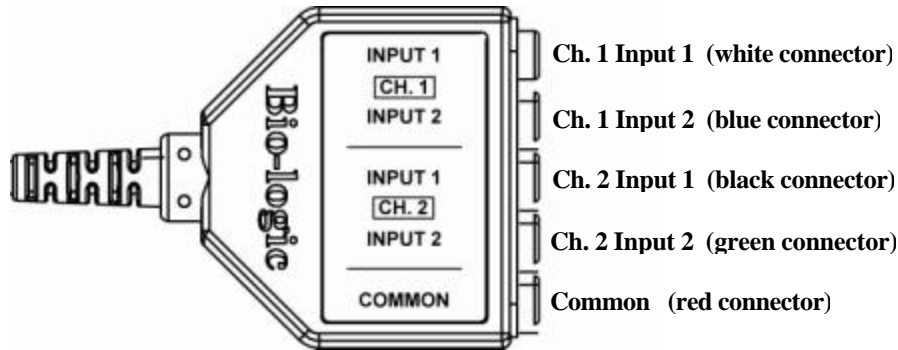


Electrode Connections for Bio-logic AEP System

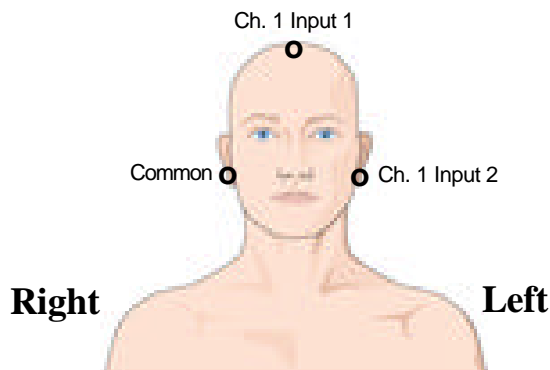
Descriptions are provided below for proper connection of electrode wires into the Navigator Pro patient cable for 1-channel or 2-channel recordings of different types (ABR, ECoChG, VEMP, Stacked ABR/CHAMP). These electrode montages for various test procedures are suggested and represent commonly used montages for data collection. However, other montages may be appropriate for some of the test procedures described.



IMPORTANT NOTE:

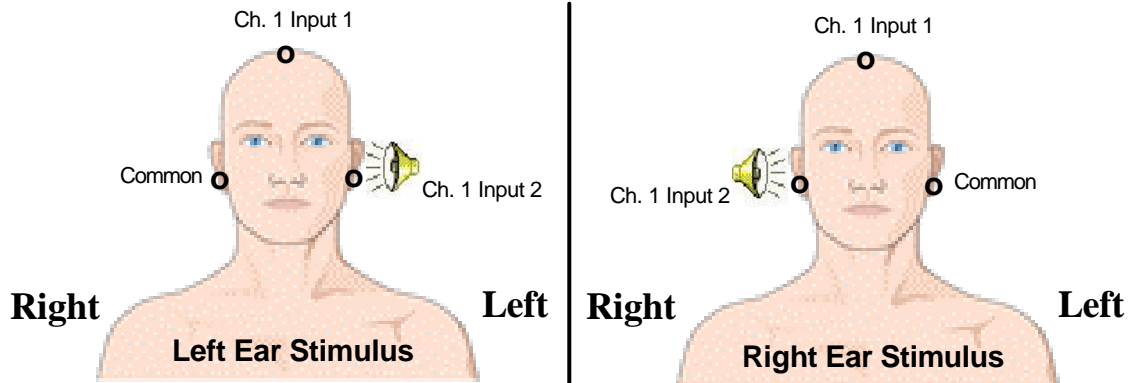
1-Channel Recordings: For 1-channel recordings, both connectors for Ch. 1 (Input 1 and Input 2) will be used as well as the Common connector. For 1-channel recordings, the inputs for Ch. 2 are not used and should be empty. No jumper should be connected to the patient cable for 1-channel recordings. Leaving a jumper connected to any input during 1-channel recordings will result in noisy data.

