



CABLING GUIDE

EZ-Guide[®] 500 Lightbar Guidance System

CABLING GUIDE

EZ-Guide® 500 Lightbar Guidance System

Contact Information

Trimble Navigation Limited
Trimble Agriculture Division
10355 Westmoor Drive
Suite #100
Westminster, CO 80021
USA

trimble_support@trimble.com
www.EZ-Guide.com

Legal Notices

Copyright and Trademarks

© 2007–2010, Trimble Navigation Limited. All rights reserved.

Trimble, AgGPS, EZ-Guide, and EZ-Steer are trademarks of Trimble Navigation Limited, registered in the United States and in other countries. Autopilot, EZ-Boom, Field-IQ, and SiteNet are trademarks of Trimble Navigation Limited.

All other trademarks are the property of their respective owners.

This product is covered by the following patents: 5,311,149, 5,369,589, 5,987,383, 6,252,863, 5,402,450, 5,493,588, and 6,463,374. Other patents pending.

Release Notice

This is the November 2010 release (Revision B) of the *EZ-Guide 500 Lightbar Guidance System Cabling Guide*. It applies to version 5.10 of the EZ-Guide 500 firmware.

LIMITED WARRANTY TERMS AND CONDITIONS

Product Limited Warranty

Subject to the following terms and conditions, Trimble Navigation Limited ("Trimble") warrants that for a period of two (2) years from date of purchase this Trimble product (the "Product") will substantially conform to Trimble's publicly available specifications for the Product and that the hardware and any storage media components of the Product will be substantially free from defects in materials and workmanship.

Product Software

Product software, whether built into hardware circuitry as firmware, provided as a standalone computer software product, embedded in flash memory, or stored on magnetic or other media, is licensed solely for use with or as an integral part of the Product and is not sold. If accompanied by a separate end user license agreement ("EULA"), use of any such software will be subject to the terms of such end user license agreement (including any differing limited warranty terms, exclusions, and limitations), which shall control over the terms and conditions set forth in this limited warranty.

Software Fixes

During the limited warranty period you will be entitled to receive such Fixes to the Product software that Trimble releases and makes commercially available and for which it does not charge separately, subject to the procedures for delivery to purchasers of Trimble products generally. If you have purchased the Product from an authorized Trimble dealer rather than from Trimble directly, Trimble may, at its option, forward the software Fix to the Trimble dealer for final distribution to you. Minor Updates, Major Upgrades, new products, or substantially new software releases, as identified by Trimble, are expressly excluded from this update process and limited warranty. Receipt of software Fixes or other enhancements shall not serve to extend the limited warranty period.

For purposes of this warranty the following definitions shall apply: (1) "Fix(es)" means an error correction or other update created to fix a previous software version that does not substantially conform to its Trimble specifications; (2) "Minor Update" occurs when enhancements are made to current features in a software program; and (3) "Major Upgrade" occurs when significant new features are added to software, or when a new product containing new features replaces the further development of a current product line. Trimble reserves the right to determine, in its sole discretion, what constitutes a Fix, Minor Update, or Major Upgrade.

Warranty Remedies

If the Trimble Product fails during the warranty period for reasons covered by this limited warranty and you notify Trimble of such failure during the warranty period, Trimble will repair OR replace the nonconforming Product with new, equivalent to new, or reconditioned parts or Product, OR refund the Product purchase price paid by you, at Trimble's option, upon your return of the Product in accordance with Trimble's product return procedures then in effect.

How to Obtain Warranty Service

To obtain warranty service for the Product, please contact your local Trimble authorized dealer. Alternatively, you may contact Trimble to request warranty service at +1-408-481-6940 (24 hours a day) or e-mail your request to trimble_support@trimble.com. Please be prepared to provide:

- your name, address, and telephone numbers
- proof of purchase
- a copy of this Trimble warranty
- a description of the nonconforming Product including the model number
- an explanation of the problem

The customer service representative may need additional information from you depending on the nature of the problem.

Warranty Exclusions and Disclaimer

This Product limited warranty shall only apply in the event and to the extent that (a) the Product is properly and correctly installed, configured, interfaced, maintained, stored, and operated in accordance with Trimble's applicable operator's manual and specifications, and; (b) the Product is not modified or misused. This Product limited warranty shall not apply to, and Trimble shall not be responsible for, defects or performance problems resulting from (i) the combination or utilization of the Product with hardware or software products, information, data, systems, interfaces, or devices not made, supplied, or specified by Trimble; (ii) the operation of the Product under any specification other than, or in addition to, Trimble's standard specifications for its products; (iii) the unauthorized installation, modification, or use of the Product; (iv) damage caused by: accident, lightning or other electrical discharge, fresh or salt water immersion or spray (outside of Product specifications); or exposure to environmental conditions for which the Product is not intended; (v) normal wear and tear on consumable parts (e.g., batteries); or (vi) cosmetic damage. Trimble does not warrant or guarantee the results obtained through the use of the Product, or that software components will operate error free.

NOTICE REGARDING PRODUCTS EQUIPPED WITH TECHNOLOGY CAPABLE OF TRACKING SATELLITE SIGNALS FROM SATELLITE BASED AUGMENTATION SYSTEMS (SBAS) (WAAS/EGNOS, AND MSAS), OMNISTAR, GPS, MODERNIZED GPS OR GLONASS SATELLITES, OR FROM IALA BEACON SOURCES: TRIMBLE IS NOT RESPONSIBLE FOR THE OPERATION OR FAILURE OF OPERATION OF ANY SATELLITE BASED POSITIONING SYSTEM OR THE AVAILABILITY OF ANY SATELLITE BASED POSITIONING SIGNALS.

THE FOREGOING LIMITED WARRANTY TERMS STATE TRIMBLE'S ENTIRE LIABILITY, AND YOUR EXCLUSIVE REMEDIES, RELATING TO THE TRIMBLE PRODUCT. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED HEREIN, THE PRODUCT, AND ACCOMPANYING DOCUMENTATION AND MATERIALS ARE PROVIDED "AS-IS" AND WITHOUT EXPRESS OR IMPLIED WARRANTY OF ANY KIND, BY EITHER TRIMBLE OR ANYONE WHO HAS BEEN INVOLVED IN ITS CREATION, PRODUCTION, INSTALLATION, OR DISTRIBUTION, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NON-INFRINGEMENT. THE STATED EXPRESS WARRANTIES ARE IN LIEU OF ALL OBLIGATIONS OR LIABILITIES ON THE PART OF TRIMBLE ARISING OUT OF, OR IN CONNECTION WITH, ANY PRODUCT. BECAUSE SOME STATES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON DURATION OR THE EXCLUSION OF AN IMPLIED WARRANTY, THE ABOVE LIMITATION MAY NOT APPLY OR FULLY APPLY TO YOU.

Limitation of Liability

TRIMBLE'S ENTIRE LIABILITY UNDER ANY PROVISION HEREIN SHALL BE LIMITED TO THE AMOUNT PAID BY YOU FOR THE PRODUCT. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL TRIMBLE OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGE WHATSOEVER UNDER ANY CIRCUMSTANCE OR LEGAL THEORY RELATING IN ANYWAY TO THE PRODUCTS, SOFTWARE AND ACCOMPANYING DOCUMENTATION AND MATERIALS, (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF DATA, OR ANY OTHER PECUNIARY LOSS), REGARDLESS OF WHETHER TRIMBLE HAS BEEN ADVISED OF THE POSSIBILITY OF ANY SUCH LOSS AND REGARDLESS OF THE COURSE OF DEALING WHICH DEVELOPS OR HAS DEVELOPED BETWEEN YOU AND TRIMBLE. BECAUSE SOME STATES AND JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

PLEASE NOTE: THE ABOVE TRIMBLE LIMITED WARRANTY PROVISIONS WILL NOT APPLY TO PRODUCTS PURCHASED IN THOSE JURISDICTIONS (E.G., MEMBER STATES OF THE EUROPEAN ECONOMIC AREA) IN WHICH PRODUCT WARRANTIES ARE THE RESPONSIBILITY OF THE LOCAL TRIMBLE AUTHORIZED DEALER FROM WHOM THE PRODUCTS ARE ACQUIRED. IN SUCH A CASE, PLEASE CONTACT YOUR LOCAL TRIMBLE AUTHORIZED DEALER FOR APPLICABLE WARRANTY INFORMATION.

Official Language

THE OFFICIAL LANGUAGE OF THESE TERMS AND CONDITIONS IS ENGLISH. IN THE EVENT OF A CONFLICT BETWEEN ENGLISH AND OTHER LANGUAGE VERSIONS, THE ENGLISH LANGUAGE SHALL CONTROL.

Registration

To receive information regarding updates and new products, please contact your local dealer or visit the Trimble website at www.trimble.com/register. Upon registration you may select the newsletter, upgrade, or new product information you desire.

Notices

Federal Communications Commission (FCC) Statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. TRIMBLE is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party:

Trimble Navigation
935 Stewart Drive
Sunnyvale CA 94085
Telephone: 1-408 481 8000

Industry Canada Compliance Statement

This Class A digital apparatus meets the requirements of the Canadian Interference-Causing Equipment Regulations.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

European Community Compliance Statement

This product is in conformity with the protection requirements of EU Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. TRIMBLE cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-TRIMBLE option cards.

Australia and New Zealand Class A Statement

Attention: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Notice to Our European Union Customers

For product recycling instructions and more information, please go to www.trimble.com/ev.shtml.

Recycling in Europe: To recycle Trimble WEEE (Waste Electrical and Electronic Equipment, products that run on electrical power), Call +31 497 53 24 30, and ask for the "WEEE Associate". Or, mail a request for recycling instructions to:

Trimble Europe BV
c/o Menlo Worldwide Logistics
Meerheide 45
5521 DZ Eersel, NL



Restriction of Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

This Trimble product complies in all material respects with DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS Directive) and Amendment 2005/618/EC filed under C(2005) 3143, with exemptions for lead in solder pursuant to Paragraph 7 of the Annex to the RoHS Directive applied.

Declaration of Conformity

We, Trimble Navigation Limited,

935 Stewart Drive
PO Box 3642
Sunnyvale, CA 94088-3642
United States
+1-408-481-8000

declare under sole responsibility that the product:
EZ-Guide 500 lightbar guidance system
complies with Part 15 of FCC Rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Contents

1	Connecting the Lightbar Only	7
	EZ-Guide 500 lightbar only	8
2	Connecting to an EZ-Boom System.	9
	EZ-Guide 500 system with the EZ-Boom 2010 system.	10
	EZ-Steer 500 system with EZ-Boom 2010 system	11
	EZ-Steer 500 system / EZ-Boom system / 900 MHz RTK radio	12
	EZ-Steer 500 system / EZ-Boom system / 450 MHz RTK radio	13
	EZ-Guide 500 / Autopilot / EZ-Boom / 900 MHz radio	15
	EZ-Guide 500 / Autopilot / EZ-Boom / 450 MHz radio	16
3	Connecting to a Field-IQ System	19
	EZ-Guide 500 lightbar	20
	EZ-Guide 500 lightbar and EZ-Steer assisted steering system	22
	EZ-Guide 500 lightbar	24
4	Connecting to an EZ-Steer System.	25
	EZ-Steer 500 system	26
	EZ-Steer 500 system / EZ-Boom controller.	27
	EZ-Steer 500 system / EZ-Boom system / SNB900 RTK Radio.	28
	EZ-Steer 500 system / EZ-Boom system / SNB900 RTK Rover Radio.	30
	EZ-Steer 500 system / EZ-Boom system / Ag3000 Modem	32
	EZ-Steer 500 system (for 900 MHz RTK corrections)	34
	EZ-Steer 500 system (for 450 MHz RTK corrections)	36
	EZ-Steer 500 system / EZ-Boom system / 900 MHz RTK radio	37
	EZ-Steer 500 system / EZ-Boom system / 450 MHz RTK radio	38
5	Connecting to an AgGPS Autopilot System	41
	EZ-Guide 500 / Autopilot / 900 MHz RTK corrections.	42
	EZ-Guide 500 / Autopilot / 450 MHz RTK corrections.	43
	EZ-Guide 500 / Autopilot / EZ-Boom / 900 MHz radio	44
	EZ-Guide 500 / Autopilot / EZ-Boom / 450 MHz radio	45
	EZ-Guide 500 system / Autopilot / Ag 3000 Modem	47
	EZ-Guide 500 system / Autopilot / SNB900 Rover RTK Radio	48
6	Connecting to Factory Ready Autopilot System	49
	EZ-Guide 500 system / Autopilot / SNB900 RTK Radio	50
	EZ-Guide 500 system / Autopilot / Ag 3000 Modem	52
	EZ-Guide 500 system / Autopilot / SNB900 Rover RTK Radio	53
7	Connecting to a Serial Variable Rate Controller	55
	Hardi 5500 Variable Rate Controller	56

Raven Variable Rate Controller	58
Radar speed input	60
Rawson Variable Rate Controller	61
Radar speed input	63
8 Accessory Connections	65
Connecting a coverage switch to the lightbar	66
Step 1. Connecting an interface cable to the lightbar	66
Step 2. Attaching a female WeatherPack connector to the switch wires	66
Step 3. Attaching the switch wires	67
Step 4. Enabling the switch on the lightbar.	68
EZ-Guide 500 system with coverage switch	70
EZ-Guide 500 system with radar cable.	71
EZ-Guide 500 system with radar cable and coverage switch	72
EZ-Steer 500 system with Krohne flow meter	73
Preparing the EZ-Guide 500 CAN 2 port connection cable (P/N 63075).	74
Preparing the EZ-Guide 500 COM 2 port connection cable (P/N 63076)	75
Adding a second USB port	76
Connecting the LB25 lightbar to an EZ-Guide 500 lightbar.	76
9 Connecting an EZ-Remote Joystick	77
Connecting an EZ-Remote joystick to the EZ-Guide 500 lightbar.	78

Connecting the Lightbar Only

In this chapter:

- [EZ-Guide 500 lightbar only](#)

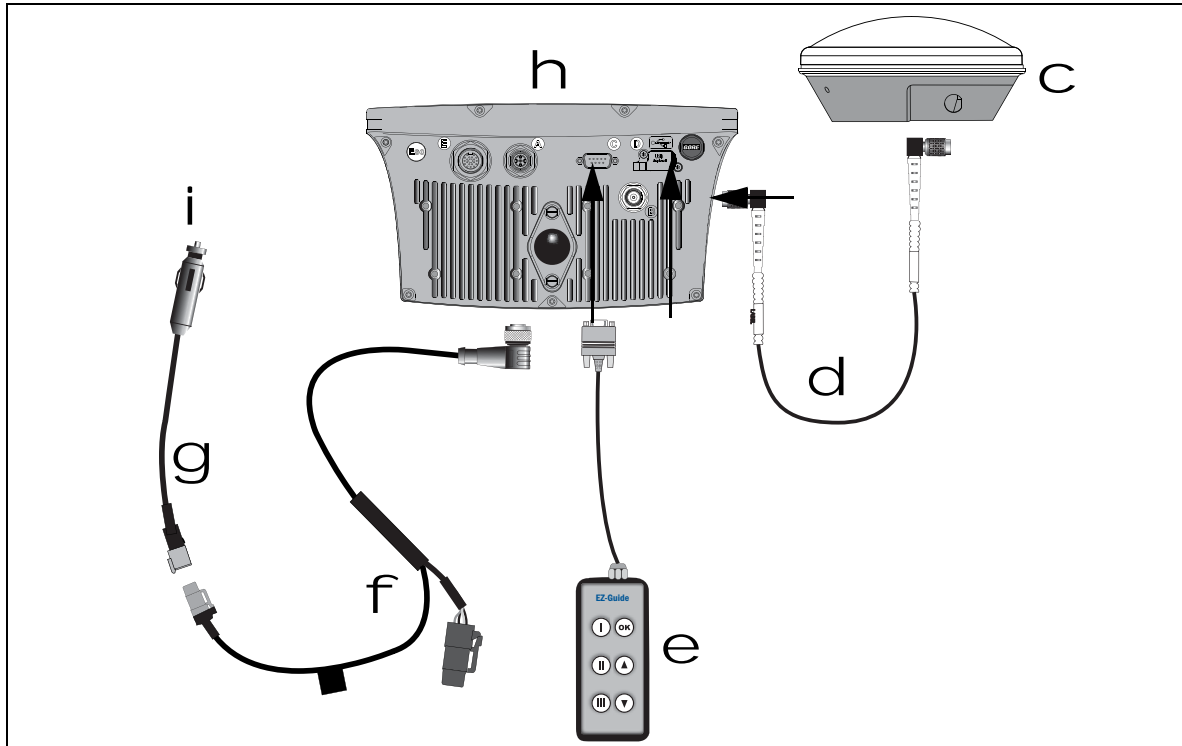
The EZ-Guide® 500 lightbar guidance system can operate as a standalone guidance system, or you can connect it to a range of agricultural guidance devices to expand its functionality. This document shows you how to complete those cable connections.

To connect:

- the lightbar as a standalone guidance system, see [Chapter 1](#).
- the lightbar to the EZ-Boom™ 2010 automated application control system, see [Chapter 2](#).
- the lightbar to a Field-IQ system, see [Chapter 3](#).
- the lightbar to the EZ-Steer® 500 system, see [Chapter 4](#).
- the lightbar to the AgGPS® Autopilot™ assisted steering system, see [Chapter 5](#).
- the lightbar to a factory-ready guidance system, see [Chapter 6](#).
- the lightbar to a serial variable rate controller, see [Chapter 7](#).
- the lightbar to a coverage switch or radar cable, see [Chapter 8](#).

EZ-Guide 500 lightbar only

This figure shows how to connect the EZ-Guide 500 lightbar guidance system using the new power cable:



Item	Description	Part number
c	Antenna	60600-02 (DGPS) 77038-00 (OmniSTAR/RTK)
d	Antenna cable	50449
e	Remote keypad (optional)	66030-00
f	Power cable	62817
g	Power connector cable	62818
h	EZ-Guide 500 lightbar	66100-xx
i	To power	-

Connecting to an EZ-Boom System

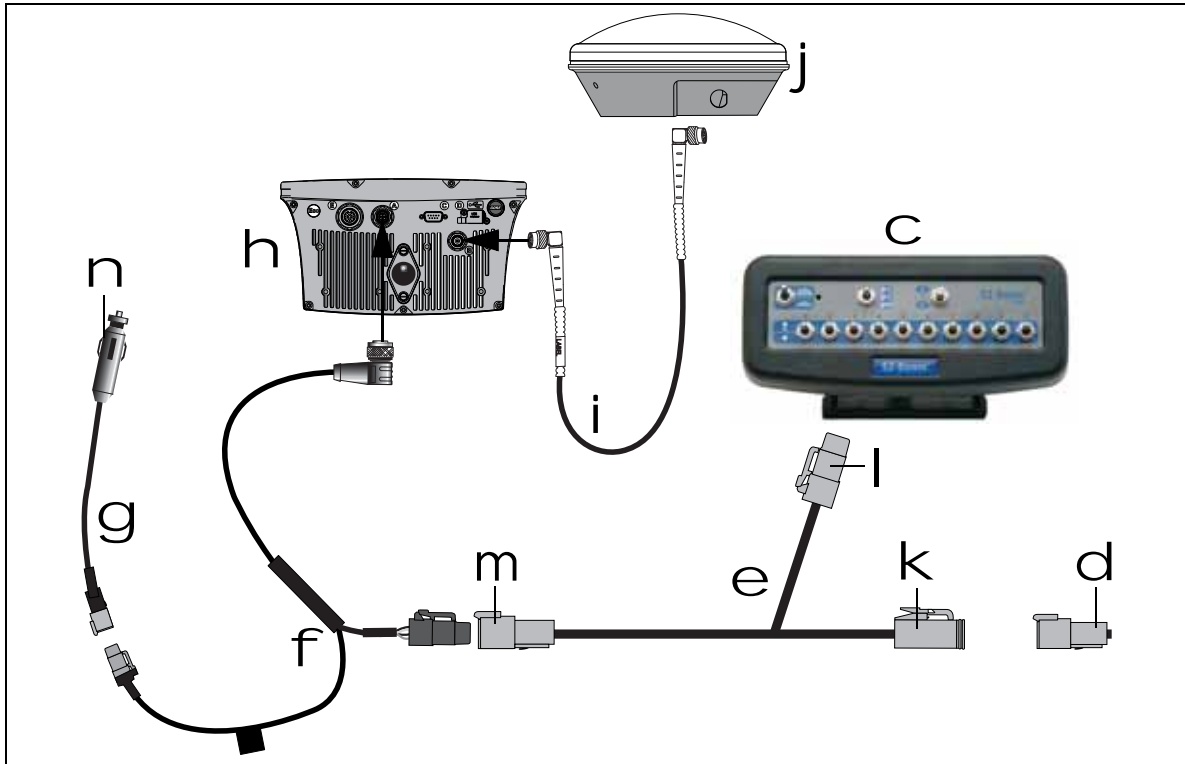
In this chapter:

- EZ-Guide 500 system with the EZ-Boom 2010 system
- EZ-Steer 500 system with EZ-Boom 2010 system
- EZ-Steer 500 system / EZ-Boom system / 900 MHz RTK radio
- EZ-Steer 500 system / EZ-Boom system / 450 MHz RTK radio
- EZ-Guide 500 / Autopilot / EZ-Boom / 900 MHz radio
- EZ-Guide 500 / Autopilot / EZ-Boom / 450 MHz radio

This chapter shows the different ways to connect the EZ-Guide 500 lightbar to an EZ-Boom 2010 automated application control system.

