



Figure 5

you have opened the IM software (from Activity 2), connected the components of the IM Hardware, and have connected the Master Control Unit (MCU) to the computer via the USB cord, follow these steps to explore the various software features. Refer to the following figures and descriptions below for more information.

## IM Program Features

After installation, a program icon (Figure 5) will appear on the computer desktop.

Double-click the “IM” icon to open the IM program. Find the control panel (similar to Figure 6). Take a moment to look over the features.



Figure 6

A. **Menu Bar:** Contains lists of necessary and additional functions and settings.

B. **Control Panel:** Displays options and information used during tasks

1. **Counter:** Displays and counts down the number of repetitions and the number of minutes set for a task. When in assessment modes, the number of repetitions/minutes is preset. However, for “Regular Training” and “In-Motion” modes, you can set the number of repetitions or minutes by clicking on the up or down arrows.

**NOTE:** The repetitions/minutes can only be adjusted when a training file is open.

2. **Tempo:** Displays the rate (beats per minute) of the reference tone. The default setting is 54 beats per minute. When in assessment modes, this is a fixed setting. However, for “Regular Training” and “In-Motion” task modes, this can be adjusted by clicking on the up arrow to increase the tempo or the down arrow to decrease the tempo.
3. **Difficulty:** Indicates the millisecond threshold beyond which your client will hear negative feedback telling him he is Very Early or Very Late. As long as your client stays below this millisecond threshold, he will hear the more pleasing Right-On and Super Right-On guide sounds. To select the Difficulty, the “Auto Dif” must be turned off (no check in box). Difficulty is adjusted by clicking on the up or down arrows on the Control Panel to increase or decrease it.
4. **SRO:** Displays the minimum millisecond score required to achieve a “Super-Right-On” or SRO hit. The default setting is 15 milliseconds



### FUN FEATURE!

You can now adjust the SRO and the Burst during IM tasks, to alleviate frustration or hone in on cognitive training.

(therefore, if you don't change anything your client must hit between 0-15 ms before or after the reference beat to achieve a SRO hit). The SRO threshold can be adjusted as you deem appropriate to make training easier or more challenging. You can choose a SRO threshold between 10 - 60 milliseconds.

**NOTE:** This feature should be used in conjunction with difficulty and/or tempo to achieve the most SRO hits.

5. **Burst Threshold:** Burst Threshold determines the number of consecutive, or in-a-row, hits your client must make to earn 1 Burst. A burst is earned each time your client hits a designated number of times consecutively in the SRO range. This number is designated by you when you set the Burst Threshold. For example, the default Burst Threshold is 4. Therefore, each time your client hits 4 times in-a-row within the SRO range of 0-15 ms, he earns 1 burst. If he earns 10 bursts over the entire exercise, that means on 10 different occasions during that exercise he made at least 4 SRO hits in-a-row. To adjust the Burst Threshold, click on the arrow on the Control Panel next to Burst. You will then select a threshold between 2 -15 hits.

**NOTE:** This feature should be used in conjunction with difficulty and/or tempo to achieve the most bursts.

- C. **Sound Volumes Panel:** Displays the volume setting for IM tasks.
  6. **Ref:** Displays the volume for the **Reference Tone**. The default setting is 127. Use the arrow and slider to set the desired volume. *(The Reference tone will be discussed further in Module 2.)*
  7. **Guide:** Displays the volume for the **Guide Sounds**. The default setting is 127. Use the arrow and slider to set the desired volume. *(Guide Sounds will be discussed further in Module 2.)*
  8. **RO:** Displays the volume for the **Right On** tone. The default setting is 127. Use the arrow and slider to set the desired volume. *(The various guide sounds will be discussed further in Module 2.)*
  9. **SRO:** Displays the volume for the **Super-Right-On** tone. The default setting is 127. Use the arrow and slider to set the desired volume. *(The various guide sounds will be discussed further in Module 2.)*
  10. **Master:** Displays the master volume for the IM exercise. The default setting is 107. Use the arrow and slider to set the desired volume. *(Adjusting the master volume will be discussed further in Module 2.)*
  11. **Game:** Displays the volume setting for the background audio on training visual screens. Use the arrow and slider to set the desired volume.
- D. **Traffic Light Icon Button:** (Figure 7) Starts and stops the selected task. The "F2" key performs the same action. This button will not illuminate if the MCU is not connected or if no file is open.



