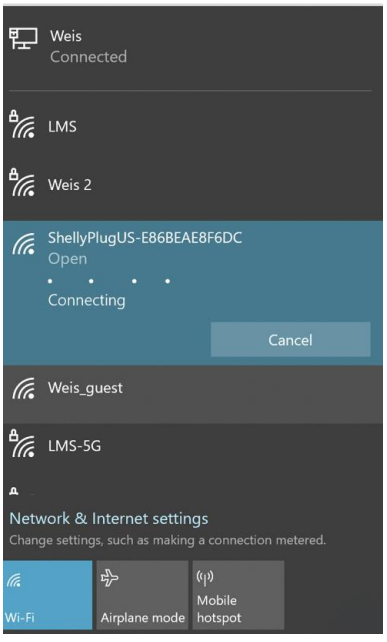
Limited Mobility Solutions, Inc. – Bill Weis (V2)

Part 1 – Using the Shelly Plug with the Preconfigured IP Address

This document will outline the steps required to create a solution for those who use a Tobii device (Windows Based) and have a need to alert a caregiver when at home, or if in a care facility or hospital this can enable them to use their Tobii device to activate the nurse call system. (We will provide the hospital kit which is an adapter and some cables).

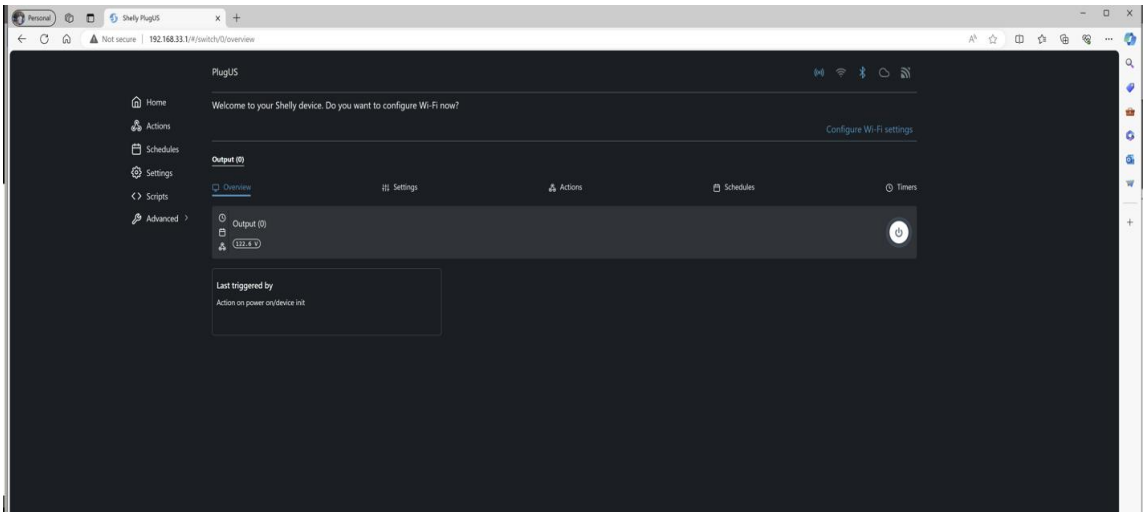
Using the Shelly device preconfigured with the default gateway address is the simplest solution. You may need to add a USB wifi adapter to your Tobii since this approach will tie up your current wifi adapter. (Cudy AC 650 and tp-link AC600 are options of add-on wifi adapters). Your current wifi adapter could continue to be used for email, etc, while this added wifi adapter (Cudy, tp-link or other brands) could be dedicated to the Shelly device). ***Remember to click "Connect Automatically" on the adapter that is connected to the Shelly device***. See how to connect below.....

This plug comes configured as a gateway with address 192.168.33.1. Go into Wi-Fi settings and **connect to the ShellPlugUS-xxxxx device.**



Part 2 – Testing the Shelly device and creating the .Bat file

The next step is to open a browser and type 192.168.33.1 (You should see the screen below)



You can now click on the power button and you should hear an audible click coming from the Shelly device.

