

MINI-Q Guidelines

Guidelines for using the BrainMaster “MINI-Q” Interface

The BrainMaster “MINI-Q” Interface is a switching device that connects between the trainee’s EEG sensors and the BrainMaster 2E module that provides a simple, easy way to select different electrodes for recording. This provides the ability to perform quantitative EEG measurements using the 2-channel device, by recording different sets of electrode pairs, for sampling the EEG signal. Then, by processing and displaying the EEG data, it is possible to make a determination of the EEG component values at the various sensor locations.

The MINI-Q is supported by the latest version of the 2.0SE and 2.5SE software. Contact BrainMaster Technologies, to ensure that you have the latest software update on your PC. The 2.5SE release is recommended.

To use the MINI-Q device, use the following procedure:

- 1) If necessary, install the updated 2.0 or 2.5 software files (master.exe, breview.exe) to your PC, into the directory c:\brainm.20. You may get these from the internet, (www.brainm.com/software/2.0SE or www.brainm.com/software/2.5) or via CD from BrainMaster Technologies, Inc.
- 2) Using the Folder Selections popup dialog, select the folder “testmini” for testing, or if you want to create a permanent study folder, you may create a new folder, and use the “MINIQ” protocol to create the initial settings.
- 3) Place the MINI-Q box on top of the BrainMaster 2E module.
- 4) Connect all sensors to the trainee (using a cap or multiple electrodes), and plug them in according to the jacks on the MINI-Q box. A drawing showing the jack assignments is attached. The sensors used are:

GND, Fz, Cz, F3, F4, C3, C4, P3, P4, T3, T4, O1, O2, A1, A2
- 5) Plug the 5 leads coming from the MINI-Q box into the 5 input connectors of the BrainMaster, in a “one-to-one” fashion, going from left to right, and matching the lead colors to the input connectors.
- 6) Place the MINI-Q selector switch on position “1” by turning the selector knob all the way to the left.
- 7) Run the the BrainMaster Bsetup program. Select the folder mini-q and click on “OK”. Click on “Run the next session” and follow the dialog boxes. When the training screen appears, click on the “GO” button. Inspect the waveform. If it is clean, click on the dialog box to begin the session. You will now be recording from **Fz and Cz**.
- 8) The system will record for 1 minute in this position, then pause. **When the system pauses, immediately rotate the switch one position clockwise.** This will select the second set of sensors. When the signal is stable, press the <Space> bar. You will now be recording from **F3 and F4**.
- 9) The system will record for 1 minute in this position, then pause. **When the system pauses, immediately rotate the switch one position clockwise.** This will select the third set of sensors. When the signal is stable, press the <Space> bar. You will now be recording from **C3 and C4**.
- 10) The system will record for 1 minute in this position, then pause. **When the system pauses, immediately rotate the switch one position clockwise.** This will select the fourth set of sensors. When the signal is stable, press the <Space> bar. You will now be recording from **P3 and P4**.
- 11) The system will record for 1 minute in this position, then pause. **When the system pauses, immediately rotate the switch one position clockwise.** This will select the fifth set of sensors. When the signal is stable, press the <Space> bar. You will now be recording from **T3 and T4**.
- 12) The system will record for 1 minute in this position, then pause. **When the system pauses, immediately rotate the switch one position clockwise.** This will select the sixth set of sensors. When the signal is stable, press the <Space> bar. You will now be recording from **O1 and O2**.
- 13) **When the final 1-minute recording is complete, the program will stop.** Click the “Close” button.
- 14) Click on the title bar of the BSetup main screen and select “Review Screen”. Using the “select” button, access the selector popup dialog. Select the latest session for the trainee.
- 15) Inspect the graphical results. You should see 6 minutes of data presented, in 1-minute intervals. Use the “settings” pushbutton to access the popup dialog to change the settings, to view in Text mode, or change settings as desired.
- 16) Press the “QAT” button on the top of the BReview screen. This will automatically load the data into Excel, and you should see the data in the Excel spreadsheet, with a separate row for each minute. There will be data for both the digital filter, and the FFT results (FFT data has an “F” after the variable name), along with asymmetries, coherences, and ratios.

MINI-Q Guidelines

- 17) The results may now be analyzed by using macros or other appropriate methods. Contact BrainMaster to get referrals of qualified individuals or practices who can help to interpret the results.