

# YourBell



INEXPENSIVE, RELIABLE USB PRODUCTS

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## Table of Contents

General Information .....	3
Installation.....	3
Software .....	3
USB Driver .....	3
Hardware.....	5
Figure 1 – Hardware Over View	6
Figure 2 – Preferred Wiring – 2 Button Input	7
Figure 3 – Preferred Wiring – 1 Button Input	8
Figure 4 – Single Button Wire – 2 Button Input	9
Figure 5 – Single Button Wire – 1 Button Input	10
Electrical Description .....	11
Warranty .....	12

## General Information

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Congratulations on your purchase of the YourBell. The door chime without limits. The YourBell can be completely personalized by the owner in just a few simple steps. Depending on file types and compression ratios, about 4 minutes of quality audio snippets will fit on the YourBell. The possibilities are endless. The YourBell will play Wave files and MP3s. These can be downloaded from any computer that has a working USB port. The songs can be acquired from the internet or ripped from your favorite CD. The songs can be edited to length and converted to MP3 format using the software package Audacity that is part of the installation. Record your own creations using a microphone, a computer's sound card and Audacity. There are many examples residing on our website at [http://www.bcsideas.com/support\\_ce.php](http://www.bcsideas.com/support_ce.php).

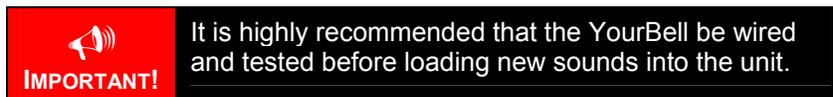
The YourBell has two inputs. Both inputs support a lighted door button. Each input can be set to accept NO or NC contacts. Each input will play its own list of sounds. When an input is received the unit will play the next sound in the list for that input. It will continue to play to the end w/o interruption. If another input is received while the unit is playing it will be ignored. When the sound is done playing the YourBell will service the next input. If the input has a long duration ( a door switch perhaps, the door is held open for awhile ) it will not be seen as an input again until the input is reset first. The length of an input will not affect the servicing of the other inputs. The only time inputs are ignored is while the unit is playing. If more than one input is received simultaneously then a sound will be played for each input in succession.

The YourBell has a powerful amplifier section that can drive two external speakers The volume is controlled using a potentiometer.

An output has been added for the control of external devices. The output can be set to last from ¼ of a second up to 8 seconds or the length of the sound clip being played, whichever is shorter. The output occurs directly after an input is received from either button and just before the sound file plays.

## Installation

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### Software

Install the YourBell Software as follows:

1. Place the CD in an open CDROM drive. A pop up message box will ask if you want to install the software. Press OK. This may take a few minutes.
2. If the message box does not come up then browse to the **Root** directory on the CDROM. Run the program called **YourBell.exe**.
3. This will install the program for loading songs into the door bell, the program for editing songs to length, the program for ripping songs from a CD and documentation.
4. There are extra hardware installation files located on the CD under the folder labeled Documentation

