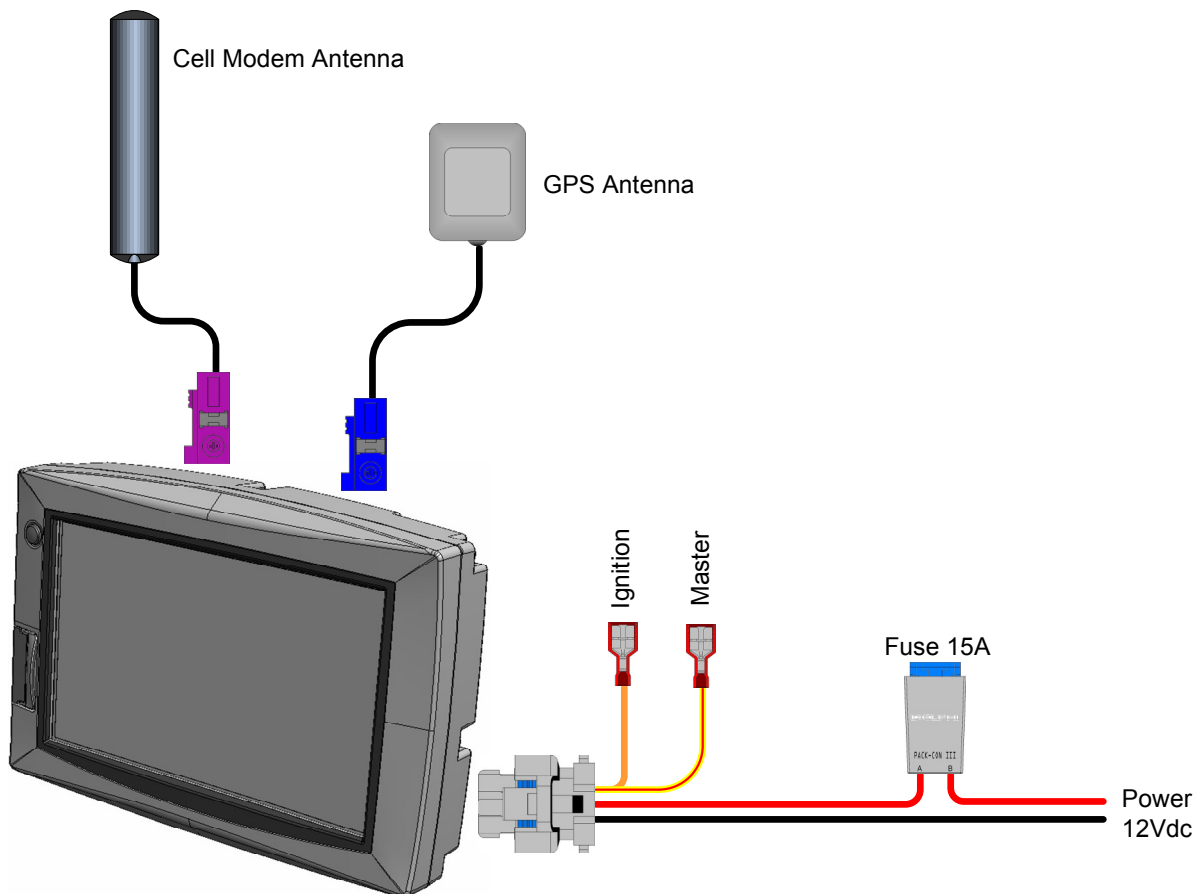


HOW TO GUIDE: mojo3D Connections

This document describes all of the possible connections for the mojo3D system including CAN bus accessories.

Basic System

The mojo3D is supplied with a power cable, GPS antenna and cell modem antenna. The diagram below shows the minimum connections for the mojo3D:



The ignition and master inputs are optional for normal operation.

Cell Modem Antenna: Should be adhered to the inside window of the cab but no closer than 20cm (8") to the operator's normal driving position. The blue connector is keyed so it can not be connected to the wrong mojo3D connector.

GPS Antenna: Should be mounted to the roof of the machine on the centre line using either the magnetic mount or the supplied tape. The violet connector is keyed so it can't be connected to the wrong mojo3D RF connector.

