

Hall A RHRS cabling map (latest updates in red)

RHRS Total Absorber (Shower)

Detector Position/ PMT labels	Online GUI labels	Upper patch panel Name & position (Delay Line if other)	Flat Cable name	Flat cable Wire No	ADC FB BOT Slot-ch.	HV Slot-ch (rpi4)
TA-1	SH 0	CHARLIE D-1	TA(1-16)	1	17 - 32	3-0
TA-2	SH 1	CHARLIE D-2	TA(1-16)	2	17 - 33	3-1
TA-2	SH 2	CHARLIE D-3	TA(1-16)	3	17 - 34	3-2
TA-4	SH 3	CHARLIE D-4	TA(1-16)	4	17 - 35	3-3
TA-5	SH 4	CHARLIE D-5	TA(1-16)	5	17 - 36	3-4
TA-6	SH 5	CHARLIE D-6	TA(1-16)	6	17 - 37	3-5
TA-7	SH 6	CHARLIE D-7	TA(1-16)	7	17 - 38	3-6
TA-9	SH 7	CHARLIE D-8	TA(1-16)	8	17 - 39	3-7
TA-8	SH 8	CHARLIE D-9	TA(1-16)	9	17 - 40	3-8
TA-10	SH 9	CHARLIE D-10	TA(1-16)	10	17 - 41	3-9
TA-11	SH 10	CHARLIE D-11	TA(1-16)	11	17 - 42	3-10
TA-12	SH 11	CHARLIE D-12	TA(1-16)	12	17 - 43	3-11
TA-13	SH 12	CHARLIE D-13 (ALFRED A-7)	TA(1-16)	13	18 - 32	4-0
TA-14	SH 13	CHARLIE D-14	TA(1-16)	14	17 - 45	4-1
TA-15	SH 14	CHARLIE D-15	TA(1-16)	15	17 - 46	4-2
<i>empty</i>	<i>empty</i>	-	TA(1-16)	16	17 - 47	-
TA-17	SH 15	DEX A-1	TA(17-32)	1	18 - 0	4-3
TA-18	SH 16	DEX A-2	TA(17-32)	2	18 - 1	4-4
TA-19	SH 17	DEX A-3	TA(17-32)	3	18 - 2	4-5
TA-20	SH 18	DEX A-4	TA(17-32)	4	18 - 3	4-6
TA-21	SH 19	DEX A-5	TA(17-32)	5	18 - 4	4-7
TA-22	SH 20	DEX A-6	TA(17-32)	6	18 - 5	4-8
TA-23	SH 21	DEX A-7	TA(17-32)	7	18 - 6	4-9
TA-24	SH 22	DEX A-8	TA(17-32)	8	18 - 7	4-10
TA-25	SH 23	DEX A-9	TA(17-32)	9	18 - 8	4-11
TA-26	SH 24	DEX A-10	TA(17-32)	10	18 - 9	5-0
TA-27	SH 25	DEX A-11	TA(17-32)	11	18 - 10	5-1
TA-28	SH 26	DEX A-12	TA(17-32)	12	18 - 11	5-2
TA-29	SH 27	DEX A-13	TA(17-32)	13	18 - 12	5-3
TA-30	SH 28	DEX A-14	TA(17-32)	14	18 - 13	5-4
TA-31	SH 29	DEX A-15	TA(17-32)	15	18 - 14	5-5
<i>empty</i>	<i>empty</i>	DEX A-16	TA(17-32)	16	18 - 15	
TA-33	SH 30	DEX B-1	TA(33-48)	1	19 - 0	5-6
TA-34	SH 31	DEX B-2	TA(33-48)	2	19 - 1	5-7
TA-35	SH 32	DEX B-3	TA(33-48)	3	19 - 2	5-8
TA-36	SH 33	DEX B-4	TA(33-48)	4	19 - 3	5-9
TA-37	SH 34	DEX B-5	TA(33-48)	5	19 - 4	5-10