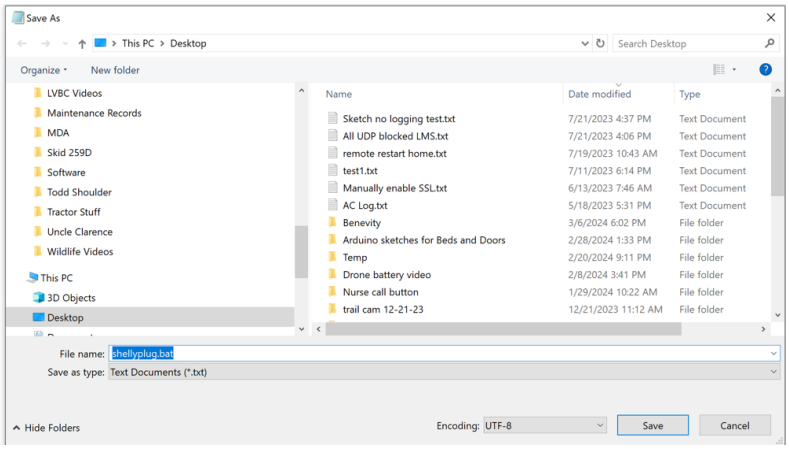
We can now test the Shelly Plug with a simple .bat program that turns the plug on, waits 5 seconds and then turns it off. Change the timeout period as desired.

Here is the .bat program contents that you need to create using **Notepad**. Once the commands are in Notepad, save it as **ShellyPlug.bat** by clicking **File->Save**.

```
curl http://192.168.33.1/rpc/Switch.Toggle?id=0

timeout /t 5

curl http://192.168.33.1/rpc/Switch.Toggle?id=0
```

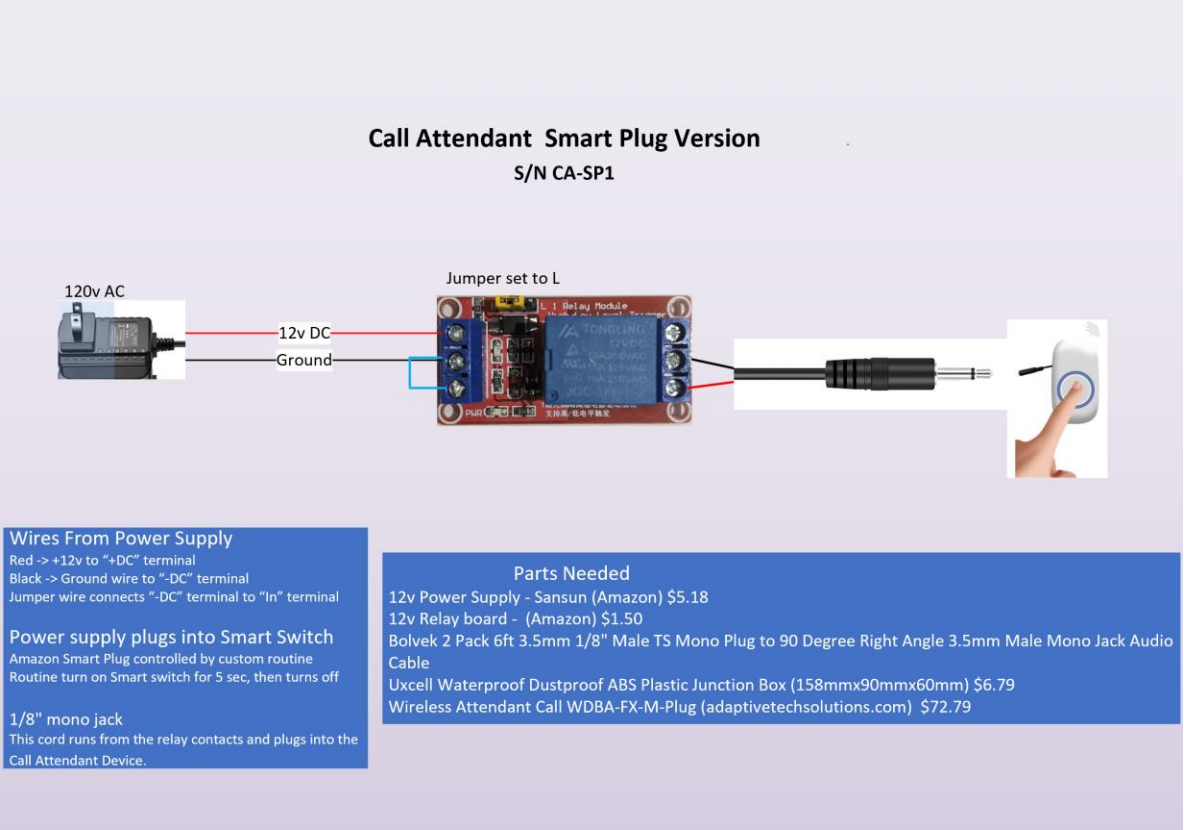


On a Windows based Tobii, copy Shellyplug.bat to the following directory:

Documents\Communicator 5\User 1\My Page Sets

*(This assumes **User 1** is the active folder for Communicator 5)*

Part 3 – Building the Relay Box



This relay box is plugged into the Shelly Plug and when the Shelly plug is powered on, the relay contacts close simulating a button push.

