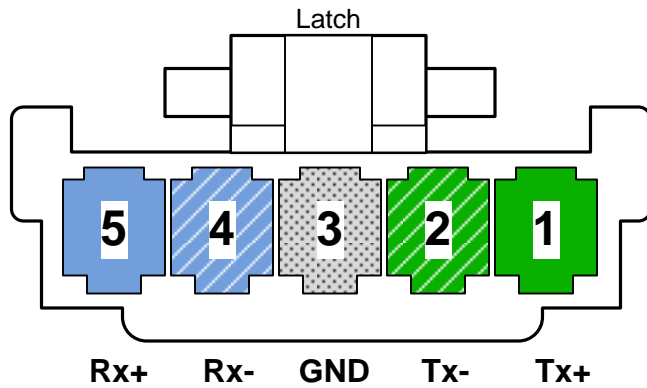
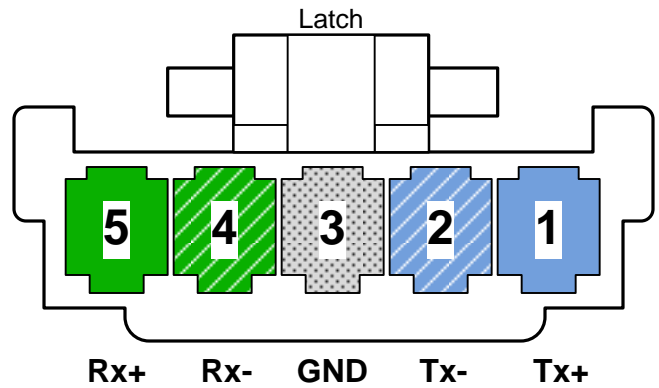


Full Duplex RS-485 Standard Connector



Sherlock 5P Receptacle
(Back)

Master Side (CPC)



Sherlock 5P Receptacle
(Back)

Slave Side (All Other Devices)

Parameters

Cable Type: Cat5e, 4-Pair SSTP, 24AWG

Contacts: Sherlock Socket (Molex 50212-8000)






Connectors: Sherlock 5-Pin Wire Housing (Molex 35507-1500)

Relevant Cables

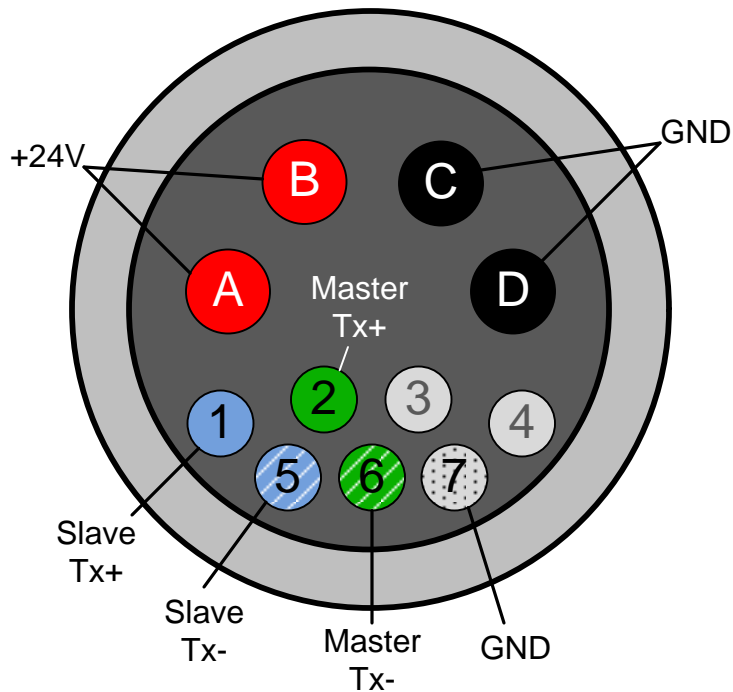
Master Side: DAT-ARM,DAT-LBOG,DAT-BBOG,DAT-RBOG,DAT-INT,DAT-TRI

