Euroball Inner Ball Cluster Signal Cabling Scheme.

—D.M. Cullen, Thu Mar 25 14:58:58 1999.

Sum Box 1 —3/5 side – Run at 1010 Volts

Position In Array	Tube Serial Number[a]	Middle of Cable Label[b]	End of Cable Label[c]	Sum Box 1 Input channel	VXI Cable Label[d]	IDC Connector number[e]
1	Z23SSM701	C-1-5	101	1	G1	A1
3	Z21SSM439	A-1-6	102	2	G1	A1
4	Z22SSM125	B-1-7	103	3	G1	A1
5	Z23SSM116	C1S-1-8	104	4	G1	A1
				5 - spare	G1	A1
				6 - spare	G1	A1
6	Z21SSM445	A-1-16	107	7	G2	A2
7	Z23SSM113	C3S-1-15	108	8	G2	A2
8	Z21SSM453	A-1-14	109	9	G2	A2
9	Z21SSM441	A-1-13	110	10	G2	A2
10	Z23SSM136	C2S-1-9	111	11	G2	A2
				12 - spare	G2	A2
2	Z23SSM713	C-1-4	113	13	G3	A3
14	Z22SSM130	B-1-2	114	14	G3	A3
15	Z22SSM133	B-1-1	115	15	G3	A3
16	Z23SSM688	C-1-3	116	16	G3	A3
				17 - spare	G3	A3
				18 - spare	G3	A3
				19 - spare	G4	
				20 - spare	G4	
				21 - spare	G4	
				22 - spare	G4	
				23 - spare	G4	
				24 - Double gain	G4	

Table 1: Notes: [a] the Z23 represents the tube size, i.e. 21-, 22- or 23-mm AF, the SSMxxx is the manufacturer's serial number on the tube, [b] is the middle cable label which relates to the detector ring number and position in the ring, [c] is the cable label at the end of the cable; the first number is the number of the sum box the cable goes to, the last 2 numbers are the input position in that box, [d] the G represents the summed output or group number, [e] 2 VXI (IDC) connectors are used for the cluster end (A and B), the number following is the IDC pin number in that connector. Note that input 24 in each sum box has double the gain of inputs 1 to 23.

Sum Box 2 —3/5 side – Run at 995 Volts

Position In Array	Tube Serial Number[a]	Middle of Cable Label[b]	End of Cable Label[c]	Sum Box 2 Input channel	VXI Cable Label[d]	IDC Connector number[e]
11	Z23SSM695	C-1-12	201	1	G1	A4
12	Z23SSM715	C-1-10	202	2	G1	A4
13	Z23SSM700	C-1-11	203	3	G1	A4
17	Z23SSM703	C-2-5	204	4	G1	A4
				5 - spare	G1	A4
				6 - spare	G1	A4
18	Z23SSM694	C-2-4	207	7	G2	A5
19	Z21SSM437	A-2-6	208	8	G2	A5
20	Z22SSM124	B-2-7	209	9	G2	A5
21	Z23SSM117	C1S-2-8	210	10	G2	A5
				11 - spare	G2	A5
				12 - spare	G2	A5
22	Z21SSM446	A-2-16	213	13	G3	A6
30	Z23SSM128	B-2-2	214	14	G3	A6
31	Z22SSM131	B-2-1	215	15	G3	A6
32	Z23SSM687	C-2-3	216	16	G3	A6
				17 - spare	G3	A6
				18 - spare	G3	A6
23	Z23SSM114	C3S-2-15	219	19	G4	A7
24	Z21SSM451	A-2-14	220	20	G4	A7
25	Z21SSM442	A-2-13	221	21	G4	A7
				22 - spare	G4	A7
27	Z23SSM691	C-2-12	223	23	G4	A7
26	Z23SSM137	C2S-2-9	224	24	G4	A7

Table 2: Notes: [a] the Z23 represents the tube size, i.e. 21-, 22- or 23-mm AF, the SSMxxx is the manufacturer's serial number on the tube, [b] is the middle cable label which relates to the detector ring number and position in the ring, [c] is the cable label at the end of the cable; the first number is the number of the sum box the cable goes to, the last 2 numbers are the input position in that box, [d] the G represents the summed output or group number, [e] 2 VXI (IDC) connectors are used for the cluster end (A and B), the number following is the IDC pin number in that connector. Note that input 24 in each sum box has double the gain of inputs 1 to 23.

Sum Box 3 —3/5 side – Run at 1050 Volts

Position In Array	Tube Serial Number[a]	Middle of Cable Label[b]	End of Cable Label[c]	Sum Box 3 Input channel	VXI Cable Label[d]	IDC Connector number[e]
28	Z23SSM709	C-2-10	301	1	G1	A8
29	Z23SSM698	C-2-11	302	2	G1	A8
33	Z23SSM705	C-3-5	303	3	G1	A8
34	Z23SSM707	C-3-4	304	4	G1	A8
				5 - spare	G1	A8
				6 - spare	G1	A8
35	Z21SSM438	A-3-6	307	7	G2	A9
36	Z22SSM121	B-3-7	308	8	G2	A9
37	Z23SSM119	C1S-3-8	309	9	G2	A9
38	Z21SSM448	A-3-16	310	10	G2	A9
48	Z23SSM686	C-3-3	311	11	G2	A9
				12- spare	G2	A9
44	Z23SSM710	C-3-10	313	13	G3	B1
45	Z23SSM699	C-3-11	314	14	G3	B1
46	Z22SSM126	B-3-2	315	15	G3	B1
47	Z22SSM132	B-3-1	316	16	G3	B1
				17- spare	G3	B1
				18- spare	G3	B1
39	Z23SSM115	C3S-3-15	319	19	G4	B2
40	Z21SSM452	A-3-14	320	20	G4	B2
41	Z21SSM440	A-3-13	321	21	G4	B2
				22- spare	G4	B2
43	Z23SSM690	C-3-12	323	23	G4	B2
42	Z23SSM139	C2S-3-9	324	24	G4	B2

