

Requirements:

1. Be able to use Tobii to alert Caregiver

Solution – High Level:

We provided a solution that allows Michon to use a custom button we created in Communicator 5 to initiate an alert notification to the Adaptive Tech Solutions wireless Wi-Fi receivers so the caregiver can respond. Michon was actually in the hospital when we first worked with her, so she started with the Hospital Kit which allows the same button on the Tobii screen to ring the nurse station.

Details of the Solution

1 – Be able to use the Tobii Device to Alert Caregiver – Michon has ALS which has progressed to where Michon cannot use hands or voice to alert a caregiver. We provide a solution that allows Michon to use a custom button on his Tobii to ring the Nurse station. This same kit has been will be used at home to alert the caregiver by connecting the Adaptive Tech Solution.

Call Attendant for Home and Hospital for Tobii User

Home - use relay box + WDBA-FX-M-Plug Kit

Hospital – replace the button with the Hospital Kit

**Parts Needed**

Adaptive Tech Solutions Attendant Call WDBA-FX-M-Plug \$75.00
 12v Power Supply - Sansun (Amazon) \$5.18
 12v Relay board - (Amazon) \$1.50
 1/8" 3.5mm Male plug w/wire \$3.00
 uxcell 100mmx68mmx40mm \$10.49
 Shelly Plug US (Smart plug) \$21.00
 Hospital Kit -
 3.5mm female to 1/8" male \$8.82
 1/8" mono male to dual mono 1/8" female \$10.18
 1/8" male to 1/8" female 15ft extension cord \$12.59

Requirements for the Eye Gaze device – The eye gaze device must be able to execute a curl command. A Windows Based Tobii running Communicator 5 works, cannot speak for other platforms. The most straightforward way of implementing the Shelly Plug US is to use the default gateway IP address. A direct connection is then made between the Tobii and the Shelly Plug. This approach would require adding a dedicated USB Wifi device to the Tobii if the user wants to be able to use the Tobii for internet related activities. (Browser, email, etc). Therefore make sure the Tobii has an available USB port, otherwise you need to add a USB Hub. The Shelly Plug can utilize DHCP, but this would require reconfiguring the Shelly plug when moving between facilities.

Code For Shelly Plug US on Tobii (Call.bat)

```
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
```

A custom button on the tobii screen executes the above code

Wires From Power Supply

Red -> +12v to "+DC" terminal
 Black -> Ground wire to "-DC" terminal
 Jumper Wire connects "+DC" terminal to "In" terminal

Power supply plugs into Smart Plug

Shelly Plug US is controlled by an object on the Tobii screen that executes a small batch File. (See code)

Relay wires to Adaptive Tech Solutions button – 3.5mm (1/8")

Red wire to relay Common terminal
 Brown wire to Relay Normally Open terminal