Figure 7

**NOTE:** Should a task be stopped prior to 20 hits being recorded, the data will not be available for reports.

- E. **Training Panel:** (Figure 8) Contains options for task mode and exercises.

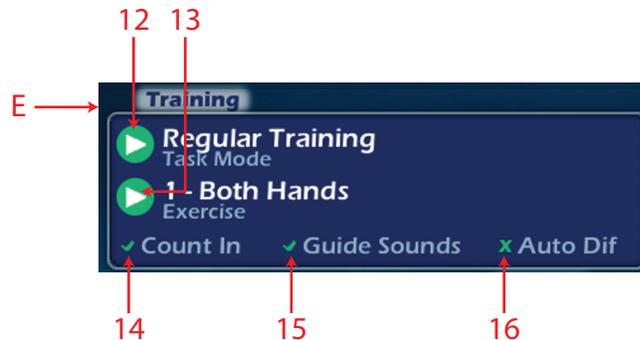


Figure 8

12. **Task Mode Selector:** Lists and indicates which mode is selected including: Short Form Test, Long Form Assessment, Regular Training, In-Motion, or Attend Over Time.  
**NOTE:** Selection of Long Form Assessment enables another group of check boxes – Pre, Interim, and Post.
13. **Exercise Selector:** Lists and indicates which exercise is selected. Each task mode has a different list of available exercises.  
**NOTE:** When in assessment modes, the sequence of exercises is presented in a set order and automatically advances to the subsequent exercise.
14. **Count-in:** When checked, adds five “warm-up” repetitions (beats) to the counter. These will not be counted by the program, which will begin recording data on the sixth repetition of the task.
15. **Guide Sounds:** When selected (checked), activates feedback tones in addition to the reference tone. When deselected (no check in box), only the reference tone is heard. When in assessment modes, this is preset. However, for “Regular Training” and “In-Motion” modes, this can be turned on or off.
16. **Auto Dif:** When “Auto Dif” (Auto Difficulty) is selected (box checked), the program continuously changes the “Difficulty” setting during an exercise based on the individual’s most recent trigger hits.

- F. **Member Panel:** (Figure 9) Contains trainer and trainee information.

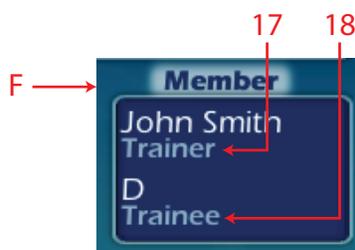


Figure 9

17. **Trainer:** Displays the IM provider's name. If there is more than one provider name in the file (which is possible only with a file created using a version of the IM software prior to IMPro version 6.0), select from the drop-down box by clicking the arrow and then select the desired name.
18. **Trainee:** Displays your client's name. If there is more than one individual's name in the file (which is possible only with a file created using a version of the IM software prior to IMPro version 6.0), select from the drop-down box by clicking the arrow and then select the desired name.

The **Performance Status Area** (Figure 10) displays data calculations based on trigger hits recorded during an assessment or exercise. In certain Training Visual screen it also displays indicators related to accuracy of your clients' trigger hits in relation to the reference beat. Hits fall into pre-defined specified areas range from 555 milliseconds before the reference tone (Very Early) to 555 milliseconds after the reference tone (Very Late). A hit falling on zero milliseconds is synchronized exactly with the reference tone.



Always check to verify that your MCU is connected.

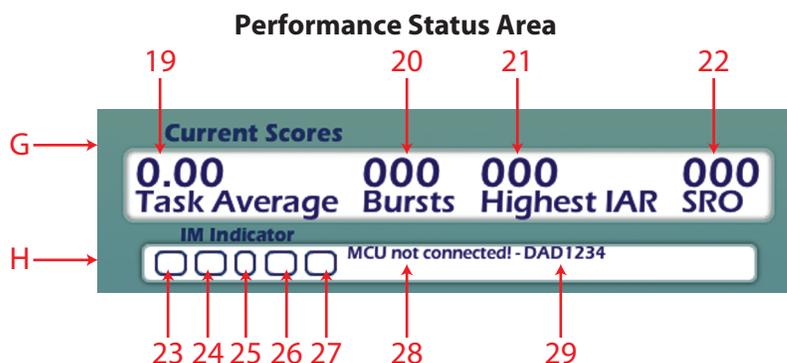


Figure 10

- G. **Current Scores Panel:** Contains performance data during the task.
  19. **Task Average:** Displays the current millisecond average of your client's trigger hit while an assessment or exercise is in progress.
  20. **Bursts:** Counts and displays how many times the current burst rate was achieved during an exercise. For example, if the **Burst Threshold** is set to 4, each time 4 trigger hits in-a-row are within 15 milliseconds of the reference tone, the Burst counter will increase by 1.  
**NOTE:** You can make changes to the **Burst Threshold** via the control panel.
  21. **Highest IAR:** Counts and displays the highest number of trigger hits in-a-row that were within the selected SRO range during any