The 1/8” plug connects to the Attendant Call device from Adaptivetechsolutions.com. This is the home based solution.

For the hospital or care facility solution, unplug the 1/8 cord from the AdaptiveTechSolutions device, and plug the 1/8” plug into an adapter that converts it to the ¼” plug needed for the hospital nurse call system. (From Amazon Disino 1/4 Mono to 3.5mm Stereo Adapter, Gold Plated 6.35mm TS Male Plug to 1/8 inch TRS Female Audio Connector - 2 Pack)

And a ¼” x 15’ cord to connect to the Nurse Call station.

Amazon - Devinal 1/4 Extension Cord, 1/4" Male to 1/4" Female Cable, 6.35mm Quarter inch Gold Plated Audio Cable Stereo Cord, 15 Feet 4.5Meters

Finally add a 1/4 “ Y-Cable so the standard nurse call cord can still be connected while we add this solution to the other side of the Y-Cable.

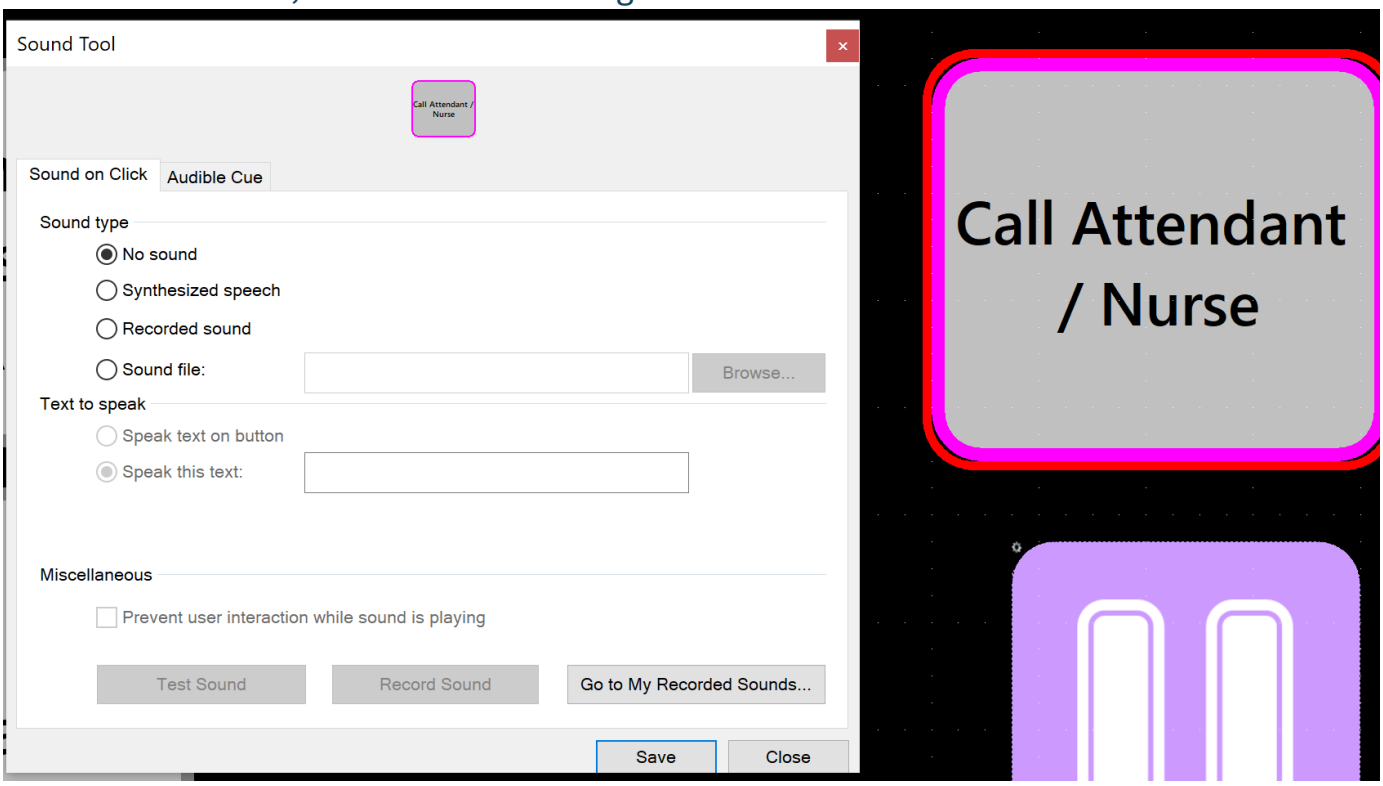
Pig Hog PY-M214M Mono 1/4" (Male) to Dual Mono 1/4" (Female) Y-Cable, 6", Black

