# YourBell





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**INEXPENSIVE, RELIABLE USB PRODUCTS** 

# Table of Contents

General Information	3
Installation	3
Software	3
USB Driver	3
Hardware	5
Figure 1 – Hardware Over View	5
Figure 2 – Utility -> Data Screen	6
Figure 3 – Preferred Wiring – 2 Button Input	8
Figure 4 – Preferred Wiring – 1 Button Input	9
Figure 5 – Single Button Wire – 2 Button Input	10
Figure 6 – Single Button Wire – 1 Button Input	11
Electrical Description	12
Warranty	13

# **General Information**

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.

The YourBell has two inputs. Both inputs support a lighted door button. Each input can be set to accept NO (normally open) or NC (normally closed) 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.

The YourBell has a powerful amplifier section that can drive two 8 Ohm external speakers The volume is controlled using a potentiometer.

# Installation

It is highly recommended that the YourBell be wired and tested before loading new sounds into the unit. **IMPORTANT** 

## Software

Install the YourBell Software as follows:

**()**)

- 1. Insert installation CD into a CDROM drive in your computer. (Vista & Win7 users may need to browse to the CD and manually run Setup.exe. Right click on Setup.exe and select "Run as Administrator")
- 2. Install the DYB2xxx, Audacity and CDex programs. DYB2xxx must be installed to program the YourBell. Audacity is a sound editing & MP3 conversion program. CDex rips sounds from a CD.
- 3. There are extra hardware installation files located on the CD under the folder labeled Documentation

## **USB** Driver

Install the YourBell USB driver as follows:

## WIN2K, XP, Vista

1. Insert installation CD into a CDROM drive in your computer.

- 2. Plug the B side of the USB cable into the YourBell and the A side into an open USB port on your computer.
- 3. Windows will pop up the "Found New Hardware Wizard".
- 4. Select No when asked to use Windows Update. Click Next.
- 5. Select Install software automatically. Click Next.
- 6. Windows will install the drivers from the CD.

#### <u>WIN7</u>

- 1. Insert installation CD into a CDROM drive in your computer. Make sure the YourBell is plugged in to a USB port.
- 2. Click on the Start button and then choose Control Panel.
- 3. Click on the System and Security link.
- 4. Note: If you're viewing the Large icons or Small icons view of Control Panel, you won't see this link. Simply click on **Device Manager** and then proceed to Step 6.
- 5. In the System and Security window, click on the Device Manager link located under the System heading..
- 6. Device Manager has a list of all of the stuff on your computer. Look for a device labeled "100% Customizable Door Chime". Right click it..
- 7. Select Update Driver. Update Driver Wizard will open.
- 8. On the *How do you want to search for driver software?* window, click on **Browse my computer for driver software**.
- 9. On the *Browse for driver software on your computer* window, click on the **Browse** button. It is located next to the drop down labeled **Search for driver software in this location**.
- 10. Browse to <CD>\USB\_Driver. Select the folder. Click Continue.
- 11. On the Install From Disk window, click on the OK button.
- 12. The software will start to install. At the driver is not signed warning click the Continue Anyway button

## 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.

#### **Button Inputs**

Each input can be set to respond to a NO (normally open) or NC (normally closed) button. This is set in the **DYB2xxx Programmer** software. Make sure the YourBell is connected to a USB port. Go to the "Create Song Profile" window. Go to the menu bar and click on Utilities-> Data. The following window will pop up.

📕 Create So	ing Profile			🔳 🗖 🐱
Profiles Add :	Sounds Remove Sounds	Buttons Utilities Help		
Data RF Butt	ons			Getting Started
	nput 1 Normally Open Normally Closed Enable Repeat/Loop Save	Input 2 Normally Open Normally Close Enable Repeat/ Cance	d d Loop Save and h There comp Whe you r load the Y soun asse drop winda sour conn press Note If you	irst step toward your custom door bell is to sounds on your computer. Be creative here have some fun. e are 3 ways to acquire sound bites on your outer : Acquire sound clips from the internet. <b>Rip, Edit, Convert</b> music from a CD. <b>Record</b> your own sound using your sound card. n you have the finalized music ready then heed to decide which sounds you want to into the YourBell. You may choose to have ourBell sequence through a series of ds, or play just one of your favorites. Simply mble the desired sounds by <b>dragging</b> and <b>ping</b> sounds from a Windows Explorer ow or using the Add sounds and Remove inds menu items. Make sure the YourBell is ected to your computer's USB port and s NEXT.
	PREV	NEX		ratriaval later than you can create what is
Connected	Size : 4,194,303	Used : 529,768	Remaining : 3,664,535	Profile On YourBell : Product_Test

## Figure 2 – Utility -> Data Screen

Select the corresponding input polarity for each input. The default is Normally Open. Click the Save button to save the changes.

The newest feature we have added allows the user to program several sounds for either input and then later select one of those sounds to play exclusively. This feature is activated in the Utilities -> Data pop up. (see Figure

2) . Check the Enable Repeat/Loop box for the corresponding input and click the Save button. Once this feature is enabled you may disconnect the YourBell from the computer and reconnect it to power. Select the sound to play using the following steps.

- 1. Press and hold the corresponding door button.
- 2. If the sound that starts to play is the desired one then continue to hold the button and go to step 3. If not then release the button. And go back to step 1.
- 3. When the sound file finishes playing you will hear 2 short beeps. You may now release the button. Next time the button is pushed the selected sound file will play

To deselect the sound file press and hold the button. Wait for the sound to finish playing and the 2 short beeps. Release the button. The next time you press the button it will play the next sound file in the list.