Slave Side: DAT-INT, DAT-BOGCTL(1-6),DAT-ARMBASE,DAT-WRIST,DAT-TRICTL

Key

-  Green Pair-Solid
-  Green Pair-Striped
-  Drain Wire/Shield
-  Blue Pair-Striped
-  Blue Pair-Solid

Bogie-Electrical Housing Connector



LF-13

(Check Pin Designator)

Key

-Cat5e-

Green Pair-Solid

Green Pair-Striped

Drain Wire/Shield

Blue Pair-Striped

Blue Pair-Solid

-MTW-

Red 16AWG

Black 16AWG

-Other-

Unused

Parameters

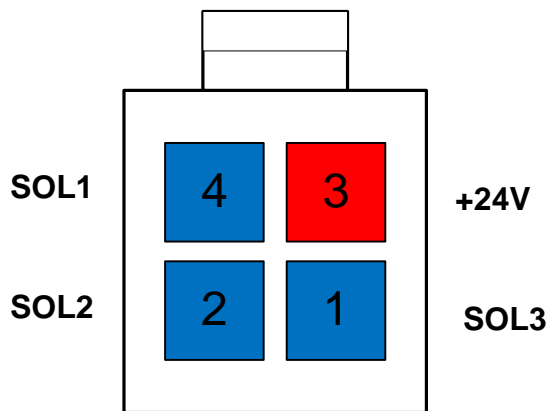
Cable Type: Cat5e, 4-Pair SSTP, 24AWG, 16AWG Machine Tool Wire, 22AWG Shielded Audio Cable

Connectors: Hirose LF13-11(LF13WBR-11S and LF13WBP-11P)

Relevant Cables

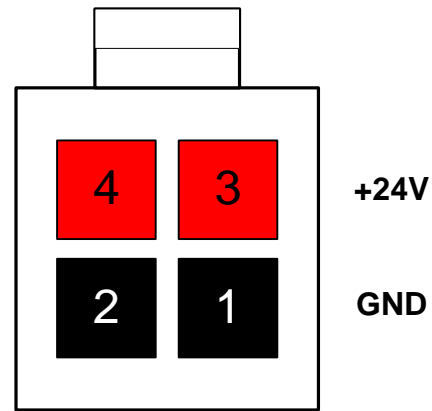
DAT-LBOG,DAT-RBOG,DAT-BBOG,+24VDIST,GND, CMP-LBOG,CMP-RBOG,CMP-BBOG

Solenoid Driver Connectors



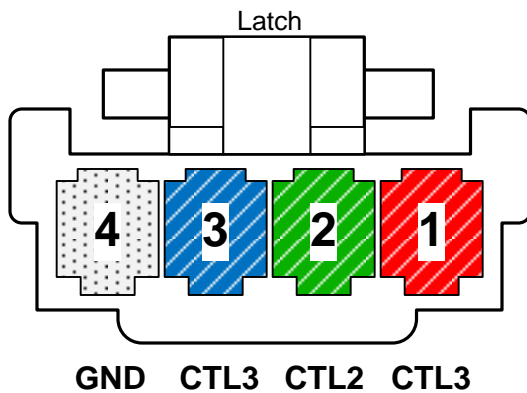
Minifit Jr. 4P2R
Receptacle (Back)

Solenoid Driver Output



Minifit Jr. 4P2R
Receptacle (Back)

Solenoid Driver Power



Sherlock 4P Receptacle
(Back)

