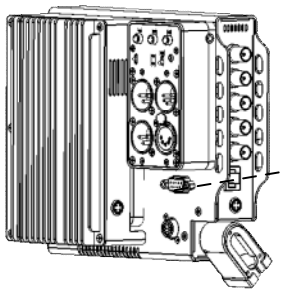
Cam Remote and Signal Breakout Cable for CopperHead G3400 & Sony BVP3 on Data2

Telecast Fiber Systems, Inc.

SRW-9000

HDC-P1



DB15 HD
Rt angle

Northern Tech CMR SERIES - METAL RIGHT ANGLE COVER ULTRA LOW & LOW PROFILE (ULP/LP) part NA30E910000

Cam Rem2: 24" ± .25"

GPI : 9.5" ± .25"

Intercom Trigger: 5" ± .25"

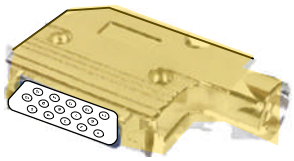
Hirose 8-Pin Male
MXR-8P-8P

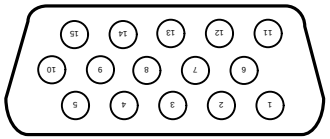
DB9F

Shrink Wrap Yellow label with "SIGNAL" + "CHCR-G32-SON-BVP3-8-BF1-D9F1" + "r" + Rev#

All connectors must have labels with their signal names in the correct color (in parenthesis)

Customer-supplied
Intercom trigger switch





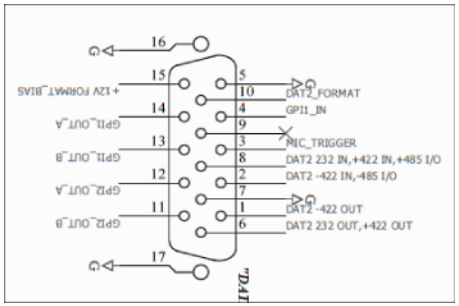
Data 2 -422 Out	1
Data 2 -422 In, -485 I/O	2
Intercom Mic Trigger	3
GPI In	4
GND	5
Data 2 232 OUT, +422 Out, -485	6
GND	7
Data 2 232 In, +422 In, +485 I/O	8
	9
Data2 Format	10
GPI 2 OUT B (Green)	11
GPI 2 OUT A (Green)	12
GPI 1 OUT B (Red)	13
GPI 1 OUT A (Red)	14
+12VDC Bias for Format	15

1	TX (+)
2	TX (-)
3	RX (+)
4	RX (-)
5	GND For TX
6	Power (+) OUT
7	POWER (-) OUT
8	SPARE

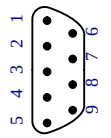
"CAM REM2"
MXR-8P-8P

X
G

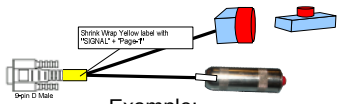
"Intercom Trigger"
BNC F



1	+12VDC from CopperHead
2	Headset MIC Trigger - Ground
3	TALLY2 OUT CONTACT A
4	Headset MIC Trigger - Signal
5	TALLY2 OUT CONTACT B
6	TALLY1 OUT CONTACT A
7	GPI INPUT
8	TALLY1 OUT CONTACT B
9	GND



DSUB 9 Female
"GPI/TRIG"



Example:
CHCS-D9-TRG/TAL

NOT A PRODUCTION CABLE DUE TO VARYING LENGTH REQUIREMENTS OF INDIVIDUAL END USERS AND 3D RIGS (suggested lengths shown)

TITLE: **SIGNAL: CopperHead G2 3200 Breakout signal cable**		REVISIONS NO. / DATE / DESCRIPTION	Cable Part #: CHCR-G32-SON-BVP3-8-BF1-D9F1
DATE ORIGINAL: 9/23/10	SCALE: N/A		File Name: All cables6.3 6CHG3 110107.vsd
LATEST REV DATE:	LATEST REV NO: 1	CHECKED	Page: Page 10 of 32
		DRAWN: Jim Hurwitz	

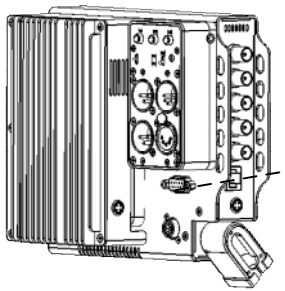
750

Cable# CHCR-G32-SON-BVP3-8-BF1-D9F1
Page 10 of 32

Remote and Signal Breakout Cable for CopperHead G3200 – 3Ality Rig1

Telecast Fiber Systems, Inc.