#### **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.

#### **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.



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

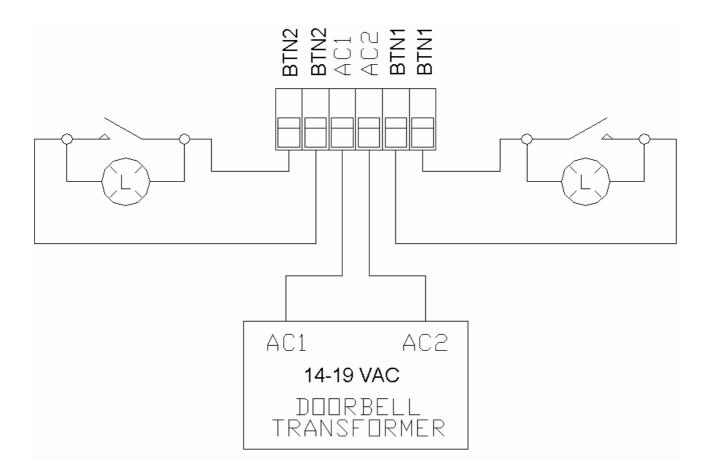


Figure 3 – Preferred Wiring – 2 Button Input

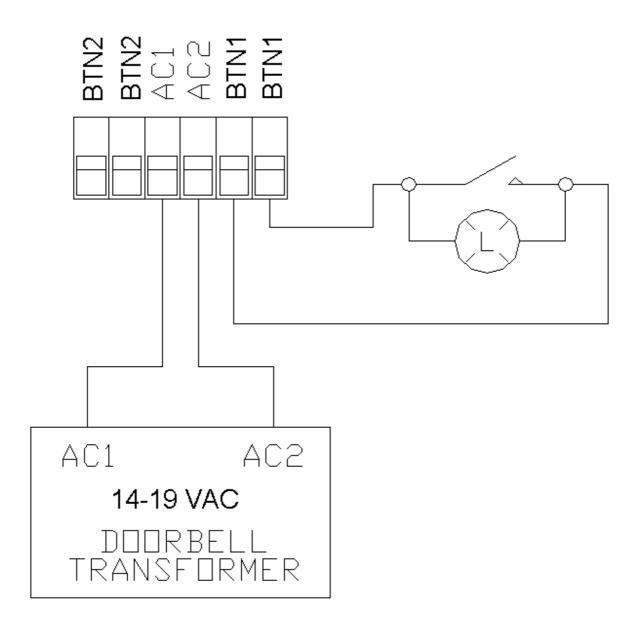


Figure 4 – Preferred Wiring – 1 Button Input

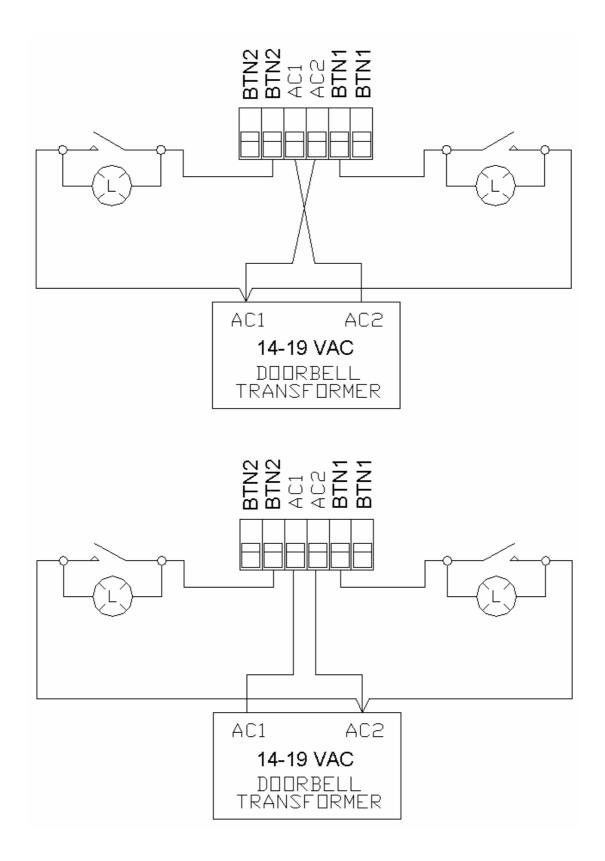
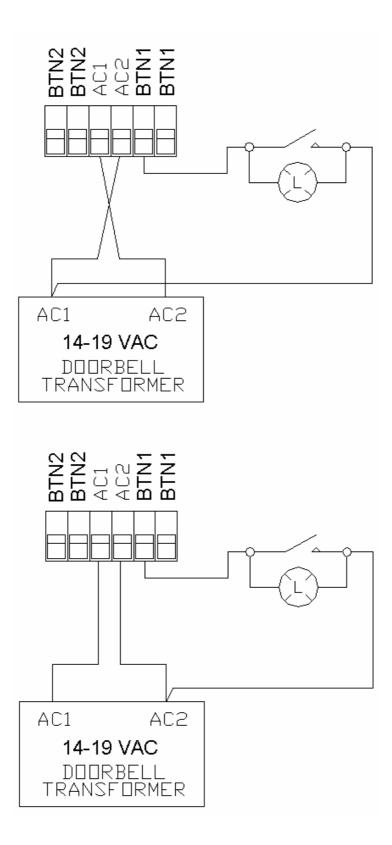


Figure 5 – Single Button Wire – 2 Button Input



**Figure 6 – Single Button Wire – 1 Button Input** 

Absolute Maximum Ratings			
Parameter	Val	ue l	Jnits
Rated Input Voltage	19	)	Vac
Measured Input Voltage	24	1	Vac
Current - Active	100	)0	mA
Amplifier Load	2	(	Dhms

Electrical Characteristics				
Parameter	Min	Тур	Max	Units
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

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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