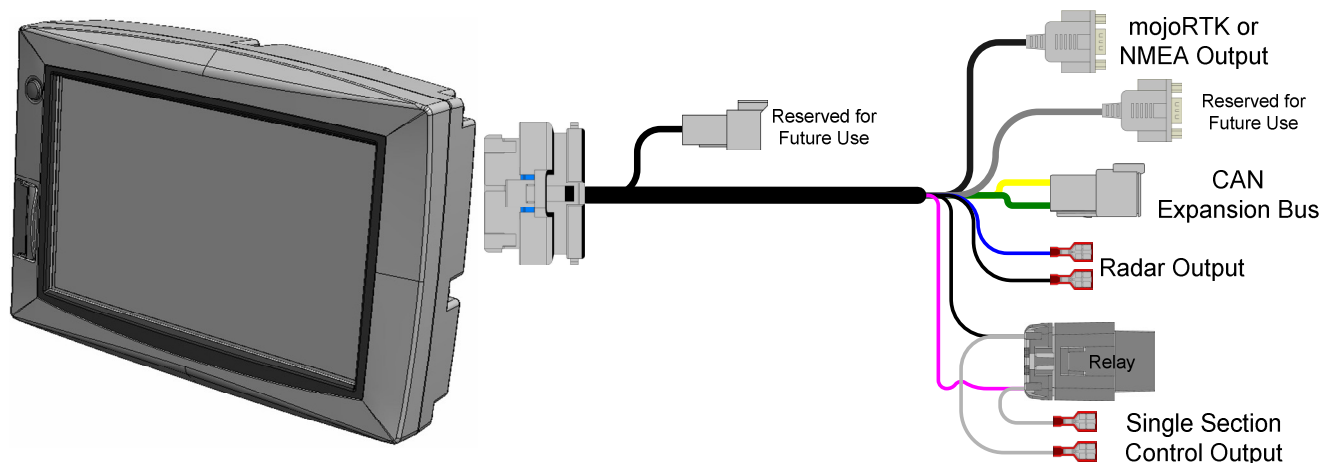
Power: Must be connected to a permanent 12Vdc power source capable of delivering a constant 2A. The red wire is positive 12V while the black wire is ground. The Orange ignition wire may be connected to a switched ignition power source to automatically power the mojo3D on and off with the machine.

Master Input: The optional master input may be connected to an external switch for remote operation of coverage function. The master input should be 12V when on and ground or floating when off.

Port Expansion Cable

The port expansion cable offers connection to:

- mojoRTK System
- NMEA Serial Output data
- Radar Output
- Single Section Control Output
- External CAN Devices Including the Electric Steer Kit and Multi-Section Kit.



mojoRTK / NMEA0183 Output: The short D9 connector serial data output port is used to connect to either the mojoRTK console or provide standard NMEA0183 data output to external 3rd party devices.

A mojoRTK External Control Cable is required to connect to the mojoRTK console.