Northern Tech CMR SERIES - METAL RIGHT ANGLE COVER ULTRA LOW & LOW PROFILE (ULP/LP) part NA30E910000



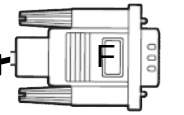
DB15 HD
Rt angle

Shrink Wrap Yellow label with "SIGNAL" + "CHCR-G32-3ALT1-BF1-D9F2" + "r" + Rev#

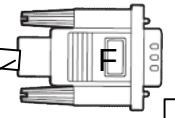
Data2: 24" ± .25" *

GPI : 9.5" ± .25" *

Intercom Trigger: 5" ± .25" *



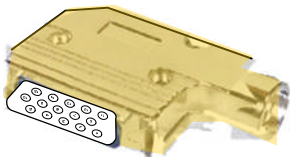
DSUB 9 Female
"Data2 3ality"

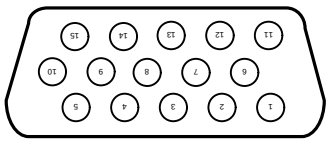


DSUB 9 Female
"GPI"

All connectors must have labels with their signal names in the correct color (in parenthesis)

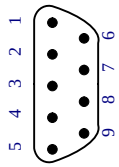
Customer-supplied
Intercom trigger switch





Data 2 -422 Out	1
Data 2 -422 In, -485 I/O	2
Intercom Mic Trigger	3
GPI In	4
GND	5
Data 2 232 OUT, +422 Out,	6
GND	7
Data 2 232 In, +422 In, +485 I/O	8
	9
Data2 Format	10
GPI 2 OUT B (Green)	11
GPI 2 OUT A (Green)	12
GPI 1 OUT B (Red)	13
GPI 1 OUT A (Red)	14
+12VDC Bias for Format	15

1	+12VDC
2	Data2 Format
3	-422 Out
4	-422 In, -485 I/O
5	-12VDC GND
6	N/C
7	232 Out, +422 Out
8	'232 In +422 In, +485 I/O
9	GND

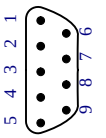


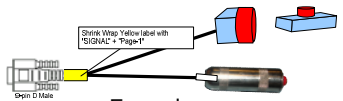
DSUB 9 Female
"Data2 3ality"

X
G

"Intercom Trigger"
BNC F

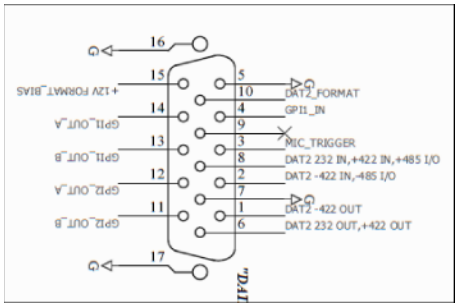
1	+12VDC from CopperHead
2	Headset MIC Trigger - Ground
3	TALLY2 OUT CONTACT A
4	Headset MIC Trigger - Signal
5	TALLY2 OUT CONTACT B
6	TALLY1 OUT CONTACT A
7	GPI INPUT
8	TALLY1 OUT CONTACT B
9	GND





Example:
CHCS-D9-TRG/TAL

DSUB 9 Female
"GPI"



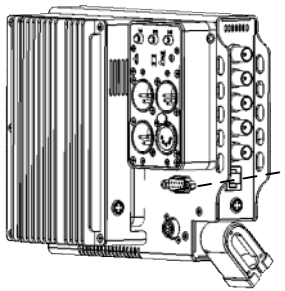
telecast Fiber Systems, Inc.	TITLE: **G3200 Base Station Data/GPI Breakout cable**	REVISIONS: NO. 2, DATE 9/29/10, DESCRIPTION various	Cable Part #: **CHCR-G32-3ALT1-BF1-D9F2**
			File Name: **I**
DATE ORIGINAL: 9/23/10	SCALE: N/A		Page: Page 12 of 32
LATEST REV DATE: 9/29/10	LATEST REV NO: **2**	CHECKED	DRAWN: Jim Hurwitz

*Note: all lengths are "boot-to-boot"

CopperHead G3000 Series Camera Signal & Data 2 Remote Breakout Cable for Panasonic HC1500

Telecast Fiber Systems, Inc.

Northern Tech CMR SERIES - METAL RIGHT ANGLE COVER ULTRA LOW & LOW PROFILE (ULP/LP) part NA30E910000

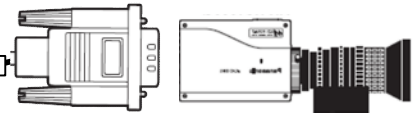


DB15 HD
Rt angle

Shrink Wrap Yellow label with "SIGNAL" + "CHCR-G32-PANHC1-D15H-BF1-D9F" + "r" + Rev#

All connectors must have labels with their signal names in the correct color (in parenthesis)

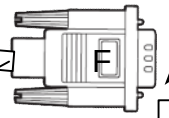
DB15HD Female



Cam Rem2: 24" ± .25"

GPI : 9.5" ± .25"

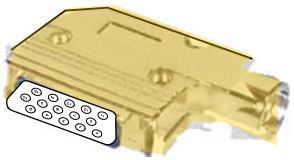
Intercom Trigger: 5" ± .25"

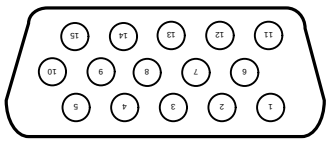


DB9F

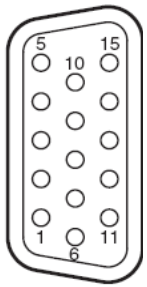
NOT A PRODUCTION CABLE DUE TO VARYING LENGTH REQUIREMENTS OF INDIVIDUAL END USERS AND 3D RIGS (suggested lengths shown)