EZ-Guide 500 system with the EZ-Boom 2010 system

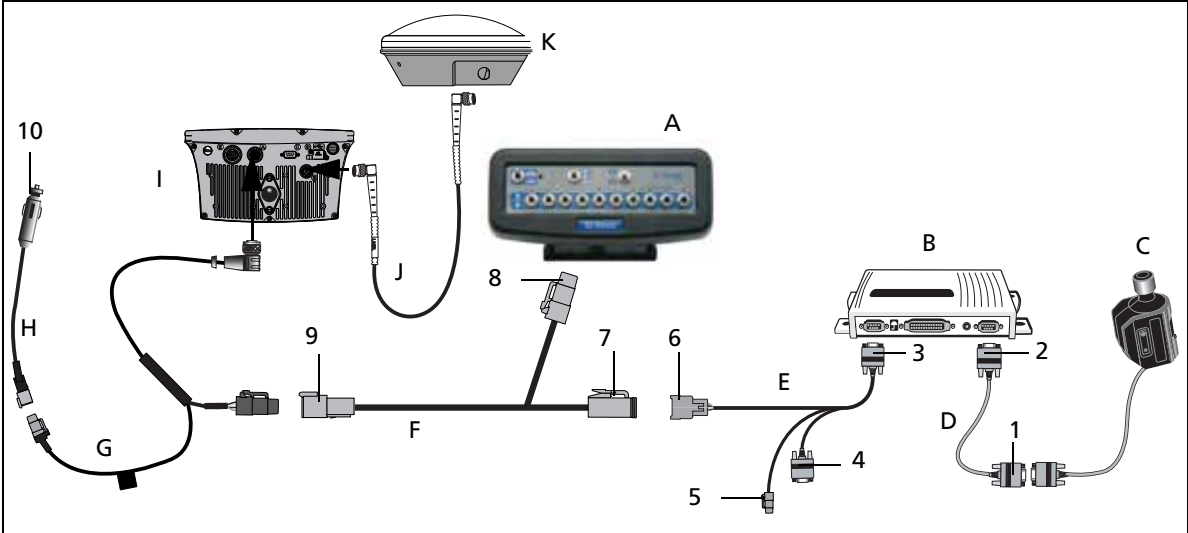
This figure shows how to connect the lightbar to the EZ-Boom 2010 system:



Item	Description	Part number
c	EZ-Boom controller	-
d	CAN terminator	59783
e	EZ-Boom cable	61437
f	Power cable	62817
g	Power connector cable	62818
h	EZ-Guide 500 lightbar	66100-xx
i	GPS antenna cable	50449
j	GPS antenna	60600-02 (DGPS) 77038-00 (OmniSTAR/RTK)
k	"P3"connector	-
l	"P1"connector	-
m	"S3"connector	-
n	To power	-

EZ-Steer 500 system with EZ-Boom 2010 system

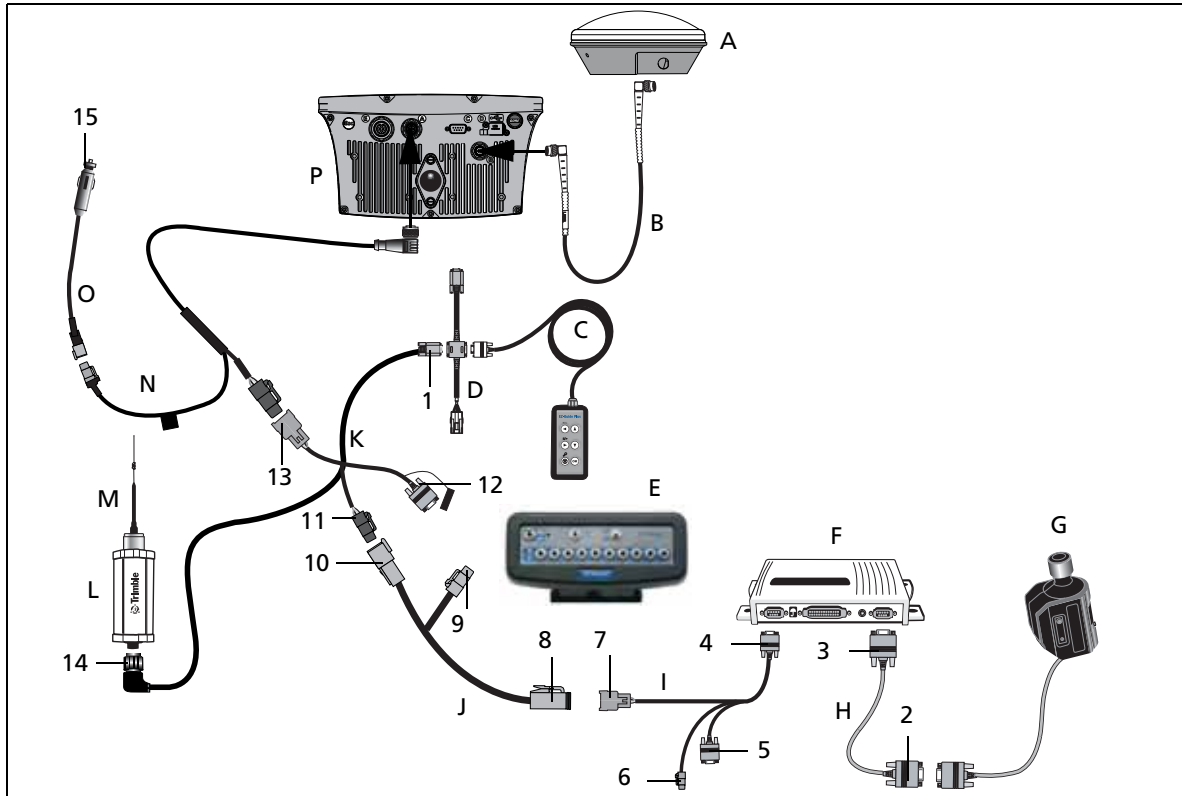
This figure shows how to connect the EZ-Steer 500 system to the EZ-Boom 2010 system:



Item	Description	Part number
A	EZ-Boom controller	-
B	EZ-Steer controller	-
C	EZ-Steer motor	53058-00
D	EZ-Steer motor cable	62257
E	EZ-Steer extension cable	62974
F	EZ-Boom cable	61437
G	Power cable	62817
H	Power connector cable	62818
I	EZ-Guide 500 lightbar	66100-xx
J	GPS antenna cable	50449
K	GPS antenna	60600-02 (DGPS) 77038-00 (OmniSTAR/RTK)
1	"P2" connector	-
2	"P1" connector	-
3	"R2" connector	-
4	Laptop connector (for firmware upgrade)	-
5	Alternate power connector	-
6	"S1" connector	-
7	"P3" connector	-
8	"P1" connector	-
9	"S3" connector	-
10	To power	-

EZ-Steer 500 system / EZ-Boom system / 900 MHz RTK radio

This figure shows how to connect the EZ-Steer 500 system to an EZ-Boom 2010 system with a 900 MHz radio for RTK corrections:

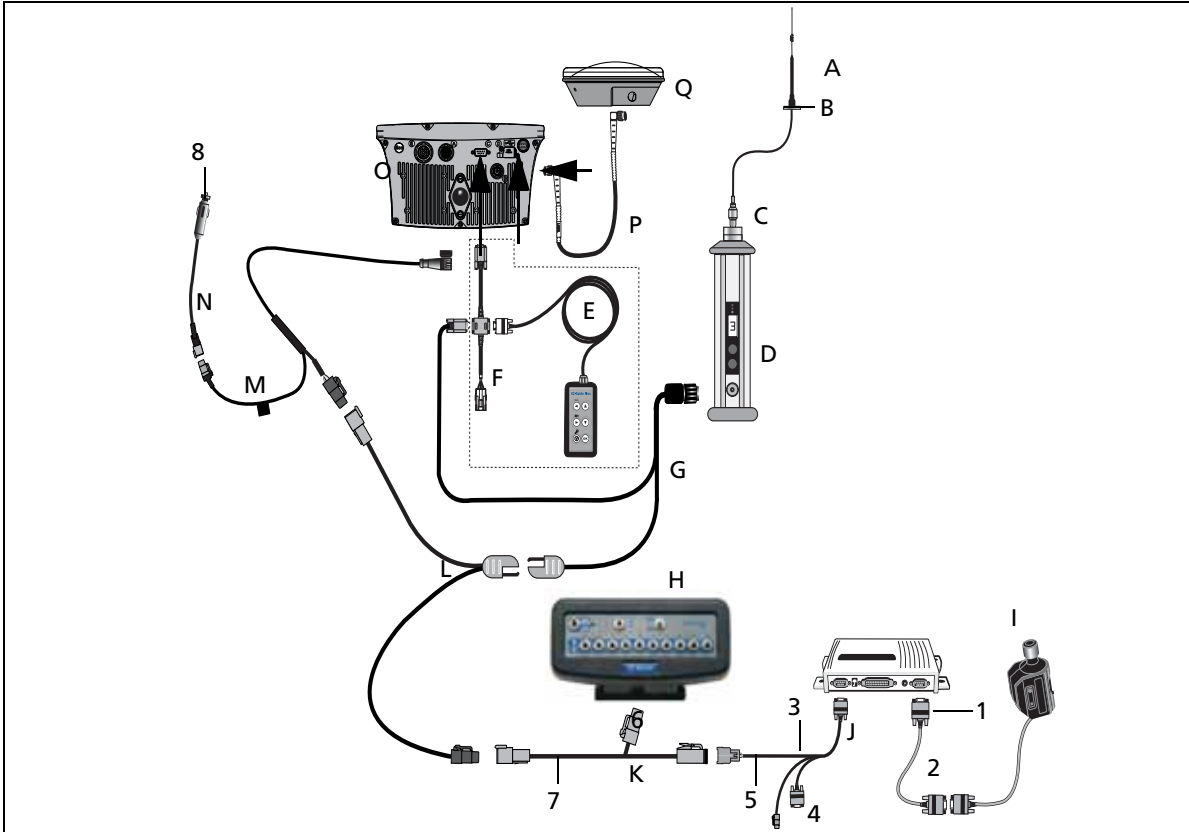


Item	Description	Part number
A	GPS antenna	77038-00
B	GPS antenna cable	50449
C	Remote keypad (optional)	66030-00
D	External interface cable	62749
E	EZ-Boom controller	-
F	EZ-Steer controller	-
G	EZ-Steer motor	53058-00
H	EZ-Steer motor cable	62257
I	EZ-Steer extension cable	62974
J	EZ-Boom cable	61437
K	EZ-Guide 500-to-radio cable	62082
L	SiteNet™ radio	-
M	Radio antenna	22882-00
N	Power cable	62817
O	Power connector cable	62818
P	EZ-Guide 500 lightbar	66100-xx

Item	Description	Part number
1	"P4" connector	-
2	"P2" connector	-
3	"P1" connector	-
4	"R2" connector	-
5	Laptop connector (for firmware upgrade)	-
6	Alternate power connector	-
7	"S1" connector	-
8	"P3" connector	-
9	"P1" connector	-
10	"S3" connector	-
11	"P2" connector	-
12	"P3" connector	-
13	"S5" connector	-
14	"P1" connector	-
15	To power	-

EZ-Steer 500 system / EZ-Boom system / 450 MHz RTK radio

This figure shows how to connect the EZ-Steer 500 system to an EZ-Boom 2010 system with a 450 MHz radio for RTK corrections:



Item	Description	Part number
A	Radio antenna	51870-x0-x0
B	Radio antenna magnetic mount	62109
C	Radio antenna connector	63278
D	PDL 450 MHz radio	62550-4x-xx
E	Remote keypad (optional)	66030-00
F	External interface cable	62749
G	PDL radio power/data cable	51861-00
H	EZ-Boom controller	-
I	EZ-Steer controller	-
J	EZ-Steer extension cable	62974
K	EZ-Boom cable	61437

Item	Description	Part number
N	Power connection cable	62818
O	EZ-Guide 500 lightbar	66100-xx
P	GPS antenna cable	50449
Q	GPS antenna	77038-00
1	"P2" connector	"P2" connector
2	Laptop connector (for firmware upgrade)	-
3	"S1" connector	-
4	Alternate power connector	-
5	"P3" connector	-
6	"P1" connector	-
7	"S3" connector	-

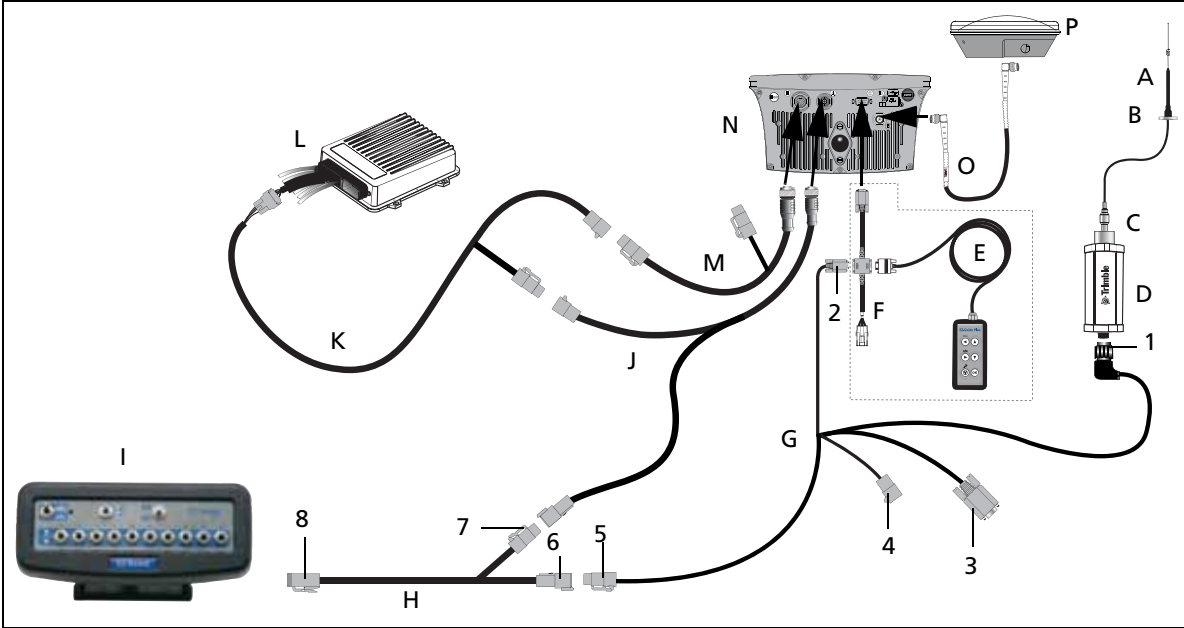
2 Connecting to an EZ-Boom System

Item	Description	Part number
L	Power tap to PDL radio	63185
M	Power cable	62817

Item	Description	Part number
8	To power	-

EZ-Guide 500 / Autopilot / EZ-Boom / 900 MHz radio

This figure shows how to connect an EZ-Guide 500 lightbar to an AgGPS Autopilot system, an EZ-Boom 2010 system, and a 900 MHz radio (with the new cables):

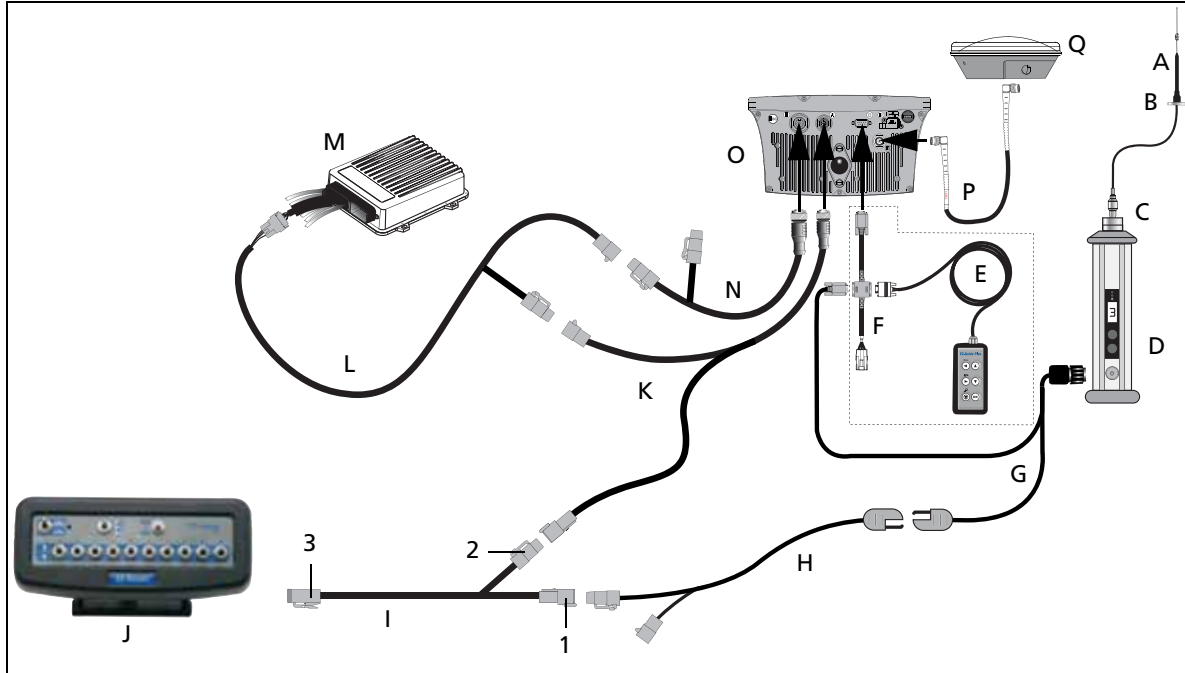


Item	Description	Part number
A	Radio antenna cable	22882-00
B	Radio antenna magnetic mount	62109
C	Radio antenna connector	46740
D	SiteNet radio	-
E	Remote keypad (optional)	66030-00
F	External interface cable	62749
G	EZ-Guide 500-to-radio cable	62082
H	EZ-Boom cable	61437
I	EZ-Boom controller	-
J	Power cable	62817
K	EZ-Guide 500-to-Autopilot cable	62754
L	AgGPS Autopilot controller	-

Item	Description	Part number
M	Port expansion cable	62609
N	EZ-Guide 500 lightbar	66100-xx
O	GPS antenna cable	50449
P	GPS antenna	77038-00
1	"P1" connector	-
2	"P4"connector	-
3	"P3"connector	-
4	"S5"connector	-
5	"P2" connector	-
6	"S3" connector	-
7	"P1" connector	-
8	"P3" connector	-

EZ-Guide 500 / Autopilot / EZ-Boom / 450 MHz radio

This figure shows how to connect an EZ-Guide 500 lightbar to an AgGPS Autopilot system, an EZ-Boom 2010 system, and a 450 MHz radio:



Item	Description	Part number
A	Radio antenna	51870-x0-x0
B	Radio antenna magnetic mount	62109
C	Radio antenna connector	63278
D	PDL 450 radio	62550-4x-xx
E	Remote keypad (optional)	66030-00
F	External interface cable	62749
G	PDL radio power/data cable	51861-00
H	Power tap to PDL radio	63185
I	EZ-Boom cable	61437
J	EZ-Boom controller	-
K	EZ-Guide 500 power cable	62817
L	EZ-Guide 500-to-Autopilot cable	62754
M	AgGPS Autopilot controller	-
N	Port expansion cable	62609
O	EZ-Guide 500 lightbar	66100-xx
P	GPS antenna cable	50449
Q	GPS antenna	77038-00
1	"S3" connector	-

Item	Description	Part number
2	"P1" connector	-
3	"P3" connector	-

Connecting to a Field-IQ System

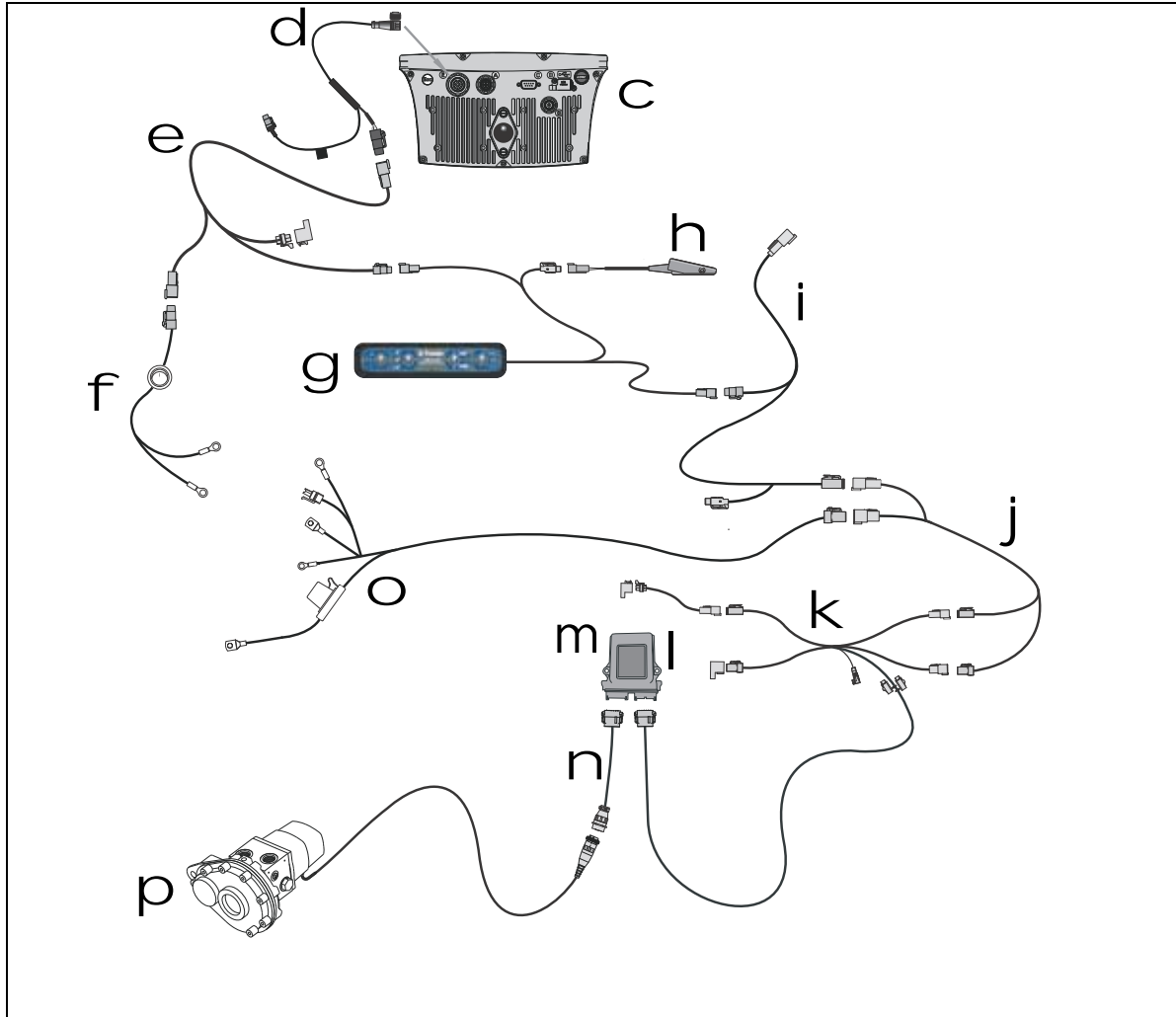
In this chapter:

- EZ-Guide 500 lightbar
- EZ-Guide 500 lightbar and EZ-Steer assisted steering system
- EZ-Guide 500 lightbar

This chapter shows the different ways to connect the EZ-Guide 500 lightbar to a Field-IQ system.

EZ-Guide 500 lightbar

This figure shows how to connect a Field-IQ system on a self-propelled spreader to the EZ-Guide 500 lightbar.