1-Channel ABR – Electrode Switching Enabled

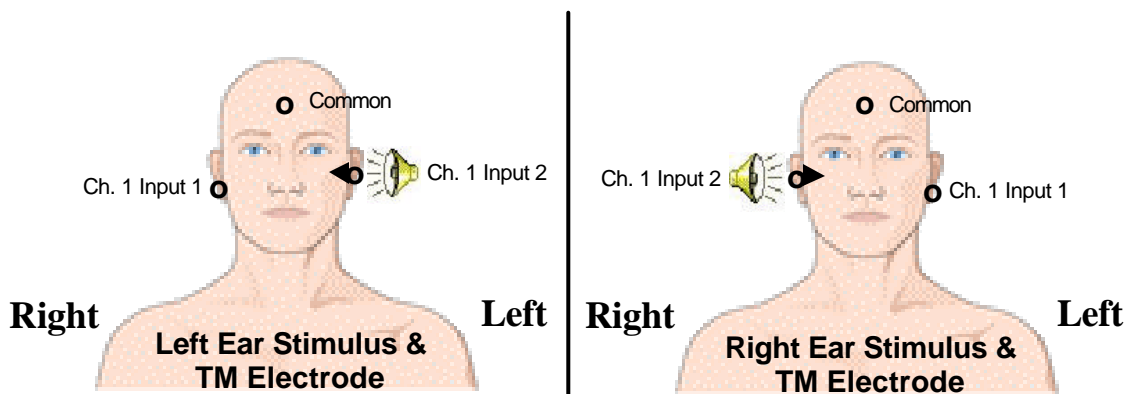


Caution: The Common and Ch. 1 Input 2 electrodes **MUST** be plugged in as shown when electrode switching is enabled in order for the electrode switching to function properly! Failure to connect this way will result in inaccurate data.

**1-Channel ABR –
Electrode Switching Disabled – requires manual switching of electrodes**

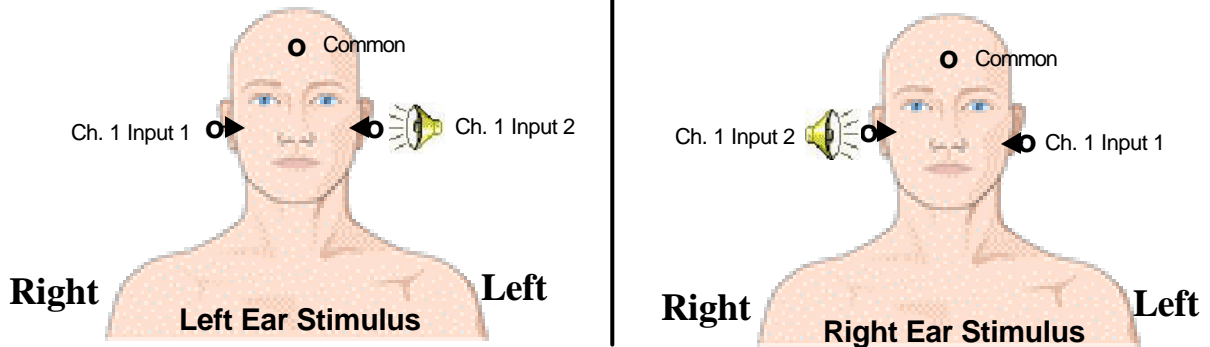


**1-Channel TM ECochG (horizontal montage) –
Electrode Switching Disabled – requires manual switching of electrodes**

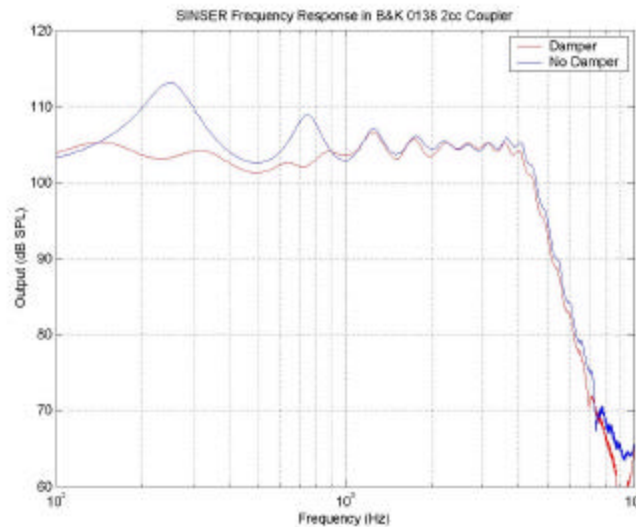


The special electrode cable provided with the Bio-logic TM electrode is a shielded cable. The “green” connector on the TM electrode cable plugs into the Common input on the patient cable and the electrode at the “Common” site above plugs into the top of the green “jumper”. The “red” connector on the TM electrode cable plugs into the Ch. 1 Input 2 connector.