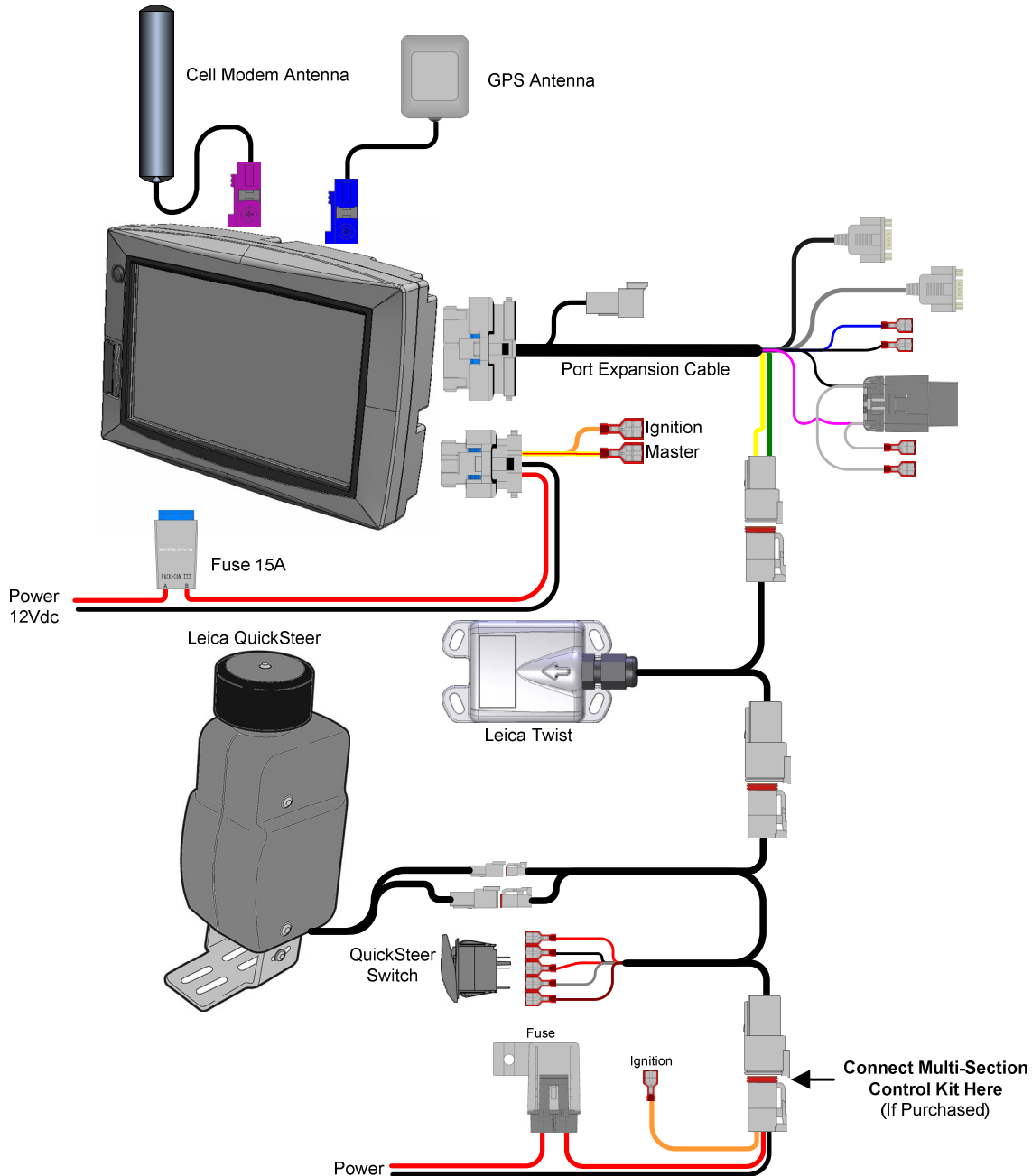
CAN Port: The expansion bus connector is the CAN port used to connect to the Electric Steer Kit and/or the Multi-Section Kit.

Radar Output: The Radar output simulates a ground speed radar signal to connect to 3rd party devices that can receive a radar input. The Black wire is ground while the blue wire is the radar variable frequency output. The output frequency is 26.11Hz/Km/hr (42Hz/mph) and receiving devices should be setup for this scale.

Single Section Control Output: An isolated switched output via a relay is provided for single section control. This switch is provided by the two grey wires. Up to 30A can be switched through the relay to power 3rd party equipment.

Electric Steer Kit

The Electric steer kit provides automatic steering via the Leica QuickSteer and the Leica Twist. The Leica QuickSteer provides steering wheel actuation via electric motor while the Leica Twist provides inertial sensing and terrain compensation. The Leica QuickSteer must always be used with the Leica Twist.



Power: The power connection for the Electric Steer Kit should be able to supply 5A continuous from a permanent 12V supply. If the Multi-Section Kit is also being used then this connection must be able to supply 13A continuous and the Multi-Section Kit must be connected closest to the power source. A 5m (16.4') cable is supplied so that direct connection to the battery is possible if required.

The Orange ignition wire may be connected to a switched ignition power source.

Leica QuickSteer: The QuickSteer is to be mounted to the steering column. For details on how to install the QuickSteer using its Universal QuickSteer Bracket consult the Leica QuickSteer User Manual supplied with the product.

Note: The following cables supplied with the QuickSteer are not required for installation with the mojo3D:

- 676093: QuickSteer CAN Cable
- 676092: QuickSteer Generic Power Cable

These two cables are only supplied for connection to the mojoRTK system, instead the QuickSteer should be connected to the QuickSteer CAN interface cable only.

