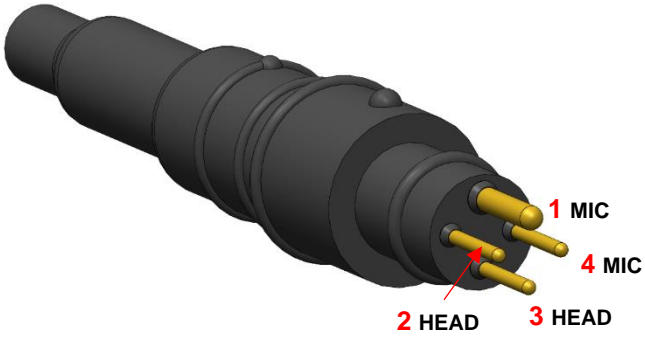


1 Introduction

The RMG-4 is a commonly used connector for communication sets in dive masks and helmets. However, there are different connectors with different wire diagrams available which makes this a highly critical point where plenty of issues in communication systems originate. This guide aims to clarify the differences and give support if anyone needs to replace or connect an RMG-4 connector. There are two main brands of RMG-4 (Marsh and Marine) connectors: Seacon & Birns, both brands are intermate-able. Seacon is used for Kirby-Morgan communication sets, however they can be replaced because of defect by another brand. Find out which connector you have by checking the branding on the connector. Below a summarization of the RMG-4-MP by both brands.

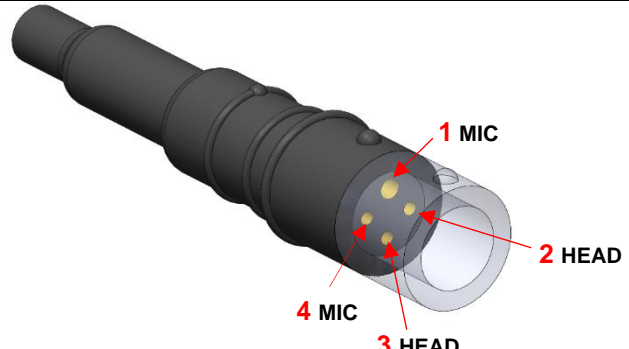
SEACON RMG-4-MP		
SEACON		
PIN	Wire Color	Function in Comms
1	White	MIC
2	Red	HEAD
3	Green	HEAD
4	Black	MIC



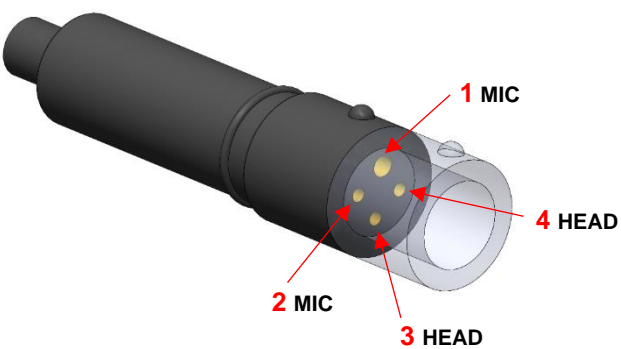
BIRNS RMG-4-MP		
BIRNS <i>Aquamate</i>		
PIN	Wire Color	Function in Comms
1	Black	MIC
2	Green	MIC
3	Red	HEAD
4	White	HEAD



SEACON RMG-4-FS		
SEACON		
PIN	Wire Color	Function in Comms
1	White	MIC
2	Red	HEAD
3	Green	HEAD
4	Black	MIC

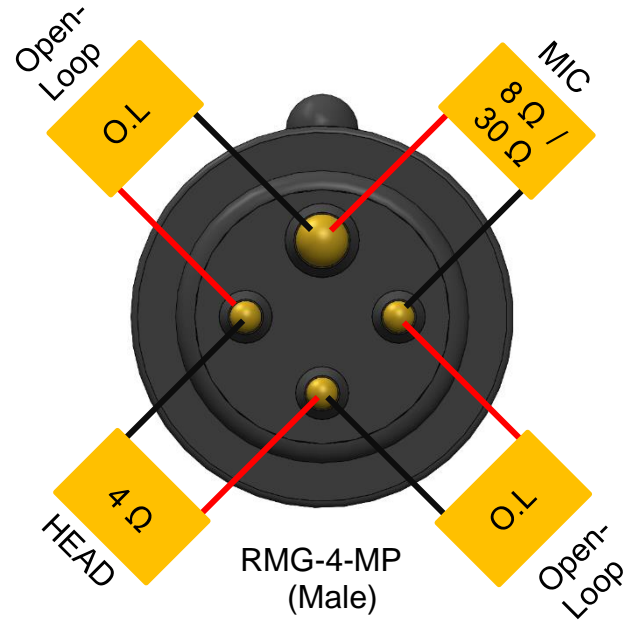


BIRNS RMG-4-FS		
BIRNS <i>Aquamate</i>		
PIN	Wire Color	Function in Comms
1	Black	MIC
2	Green	MIC
3	Red	HEAD
4	White	HEAD



2 Testing Comms Set

Because of the different connectors and the chaos concerning the RMG-4 connector, a lot of communication sets are wrongly wired. **Make sure you test the communication set before replacing an umbilical or a connector, this will save you a lot of hassle.** To test a set, you can simply measure the resistance using a multimeter between two pins (regardless of the brand), this should be as show on the right:



3 Replacing Comms Connector

To replace the connector on the comms module you will have to inform yourself on the type of connector you have and the type of Cassette. Then you can follow below color schematic.

BRAND	New Kirby Cassette	Old Kirby Cassette
SEACON RMG-4-MP 	 	
BIRNS RMG-4-MP 	 	