TA-38	SH 35	DEX B-5	TA(33-48)	6	19 - 5	5-11
TA-39	SH 36	DEX B-7	TA(33-48)	8	19 - 6	9-4
TA-40	SH 37	DEX B-8	TA(33-48)	7	19 - 8	6-1
TA-41	SH 38	DEX B-9	TA(33-48)	9	19 - 8	6-2
TA-42	SH 39	DEX B-10	TA(33-48)	10	19 - 9	6-3
TA-43	SH 40	DEX B-11	TA(33-48)	11	19 - 10	6-4
TA-44	SH 41	DEX B-12	TA(33-48)	12	19 - 11	6-5
TA-45	SH 42	DEX B-13	TA(33-48)	13	19 - 12	6-6
TA-46	SH 43	DEX B-14	TA(33-48)	14	19 - 13	6-7
TA-47	SH 44	DEX B-15	TA(33-48)	15	19 - 14	6-8
<i>empty</i>	<i>empty</i>	DEX B-16	TA(33-48)	16	19 - 15	
TA-49	SH 45	EUNICE A-1	TA(49-64)	1	16 - 0	6-9
TA-50	SH 46	EUNICE A-2	TA(49-64)	2	16 - 1	6-10
TA-51	SH 47	EUNICE A-3	TA(49-64)	3	16 - 2	6-11
TA-52	SH 48	EUNICE A-4	TA(49-64)	4	16 - 3	7-0
TA-53	SH 49	EUNICE A-5	TA(49-64)	5	16 - 4	7-1
TA-54	SH 50	EUNICE A-6	TA(49-64)	6	16 - 5	7-2
TA-55	SH 51	EUNICE A-7	TA(49-64)	7	16 - 6	7-3
TA-56	SH 52	EUNICE A-8	TA(49-64)	8	16 - 7	7-4
TA-57	SH 53	EUNICE A-9	TA(49-64)	9	16 - 8	7-5
TA-58	SH 54	EUNICE A-10	TA(49-64)	10	16 - 9	7-6
TA-59	SH 55	EUNICE A-11	TA(49-64)	11	16 - 10	7-7
TA-60	SH 56	EUNICE A-12	TA(49-64)	12	16 - 11	7-8
TA-61	SH 57	EUNICE A-13	TA(49-64)	13	16 - 12	7-9
TA-62	SH 58	EUNICE A-14	TA(49-64)	14	16 - 13	7-10
TA-63	SH 59	EUNICE A-15	TA(49-64)	15	16 - 14	7-11
<i>empty</i>	<i>empty</i>	-	TA(49-64)	16	16 - 15	
TA-65	SH 60	EUNICE A-16	TA(65-80)	1	17 - 16	8-0
TA-66	SH 61	EUNICE B-2 (ALFRED D-8)	TA(65-80)	2	17 - 17	8-1
TA-67	SH 62	EUNICE B-3	TA(65-80)	3	17 - 18	8-2
TA-68	SH 63	EUNICE B-4	TA(65-80)	4	17 - 19	8-3
TA-69	SH 64	EUNICE B-5	TA(65-80)	5	17 - 20	8-4
TA-70	SH 65	EUNICE B-6	TA(65-80)	6	17 - 21	8-5
TA-71	SH 66	EUNICE B-7	TA(65-80)	7	17 - 22	8-6
TA-72	SH 67	EUNICE B-8	TA(65-80)	8	17 - 23	8-7
TA-73	SH 68	EUNICE B-9	TA(65-80)	9	17 - 24	8-8
TA-74	SH 69	EUNICE B-10	TA(65-80)	10	17 - 25	8-9
TA-75	SH 70	EUNICE B-11	TA(65-80)	11	17 - 26	8-10
TA-76	SH 71	EUNICE B-12	TA(65-80)	12	17 - 27	8-11
TA-77	SH 72	EUNICE B-13	TA(65-80)	13	17 - 28	9-0
TA-78	SH 73	EUNICE B-14	TA(65-80)	14	17 - 29	9-1
TA-79	SH 74	EUNICE B-15	TA(65-80)	15	17 - 30	9-2
<i>empty</i>	<i>empty</i>	EUNICE B-16	TA(65-80)	16	17 - 31	

RHRS EPS (Preshower)

