

# Get familiar with GlobiLab in **11** easy steps




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## STEP 1




### Download the **GlobiLab** application install

- Tap the iPad App Store icon 
- Search for “GlobiLab”
- Press the FREE green key to install the application



## STEP 2







**View iPad internal sound and accelerometer**

- Tap Meter view  to see sound and accelerometer sensors
- Press the “I” key (above Meter view) to see one of the Meters
- Tap this Meter and scroll the sensor wheel to select sound (first sensor on the list)
- You may select a different Meter type   from the horizontal icon line
- View the changes of sound level (quiet is about 20 dB, noisy is 80 dB and above)



## STEP 3

**Line graphs, bar graphs and tables**

- Tap the SETUP icon  and enter the SETUP screen. This dialog box allows you to select sensors, sampling rate and no. of samples for the next data recording
- From the sensors select iPad Sound
- In the Rate Wheel select 10/Sec (collecting 10 samples per second)
- In the samples Wheel select 1000
- Tap the Line Graph icon 
- Tap the RUN icon  to start recording and observe the graph build on the screen
- Tap the Bar Graph view  to see the sound level as a bar graph
- Tap the Table view  to see a table of sound level values
- Use the STOP icon  to stop recording



## STEP 4



**Graph annotation**

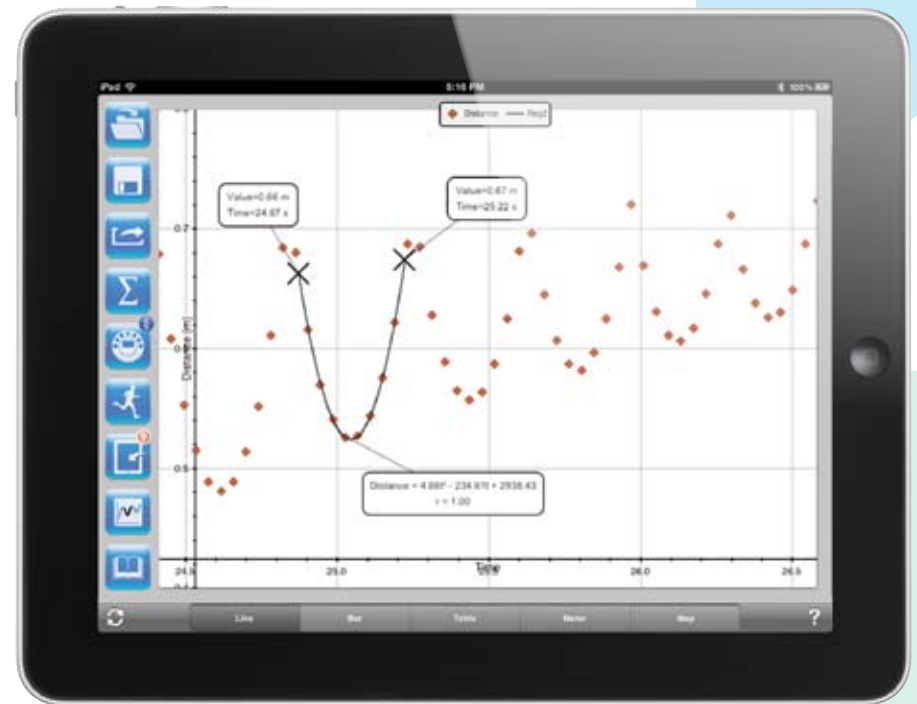
- Use a long touch anywhere on the background (not on a graph) to create an empty annotation. The edit annotation box opens automatically:
  - Edit or write an annotation
  - Add an image using the camera or the image gallery
  - Remove the annotation



