

## Application Note 186      Psychological Assessment using the TSD115/115A

### Overview

The ability to collect and display psychological responses via a self reporting mechanism can be implemented using the TSD115 Variable Assessment Transducer with the MP160 or MP150 System. The MP160/150 System with *AcqKnowledge* provides considerable flexibility when performing these kinds of measurements.

The following procedure illustrates how to perform a four channel Psychological Assessment Test using the MP160/150 System.

### Equipment:

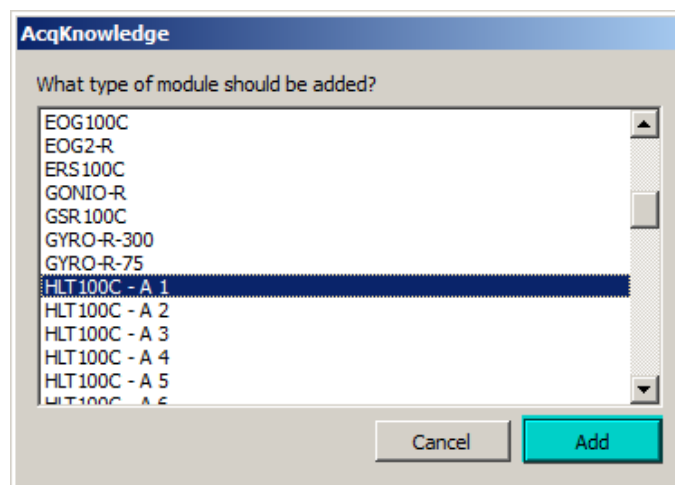
- One MP160/150 System
- One HLT100C or AMI100D module
- Four TSD115 or TSD115A Variable Assessment Transducers

### Hardware Setup:

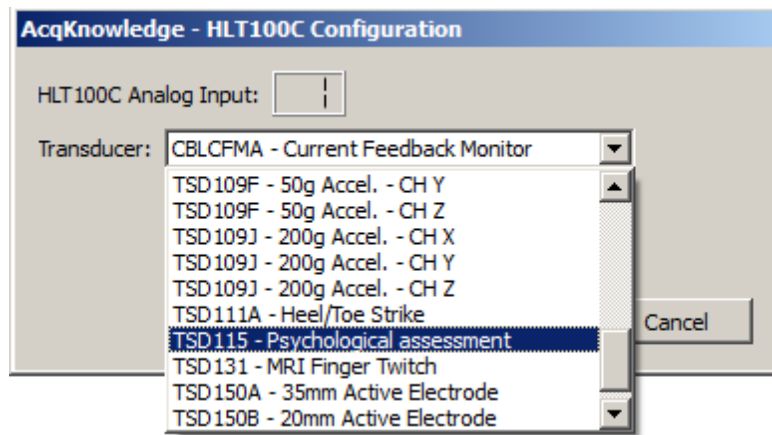
1. Snap the HLT100C/AMI100D module onto the left side of the UIM100C (MP150) module. (The MP160 System uses the HLT100C or AMI100D only.)
2. Plug the four TSD115 Variable Assessment transducers to channels 1 through 4 on the HLT100C/AMI100D.
  - Any four channels could be used, but this application note assumes channels 1 through 4 are the ones chosen.
3. Make sure the MP160/150 hardware is powered ON and connected properly to the computer.

### Software Setup

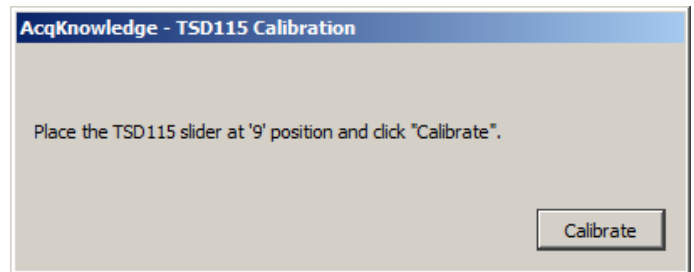
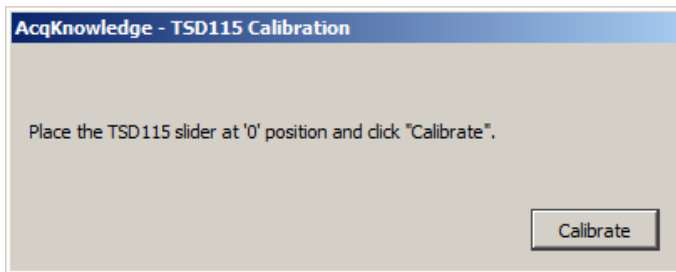
1. Launch the *AcqKnowledge* software and choose “**Create/Record a new experiment.**”
2. Choose HLT100C – A1, or AMI100D – A1 from the Module Setup menu and click “**Add.**”



