

**Specifications for
Cable Harnesses for the NOvA Experiment
(University of Virginia)**

Cable Harness Type S

-Length and Labeling

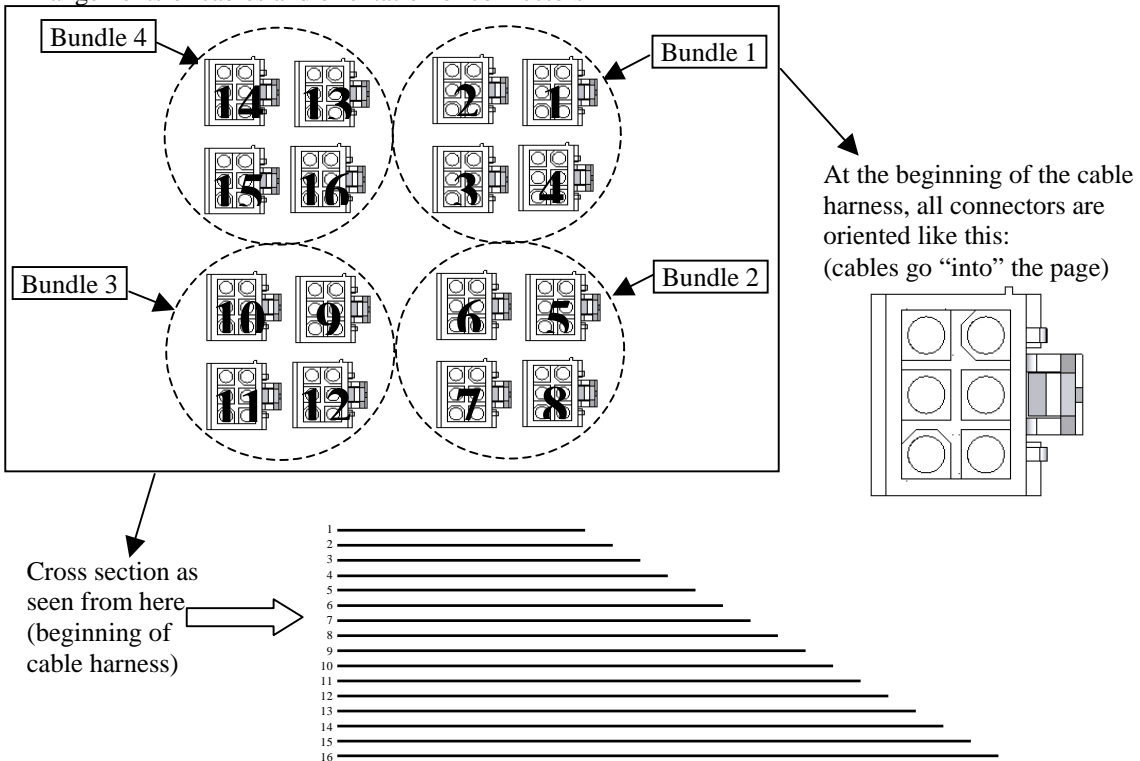
#	Length in cm	Cable labels with scheme SD	Cable labels with scheme SU
1	112.0	SD1	SU1
2	117.0	SD2	SU2
3	126.0	SD3	SU3
4	139.3	SD4	SU4
5	152.6	SD5	SU5
6	165.9	SD6	SU6
7	179.2	SD7	SU7
8	192.5	SD8	SU8
9	205.8	SD9	SU9
10	219.1	SD10	SU10
11	232.4	SD11	SU11
12	245.7	SD12	SU12
13	259.0	SD13	SU13
14	272.3	SD14	SU14
15	285.6	SD15	SU15
16	298.9	SD16	SU16

-Number of cable harnesses

6 cable harnesses with label scheme SD

6 cable harnesses with label scheme SU

-Arrangements of cables and orientation of connectors



-Positions of cable ties

0.45m: small ties around bundles 1, 2, 3, 4, and one big tie around bundles 1, 2, 3, 4