Table 3: Notes: [a] the Z23 represents the tube size, i.e. 21-, 22- or 23-mm AF, the SSMxxx is the manufacturer's serial number on the tube, [b] is the middle cable label which relates to the detector ring number and position in the ring, [c] is the cable label at the end of the cable; the first number is the number of the sum box the cable goes to, the last 2 numbers are the input position in that box, [d] the G represents the summed output or group number, [e] 2 VXI (IDC) connectors are used for the cluster end (A and B), the number following is the IDC pin number in that connector. Note that input 24 in each sum box has double the gain of inputs 1 to 23.

Sum Box 4 —2/5 side – Run at 1010 Volts

Position In Array	Tube Serial Number[a]	Middle of Cable Label[b]	End of Cable Label[c]	Sum Box 4 Input channel	VXI Cable Label[d]	IDC Connector number[e]
50	Z23SSM702	C-4-4	401	1	G1	B3
51	Z23SSM436	A-4-6	402	2	G1	B3
52	Z23SSM122	B-4-7	403	3	G1	B3
53	Z23SSM118	C1S-4-8	404	4	G1	B3
54	Z23SSM447	A-4-16	405	5	G1	B3
				6 - spare	G1	B3
49	Z21SSM704	C-4-5	407	7	G2	B4
62	Z22SSM127	B-4-2	408	8	G2	B4
63	Z22SSM135	B-4-1	409	9	G2	B4
64	Z23SSM689	C-4-3	410	10	G2	B4
				11- spare	G2	B4
				12- spare	G2	B4
				13	G3	
				14	G3	
				15	G3	
				16	G3	
				17	G3	
				18- spare	G4	
				19- spare	G3	B5
56	Z23SSM454	A-4-14	420	20	G4	B5
57	Z22SSM443	A-4-13	421	21	G4	B5
58	Z22SSM138	C2S-4-9	422	22	G4	B5
59	Z23SSM693	C-4-12	423	23	G4	B5
55	Z23SSM111	C3S-4-15	424	24	G4	B5

Table 4: Notes: [a] the Z23 represents the tube size, i.e. 21-, 22- or 23-mm AF, the SSMxxx is the manufacturer's serial number on the tube, [b] is the middle cable label which relates to the detector ring number and position in the ring, [c] is the cable label at the end of the cable; the first number is the number of the sum box the cable goes to, the last 2 numbers are the input position in that box, [d] the G represents the summed output or group number, [e] 2 VXI (IDC) connectors are used for the cluster end (A and B), the number following is the IDC pin number in that connector. Note that input 24 in each sum box has double the gain of inputs 1 to 23.

Sum Box 5 —2/5 side – Run at 1010 Volts

Position In Array	Tube Serial Number[a]	Middle of Cable Label[b]	End of Cable Label[c]	Sum Box 5 Input channel	VXI Cable Label[d]	IDC Connector number[e]
60	Z23SSM708	C-4-10	501	1	G1	B6
61	Z23SSM696	C-4-11	502	2	G1	B6
65	Z23SSM706	C-5-5	503	3	G1	B6
80	Z23SSM685	C-5-3	504	4	G1	B6
				5 - spare	G1	B6
				6 - spare	G1	B6
66	Z23SSM711	C-5-4	507	7	G2	B7
67	Z21SSM435	A-5-6	508	8	G2	B7
68	Z22SSM123	B-5-7	509	9	G2	B7
69	Z23SSM120	C1S-5-8	510	10	G2	B7
70	Z21SSM449	A-5-16		11- spare	G2	B7
				12- spare	G2	B7
76	Z23SSM716	C-5-10	513	13	G3	B8
77	Z23SSM697	C-5-11	514	14	G3	B8
78	Z22SSM129	B-5-2	515	15	G3	B8
79	Z22SSM134	B-5-1	516	16	G3	B8
				17- spare	G3	B8
				18- spare	G3	B8
71	Z23SSM112	C3S-5-15	519	19	G4	B9
72	Z21SSM450	A-5-14	520	20	G4	B9
73	Z21SSM444	A-5-13	521	21	G4	B9
				22- spare	G4	B9
74	Z23SSM140	C2S-5-9	522	22	G4	B9
75	Z23SSM712	C-5-12	524	24	G4	B9

Table 5: Notes: [a] the Z23 represents the tube size, i.e. 21-, 22- or 23-mm AF, the SSMxxx is the manufacturer's serial number on the tube, [b] is the middle cable label which relates to the detector ring number and position in the ring, [c] is the cable label at the end of the cable; the first number is the number of the sum box the cable goes to, the last 2 numbers are the input position in that box, [d] the G represents the summed output or group number, [e] 2 VXI (IDC) connectors are used for the cluster end (A and B), the number following is the IDC pin number in that connector. Note that input 24 in each sum box has double the gain of inputs 1 to 23.