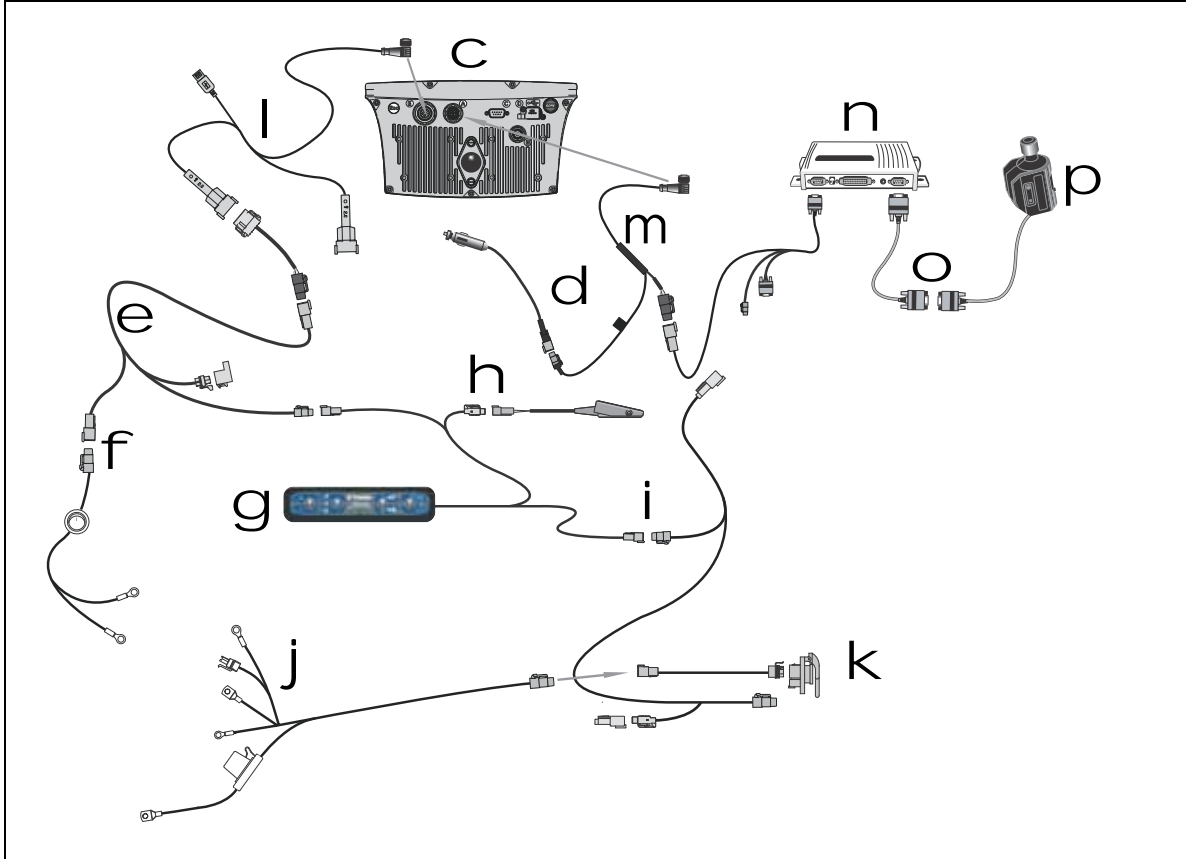


Item	Description	Trimble part number
c	EZ-Guide 500 lightbar	66100-xx
d	Lightbar power cable	62817
e	CAN-TBC active terminator cable (with power)	75522
f	Power cable with switch	75743
g	Field-IQ master switch box	75050-01
h	Remote foot switch (optional)	60490
i	Cable assembly, power to hitch connection	76941
j	CAN-power extension cable	75528-xx
k	Rawson module tee cable	75527

Item	Description	Trimble part number
l	Implement terminator kit (includes P/N 75491)	75529
m	Rawson control module	75070-00
n	Rawson motor CPC to DTM cable	75531
o	Cable assembly, power to hitch connection	76941
p	Single pinion Rawson PAR 40 motor	304152

EZ-Guide 500 lightbar and EZ-Steer assisted steering system

This diagram shows how to connect an FmX integrated display with the Field-IQ system to an EZ-Steer assisted steering system and EZ-Guide 500 lightbar:

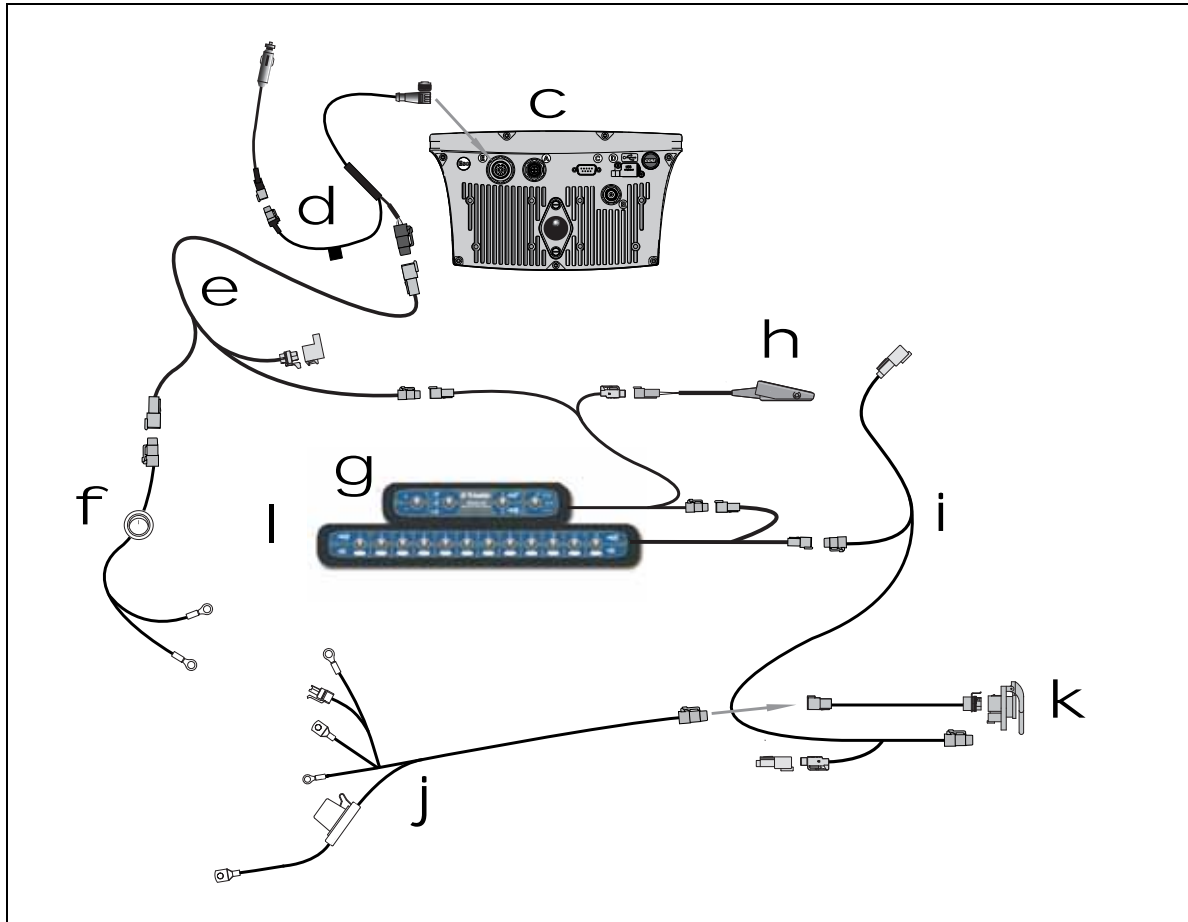


Item	Description	Trimble part number
c	EZ-Guide 500 lightbar	66100-xx
d	Lightbar power cable	62817
e	CAN-TBC active terminator cable (with power)	75522
f	Power cable with switch	75743
g	Field-IQ master switch box	75050-01
h	Optional: remote foot switch	60490
i	Cable assembly, CAN cab to hitch connection	77368
j	Cable assembly, power to hitch connection	76941
k	Cable assembly, IBRC to DTP adapter (optional Powell connector)	77413
l	Port expansion cable	62609
m	EZ-Steer extension cable	62974
n	EZ-Steer controller	

Item	Description	Trimble part number
○	EZ-Steer motor cable	62257
p	EZ-Steer motor	53058-00

EZ-Guide 500 lightbar

This diagram shows how to connect an EZ-Guide 500 lightbar to the Field-IQ system:



Item	Description	Trimble part number
c	EZ-Guide 500 lightbar	66100-xx
d	Lightbar power cable	62817
e	CAN-TBC active terminator cable (with power)	75522
f	Power cable with switch	75743
g	Field-IQ master switch box	75050-01
h	Optional: remote foot switch	60490
i	Cable assembly, CAN cab to hitch connection	77368
j	Cable assembly, power to hitch connection	76941
k	Cable assembly, IBRC to DTP adapter (optional Powell Connector)	77413
l	Optional: 12 section switch box	75060-01

Connecting to an EZ-Steer System

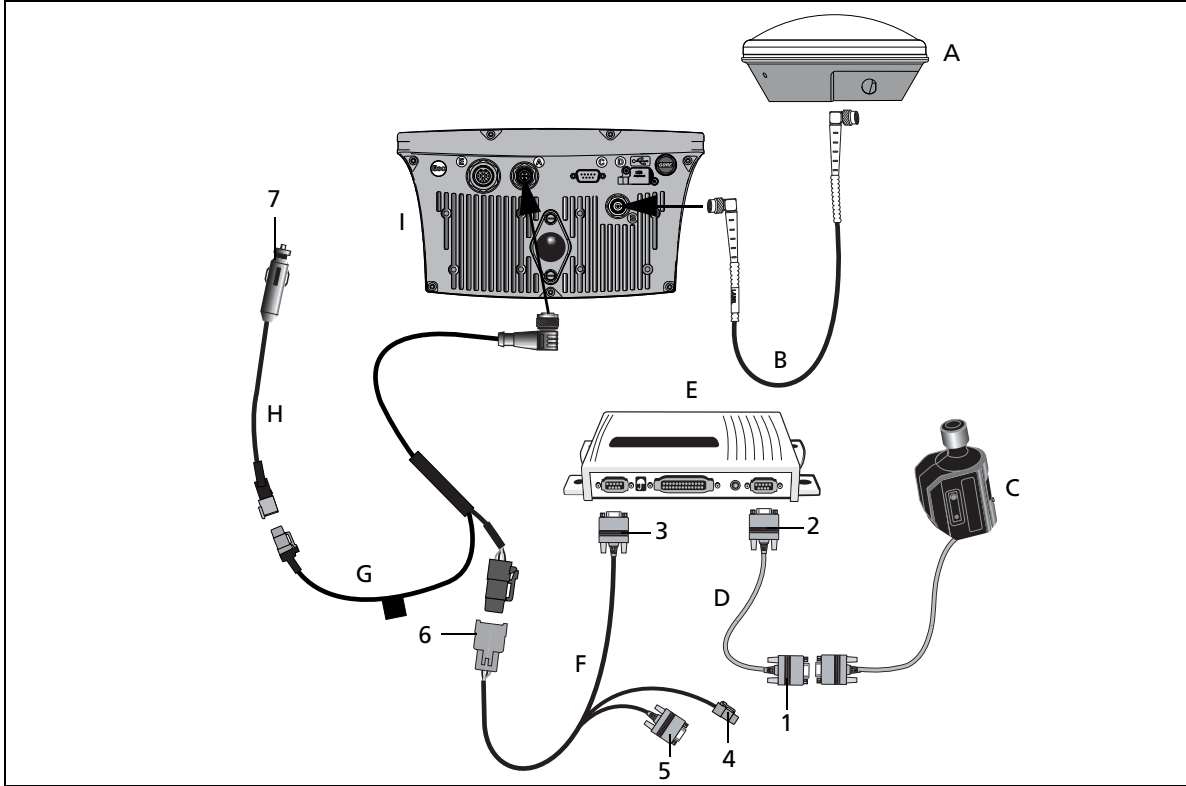
In this chapter:

- EZ-Steer 500 system
- EZ-Steer 500 system / EZ-Boom controller
- EZ-Steer 500 system (for 900 MHz RTK corrections)
- EZ-Steer 500 system (for 450 MHz RTK corrections)
- EZ-Steer 500 system / EZ-Boom system / 900 MHz RTK radio
- EZ-Steer 500 system / EZ-Boom system / 450 MHz RTK radio

This chapter shows the different ways to connect the EZ-Guide 500 lightbar to an EZ-Steer system.

EZ-Steer 500 system

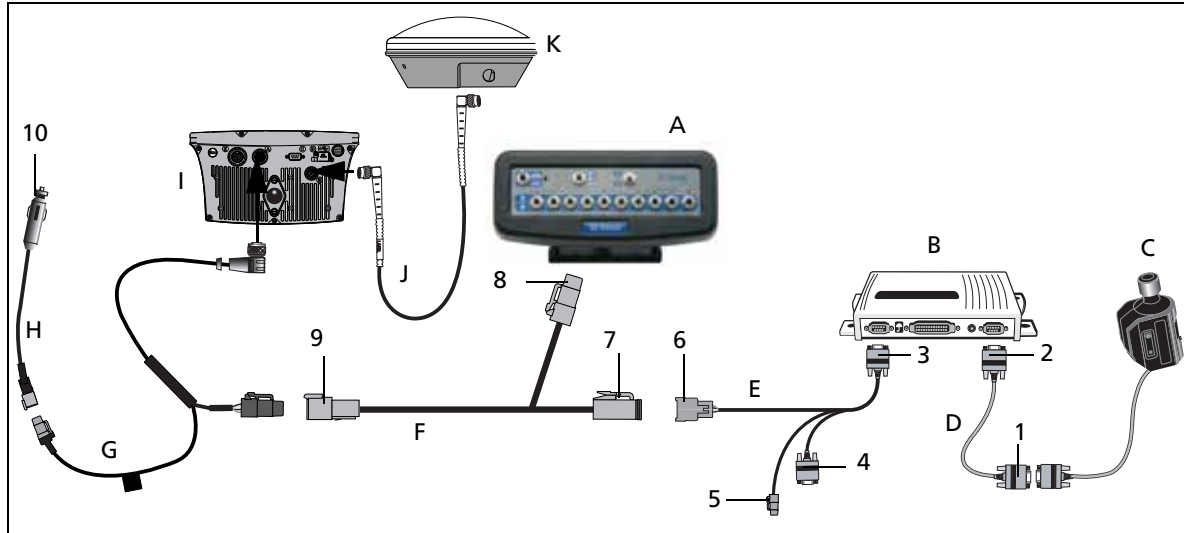
This figure shows how to connect the EZ-Guide 500 lightbar to an EZ-Steer system:



Item	Description	Part number
A	GPS antenna	60600-02 (DGPS) 77038-00 (OmniSTAR/RTK)
B	GPS antenna cable	50449
C	EZ-Steer motor	53058-00
D	EZ-Steer motor cable	62257
E	EZ-Steer controller	–
F	EZ-Steer extension cable	62974
G	Power cable	62817
H	Power connector cable	62818
I	EZ-Guide 500 lightbar	66100-xx
1	“P2” connector	–
2	“P1” connector	–
3	“P2” connector	–
4	Alternate power connector	–
5	Laptop connector (for upgrading firmware)	–
6	“S1” connector	–
7	To power	–

EZ-Steer 500 system / EZ-Boom controller

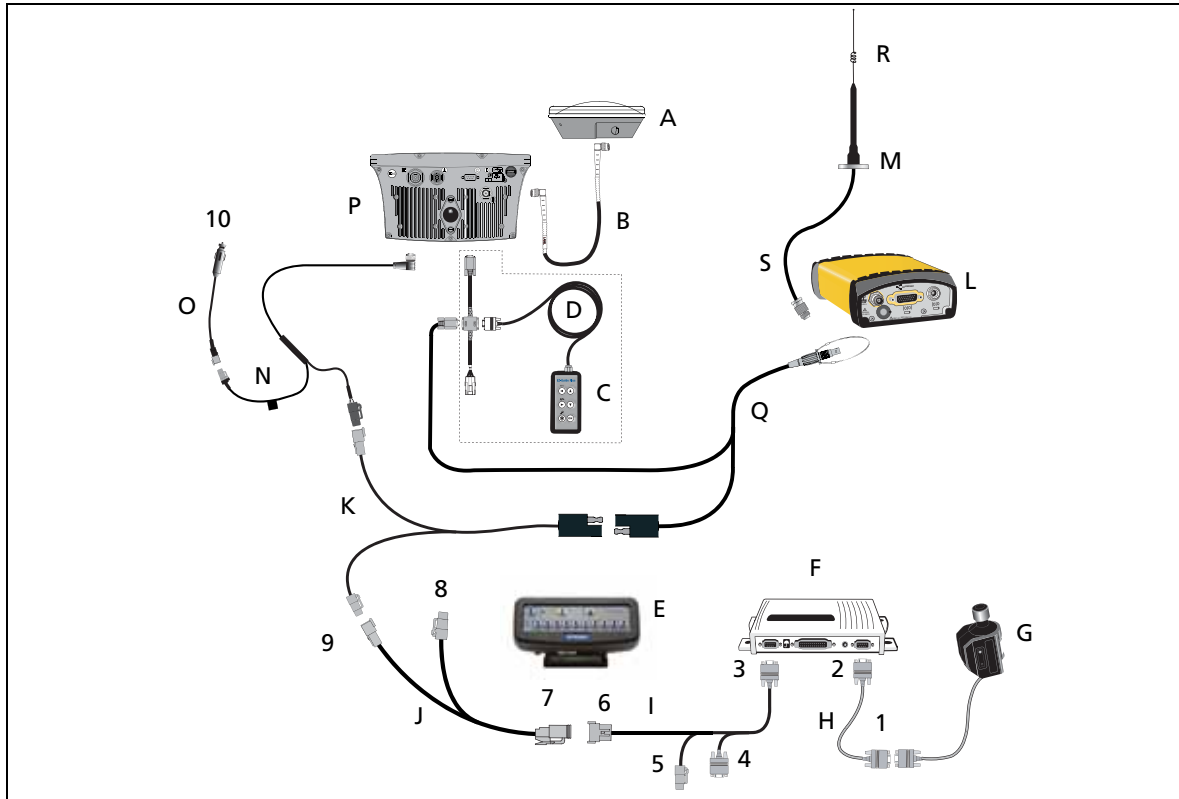
This figure shows how to connect the EZ-Steer 500 system to the EZ-Boom 2010 system:



Item	Description	Part number
A	EZ-Boom controller	-
B	EZ-Steer controller	-
C	EZ-Steer motor	53058-00
D	EZ-Steer motor cable	62257
E	EZ-Steer extension cable	62974
F	EZ-Boom cable	61437
G	Power cable	62817
H	Power connector cable	62818
I	EZ-Guide 500 lightbar	66100-xx
J	GPS antenna cable	50449
K	GPS antenna	60600-02 (DGPS) 77038-00 (OmniSTAR/RTK)
1	"P2" connector	-
2	"P1" connector	-
3	"R2" connector	-
4	Laptop connector (for firmware upgrade)	-
5	Alternate power connector	-
6	"S1" connector	-
7	"P3" connector	-
8	"P1" connector	-
9	"S3" connector	-
10	To power	-

EZ-Steer 500 system / EZ-Boom system / SNB900 RTK Radio

This figure shows how to connect the EZ-Boom system to an EZ-Steer 500 system using an SNB900 RTK radio for corrections:



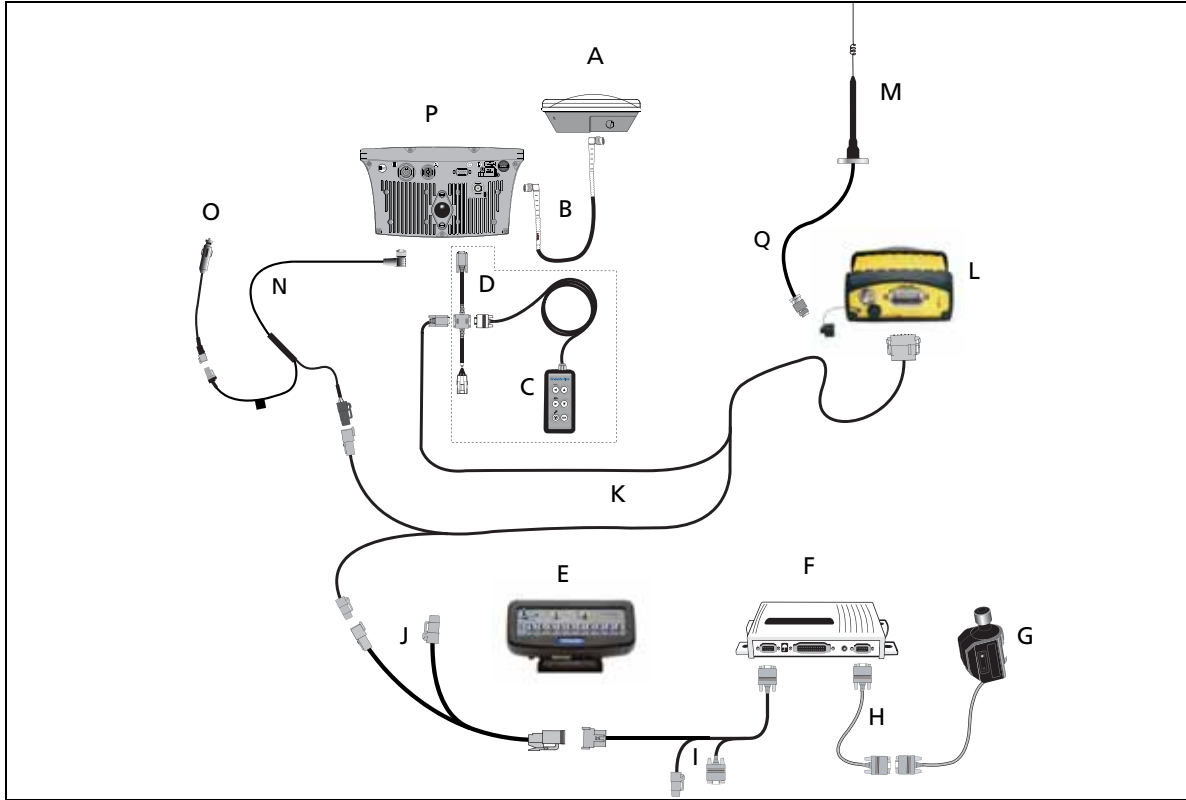
Item	Description	Part number
A	GPS antenna	77038-00
B	GPS antenna cable	50449
C	Remote keypad (optional)	66030-00
D	External interface cable	62749
E	EZ-Boom controller	-
F	EZ-Steer controller	-
G	EZ-Steer motor	53058-00
H	EZ-Steer motor cable	62257
I	EZ-Steer extension cable	62974
J	EZ-Boom cable	61437
K	SNB900 power tap to EZ-Guide 500	63185
L	SNB900 radio	68480-90-XX
M	SNB900 radio antenna magnet mount	62109
N	Power cable	62817
O	Power connector cable	62818
P	EZ-Guide 500 lightbar	66100-xx

Item	Description	Part number
Q	SNB900 to EZ-Guide 500	61158
R	Radio antenna	22882-00
S	N female to Rev POL TNC Male	62114

Item	Connector description
1	P2
2	P1
3	R2
4	Laptop connector (for firmware upgrade)
5	Alternate power connector
6	S1
7	P3
8	P1
9	S3
10	To power

EZ-Steer 500 system / EZ-Boom system / SNB900 RTK Rover Radio

This figure shows how to connect an EZ-Boom system to an EZ-Steer 500 system using an SNB900 RTK rover radio for corrections:



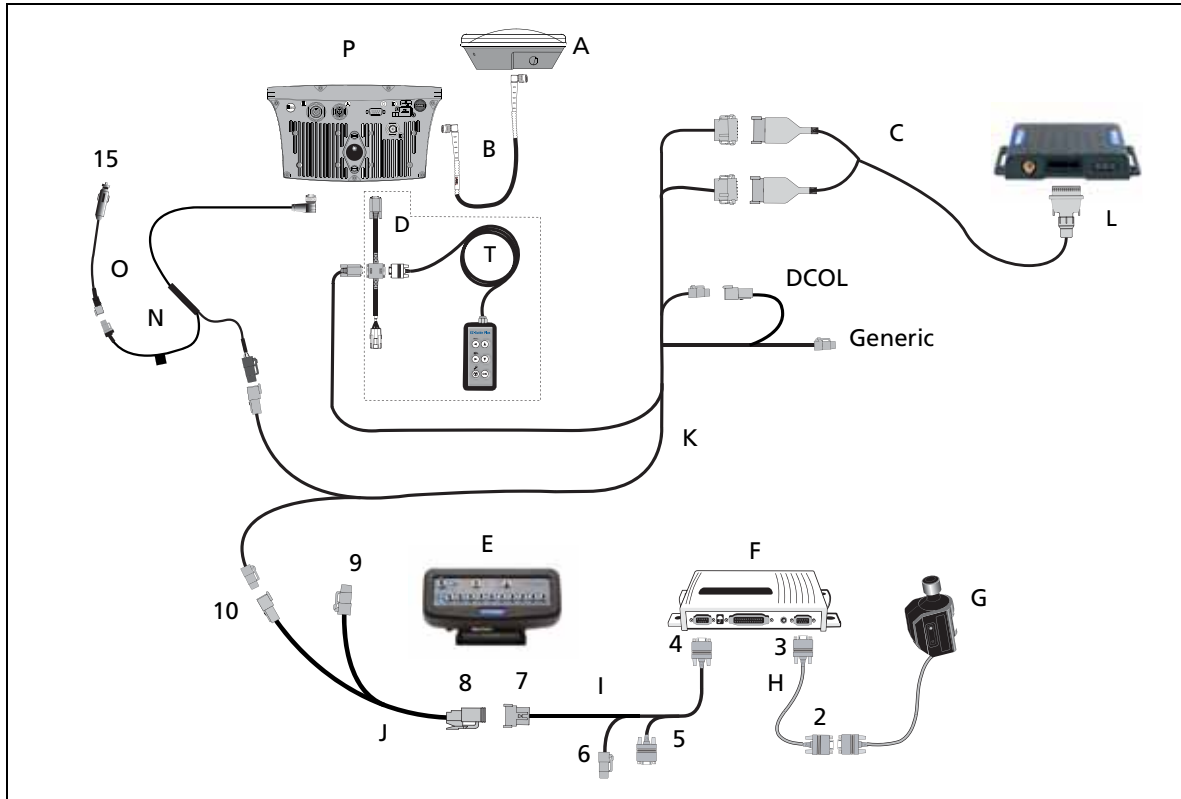
Item	Description	Part number
A	GPS antenna	77038-00
B	GPS antenna cable	50449
C	Remote keypad (optional)	66030-00
D	External interface cable	62749
E	EZ-Boom controller	-
F	EZ-Steer controller	-
G	EZ-Steer motor	53058-00
H	EZ-Steer motor cable	62257
I	EZ-Steer extension cable	62974
J	EZ-Boom cable	61437
K	EZ-Guide 500 to SNB900R	74798
L	SNB900R radio	66768-00-xx
M	Radio antenna	22882-00
N	Power cable	62817
O	Power connector cable	62818

Item	Description	Part number
P	EZ-Guide 500 lightbar	66100-xx
Q	Antenna cable, magnetic base NMO-to-TNC	72122

Item	Connector description
1	P2
2	P1
3	R2
4	Laptop connector (for firmware upgrade)
5	Alternate power connector
6	S1
7	P3
8	P1
9	S3
10	To power

EZ-Steer 500 system / EZ-Boom system / Ag3000 Modem

This figure shows how to connect an EZ-Boom system to an EZ-Steer 500 system using an Ag3000 modem:



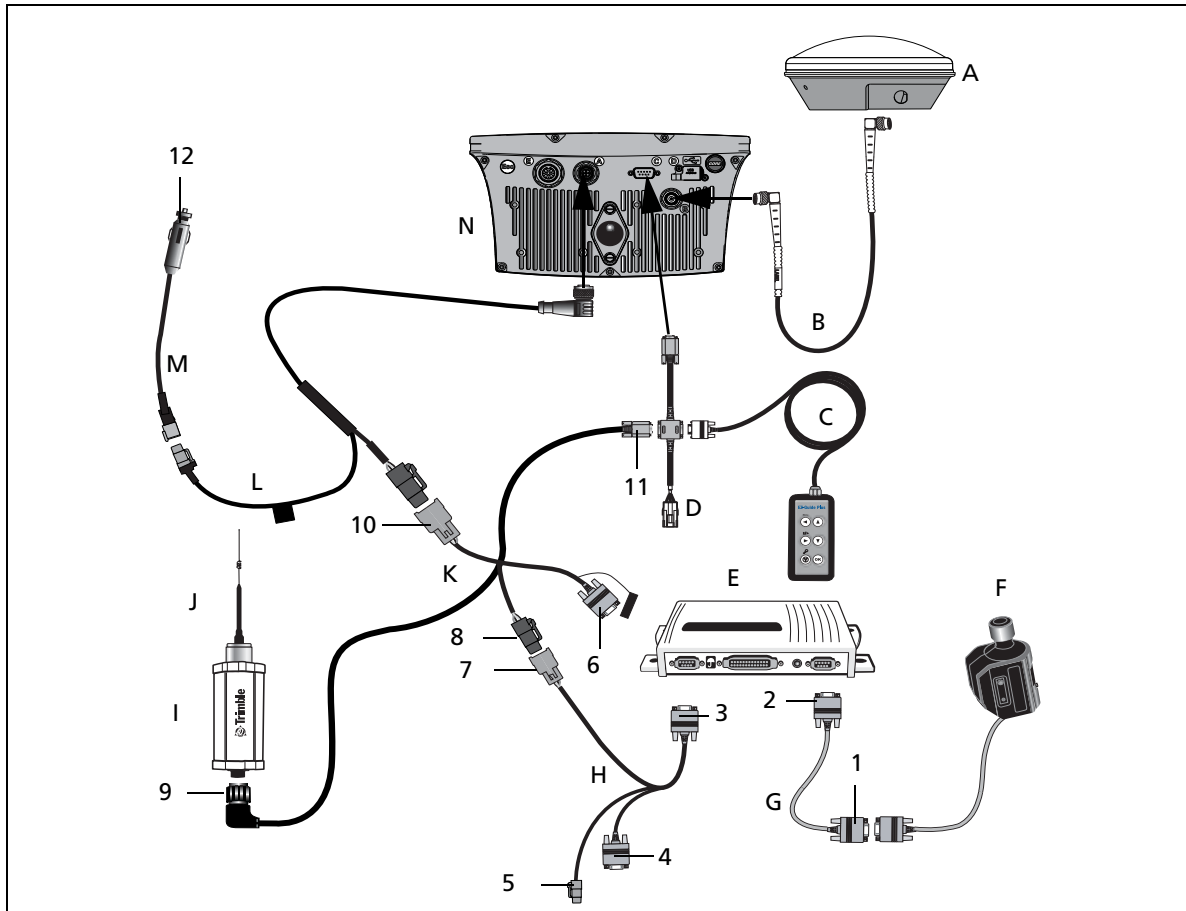
Item	Description	Part number
A	GPS antenna	77038-00
B	GPS antenna cable	50449
C	Ag3000 Breakout cable	70433
D	External interface cable	62749
E	EZ-Boom controller	-
F	EZ-Steer controller	-
G	EZ-Steer motor	53058-00
H	EZ-Steer motor cable	62257
I	EZ-Steer extension cable	62974
J	EZ-Boom cable	61437
K	Ag3000 CAN/Serial interface	72639
L	Ag3000 modem	68600-xx
N	Power cable	62817
O	Power connector cable	62818
P	EZ-Guide 500 lightbar	66100-xx

Item	Description	Part number
T	Remote keypad (optional)	66030-00
V	EZ-Guide 500 to SNB900R	74798

Item	Connector description
1	P4
2	P2
3	P1
4	R2
5	Laptop connector (for firmware upgrade)
6	Alternate power connector
7	S1
8	P3
9	P1
10	S3

EZ-Steer 500 system (for 900 MHz RTK corrections)

This figure shows how to connect the EZ-Steer 500 system to a 900 MHz radio for RTK corrections:



Item	Description	Part number
A	GPS antenna	77038-00
B	GPS antenna cable	50449
C	Remote keypad (optional)	66030-00
D	External interface cable	62749
E	EZ-Steer controller	-
F	EZ-Steer motor	53058-00
G	EZ-Steer motor cable	62257
H	EZ-Steer extension cable	60855
I	900 MHz SiteNet radio	-
J	Radio antenna	22882-00
K	EZ-Guide 500-to-radio cable	62082

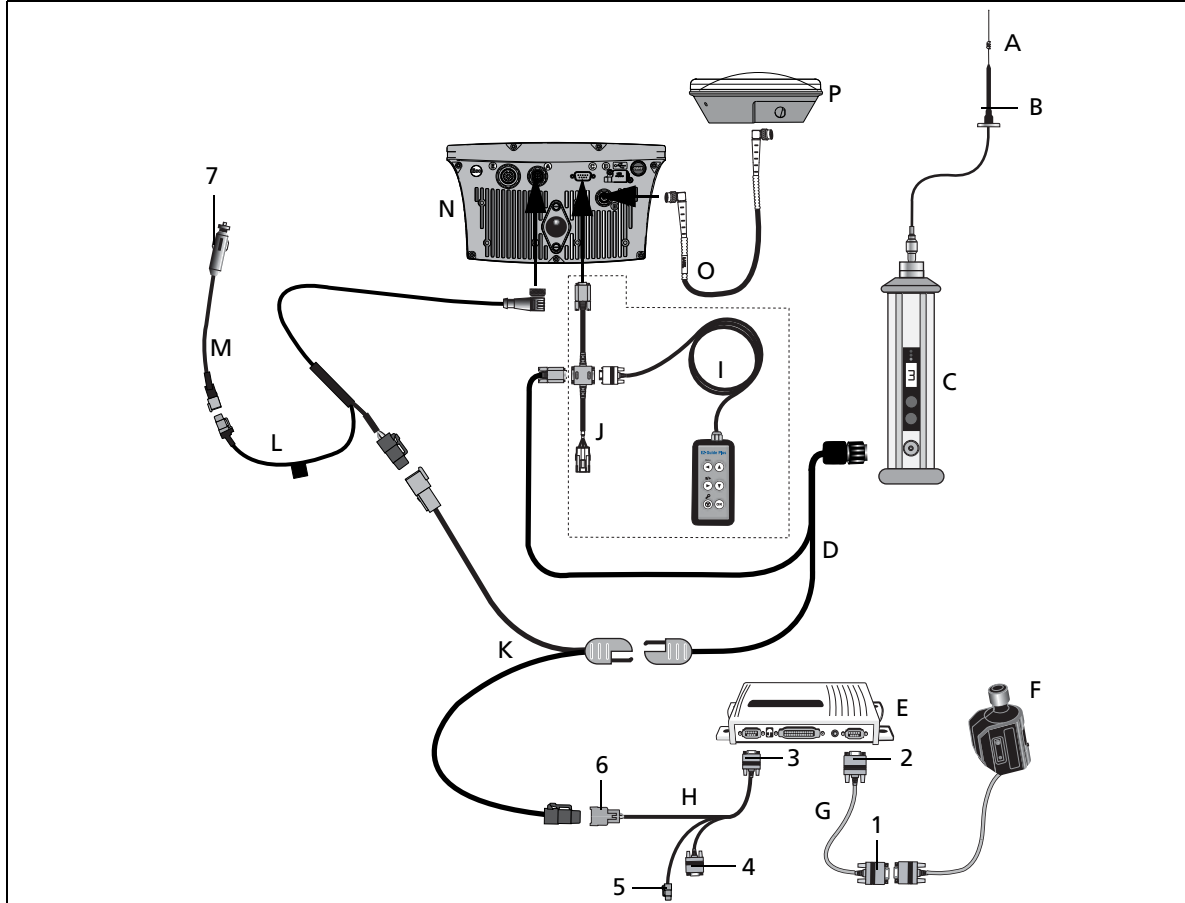
Item	Description	Part number
N	EZ-Guide 500 lightbar	66100-xx
1	"P2" connector	-
2	"P1" connector	-
3	"R2" connector	-
4	Laptop connector (for firmware upgrade)	-
5	Alternate power supply	-
6	"P3" connector	-
7	"S1" connector	-
8	"P2" connector	-
9	"P1" (radio) connector	-
10	"S5" connector	-

Item	Description	Part number
L	Power cable	62817
M	Power connector cable	62818

Item	Description	Part number
11	"P4" connector	-
12	To power	-

EZ-Steer 500 system (for 450 MHz RTK corrections)

This figure shows how to connect the EZ-Steer 500 system to a 450 MHz radio for RTK corrections:



Item	Description	Part number
A	Radio antenna	51870-x0-x0
B	Radio antenna cable	62109
C	PDL 450 MHz radio	62550-4x-xx
D	PDL 450 MHz radio power/data cable	51861-00
E	EZ-Steer controller	-
F	EZ-Steer motor	53058-00
G	EZ-Steer motor cable	62257
H	EZ-Steer extension cable	62974
I	Remote keypad (optional)	66030-00
J	External interface cable	62749

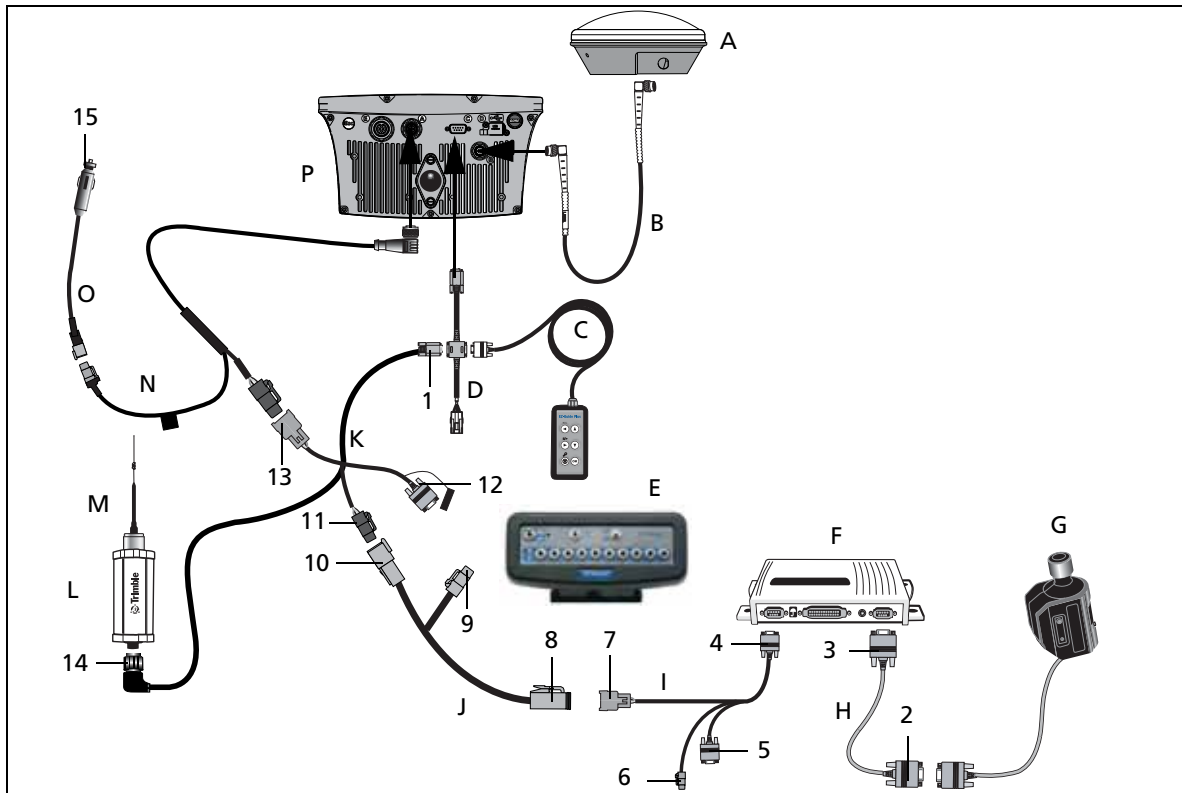
Item	Description	Part number
M	Power connector cable	62818
N	EZ-Guide 500 lightbar	66100-xx
O	GPS antenna cable	50449
P	GPS antenna	77038-00
1	"P2" connector	-
2	"P1" connector	-
3	"R2" connector	-
4	Laptop connector (for firmware upgrade)	-
5	Alternate power connector	-
6	"S1" connector	-

Item	Description	Part number
K	Power tap to PDL radio	63185
L	Power cable	62817

Item	Description	Part number
7	To power	–

EZ-Steer 500 system / EZ-Boom system / 900 MHz RTK radio

This figure shows how to connect the EZ-Steer 500 system to an EZ-Boom 2010 system with a 900 MHz radio for RTK corrections:



Item	Description	Part number
A	GPS antenna	77038-00
B	GPS antenna cable	50449
C	Remote keypad (optional)	66030-00
D	External interface cable	62749
E	EZ-Boom controller	–
F	EZ-Steer controller	–
G	EZ-Steer motor	53058-00
H	EZ-Steer motor cable	62257
I	EZ-Steer extension cable	62974
J	EZ-Boom cable	61437
K	EZ-Guide 500-to-radio cable	62082

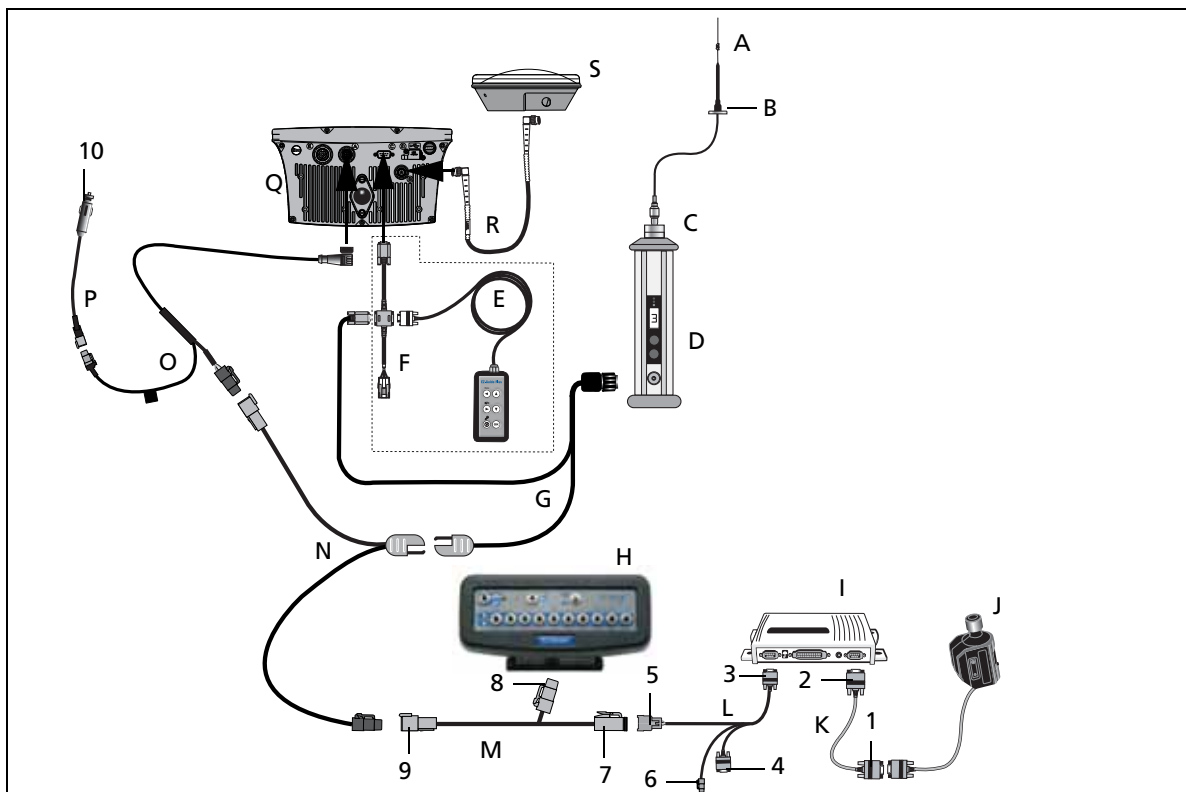
Item	Description	Part number
1	"P4" connector	–
2	"P2" connector	–
3	"P1" connector	–
4	"R2" connector	–
5	Laptop connector (for firmware upgrade)	–
6	Alternate power connector	–
7	"S1" connector	–
8	"P3" connector	–
9	"P1" connector	–
10	"S3" connector	–
11	"P2" connector	–

Item	Description	Part number
L	SiteNet radio	-
M	Radio antenna	22882-00
N	Power cable	62817
O	Power connector cable	62818
P	EZ-Guide 500 lightbar	66100-xx

Item	Description	Part number
12	"P3" connector	-
13	"S5" connector	-
14	"P1" connector	-
15	To power	-

EZ-Steer 500 system / EZ-Boom system / 450 MHz RTK radio

This figure shows how to connect the EZ-Steer 500 system to an EZ-Boom 2010 system with a 450 MHz radio for RTK corrections:



Item	Description	Part number
A	Radio antenna	51870-x0-x0
B	Radio antenna magnetic mount	62109
C	Radio antenna connector	63278
D	PDL 450 MHz radio	62550-4x-xx
E	Remote keypad (optional)	66030-00
F	External interface cable	62749
G	PDL radio power/data cable	51861-00

Item	Description	Part number
P	Power connection cable	62818
Q	EZ-Guide 500 lightbar	66100-xx
R	GPS antenna cable	50449
S	GPS antenna	77038-00
1	"P2" connector	-
2	"P1" connector	-
3	"R2" connector	-

Item	Description	Part number
H	EZ-Boom controller	–
I	EZ-Steer controller	–
J	EZ-Steer motor	53058-00
K	EZ-Steer motor cable	62257
L	EZ-Steer extension cable	62974
M	EZ-Boom cable	61437
N	Power tap to PDL radio	63185
O	Power cable	62817

Item	Description	Part number
4	Laptop connector (for firmware upgrade)	–
5	"S1" connector	–
6	Alternate power connector	–
7	"P3" connector	–
8	"P1" connector	–
9	"S3" connector	–
10	To power	–

Connecting to an AgGPS Autopilot System

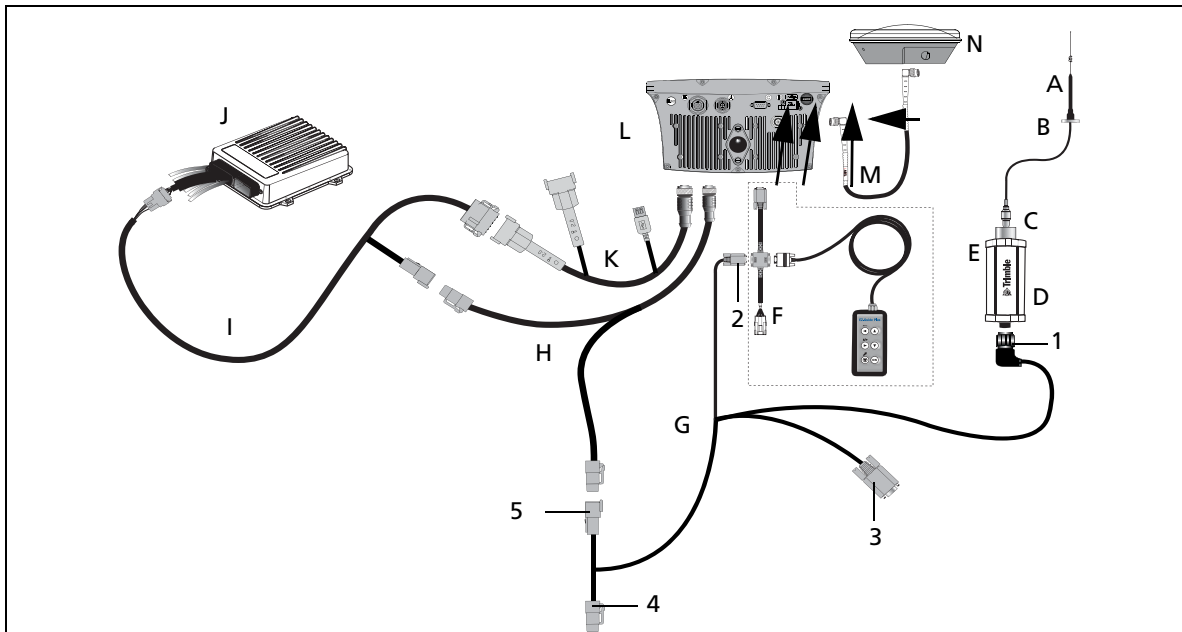
In this chapter:

- EZ-Guide 500 / Autopilot / 900 MHz RTK corrections
- EZ-Guide 500 / Autopilot / 450 MHz RTK corrections
- EZ-Guide 500 / Autopilot / EZ-Boom / 900 MHz radio
- EZ-Guide 500 / Autopilot / EZ-Boom / 450 MHz radio
- EZ-Guide 500 system / Autopilot / Ag 3000 Modem
- EZ-Guide 500 system / Autopilot / SNB900 Rover RTK Radio

This chapter shows the different ways to connect the EZ-Guide 500 lightbar to an AgGPS Autopilot system.

