CABLING GUIDE

Trimble® TMX-2050™ Display

Version 1.0
Revision A
November 2013
Part Number 96572-00-ENG

Contact Information

Trimble Navigation Limited
Trimble Agriculture Division
10368 Westmoor Drive,
Westminster, CO 80021
USA

trimble_support@trimble.com

Legal Notices

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This is the November 2013 release (Revision A) of the *Trimble TMX-2050 Display Cabling Guide*. It applies to version 1.0 of the TMX-2050 display firmware.

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- 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

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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.

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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.

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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:

TMX-2050
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.

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CHAPTER 1

Components and Cable Configuration Guidelines

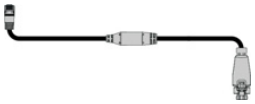
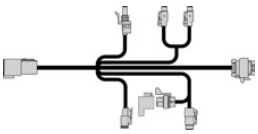
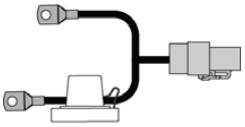
In this chapter:

- TMX-2050 system components
- Making correct connections with cables
- Cable/port compatibility table

This chapter shows the components of the Trimble® TMX-2050™ display and includes guidelines on using cables correctly with compatible ports.

Use Trimble cables only. Trimble cables use specific wire gauges not found in some off-the-shelf RJ45/CAT 6 cables.

TMX-2050 system components

	Description	Trimble part number		Description	Trimble part number
	TMX-2050 display, rear view	96700-00		AG-25 GNSS antenna to TM-200 Module cable	50449
	TM-200 Module to display cable	93843		AG-25 GNSS antenna	77038-01
	TM-200 Module	95060-00		AG-815 integrated radio AG-814 450 AG-814 900	 95080-04 95080-05
	TM-200 Module power and I/O cable	92676		Radio antenna cable	72122
	TM-200 Module battery cable	92905		Radio antenna 430 - 450 MHz 450 - 470 MHz SiteNet™ 900	 24253-44 24253-46 22882-10

TMX-2050 display—rear view

Item	Description
1	Possible location for mounting Field-IQ switch box (two locations)
2	USB (side)
3	Location for Zirkona mount attachment
4	USB (rear)
5	RJ11 auxiliary port for future use
6	Cable clips
7	RJ45 port for connection to TM-200 Module
8	HDMI / DVI (not used)
9	Power

TM-200 Module

The TM-200 Module has multiple power and input/output connections, with only one connection to the TMX-2050 display. This enables you to quickly detach the display without removing all other connections.

Item	Description
❶	AG-25 GNSS antenna connector
❷	8-pin AMPSEAL Ethernet expansion port (for connecting to a DCM-300 modem or a second TM-200 Module)
❸	8-pin AMPSEAL connector port (for connecting to the TMX-2050 display)
❹	12-pin DEUTSCH connector (Port A)
❺	14-pin AMPSEAL connector (Port B) power input
❻	10 A fuse
❼	Radio / receiver expansion slot, see AG-815 integrated radio, page 9

Note – *The TM-200 Module provides two CAN connections. If your configuration requires additional CAN connections, you can connect another TM-200 module to your primary one.*

AG-815 integrated radio

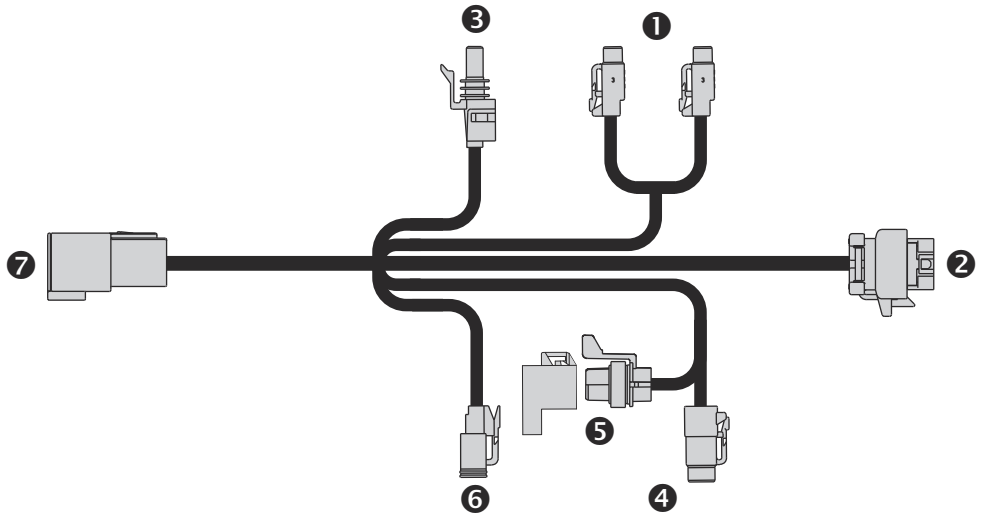
The AG-815 integrated radio is required for using RTK connections.

TM-200 Module AG-815 radio

Item	Description
❶	Optional GNSS connector for future use
❷	Radio antenna connector
❸	Expansion slot connector for connection to the TM-200 Module

TM-200 Module, power and I/O cable

The power and input/output cable provides power as well as enabling a variety of equipment configurations. See Cable/port compatibility table, page 12.

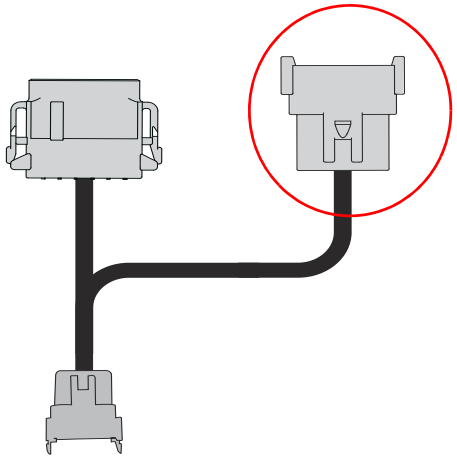


Item	Description
❶	P5 / P6: Input/output (external switch and remote engage)
❷	P1: 14-pin AMPSEAL for connecting to port B on the TM-200 Module
❸	R1: Ignition sensing
❹	P4: CAN
❺	R2: CAN terminator
❻	P2: Power out
❼	R3: Power in

Making correct connections with cables

Keep the following guidelines in mind for configuring multiple connectors to single ports:

⚠ **CAUTION – EQUIPMENT DAMAGE**. Do not connect the port replicator to the NavController II. The replicator port on most cables breaks away the pins not used by the primary device the cable was designed for. Incorrect connection will damage the equipment.



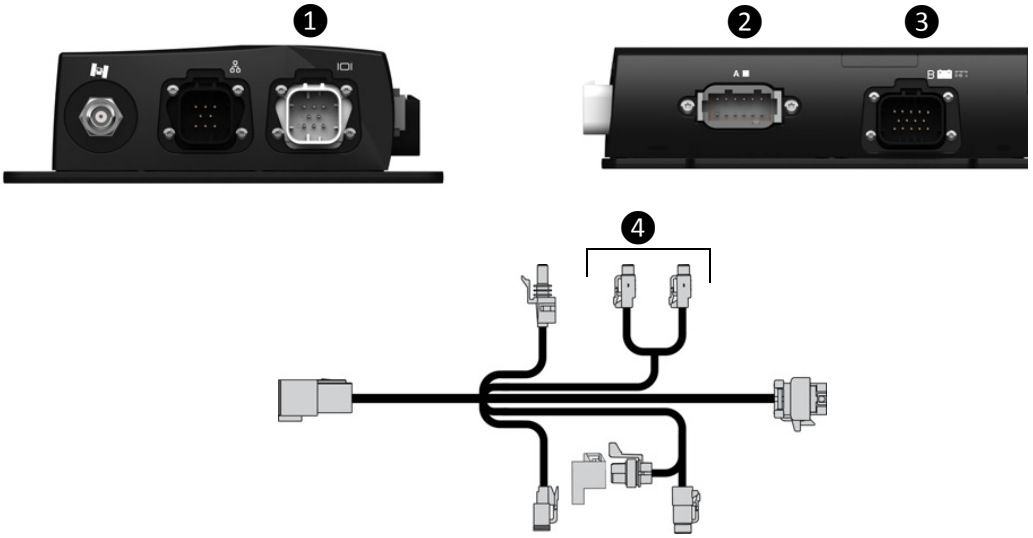
- The Field-IQ™ crop input control and boom height control systems and the Yield Monitoring system require a CAN connection.
- The EZ-Steer® and EZ-Pilot® assisted steering systems require their own dedicated CAN ports.
- The Autopilot™ automated steering system must be connected to port A on the TM-200 Module. See TM-200 Module, page 8.
- The DCM-300 modem can only be connected to the Ethernet expansion port on the TM-200 Module. See TM-200 Module, page 8.

Cable/port compatibility table

Use this table to confirm which TMX-2050 display cable can be used in each port.

Function	Type	❸ R3 power to TM-200 Module	P2 power out	P4 CAN	❹ P5 and P6 I/O on TM-200 Module power and I/O cable	❷ 12-pin Deutsch (Port A) on TM-200 Module	❶ Trimble Ethernet expansion on TM-200 Module
Autopilot system	RS232		✓			✓	
EZ-Pilot system	CAN	✓		✓			
EZ-Steer system	CAN		✓			✓	
Field-IQ rate and section control system	CAN			✓		✓	
Field-IQ boom height control	CAN x 2		✓	✓		✓	
DCM-300 modem	Trimble Ethernet						✓
Remote Engage	Input/ Output				✓		

Note – *EZ-Pilot and EZ-Steer systems must be on a dedicated CAN connection. A port replicator* ***can not*** *be used to make this connection.*



CHAPTER 2

Connecting the Display Only

In this chapter:

- Manual guidance using SBAS, OmniSTAR HP/G2, or RTX corrections
- Manual guidance using radio and RTK corrections
- Manual guidance using CenterPoint VRS or VRSNow corrections
- Manual guidance using a modem and RTK corrections

The TMX-2050 display can operate as a standalone guidance system, or you can connect it to a range of agricultural guidance devices to expand its functionality.

Use Trimble cables only. Trimble cables use specific wire gauges not found in some off-the-shelf RJ45/CAT 6 cables.

To connect the display:

- as a standalone guidance system, see Chapter 2.
- to the EZ-Steer assisted steering or EZ-Pilot steering system, see Chapter 3
- to the Autopilot automated steering system, see Chapter 4.
- to a Field-IQ control system, see Chapter 5.