Key

-4 Conductor-

- Red Wire
- Green Wire
- Blue Wire
- Drain Wire/Shield

-MTW-

- Red 16AWG
- Black 16AWG
- Blue 16AWG

Parameters

Cable Type: 16AWG Machine Tool Wire, 24AWG 4-Cond. Shielded Cable

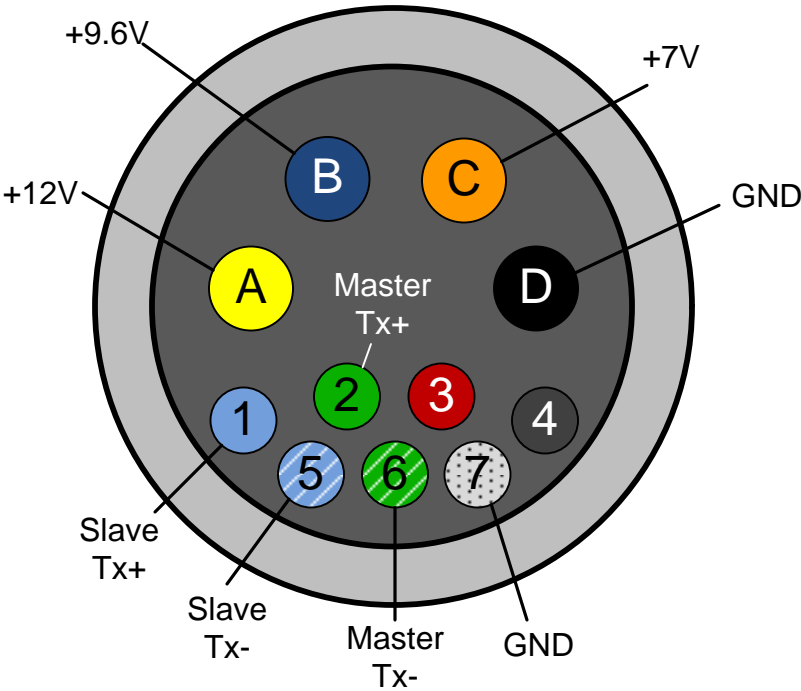
Contacts: Sherlock Sockets (Molex 50212-8000), Molex Minifit Jr. Sockets

Connectors: Sherlock 4P Receptacle (Molex 35507-0400), Minifit Jr. 4P2R Receptacle

Relevant Cables

PWR-SOL1, PWR-SOL2, DRV-SOL1, DRV-SOL2, CTL-SOL1, CTL-SOL2

Tripod-Electrical Housing Connector



LF-13

(Check Pin Designator)

Parameters

Cable Type: Cat5e, 4-Pair SSTP, 24AWG, 16AWG Machine Tool Wire

Connectors: Hirose LF13-11(LF13WBR-11S and LF13WBP-11P)