EZ-Guide 500 / Autopilot / 900 MHz RTK corrections

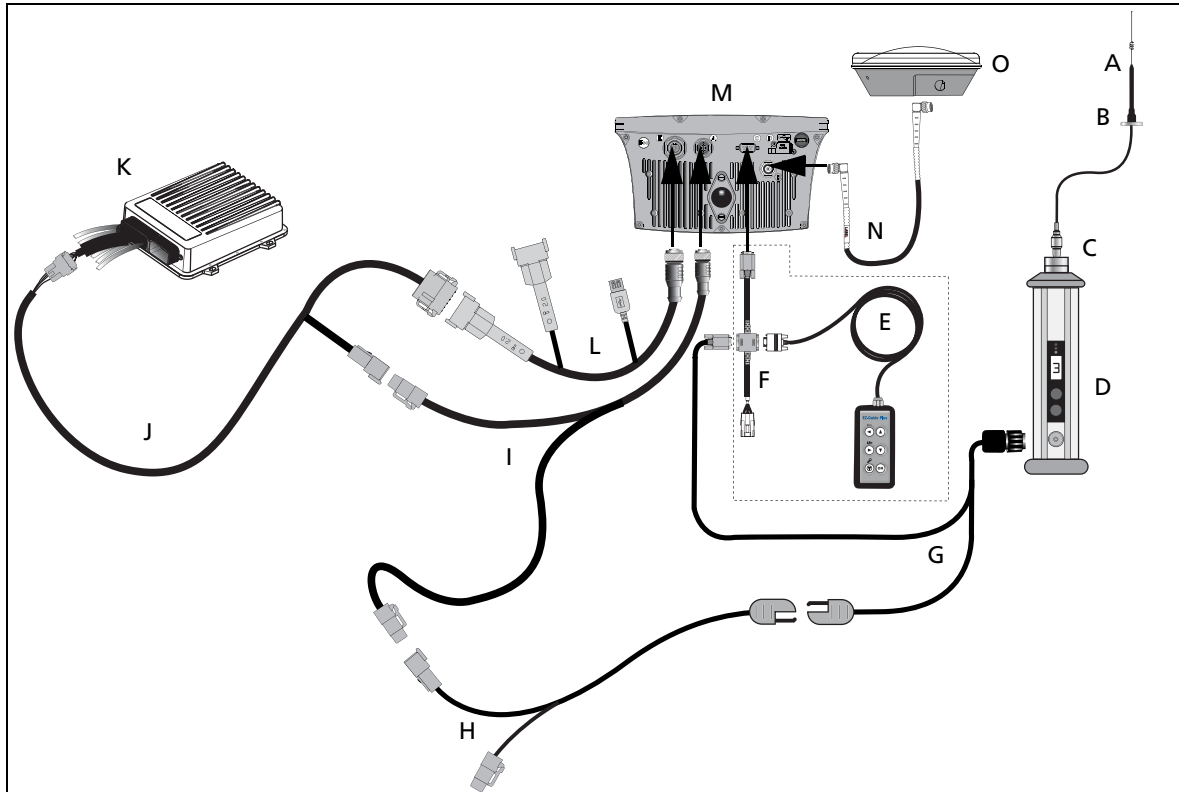
This figure shows how to connect an EZ-Guide 500 lightbar to an AgGPS Autopilot system with RTK corrections:



Item	Description	Part number
A	Radio antenna	22882-00
B	Radio antenna magnetic mount	62109
C	Radio antenna connector	46740
D	SiteNet radio	–
E	Remote keypad (optional)	66030-00
F	External interface cable	62749
G	EZ-Guide 500-to-radio cable	62082
H	EZ-Guide 500 power cable	62817
I	EZ-Guide 500-to-Autopilot cable	62754
J	AgGPS Autopilot controller	–
K	Port expansion cable	62609
L	EZ-Guide 500 lightbar	66100-xx
M	GPS antenna cable	50449
N	GPS antenna	77038-00
1	“P1” (radio) connector	–
2	“P4” connector	–
3	“P3” connector	–
4	“P2” connector	–
5	“S5” connector	–

EZ-Guide 500 / Autopilot / 450 MHz RTK corrections

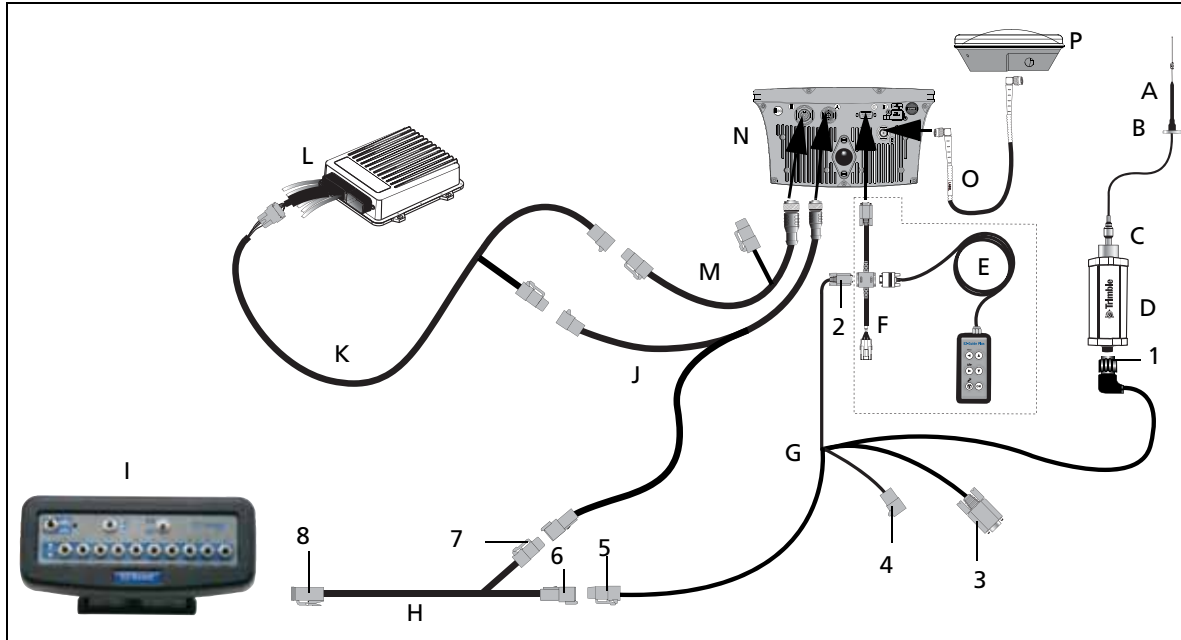
This figure shows how to connect an EZ-Guide 500 lightbar to an AgGPS Autopilot system with 450 MHz RTK corrections:



Item	Description	Part number
A	Radio antenna	51870-x0-x0
B	Radio antenna magnetic mount	62109
C	Radio antenna connector	63278
D	PDL 450 radio	62550-4x-xx
E	Remote keypad (optional)	66030-00
F	External interface cable	62749
G	PDL radio power/data cable	51861-00
H	Power tap to PDL radio	63185
I	EZ-Guide 500 power cable	62817
J	EZ-Guide 500-to-Autopilot cable	62754
K	AgGPS Autopilot controller	-
L	Port expansion cable	62609
M	EZ-Guide 500 lightbar	66100-xx
N	GPS antenna cable	50449
O	GPS antenna	77038-00

EZ-Guide 500 / Autopilot / EZ-Boom / 900 MHz radio

This figure shows how to connect an EZ-Guide 500 lightbar to an AgGPS Autopilot system, an EZ-Boom 2010 system, and a 900 MHz radio:

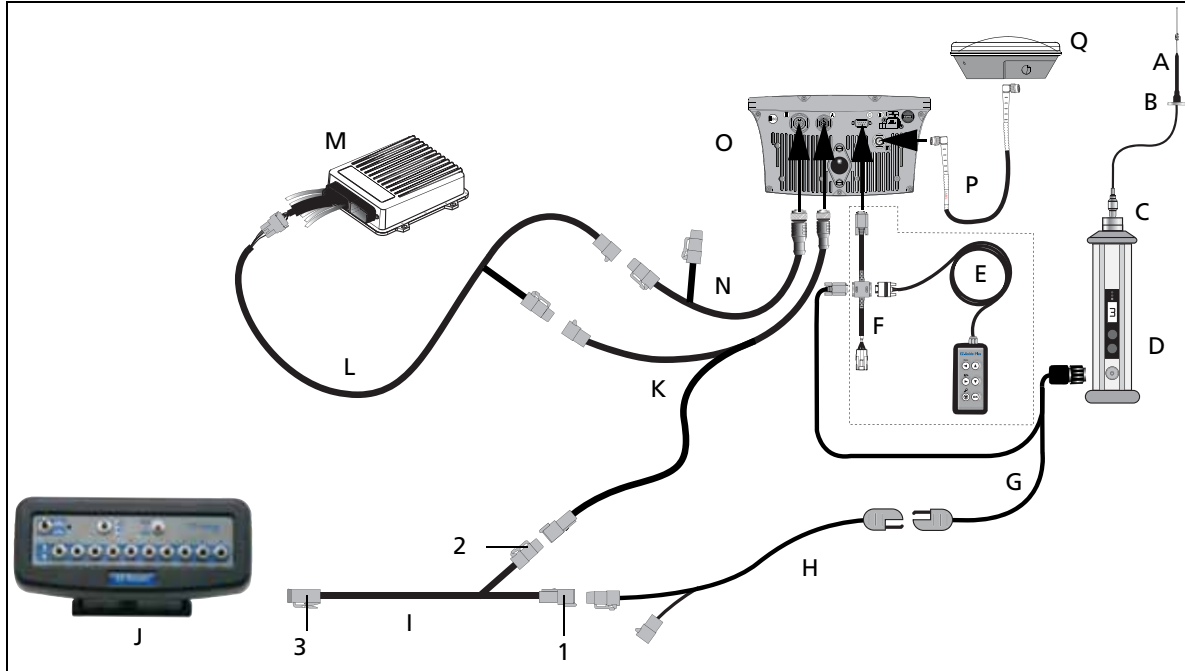


Item	Description	Part number
A	Radio antenna cable	22882-00
B	Radio antenna magnetic mount	62109
C	Radio antenna connector	46740
D	SiteNet radio	-
E	Remote keypad (optional)	66030-00
F	External interface cable	62749
G	EZ-Guide 500-to-radio cable	62082
H	EZ-Boom cable	61437
I	EZ-Boom controller	-
J	Power cable	62817
K	EZ-Guide 500-to-Autopilot cable	62754
L	AgGPS Autopilot controller	-

Item	Description	Part number
M	Port expansion cable	62609
N	EZ-Guide 500 lightbar	66100-xx
O	GPS antenna cable	50449
P	GPS antenna	77038-00
1	"P1" connector	-
2	"P4" connector	-
3	"P3" connector	-
4	"S5" connector	-
5	"P2" connector	-
6	"S3" connector	-
7	"P1" connector	-
8	"P3" connector	-

EZ-Guide 500 / Autopilot / EZ-Boom / 450 MHz radio

This figure shows how to connect an EZ-Guide 500 lightbar to an AgGPS Autopilot system, an EZ-Boom 2010 system, and a 450 MHz radio:



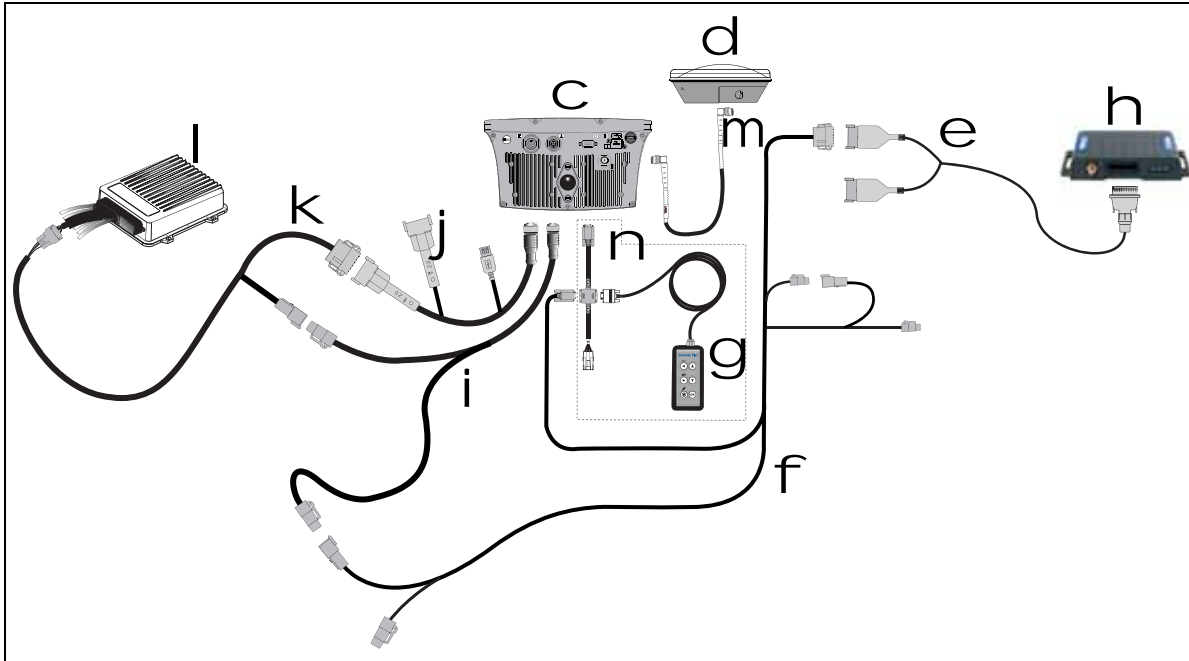
Item	Description	Part number
A	Radio antenna	51870-x0-x0
B	Radio antenna magnetic mount	62109
C	Radio antenna connector	63278
D	PDL 450 radio	62550-4x-xx
E	Remote keypad (optional)	66030-00
F	External interface cable	62749
G	PDL radio power/data cable	51861-00
H	Power tap to PDL radio	63185
I	EZ-Boom cable	61437
J	EZ-Boom controller	-
K	EZ-Guide 500 power cable	62817
L	EZ-Guide 500-to-Autopilot cable	62754
M	AgGPS Autopilot controller	-
N	Port expansion cable	62609
O	EZ-Guide 500 lightbar	66100-xx
P	GPS antenna cable	50449
Q	GPS antenna	77038-00
1	"S3" connector	-

5 Connecting to an AgGPS Autopilot System

Item	Description	Part number
2	"P1"connector	-
3	"P3"connector	-

EZ-Guide 500 system / Autopilot / Ag 3000 Modem

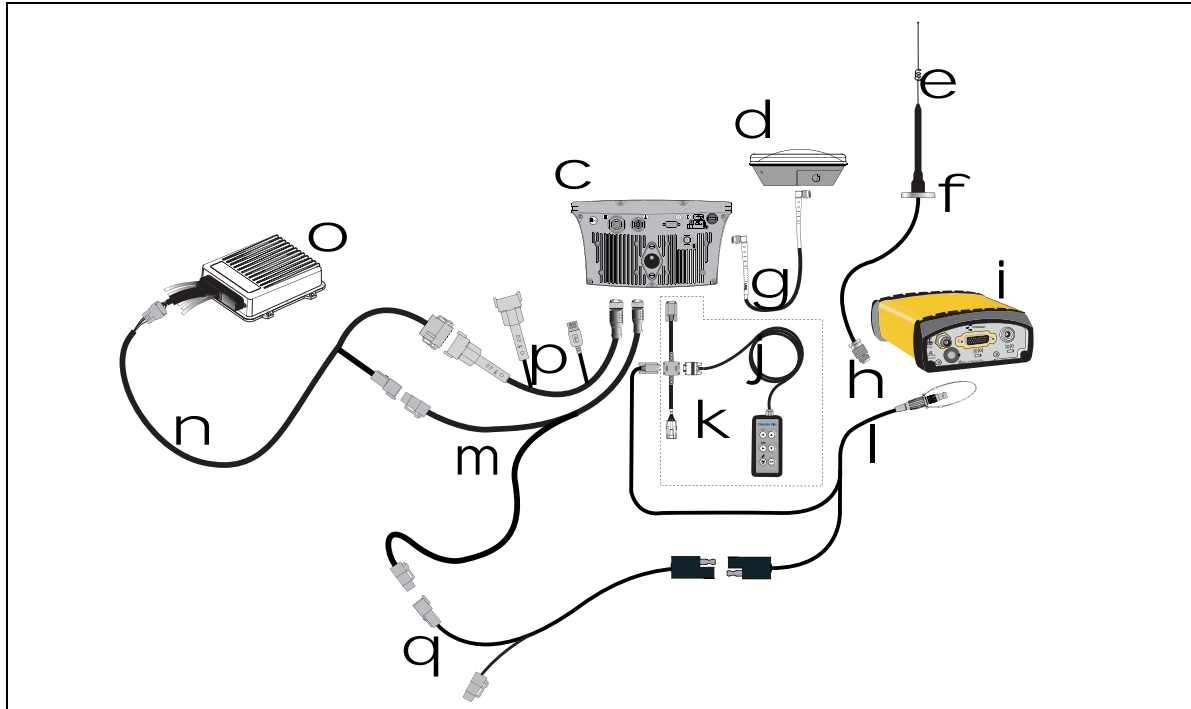
This figure shows how to connect an EZ-Guide 500 lightbar to an Autopilot using an Ag3000 modem:



Item	Description	Part number
C	EZ-Guide 500 lightbar	66100-xx
d	GPS antenna	77038-00
e	Ag3000 breakout cable	70433
f	Ag3000 interface cable	72639
g	Remote keypad: optional	66030-00
h	AG3000 modem	68600-xx
i	Power cable	62817
j	Port expansion cable	62609
k	EZ-Guide 500 to Autopilot cable	62754
l	AgGPS Autopilot controller	-
m	GPS antenna cable	50449
n	External interface cable	62749

EZ-Guide 500 system / Autopilot / SNB900 Rover RTK Radio

This figure shows how to connect an EZ-Guide 500 lightbar system to an Autopilot system using an SNB900 rover RTK radio for corrections.



Item	Description	Trimble part number
c	EZ-Guide 500 lightbar	66100-xx
d	GPS antenna	77038-00
e	SNB900 radio antenna	22882-00
f	SNB900 radio antenna magnetic mount	62109
g	GPS antenna cable	50449
h	N Female to REV. POL TNC Male	62114
i	SNB900 radio	X8480-X0
j	Remote keypad (optional)	66030-00
k	External interface cable	62749
l	Radio power/data cable	61158
m	EZ-Guide 500 power cable	62817
n	EZ-Guide 500-to-Autopilot cable	62754
o	NavController II	55563-00
p	Port expansion cable	62609
q	Power tap to PDL radio	63185

Connecting to Factory Ready Autopilot System

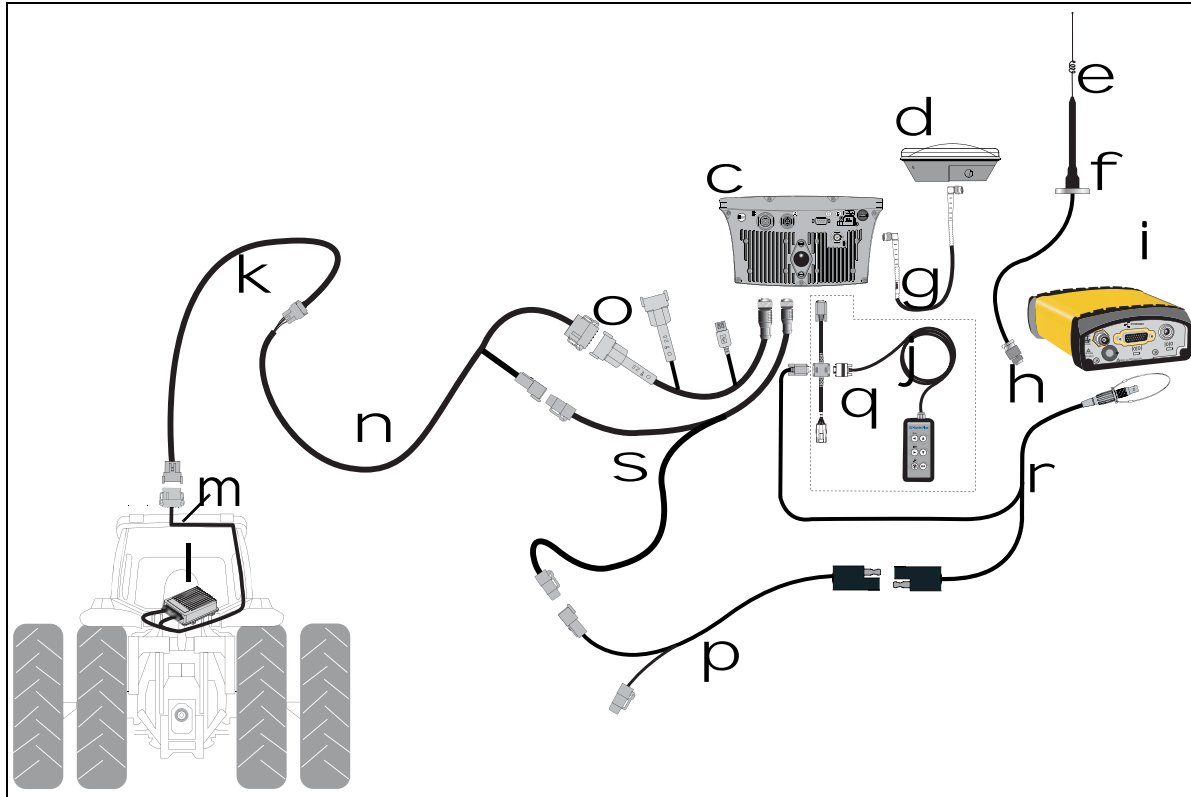
In this chapter:

- EZ-Guide 500 system / Autopilot / SNB900 RTK Radio
- EZ-Guide 500 system / Autopilot / Ag 3000 Modem
- EZ-Guide 500 system / Autopilot / SNB900 Rover RTK Radio

This chapter describes how to connect the EZ-Guide 500 to a Factory Ready guidance system.

