Connecting diagrams for
CTRX Graphene and Graphene+

Rev. 1.0
(130124)

NOTE! NOTE! NOTE!

WHEN CONNECTING VIA NMEA2000:

EVEN IF IT IS POSSIBLE TO CONNECT THE CTRX GRAPHENE AND THE CTRX GRAPHENE+ VIA NMEA2000 WE STILL SUGGEST YOU CONNECT YOUR AIS CTRX GRAPHENE/GRAPHENE+ VIA NMEA0183.

The reason for connecting via NMEA0183 is that in a larger NMEA2000 network the network *could* ”go down”, or get slow, due to all the data coming from the AIS.

NOTE! NOTE! NOTE!

WHEN CONNECTING VIA NMEA0183:

DO NOT FORGET TO SET THE COMMUNICATION PORT IN THE PLOTTER TO WHICH THE AIS IS CONNECTED TO RECEIVE NMEA0183 DATA AT 38.400 BAUD

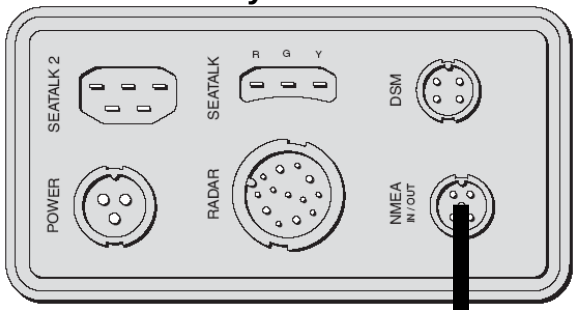
This setting is in general made in the ”communication settings” that usually are under ”system configuration”.

The speed of the communication port shall be set to 38.400 baud but can also be mentioned as ”NMEA High Speed”.

CTRX Graphene and Graphene+ to Raymarine C-xx.

Picture shows Graphene+

Back of Raymarine C-Serie



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

WHITE (Rx-A)

GREEN (Rx-B)

Cut and insulate wires from Raymarine that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

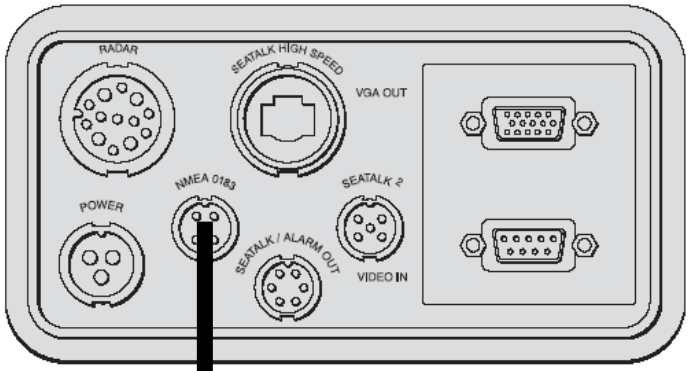
BLUE

- 0VDC

CTRX Graphene and Graphene+ to Raymarine E-xx.

Picture shows Graphene+

Back of Raymarine E-Serie



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

WHITE (Rx-A)

GREEN (Rx-B)

Cut and insulate wires from Raymarine that are NOT USED

RED

ORANGE

+ 9-36VDC

BLACK

BLUE

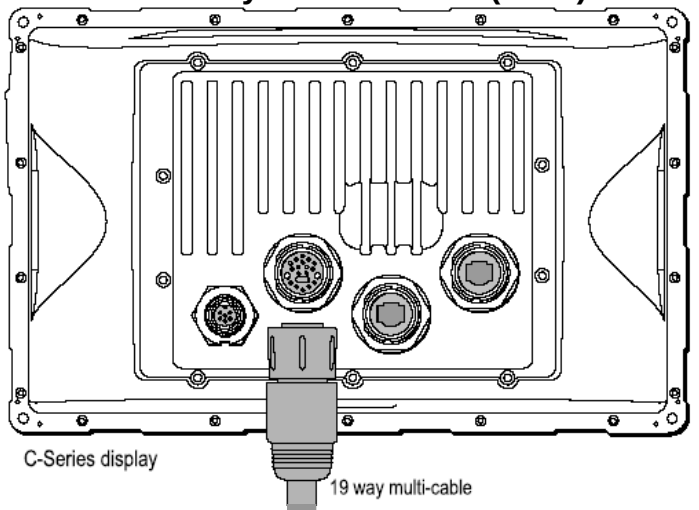
- 0VDC

Cut and insulate wires not used

CTRX Graphene and Graphene+ to Raymarine C-xx (Wide).

