

SMT Designs Standard Color Code for Electronic Bays and Interconnects

Revision 1.1 October 22, 2019

Switches - Single Throw- Off/On (SPST)

Color	Purpose	Connector Pin
Green	Positive Battery Power In	Common
Green	Positive Switched Power Out	Normally Open

Direct Bay Wiring - Single & Dual Deploy

Color	Purpose
Red	Positive Power - Device
White	Positive Power – Pyro Battery ¹
Black	Negative Power - Ground
Gray	Status/IO 1 ²
Violet	Status/IO 2 ²
Yellow	Apogee +
Orange	Apogee -
Blue	Main +
Brown	Main -

Direct Bay Wiring - Redundant Dual Deploy – Primary Altimeter

Color	Purpose
Red	Positive Power - Device
White	Positive Power – Pyro Battery ¹
Black	Negative Power - Ground
Gray	Status/IO 1 ²
Violet	Status/IO 2 ²
Yellow	Apogee +
Yellow	Apogee -
Blue	Main +
Blue	Main -

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- 1 Not all altimeters support a separate battery for the main and apogee deployment connections. If support is not available, SMT Designs recommends connecting pin 2 on the end plate connector to positive power, so that any SMT Designs platform will work in the bay you are designing.
 - 2 Status/IO are two lines that can be used in a couple of different ways. My initial use was to have a centrally located LED that would either be added to or replace a LED on an altimeter due to my hearing. A quite different (but very valid) use is to have the two connections be a serial link to the altimeter on the sled as more and more manufacturers add telemetry connections to their altimeters. Look at my connection recommendations above.

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Direct Bay Wiring - Redundant Dual Deploy – Device Altimeter

Color	Purpose
Red	Positive Power - Device
White	Positive Power – Pyro Battery ¹
Black	Negative Power - Ground
Gray	Status/IO 1 ²
Violet	Status/IO 2 ²
Orange	Apogee +
Orange	Apogee -
Brown	Main +
Brown	Main -

Interconnect Wiring - Platform Connector (female)

Color	Purpose	Connector Pin
Red	Positive Power - Device	1
White	Positive Power – Pyro Battery ¹	2
Black	Negative Power - Ground	3
Gray	Status/IO 1 ²	4
Violet	Status/IO 2 ²	5
Yellow	Apogee +	6
Orange	Apogee -	7
Blue	Main +	8
Brown	Main -	9

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Interconnect Wiring - Platform Connector (male) - Single & Dual Deploy

Color	Purpose	Connector Pin
Red	Positive Power - Device	1
White	Positive Power – Pyro Battery ¹	2
Black	Negative Power - Ground	3
Gray	Status/IO 1 ²	4
Violet	Status/IO 2 ²	5
Yellow	Apogee +	6
Orange	Apogee -	7
Blue	Main +	8
Brown	Main -	9

Interconnect Wiring – Bay Connector (male) - Redundant Dual Deploy – Primary Altimeter

Color	Purpose	Connector Pin
Red	Positive Power - Device	1
White	Positive Power – Pyro Battery ¹	2
Black	Negative Power - Ground	3
Gray	Status/IO 1 ²	4
Violet	Status/IO 2 ²	5
Yellow	Apogee +	6
Yellow	Apogee -	7
Blue	Main +	8
Blue	Main -	9

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Interconnect Wiring - Bay Connector (male) - Redundant Dual Deploy – Secondary Altimeter

Color	Purpose	Connector Pin
Red	Positive Power - Device	1
White	Positive Power – Pyro Battery ¹	2
Black	Negative Power - Ground	3
Gray	Status/IO 1 ²	4
Violet	Status/IO 2 ²	5
Orange	Apogee +	6
Orange	Apogee -	7
Brown	Main +	8
Brown	Main -	9

Status/IO Connection Recommendations – Serial Port

Color	Purpose	Connector Pin
Gray	Serial Data Out ²	4
Violet	Serial Data In ²	5