You can purchase and authorize additional hours on the Provider Login section of the website. You may also refer to the Technical Reference on the Resource CD.

one uninterrupted assessment task or exercise. Keep in mind, 15 milliseconds is the default SRO setting.

**NOTE:** You can make changes to the SRO threshold via the control panel.

22. **SRO:** Counts the number of “Super-Right-On” hits during an assessment task or exercise.  
**NOTE:** You can make changes to the SRO threshold via the control panel.
- H. **IM Indicator Panel:** (Shown in Figure 10 on the previous page) Displays real-time feedback as your client hits the trigger.
  23. **Very Early Hit Box:** Indicates that the trigger hit was very early (beyond the maximum millisecond value set for “Early” trigger hits) and displays how far away from the reference tone it was in milliseconds.
  24. **Early and “Super-Right-On” Hit Box:** Indicates that the trigger hit was early and displays how far away from the reference tone it was in milliseconds. “Super-Right-on” hits that do not fall exactly on the reference tone, but are early by less than 15 milliseconds, also appear in this location.
  25. **Visual Guide:** A set of lines in the square that flash exactly on the reference beat.
  26. **Late and “Super-Right-On” Hit Box:** Indicates that the trigger hit was late and displays how far away from the reference tone it was in milliseconds. “Super-Right-on” hits that do not fall exactly on the reference tone, but are late by less than 15 milliseconds, also appear in this location.
  27. **Very Late Hit Box:** Indicates that the trigger hit was very late (beyond the maximum millisecond value set for “Late” trigger hit) and displays how far away from the reference tone it was in milliseconds.
  28. **MCU Connection:** Displays the connection status of the MCU.
  29. **IM Data File:** Displays the file that is currently open for training.

### Checking the Connection and MCU Time Available

1. With the IM program open, verify that the MCU is connected by locating the “IM Indicator” box at the bottom center of the IM program. Within seconds of opening the program, the words should change from “MCU not connected” to “X Hours Remaining on MCU” (Figure 11). Before any training can take place, the MCU must be connected.



Figure 11

2. The MCU should currently have ample time for performing IM self-training; however, it is a good habit to check that there is enough time available prior to a training session with an individual.

- To check the amount of time remaining on the MCU, view the IM Indicator (Figure 12) at the bottom of the IM program screen.  
**NOTE:** The program must be operating, and the MCU must be connected to view the minutes. If the number of minutes is below 600, reminder messages will begin to appear after connection.

**58 Minutes remaining on MCU**

Figure 12

## Creating a New Data File

- Once connected, click "File" then select "New" from the program menu bar.
- Select from "This Computer" or "eClinic". This will determine where your file will be saved.

**NOTE:** Use "This Computer" if your client will not be using IM-Home at the time of creation. Your client can choose to use IM-Home at a later date and his data from the computer can be synced with his home data. Choose "eClinic" if your client will be using IM-Home at the time of creation. This option requires internet access and IM-Home Certification.

### This Computer:

- A "New File Dialog" window will appear (Figure 13). Enter your name (the provider) where it asks for "Trainer Information." Do not use the space bar when typing in the provider's first and last name or the software will not allow you to save the file. The tab function may be used.

Enter your client's first, middle and last initial where it asks for "Trainee Information." If a middle initial is not entered, the IM software will automatically enter an 'X' for the middle initial (i.e., AXV). The "Numeric ID" must be four digits, and may not be all zeros. You may opt to use the last four digits of your client's social security number, the year, or some other valid four digit number. Please select the preferred hand used for training and gender. Enter your client's birth date.

The screenshot shows a 'New File Dialog' window with the following fields and options:

- Trainer Information:** First Name: [text input], Last Name: [text input] (maximum 10 characters per field).
- Trainee Information:**
  - First Init.: D, Mid Init.: A, Last Init.: D
  - Numeric ID: 1234 (4 digits)
  - Preferred Hand: Left (selected), Right
  - Gender: Female (selected), Male
  - Birth Date (mm/dd/yyyy): [text input]
- Buttons: CANCEL, OK, DESIGN AVATAR (with 'Enable Avatar' text above it).