Customer-supplied Intercom trigger switch



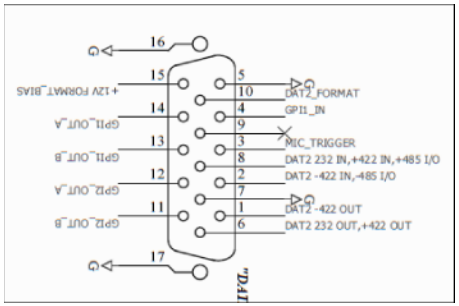


Pin No.	Signal
1	Gen-lock signal GND
2	Time code signal input
3	Not used
4	TX_N (EIA422)/TXD (EIA232) output
5	RX_N (EIA422)/RXD (EIA232) output
6	Camera power supply input (DC +12 V)
7	Gen-lock signal input
8	GND
9	TX_P (EIA422) output
10	RX_P (EIA422) input
11	GND
12	Time code signal GND
13	GND
14	GND
15	GND



DB15HD Female

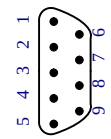
Data 2 -422 Out	1
Data 2 -422 In, -485 I/O	2
Intercom Mic Trigger	3
GPI In	4
GND	5
Data 2 232 OUT, +422 Out, -485	6
GND	7
Data 2 232 In, +422 In, +485 I/O	8
	9
Data2 Format	10
GPI 2 OUT B (Green)	11
GPI 2 OUT A (Green)	12
GPI 1 OUT B (Red)	13
GPI 1 OUT A (Red)	14
+12VDC Bias for Format	15



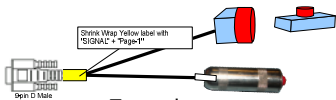
X
G

"Intercom Trigger"
BNC F

1	+12VDC from CopperHead
2	Headset MIC Trigger - Ground
3	TALLY2 OUT CONTACT A
4	Headset MIC Trigger - Signal
5	TALLY2 OUT CONTACT B
6	TALLY1 OUT CONTACT A
7	GPI INPUT
8	TALLY1 OUT CONTACT B
9	GND



DSUB 9 Female
"GPI/TRIG"