Switch: The guidance switch serves two functions:

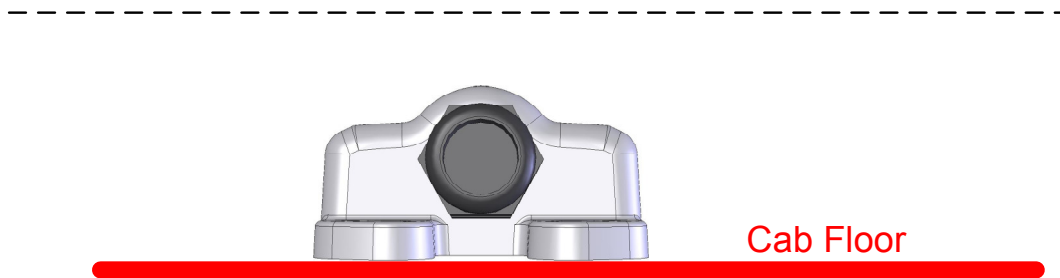
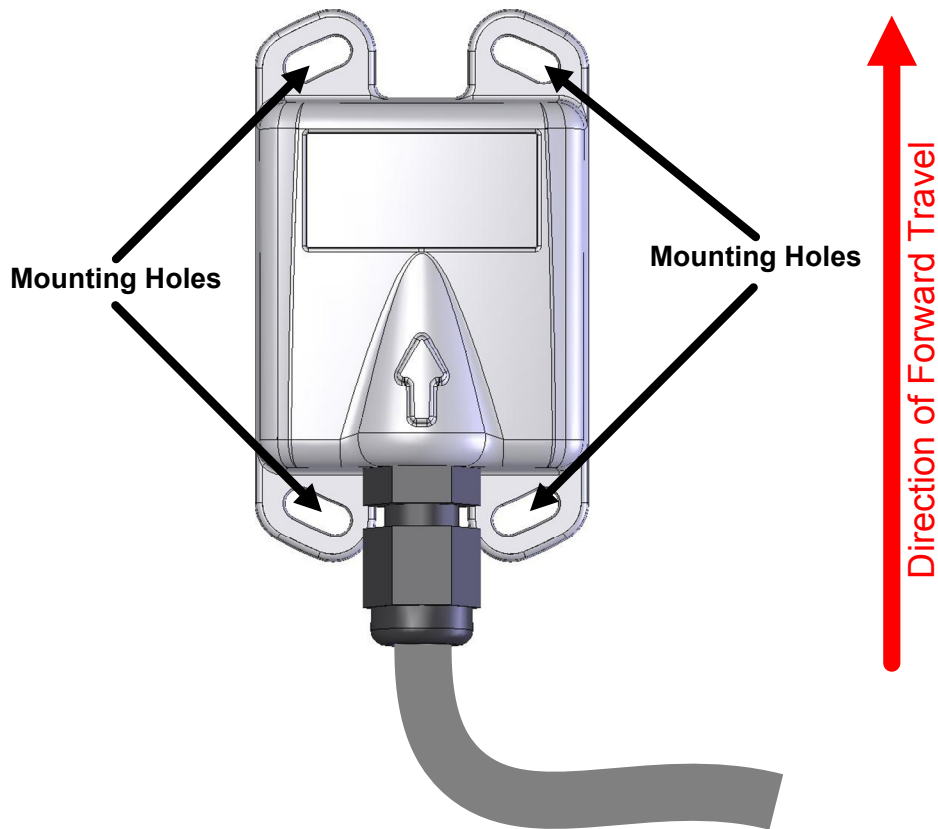
- Power Isolation for the QuickSteer
- Steering Engage function

The wires on the QuickSteer CAN interface cable are numbered; these numbers correspond to the numbered terminal pins on the switch.

The switch is a standard size and should fit into a spare switch location on the machines operating panel.

