

Robbie Ivey Hospital Nurse Call Project – Detailed view (v1)

By Bill Weis

Requirements:

1. Robbie depends on his Eye Gaze device when in the hospital and needs to be able to call the nurse when needed.

Solution – High Level:

1. We designed a solution using commercially available parts to make it possible for Robbie to call the nurse from his eye gaze tablet.

Details of the Solution

1 – Use Eye Gaze in hospital to be able to activate the Nurse Call system - Unlike many care facilities that allow Alexa smart speakers, it is difficult to find a hospital that will let you to bring in Alexa devices due to privacy concerns, so that eliminates the obvious solutions that could have been used to activate the nurse call system. Robbie has a tablet with eye gaze software on it, but in his case the tablet was not equipped with an infrared device. Most Tobii Dynavox devices have Infrared built-in. We had to start by adding a USB-UIRT IR device to his tablet. We ordered a USB-UIRT device from www.usbuirt.com. Once we installed the drivers for that device, we were able to create some custom buttons in Communicator 5 that activated the IR Relay (Call Nurse = On) and a separate button to deactivate the Nurse Call.

What is interesting is the fact that if you add a short cable that converts from the ¼" plug to a 1/8" plug, you can use the same custom buttons on the eye gaze along with the core infrared box to have an in-home call attendant solution.

By adding a Wireless Attendant Call Button part WDBA-FX-M-PLUG from www.AdaptiveTechSolutions.com (Keep the Switch Adaptation wire) \$72.73 plus a ¼" female to 1/8" male converter cable amazon = [Amazon.com: zdyCGTime CGTime Golden Plated 3.5mm Mono 1/8 inch Audio Male to 6.35mm 1/4 inch Female Jack Converter Cable Cord Adapter \(25CM/10Inch\) : Electronics](https://www.amazon.com/dp/B000000000) \$6.49, you could use the hospital nurse call solution as a home (Call Attendant) solution.



Infrared solution for a Hospital Nurse Call system Initiated by a Tobii or similar eye gaze device

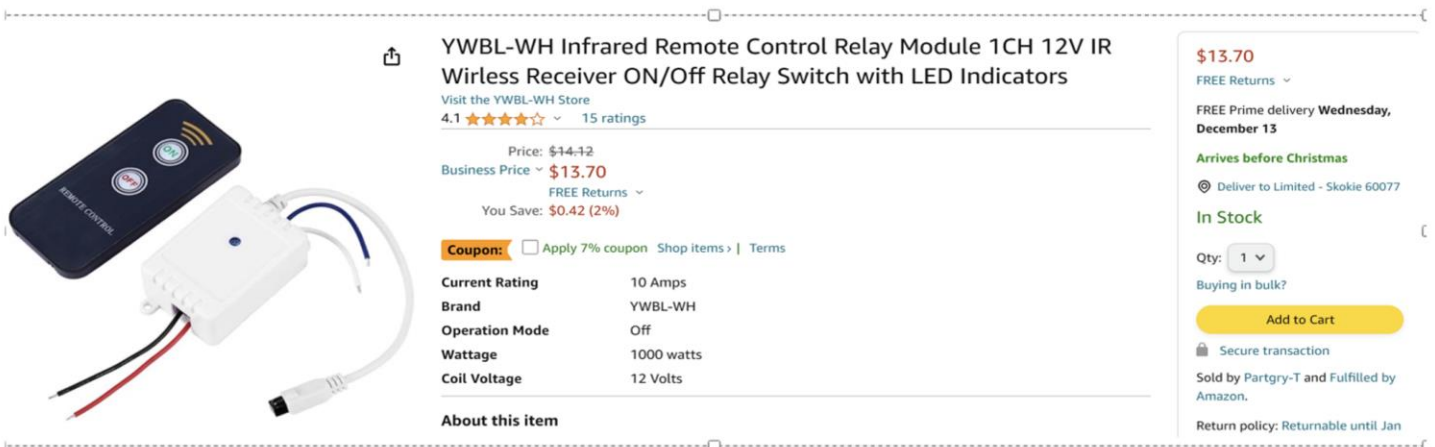


Parts Needed for IR Hospital Nurse Call

Parts Needed

1. Infrared Relay - on Amazon - [Amazon.com: YWBL-WH Infrared Remote Control Relay Module 1CH 12V IR Wireless Receiver ON/Off Relay Switch with LED Indicators : Electronics](https://www.amazon.com/dp/B07MVGQMD3)
2. Small enclosure - On Amazon - https://www.amazon.com/gp/product/B07MVGQMD3/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1 \$6.60
3. Standard Nurse Call cord https://www.amazon.com/gp/product/B072JX6913/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1 \$25.00
4. 12v Power Supply - [Amazon.com: Heart of Tafitj 12V Power Supply AC Adapter to DC 2A 2.1mm X 5.5mm Plug 12V 2Amps UL Listed Power Supply Wall Plug Extra Long 8 Feet Cord for Household Electronics, LED Strip, 24W Max- 1 Pack : Electronics](https://www.amazon.com/dp/B072JX6913)
5. If the eye gaze does not have built-in Infrared, USB-UIRT from Orders@Usbuirt.com is a good option and I tested on a computer with no Built-in IR and Communicator 5. \$55 + \$10 Shipping

The red and black leads are soldered to the red and black of the +12v power supply and the Nurse call cord are soldered to the blue and white wires. (Wire color makes no difference between the Nurse Call cord and the Blue and White wires)



YWBL-WH Infrared Remote Control Relay Module 1CH 12V IR Wireless Receiver ON/Off Relay Switch with LED Indicators

Visit the YWBL-WH Store
4.1 ★★★★★ 15 ratings

Price: \$14.12
Business Price **\$13.70**
FREE Returns
You Save: \$0.42 (2%)

Coupon: Apply 7% coupon Shop items > | Terms

Current Rating	10 Amps
Brand	YWBL-WH
Operation Mode	Off
Wattage	1000 watts
Coil Voltage	12 Volts

About this item

\$13.70
FREE Returns
FREE Prime delivery **Wednesday, December 13**
Arrives before Christmas
Deliver to Limited - Skokie 60077
In Stock
Qty: 1
Buying in bulk?
Add to Cart
Secure transaction
Sold by Partgry-T and Fulfilled by Amazon.
Return policy: Returnable until Jan

Video - <https://youtu.be/y41Mxeyu4ns>