EZ-Guide 500 system / Autopilot / SNB900 RTK Radio

This figure shows how to connect an EZ-Guide 500 system to an Autopilot system using an SNB900 RTK radio:

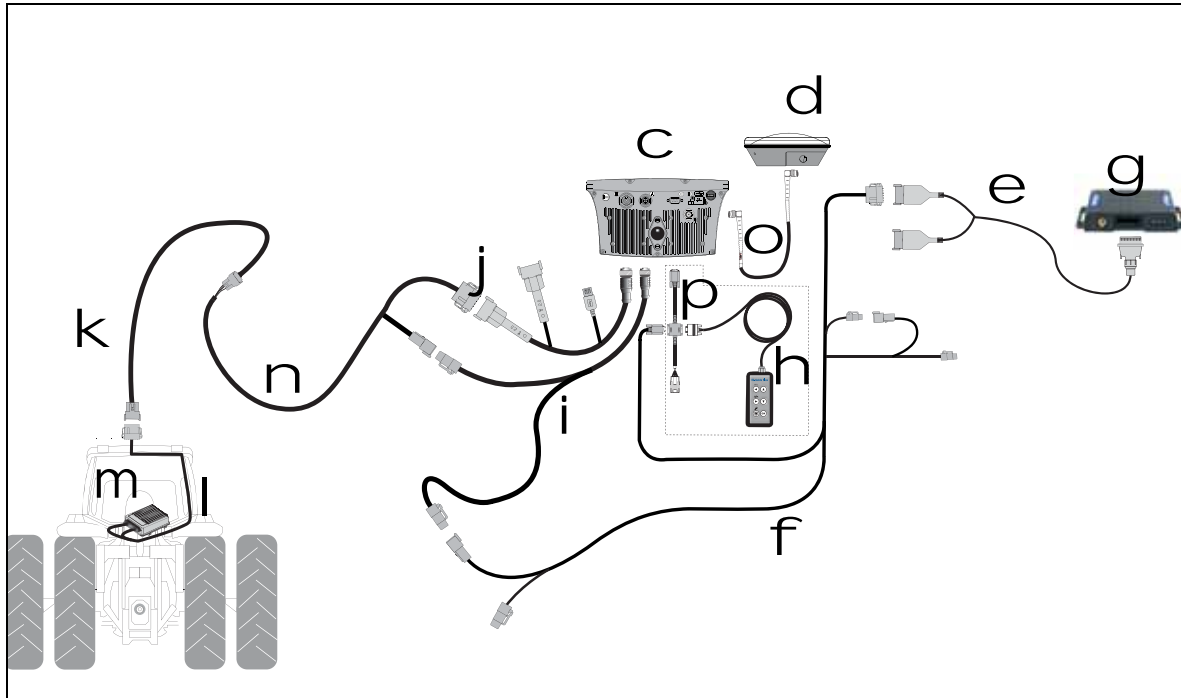


Item	Description	Part number
c	EZ-Guide 500 lightbar	66100-xx
d	GPS antenna	77038-00
e	SBN900 radio antenna	22882-00
f	SBN900 radio antenna magnetic mount	62109
g	GPS antenna cable	50449
h	N Female to REV. POL TNC Male	62114
i	SNB900 radio	68480-X0
j	Remote keypad (optional)	66030-00
k	CNH Hybrid to GPS cable	67120
l	NAVController II	55563-00
m	Factory-installed harness	-
n	EZ-Guide 500-to-Autopilot cable	62754
o	Port expansion cable	62609
p	Power tap to EZ-Guide 500	63185
q	External interface cable	62749

Item	Description	Part number
R	Radio to EZ-Guide 500	61158
S	EZ-Guide 500 power cable	62817

EZ-Guide 500 system / Autopilot / Ag 3000 Modem

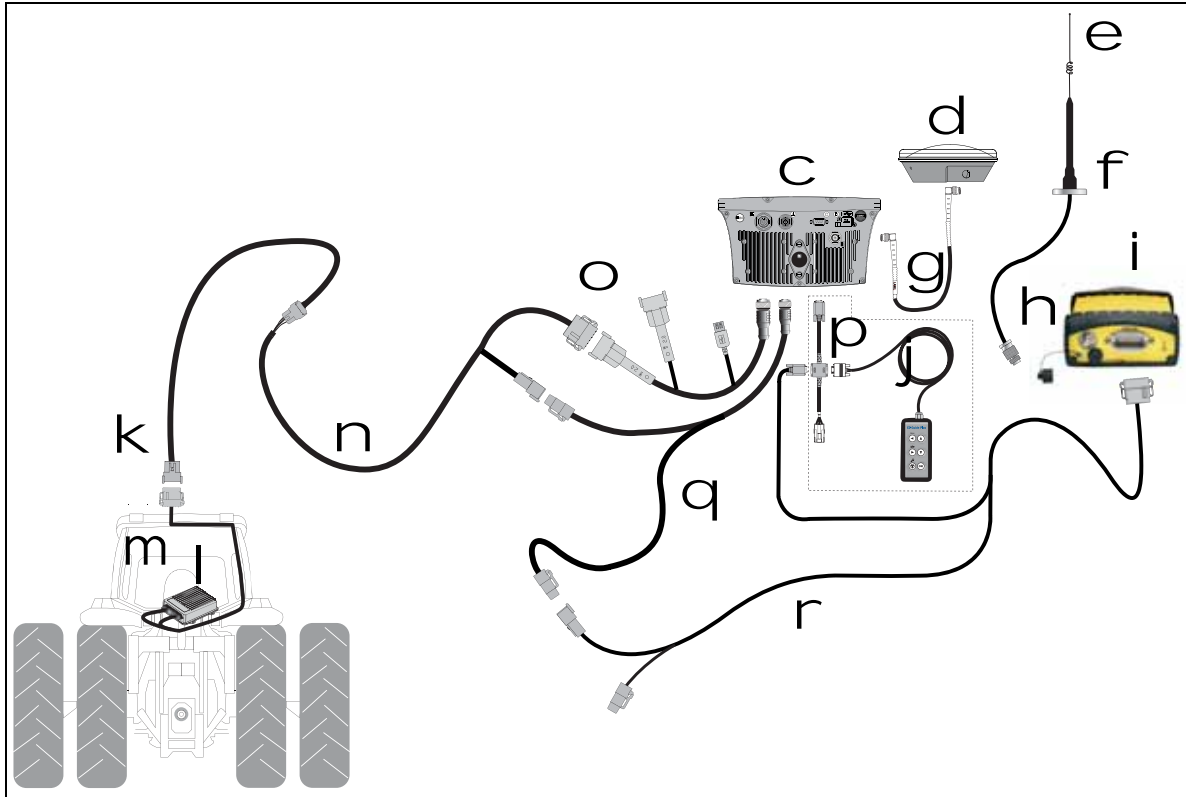
This figure shows how to connect an EZ-Guide 500 system to an Autopilot system with an Ag3000 modem:



Item	Description	Part number
C	EZ-Guide 500 lightbar	66100-xx
d	GPS antenna	77038-00
e	Ag3000 breakout cable	70433
f	Ag3000 interface cable	72639
g	AG3000 Modem	68600-xx
h	Remote keypad: optional	66030-00
i	EZ-Guide 500 power cable	62817
j	Port expansion cable	62609
k	CNH Hybrid to GPS cable	67120
l	NAVController II	55563-00
m	Factory-installed harness	-
n	EZ-Guide 500-to-Autopilot cable	62754
o	GPS antenna cable	50449
p	External interface cable	62749

EZ-Guide 500 system / Autopilot / SNB900 Rover RTK Radio

This figure shows how to connect an EZ-Guide 500 system to an Autopilot system using an SNB900 rover RTK radio for corrections.



Item	Description	Part number
c	EZ-Guide 500 lightbar	66100-xx
d	GPS antenna	77038-00
e	900 MHz radio antenna kit	22882-10
f	Antenna cable, magnetic base NMO-to-TNC	72122
g	GPS antenna cable	50449
h	N Female to REV. POL TNC Male	62114
i	SNB900 radio	66768-00-XX
j	Remote keypad: optional	66030-00
k	CNH Hybrid to GPS cable	67120
l	NAVController II	55563-00
m	Factory-installed harness	-
n	EZ-Guide 500-to-Autopilot cable	62754
o	Port expansion cable	62609
p	External interface cable	62749
q	EZ-Guide 500 power cable	62817
r	EZ-Guide 500 to SNB900R	74798

Connecting to a Serial Variable Rate Controller

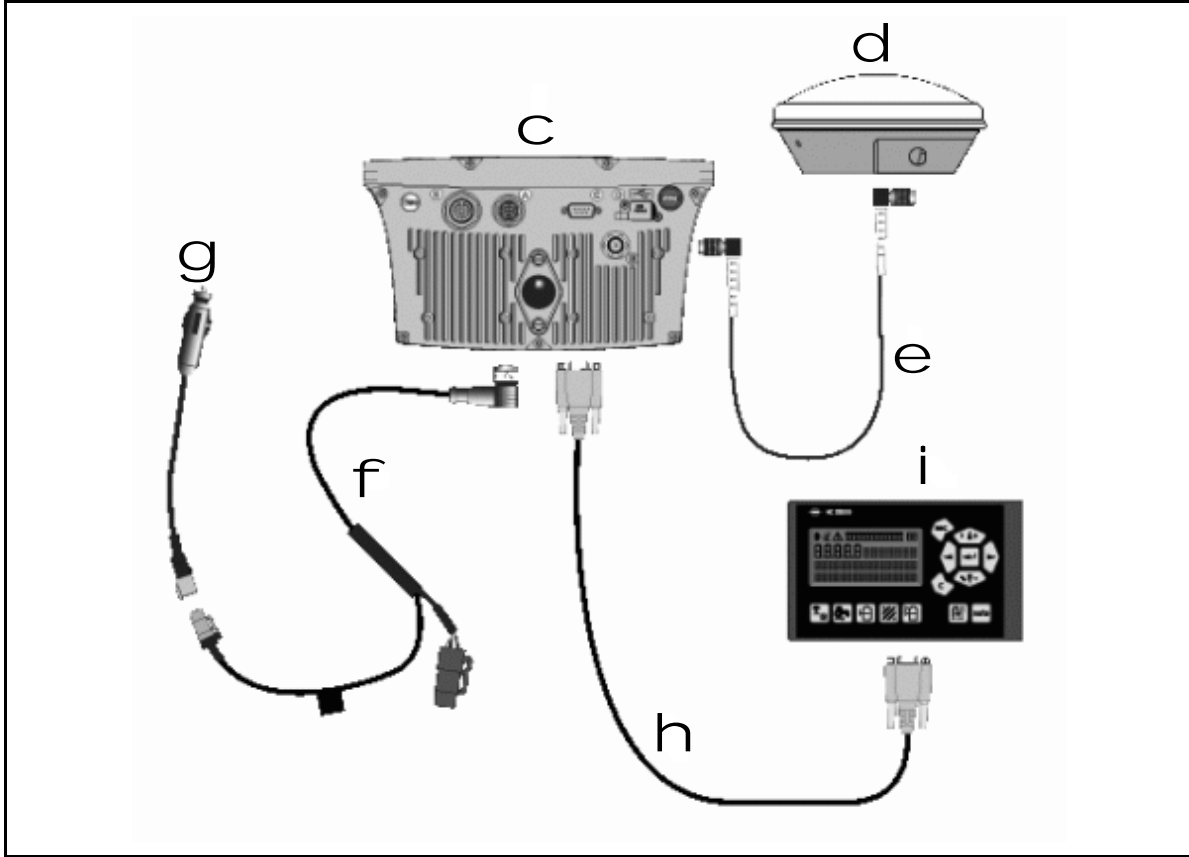
In this chapter:

- [Hardi 5500 Variable Rate Controller](#)
- [Raven Variable Rate Controller](#)
- [Rawson Variable Rate Controller](#)

This chapter describes how to connect the EZ-Guide 500 to a Factory Ready guidance system.

Hardi 5500 Variable Rate Controller

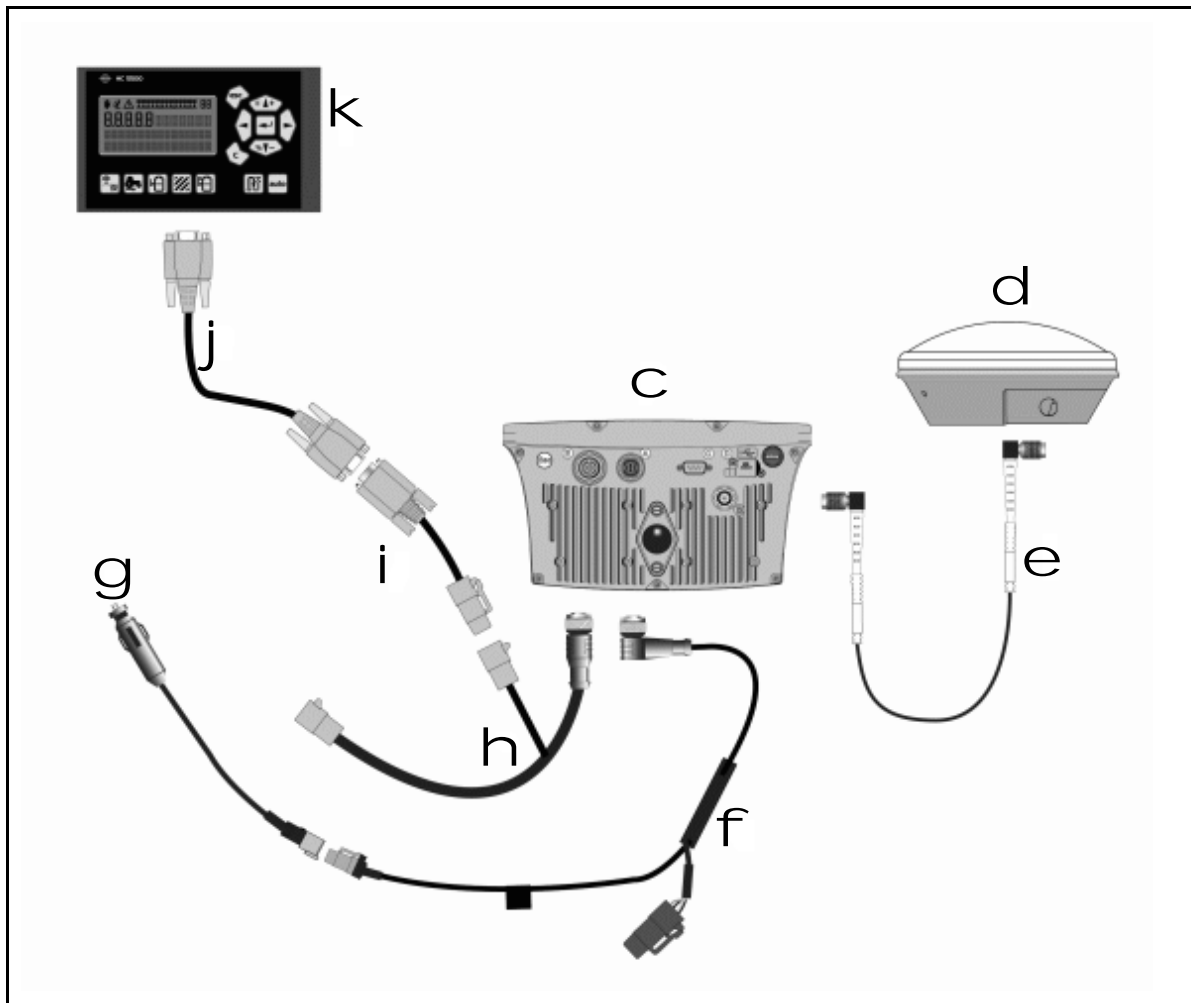
This figure shows how to connect the Hardi 5500 variable rate controller to the EZ-Guide 500 lightbar COM port.



Item	Description	Part number
c	EZ-Guide 500 lightbar	66100-xx
d	Antenna	60600-02 (DGPS), 77038-00 (OmniSTAR/RTK)
e	Antenna cable	50449
f	EZ-Guide 500 power cable	62817
g	To power	-
h	Hardi 5500 (COM1) to EZ-Guide 500 cable	59043
i	Hardi 5500 Controller	-

Note – The Hardi 5500 controller must have firmware version 3.16 or later installed and have a JOBCOM control box connected for it to work correctly with the EZ-Guide 500 lightbar.

Alternatively, this figure shows how to connect the Hardi 5500 variable rate controller to the EZ-Guide 500 lightbar AUX port.

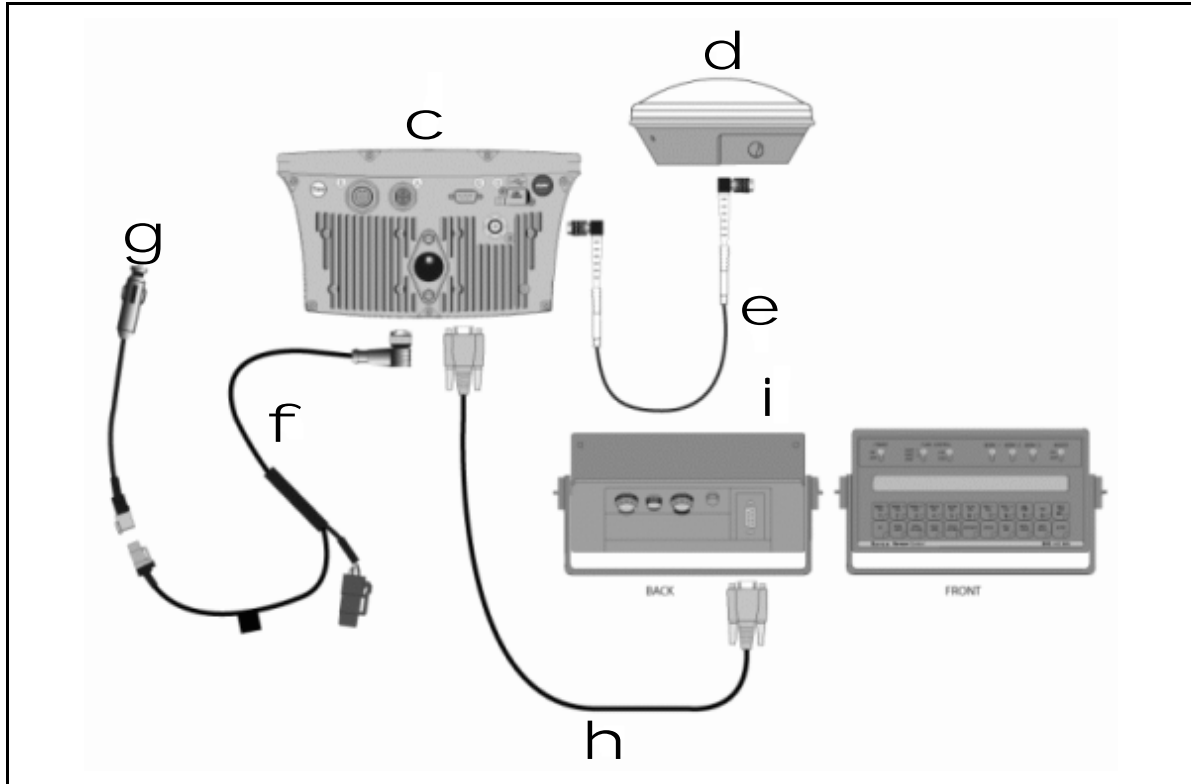


Item	Description	Part number
C	EZ-Guide 500 lightbar	66100-xx
D	Antenna	60600-02 (DGPS), 77038-00 (OmniSTAR/RTK)
E	Antenna cable	50449
F	EZ-Guide 500 power cable	62817
G	To power	-
H	EZ-Guide 500 AUX port cable	62609
I	Serial port extender	63076
J	Hardi 5500 (COM1) to EZ-Guide 500 cable	59043
K	Hardi 5500 Controller	-

Note – The Hardi 5500 controller must have firmware version 3.16 or later installed and have a JOBCOM control box connected for it to work correctly with the EZ-Guide 500 lightbar.

Raven Variable Rate Controller

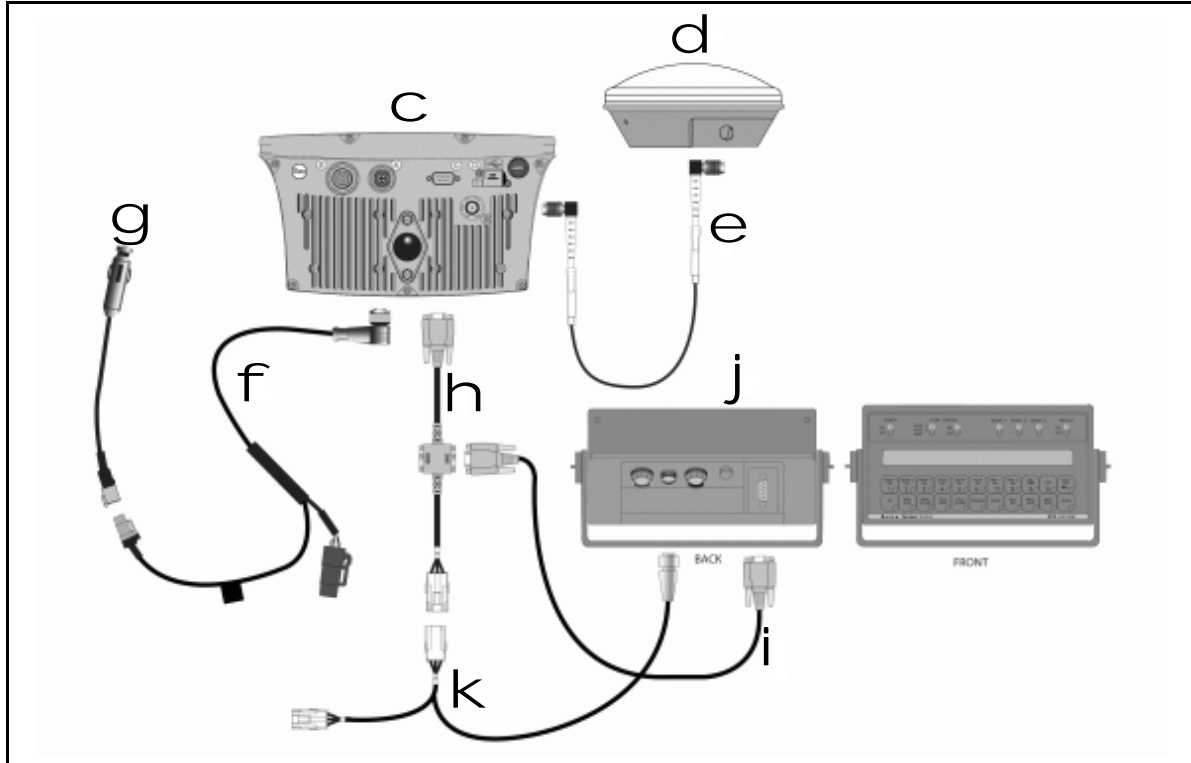
This figure shows how to connect the Raven variable rate controller to the EZ-Guide 500 lightbar COM port.