Detector position / PMT labels	Online GUI labels	Upper patch panel Name & position (Delay line if other)	Flat Cable name	Flat cable Wire No	ADC FB BOT Slot-ch.	HV Slot-ch (rpi4)
EPS-1R	PS 0	CHARLIE A-1 (ALFRED A-9)	EPS(1R-16R)	1	20 - 0	10-0
EPS-2R	PS 1	CHARLIE A-2 (ALFRED A-14)	EPS(1R-16R)	2	20 - 1	10-1
EPS-3R	PS 2	CHARLIE A-3 (ALFRED A-2)	EPS(1R-16R)	3	20 - 2	10-2
EPS-4R	PS 3	CHARLIE A-4 (ALFRED A-16)	EPS(1R-16R)	4	20 - 3	10-3
EPS-5R	PS 4	CHARLIE A-5 (ALFRED A-3)	EPS(1R-16R)	5	20 - 4	10-4
EPS-6R	PS 5	CHARLIE A-6 (ALFRED A-10)	EPS(1R-16R)	6	20 - 5	10-5
EPS-7R	PS 6	CHARLIE A-7	EPS(1R-16R)	7	20 - 6	10-6
EPS-8R	PS 7	CHARLIE A-8	EPS(1R-16R)	8	20 - 7	10-7
EPS-9R	PS 8	CHARLIE A-9 (ALFRED A-4)	EPS(1R-16R)	9	20 - 8	10-8
EPS-10R	PS 9	CHARLIE A-10	EPS(1R-16R)	10	20 - 9	10-9
EPS-11R	PS 10	CHARLIE D-16	EPS(1R-16R)	11	20 - 10	10-10
EPS-12R	PS 11	CHARLIE A-12	EPS(1R-16R)	12	20 - 11	10-11
EPS-13R	PS 12	CHARLIE A-13	EPS(1R-16R)	13	20 - 12	11-0
EPS-14R	PS 13	DEX A-16	EPS(1R-16R)	14	20 - 13	11-1
EPS-15R	PS 14	CHARLIE A-15	EPS(1R-16R)	15	20 - 14	11-2
EPS-16R	PS 15	CHARLIE A-16	EPS(1R-16R)	16	20 - 15	11-3
EPS-17R	PS 16	CHARLIE B-1 (ALFRED A-11)	EPS(17R-24R)	1	21 - 0	11-4
EPS-18R	PS 17	CHARLIE B-2 (ALFRED A-5)	EPS(1L-8L)	2	21 - 1	11-5
EPS-19R	PS 18	CHARLIE B-3 (ALFRED D-10)	EPS(1L-8L)	3	21 - 2	11-6
EPS-20R	PS 19	CHARLIE B-4		4	21 - 3	11-7
EPS-21R	PS 20	CHARLIE B-5		5	21 - 4	11-8
EPS-22R	PS 21	CHARLIE B-6		6	21 - 5	11-9
EPS-23R	PS 22	CHARLIE B-7		7	21 - 6	11-10
EPS-24R	PS 23	CHARLIE B-8		8	21 - 7	11-11
EPS-1L	PS 24	CHARLIE B-9		9	21 - 8	12-0
EPS-2L	PS 25	CHARLIE B-10		10	21 - 9	12-1
EPS-3L	PS 26	CHARLIE B-11 (ALFRED A-6)		11	21 - 10	12-2
EPS-4L	PS 27	CHARLIE B-12		12	21 - 11	12-3
EPS-5L	PS 28	CHARLIE B-13		13	21 - 12	12-4

EPS-6L	PS 29	CHARLIE B-14		14	21 - 13	12-5
EPS-7L	PS 30	CHARLIE B-15		15	21 - 14	12-6
EPS-8L	PS 31	CHARLIE B-16		16	21 - 15	12-7
EPS-9L	PS 32	CHARLIE C-1	EPS(9L-24L)	1	16 - 32	12-8
EPS-10L	PS 33	CHARLIE C-2	EPS(9L-24L)	2	16 - 33	12-9
EPS-11L	PS 34	CHARLIE C-3	EPS(9L-24L)	3	16 - 34	12-10
EPS-12L	PS 35	CHARLIE C-4	EPS(9L-24L)	4	16 - 35	12-11
EPS-13L	PS 36	CHARLIE C-5	EPS(9L-24L)	5	16 - 36	13-0
EPS-14L	PS 37	CHARLIE C-6	EPS(9L-24L)	6	16 - 37	13-1
EPS-15L	PS 38	CHARLIE C-7	EPS(9L-24L)	7	16 - 38	13-2
EPS-16L	PS 39	CHARLIE C-8	EPS(9L-24L)	8	16 - 39	13-3
EPS-17L	PS 40	CHARLIE C-9	EPS(9L-24L)	9	16 - 40	13-4
EPS-18L	PS 41	CHARLIE C-10	EPS(9L-24L)	10	16 - 41	13-5
EPS-19L	PS 42	CHARLIE C-11	EPS(9L-24L)	11	16 - 42	13-6
EPS-20L	PS 43	CHARLIE C-12	EPS(9L-24L)	12	16 - 43	13-7
EPS-21L	PS 44	CHARLIE C-13	EPS(9L-24L)	13	16 - 44	13-8
EPS-22L	PS 45	CHARLIE C-14 (ALFRED A-12)	EPS(9L-24L)	14	16 - 45	13-9
EPS-23L	PS 46	CHARLIE C-15 (ALFRED A-13)	EPS(9L-24L)	15	16 - 46	13-10
EPS-24L	PS 47	CHARLIE C-16	EPS(9L-24L)	16	16 - 47	13-11

