

Fluxgate Compass Interface Cable

P.N. 31110024

This 12 inch cable is used to interface ComNav's standard Fluxgate Compass (PN 20320004) – optionally equipped with the ComNav Heading Rate Stabilizer (PN 20320005) – to the Signal Processor Unit (SPU) of a ComNav Commander P2, Admiral P3, or 5000 Series Autopilot System.

Note: If you have the Heading Rate Stabilizer, you will first have to connect your Fluxgate Compass to the HRS. Refer to the HRS Installation and Operation manual for more information on that procedure.

Installation Steps

1. For installation on a 5000 Series SPU, loosen one of the small glands on the right hand side of the end of the SPU. Feed the cable through the gland so that the plug end is outside the SPU and the “flying leads” are inside. On the Commander & Admiral SPUs, the cable is wired to the plug that mates with J8.
2. Wire the cable to the appropriate connector (J8 on a Commander or Admiral SPU, J9 on a 5000 Series compass card) as per the following table.

Commander or Admiral SPU J8 pin number	5000 Series SPU J9 pin number *	Pin Signal	Wire Colour
7	1	Power +ve	Green
1	2	Sine	Blue
6	3	Cosine	Yellow
5	4	Reference	White
4	5	Power –ve	Shield Drain wire
2	7	Excitation Phase 1	Red
3	8	Excitation Phase 2	Black
	<i>* Note: positions 6, 9, 10, 11, & 12 are not used, and should be left unconnected</i>		

Table 1 – Connections for a Comnav Fluxgate Compass (or Heading Rate Stabilizer)

3. On a 5000 Series SPU: tighten the cable gland used for the cable. Do not over-tighten.
4. Plug the Fluxgate Compass (or Heading Rate Stabilizer) into the interface cable end, until an audible **snap** sound is heard. The snap indicates that the two cables are locked together properly.
5. The connectors on the cables are a “locking” type. To disconnect the cables from each other, it is necessary to gently squeeze the end of the Compass (or Heading Rate Stabilizer) plug, on the ribbed portion of the plug, while pulling the two cables apart.
6. If you have the Heading Rate Stabilizer, refer to the HRS Installation and Operation manual for information on setting up & using the HRS. *Note: you must setup the HRS before setting up the Fluxgate Compass.*
7. Refer to your autopilot's Installation and Operation manual for more information on setting up & using the Fluxgate Compass.