impedance 8-600 Ohms 100 mW	
21.	Headphone	¼" (6.3mm) Stereo Headphone Socket Headset Impedance 8-600 Ohms 100 mW	
22.	Light Socket	3 PIN XLR Connector	

	(DC 12 V)	Light Power Consumption: 12 V / 100 mA		
23.	Microphone	3 PIN XLR / ¼” (6.3mm) Jack Microphone Socket. Switchable Condenser / Dynamic Input. Microphone Level -67 dB		
24.	Frequency Response	550-3.6 kHz, <+/- 3dB		
25.	THD	< 3%		
26.	Signal to Noise Ratio	> 50dB		
27.	Built-in Speaker	70mm x 30mm 32 Ohm 3 Watts		
28.	Power consumption	230VAC ± 10% ,50Hz		

Technical Data - Belt Pack Unit				
29.	Input	5 PIN XLR Connector		
30.	MIC / Headset Socket	3.5 mm Stereo Jack Socket for Headphone / Microphone Headset Impedance (8 – 600) Ω 100 mW (Min.) Microphone Level - 67 dB Or 2.5 mm Stereo Jack Socket for Mobile Phone type headset / microphone.		
31.	Tally OUT Socket	3.5 mm Jack Socket to connect to tally indicator.		
32.	Tally LED	Bi-color LED – RED indicates LIVE / GREEN indicated CUED		
33.	Power LED	Illuminates to indicate that power is being received.		

Intercom System_ Brand (Should be Specify)	
Intercom System_ Model (Should be Specify)	
Intercom System_ Country of Origin (Should be Specify)	
Intercom System_ Country of Manufacture (Should be Specify)	
Intercom System_ Year of Manufacture (Should be Specify)	

Terms and General Conditions				
34.	Should be provide at least 3 year comprehensive warranty.			
35.	Service Level Agreement (SLA) after warranty period should be mentioned separately for 4 th , 5 th , 6 th , 7 th , 8 th years (five years) payable annually.			
36.	The bidder shall supply the original printed version of the User Manual (English).			

37.	The bidder shall submit a letter from the Distributor /Agent stating the capability authorization for the sale and support of the quoted product.		
38.	Spares must be available for a minimum period of 5 years from the date of purchase.		
39.	Local Supplier/Agent shall have the capacity and professional expertise locally to attend to after sales service in case of emergencies and must produce evidence of the same.		
40.	Software updates and/or modifications, if applicable, shall be available free of charge electronically from the manufacturer's web site or via email or through the local supplier on CD/DVD. (Details to be specified).		
41.	Should work. Support and compatible with the quoted GPI and TALLY Interface, Video Switcher, Video control panel and other accessories in the Live studio Multi cam A/V Recording system.		
42.	Detailed original catalogues and supporting documents should be supplied with the quotation to confirm the requested technical specifications indicating cross reference to each item in the compilation chart.		
43.	If any supported software Should be supplied.		
44.	A duly completed point by point compliance statement in respect of all the features & specifications laid down in these documents should be enclosed along with the offer.		
45.	Installation, configuration and commissioning of the entire system should carried out by the bidder with accordance with Department of Government Information.		
46.	Maintenance and operational training should be carried out by the bidder with the experience and knowledgeable trainer with relevant to the system for Department of Government Information's Film Unit Technical staff.		
47.	Bidder's failure to provide the Information requested in the relevant columns may be a reason for the rejection of the bid.		

02. Supply, Installation and Commissioning of the Video Recorder/Player – (01 No.)

<u>N0</u> <u>03</u>	Minimum Technical Specifications of the Video Recorder /Player	Bidder's Response (Yes/No)	Any Remarks
Features			
01.	It should have LCD display for video monitoring and menu setting		
02.	It should be 1U standard 19" rack mount size		
03.	It should have Ethernet port for connect a PC		
04.	Supplier should supply 04 SSD hard disks for the Recorder which can record approximate two hours.		
Technical Data			
05.	SDI Video Inputs	1	
06.	SDI Video Outputs	2	
07.	SDI Rates	270Mb, 1.5G-SDI	
08.	HDMI Video Inputs	1 x HDMI type A connector	
09.	HDMI Video Outputs	1 x HDMI type A connector	
10.	SDI Audio Inputs	16 channels embedded in SD and HD	
11.	SDI Audio Outputs	16 channels embedded in SD and HD	
12.	HDMI Audio Inputs	8 channels embedded in SD and HD	
13.	HDMI Audio Outputs	2 channels	
14.	Reference Input	Tri-Sync / Black Burst	
15.	Recorder Configuration	Front panel configurable or USB 2.0 high speed interface	
16.	Video Standards	625i50 PAL1080i50	
17.	SDI Compliance	SMPTE 259M, SMPTE 292M	
18.	SDI Metadata Support	HD RP188 and closed captioning	
19.	Audio Sampling	sample rate of 48kHz and 24-bit	
20.	Video Sampling	4:2:2	
21.	Color Precision	10-bit	
22.	Color Space	REC 601, REC 709	
23.	Media	2 x SSD	
24.	Media Type	SATA-II or SATA-III solid state disc	
25.	Supported Codecs	Uncompressed QuickTime, ProRes 422 HQ QuickTime, ProRes 422 QuickTime, Avid DNxHD QuickTime, Avid DNxHD MXF etc.	
26.	Power consumption	230VAC ± 10% ,50Hz	
27.	Temperature	32-104 F, (5-40 C)	
28.	Humidity	15-80% non-condensing	
29.	Warranty	3 or more years	