Figure 13

- Click the "OK" button.
- A "New Interactive Metronome Database" window (Figure 14) will then appear with the default file name, which is automatically generated from using the first, middle, and last initials appended with the Numeric ID. For example, if the individual's information is entered as shown above, the default file name will be DAD1234.impd. If there is no middle initial, an "X" will be used instead (DXD1234.impd). The user can change the default file name if desired, however it is recommended that providers take appropriate measures to assign file names that protect privacy and



The eClinic is IM's online therapy management tool that enables you to manage your clients IM-Home training plan remotely. The eClinic allows you to assign and modify training plans, view reports and send messages. The IM Pro 9.0 software is compatible with the eClinic, allowing your client's data to remain in one file.



### FUN FEATURE!

You may also select to use an avatar for training. Great way to get your clients excited about IM.

comply with Health Insurance Portability and Accountability Act (HIPAA) requirements.

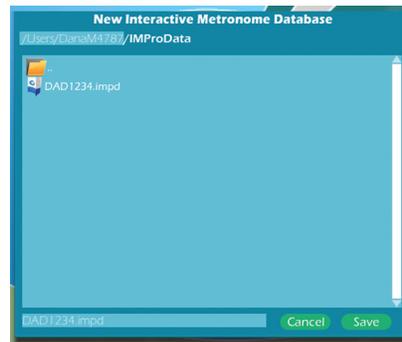


Figure 14

6. Verify that the folder is the desired folder in which to save the new file; otherwise, browse for the folder.
7. Click “Save”.
8. Your new file is now open. To confirm this, look at the bottom of the screen in the “IM Indicator” panel. You will see that it says “MCU Connected,” the number of minutes remaining on your MCU (i.e., 1126 minutes remaining on MCU), and the name of the file you’ve just created (i.e. DAD1234). When there is no file selected, it will read “NO FILE OPEN.”

eClinic:

9. If you choose to create a new file through the Pro software on the eClinic, a dialog box will appear prompting you to create your file in the eClinic. The program will minimize and open the eClinic. You will use your Provider ID and password to login. If you do not know your ID & password email [support@interactivemetronome.com](mailto:support@interactivemetronome.com).
10. Files created using the eClinic through the IM Pro will only function with the Pro software. In order to use the eClinic file with the IM-Home software, an IM-Home must be purchased and authenticated online. This will link the two programs together for your client. You must become IM-Home Certified to use the eClinic. Information about getting IM-Home Certified can be found at [www.InteractiveMetronome.com](http://www.InteractiveMetronome.com) (click on Continuing Education).

## Technical Help

If you experience technical problems during the certification process, click on the “Help” feature (Figure 15) or refer to the Technical Reference in the appendix of this manual. If you are unable to resolve the technical problem after consulting these references, contact IM @ 877-994-6776 and select the menu option for technical support.

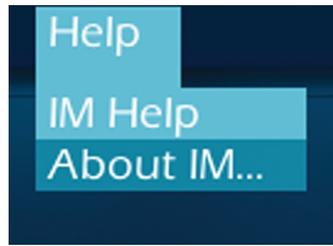


Figure 15

## HISTORY SNIPPET

When IM's inventor, Jim Cassily, moved the IM out of the music studio one of the first he worked with were students diagnosed in the autism spectrum (ASD). As the IM became more widely known Jim had the opportunity to work with the son of an acquaintance. The little boy was 10 years old and had severe motor impairments as a result of major medical problems since birth. His name was Jimmy and among his challenges was that he was completely dependent on a rolling walker for ambulation. When Jim started working on improving little Jimmy's motor coordination it wasn't all smooth sailing. Jimmy found the IM exercises a little frustrating. The challenge was great but the IM sounds and scores helped keep him focused on the demanding exercises. Shortly after he started on IM Jimmy showed dramatic improvement as first evidenced in his improved handwriting. Within a few weeks, and to his mother and father's amazement, Jimmy showed off for his parents by setting the walker aside and ambulating independently for the first time.

As of 2006 Jimmy is a college freshman and enjoys playing basketball, managing the baseball team and swimming competitively in the summer. IM has come a long way since Jimmy helped us take our first steps too.