Picture shows Graphene+

Back of Raymarine C-serie (Wide).



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

ORANGE/WHITE (Rx-A)

ORANGE/GREEN (Rx-B)

Cut and insulate wires from Raymarine that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

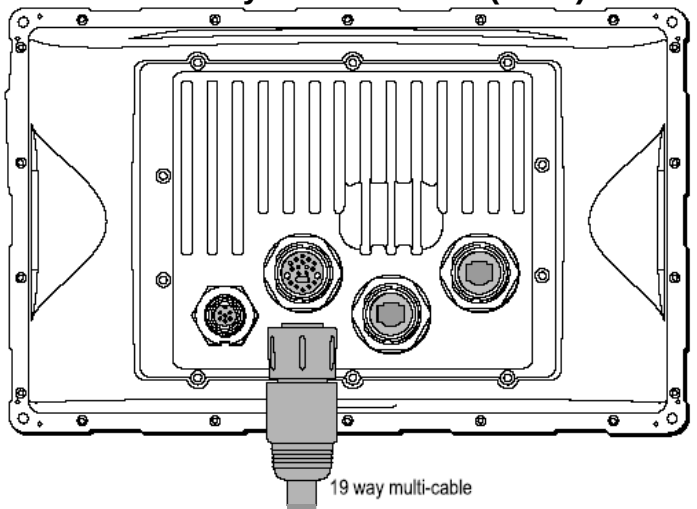
BLUE

- 0VDC

CTRX Graphene and Graphene+ to Raymarine E-xx (Wide).

Picture shows Graphene+

Back of Raymarine E-serie (Wide).



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

ORANGE/WHITE (Rx-A)

ORANGE/GREEN (Rx-B)

Cut and insulate wires from Raymarine that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

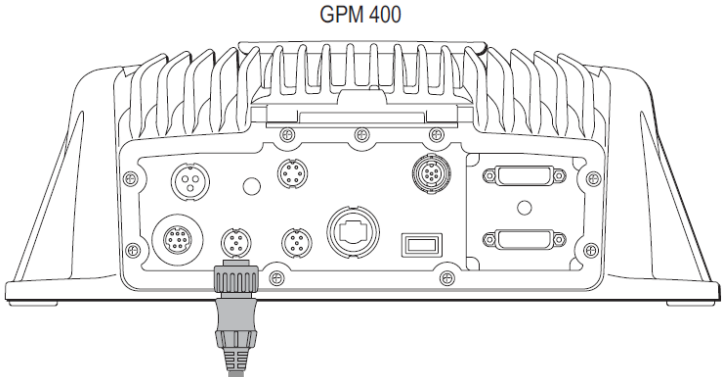
BLUE

- 0VDC

CTRX Graphene and Graphene+ to Raymarine G-serie.

Picture shows Graphene+

Back of Raymarine G-serie.



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

WHITE (Rx-A)

GREEN (Rx-B)

Cut and insulate wires from Raymarine that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

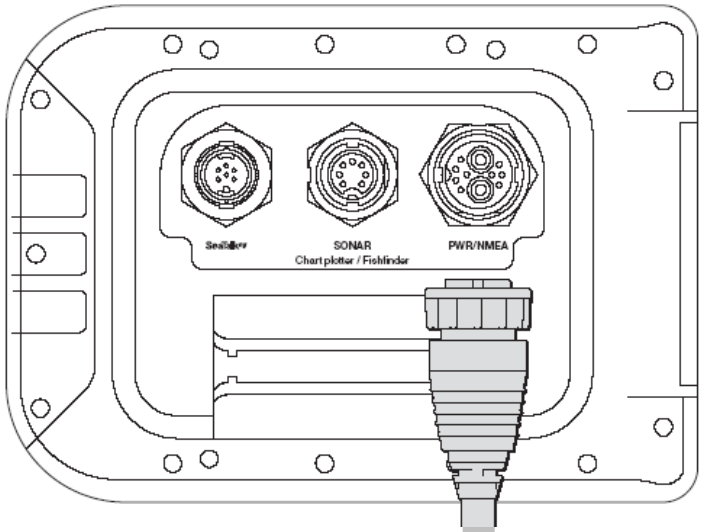
BLACK

BLUE

- 0VDC

CTRX Graphene and Graphene+ to Raymarine A-serie.

