

# MUSICA™ Technical Bulletin

## Muting With Doorbell or Telephone

The IP-Based Distributed Entertainment Company.

### Products Included:

Musica MU4602

Musica MU5066

### Introduction

By using the doorbell and/or telephone muting feature of the Musica™ system, you can mute all the audio in the home for 30 seconds when the doorbell or telephone rings. This allows you time to hear the ring and respond. The audio then fades back to the previous volume level after 30 seconds have passed.

**NOTE:** This application requires an ELK-930 Doorbell and Telephone Ring Detector. These can be purchased from ELK at [www.elkproducts.com](http://www.elkproducts.com) or call 828-397-4200.

See Figure 1 for an example of how to connect the ELK-930 Doorbell and Telephone Ring Detector to a Musica system.



Figure 1 Connecting an ELK-930



## Requirements

This configuration requires:

- phone line,
- Cat5e cable to the door chimes,
- ELK-930 Doorbell and Ring Detector, and
- *Musica* Audio Distribution Center (ADC).

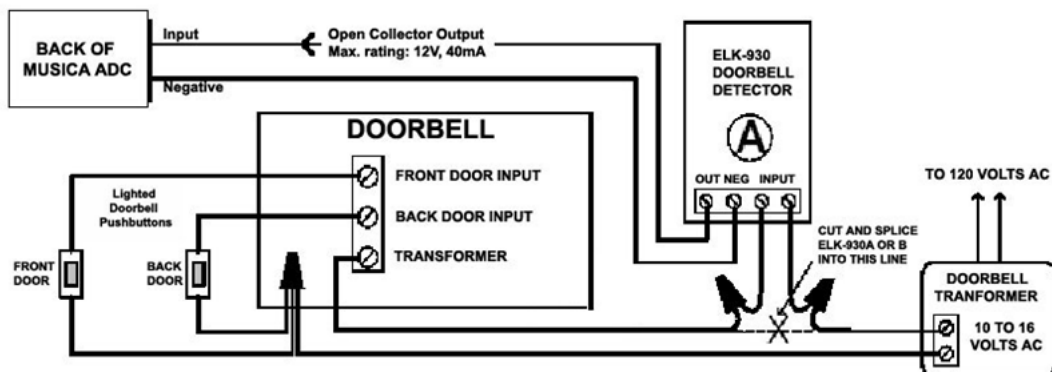
## Pre-Wiring

Complete the following steps to pre-wire:

1. Run a phone line to the *Musica* ADC.
2. Run a Cat5e cable from the ADC to the door bell.
3. Mount the ELK-930 near the *Musica* ADC for ease of wiring.

## Connecting Doorbell Muting

Figure 2 depicts the proper way to wire for doorbell muting.



**Figure 2** Doorbell Muting

The doorbell input requires only one of the ELK-930 Doorbell and Telephone Ring Detectors and free access to the wires leading from the doorbell transformer. The ELK-930 activates when the doorbell rings when either a single pushbutton or two pushbuttons (front door/back door) are used. To connect the ELK-930 doorbell, complete the following steps:

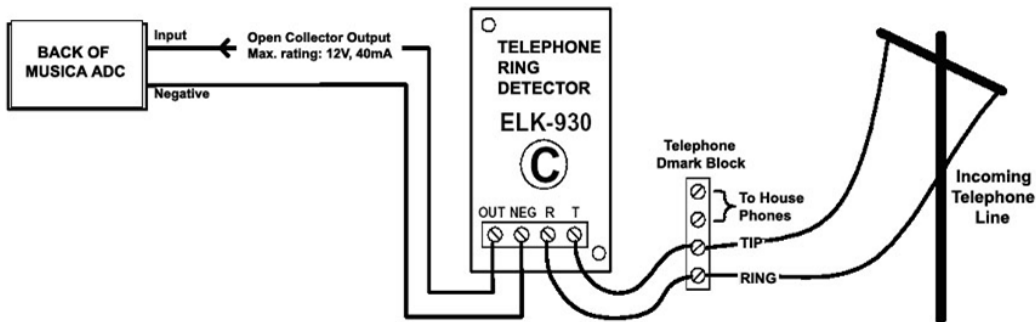
1. Mount the ELK-930 at any convenient location along the path of the two wires leading from the transformer to the doorbell.
2. Cut one of the two transformer wires.
3. Strip the ends and place one under each of the doorbell detector INPUT terminals.
4. Run a two-conductor wire from the doorbell detector output terminals to the *Musica* ADC.

5. Connect one wire from the NEG terminal of the ELK-930 to a common NEG terminal of the *Musica* ADC.
6. Connect the other wire from the OUT terminal of the ELK-930 to the doorbell input on the *Musica* ADC.

## Connecting Telephone Muting

Figure 3 depicts the proper way to wire for telephone muting.

The ELK-930 telephone ring detector monitors the voltage on the telephone line and produces an open collector output (pull to ground) when the telephone ringing voltage is approximately 50 Volts or greater. The output follows the ringing pattern



**Figure 3** Telephone Muting

1. Run the phone line to the ring detector of the ELK-930.
2. Run a two-conductor wire from the output terminals of the telephone ring detector section of the ELK-930 to the *Musica* ADC.
3. Connect one wire from the NEG terminal of the ELK-930 to a common NEG terminal of the *Musica* ADC.
4. Connect the other wire from the OUT terminal of the ELK-930 to the telephone input on the *Musica* ADC.