Item	Description	Part number
C	EZ-Guide 500 lightbar	66100-xx
D	Antenna	60600-02 (DGPS), 77038-00 (OmniSTAR/RTK)
E	Antenna cable	50449
F	EZ-Guide 500 power cable	62817
G	To power	-
H	Raven to EZ-Guide 500 cable	69729
I	Raven SCS 400 or 600 series controller	-

Radar speed input

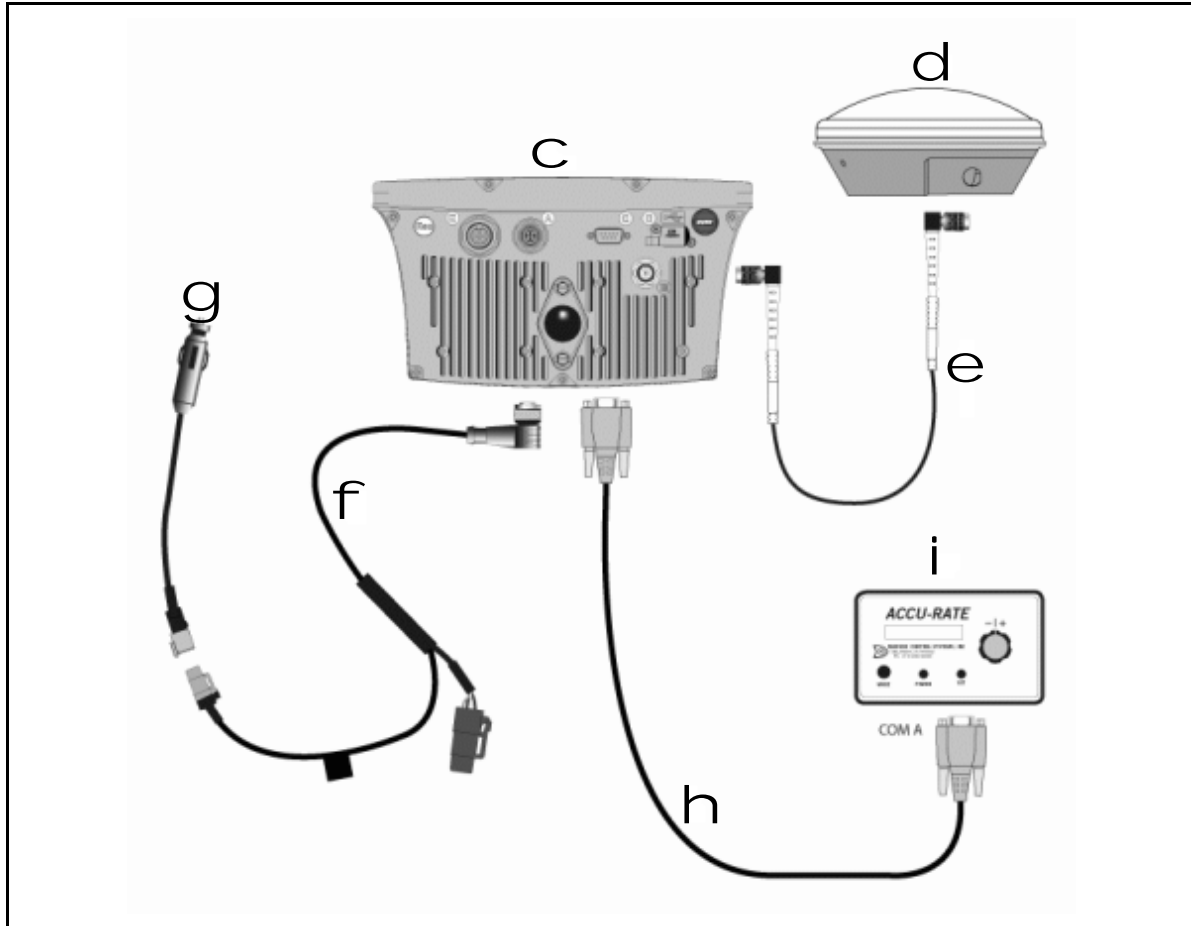
Radar input is required for speed. You can connect either an external radar device, or use cable P/N 54805-00, as shown below.



Item	Description	Part number
c	EZ-Guide 500 lightbar	66100-xx
d	Antenna	60600-02 (DGPS), 77038-00 (OmniSTAR/RTK)
e	Antenna cable	50449
f	EZ-Guide 500 power cable	62817
g	To power	–
h	External interface cable	62749
i	Raven to EZ-Guide 500 cable	69729
j	Raven SCS 400 or 600 series controller	–
k	Radar cable	54805-00

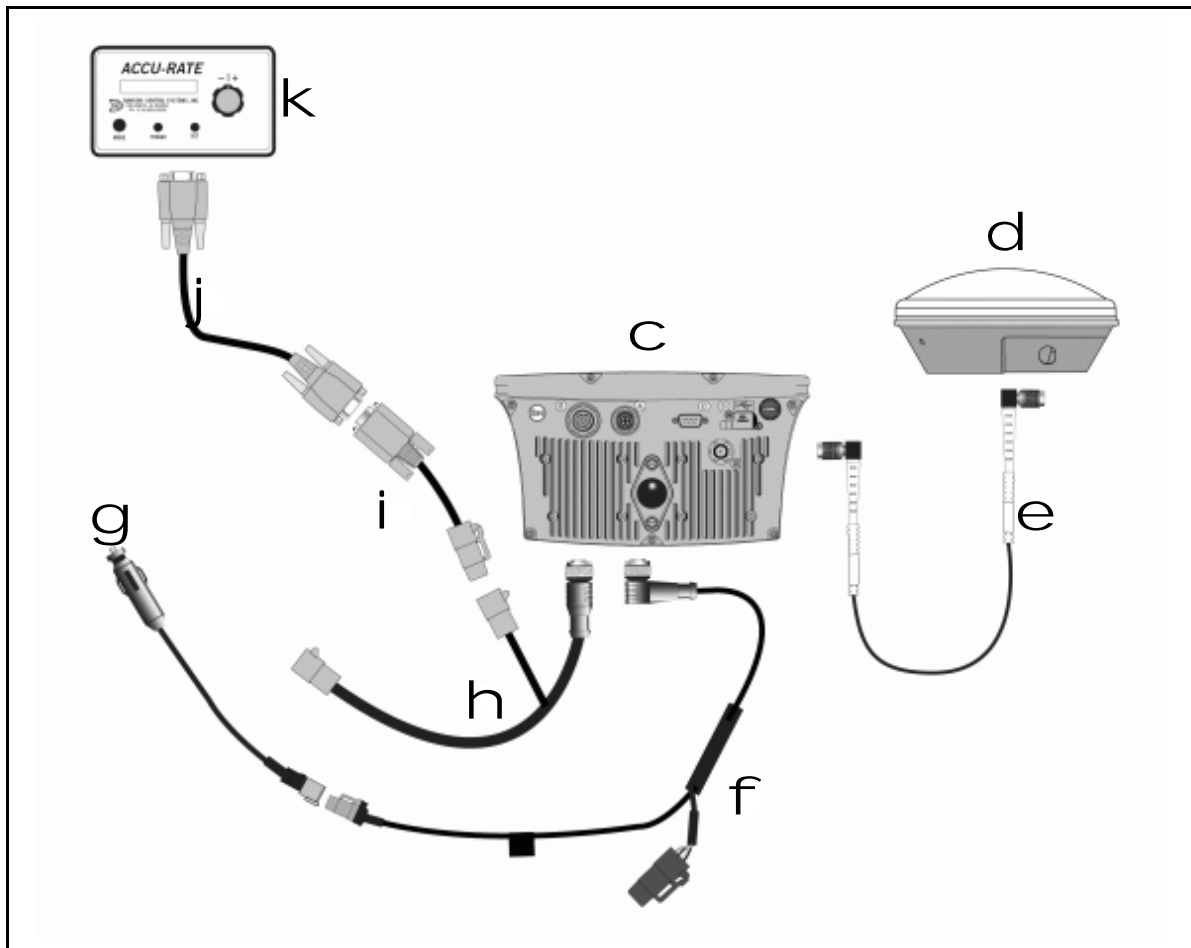
Rawson Variable Rate Controller

This figure shows how to connect the Rawson variable rate controller to the EZ-Guide 500 lightbar COM port.



Item	Description	Part number
c	EZ-Guide 500 lightbar	66100-xx
d	Antenna	60600-02 (DGPS), 77038-00 (OmniSTAR/RTK)
e	Antenna cable	50449
f	EZ-Guide 500 power cable	62817
g	To power	-
h	Rawson (COM A) to EZ-Guide 500 cable	69730
i	Rawson Controller	-

Alternatively, this figure shows how to connect the Rawson variable rate controller to the EZ-Guide 500 lightbar AUX port.

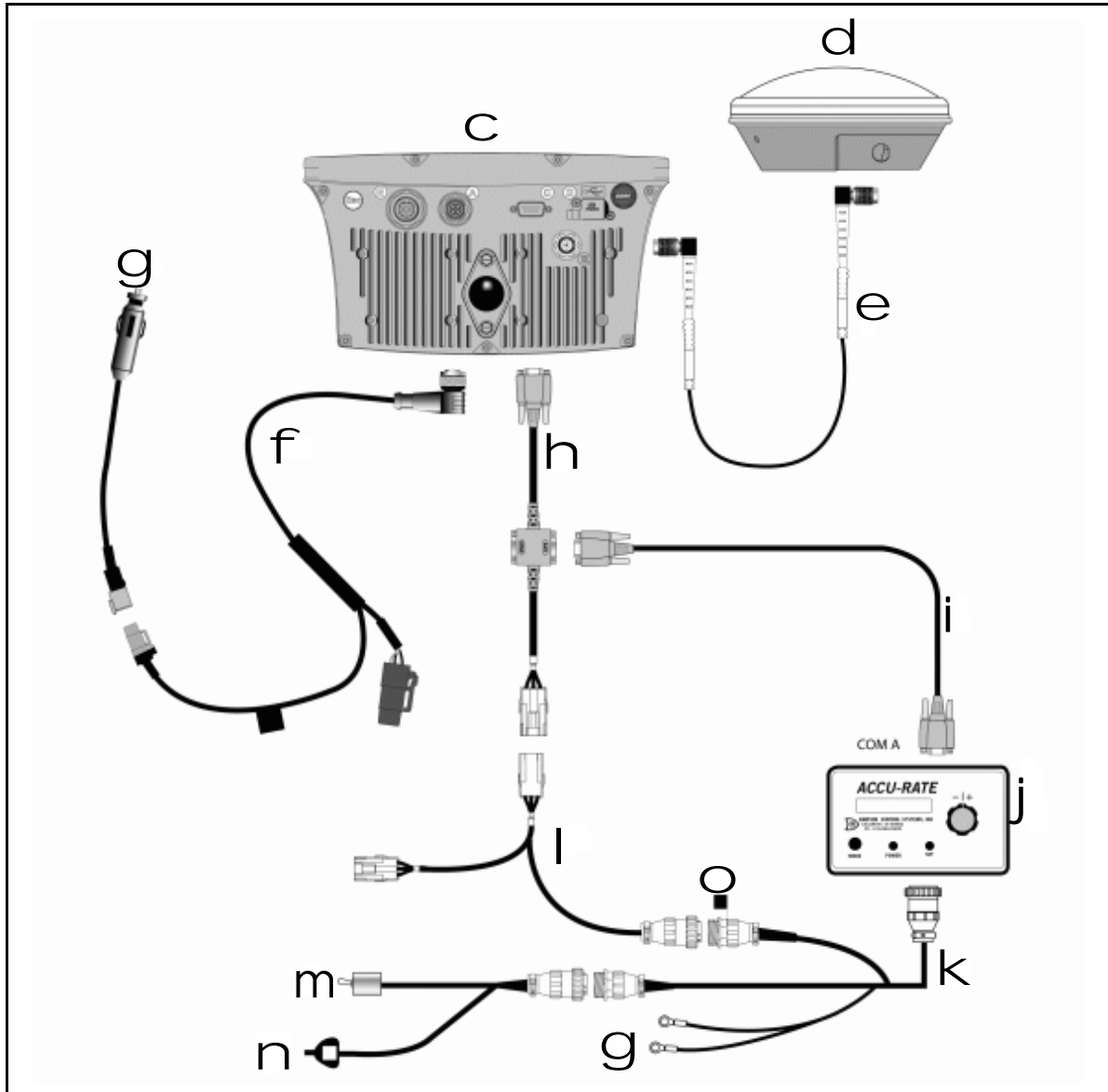


Item	Description	Part number
C	EZ-Guide 500 lightbar	66100-xx
d	Antenna	60600-02 (DGPS), 77038-00 (OmniSTAR/RTK)
e	Antenna cable	50449
f	EZ-Guide 500 power cable	62817
g	To power	-
h	EZ-Guide 500 AUX port cable	62609
i	Serial port extender cable	63076
j	Rawson (COM A) to EZ-Guide 500 cable	69730
k	Rawson Controller	-

Note – The target rate information from the EZ-Guide 500 lightbar is sent to both drives on the Rawson controller.

Radar speed input

Radar input is required for speed. You can connect either an external radar device, or use cable P/N 54806-00, as shown below.



Item	Description	Part number
C	EZ-Guide 500 lightbar	66100-xx
d	Antenna	60600-02 (DGPS), 77038-00 (OmniSTAR/RTK)
e	Antenna cable	50449
f	EZ-Guide 500 power cable	62817
g	To power	-
h	External interface cable	62749
i	Rawson (COM A) to EZ-Guide 500 cable	69730

Item	Description	Part number
J	Rawson controller	–
K	Rawson power cable	Rawson P/N 307670
L	Radar cable	54806-00
M	Master switch	–
N	Drive A/B selector switch (if fitted)	–
O	Radar input	–

Accessory Connections

In this chapter:

- Connecting a coverage switch to the lightbar
- EZ-Guide 500 system with coverage switch
- EZ-Guide 500 system with radar cable
- EZ-Guide 500 system with radar cable and coverage switch
- EZ-Steer 500 system with Krohne flow meter
- Preparing the EZ-Guide 500 CAN 2 port connection cable (P/N 63075)
- Preparing the EZ-Guide 500 COM 2 port connection cable (P/N 63076)
- Adding a second USB port
- Connecting the LB25 lightbar to an EZ-Guide 500 lightbar

This chapter shows how to connect a coverage switch, radar cable, or a second COM or CAN port to the EZ-Guide 500 lightbar.

Connecting a coverage switch to the lightbar

You can connect a coverage switch to the EZ-Guide 500 lightbar guidance system to turn coverage logging on and off. When the switch is closed (switched on), coverage logging occurs. When the switch is open (switched off), coverage logging does not occur. The switch can be either a toggle switch or connected directly to the implement or spray source.

To connect a coverage switch to the lightbar:

1. Connect an interface cable to the lightbar.
2. Attach the female WeatherPack connector (supplied) to the wires of a switch (not supplied).
3. Do one of the following:
 - Option 1: Attach the switch wires to an implement or spray source.
 - Option 2: Attach the switch wires to a toggle switch.
4. Enable the switch on the lightbar.

Step 1. Connecting an interface cable to the lightbar

The coverage switch requires one of the following external interface cables which has a 3-pin WeatherPack connector:

- External interface cable (P/N 52033)
- Right angle interface cable (P/N 62749)

Connect the cable to the serial (DE9) port on the rear of the lightbar.

Step 2. Attaching a female WeatherPack connector to the switch wires

1. Strip about 1 cm (0.4 inches) of insulation off the switch wires.
2. Thread each switch wire through a cable seal:



3. Crimp terminal connectors to the ends of the two wires with an appropriately-sized crimp tool or pliers and then solder the terminal connectors to the wire to ensure a secure connection:



4. Insert the wires with terminal connectors and the cable seals into the appropriate holes on the female WeatherPack connector:

Switch wire	Connector
Ground	B
Switch	C

C

CAUTION – Ensure that you do not supply either wire with power. If necessary, use a relay.

5. Plug the female connector into the male connector on the lightbar's interface cable:



Note – If you are also using radar, connect the radar cable to the WeatherPack connector on the interface cable and then connect the switch cable to the spare WeatherPack connector on the radar cable.

Step 3. Attaching the switch wires

Option 1: Connecting the switch wire to an implement or spray source

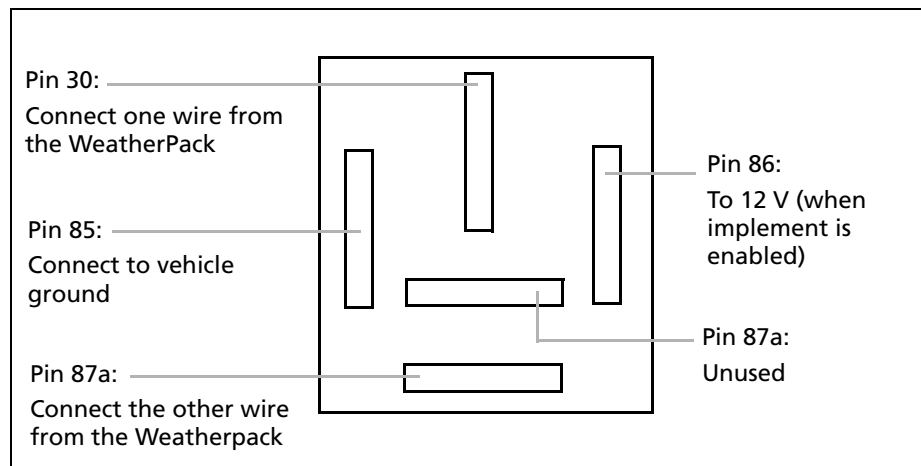
If you connect the switch wire to an implement or spray source, coverage is engaged when you turn on the implement or spray source. This requires an automotive relay to close the circuit when power is supplied.

C

CAUTION – Ensure that you do not supply either wire with power. If necessary, use a relay.

To connect the relay:

1. Connect the 3-pin WeatherPack end of the switch cable to the 3-pin WeatherPack connector on interface cable.
2. Connect one of the switch wires to pin 87 on the relay.
3. Connect the other switch wire to pin 30 on the relay.
4. Connect a wire from a ground connection on the implement to pin 85 on the relay.
5. Locate a point on the implement that outputs 12V only when the implement is engaged. Connect a wire from that point to pin 86 on the relay.



Note – Leave pin 87a (in the middle of the relay) unconnected.




Option 2: Connecting the switch wire to an SPST toggle switch

You can connect an SPST toggle switch to manually turn coverage logging on or off:

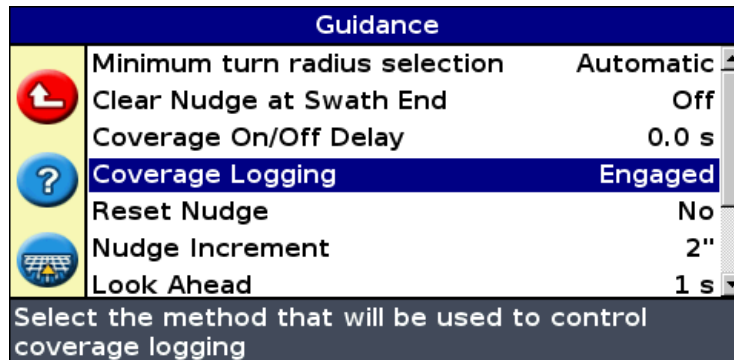
Switch state	Result
On (switch is closed)	Coverage logging is enabled
Off (switch is open)	Coverage logging is disabled

Step 4. Enabling the switch on the lightbar

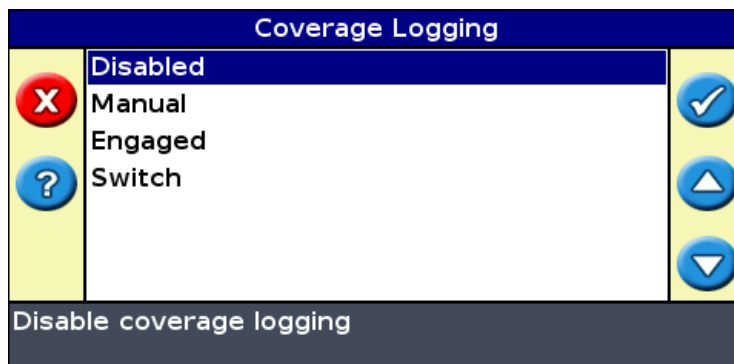
From the main guidance screen:

1. Press  until you have selected the  icon.
2. Press . The *Configuration* screen appears.
3. Ensure that the *User Mode* field is set to Advanced.

4. Select *System / Guidance*. The *Guidance* screen appears:



5. Select *Coverage Logging* and then press . The *Coverage Logging* screen appears:

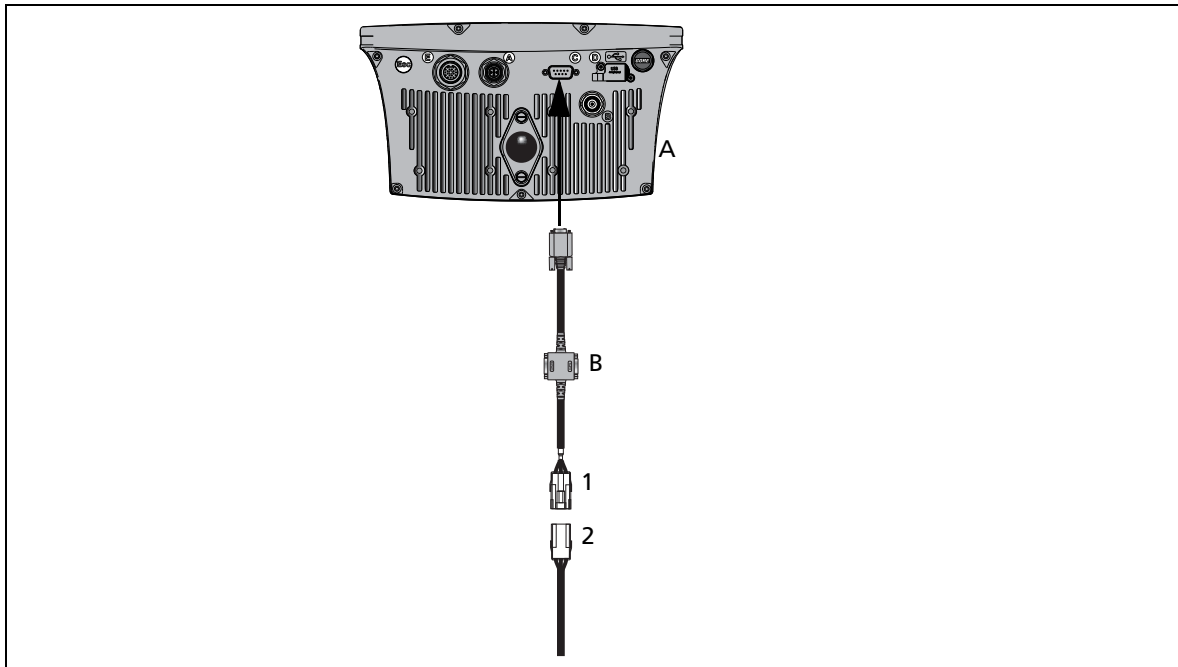


6. Press until you have selected *Switch* and then press .
7. If necessary, set the user mode back to Easy.

Coverage logging is now set to start when you turn on the switch or when the implement turns on.