### USB Driver

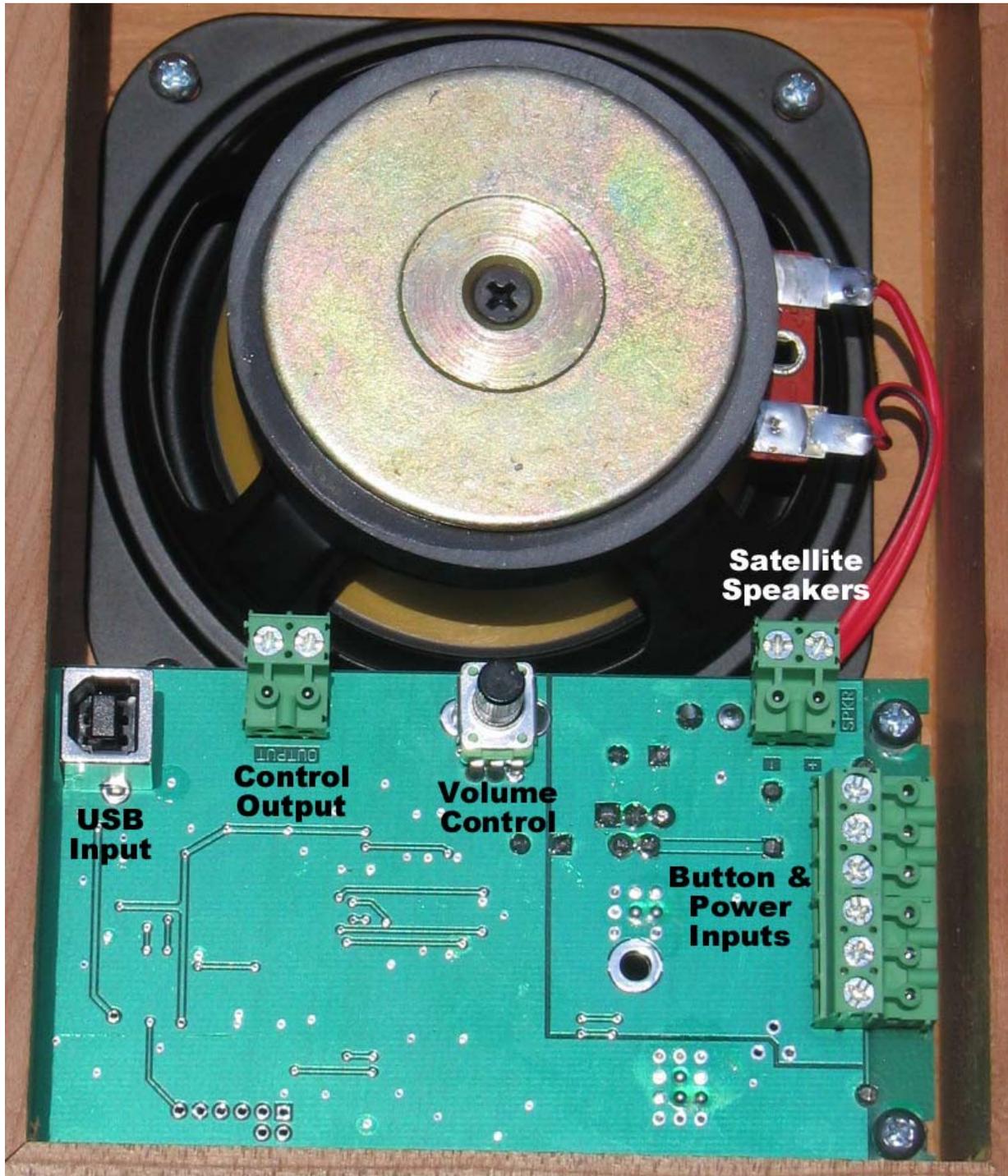
Install the YourBell USB driver as follows:

1. Plug the YourBell into a computer's USB Port or a USB Hub. The operating system will acknowledge new hardware.
2. When prompted, browse the New Hardware Wizard to the subdirectory **USB\_Driver** on the CDROM.
3. Select the file **FTD2xx.inf**. The operating system will then load the necessary files for the YourBell to work on the computer. The system will acknowledge the installation of the new hardware.

What to do if the operating system does not recognize the hardware when you first plug it in.

1. Make sure the Installation CD is in an available CD/DVD drive.
2. Plug the YourBell into a computer's USB Port or a USB Hub
3. Right mouse click on the "My Computer" icon located on the desk top. The Computer Management window will appear.
4. In the left pane click on Device Manager. A listing of your computer's assets will appear in the right pane.
5. Click on the + symbol next to Universal Serial Bus controllers. You will now see a complete list of the USB devices and controllers.
6. You should see one line item with a yellow exclamation point titled 100% Customizable Door Chime. Double click this item. This will pop up a properties window.
7. Select the Driver tab (at the top).
8. Click on Update Driver. This will bring up the Device Driver Wizard. Follow the instructions.