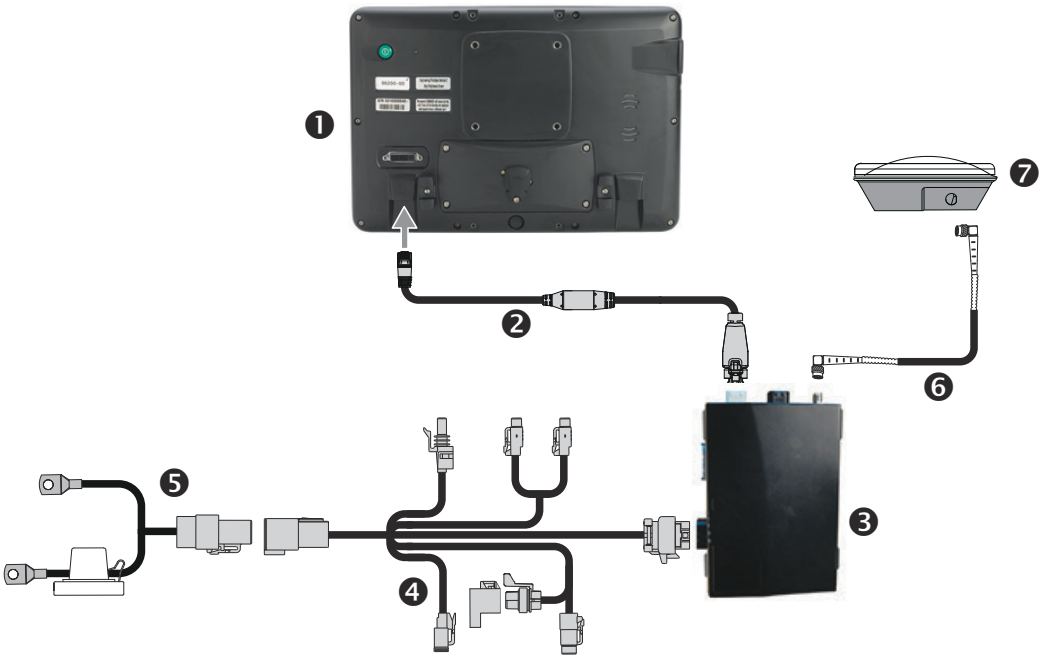
Manual guidance using SBAS, OmniSTAR HP/G2, or RTX corrections

SBAS, OmniSTAR® HP/G2, RangePoint™ RTX™, and Centerpoint™ RTX corrections require a GNSS antenna ❼.

SBAS (Satellite Based Augmentation Systems) includes:

- WAAS (Wide Area Augmentation System), available in the USA
- EGNOS (European Geostationary Navigation Overlay Service), available in Europe
- MSAS (MTSAT Satellite-based Augmentation System), available in Japan

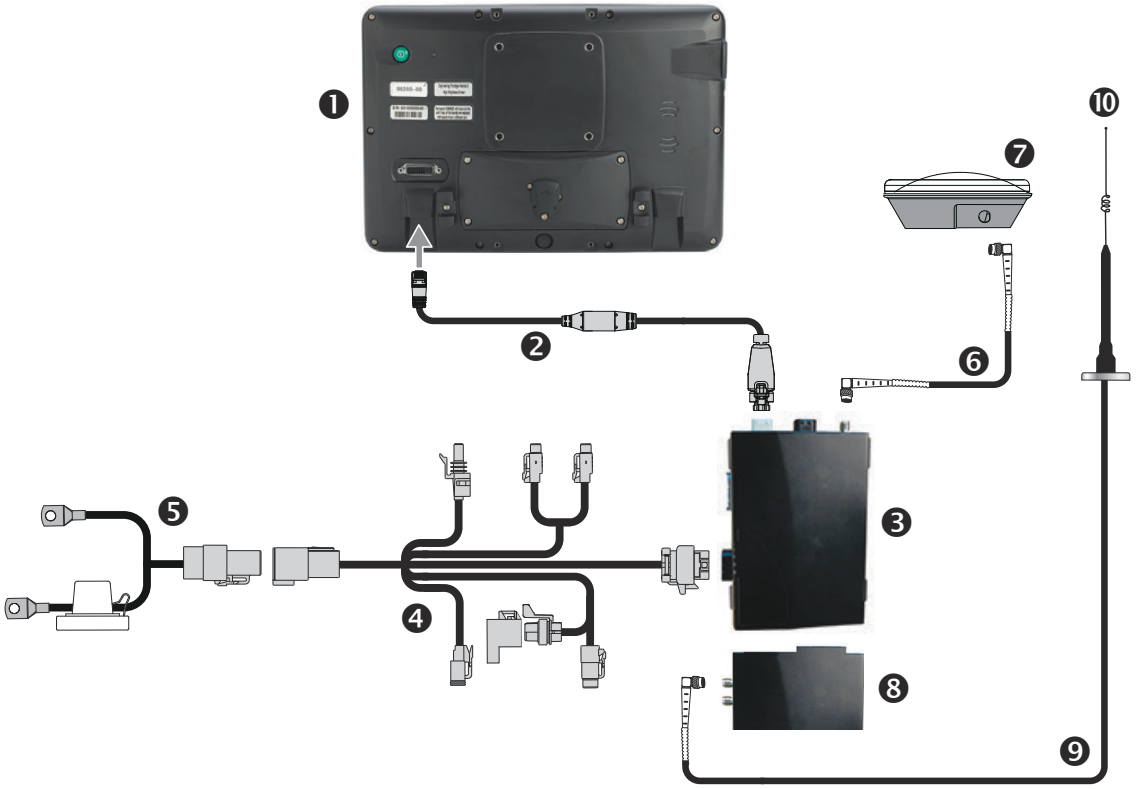
This figure shows how to connect the display to use SBAS corrections:



Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to Port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01

Manual guidance using radio and RTK corrections

RTK corrections require an AG-815 integrated radio ❽ and a radio antenna ❿.



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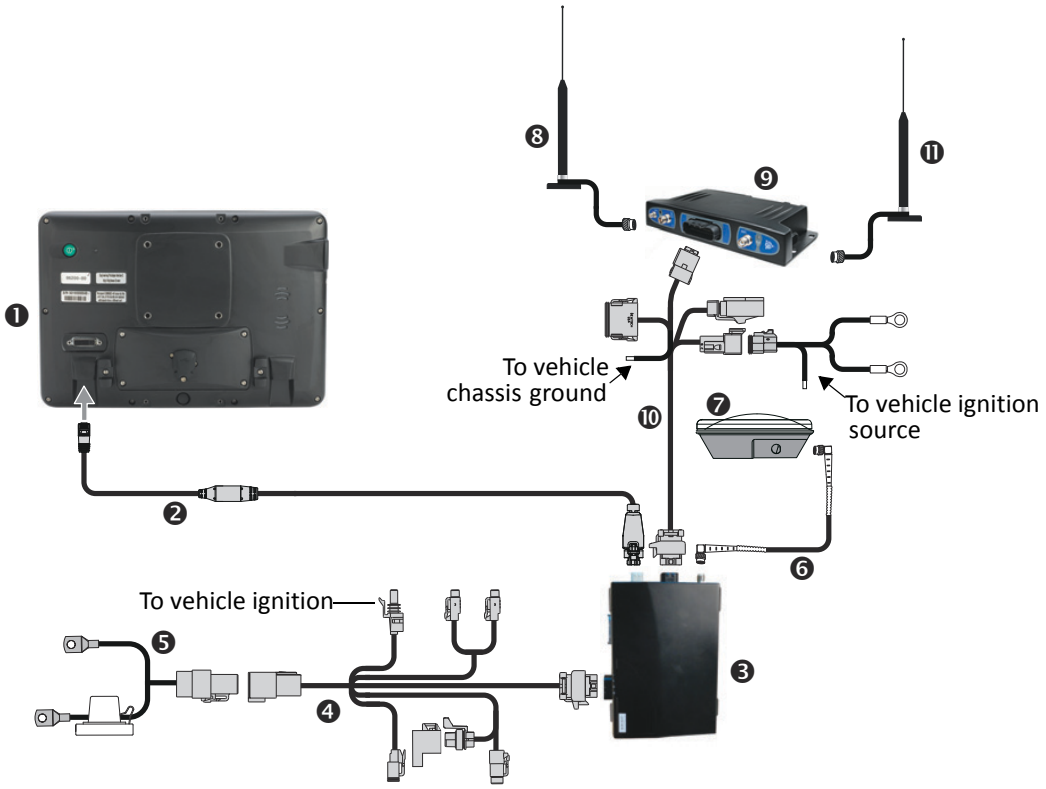
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	AG-815 radio. For available frequencies, see TMX-2050 system components, page 6.	95080-xx
❾	Radio antenna cable	72122
❿	Radio antenna. For available frequencies, see TMX-2050 system components, page 6.	24253-44 24253-46 22882-10

Manual guidance using CenterPoint VRS or VRSNow corrections

CenterPoint VRS™ or VRSNow™ corrections require the DCM-300 modem ❾.



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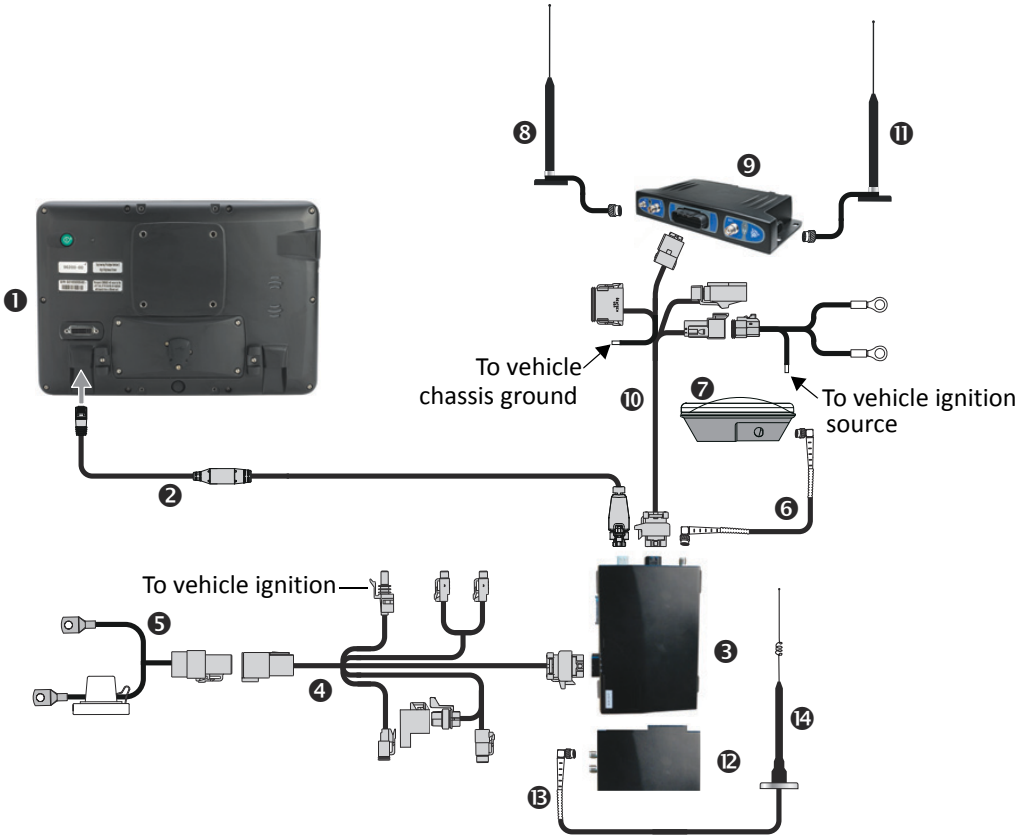
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	DCM-300 cellular antenna	72122
	DCM-300 cellular antenna	51227
❾	DCM-300 cellular modem	80632-xx
❿	DCM-300 modem to TM-200 Modem to power cable	94267
⓫	WiFi antenna	83700-05

Manual guidance using a modem and RTK corrections



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	DCM-300 cellular antenna	51227
❾	DCM-300 modem	80632-xx
❿	DCM-300 modem to TM-200 Modem to power cable	94267
⓫	WiFi antenna	83700-05
⓬	AG-815 radio. For available frequencies, see TMX-2050 system components, page 6.	95080-xx

Item	Description	Trimble part number
⓭	Radio antenna cable	62120
⓮	Radio antenna. For available frequencies, see TMX-2050 system components, page 6.	24253-44 24253-46 22882-10

CHAPTER 3

Connecting to the EZ-Steer / EZ-Pilot System

In this chapter:

- EZ-Steer system using SBAS / RangePoint RTX / CenterPoint RTX / OmniSTAR HP|G2 corrections
- EZ-Steer system using SBAS / RangePoint RTX / CenterPoint RTX / OmniSTAR corrections with external power leads
- EZ-Pilot steering system

This chapter describes how to connect the TMX-2050 display to the Trimble EZ-Steer assisted steering system or the Trimble EZ-Pilot steering system.