Relevant Cables

DAT-TRI,CMP-TRI,+12V,+9.6V,+7V,GND

Key

-Cat5e-

- Green Pair-Solid
- Green Pair-Striped
- Drain Wire/Shield

- Blue Pair-Striped
- Blue Pair-Solid

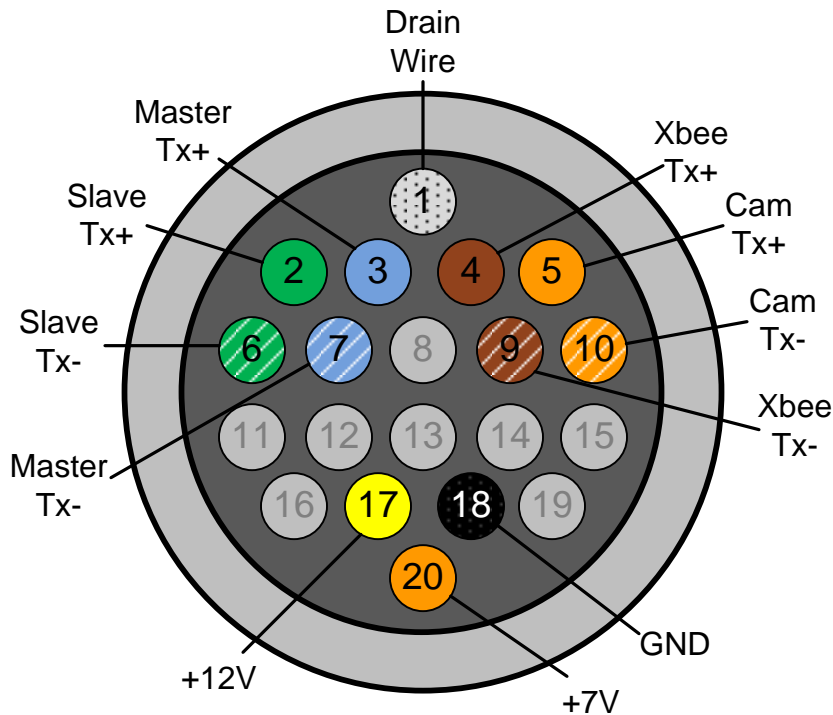
-MTW-

- Yellow 16AWG
- Blue 16AWG
- Orange 16AWG
- Black 16AWG

-Audio Cable-

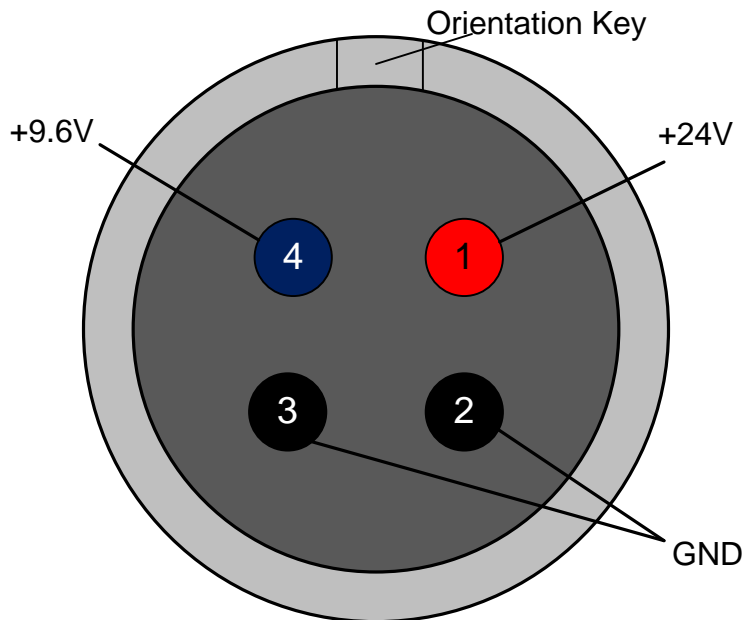
- Red Wire
- Black Wire

Arm-Electrical Housing Connectors



LF-13

(Check Pin Designators)



RM-12

(Check Pin Designators)

Key

-Cat5e-

- Green Pair-Solid
- Green Pair-Striped
- Blue Pair-Solid
- Blue Pair-Striped
- Brown Pair-Solid
- Brown Pair-Striped
- Orange Pair-Solid
- Orange Pair-Striped
- Drain Wire/Shield

-MTW-

- Red 16AWG
- Blue 16AWG
- Black 16AWG
- Orange 22AWG
- Yellow 22AWG
- Black 22AWG

-Other-

- Unused

Parameters

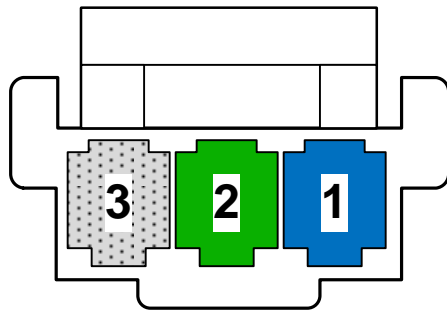
Cable Type: Cat5e, 4-Pair SSTP, 24AWG, 16AWG Machine Tool Wire

Connectors: Hirose LF13-11(LF13WBR-11S and LF13WBP-11P)

