

Installation Guide

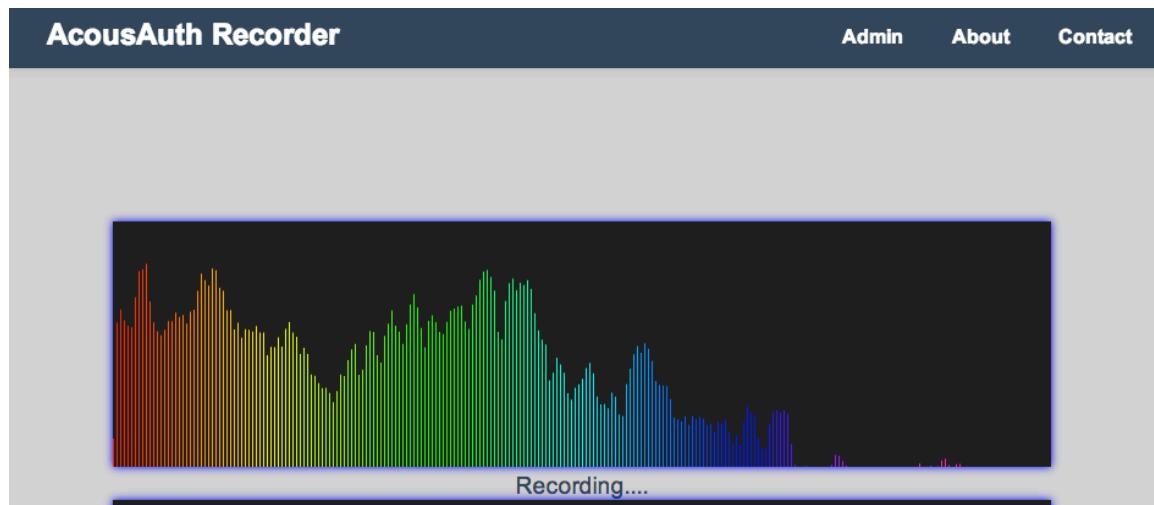
Our project's front-end GUI is based on HTML5 Web Audio technique. Therefore, a compatible web browser is needed. You can check the compatibility table in this link: <http://caniuse.com/audio-api>

In our experiment, we use **Chrome (Version 29.0.1547.65)** OSX version.

After enter our URL (<http://acousauth.com>) and press the "Enter" button. The browser will ask you to grant permission for access your microphone. Please click "Allow" button. (Shown below)



After click the button, our front-end GUI should be able to access your computer's microphone. A rainbow colored volume graph will be displayed. It shows the real-time microphone status. (Shown below)