RHRS S2m

Detector position / PMT Labels	FADC VME crate roc 20, Slot-ch	TDC Fast bus Slot -ch.	HV Slot-ch.	Detector position / PMT Labels	FADC VME crate roc 20, Slot-ch	TDC Fast bus Slot -ch.	HV Slot-ch.
S2m-1L	13-0	11-0	0-0	S2m-1R	14-0	11-0	0-0
S2m-2L	13-1	11-1	0-1	S2m-2R	14-1	11-1	0-1
S2m-3L	13-2	11-2	0-2	S2m-3R	14-2	11-2	0-2
S2m-4L	13-3	11-3	0-3	S2m-4R	14-3	11-3	0-3
S2m-5L	13-4	11-4	0-4	S2m-5R	14-4	11-4	0-4
S2m-6L	13-5	11-5	0-5	S2m-6R	14-5	11-5	0-5
S2m-7L	13-6	11-6	0-6	S2m-7R	14-6	11-6	0-6
S2m-8L	13-7	11-7	0-7	S2m-8R	14-7	11-7	0-7
S2m-9L	13-8	11-8	0-8	S2m-9R	14-8	11-8	0-8
S2m-10L	13-9	11-9	0-9	S2m-10R	14-9	11-9	0-9
S2m-11L	13-10	11-10	0-10	S2m-11R	14-10	11-10	0-10
S2m-12L	13-11	11-11	0-11	S2m-12R	14-11	11-11	0-11
S2m-13L	13-12	11-12	2-0	S2m-13R	14-12	11-12	2-0
S2m-14L	13-13	11-13	2-1	S2m-14R	14-13	11-13	2-1
S2m-15L	13-14	11-14	2-2	S2m-15R	14-14	11-14	2-2
S2m-16L	13-15	11-15	2-3	S2m-16R	14-15	11-15	2-3

RHRS Gas Cerenkov & S0 & L1A referre

Detector position / PMT labels	FADC VME crate roc 20, Slot-ch.	TDC Fast bus Slot -ch.	HV Slot-ch (rpi4)	Halla Labels	MCC Labels	FADC VME crate roc 31, Slot-ch..
Gas Cer-1	15 - 2	11 - 32	14-0	Upstream Raster y	Upstream Raster x	16 - 0
Gas Cer-2	15 - 3	11 - 33	14-1	Upstream Raster x	Upstream Raster y	16 - 1
Gas Cer-3	15 - 4	11 - 34	14-2	Downstream Raster y	Downstream Raster x	16 - 2
Gas Cer-4	15 - 5	11 - 35	14-3	Downstream Raster x	Downstream Raster y	16 - 3
Gas Cer-5	15 - 6	11 - 36	14-4	BPMA x+	BPMA x+	16 - 4
Gas Cer-6	15 - 7	11 - 37	14-5	BPMA x-	BPMA x-	16 - 5
Gas Cer-7	15 - 8	11 - 38	14-6	BPMA y+	BPMA y+	16 - 6
Gas Cer-8	15 - 9	11 - 39	14-7	BPMA y-	BPMA y-	16 - 7
Gas Cer-9	15 - 10	11 - 40	14-8	BPMB x+	BPMB x+	16 - 8
Gas Cer-10	15 - 11	11 - 41	14-9	BPMB x-	BPMB x-	16 - 9
Gas Cer-Sum	15 - 12	11 - 42		BPMB y+	BPMB y+	16 - 10
S0A-Bottom	15 - 0	11 - 43	2-8	BPMB y-	BPMB y-	16 - 11
S0B-Top	15 - 1	11 - 44	2-9			
L1A reference	15 - 13					