Part 4 – Configuring the Tobii

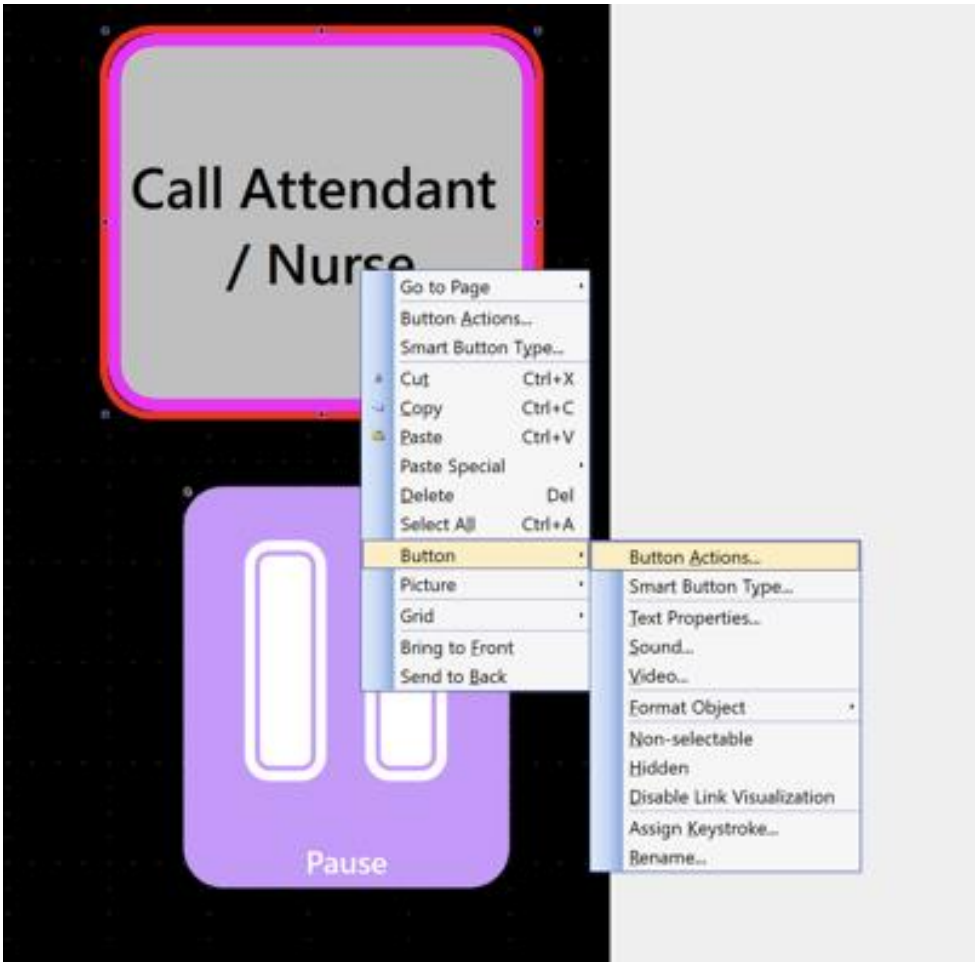
We need to create a button on the Tobii screen to initiate the Call Attendant or Nurse Call action. This document assumes Communicator 5 on a Windows based system.

Place the **Shellyplug.bat** file described on page 2 in the C:\Users\wmwei\Documents\Communicator 5\User 1\My Page Sets> folder

In Communicator 5, create a button configured with no sound.