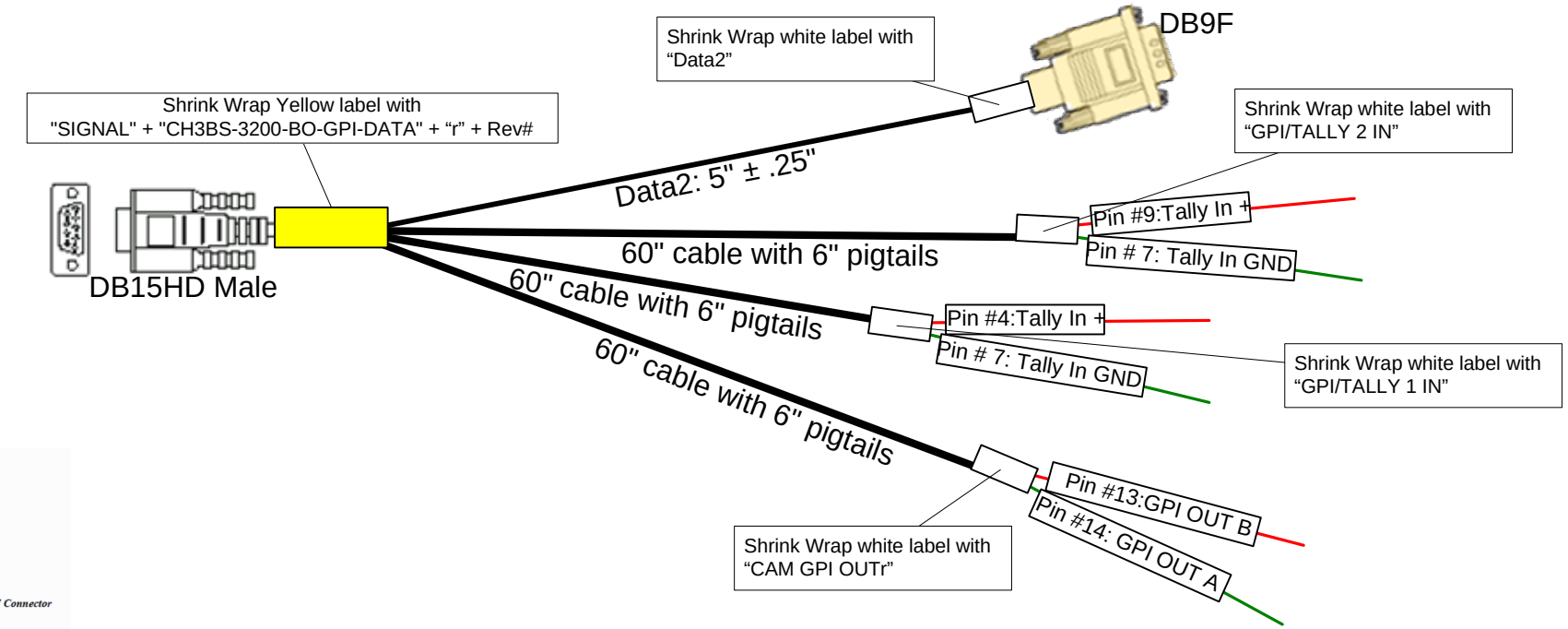


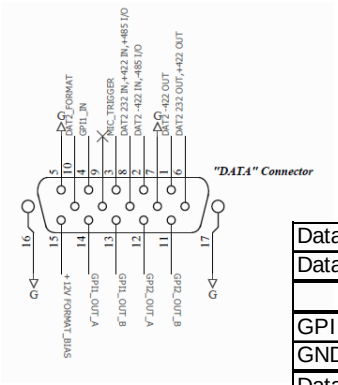
Example:
CHCS-D9-TRG/TAL

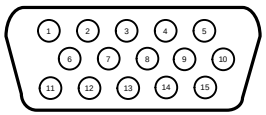
TITLE: **SIGNAL:** CopperHead G2 3200 Breakout signal cable		REVISIONS NO. 2 / DATE 1/7/11 / DESCRIPTION label change	Cable Part #: CHCR-G32-PANHC1-D15H-BF1-D9F	
DATE ORIGINAL 1/7/11	SCALE N/A		File Name: All cables6.3 6CHG3 110107.vsd	
LATEST REV DATE	LATEST REV NO 2	CHECKED	Page: Page 14 of 32	DRAWN Jim Hurwitz

Base Station Breakout Data/GPI Cable for CopperHead G3200

Telecast Fiber Systems, Inc.







Data 2 -422 Out	1
Data 2 -422 In, -485 I/O	2
	3
GPI 1 In (Tally Red)	4
GND	5
Data 2 232 OUT, +422 Out, -485 I/O	6
GND	7
Data 2 232 In, +422 In, +485 I/O	8
GPI 2 In (Tally Green)	9
Data2 Format	10
	11
	12
GPI OUT B	13
GPI OUT A	14
+12VDC Bias for Format	15

DATA2

1	GND
2	
3	
4	Data 2 232 OUT, +422 Out, -485
5	Data 2 -422 In, -485 I/O
6	'+12VDC Bias for Format
7	Data2 Format
8	Data 2 232 OUT, +422 Out, -485
9	Data 2 -422 Out

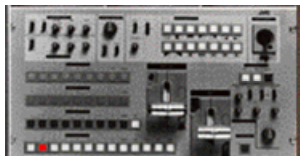
Tally 1 in

Tally 2 in

CAM GPI OUT

Pigtails

Connect Pigtails to Switcher's Tally Outputs



Switcher's GPI Tally Output2

TITLE: G3200 Base Station Data/GPI Breakout cable	REVISIONS: NO. 1, DATE 3/12/10, DESCRIPTION changed labels			Cable Part #: CH3BS-3200-BO-GPI-DATA
				File Name: I
DATE ORIGINAL 9/25/09	SCALE N/A			Page: Page 15 of 32
LATEST REV DATE. 3/12/10	LATEST REV NO 1	CHECKED	DRAWN Jim Hurwitz	

Base Station Sony Remote Breakout
Data/GPI Cable for CopperHead G3400 (w/video)

MXR-8P-8P

Shrink Wrap Yellow label with "SIGNAL" + "CH3BSR2-SONB3-8-PIG3-BNC" + "r" + Rev#

Shrink Wrap white label with "BaseRem2"

Shrink Wrap white label with "GPI/TALLY 2 IN"

Base Rem2: 10' ± 0.5"

60" cable with 6" pigtails

Pin #9:Tally In +

Pin # 7: Tally In GND

DB15HD Male

60" cable with 6" pigtails

Pin #4:Tally In +

Pin # 7: Tally In GND

Shrink Wrap white label with "GPI/TALLY 1 IN"

60" cable with 6" pigtails

Data3/GPI: 3' ± 0.5"

Pin #13:GPI OUT B

Pin #14: GPI OUT A

Shrink Wrap white label with "CAM GPI OUTr"

Shrink Wrap WHITE label with "VIdeo To Remote"

1' ± 0.5" boot-to-boot.

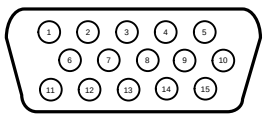
75 ohm coax from BNC to Hirose MXR-8P-8P

Shrink Wrap white label with "Data3/GPI"

DB9 Female

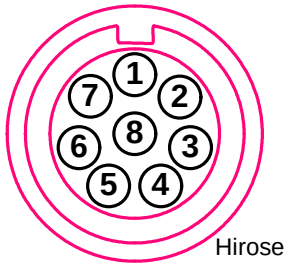
75 Ohm Coax from BNC to Hirose (via boot on DB9M)

Data 2 -422 Out	1
Data 2 -422 In, -485 I/O	2
	3
GPI 1 In (Tally Red)	4
GND	5
Data 2 232 OUT, +422 Out	6
GND	7
Data 2 232 In, +422 In, +485 I/O	8
GPI 2 In (Tally Green)	9
Data2 Format	10
Data 3 RS232-In	11
Data 3 RS232-Out	12
GPI OUT B	13
GPI OUT A	14
+12VDC Bias for Format	15



"Base Rem2"

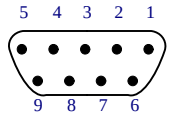
1	TX (+)
2	TX (-)
3	RX (+)
4	RX (-)
5	Video (G)
6	Power (+) In
7	Power (-) In
8	Video (X) In