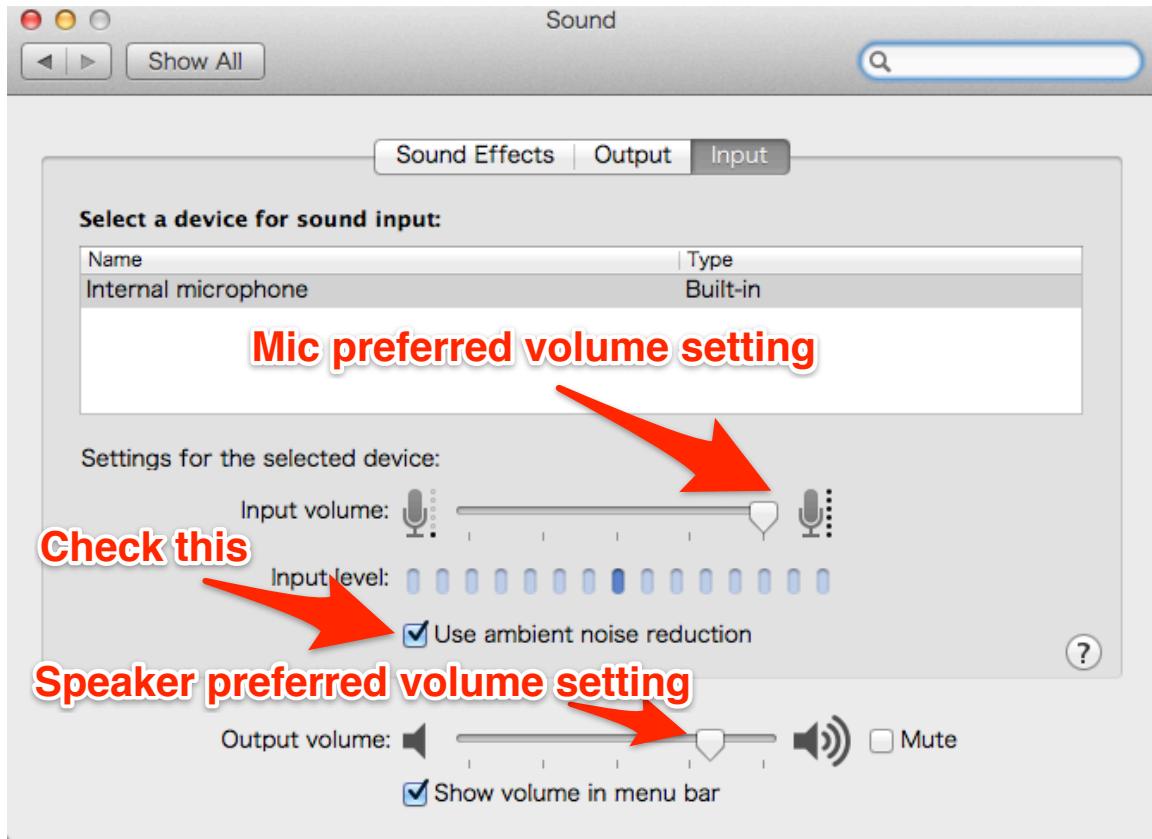


Since the speaker, microphone and multipath affect the transmitted noise, we need first time user (or a new device) to broadcast and record a random noise to help our system perform parameter calibration process.

Please follow the following steps:

1. Set your speaker and microphone to a preferred volume. For microphone, please select the maximum input volume. For speaker, please set your system volume

to 70% - 80%. These parameters are varied from different devices. We only tested MacBook Pro (13-inch, Mid 2012), and Mac Air. For OSX system, you can set your Input and Output Volume as follows:



2. Go to the following URL (<http://acousauth.com/adjusting>), After enter the URL and press the “Enter” button. The browser will ask you to grant to permission for access your microphone.
3. Before click “Allow” button, please make sure you can in a quiet room without noise.
4. Then, you can click the “Allow” button. (Shown below)

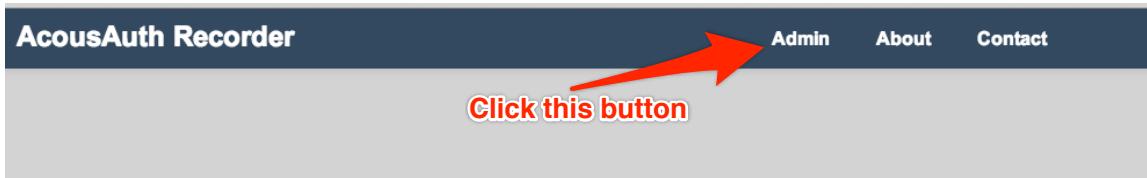


After click the button, our front-end GUI should be able to access your computer's microphone. And a random noise will be broadcasted. Please remain quiet before the recording process finished.

Once finished, we will upload the recorded data to our server for training proposes. You can see the status bar changes to “Success” -- It means you successfully finished the training.



Then you can go back to <http://acousauth.com/>
You can add new user by clicking “admin” button.



Then you need to login our system. The default user named and password for admin user is:

Username: **admin**

Password: **admin**

A screenshot of a login form titled "Login". It has two input fields: one for "username" containing "admin" and another for "password" containing "*****". Both fields have small icons next to them: a person icon for the username and a lock icon for the password. Below the fields is a large green "Login" button.

