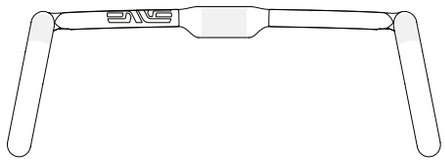
ENVE® Composites LLC
Ogden, UT 84404, USA

ENVE® SES AERO ROAD BAR MECHANICAL & ELECTRIC CABLE ROUTING INSTRUCTIONS



YOU WILL NEED:

- ENVE SES Aero Road Bar
- Hacksaw w/ fine tooth carbon blade
- Emory cloth
- Cutting guide
- ENVE bar end replacements
- Shimano EW-RS910
- Shimano EW-JC130-SM
- Shimano EW-WU111
- Shimano EW-SD50 350mm E-Tube wire
- 4mm, 5mm allen wrench
- Derailleur cable (x2)
- 5mm Brake housing ferrule (x2)
- Pick tool
- Electrical tape

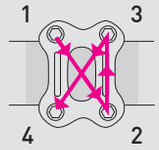
MECHANICAL SHIFTER INSTALLATION

1. Install Handlebar

a. Install the handlebar by centering the bar to the stem and rotate to the desired position.

b. Install the stem faceplate over the handlebar and tighten the bolts to 5Nm.

***NOTE:** Tighten bolts alternating opposite corners



2. Install Shifters and Housing

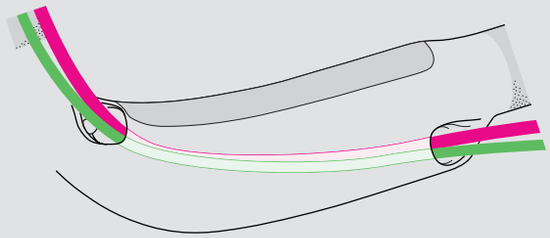
a. Install shifters to desired location and tighten to shifter-specified torque ratings.

b. Route brake housing in through the port near the shifter, and out through the port near the stem.



2. Install Shifters and Housing (Cont'd)

c. Route the derailleur housing behind the brake housing towards the back of the handlebar on both sides. Use a pick tool if necessary.



***NOTE:** Make sure housings are seated into shifters properly.

3. Complete Standard Installations

a. Install brake and derailleur cables by standard procedure, and make any necessary adjustments.

SHIMANO DI2 JUNCTION BOX AND WIRING INSTALLATION

****Follow these steps before installing handlebar on bike****

1. Cut Bar Ends at Specified Guide lines (25mm from ends of bar)

a. Clean and prepare handlebar for cutting with isopropyl alcohol.

b. Using a cutting guide, cut the bar at the specified cut lines with a fine-tooth carbon blade hacksaw.

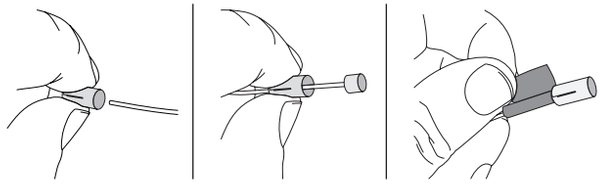
c. Clean the cut edges with an emory cloth.

2. Install Di2 Shifters

a. Install shifters to desired location and tighten to shifter-specified torque ratings.

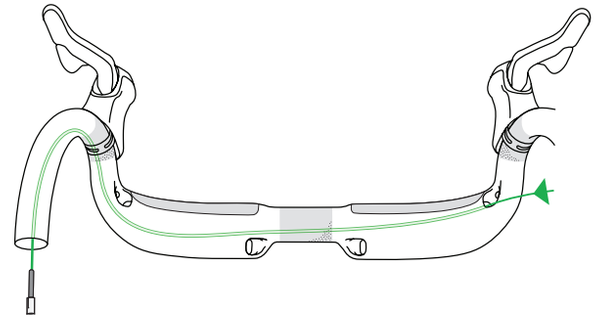
3. Route Shimano split harness EW-JC130-SM

a. Create a routing tool by sliding a 5mm brake housing ferrule over a derailleur cable so that the head of the cable hides inside the ferrule. Wrap tape around the cable just below the ferrule. (x2)

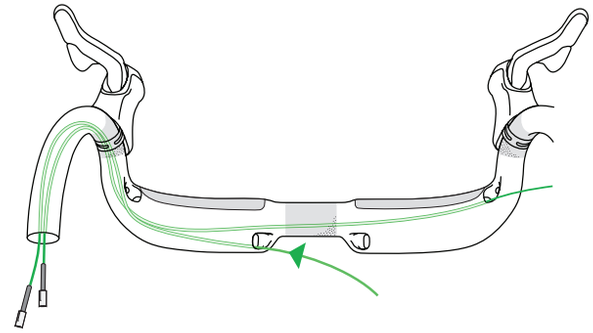


3. Route Shimano split harness EW-JC130-SM (Cont'd)

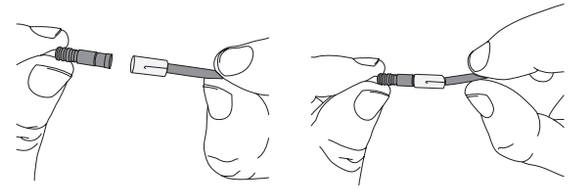
b. Insert one cable (ferrule end first) through the port near the left-shifter and push through the handlebar until it exits out of the right-side bar end. A pick tool may be necessary to guide cable through clamp area.