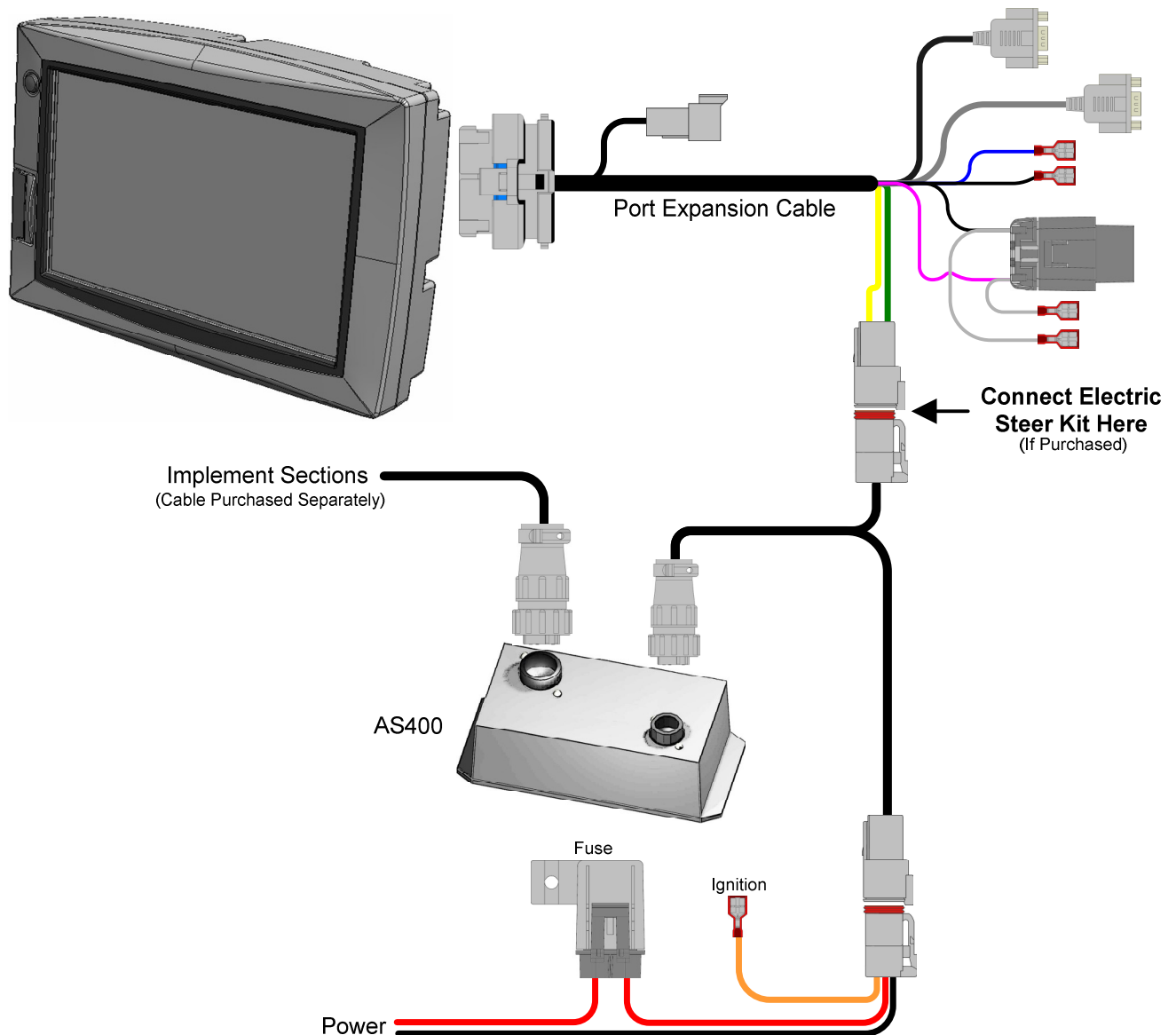
Leica Twist: The Leica Twist must be oriented flat on the floor with the arrow facing in the forward direction of travel. The Leica Twist should be mounted out of the way in a location where it's unlikely to be struck by pedals or feet. No interaction with the Leica Twist is required.

The Leica Twist needs to be firmly bolted to the Cab floor using the four Screws and nuts supplied. 5mm Holes should be drilled into the rubber mat using the Leica Twist as a template.



Multi-Section Control Kit

The multi-section kit provides multi-section control using the Leica AS400 section controller.



Power: The power connection for the Multi-Section Control kit should be able to supply 8A continuous from a permanent 12V supply. If the Electric Steer Kit is also being used then this connection must be able to supply 13A continuous and the Multi-Section Control Kit must be connected closest to the power source. A 5m (16.4') cable is supplied so that direct connection to the battery is possible if required.

The Orange ignition wire may be connected to a switched ignition power source.