# Hardware



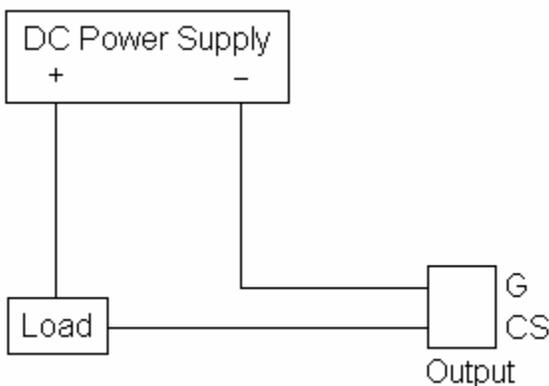
## Figure 1 – Hardware Over View

### USB Input

The USB input is used for loading sound files onto the YourBell, setting up the polarity of the inputs and adjusting the duration of the control output. All of these features are accessible using the YourBell\_Programming software.

### Control Output

The control output can be used to control external devices such as to turn on a video recorder or maybe a light. The output is rated for a maximum 24Vdc at 1 amp. The output acts like a switch to ground. There are two terminals on the connector. The one marked G represents a common return. The one marked CS represents the normally open side of the switch.



### Volume Control

Use this potentiometer to control the sound output levels. This will control the built in speaker and any satellite speakers that are connected.

### Satellite Speakers

This connector allows for the driving of external speakers. It can drive either one 4 ohm or two 8 ohm speakers. The polarity is shown on the circuit board.

### Button And Power Inputs

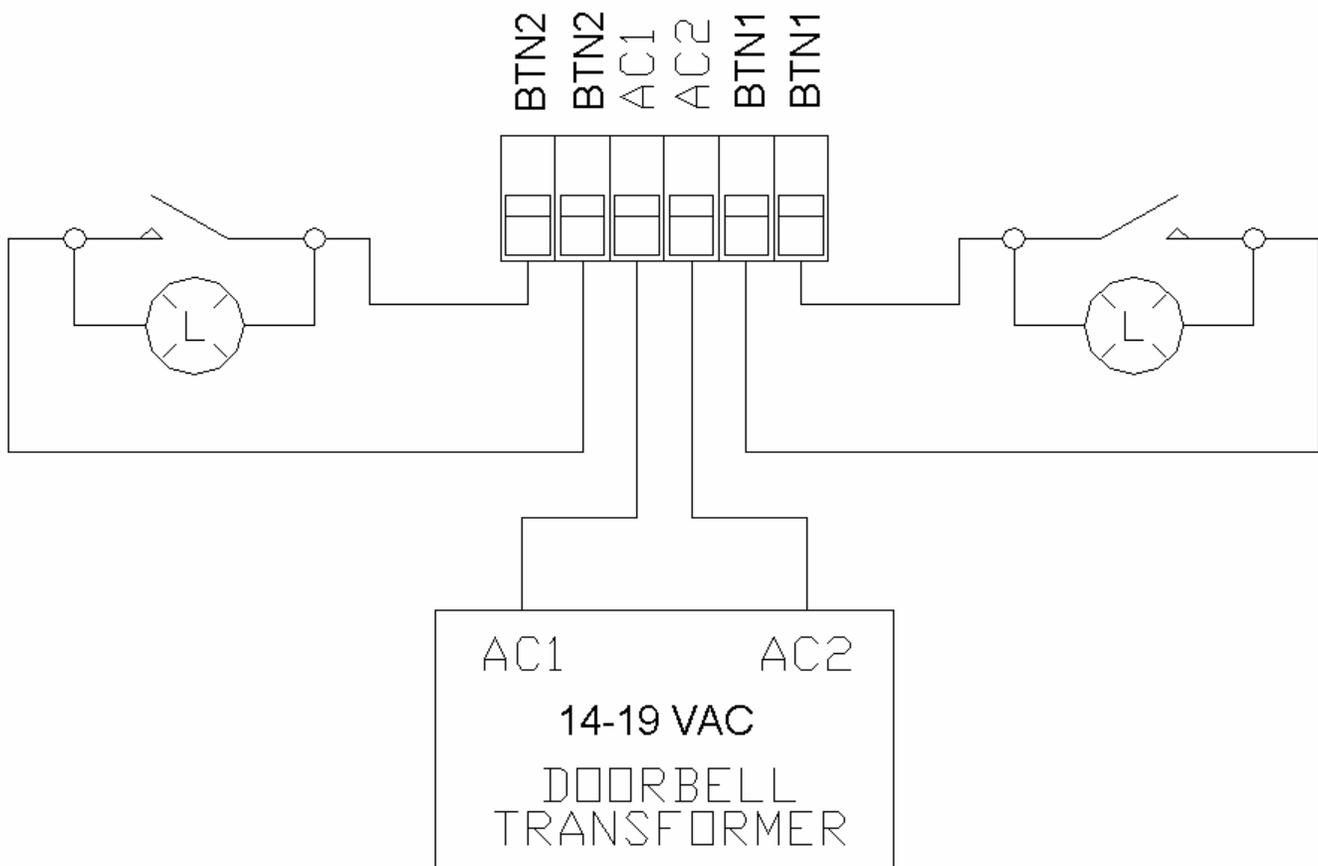
The YourBell was designed to be powered from the doorbell transformer provided the voltage is 14Vac – 19Vac. The YourBell requires both transformer wires to operate correctly. See figures 2 through 5 for the correct wiring of the YourBell. The preferred wiring scenario is shown in figures 2 or 3 and is recommended for new home installations. The connector configuration was designed to be able to be plugged in backwards with out damaging the unit. When plugging in the header always make sure all 6 pins are connected.