Relevant Cables

DAT-ARM,DAT-XBEE,CMP-ARM,+24V,+12V,+9.6V,+7V,GND

XBee Interface Board I/O Connectors

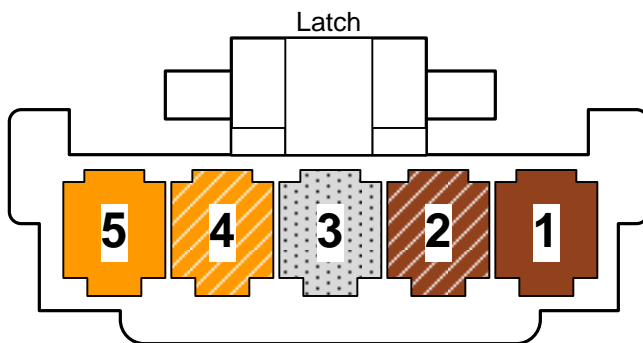


Same on CPC
Board Side

GND SLEEP RESET

**Sherlock 3P Receptacle
(Back)**

XBee Control Connector



XBRx+ XBRx- GND XBTx- XBTx+

**Sherlock 5P Receptacle
(Back)**

XBee RS-485 Connector

Key

-4 Conductor-

 Blue Pair-Solid


 Green Pair-Solid

 Drain Wire/Shield

-Cat5e-

 Orange Pair-Solid

 Orange Pair-Striped

 Drain Wire/Shield

 Brown Pair-Striped

 Brown Pair-Solid

Parameters

Cable Type: Cat5e 4-Pair SSTP 24AWG, 4 Conductor Shielded Cable

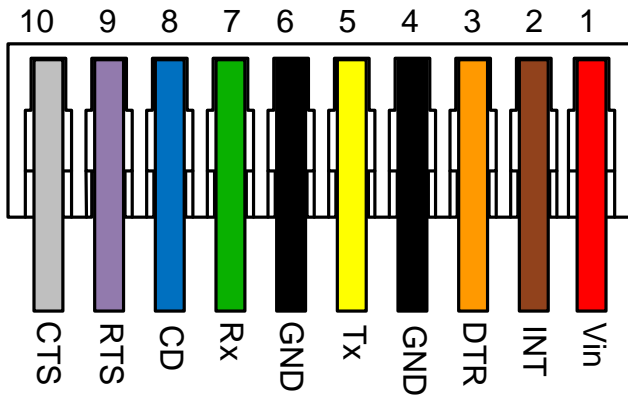
Contacts: Sherlock Receptacle (Molex 50212-8000)

Connectors: Sherlock 3-Pin Wire Housing (Molex 35507-0300)
, Sherlock 5-Pin Wire Housing (Molex 35507-1500)

Relevant Cables

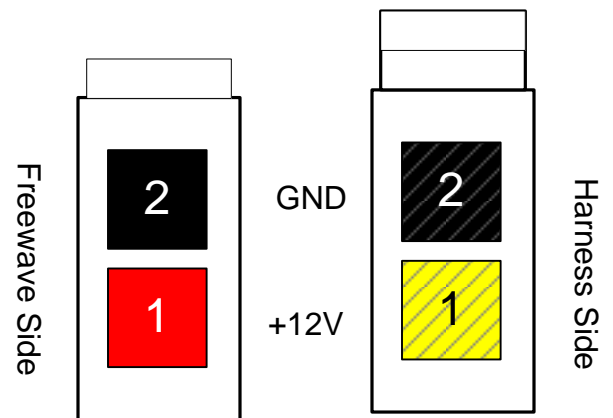
DAT-XBEE,CTL-XBEE

Freewave Connectors



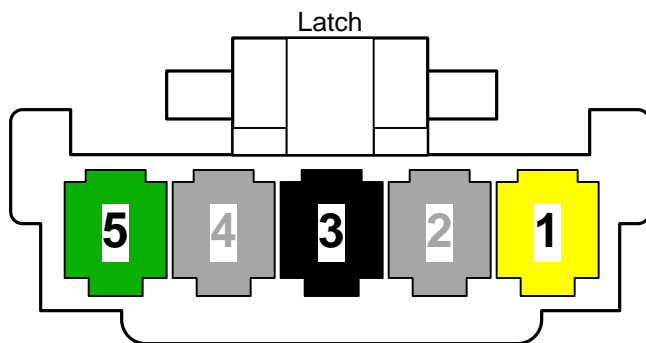
MTA-100 10P Connector
(Top)