EZ-Guide 500 system with coverage switch

This figure shows how to connect a coverage switch to the EZ-Guide 500 lightbar:



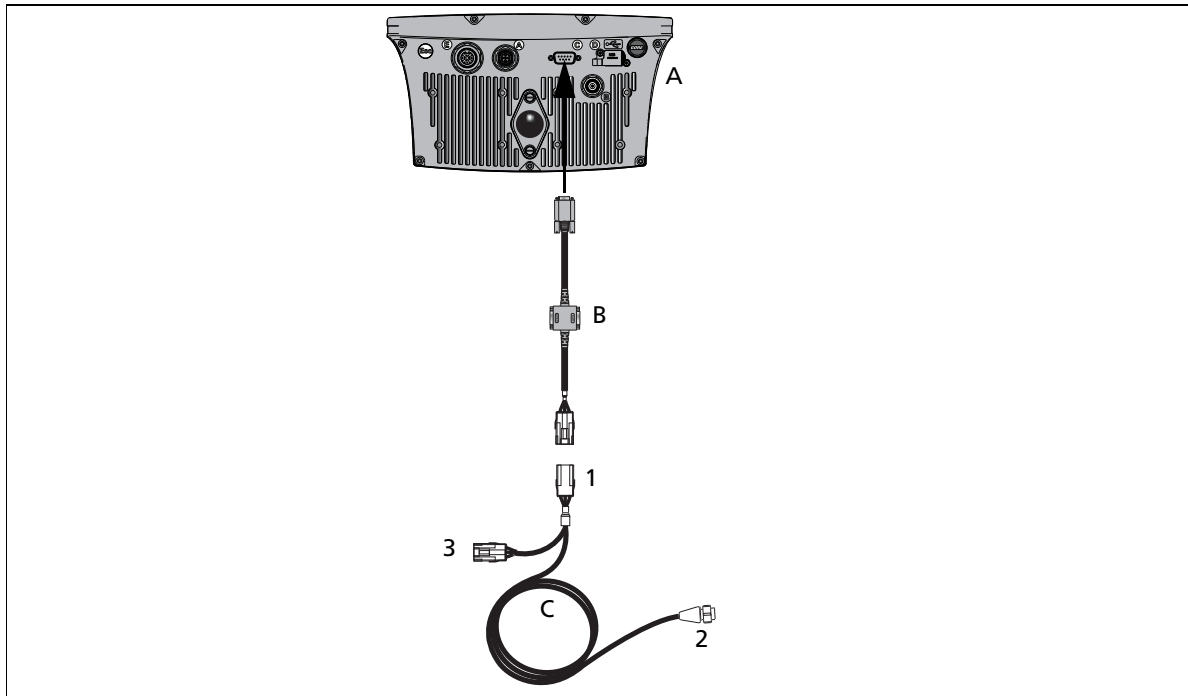
Item	Description	Part number
A	EZ-Guide 500 lightbar	66100-xx
B	External interface cable	62749
1	Female WeatherPack connector	–
2	Male WeatherPack connector	–

Note – There is not a specific coverage switch. Create one with the supplied WeatherPack connector.

You can connect the coverage switch to either an implement or a toggle switch. This may require a relay. For more information, refer to the *EZ-Guide 500 Lightbar: Connecting a Coverage Switch Support Note* on www.EZ-Guide.com.

EZ-Guide 500 system with radar cable

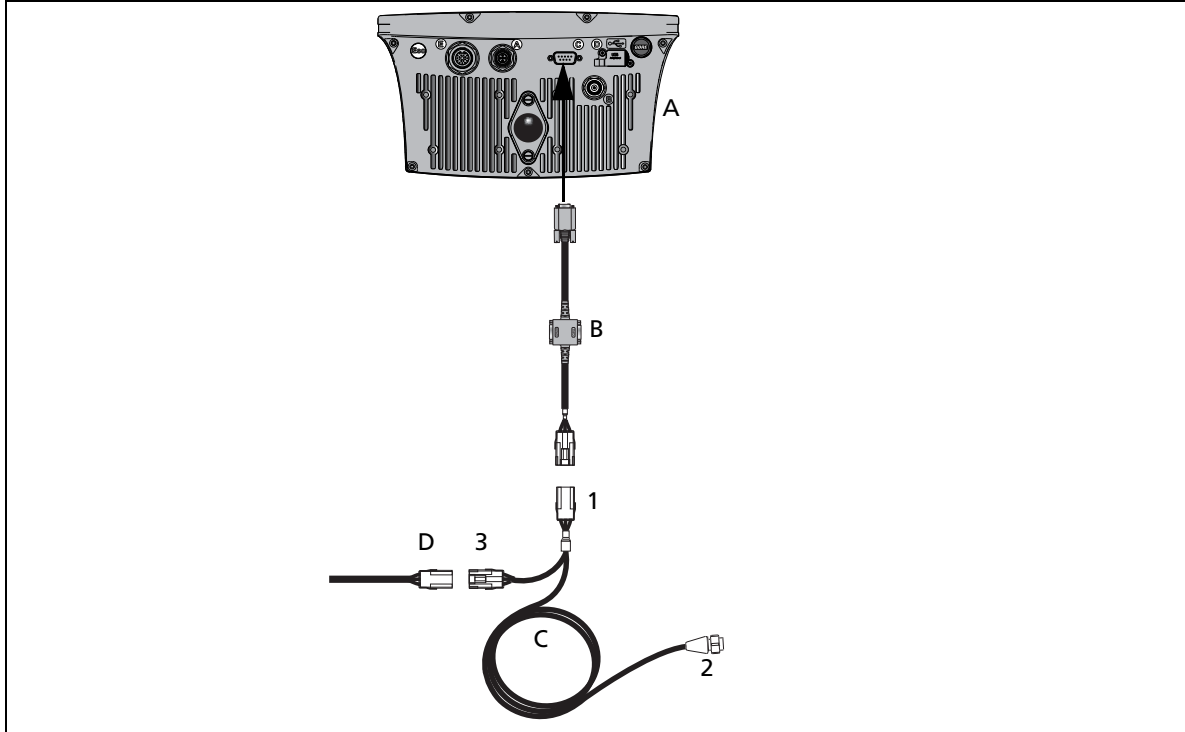
This figure shows how to connect a radar cable to the EZ-Guide 500 lightbar:



Item	Description	Part number
A	EZ-Guide 500 lightbar	66100-xx
B	External interface cable	62749
C	Radar cable	54805-00 (Raven) or 54806-00 (Midtech) or 54807-00 (Hinniker)
1	Female WeatherPack connector	-
2	Connection to radar gun	-
3	Spare male WeatherPack connector	-

EZ-Guide 500 system with radar cable and coverage switch

This figure shows how to connect a radar cable and coverage switch to the EZ-Guide 500 lightbar:

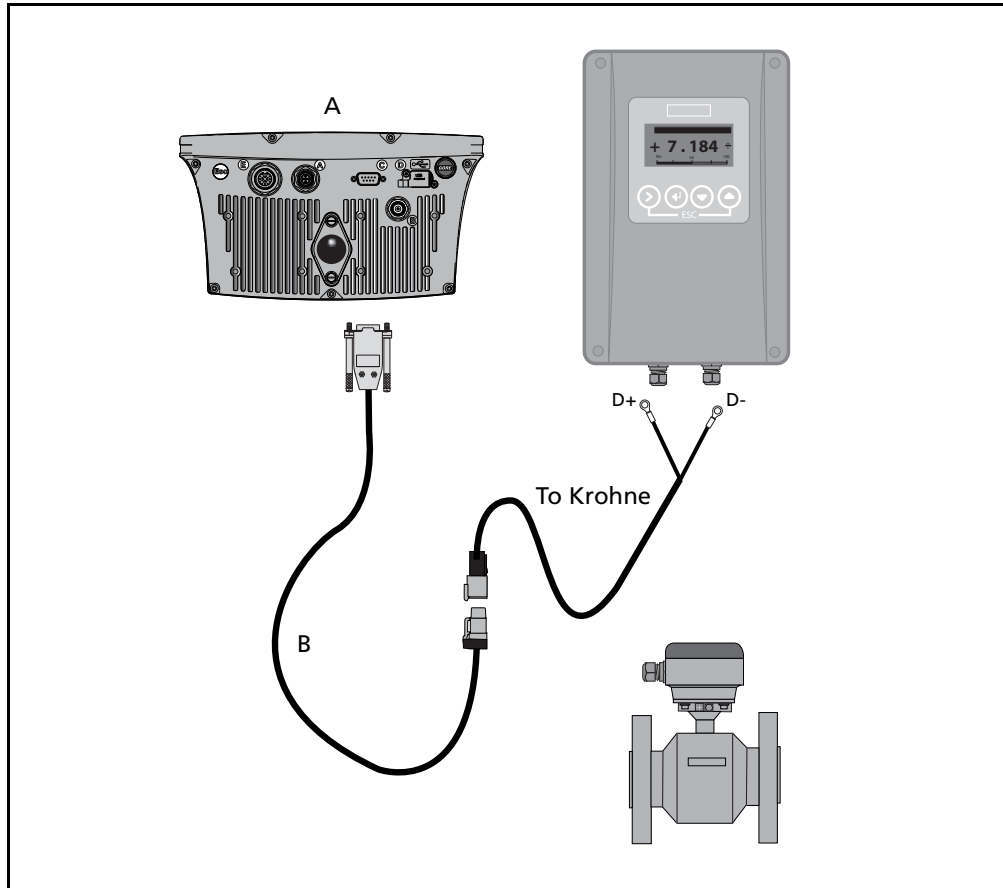


Item	Description	Part number
A	EZ-Guide 500 lightbar	66100-xx
B	External interface cable	62749
C	Radar cable	54805-00 (Raven) or 54806-00 (Midtech) 54807-00 (Hinniker)
D	Coverage switch cable	–
1	Female WeatherPack connector	–
2	Connection to radar gun	–
3	Spare male WeatherPack connector	–

Note – The pulse amplifier module that is provided with the radar cable is for the EZ-Guide Plus lightbar. It is not required for the EZ-Guide 500 lightbar.

EZ-Steer 500 system with Krohne flow meter

This figure shows how to connect the EZ-Steer 500 system to a Krohne flow meter:

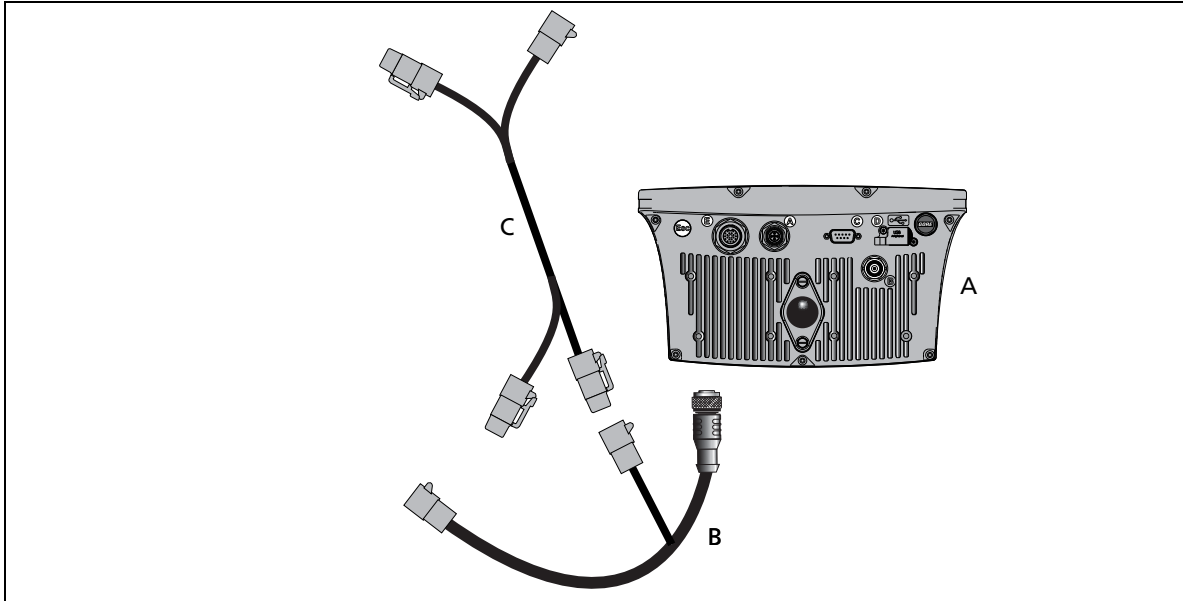


Item	Description	Part number
A	EZ-Guide 500 lightbar	66100-xx

Item	Description	Part number
B	Krohne flow meter to EZ-Guide 500 lightbar	78369

Preparing the EZ-Guide 500 CAN 2 port connection cable (P/N 63075)

The EZ-Guide 500 CAN 2 port connection cable (P/N 63075) connects to the 19-pin cable (P/N 62609) to add a second CAN port for the EZ-Guide 500 lightbar guidance system.



Item	Description	Part number
A	EZ-Guide 500 lightbar	66100-xx
B	Port expansion cable	62609
C	EZ-Guide 500 CAN 2 port connection cable	63075

Insert the contacts on cable P/N 63075 into the port 2 mating connector as follows:

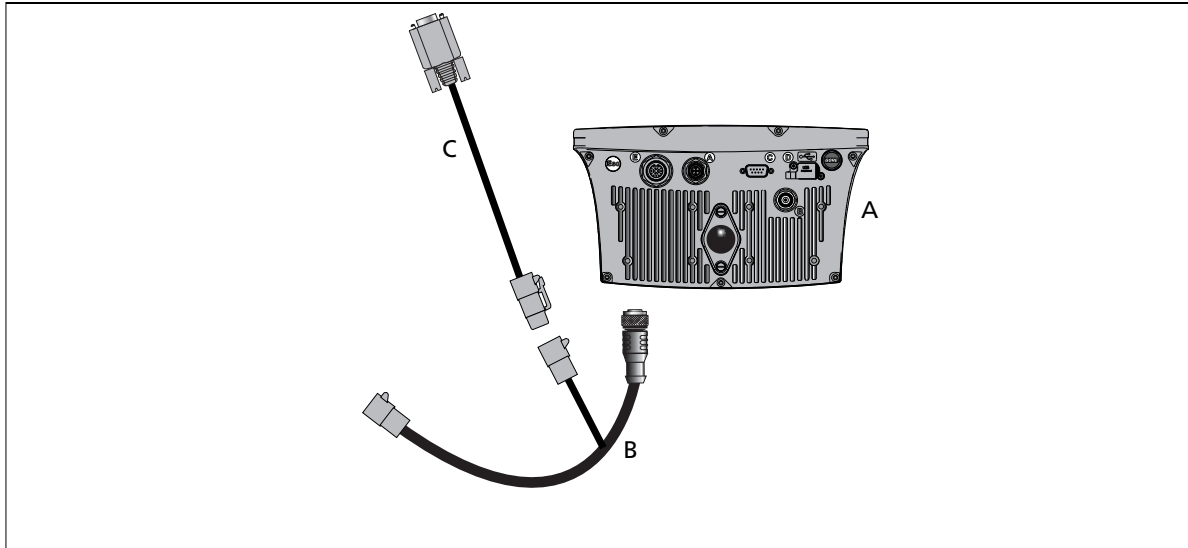
1. Identify port 2 on cable P/N 62609. It is the gray 12-pin Deutsch connector.
2. Unplug the gray Deutsch DTM06-12S dust cover.
3. Pull out the connector wedgelock with a pair of needlenose pliers. The wedgelock is the piece of orange plastic with 4 square holes.
4. On the other side of the dust cover, remove the sealing pins from cavity 1 and cavity 2.
5. Insert the following wires through the silicone seal and into the specified cavities:

Connector	Cavity
CAN_H (yellow wire)	1
CAN_L	2

6. Replace the wedgelock.

Preparing the EZ-Guide 500 COM 2 port connection cable (P/N 63076)

The EZ-Guide COM 2 port connection cable (P/N 63076) connects to the 19-pin cable (P/N 62609) to add a second COM port for the EZ-Guide 500 lightbar guidance system.



Item	Description	Part number
A	EZ-Guide 500 lightbar	66100-xx
B	Port expansion cable	62609
C	EZ-Guide 500 COM 2 port connection cable	63076

Insert the contacts on cable P/N 63076 into the port 2 mating connector as follows:

1. Identify port 2 on cable P/N 62609. It is the gray 12-pin Deutsch connector.
2. Unplug the gray Deutsch DTM06-12S dust cover.
3. Pull out the connector wedgelock with a pair of needlenose pliers. The wedgelock is the piece of orange plastic with 4 square holes.
4. On the other side of the dust cover, remove the sealing pins from cavities 5, 6, and 7.
5. Insert the labeled contacts on cable P/N 63076 into the specified cavities:

Contact	Cavity
Yellow	5
Violet	6
Green	7

6. Replace the wedgelock.

Adding a second USB port

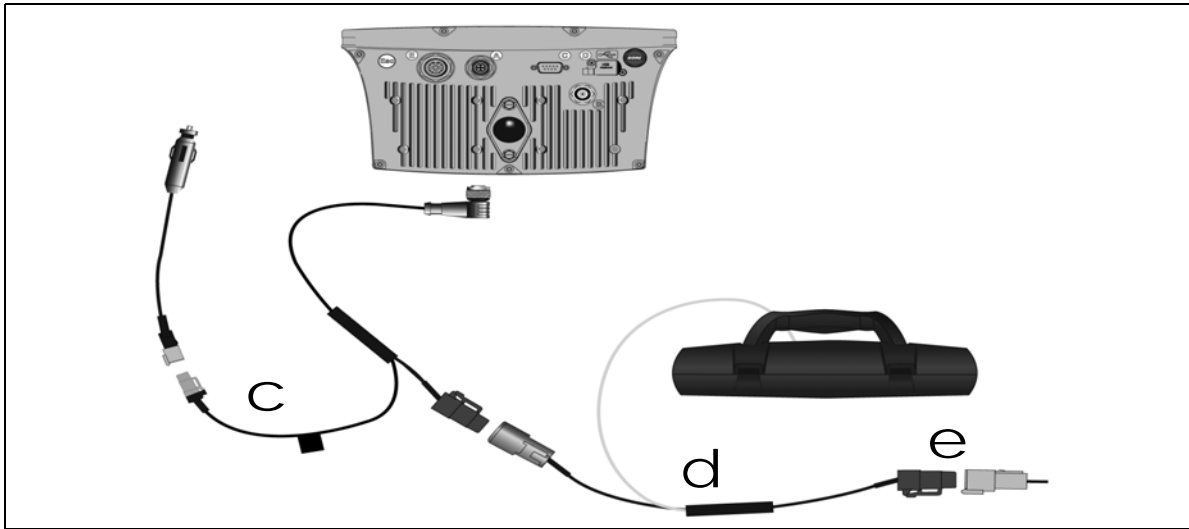
The lightbar does not currently support a second USB port.

You cannot use the USB connector on the port expansion cable (P/N 62609).

Connecting the LB25 lightbar to an EZ-Guide 500 lightbar

This section describes the cabling option to connect the LB25 lightbar to the EZ-Guide 500 lightbar.

Note – Ensure firmware version 4.05 or greater is loaded on the EZ-Guide 500. For information on configuring the LB25 lightbar for use with the display refer to your display documentation.



Step 1

Connect the LB25 cable (P/N 67094) (d) to the 4-pin Deutsch connector on cable P/N 62817 (c).

Notes:

- For a standalone system, connect the CAN terminator (P/N 59783) (e) to the 4-pin Deutsch plug on the LB25 cable (d).
- If you are using an EZ-Steer or EZ-Boom system, connect the appropriate cable to the 4-pin Deutsch plug on the LB25 cable (d).
- For details on how to connect the remaining parts of those systems, refer to your display documentation.

Connecting an EZ-Remote Joystick

In this chapter:

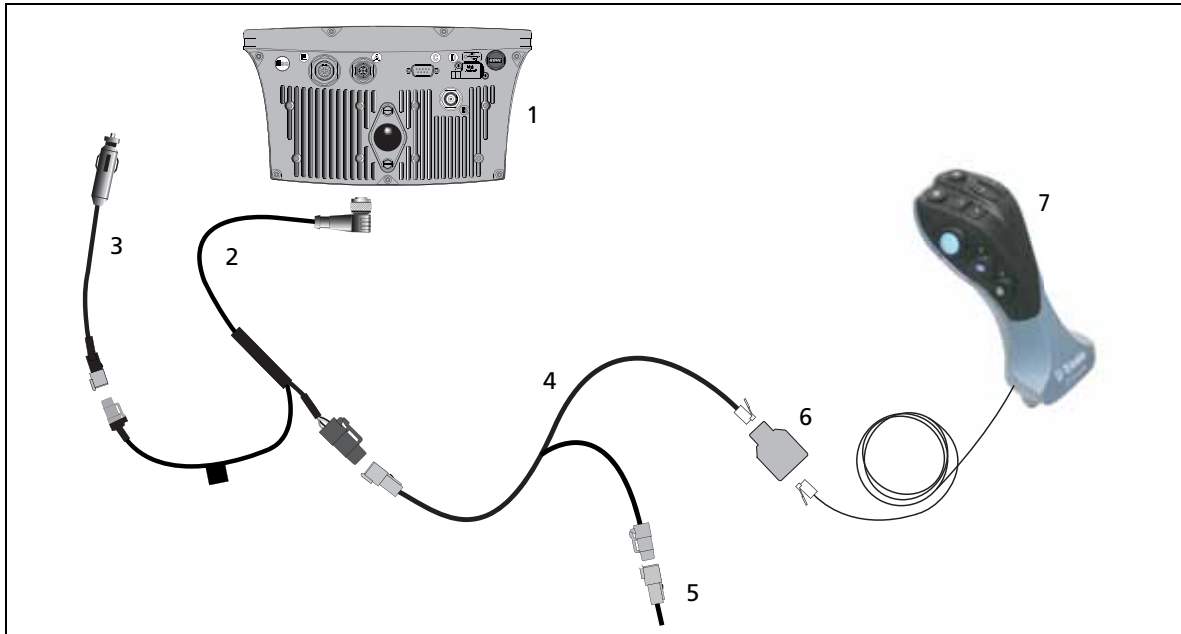
- [Connecting an EZ-Remote joystick to the EZ-Guide 500 lightbar](#)

This chapter describes the cabling option to connect the EZ-Remote joystick to the EZ-Guide 500 lightbar.

***Note** – Ensure that firmware version 5.10 or greater is loaded on the EZ-Guide 500 lightbar. For information on configuring the EZ-Remote joystick for use with a display refer to the display documentation.*

Connecting an EZ-Remote joystick to the EZ-Guide 500 lightbar

This figure shows how to connect the EZ-Remote joystick to the EZ-Guide 500 lightbar—connect the EZ-Remote cable (P/N 67094) (4) to the 4-pin Deutsch connector on cable P/N 62817 (2):



Item	Description	Part number
1	EZ-Guide 500 lightbar	66100-xx
2	Power cable	62817
3	Power connector cable	62818
4	EZ-Guide 500 to LB25 remote lightbar cable	67094
5	CAN terminator	59783
6	Splitter cable, RJII F to 2x RJII F	72422
7	EZ-Remote joystick	83200-00

Notes:

- For a standalone system, connect the CAN terminator (P/N 59783) (5) to the 4-pin Deutsch plug on the EZ-Remote cable (4).
- If you are using an EZ-Steer system, connect the appropriate cable to the 4-pin Deutsch plug on the EZ-Remote cable (4).
- For details on how to connect the remaining parts of those systems, refer to your display documentation.

