



Portable HeadMouse®

Power Cables

The fused DC power cables are used to provide power to the Portable HeadMouse Interface Unit from a 12- or 24-volt battery. Each cable is approximately 1.8-meters (72-inches) long and consists of an in-line 5-Amp fuse, a 2.5-millimeter power connector on one end and one of the connectors illustrated in Table 1 on the other. These cables are designed for connection to a powered wheelchair battery system by direct connection, by an accessory power port supplied by the wheelchair manufacturer or a third party supplier, or the battery recharge connector. All connection methods are considered by Origin Instruments to be equally suitable.

Part Number	Description	Connector Style
HM-0915-RT	Direct Battery Connection: Ring terminals for direct connection to a 12-volt battery or 24-volt battery stack.	<p>Positive Battery Terminal</p> <p>Fused Lead with ring connector</p>
HM-0915-AC	Accessory Port Connection: Connector for plugging into an accessory power port using Anderson connectors.	<p>Positive (+) Red</p> <p>Negative (-) Black</p>
HM-0915-RR	Round Re-charge Port Connection: Connector for plugging into round battery re-charge port. Used on newer Invacare wheelchairs.	<p>(FRONT VIEW)</p> <p>NEGATIVE (-)</p> <p>POSITIVE (+)</p> <p>SOCKET</p> <p>PLUG</p>
HM-0915-RE	Rectangular Re-charge Port Connection: Connector for plugging into rectangular re-charge port using Anderson Power Pack connector. Used on older Invacare wheelchairs.	<p>Chair Inhibit</p> <p>Negative (-)</p> <p>Positive (+)</p>

Table 1. Power cable options. Connectors illustrated are for connection to the battery system. The Portable HeadMouse power connector is shown in **Figure 1**.



The power cord supplied by Origin Instruments has the center conductor of the 2.5-mm connector, or positive lead attached to the in-line 5 Amp fuse. The fused lead is connected to the positive pin of the recharge connector and the other lead is connected to the negative pin.

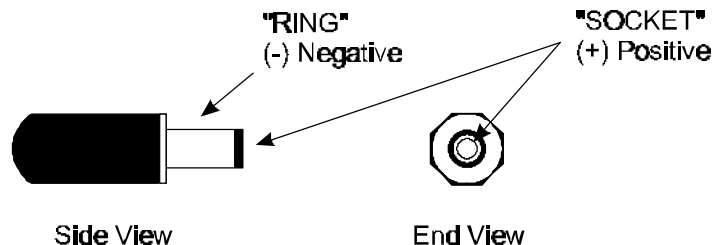


Figure 1. Mating power connector for the Portable HeadMouse Interface Unit. Mating center conductor is 2.5mm (0.1 inch) in diameter and the outside ring diameter is 5.5mm (0.21 inch).

Please note that the power adapter in the Interface Unit should be enabled for operation from a battery by switching mode switches 3 and 4 to ON (UP). An illustration of the Interface Unit rear panel is shown in Figure 2. This operating mode will protect the battery from deep discharge. However, battery capacity management is the responsibility of the user. If allowed, the Portable HeadMouse will consume the battery's entire capacity. More information concerning features of the integrated power adapter is contained in the Installation and Getting Started Guide.

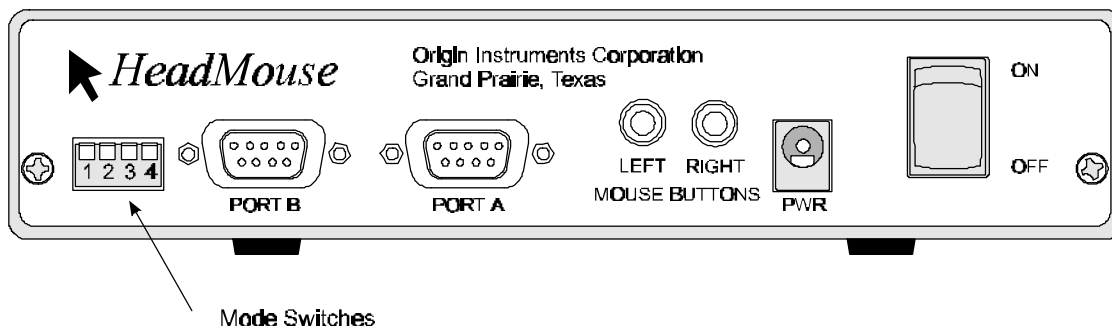


Figure 2. HeadMouse for Portables Interface Unit rear panel. Operating mode switches are accessed through the panel opening next to "PORT B". Factory default positions of the mode switches are down.

The Interface Unit is protected from reverse polarity connection and voltage transients from the wheelchair battery. Therefore, if the voltage is accidentally reversed the Interface Unit will not be damaged. However, the power capacity of most wheelchair batteries is large and the power cord should be treated carefully. Do not immerse the attached power plug in water or physically abuse the cord. If the cord insulation becomes damaged, replace it immediately. Even though the 24-volt potential of a wheelchair battery is not generally considered to be hazardous a short circuit can generate considerable heat and could damage the wheelchair, the battery, or attached equipment.