Hirose MXR-8P-8P

"DATA3/GPI"

1	N/C
2	Data 3 - RS232 RX In
3	Data 3 - RS232 TX Out
4	GPI 1 In (Tally Red)
5	GND
6	GPI 2 In (Tally Green)
7	GPI Out B
8	GPI Out A
9	12 VDC



DB9 Female

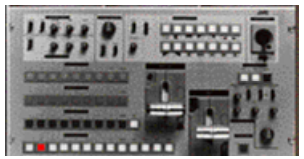
CAM GPI OUT

Tally 1 in

Tally 2 in

Pigtails

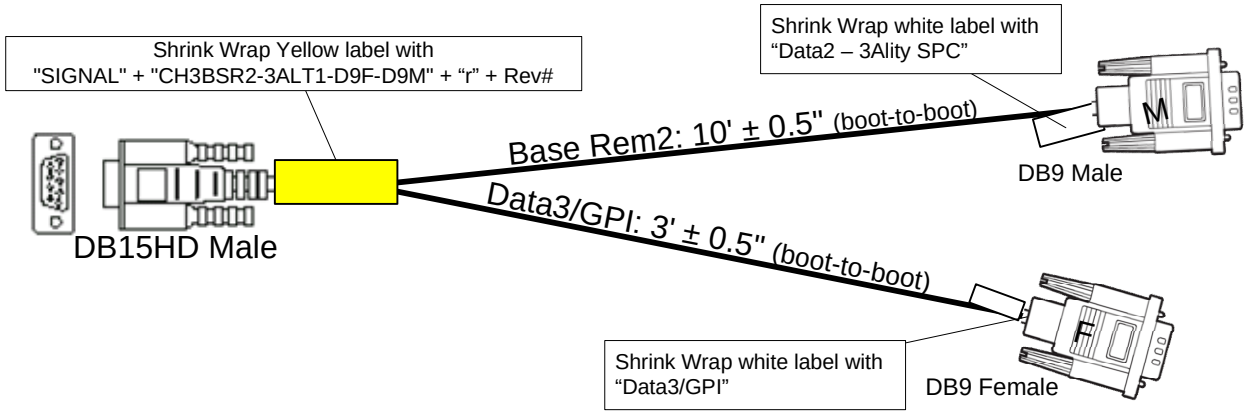
Connect Pigtails to Switcher's Tally Outputs

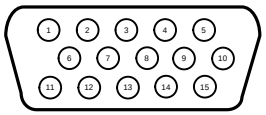


Switcher's Tally Outputs

TITLE: G3200 Base Station Data/GPI Breakout cable	REVISIONS: NO. 1, DATE 3/12/10, DESCRIPTION changed labels; NO. 2, DATE 01/04/11, changed part # from CH3BSR2-SON-BVP3-8-BNC	Cable Part #: CH3BSR2-SONB3-8-PIG3-BNC	
DATE ORIGINAL: 9/25/09	SCALE: N/A	File Name: I	
LATEST REV DATE: 01/04/11	LATEST REV NO: 2	Page: Page 17 of 32	
CHECKED	DRAWN: Jim Hurwitz		

Base Station Remote Breakout
Data/GPI Cable for CopperHead G3400 – 3Ality SPC

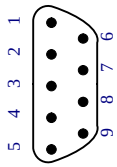




Data 2 -422 Out	1
Data 2 -422 In, -485 I/O	2
	3
GPI 1 In (Tally Red)	4
GND	5
Data 2 232 OUT, +422 Out	6
GND	7
Data 2 232 In, +422 In, +485 I/O	8
GPI 2 In (Tally Green)	9
Data2 Format	10
Data 3 RS232-In	11
Data 3 RS232-Out	12
GPI OUT B	13
GPI OUT A	14
+12VDC Bias for Format	15

"Data2 – 3Ality SPC"

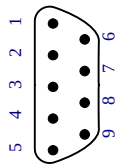
1	+12VDC
2	Data2 Format
3	-422 In, 485 I/O
4	-422 Out
5	-12VDC GND
6	N/C
7	232 In +422 In, +485 I/O
8	232 Out, +422 Out
9	GND



DB9 Male

"DATA3/GPI"

1	N/C
2	Data 3 - RS232 RX In
3	Data 3 - RS232 TX Out
4	GPI 1 In (Tally Red)
5	GND
6	GPI 2 In (Tally Green)
7	GPI Out B
8	GPI Out A
9	12 VDC