RHRS A1

Detector position / PMT Labels	Online GUI labels	FADC VME crate roc 20, Slot-ch	HV Slot-ch. (rpi7)	Detector position / PMT Labels	Online GUI labels	FADC VME crate roc 20, Slot-ch	HV Slot-ch. (rpi7)
A1-1L	A1 12	19-12	9-0	A1-1R	A1 0	19-0	10-0
A1-2L	A1 13	19-13	9-1	A1-2R	A1 1	19-1	10-1
A1-3L	A1 14	19-14	9-2	A1-3R	A1 2	19-2	10-2
A1-4L	A1 15	19-15	9-3	A1-4R	A1 3	19-3	10-3
A1-5L	A1 16	18-0	9-4	A1-5R	A1 4	19-4	10-4
A1-6L	A1 17	18-1	9-5	A1-6R	A1 5	19-5	10-5
A1-7L	A1 18	18-2	9-6	A1-7R	A1 6	19-6	10-6
A1-8L	A1 19	18-3	9-7	A1-8R	A1 7	19-7	10-7
A1-9L	A1 20	18-4	9-8	A1-9R	A1 8	19-8	10-8
A1-10L	A1 21	18-5	9-9	A1-10R	A1 9	19-9	10-9
A1-11L	A1 22	18-6	9-10	A1-11R	A1 10	19-10	10-10
A1-12L	A1 23	18-7	9-11	A1-12R	A1 11	19-11	10-11

RHRS A2

Detector position / PMT Labels	Online GUI labels	FADC VME crate roc 20, Slot-ch	HV Slot-ch. (rpi7)	Detector position / PMT Labels	Online GUI labels	FADC VME crate roc 20, Slot-ch	HV Slot-ch. (rpi7)
A2-1L	A2 13	17-5	6-0	A2-1R	A2 0	18-8	8-0
A2-2L	A2 14	17-6	6-1	A2-2R	A2 1	18-9	8-1

A2-3L	A2 15	17-7	6-2	A2-3R	A2 2	18-10	8-2
A2-4L	A2 16	17-8	6-3	A2-4R	A2 3	18-11	8-3
A2-5L	A2 17	17-9	6-4	A2-5R	A2 4	18-12	8-4
A2-6L	A2 18	17-10	6-5	A2-6R	A2 5	18-13	8-5
A2-7L	A2 19	17-11	6-6	A2-7R	A2 6	18-14	8-6
A2-8L	A2 20	17-12	6-7	A2-8R	A2 7	18-15	8-7
A2-9L	A2 21	17-13	6-8	A2-9R	A2 8	17-0	8-8
A2-10L	A2 22	17-14	6-9	A2-10R	A2 9	17-1	8-9
A2-11L	A2 23	17-15	6-10	A2-11R	A2 10	17-2	8-10
A2-12L	A2 24	15-14	6-11	A2-12R	A2 11	17-3	8-11
A2-13L	A2 25	15-15	5-11	A2-13R	A2 12	17-4	5-10

Other

Detector position	Patch panel Name&posit.	Flat Cable name	ADC FB BOT Slot-ch.	TDC Fast bus Slot -ch.
Triggers		TRIGGERS		11 - (42-63)
SPARE 1		SPARE 1		16 - (0-15) MID
SPARE 2		SPARE 2		16 - (16-31) MID

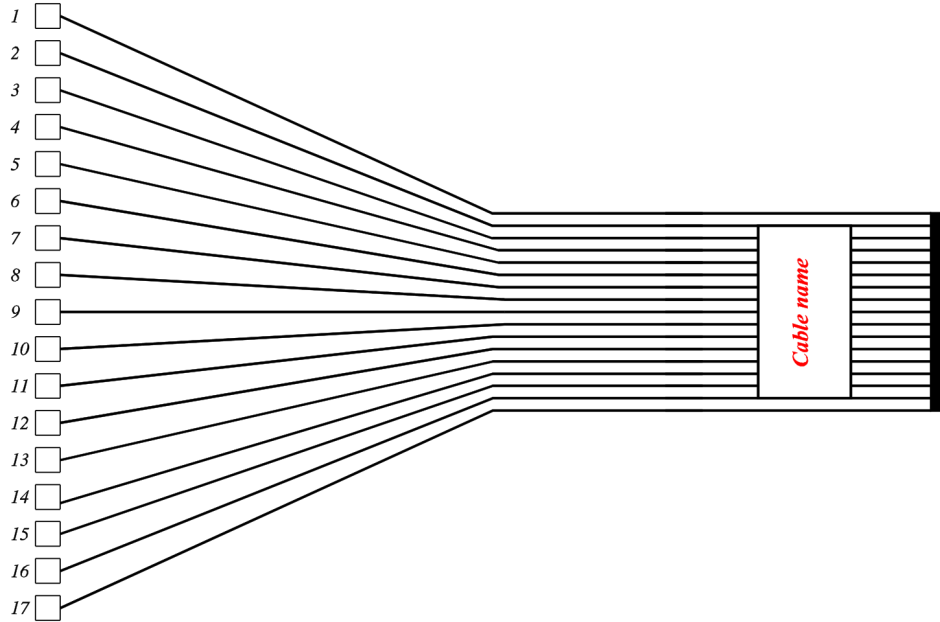
RHRS VDC (HV)