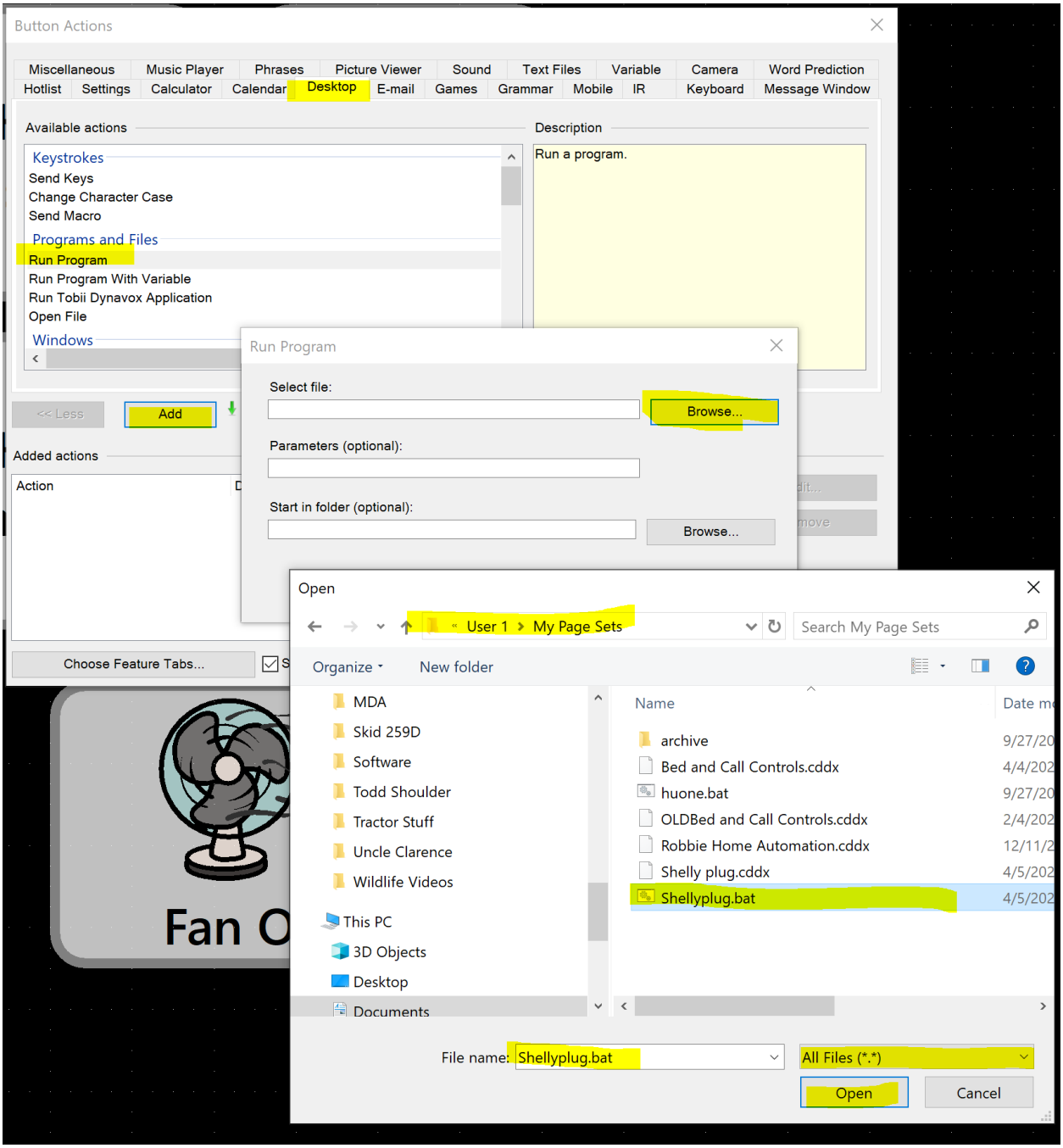


Right click the button to configure the button actions



In **button actions,** select **Desktop**, then **Run Program**, then click **Add**. This will open a window where you will click **Browse** to define the path to the **.bat** file, click the drop down to switch from .exe to **All Files** (*.*) and click Open. Then click OK in the next window to save this change.

Click File -> Save in the upper left corner to save the change to the pageset.



Part 5 – Recap of the important points

1. **We need a relay box - contains a 12v relay that is configured to close the normally open contacts when the relay is powered on, we need a 12v power supply, and a short cord with a 1/8” male plug.**
2. **The 1/8” plug from the relay box connects to the AdaptiveTechSolutions call attendant device for use in the home.**
3. **If in the hospital, disconnect the 1/8” plug from the AdaptiveTechSolutions device and add the 1/8” to ¼” adapter, plus add the ¼” extension cable and finally the Y-Cable that allows the standard nurse call cord to be connected AND the solution described above. Both should be connected at the same time for redundancy.**
4. **Here is a video from YouTube -** https://youtu.be/BHvJBTbJnFA