Back of Raymarine A-serie.



Picture shows Graphene+

NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

ORANGE/WHITE (Rx-A)

ORANGE/GREEN (Rx-B)

Cut and insulate wires from Raymarine that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

BLUE

- 0VDC

CTRX Graphene and Graphene+ to Garmin 400- and 500-serie

Picture shows Graphene+

NMEA2000

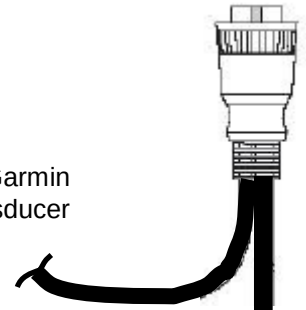
USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

Connector (Power and data) going in to Garmin 400- or 500-serie



To Garmin transducer

* = Same wire for power supply
0V and NMEA Rx-B

TERMINAL BLOCK

GREY (Tx-A)

YELLOW (Tx-B)

BROWN or PURPLE (Rx-A)

BLACK* (Rx-B)

Cut and insulate wires from Garmin that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

BLUE

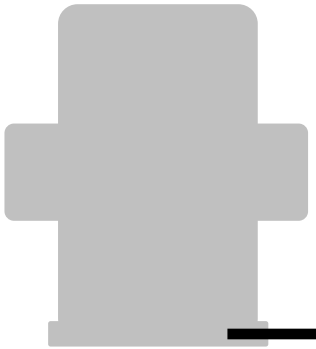
- 0VDC

CTRX Graphene and Graphene+ to Garmin 600-serie

Picture shows Graphene+

NMEA2000
USB
To VHF radio
VHF antenna (BNC)
GPS Antenna (TNC)

Bracket for Garmin 620/640



* = Same wire for power supply
0V and NMEA Rx-B

GREY (Tx-A)
YELLOW (Tx-B)
TERMINAL BLOCK
BROWN or WHITE (Rx-A)
BLACK* (Rx-B)

Cut and insulate wires from Garmin that are NOT USED

Cut and insulate wires not used

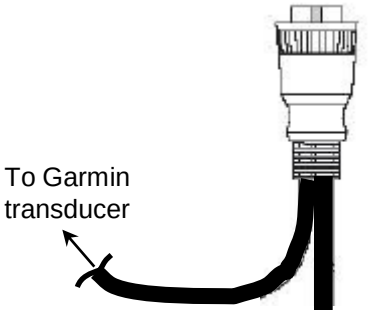
RED
ORANGE
+ 9-36VDC
BLACK
BLUE
- 0VDC

CTRX Graphene and Graphene+ to Garmin 700-serie

Picture shows Graphene+

NMEA2000
USB
To VHF radio
VHF antenna (BNC)
GPS Antenna (TNC)

Connector (Power and data) going in to Garmin 700-serie



To Garmin transducer

* = Same wire for power supply
0V and NMEA Rx-B

TERMINAL BLOCK

GREY (Tx-A)
YELLOW (Tx-B)
BROWN or PURPLE (Rx-A)
BLACK* (Rx-B)

Cut and insulate wires from Garmin that are NOT USED

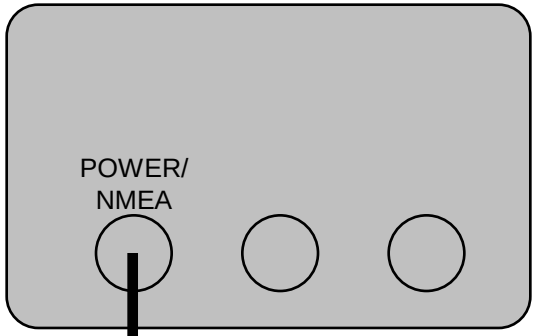
Cut and insulate wires not used

RED
ORANGE
+ 9-36VDC
BLACK
BLUE
- 0VDC

CTRX Graphene and Graphene+ to Garmin 3000-serie

Picture shows Graphene+

Back of Garmin 3000-serie



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

* = Same wire for power supply
0V and NMEA Rx-B

TERMINAL BLOCK

GREY (Tx-A)

YELLOW (Tx-B)

BROWN or PURPLE (Rx-A)

BLACK* (Rx-B)

Cut and insulate wires from Garmin that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