AS400: The AS400 section controller should be located in the cab and provides up to 13 section control. For more information regarding the AS400 mounting, section connection and other features please consult the AS400 user manual.

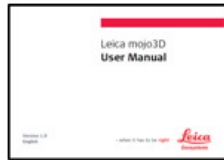
Order Numbers

The following part numbers can be used when ordering the mojo3D and accessories:

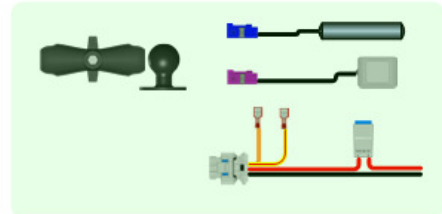
777532: Leica mojo3D Kit. Includes:



Leica mojo3D Display, HSDPA - **777533**



User Manual (En) - **777538**

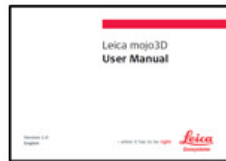


Vehicle Switch Kit - **780161**

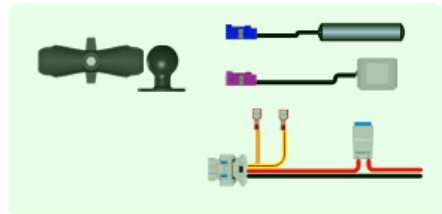
777535: Leica mojo3D Kit (US Version). Includes:



Leica mojo3D Display, CDMA - **777536**

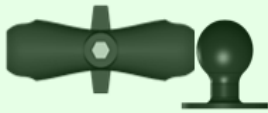


User Manual (En) - **777538**

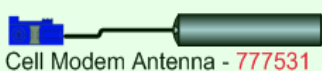


Vehicle Switch Kit - **780161**

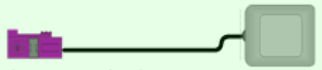
780161: Leica mojo3D Vehicle Switch Kit. Includes:



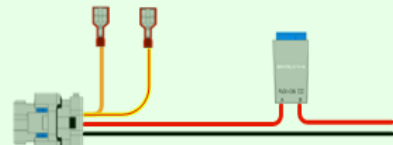
Ram Mount Arm - **779295**
Ram Mount - **779529**



Cell Modem Antenna - **777531**



Compact GPS Antenna - **777530**

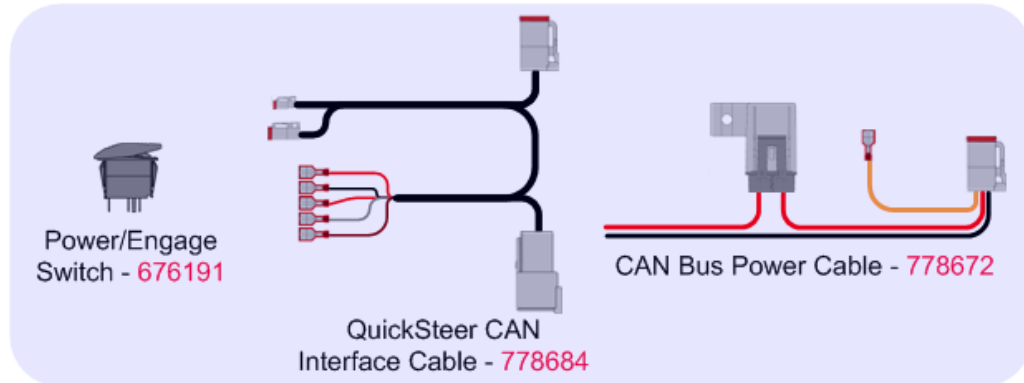


Power Cable - **777579**

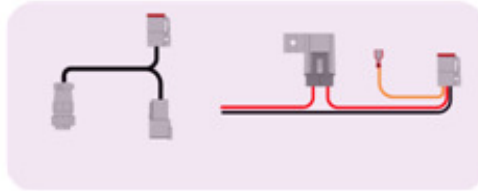
6004480: Electric Steer Kit. Includes:



780162: Electric Steer Cable Kit. Includes:



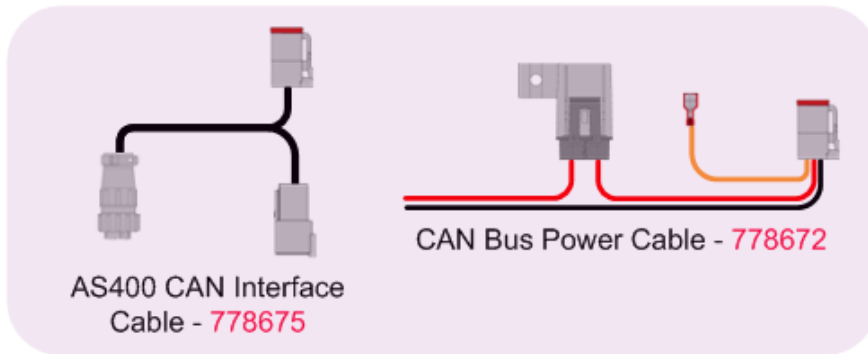
6004481: Multi-Section Control Kit. Includes:



Leica AS400 - 779828

Multi-Section Cable Kit - 780163

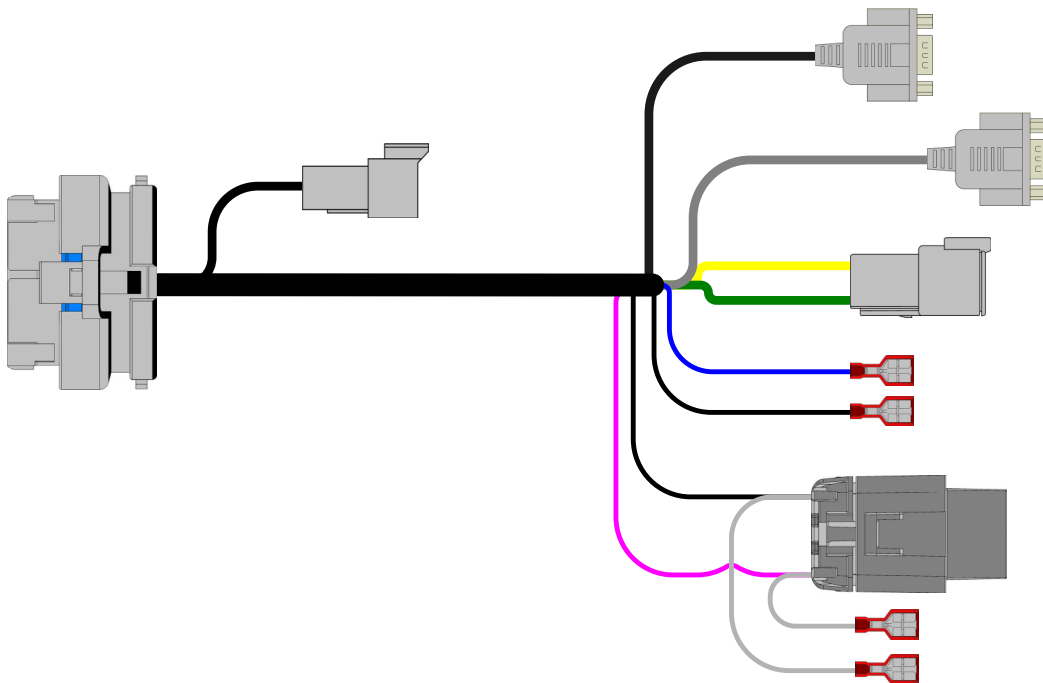
780163: Multi-Section Cable Kit. Includes:



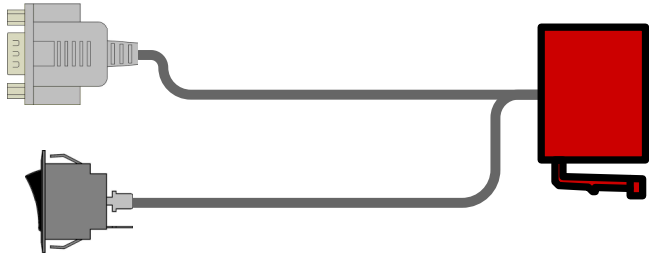
AS400 CAN Interface
Cable - 778675

CAN Bus Power Cable - 778672

778674: Port Expansion Cable



675593: mojoRTK External Control Cable (Non-Australian Version)



675594: mojoRTK External Control Cable (Australian Version)