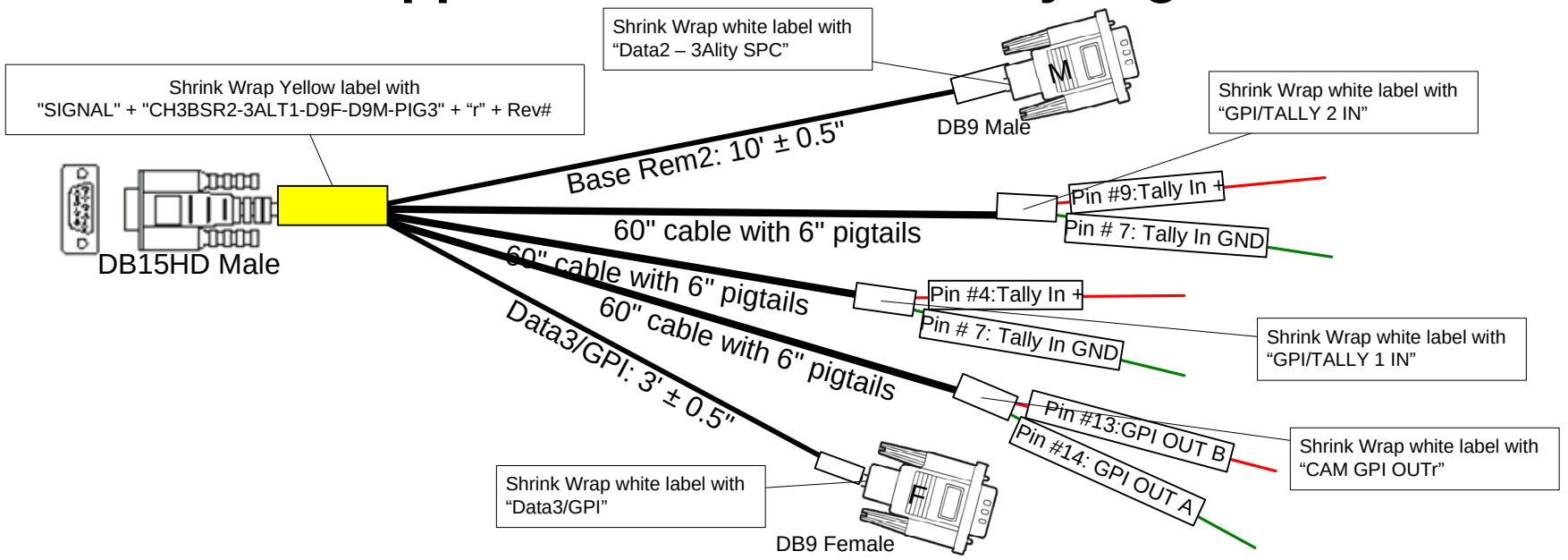


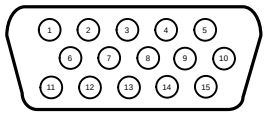
DB9 Female

TITLE: **G3200 Base Station Data/GPI Breakout cable**	REVISIONS: NO. 1 DATE 3/12/10 DESCRIPTION changed labels; NO. 2 DATE 9/29/10 added lengths "b2b"; NO. 3 DATE 1/4/11 part# cnangd	Cable Part #: **CH3BSR2-3ALT1-D9F-D9M**	
DATE ORIGINAL: 9/25/09	SCALE: N/A	File Name: **I**	
LATEST REV DATE: 1/4/11	LATEST REV NO: **3**	Page: Page 19 of 32	
CHECKED	DRAWN: Jim Hurwitz		

Base Station Remote Breakout
Data/GPI Cable for CopperHead G3400 – 3Ality Rig1

Telecast Fiber Systems, Inc.

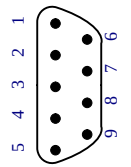




Data 2 -422 Out	1
Data 2 -422 In, -485 I/O	2
	3
GPI 1 In (Tally Red)	4
GND	5
Data 2 232 OUT, +422 Out	6
GND	7
Data 2 232 In, +422 In, +485 I/O	8
GPI 2 In (Tally Green)	9
Data2 Format	10
Data 3 RS232-In	11
Data 3 RS232-Out	12
GPI OUT B	13
GPI OUT A	14
+12VDC Bias for Format	15

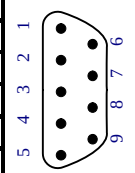
"Data2"

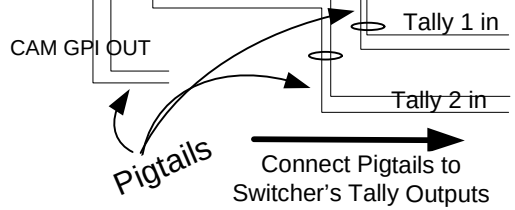
1	+12VDC
2	N/C
3	-422 In, 485 I/O
4	-422 Out
5	-12VDC GND
6	N/C
7	232 In +422 In, +485 I/O
8	232 Out, +422 Out
9	GND

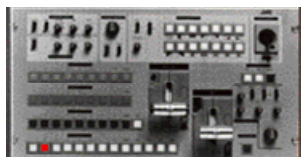


"DATA3/GPI"

1	N/C
2	Data 3 - RS232 RX In
3	Data 3 - RS232 TX Out
4	GPI 1 In (Tally Red)
5	GND
6	GPI 2 In (Tally Green)
7	GPI Out B
8	GPI Out A
9	12 VDC