Detector position	Patch panel Name&posit.	Flat Cable name	Flat cable Wire No	ADC FB BOT Slot-ch.	TDC Fast bus Slot -ch.	HV Slot-ch rpi7
VDC Top						12-0
VDC Bottom						12-2

RHRS Gas Cerenkov/S0 old

Detector position	Patch panel Name&posit.	Flat Cable name	Flat cable Wire No	ADC FB BOT Slot-ch.	TDC Fast bus Slot -ch.	HV Slot-ch. (rpi4)
<i>Gas Cer-1</i>	<i>ALFRED C-1</i>	<i>Gas,Sum&S0</i>	<i>1</i>	<i>20 - 32</i>	<i>11-32</i>	<i>14-0</i>
<i>Gas Cer-2</i>	<i>ALFRED C-2</i>	<i>Gas,Sum&S0</i>	<i>2</i>	<i>20 - 33</i>	<i>11-33</i>	<i>14-1</i>
<i>Gas Cer-3</i>	<i>ALFRED C-3</i>	<i>Gas,Sum&S0</i>	<i>3</i>	<i>20 - 34</i>	<i>11-34</i>	<i>14-2</i>
<i>Gas Cer-4</i>	<i>ALFRED C-4</i>	<i>Gas,Sum&S0</i>	<i>4</i>	<i>20 - 35</i>	<i>11-35</i>	<i>14-3</i>
<i>Gas Cer-5</i>	<i>ALFRED C-5</i>	<i>Gas,Sum&S0</i>	<i>5</i>	<i>20 - 36</i>	<i>11-36</i>	<i>14-4</i>
<i>Gas Cer-6</i>	<i>ALFRED C-6</i>	<i>Gas,Sum&S0</i>	<i>6</i>	<i>20 - 37</i>	<i>11-37</i>	<i>14-5</i>

<i>Gas Cer-7</i>	<i>ALFRED C-7</i>	<i>Gas,Sum&S0</i>	<i>7</i>	<i>20 - 38</i>	<i>11-38</i>	<i>14-6</i>
<i>Gas Cer-8</i>	<i>ALFRED C-8</i>	<i>Gas,Sum&S0</i>	<i>8</i>	<i>20 - 39</i>	<i>11-39</i>	<i>14-7</i>
<i>Gas Cer-9</i>	<i>ALFRED C-9</i>	<i>Gas,Sum&S0</i>	<i>9</i>	<i>20 - 40</i>	<i>11-40</i>	<i>14-8</i>
<i>Gas Cer-10</i>	<i>ALFRED C-10</i>	<i>Gas,Sum&S0</i>	<i>10</i>	<i>20 - 41</i>	<i>11-41</i>	<i>14-9</i>
<i>Gas Cer-Sum</i>	<i>ALFRED C-11</i>	<i>Gas,Sum&S0</i>	<i>11</i>	<i>20 - 42</i>	<i>11-42</i>	
<i>S0A-Bot</i>	<i>ALFRED C-12</i>	<i>Gas,Sum&S0</i>	<i>12</i>	<i>20 - 43</i>	<i>11-43</i>	<i>2-8</i>
<i>S0B-Top</i>	<i>ALFRED C-13</i>	<i>Gas,Sum&S0</i>	<i>13</i>	<i>20 - 44</i>	<i>11-44</i>	<i>2-9</i>



Flat coaxial cable: One end 17 BNC connectors other end 34 pin connector.

PS: Line number 17-in not used

*Albert Shahinyan
Sep 26, 2013*

*Update: Tyler Hague
July 10, 2017*

*Update: Florian Hauenstein
September 21, 2018*