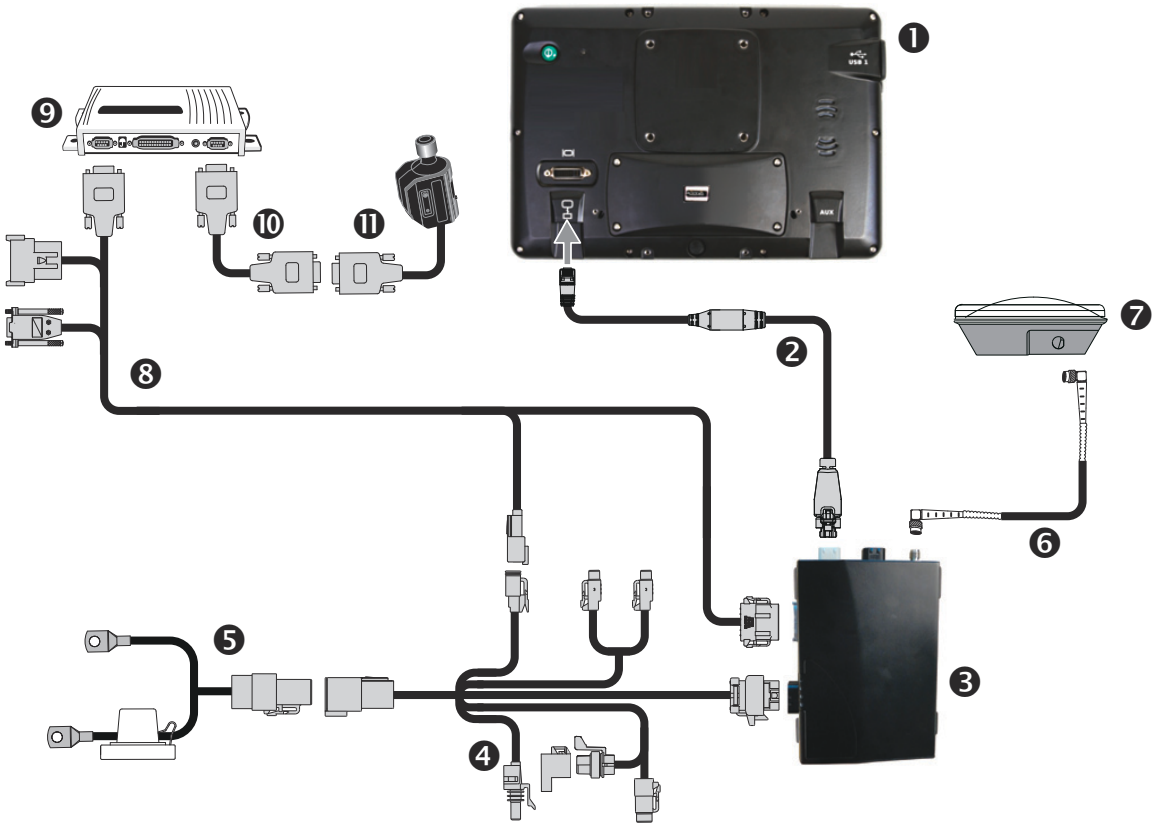
Use Trimble cables only. Trimble cables use specific wire gauges not found in some off-the-shelf RJ45/CAT 6 cables.

EZ-Steer system using SBAS / RangePoint RTX / CenterPoint RTX / OmniSTAR HP|G2 corrections

The EZ-Steer system requires the navigation controller ❿ and motor ⓬.

SBAS, RangePoint RTX, CenterPoint RTX, and OmniSTAR HP/G2 corrections require a GNSS antenna ❼.

Note – *The EZ-Steer assisted steering system must have a separate power source (such as the TM-200 Module) to power the EZ-Steer motor ⓬.*



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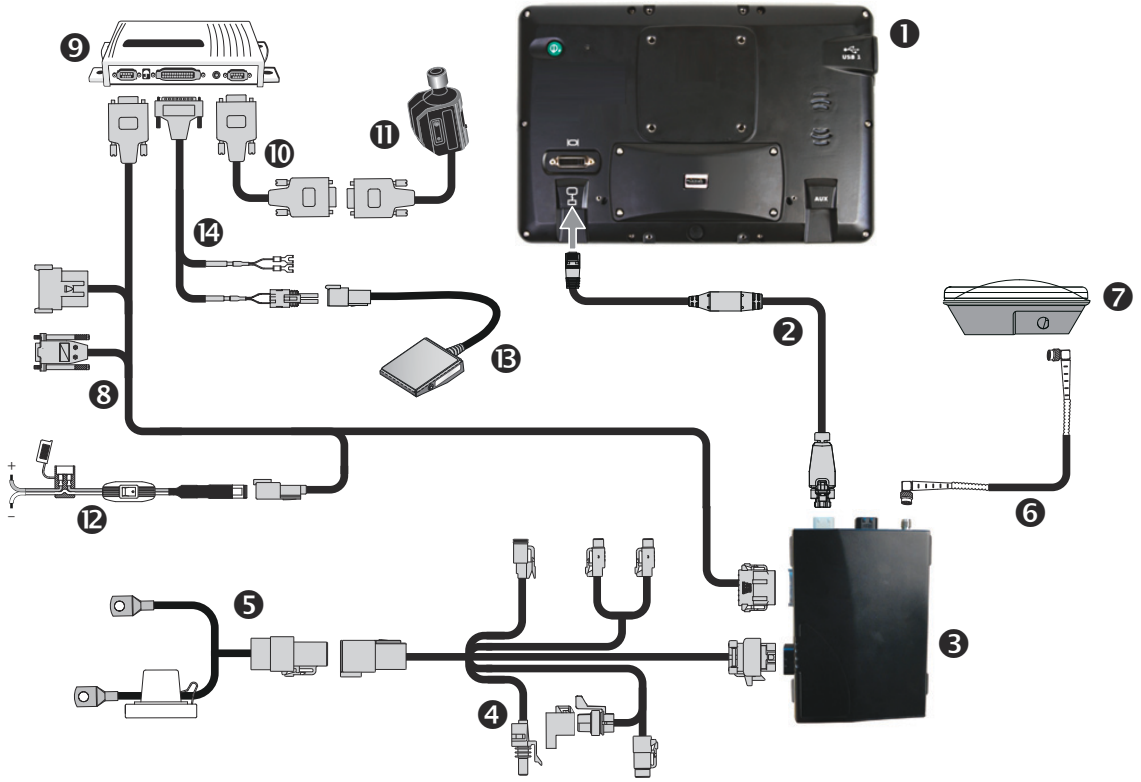
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	TM-200 Module to EZ-Steer controller cable	75742

Item	Description	Trimble part number
❾	EZ-Steer T2® controller	53348-10
❿	EZ-Steer controller to motor cable	53058-00
⓫	EZ-Steer motor	62257

EZ-Steer system using SBAS / RangePoint RTX / CenterPoint RTX / OmniSTAR corrections with external power leads

This figure shows an alternative method for connecting the display with the EZ-Steer assisted steering system, to use WAAS or EGNOS corrections.

The EZ-Steer assisted steering system must have a separate power source (such as the TM-200 Module) to power the EZ-Steer motor ⓬.

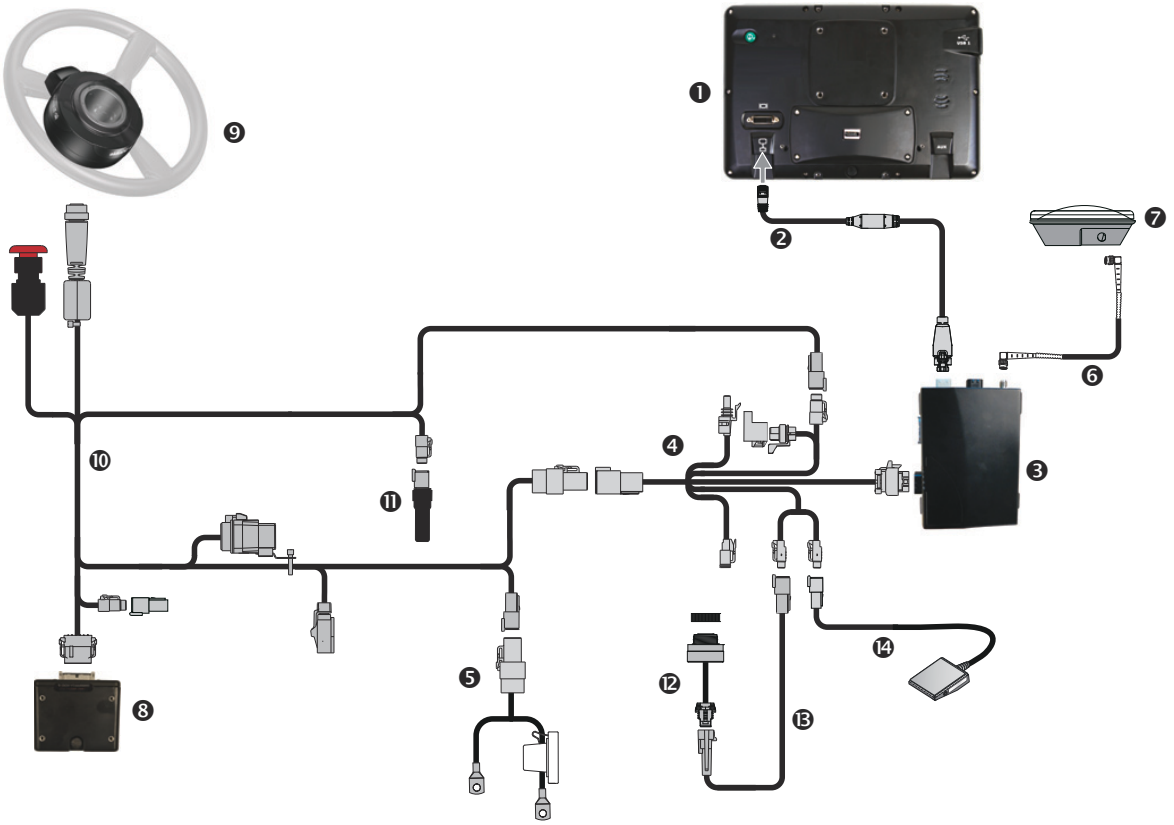


Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	FmX / FM-1000 display to EZ-Steer with 2-pin power input	75742
❾	EZ-Steer controller	53348-10

Item	Description	Trimble part number
❿	EZ-Steer controller to motor cable	53058-00
⓫	EZ-Steer motor	62257
⓬	Unterminated power cable to power source	75743
⓭	Foot switch	57259
⓮	EZ-Steer seat switch remote engage cable	53067

EZ-Pilot steering system

This figure shows how to connect the display with the Trimble EZ-Pilot® steering system:



Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	IMD-600 unit	83390-00
❾	SAM-200 motor	83382-00
❿	IMD-600 unit to SAM-200 motor to CAN and power	76351
⓫	CAN bus terminator	59783
⓬	Sonalert	43104
⓭	Display to Sonalert cable (P5 connector only)	94121
⓮	EZ-Pilot foot switch remote engage (P6 connector only)	78150-00

CHAPTER 4

Connecting to the Autopilot System

In this chapter:

- Autopilot system using SBAS / OmniSTAR / RTX corrections
- Autopilot system using RTK corrections
- Autopilot system using RTK corrections on a factory-ready CNH vehicle
- Autopilot system using VRS corrections with a DCM-300 modem

This chapter shows the different ways to connect the TMX-2050 display to the Autopilot™ automated steering system.