After you enter the above info, you can click “Login” button to log in our authentication system.

AcousAuth Recorder

[Admin](#) [About](#) [Contact](#)

[Add new user](#)

Go back to the auth page

Admin - Users

USERNAME	PASSWORD	AUTHORITY	CREATED DATE		
admin	d033e22ae348aeb5660fc2140aec35850c4da997	admin	Wed Sep 4 17:44:51 2013		
cscs	672c346d8ff4d6032c91ad794eb087b26ab6b3fb	admin	Thu Sep 5 02:50:50 2013		
kuiren	faf8d203b3f952d1eba5401fbf4222dbe52d61a9	admin	Thu Sep 5 15:03:08 2013		
wangjun	d2edfc4bb451960bb8e9f22218a4f762327b8d55	admin	Thu Sep 5 17:23:33 2013		
wj	630458f5671d4f281199f0990b054b0ebbc6722e	guest	Thu Sep 5 17:53:20 2013		
tu	a3da4c6307d230e1f1c8ad62e00d05ff1f1f5b52	admin	Thu Sep 5 22:06:44 2013		
csc	672c346d8ff4d6032c91ad794eb087b26ab6b3fb	admin	Thu Sep 5 22:20:55 2013		
f	ed70c57d7564e994e7d5f6fd6967cea8b347efbc	admin	Thu Sep 5 23:01:12 2013		

You can add new user by clicking the blue “Add User” button. Then you will redirect to a user registration page.

Register

User

Lock

Lock

Guest
 Admin

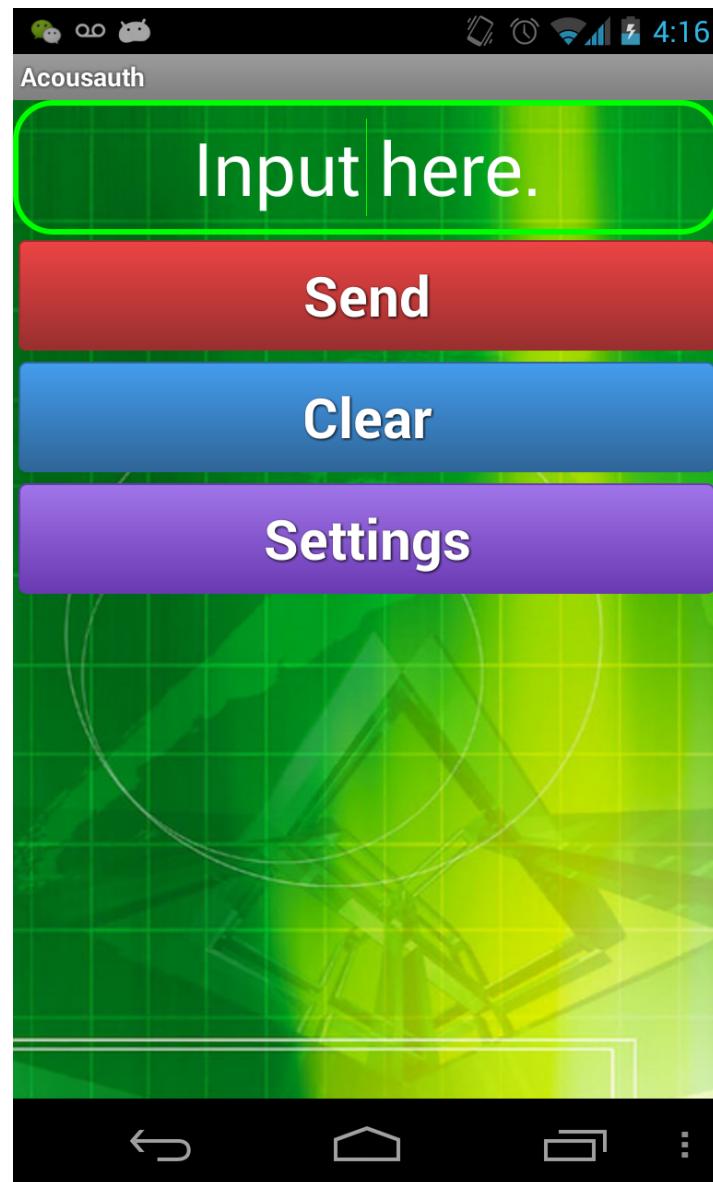
[Add](#)