## STEP 5


**Open a stored experiment file (Physics)**

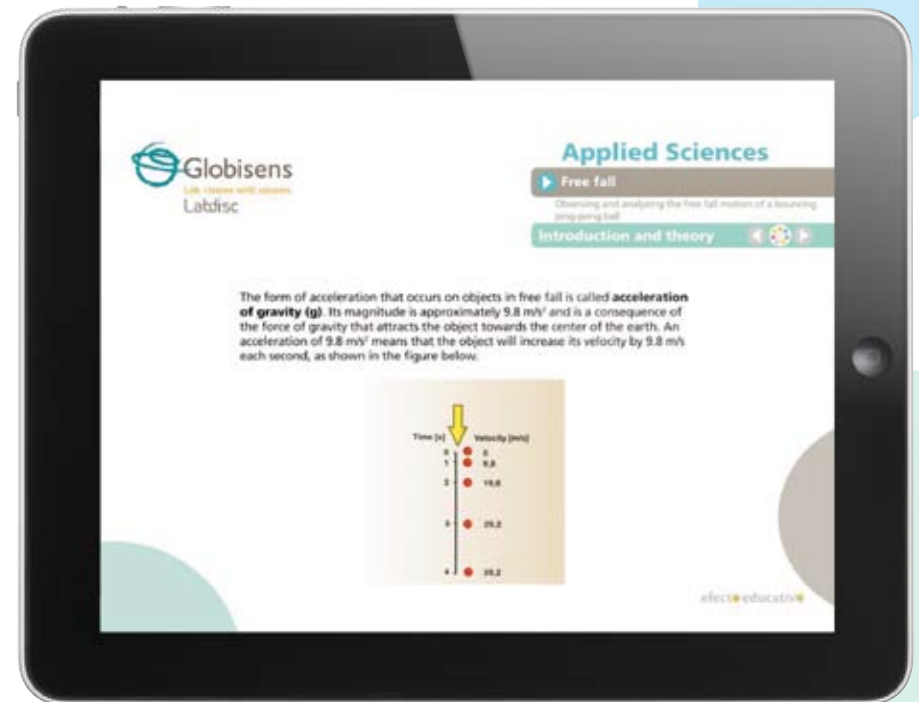
- Tap the open icon  and select “Free fall”. This graph describes a real-time Labdisc Distance sensor recording of a ping-pong ball’s bounces on a table. See the experiment movie:  
<http://www.globisens.com/resources/experiment-videos>.
- Long touch on the graph to add a Marker
- Touch the Marker cross and drag it with your finger. As the Marker follows the graph line notice the data in the text box changing.
- Tap the graph twice to view the actual sampling points
- Long touch the graph to add a 2nd Marker
- Place a Marker at the beginning and end of a single ball jump
- Tap the Curve Fitting icon  and select a Quadric Regression to get the mathematical equation for the ping-pong ball jump (from this equation we can calculate Earth’s gravitation)



## STEP 6

**Use the built-in curriculum**

- Tap the activity book icon 
- Select “Free Fall” activity
- A step-by-step cookbook opens describing the Newton’s 2nd Law experiment







## STEP 7

**Use of Map view in a field trip (Environment)**

*Recording GPS together with other Labdisc sensors enables the GlobiLab software to plot these sensors over Apple maps*




- Make sure the iPad is connected to the Internet
- Tap the Open icon  and select “Walk in the park”. Here the Micro Climate of a city park is compared to a nearby busy junction. See the experiment movie at: <http://www.globisens.com/resources/experiment-videos>
- Tap the color scale on the left and select Amb. Temperature. Observe the dramatic temperature change while walking from the busy junction to the park
- Tap the colored samples on the map to get a Marker with the temperature value
- Pinch to zoom in/out on the map
- See the experiment data in a Table, by tapping Table View  and observe GPS longitude and latitude values
- View other experiments like this such as “Trip to the Dead Sea” or “Flight from Tel-Aviv to Istanbul”



## STEP 8

**Pairing the Labdisc with the iPad**

*This is a one-time action needed when you connect your Labdisc to the iPad for the first time.*

- **On the Labdisc:**
  - a. Press the *Scroll* key to launch the Labdisc menu
  - b. *Scroll* and select the configuration  menu
  - c. In the configuration menu *Scroll* and select the Bluetooth  icon
  - d. In the Bluetooth menu select “*BT pairing*”. The Labdisc will produce a long “beep” sound and switch to “*BT pairing*”
- **On the iPad:**
  - a. Launch the iPad Setting 
  - b. Open Bluetooth. Make sure the iPad Bluetooth is on
  - c. From the Devices list click the Labdisc XXXX where the XXXX digits match the last 4 digits of your Labdisc S/N sticker (located on the Labdisc back cover)
  - d. The iPad will ask for a PIN code. Enter “1234” and click Pair
  - e. The iPad will show Labdisc\_XXXX connected



## STEP 9

**Set wireless communication between the Labdisc and the iPad**


- Go to iPad Setting > General > Bluetooth and select your Labdisc from the devices list
- The iPad immediately connects to your Labdisc, changing its status to “connected”
- Close setting and open the GlobiLab software



## STEP 10

### Download Labdisc stored measurements to the iPad

*The Labdisc can store up to 127 different experiments. This is very useful when conducting long measurements.*

- Tap the Download icon 
- The iPad will list all Labdisc stored experiments. Each line on this list shows what sensors were recorded, at what sampling rates and for how many samples. In addition it indicates the date and time of the recording
- Click on one of the lines in the list. The Labdisc transfers the data to the iPad
- After all the data is transferred, the iPad will show a graph of every collected measurement



## STEP 11

**Online help**

*GlobiLab offers an online help for each of the 5 views: Line, Bar, Table, Meter and Map.*

- Open the relevant View
- Tap on the HELP icon  and observe a list of features and controls



[www.globisens.com](http://www.globisens.com)