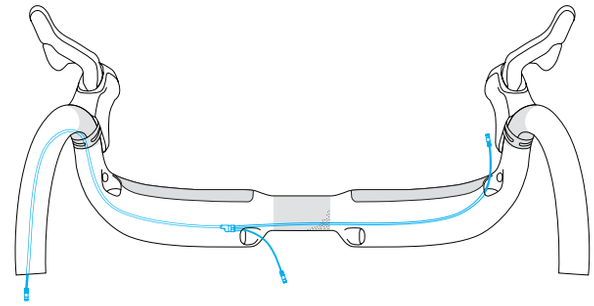


c. Insert the second cable through the port on the right-shifter side of the clamp area until it also exits out of the right-side bar end.

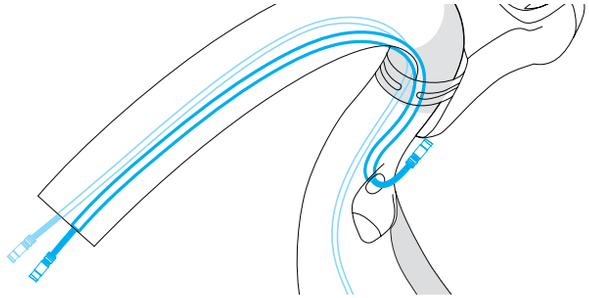


d. Attach the shortest and longest lengths of EW-JC130-SM to the ferrules and pull them through the bar.





e. Route a separate, short E-tube wire from the right-hand shifter through the small hole in the housing port and out the bar end.



SHIMANO DI2 JUNCTION BOX AND WIRING (CONT'D)

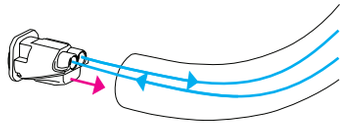
4. Install Shimano EW-RS910 Handlebar Junction

a. Connect EW-RS910 to the two wires exiting the right-side bar end.

b. Using the Shimano suggested bracket for EW-RS910, insert the assembly into the bar.

c. Cut the opposite side of the bar to match, and use a standard bar end plug to finish.

d. Connect both shifters to their respective E-tube wires.

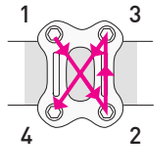


5. Install handlebar, brake housing, and cables

a. Install the handlebar by centering the bar to the stem and rotate to the desired position.

b. Install the stem faceplate over the handlebar and tighten the bolts to 5Nm.

***NOTE:** Tighten bolts alternating opposite corners



c. Connect the remaining E-tube wire near the stem to the wire running through the frame of the bike using EW-WU111.

d. Route the brake housing and cables, and adjust as needed.

***NOTE:** Make sure housings are seated into shifters properly.

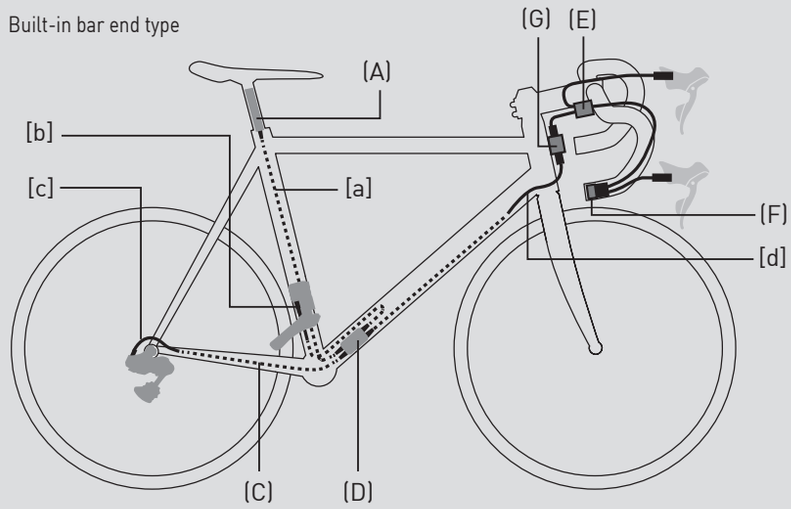
Refer to Shimano Installation guides for further information:
(http://si.shimano.com/pdfs/dm/DM-R9150-03-ENG.pdf)

EXCERPT FROM SHIMANO DURA-ACE R9150 SERIES DEALER MANUAL

(http://si.shimano.com/pdfs/dm/DM-R9150-03-ENG.pdf)

EW-RS910

Built-in bar end type



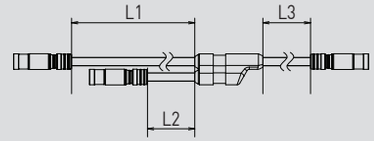
(A) Lithium ion battery (built-in type) SM-BTR2/BT-DN110
(B) Junction A SM-EW90-A/B
(C) Electric wire EW-SD50-I
(D) Junction B SM-JC41
(E) EW-JC130
(F) EW-RS910 (Built-in bar end type)
(G) EW-WU111
(H) EW-RS910 (Built-in frame type)

TECH TIPS

- Cable length (EW-SD50)

  [a] + [b] ≤ 1500mm
  [a] + [c] ≤ 1700mm
  [d] ≤ 1400mm
  [e], [f] ≤ 500mm

  Cable length (EW-JC130)
  EW-JC130 is available in three variations of differing length.
  Refer to the table and select the appropriate variation.



	L1 (mm)	L2 (mm)	L3 (mm)
EW-JC130-SS	350	50	250
EW-JC130-SM	350	50	450
EW-JC130-MM	550	50	550

- If using EW-WU111, use it in combination with BT-DN110 or BM-DN100.