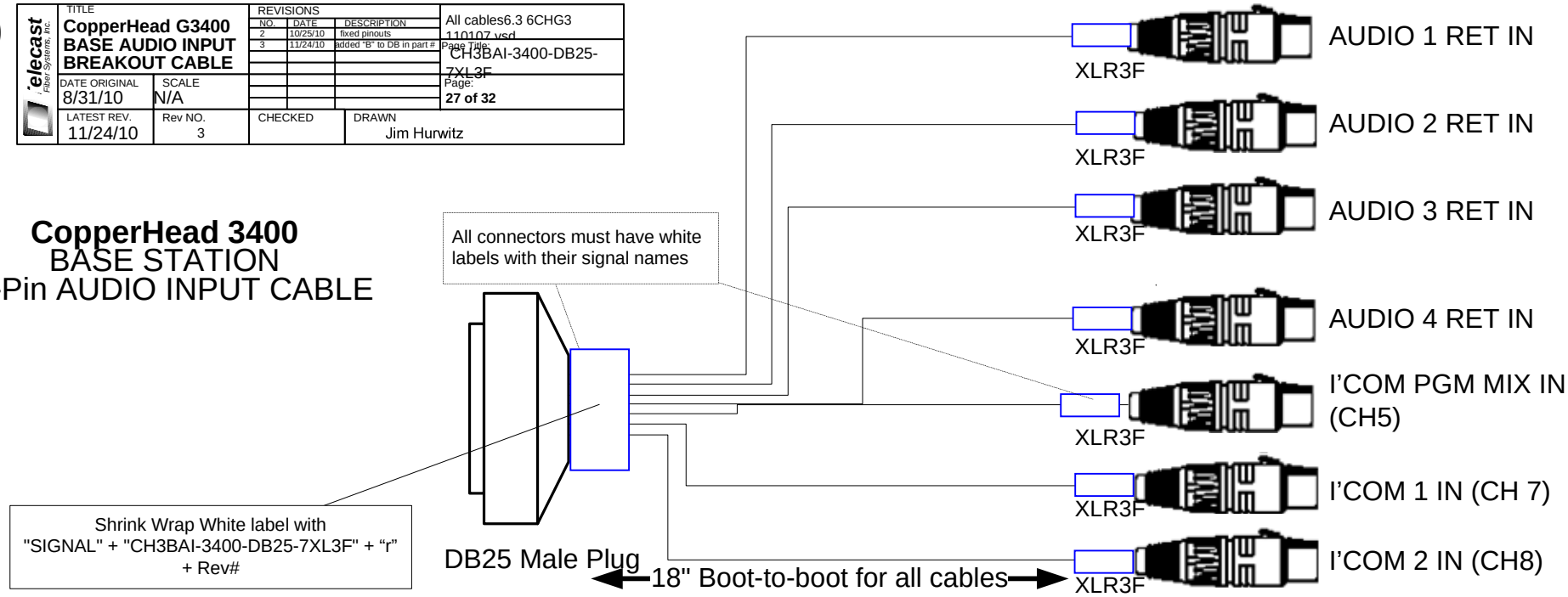

Switcher's Tally Outputs

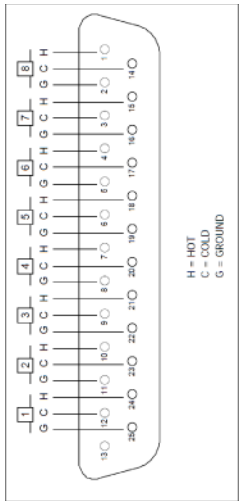
TITLE: G3200 Base Station Data/GPI Breakout cable		REVISIONS: NO. 1 DATE 3/12/10 DESCRIPTION changed labels; NO. 2 DATE 1/7/11 DESCRIPTION part# change	Cable Part #: CH3BSR2-3ALT1-D9F-D9M-PIG3
DATE ORIGINAL: 9/25/09	SCALE: N/A		File Name: I
			Page: Page 20 of 32
LATEST REV DATE: 1/4/11	LATEST REV NO: 2	CHECKED	DRAWN: Jim Hurwitz

920

TITLE	REVISIONS			
CopperHead G3400 BASE AUDIO INPUT BREAKOUT CABLE	NO.	DATE	DESCRIPTION	All cables6.3 6CHG3 110107.vsd
	2	10/25/10	fixed pinouts	
	3	11/24/10	added "B" to DB in part #	Page Title: CH3BAI-3400-DB25-7XL3F
DATE ORIGINAL 8/31/10	SCALE N/A			Page: 27 of 32
LATEST REV. 11/24/10	Rev NO. 3	CHECKED	DRAWN Jim Hurwitz	

CopperHead 3400
BASE STATION
25-Pin AUDIO INPUT CABLE





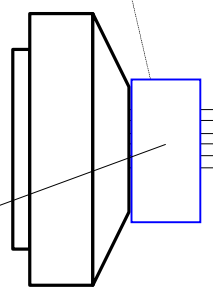
Aud 1 Return In HOT(+)	24	2	XLR3 F	AUDIO 1 RET IN
Aud 1 Return In COLD (-)	12	3		
Aud 1 Return In GROUND	25	1		
Aud 2 Return In HOT(+)	10	2	XLR3 F	AUDIO 2 RET IN
Aud 2 Return In COLD (-)	23	3		
Aud 2 Return In GROUND	11	1		
Aud 3 Return In HOT(+)	21	2	XLR3 F	AUDIO 3 RET IN
Aud 3 Return In COLD (-)	9	3		
Aud 3 Return In GROUND	22	1		
Aud 4 Return In HOT(+)	7	2	XLR3 F	AUDIO 4 RET IN
Aud 4 Return In COLD (-)	20	3		
Aud 4 Return In GROUND	8	1		
Intcom Program Audio In HOT(+)	18	2	XLR3 F	ICM PGM MIX In
Intcom Program Audio In COLD (-)	6	3		
Intcom Program Audio In GROUND	19	1		
I'Com 1 Return In HOT(+) (CH7)	15	2	XLR3 F	I'COM1 In (CH7)
I'Com 1 Return In COLD (-) (CH7)	3	3		
I'Com 1 Return In GROUND (CH7)	16	1		
I'Com 2 Return In HOT(+) (CH8)	1	2	XLR3 F	I'COM 2 In (CH8)
I'Com 2 Return In COLD (-) (CH8)	14	3		
I'Com 2 Return In GROUND (CH8)	2	1		