It is easiest to break down the wiring into smaller steps. The first step is to wire the transformer leads to the 2 middle connectors of the green header (connectors 3 and 4 counting from either side). Plug the header into the YourBell making sure all 6 pins are connected. There will be approximately a 3-5 second delay and then you should hear a short beep. This will let you know that the doorbell has powered up in good fashion.

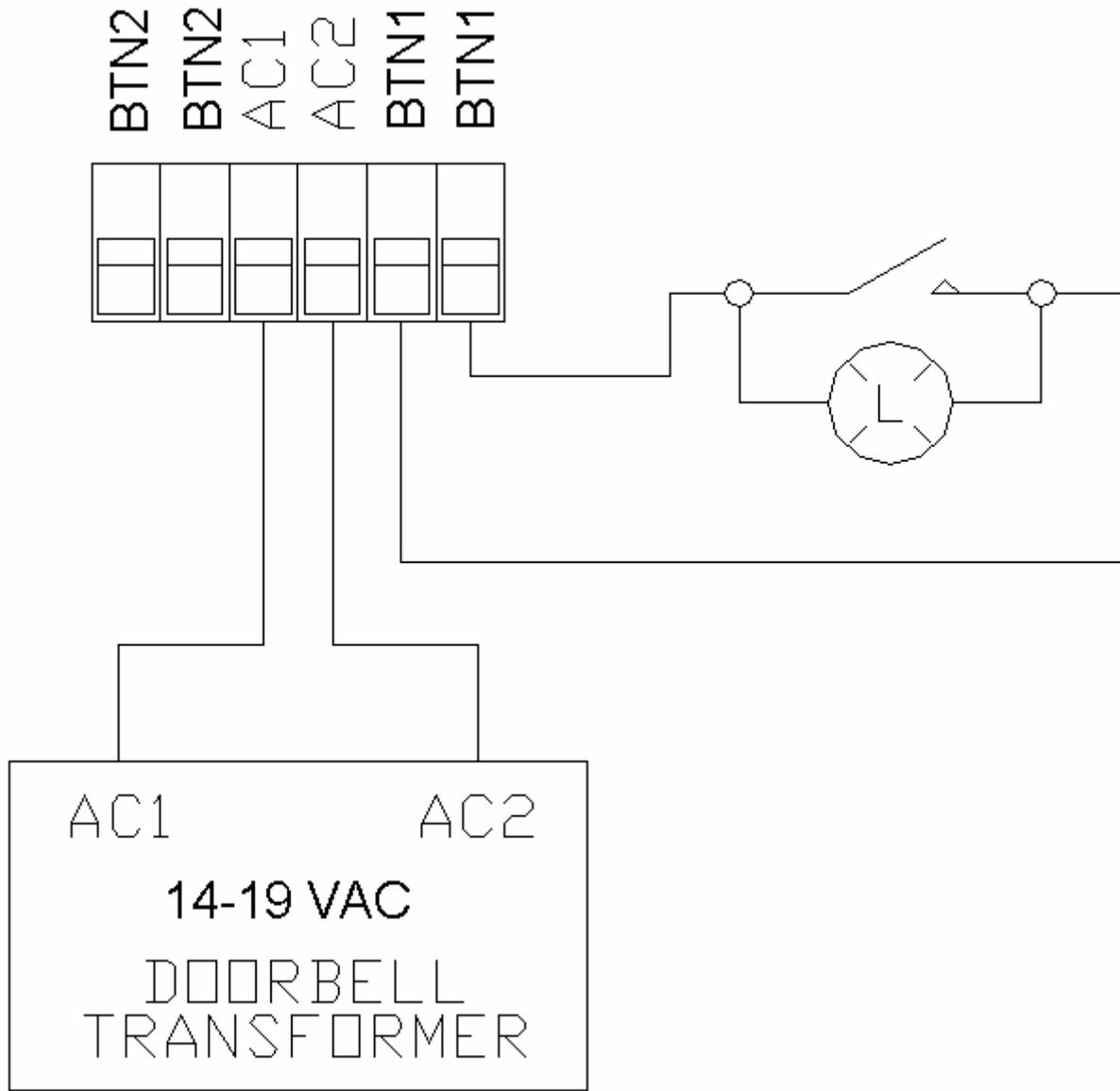
This step is optional. If there is enough room try shorting the 2 outer connectors of the green header ( connectors 1 & 2 or 5 & 6 ) for a short period. The YourBell should play one of 2 sounds that it came with. These sounds were placed on the unit for testing purposes just before shipment. This verifies that the YourBell is working.

