

3.8 13-pin MacArtney Cable

In addition to the RF cables, each Optical head is also connected to the Electronics via (1) 13-pin MacArtney cable. The 13-pin cables (SubConn D-P-P4TP24#/4C18#) are interchangeable between the two Optical heads. These cables have been custom-molded with a right-angle connector on one end, as shown in Figure 17. The right-angle plug mates to the Optical head and the straight plug mates to the Electronics. Table 2 and Figure 18 describe the connector and cable pin-outs.

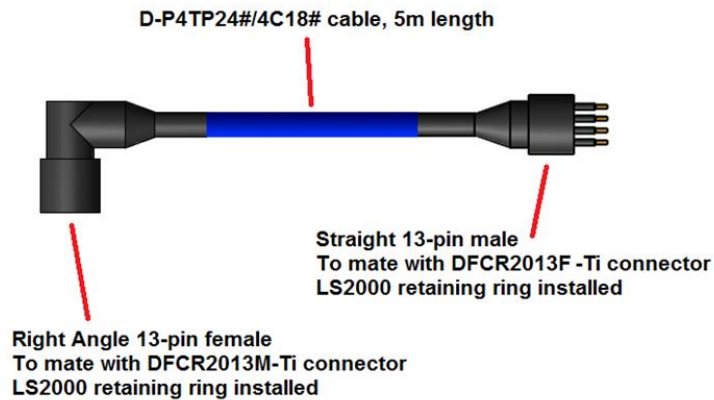


Figure 17 MacArtney 13-pin Cable Details

Table 2 MacArtney 13-pin Pin-Out

<u>DIL13M</u>	<u>MacArtney:D-P-P4TP24#/4C18#</u>	<u>DIL13F</u>	<u>Signal</u>
1	Gnd: 18 AWG	1	Power Gnd
2	Shield	2	Connect to Housing
3	Gnd: 18 AWG	3	Power Gnd
4	TP1a: 24 AWG	4	X Ctrl Pos
5	TP1b: 24 AWG	5	X Ctrl Neg
6	TP2a: 24 AWG	6	X Position Pos
7	TP2b: 24 AWG	7	X Position Neg
8	TP3a: 24 AWG	8	RS232 Tx from computer
9	TP3b: 24 AWG	9	RS232 Gnd
10	TP4a: 24 AWG	10	RS232 Rx to computer
11	TP4b: 24 AWG	11	RS232 Gnd
12	+24V: 18 AWG	12	+24V
13	+24V: 18 AWG	13	+24V