Note: CH6 (pins 4, 5, & 17) is not used

TITLE: CopperHead G3400 BASE AUDIO OUTPUT BREAKOUT CABLE	REVISIONS: NO. 1, DATE 10/25/10, DESCRIPTION fixed plouts; NO. 2, DATE 11/24/10, DESCRIPTION added "B" to DB in part #	All cables6.3 6CHG3 110107.vsd	
DATE ORIGOUTAL: 8/31/10	SCALE: N/A	Page Title: 3M	
LATEST REV.: 11/24/10	Rev NO.: 2	CHECKED	DRAWN: Jim Hurwitz
		Page: 28 of 32	

CopperHead 3400
BASE STATION
25-POUT AUDIO OUTPUT CABLE

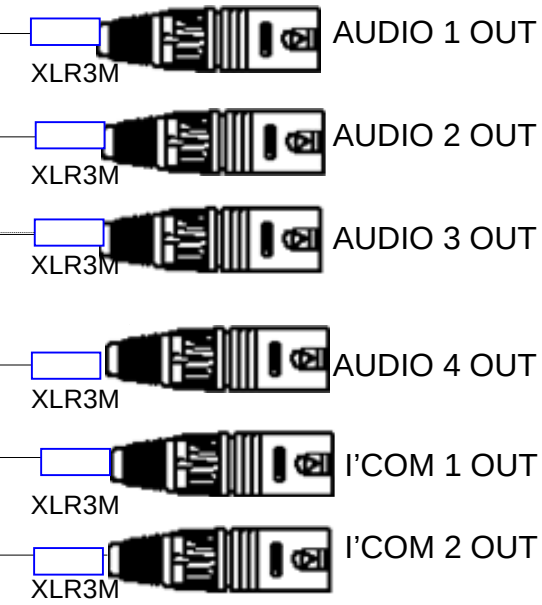
All connectors must have white labels with their signal names

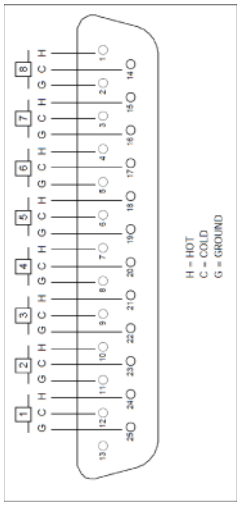
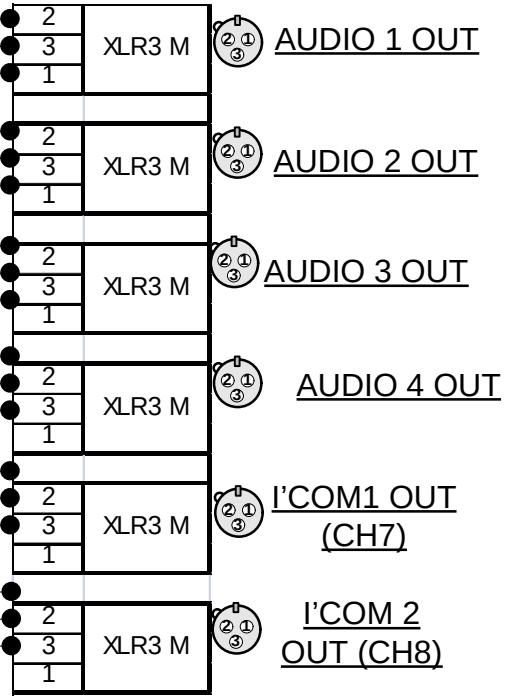


ShrOUTk Wrap White label with "SIGNAL" + "CH3BAO-3400-DB25-6XL3M" + "r" + Rev#

DB25 Male Plug

18" Boot-to-boot for all cables





Aud 1 Out HOT(+)	24
Aud 1 Out COLD (-)	12
Aud 1 Out GROUND	25
Aud 2 Out HOT(+)	10
Aud 2 Out COLD (-)	23
Aud 2 Out GROUND	11
Aud 3 Out HOT(+)	21
Aud 3 Out COLD (-)	9
Aud 3 Out GROUND	22
Aud 4 Out HOT(+)	7
Aud 4 Out COLD (-)	20
Aud 4 Out GROUND	8
I'Com 1 Out HOT(+) (CH7)	15
I'Com 1 Out COLD (-) (CH7)	3
I'Com 1 Out GROUND (CH7)	16
I'Com 2 Out HOT(+) (CH8)	1
I'Com 2 Out COLD (-) (CH8)	14
I'Com 2 Out GROUND (CH8)	2