0.90m: small ties around bundles 2, 3, 4

1.35m: small ties around bundles 3, 4

1.80m: small tie around bundle 4

Cable Harness Type L

-Length and Labeling

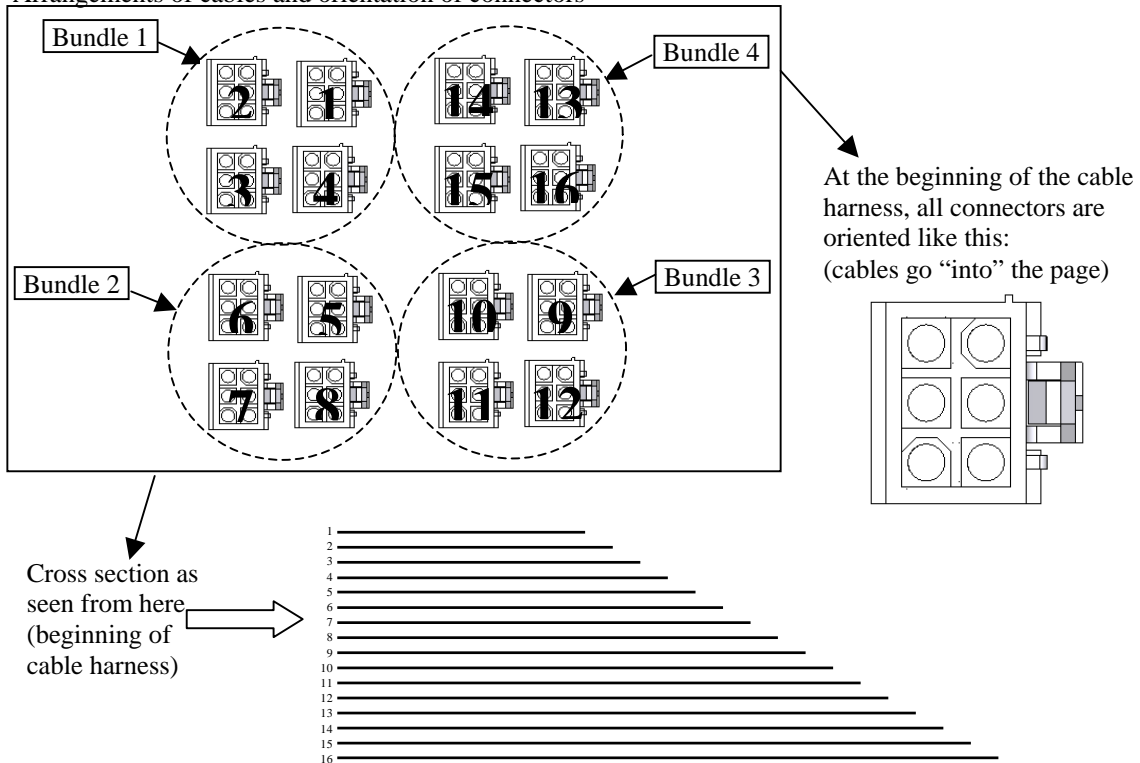
#	Length in cm	Cable labels with scheme LD	Cable labels with scheme LU
1	184.0	LD1	LU1
2	188.0	LD2	LU2
3	201.3	LD3	LU3
4	214.6	LD4	LU4
5	227.9	LD5	LU5
6	241.2	LD6	LU6
7	254.5	LD7	LU7
8	267.8	LD8	LU8
9	281.1	LD9	LU9
10	294.4	LD10	LU10
11	307.7	LD11	LU11
12	321.0	LD12	LU12
13	334.3	LD13	LU13
14	347.6	LD14	LU14
15	360.9	LD15	LU15
16	374.2	LD16	LU16

-Number of cable harnesses

9 cable harnesses with label scheme LD

9 cable harnesses with label scheme LU

-Arrangements of cables and orientation of connectors



-Positions of cable ties

0.45m: small ties around bundles 1, 2, 3, 4, and one big tie around bundles 1, 2, 3, 4

0.90m: small ties around bundles 1, 2, 3, 4, and one big tie around bundles 1, 2, 3, 4

1.35m: small ties around bundles 2, 3, 4

1.80m: small ties around bundles 3, 4

2.15m: small tie around bundle 4

Color scheme for pins on both cable ends

Pin #	Color
1	Yellow
2	Brown
3	Black
4	Orange
5	Blue
6	Red

Material supplied by the University of Virginia.

- 6 conductor cables (Belden 27600A):
 - 5000ft (3859.9ft required for all 30 cable harnesses)
- 6 pin connectors (Tyco 172168-1):
 - 907 (960 required for all 30 cable harnesses)
 - we will send more
- sample harnesses of type S and type L