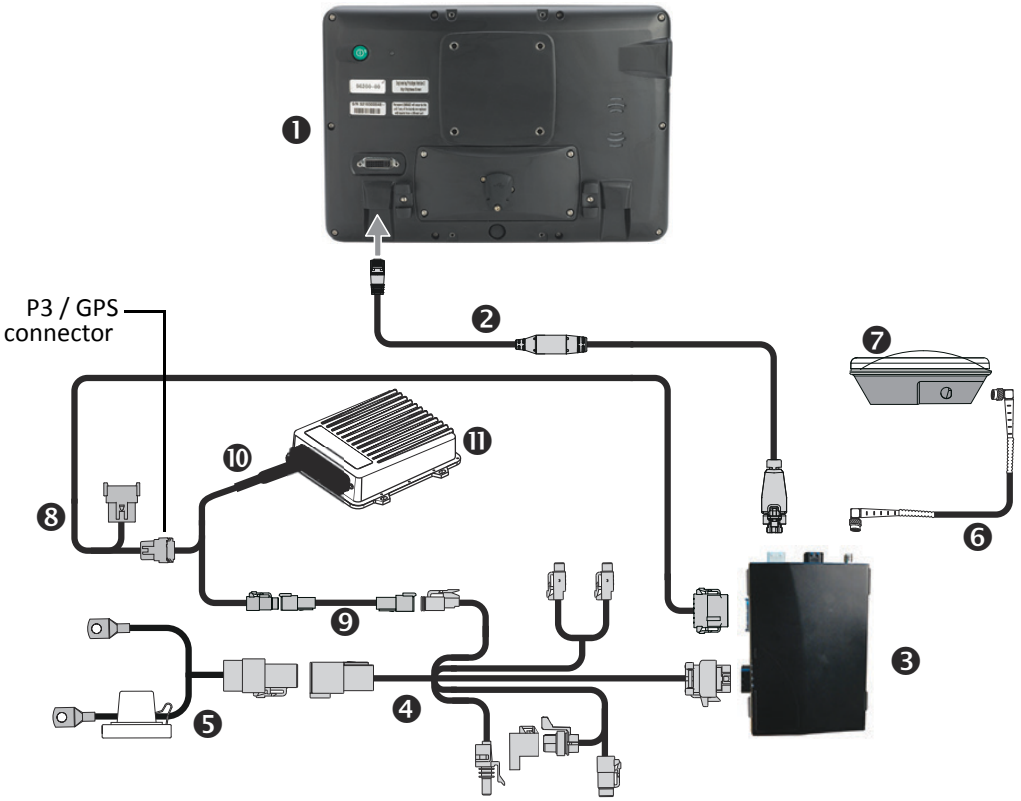
Use Trimble cables only. Trimble cables use specific wire gauges not found in some off-the-shelf RJ45/CAT 6 cables.

⚠ **CAUTION –** Connecting the Port Replicator of the NavController II cable to the P4 or P12 connector of the NavController II harness will result in damage to the equipment, and will void the warranty.

Autopilot system using SBAS / OmniSTAR / RTX corrections

The Autopilot assisted steering system requires the navigation controller ⓫.

OmniSTAR HP/G2 /RTX corrections rquire a GNSS antenna ❼.



⚠ **CAUTION –** Connecting the Port Replicator of the NavController II cable ❽ to the P4 or P12 connector of the NavController II harness ❿ will result in damage to the equipment, and will void the warranty,

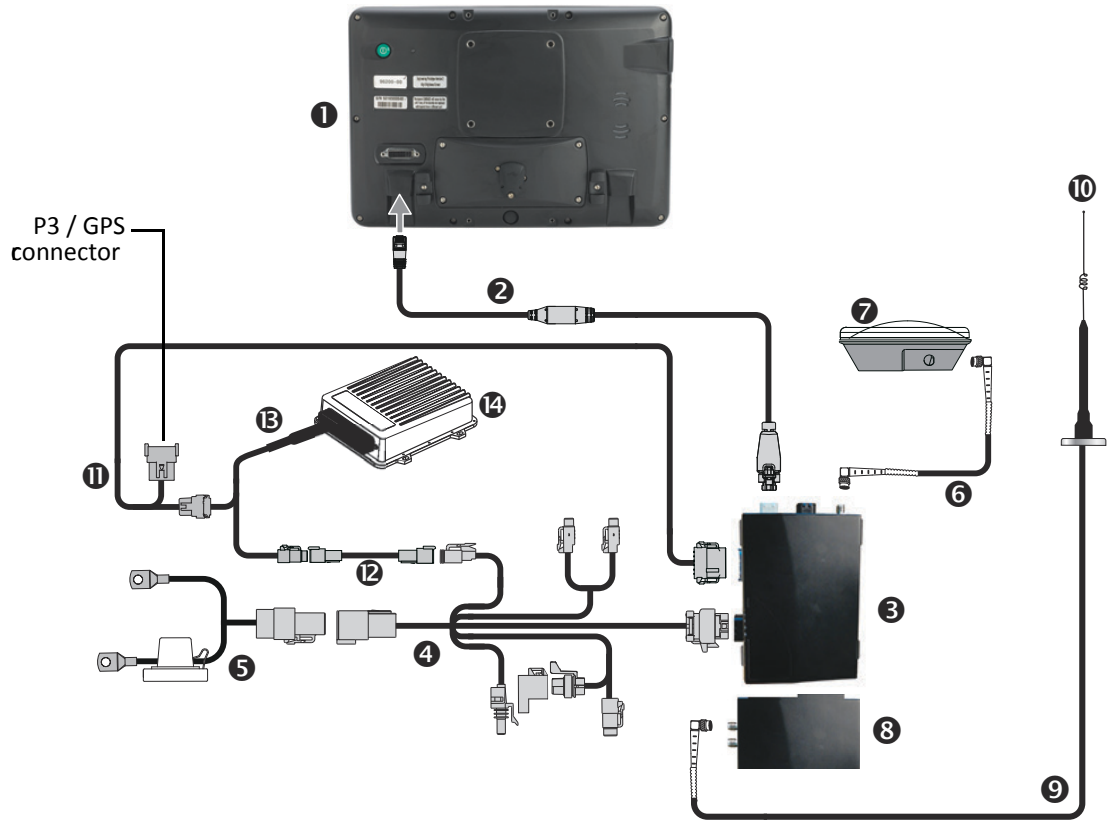
Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	TM-200 Module (port A) to NavController II cable with port replicator	75741

Item	Description	Trimble part number
❾	2-pin DTM to 2-pin DT power adapter	67095
❿	Main NavController II harness	54601
⓫	NavController II	55563-00

Autopilot system using RTK corrections

The Autopilot assisted steering system requires the navigation controller ⓫.

RTK corrections require the AG-815 radio ❽ and antenna ❿.



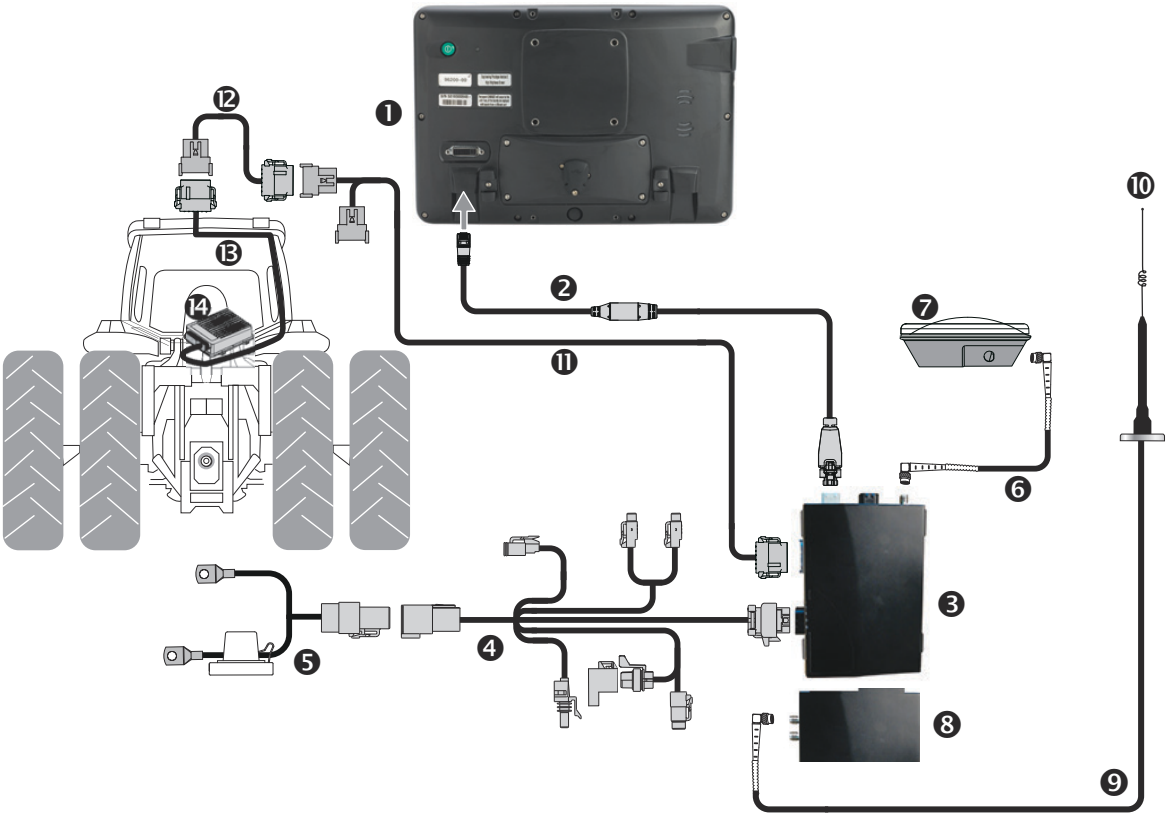
⚠ **CAUTION –** Connecting the Port Replicator of the NavController II cable ⓫ to the P4 or P12 connector of the NavController II harness ⓭ will result in damage to the equipment, and will void the warranty.

Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	AG-815 radio	95080-xx
❾	Radio antenna cable	72122

Item	Description	Trimble part number
⑩	Radio antenna. For available frequencies, see TMX-2050 system components, page 6.	24253-44 24253-46 22882-10
⑪	TM-200 Module (port A) to NavController II cable with port replicator	75741
⑫	2-pin DTM to 2-pin DTM power adapter	67095
⑬	Main NavController II harness	54601
⑭	NavController II	55563-00

Autopilot system using RTK corrections on a factory-ready CNH vehicle

This figure shows how to connect the display into a factory-ready CNH vehicle, to use RTK corrections:



⚠ **CAUTION –** Connecting the Port Replicator of the NavController II cable ⓫ to the P4 or P12 connector of the NavController II harness ⓭ will result in damage to the equipment, and will void the warranty.

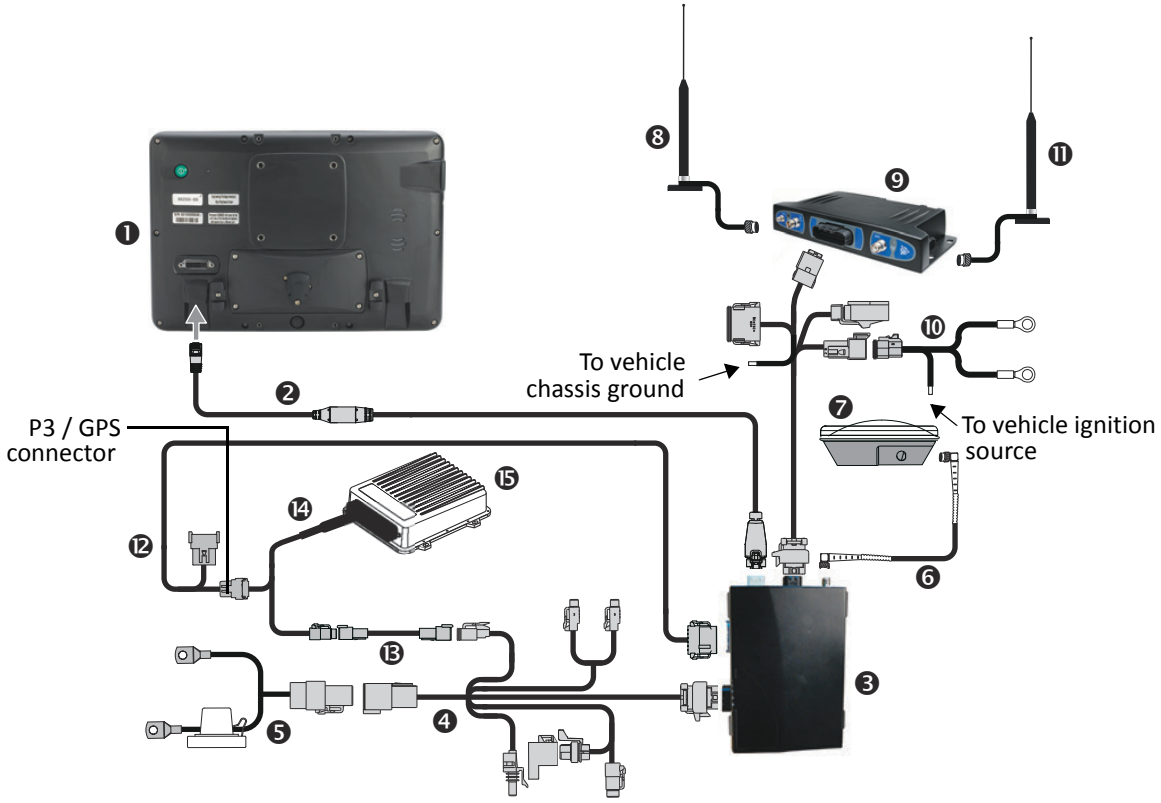
Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	AG-815 radio. For available frequencies, see TMX-2050 system components, page 6.	95080-xx

Item	Description	Trimble part number
❾	Radio antenna cable.	62120
❿	Radio antenna. For available frequencies, see TMX-2050 system components, page 6.	24253-44 24253-46 22882-10
⓫	TM-200 Module (port A) to NavController II cable with port replicator	75741
⓬	CNH hybrid to GPS cable	67120
⓭	Factory installed harness	N/A
⓮	NavController II	55563-00

Autopilot system using VRS corrections with a DCM-300 modem

The Autopilot assisted steering system requires the navigation controller ⓯.

VRS corrections require a DCM-300 modem ❾.



⚠ **CAUTION –** Connecting the Port Replicator of the NavController II cable ⓮ to the P4 or P12 connector of the NavController II harness ⓭ will result in damage to the equipment, and will void the warranty.

Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01

Item	Description	Trimble part number
❽	DCM-300 cellular antenna	72122
	DCM-300 cellular antenna	51227
❾	DCM-300 cellular modem	80632-xx
❿	DCM-300 modem to TM-200 Module to power cable	94267
⓫	WiFi antenna	83700-05
⓬	TM-200 Module (port A) to NavController II cable with port replicator	75741
⓭	2-pin DTM to 2-pin DT power adaptor	67095
⓮	Main NavController II harness	54601
⓯	NavController II	55563-00

CHAPTER 5

Connecting the Field-IQ Crop Input Control Systems

In this chapter:

- Field-IQ Rate and Section Control cab kit/ Autopilot system
- Field-IQ Rate and Section Control cab kit / EZ-Pilot system
- Field-IQ Rate and Section Control cab kit / EZ-Steer system
- Field-IQ Rate and Section Control cab kit/ Sprayer full platform kit
- Field-IQ Boom Height Control and Field-IQ Rate and Section Control
- Field-IQ Boom Height Control and Field-IQ Rate and Section Control / Autopilot system
- Field-IQ Section Control to Raven 4x0 rate control
- Field-IQ Rate and Section Control to EZ-Boom harness
- Field-IQ Section Control to Raven 4x00 rate control

This chapter shows the different ways to connect the TMX-2050 display to the Field-IQ™ crop input control system.

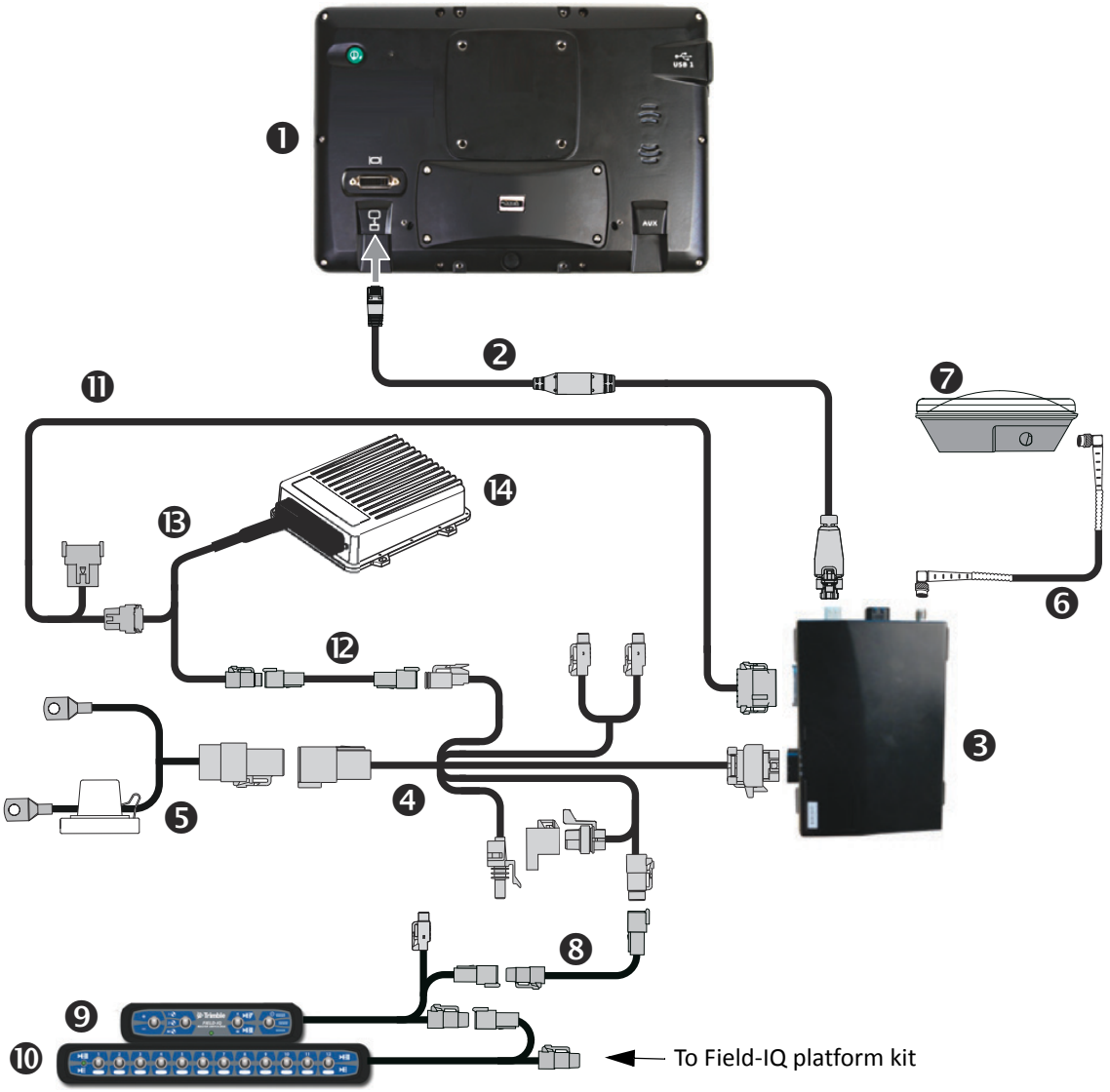
Use Trimble cables only. Trimble cables use specific wire gauges not found in some off-the-shelf RJ45/CAT 6 cables.

⚠ **CAUTION –** Connecting the port replicator on the TM-200 to NavController II cable to the P4 or P12 connector of the NavController II harness will result in damage to the TMX-2050 display, and will void the warranty.

Field-IQ Rate and Section Control cab kit/ Autopilot system

The Autopilot system requires the NavController II ⓭.