BLUE

- 0VDC

CTRX Graphene and Graphene+ to Garmin 4000- and 5000-serie

Picture shows Graphene+

NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

WHITE (Rx-A)

ORANGE/WHITE (Rx-B)

Cut and insulate wires from Garmin that are NOT USED

RED

ORANGE

+ 9-36VDC

BLACK

BLUE

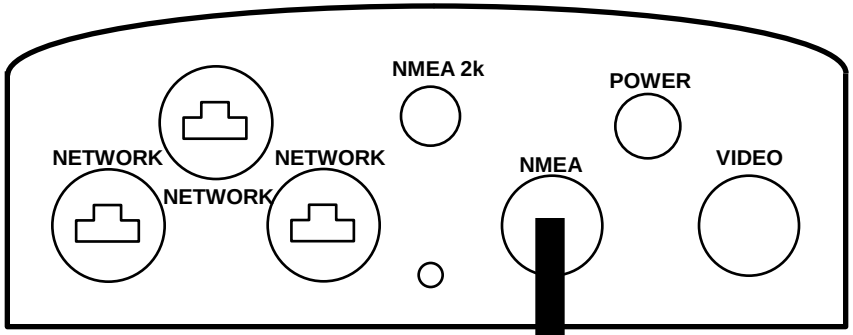
- 0VDC

Cut and insulate wires not used

CTRX Graphene and Graphene+ to Garmin 6000- and 7000-serie

Picture shows Graphene+

Back of Garmin 6008/6208/6012/6212/7012/7212



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

WHITE (Rx-A)

ORANGE/WHITE (Rx-B)

Cut and insulate wires from Garmin that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

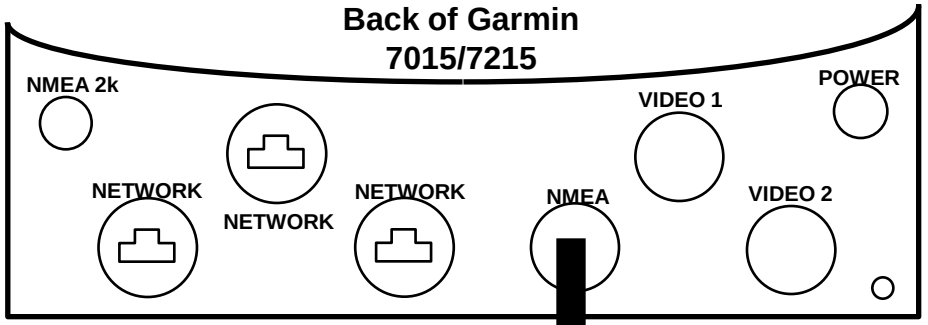
BLACK

BLUE

- 0VDC

CTRX Graphene and Graphene+ to Garmin 7000-serie

Picture shows Graphene+



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

WHITE (Rx-A)

ORANGE/WHITE (Rx-B)

Cut and insulate wires from Garmin that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

BLUE

- 0VDC

CTRX Graphene and Graphene+ to Furuno MFD 8, 12 and Black Box

Picture shows Graphene+

Back of MFD 8/12/Black Box

NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

FRUDD

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

BROWN (Rx-A)

BROWN/WHITE (Rx-B)

Cut and insulate wires from Furuno that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

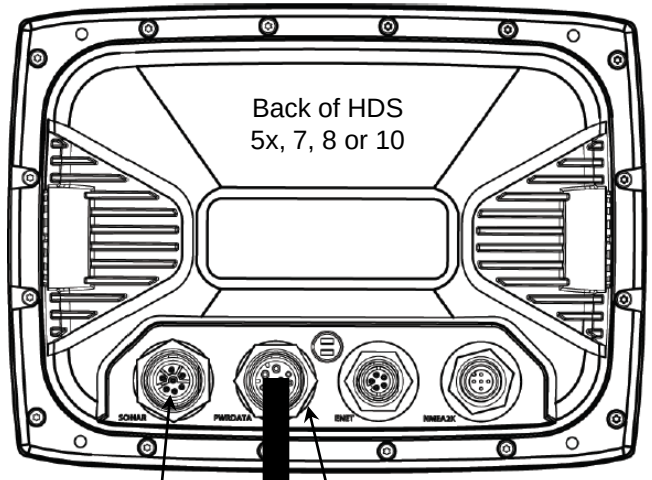
BLACK

BLUE

- 0VDC

CTRX Graphene and Graphene+ to Lowrance HDS 5x,7 ,8 and 10

Picture shows Graphene+



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

POWER/DATA

This connector is only available if HDS unit has echoe sounder function

TERMINAL BLOCK

GREY (Tx-A)

YELLOW (Tx-B)

ORANGE (Rx-A)

GREEN (Rx-B)

Power etc.