Video Recorder/Player_ Brand (Should be Specify)	
Video Recorder/Player_Model (Should be Specify)	

Video Recorder/Player_Country of Origin (Should be Specify)	
Video Recorder/Player_Country of Manufacture (Should be Specify)	
Video Recorder/Player_Year of Manufacture (Should be Specify)	

Terms and General Conditions			
30.	Should be provide at least 3 year comprehensive warranty		
31.	Service Level Agreement (SLA) after warranty period should be mentioned separately for 4 th , 5 th , 6 th , 7 th , 8 th years (five years) payable annually.		
32.	The bidder shall supply the original printed version of the User Manual (English)		
33.	The bidder shall submit a letter from the Distributor /Agent stating the capability authorization for the sale and support of the quoted product.		
34.	Spares must be available for a minimum period of 5 years from the date of purchase.		
35.	Local Supplier/Agent shall have the capacity and professional expertise locally to attend to after sales service in case of emergencies and must produce evidence of the same.		
36.	Software updates and/or modifications, if applicable, shall be available free of charge electronically from the manufacturer's web site or via email or through the local supplier on CD/DVD. (Details to be specified).		
37.	Detailed original catalogues and supporting documents should be supplied with the quotation to confirm the requested technical specifications indicating cross reference to each item in the compilation chart.		
38.	If any supported software Should be supplied.		
39.	Should work. Support and compatible with the quoted GPI and TALLY Interface, Video Switcher, Video control panel and other accessories in the Live studio Multi cam A/V Recording system.		
40.	A duly completed point by point compliance statement in respect of all the features & specifications laid down in these documents should be enclosed along with the offer.		
41.	Installation, configuration and commissioning of the entire system should carried out by the bidder with accordance with Department of Government Information		
42.	Maintenance and operational training should be carried out by the bidder with the experience and knowledgeable trainer with relevant to the system for Department of Government Information's Film Unit Technical staff		
43.	Bidder's failure to provide the Information requested in the relevant columns may be a reason for the rejection of the bid.		

03. 32” LED TV Receiver – (01 No.)

NO.04.		BIDDER'S RESPONSE (YES/NO)	REMARKS
32” LED TV Receiver EXPECTED FEATURES/SPECIFICATIONS			
1. TV System	Analog B/G		
2. Colour System	PAL		
3. Screen Size	32”		
4. Display type	LED Back lit LCD		
5. Aspect ratio	16:9 (4:3 viewable)		
6. Viewing Angle	170°or better		
7. Contrast (Dynamic)	20,000 : 1 or better		
8. Display resolution	Full HD 1920X1080		
9. Applicable video Signals	576/50p,1080/50i,1080/24p (HDMI), 1080/50p (HDMI/Component)		
10. USB Player.			
INPUT/OUTPUT			
11. Audio Output	3W +3W or more		
12. HDMI Input	Should be available		
13. Composite Video Input	Should be available		
14. Audio Input	Should be available		
15. Power Supply	240VAC, 50Hz		

LED TV Receiver Brand (Should be Specify)			
LED TV Receiver Model (Should be Specify)			
LED TV Receiver Country of Origin (Should be Specify)			
LED TV Receiver Country of Manufacture (Should be Specify)			
LED TV Receiver Year of Manufacture (Should be Specify)			
Terms and General Conditions			
16.	Should be provide at least 3 year comprehensive warranty		
17.	The bidder shall supply the original printed version of the User Manual (English)		

18.	The bidder shall submit a letter from the Distributor /Agent stating the capability authorization for the sale and support of the quoted product.		
19.	Local Supplier/Agent shall have the capacity and professional expertise locally to attend to after sales service in case of emergencies.		
20.	Detailed original catalogues and supporting documents should be supplied with the quotation to confirm the requested technical specifications indicating cross reference to each item in the compilation chart.		
21.	A duly completed point by point compliance statement in respect of all the features & specifications laid down in these documents should be enclosed along with the offer.		
22.	Installation, configuration and commissioning of the entire system should carried out by the bidder with accordance with Department of Government Information.		
23.	Bidder's failure to provide the Information requested in the relevant columns may be a reason for the rejection of the bid.		