Disconnect the green header and connect the wires for the buttons. When replacing an existing doorbell you will most likely have only one wire coming from either button. This single wire should always be connected to terminal 2 or terminal 5 ( when counting from either direction ). See figures 2 through 4. Connect the header to the YourBell making sure to connect all 6 pins. Wait approximately 3 -5 seconds for the beep verifying the YourBell is powered up. Press one of the buttons. The YourBell should start playing one of the 2 sounds it shipped with. If it does not, wait approximately 5 seconds. If after about 5 seconds you hear a short beep then you need to unplug the green header, rotate it 180 degrees and plug it back in. Again wait about 3-5 seconds for the ready beep and press a button. The YourBell should start playing.

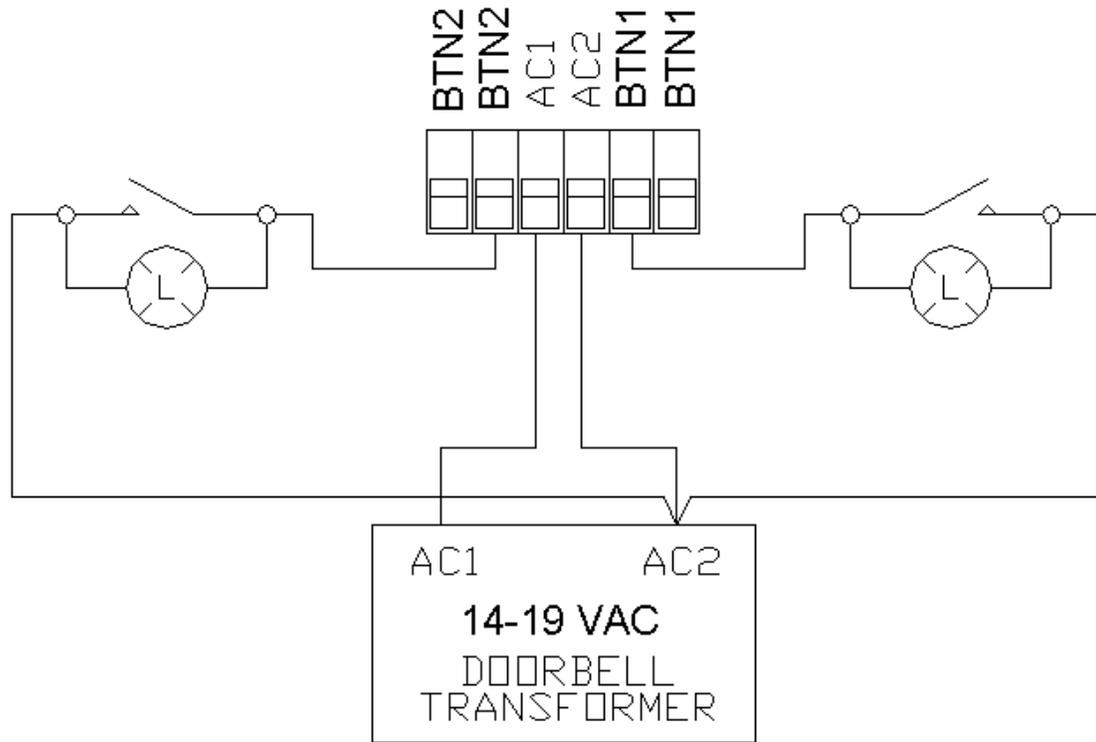
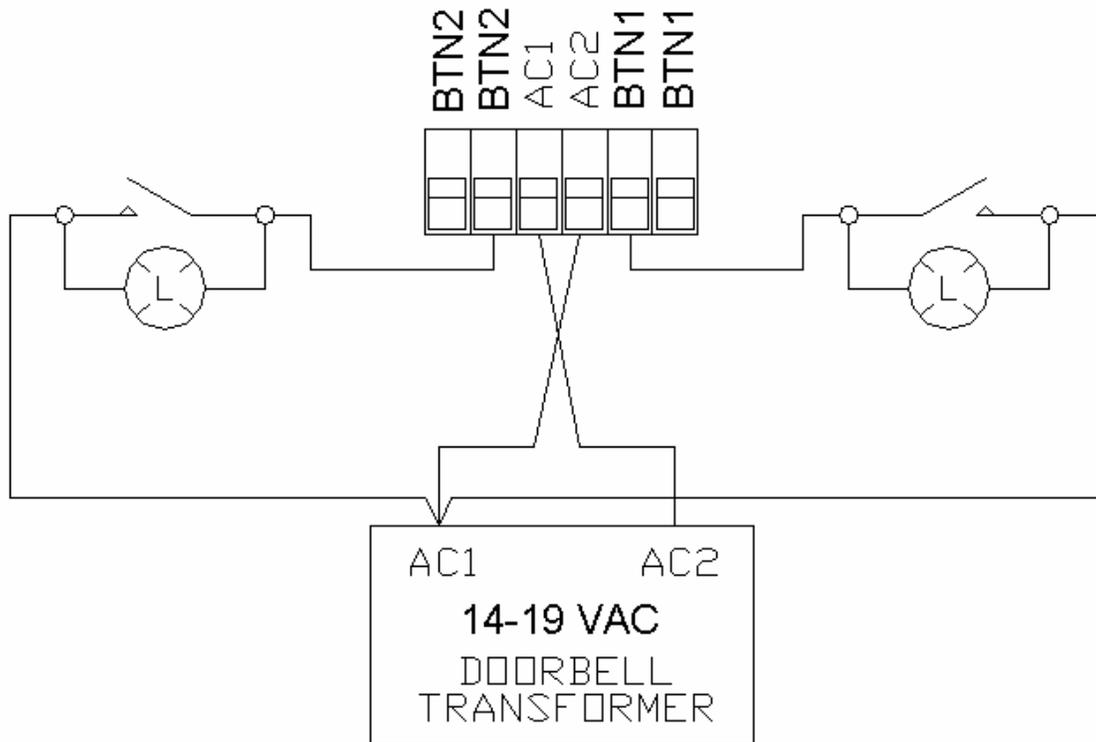
 **IMPORTANT!** Placing a Voltage larger than 19Vac on the YourBell may destroy the unit and void the warranty.



