

CM-Cable

A CM-3 Connecting Cable for Non-Warner Amplifiers

The **CM-3** connects to your amplifier through the headstage. This allows the simulator to accurately model the kinetics of a membrane bound ion channel while utilizing all components of the equipment normally used to make measurements. While the **CM-3** is designed to connect directly to a Warner amplifier through the supplied three-wire cable, it can also be used with other manufacturer's amplifiers provided this **CM-Cable** is used.

The standard white **CM-3** connecting cable is comprised of 3 wires; the main white wire, a black wire, and a green wire. All three wires must be connected to the amplifier for the **CM-3** to operate. To use the **CM-3** on a non-Warner amplifier, all three wires must still be powered, and the **CM-Cable** is used to make the bridging connections.

Make the following connections:

- Connect the black wire on the **CM-3** cable to the black jack on the **CM-Cable**
- Connect the green wire on the **CM-3** cable to the green jack on the **CM-Cable**
- Connect the white wire on the **CM-3** cable to the headstage input jack of your amplifier.
- Connect the **CM-Cable** BNC to the amplifier V_{cx10} output

Once all connections are made, the **CM-3** cable can be plugged into the jack on the **CM-3**. This will activate the electronics within the **CM-3** and it will begin to function.

Notes:

- Since plugging in the **CM-3** turns the device on, we recommend disconnecting the cable when not in use to preserve battery life.
- Be sure to set your offset potential to zero to minimize any offset currents in the simulator.
- A holding potential must be applied to resolve channel currents.