Cut and insulate wires from Lowrance that are NOT USED

Cut and insulate wires not used

RED

ORANGE

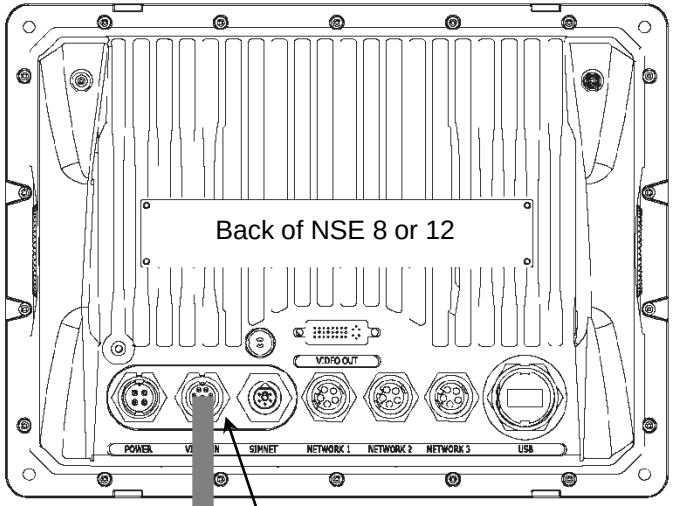
+ 9-36VDC

BLACK

BLUE

- 0VDC

CTRX Graphene and Graphene+ to Simrad NSE 8 & 12



NMEA2000

USB

Till VHF radio

VHF antenn (BNC)

GPS Antenn (TNC)

VIDEO IN

Connectors for VIDEO IN

KOPPLINGSPLINT

GREY (Tx-A)

YELLOW (Tx-B)

GREEN (Rx+)

ORANGE (Rx-)

Cut and insulate wires from Simrad that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

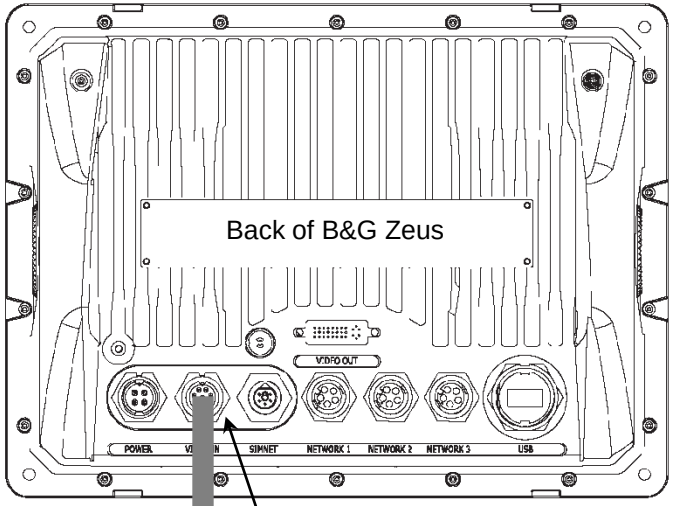
BLACK

BLUE

- 0VDC

CTRX Graphene and Graphene+ to B&G Zeus

Bilden visar Graphene+



NMEA2000

USB

Till VHF radio

VHF antenn (BNC)

GPS Antenn (TNC)

VIDEO IN

Connectors for VIDEO IN

KOPPLINGSPLINT

GREY (Tx-A)

YELLOW (Tx-B)

GREEN (Rx+)

ORANGE (Rx-)

Cut and insulate wires from B&G that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