Freewave Main Connector



Minifit Jr. 2P2R
Receptacle (Back)

Freewave Power Connector



Sherlock 5P Receptacle
(Back)

Freewave Data Connector

Key	
-MTW-	-Freewave Cable-
16-18AWG-Yellow	FWV Yellow
16-18AWG-Black	FWV Green
-Freewave Cable-	FWV Blue
FWV Red	FWV Purple
FWV Brown	FWV Gray
FWV Orange	
FWV Black	

Parameters

Cable Type: 10 wire Freewave Cable

Contacts: Sherlock Receptacle (Molex 50212-8000)

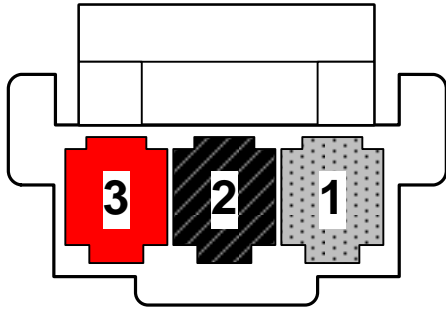
Connectors: MTA-100 (Freewave Cable)

, Sherlock 5-Pin Wire Housing (Molex 35507-1500), Minifit-Jr. 2-Pin Wire Housing

Relevant Cables

DAT-FWV, PWR-FWV

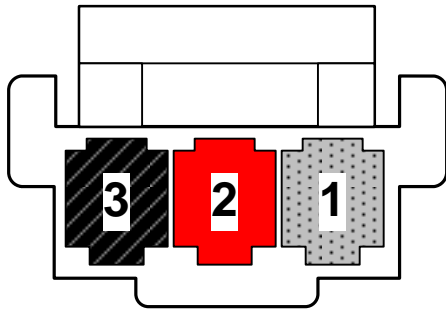
MUX Audio Connectors



AUD+ AUD- GND

Sherlock 3P Receptacle
(Back)

Differential Audio Input



GND AUD GND

Sherlock 3P Receptacle
(Back)

Single-Ended Audio Output

Key

-Audio Cable-



Audio Cable - Red



Audio Cable - Black



Drain Wire/Shield

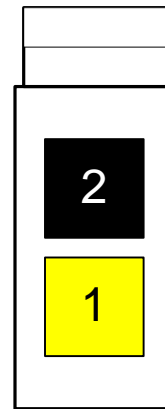
-MTW-



16-18AWG-Yellow



16-18AWG-Black



GND

+12V

Minifit Jr. 2P2R
Receptacle (Back)

Mux Power

Parameters

Cable Type: Shielded Audio Cable, 1 Pair 20-22AWG Red/Black, 18AWG MTW

Contacts: Sherlock Sockets (Molex 50212-8000), Minifit Jr. Sockets

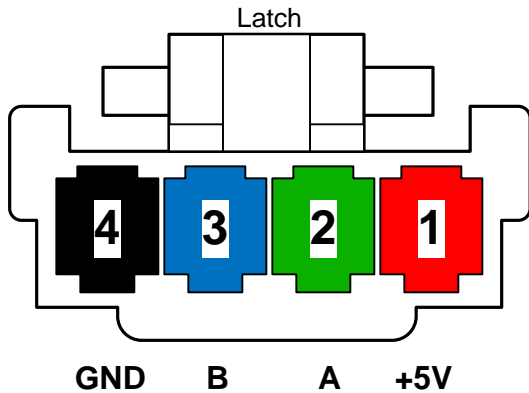
Connectors: Sherlock 3-Pin Wire Housing (Molex 35507-0300), Minifit Jr. 2P Plug