1-Channel Tiptrode ECoChG (horizontal montage)– Electrode Switching Disabled – requires manual switching of electrodes

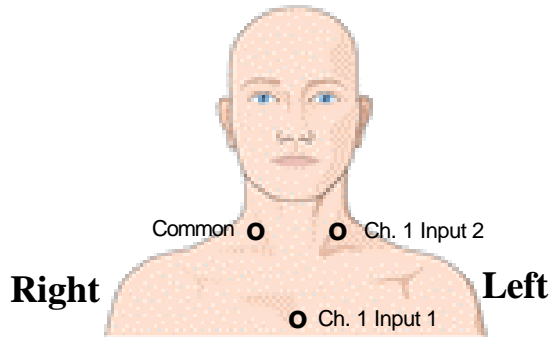


The use of Tiptrodes with insert earphones with part number 580-SINSER must be done with caution. These transducers have a damper in the adapter at the end of the red and blue tubing that smooths peaks in the frequency response. These dampers are not present and cannot be added to the Tiptrodes. Use of Tiptrodes on the 580-SINSER insert earphones will result in slightly higher output (3-8 dB) than is specified in the software for the click stimulus and for certain tone bursts. The frequency response of the 580-SINSER insert earphones with and without the damper is shown in the graph below for your reference.



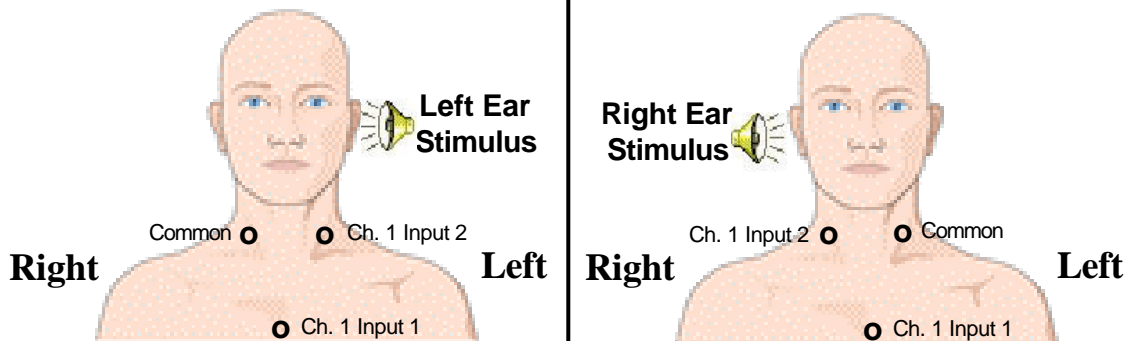
Use of Tiptrodes (which do not have acoustic dampers) with the 580-SINSER insert earphones will result in a frequency response as shown by the blue or more “peaky” line above. Be aware that use of Tiptrodes with the 580-SINSER will impact the stimulus frequency response and output.

1-Channel VEMP – Electrode Switching Enabled

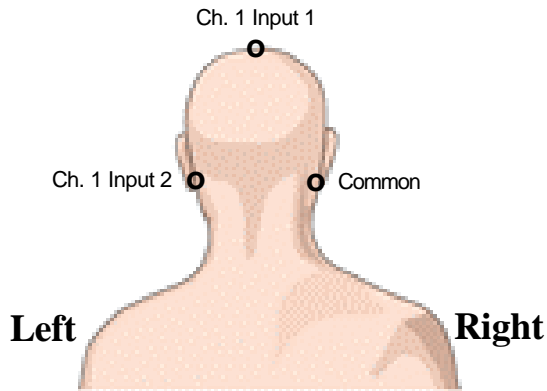


Caution: The Common and Ch. 1 Input 2 electrodes **MUST** be plugged in as shown when electrode switching is enabled in order for the electrode switching to function properly! Failure to connect this way will result in inaccurate data.