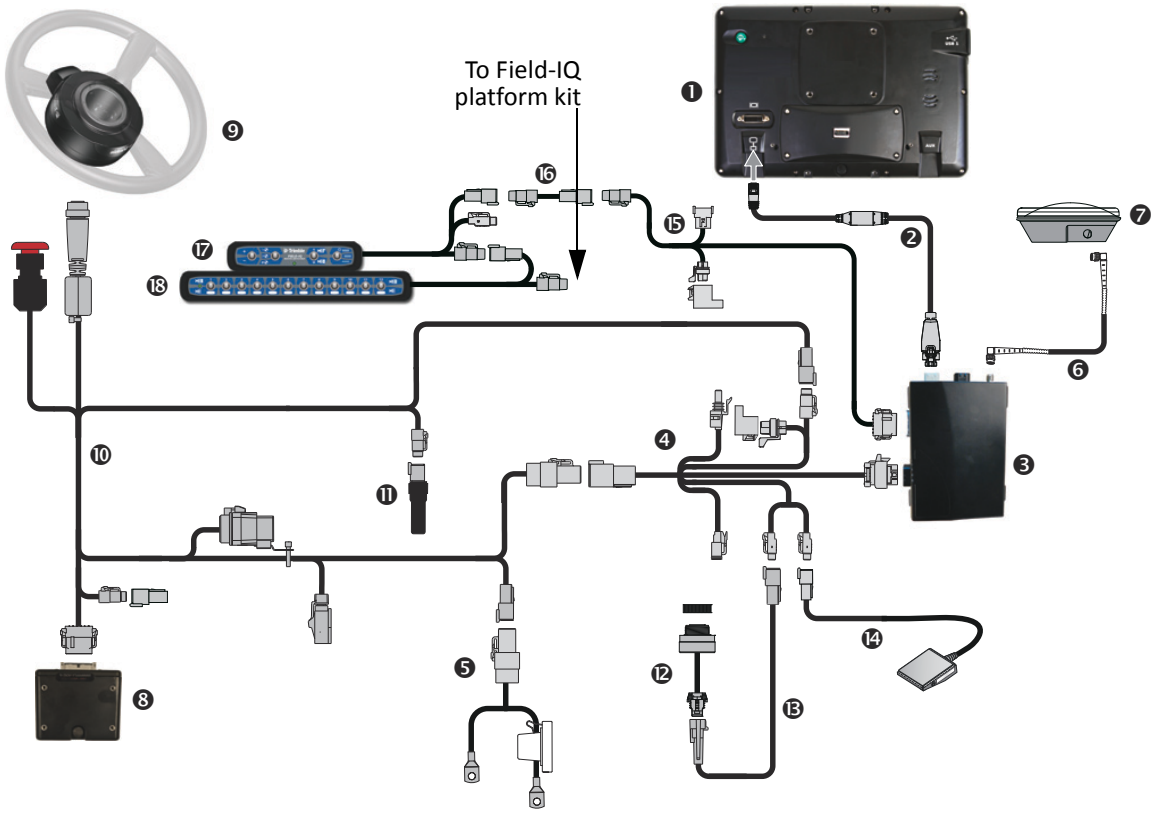
Field-IQ Rate and Section Control requires the Field-IQ master switch box ❽. The 12-switch box ❾ may also be used.



Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676

Item	Description	Trimble part number
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	Steering Sensor Extension cable and Field-IQ Switch Box Extension	55656
❾	Field-IQ master switch box	75050-01
❿	Field-IQ 12-section switch box, optional	75060-01
⓫	TM-200 Module (port A) to NavController II cable with port replicator	75741
⓬	2-pin DTM to 2-pin DT power adapter	67095
⓭	Main NavController II harness	54601
⓮	NavController II	55563-00

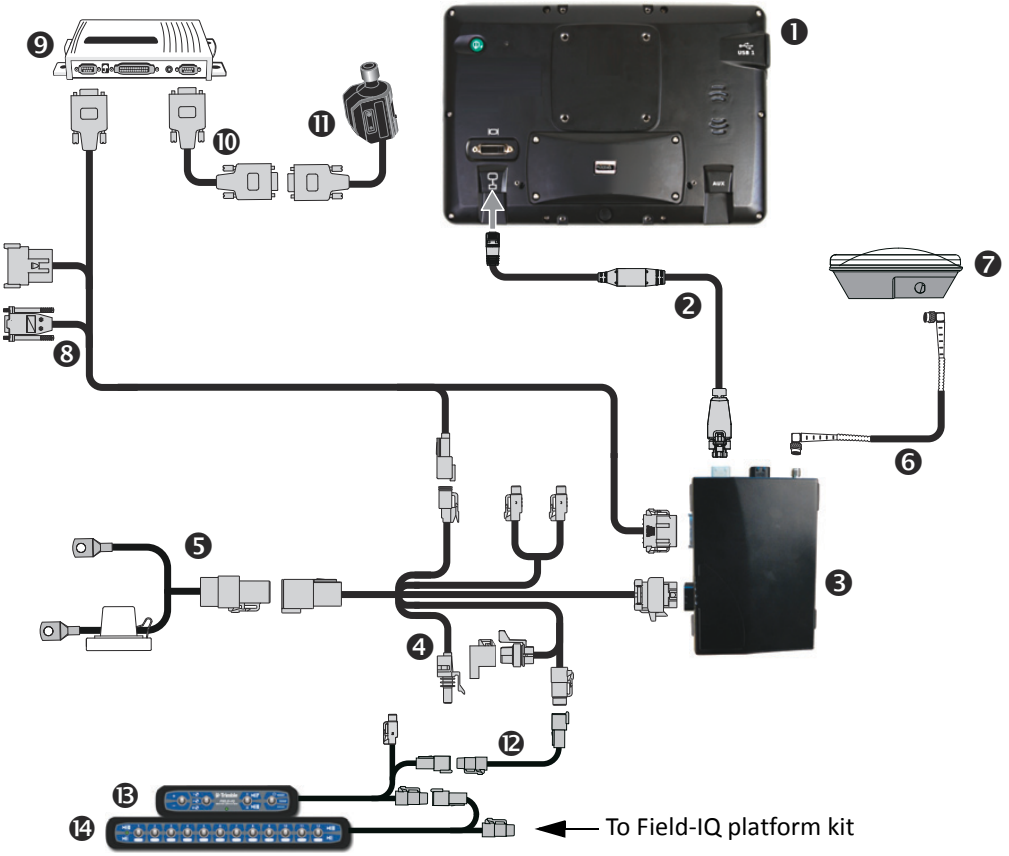
Field-IQ Rate and Section Control cab kit / EZ-Pilot system



Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	IMD-600 unit	83390-00
❾	SAM-200 motor	83382-00
❿	Field-IQ to display cable	75834
⓫	CAN bus terminator	59783
⓬	Sonalert	43104
⓭	Display to Sonalert cable (P5 connector only)	94121
⓮	Foot switch (P6 connector only)	57259

Item	Description	Trimble part number
⓯	TM-200 Module to Field-IQ cable	75834
⓰	Steering Sensor Extension cable and Field-IQ Switch Box Extension	55656
⓱	Field-IQ master switch box	75050-01
⓲	12-section switch box (optional)	75060-01

Field-IQ Rate and Section Control cab kit / EZ-Steer system

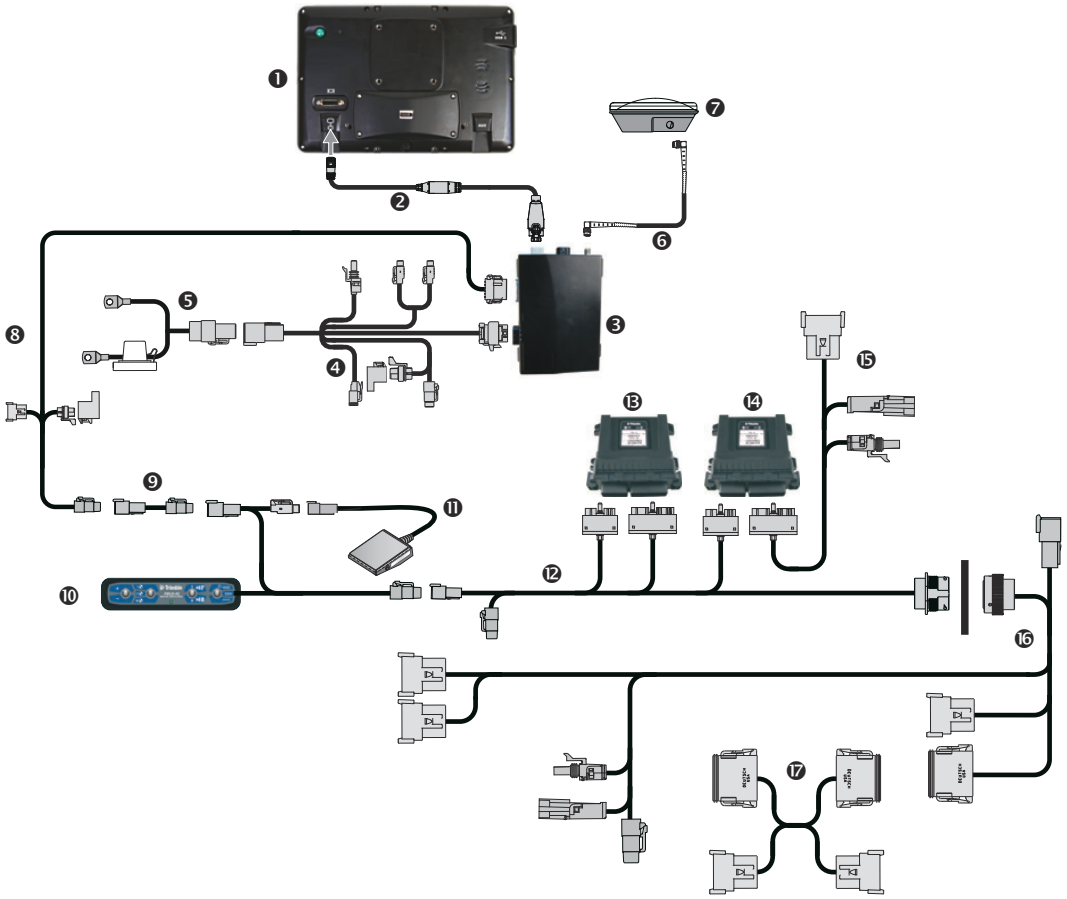


Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	TM-200 Module to EZ-Steer controller cable	75742
❾	EZ-Steer T2 controller	53348-10
❿	EZ-Steer controller to motor cable	53058-00
⓫	EZ-Steer motor	62257
⓬	Steering Sensor Extension cable and Field-IQ Switch Box Extension	55656

Item	Description	Trimble part number
⓭	Field-IQ master switch box	75050-01
⓮	12-section switch box (optional)	75060-01