Relevant Cables

AV-DIFFAU, AV-SEAU, PWR-MUX

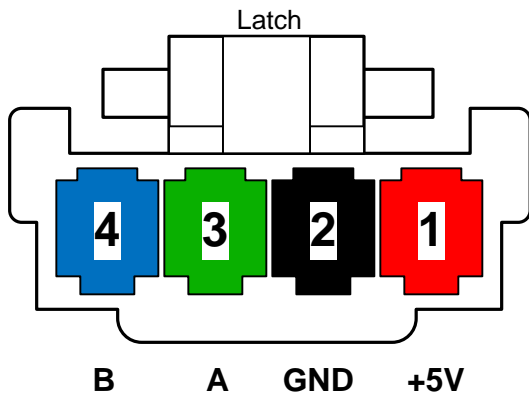
Bogie Controller I/O Connectors

Tie Shields to Ground



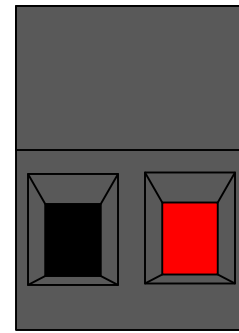
Sherlock 4P Receptacle
(Back)

**Turn Motor Encoder
Connector**

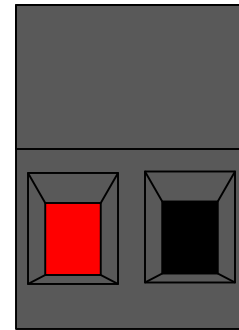


Sherlock 4P Receptacle
(Back)

**Drive Motor Encoder
Connector**



GND +24V
Power Input



V+ GND
Power Output

Key

-4 Conductor-



Red Wire



Black Wire



Green Wire



Blue Wire

-MTW-



16AWG-Red



16AWG-Black

Parameters

Cable Type: 4 Conductor 24AWG Shielded, 16AWG MTW

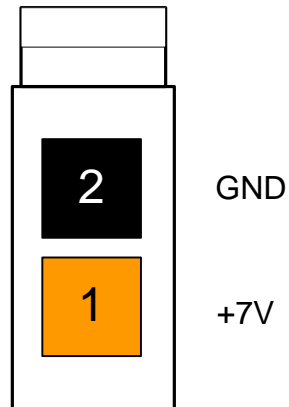
Contacts: Sherlock Sockets (Molex 50212-8000)

Connectors: Sherlock 4-Pin Wire Housing (Molex 35507-0400),
Motor Interface Terminal Blocks

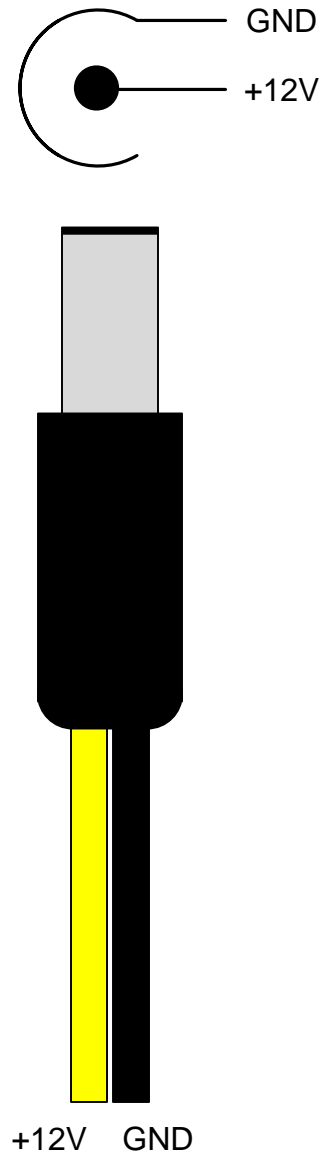
Relevant Cables

SIG-TENC1-6, SIG-PENC1-6, DAT-MTRCTL1-12, PWR-
MTRCTL1-6, PWR-MTRDRV1-6

Miscellaneous Internal Power Connectors



Minifit Jr. 2P2R
Receptacle (Back)
CPC/XBee Power



Parameters

Cable Type: 16-18AWG MTW

Contacts: Minifit Jr. Sockets

Connectors: Minifit Jr. 2P Plug, 2.1mm Barrel Plug

Relevant Cables

PWR-CPC, PWR-FWV, PWR-VID