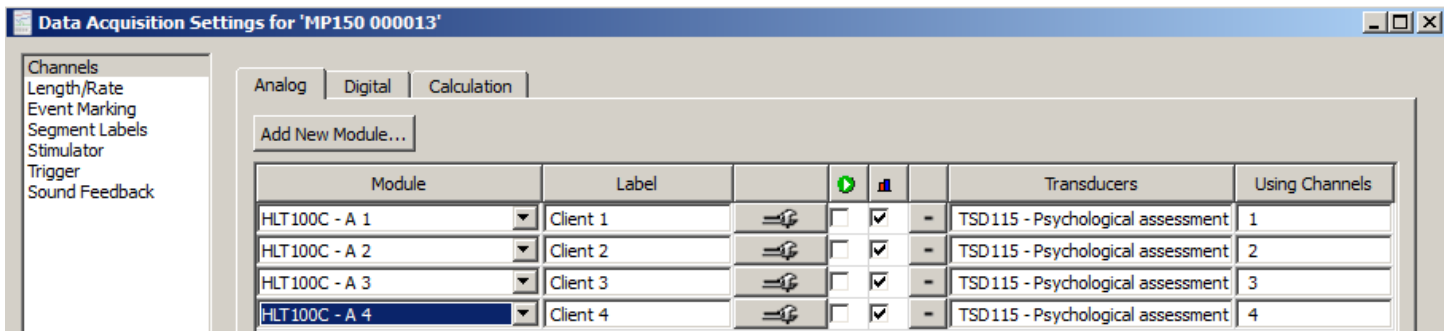
- Choose “TSD115- Psychological Assessment” from the HLT100C/AMI100D Configuration menu and click OK.



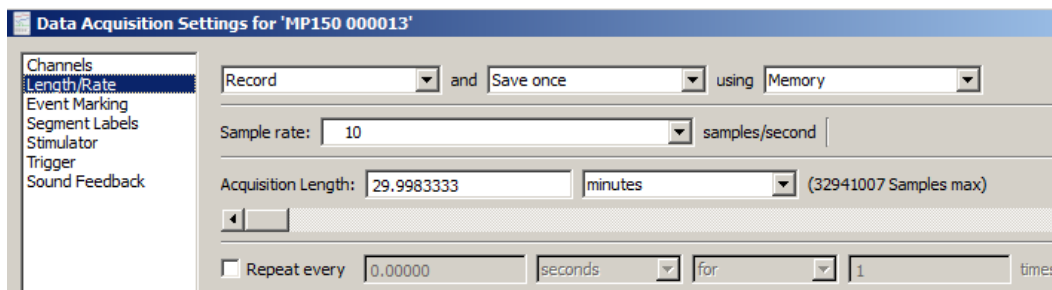
- Follow the Calibration prompts as they appear.



- Click “Add New Module” and repeat Steps 2-4 for Channels A2 through A4 (Choose HLT100C/AMI100D, TSD115, and follow Calibration prompts.)
- Label each Module channel “Client 1” through “Client 4.”

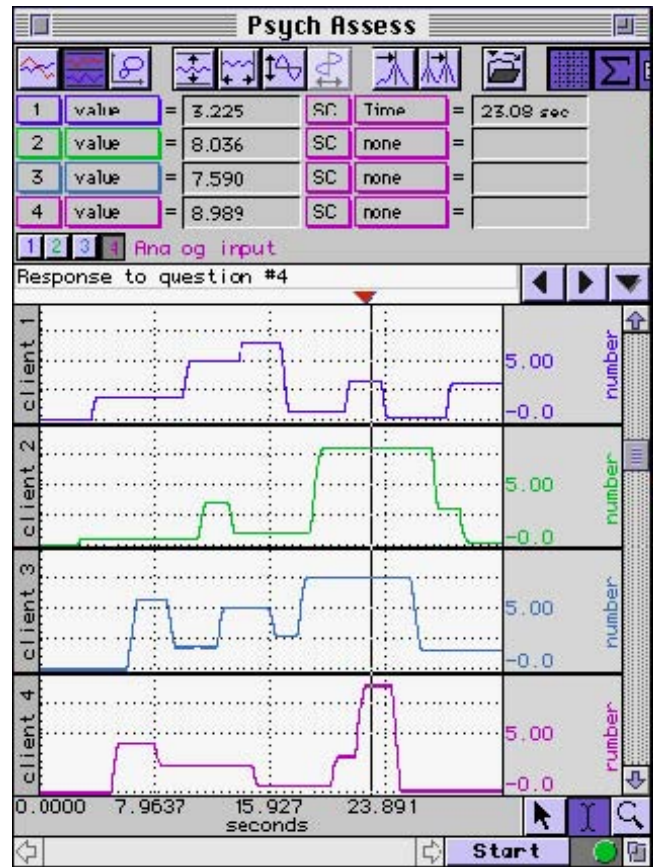


- Select “Length/Rate” from the MP160/150 menu.
- Choose the sampling rate and select the desired recording period.
  - Generally, a sampling rate of 10 samples/second is more than adequate to record from the TSD115/115A.
 The following dialog illustrates a possible setup.



## Recording

Begin recording data by pressing the **Start** button in the Graph window. The data will begin scrolling across the screen as shown below. Use the *AcqKnowledge* **Event Markers** feature to identify the points in time that certain events take place during recording (questions asked, slides shown, responses given, etc.). Click the **Stop** button when done.



Collected Data

## Analysis

The graph above shows a measurement which identifies the responses (on a scale from 0 to 9) of the four clients to a particular question. To identify the response for each client:

1. Set a measurement box for **“Time”** (Since all channels share the horizontal time scale, you can use **“SC”** for selected channel rather than choosing a particular channel.)
2. Set a measurement box for each channel to **“Value.”**

In this case, at 23.08 seconds into the recording, the responses to question four were:

**Client 1** 3.225  
**Client 2** 8.036  
**Client 3** 7.590  
**Client 4** 8.989