Field-IQ Rate and Section Control cab kit/ Sprayer full platform kit

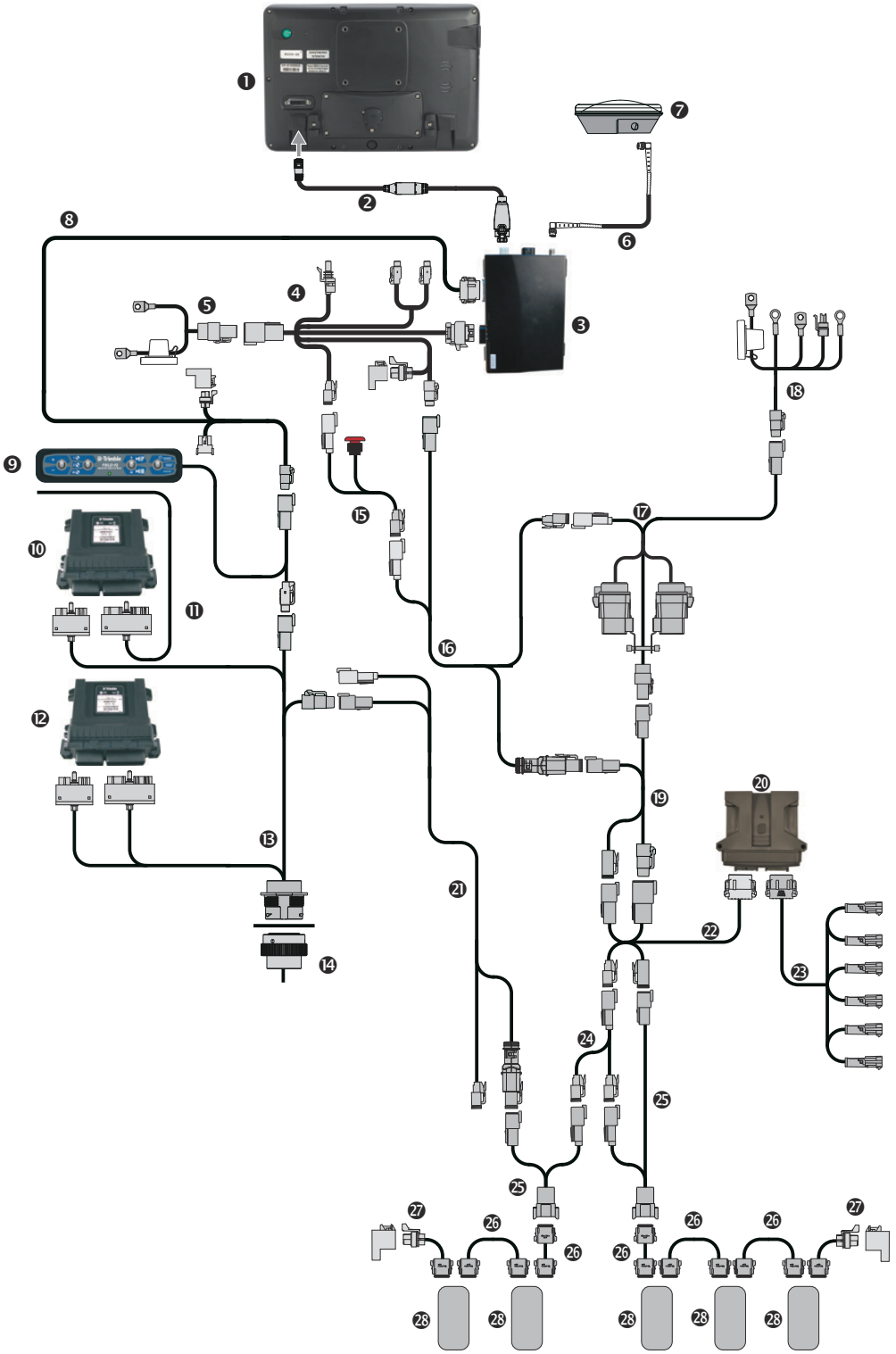
This figure shows how to connect the display with the Field-IQ rate and section control system to sprayers.



Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	TM-200 Module to Field-IQ cable	75834
❾	Steering Sensor Extension cable and Field-IQ Switch Box Extension	55656
❿	Field-IQ master switch box	75050-01

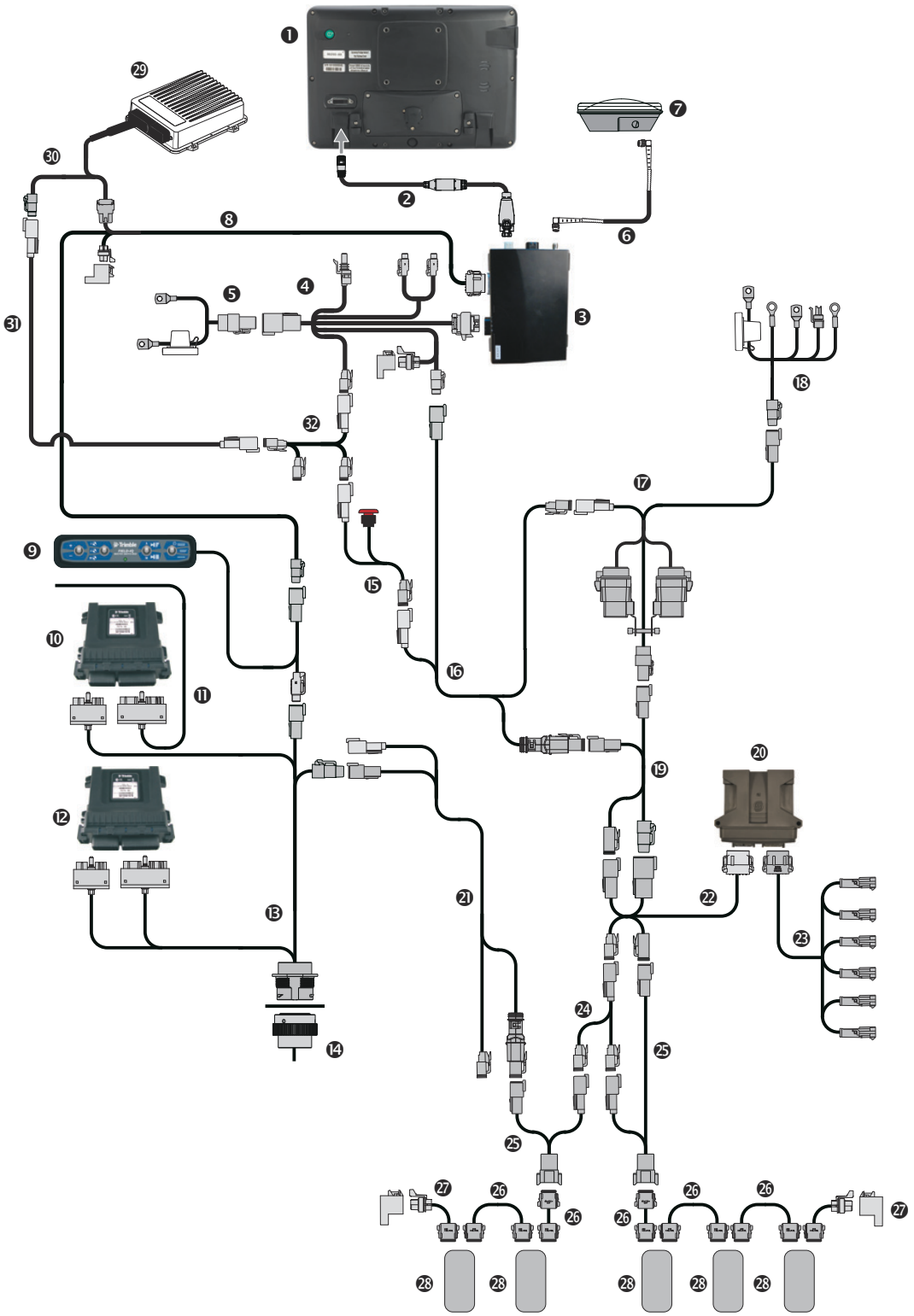
Item	Description	Trimble part number
⓫	Optional: Remote foot switch	78150
⓬	Field-IQ-to-sprayer cab cable	80999
⓭	Rate and Section Control module	75774-00
⓮	Signal Input Module	76774-00
⓯	Field-IQ SPX switch input cable (2009 and up)	87720
⓰	Field-IQ SPX chassis harness cable (2009 and up)	80250
⓱	Gender changer cable (4430 model only)	88702

Field-IQ Boom Height Control and Field-IQ Rate and Section Control



Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	TM-200 Module to Field-IQ cable	75834
❾	Field-IQ master switch box	75050-01
❿	Signal Input Module - SIM	76774-00
⓫	Switch Input Cable	
⓬	Rate and section control module	75774-00
⓭	Field-IQ sprayer cab cable	80099
⓮	To Sprayer wet works and power	
⓯	Emergency stop cable	90528
⓰	Field-IQ cab to hitch cable	77368
⓱	Field-IQ dual relay power disconnect cable	77533
⓲	Field-IQ power cable	76941
⓳	Field-IQ CAN/power extension	75528-xx
⓴	VM430 valve module	80585-00
㉑	Field-IQ cab to hitch cable	90541-xx
㉒	VM430 valve module tee cable	90569
㉓	VM430 to valve cable	86855
㉔	Boom height control power Y cable	90531
㉕	Boom Height Control power /CAN cable	90513
㉖	Boom Height Control power / CAN extension cable	86592-xx
㉗	Boom Height Control terminator adaptor	86594
㉘	Boom Height Control SS-100 sensor	88473-00

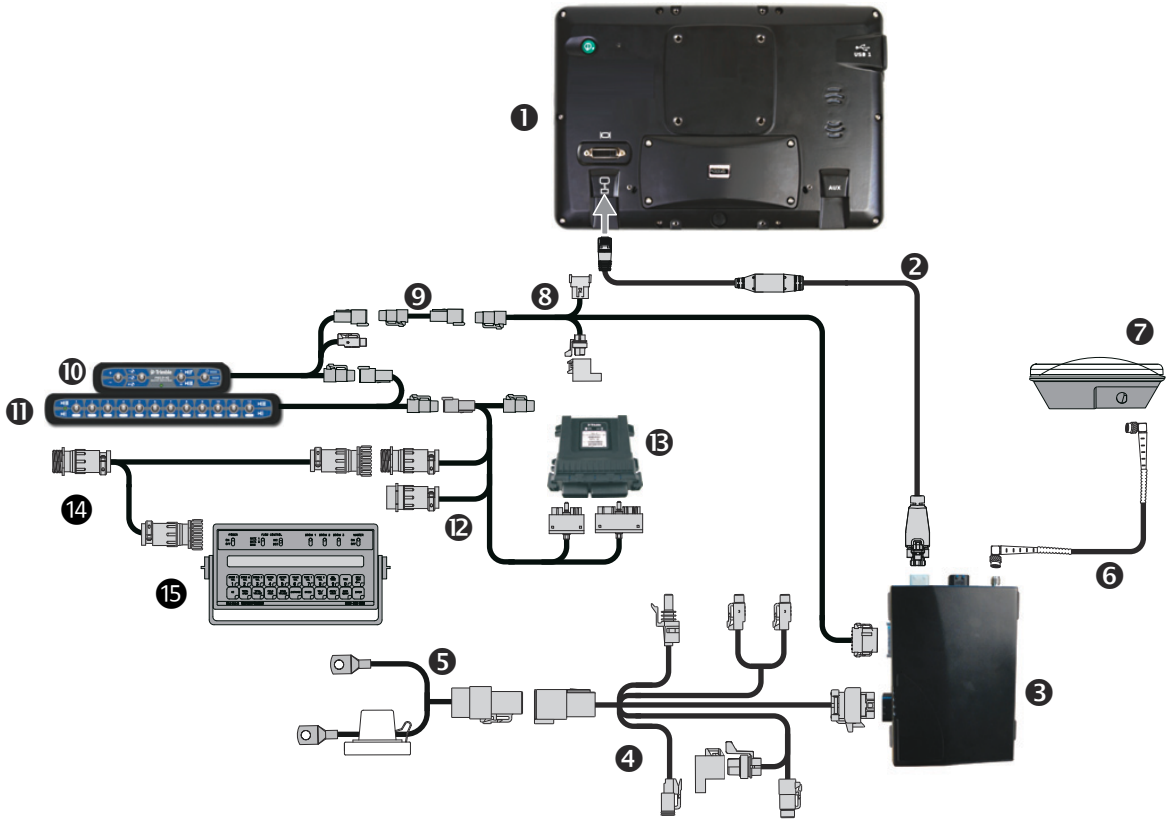
Field-IQ Boom Height Control and Field-IQ Rate and Section Control / Autopilot system



Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	TM-200 Module to Field-IQ cable	75834
❾	Field-IQ master switch box	75050-01
❿	Signal Input Module - SIM	76774-00
⓫	Switch Input Cable	
⓬	Rate and section control module	75774-00
⓭	Field-IQ sprayer cab cable	80099
⓮	To Sprayer wet works and power	
⓯	Emergency stop cable	90528
⓰	Field-IQ cab to hitch cable	77368
⓱	Field-IQ dual relay power disconnect cable	77533
⓲	Field-IQ power cable	76941
⓳	Field-IQ CAN/power extension	75528-xx
⓴	VM430 valve module	80585-00
㉑	Field-IQ cab to hitch cable	90541-xx
㉒	VM430 valve module tee cable	90569
㉓	VM430 to valve cable	86855
㉔	Boom height control power Y cable	90531
㉕	Boom Height Control power /CAN cable	90513
㉖	Boom Height Control power / CAN extension cable	86592-xx
㉗	Boom Height Control terminator adaptor	86594
㉘	Boom Height Control SS-100 sensor	88473-00
㉙	NavController II	55563-00
㉚	Main NavController II harness	54601
㉛	2-pin DTM to 2-pin DT power adapter	67095
㉜	TMX-2050 power adapter	94645

Field-IQ Section Control to Raven 4x0 rate control

This figure shows how to connect the display with the Field-IQ section control system to the Raven 4x0 controller:

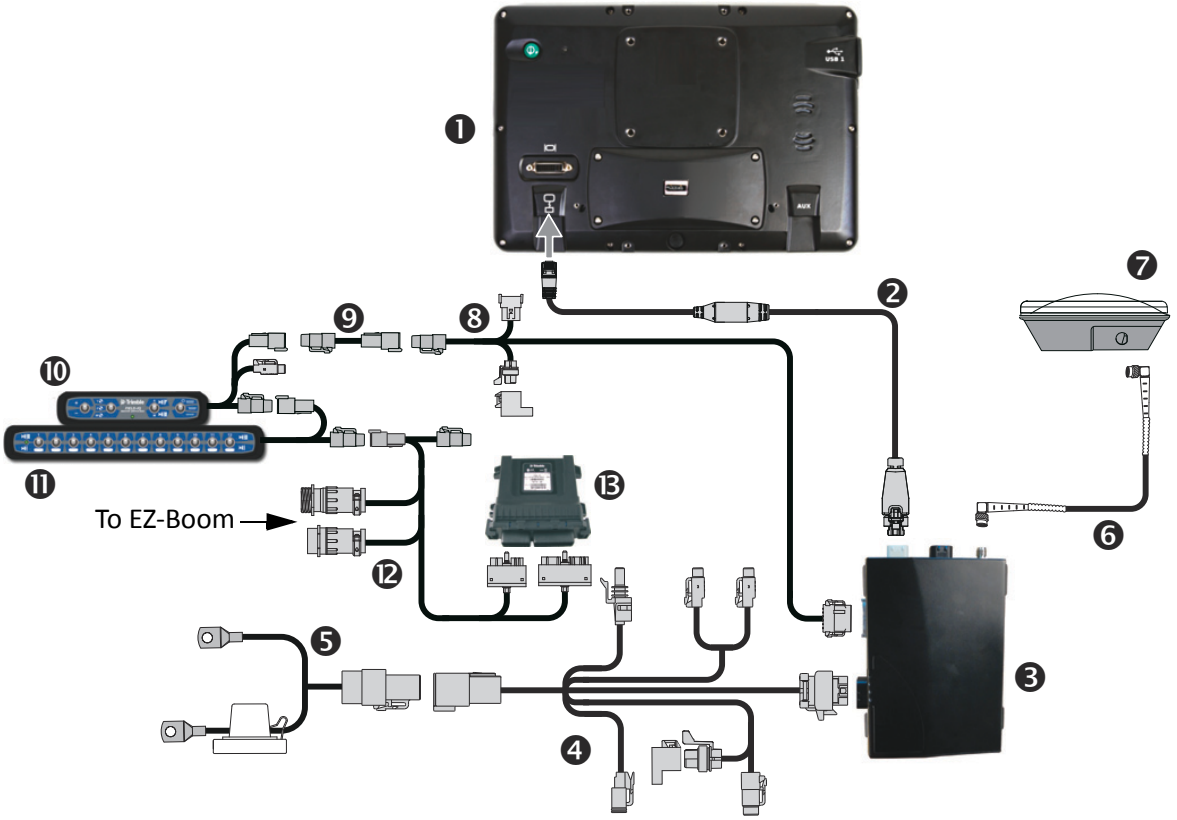


Item	Description	Trimble part number
1	TMX-2050 display	96700-00
2	TM-200 Module to display cable	93843
3	TM-200 Module	95060-00
4	TM-200 Module power and I/O cable connected to port B	92676
5	TM-200 Module battery cable	92905
6	AG-25 GNSS antenna to TM-200 Module cable	50449
7	AG-25 GNSS antenna	77038-01
8	TM-200 Module to Field-IQ cable	75834
9	Autopilot Steering Sensor Extension and Field-IQ Switch Box Extension Cable Assembly	55656
10	Field-IQ master switch box	75050-01
11	12-section switch box (optional)	75060-01
12	Field-IQ product / section control module - EZ-Boom® replacement	75503

Item	Description	Trimble part number
⓭	Rate and Section Control module	75774-00
⓮	Raven to EZ-Boom system 4x0 T-cable	79514
⓯	Raven 4x0 console	N/A

Field-IQ Rate and Section Control to EZ-Boom harness

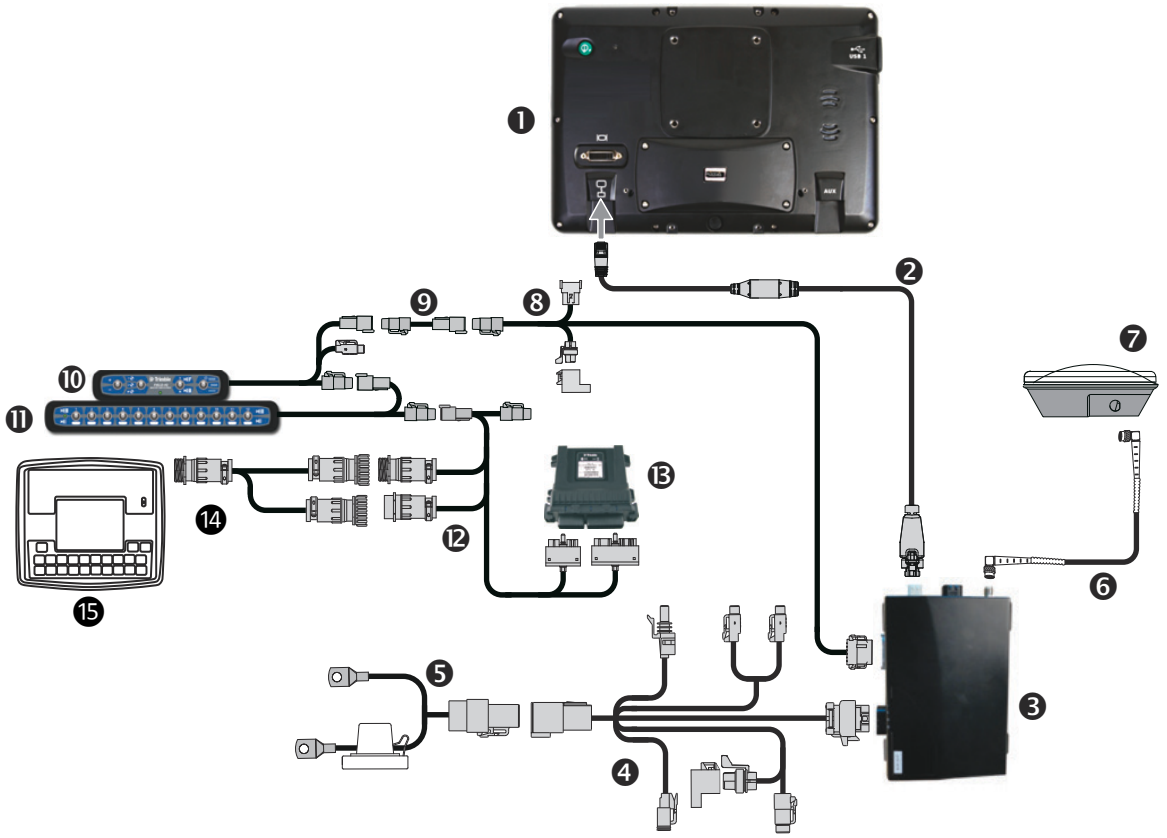
This figure shows how to connect the display with the Field-IQ rate and section control system to the EZ-Boom harness:



Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	Display to Field-IQ cable	75834
❾	Autopilot Steering Sensor Extension and Field-IQ Switch Box Extension Cable Assembly	55656
❿	Field-IQ master switch box	75050-01
⓫	12-section switch box (optional)	75060-01
⓬	Field-IQ product / section control module - EZ-Boom® replacement	75503
⓭	Rate and Section Control module	75774-00

Field-IQ Section Control to Raven 4x00 rate control

This figure shows how to connect the display with the Field-IQ Section Control and the Raven 4x00 cables:



Item	Description	Trimble part number
❶	TMX-2050 display	96700-00
❷	TM-200 Module to display cable	93843
❸	TM-200 Module	95060-00
❹	TM-200 Module power and I/O cable connected to port B	92676
❺	TM-200 Module battery cable	92905
❻	AG-25 GNSS antenna to TM-200 Module cable	50449
❼	AG-25 GNSS antenna	77038-01
❽	TM-200 Module to Field-IQ cable	75834
❾	Autopilot Steering Sensor Extension and Field-IQ Switch Box Extension Cable Assembly	55656
❿	Field-IQ master switch box	75050-01
⓫	12-section switch box (optional)	75060-01
⓬	Field-IQ product / section control module - EZ-Boom replacement	75503
⓭	Rate and Section Control module	75774-00

Item	Description	Trimble part number
⓮	Raven 4x0-to-4x00 harness adapter	59943
⓯	Raven 4x00 console	N/A