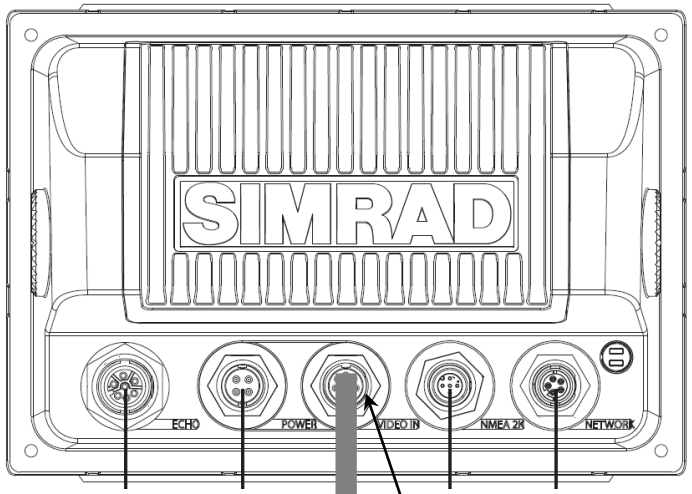
BLUE

- 0VDC

CTRX Graphene and Graphene+ to Simard NSS 7 & 8 radar/plotter

Bilden visar Graphene+

Back of Simrad NSS 7&8



NMEA2000

USB

Till VHF radio

VHF antenn (BNC)

GPS Antenn (TNC)

VIDEO IN

Connectors for VIDEO IN

KOPPLINGSPLINT

GREY (Tx-A)

YELLOW (Tx-B)

GREEN (Rx+)

ORANGE (Rx-)

Cut and insulate wires from Simrad that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

BLUE

- 0VDC

CTRX Graphene and Graphene+ to Northstar Explorer 557,567 and 657

Picture shows Graphene+

Back of Explorer xxx

NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

Specialkabel från Northstar art#:
AA010111 -
NAVICO,CABLE,GPS/FUEL/NMEA-AIS

TERMINAL BLOCK

GREY (Tx-A)

YELLOW (Tx-B)

ORANGE (Rx-A)

GREEN (Rx-B)

The cable that has two loose wires w/o connectors

Cut and insulate wires from Lowrance that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

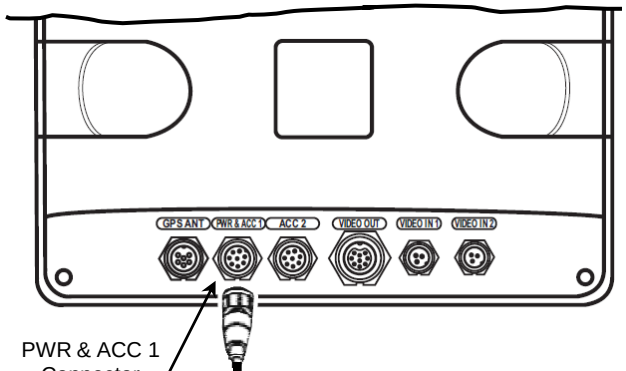
BLUE

- 0VDC

CTRX Graphene and Graphene+ to Standard Horizon CP500

Picture shows Graphene+

Back of Standard Horizon CP500



PWR & ACC 1 Connector

NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

Standard Horizon PWR & ACC 1 Cable

TERMINAL BLOCK

GREY (Tx-A)

YELLOW (Tx-B)

BLUE (Rx-A)

GREEN (Rx-B)

Cut and insulate wires from Standard Horizon that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

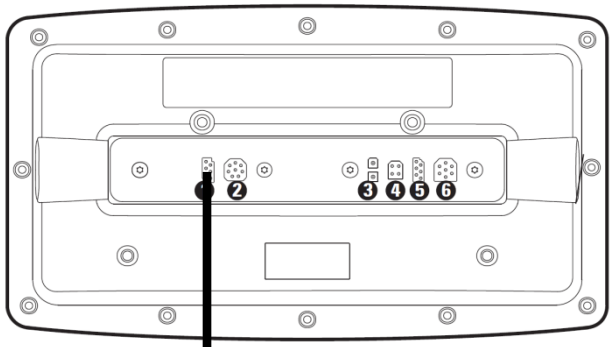
BLUE

- 0VDC

CTRX Graphene and Graphene+ to Humminbird 800 and 958c/998c
(RS-422 to RS-232 connection)

Picture shows Graphene+

Back of Humminbird
800 & 958c/998c



NMEA2000

USB

To VHF radio

VHF antenna (BNC)

GPS Antenna (TNC)

GREY (Tx-A)

YELLOW (Tx-B)

TERMINAL BLOCK

BLUE (Rx-A)

GREEN (Rx-B)

Resistor of 1kΩ

Cut and insulate wires from Standard Horizon that are NOT USED

Cut and insulate wires not used

RED

ORANGE

+ 9-36VDC

BLACK

BLUE

- 0VDC