1-Channel VEMP – Electrode Switching Disabled– requires manual switching of electrodes



Stacked ABR/CHAMP – Electrode Switching Enabled

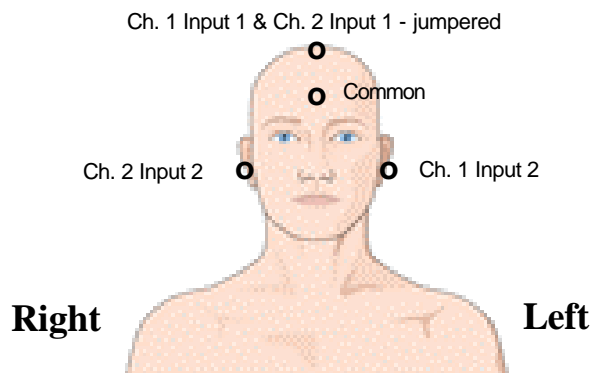


Caution: The Common and Ch. 1 Input 2 electrodes **MUST** be plugged in as shown when electrode switching is enabled in order for the electrode switching to function properly! Failure to connect this way will result in inaccurate data.

IMPORTANT NOTE:

2-Channel Recordings: For all of the 2-channel recordings described below, a jumper is used in the patient cable to connect two inputs together so that one electrode site can be shared by both connectors. In that case, the term “jumpered” is used in the descriptions below to describe how this is accomplished.

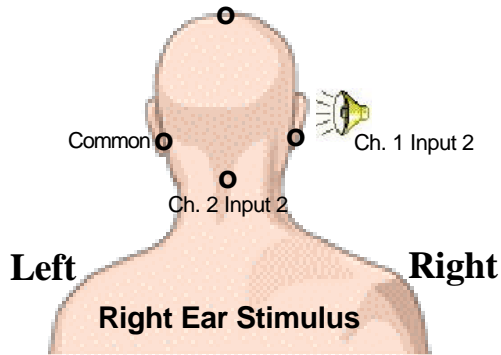
2-Channel ABR



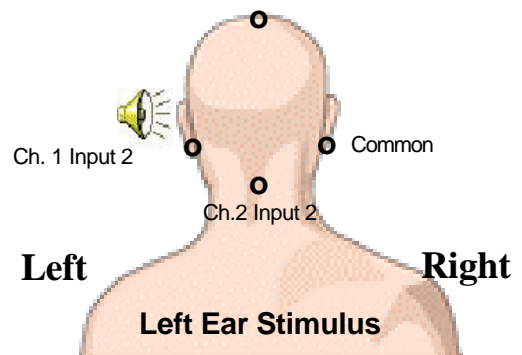
Consider using the nape of the neck as an alternate common electrode placement, particularly if you plan to collect ASSR data with MASTER immediately after collecting ABR data. You will need to change the connection of electrodes into the patient cable for MASTER since it is a one-channel system, but you will not have to reapply electrodes to different sites on the patient.

2-Channel ABR (Ch.1: Cz-Ipsi montage) & (Ch. 2: Cz-Nape montage)

Ch. 1 Input 1 & Ch. 2 Input 1 - jumpered



Ch. 1 Input 1 & Ch. 2 Input 1 - jumpered



Requires manual switching of electrodes upon changing stimulated ear.

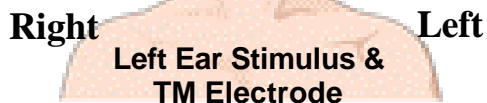
TM ECochG (Ch.1-horizontal montage) & ABR (Ch. 2)

Ch. 2 Input 1

Common

Ch. 1 Input 1

Ch. 1 Input 2 & Ch. 2 Input 2 - jumpered

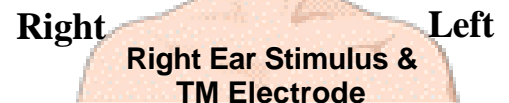


Ch. 2 Input 1

Common

Ch. 1 Input 2 & Ch. 2 Input 2 - jumpered

Ch. 1 Input 1



The special electrode cable provided with the Bio-logic TM electrode is a shielded cable. The “green” connector on the TM electrode cable plugs into the Common input on the patient cable and the electrode at the “Common” site above plugs into the top of the green “jumper”. The “red” connector on the TM electrode cable plugs into the Ch. 1 Input 2 connector.

Requires manual switching of electrodes upon changing stimulated ear.