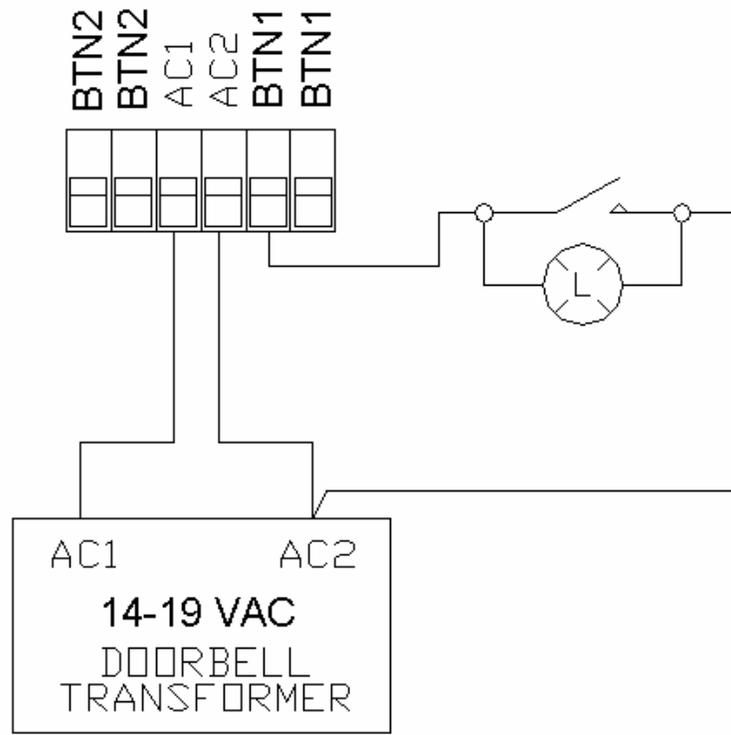
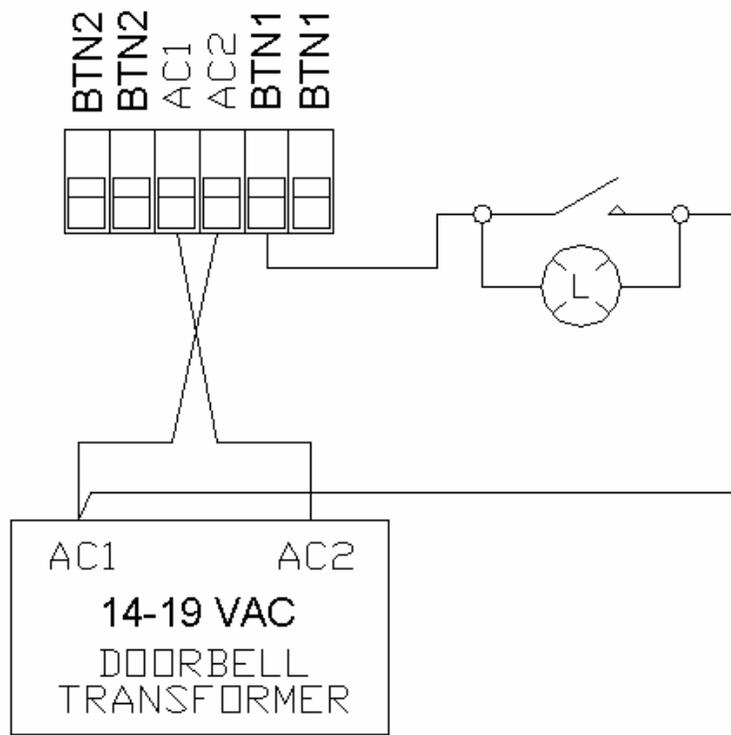
**Figure 2 – Preferred Wiring – 2 Button Input**



**Figure 3 – Preferred Wiring – 1 Button Input**



**Figure 4 – Single Button Wire – 2 Button Input**



**Figure 5 – Single Button Wire – 1 Button Input**

## Electrical Description

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<b>Absolute Maximum Ratings</b>		
<b>Parameter</b>	<b>Value</b>	<b>Units</b>
Rated Input Voltage	19	Vac
Measured Input Voltage	24	Vac
Current - Active	1000	mA
Amplifier Load	2	Ohms

<b>Electrical Characteristics</b>				
<b>Parameter</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>	<b>Units</b>
Input Voltage	14	16	19	Vac
Current - Idle	80	100	120	mA
Current - Active	120		500	mA
Button Input Isolation Voltage			2500	V(rms)

## Warranty

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The YourBell is warranted for 1 year. If within the first year of ownership the YourBell fails while being used within the specifications the unit will be replaced with a new one. The user will be responsible for shipping the old unit back to BCS. If it is determined that the board has been misused in any way the warranty will be void.



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*General Inquiries*  
*info@bcsideas.com*

*Sales Information*  
*sales@bcsideas.com*

*Product Support or Recommendations*  
*support@bcsideas.com*