In this page, you need fill out the username and the password. The username is just

use for user identification, the password is the actual info you need to memorize. In this page, you can choose new user type: Guest or Admin. A Guest user can open the door by typing the correct password, but it cannot login into the management interface.

After entering the info, you can click “Add” button to add a new user. Then you can go back to <http://acousauth.com/>

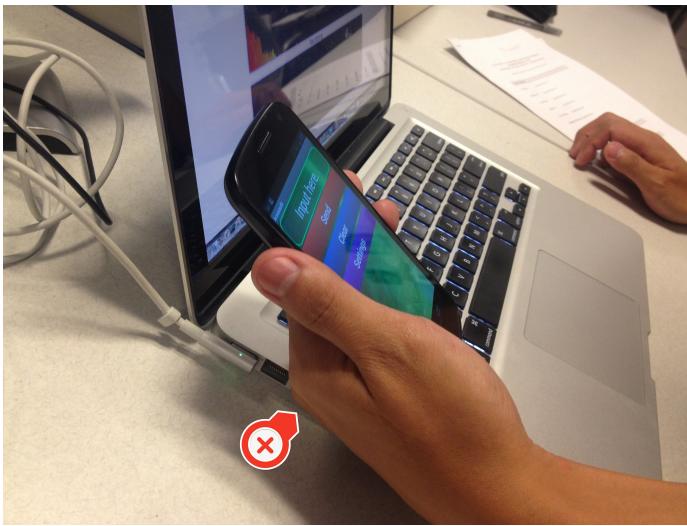
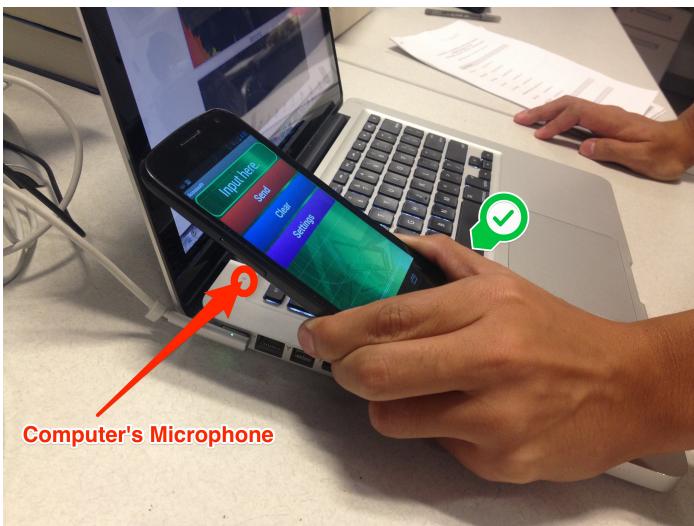
Make sure the microphone is allowed and you can open your smartphone, install the apk file and open our app “AcousAuth”. You will see a screen like this:



You can type the password you just set to the input form. Once you finished, you can hit “send” button and the smartphone will broadcast a beacon sound; your computer will then broadcast the noise signal and record the mixed signal. To achieve a correct result, you need make sure the speaker does not covered by your hand and make sure the distance between you phone’s speaker and computer’s microphone is less than 3cm.

Here are some tips:

1. Please make sure your hands do not cover your smartphone’s speaker (especially the speaker on the back)



2. Please make sure your phone is close to your computer’s microphone (within 3cm)