## EZTronic Technical Product Configurator

Comprehensive Guide for Different Configurations

## Introduction

Welcome to the technical product configurator for EZTronic, designed to assist you in setting up and managing our product offerings efficiently. This guide includes three distinct configurations for EZTronic's 4 product offerings. We will provide comprehensive wiring diagrams, descriptions, and notes of caution to ensure a seamless setup process.

## Configuration 1: Turnout Controller with Integrated Pushbutton-Display

Product Components:

- (1) Turnout Controller
- (1) Integrated Pushbutton-Display
- (1) or more servo kits
  - o Basic Servo Kit for insulated or plastic frogs
  - o Enhanced Servo Kit for metal frog turnouts

#### Description:

This configuration uses an EZTronic Turnout Controller and an EZTronic Pushbutton-Display assembly. This represents the easiest way to get a solution up and running. It provides an integrated solution for controlling up to 8 servo-based turnouts supporting either insulate/plastic frogs or metal frog turnouts.



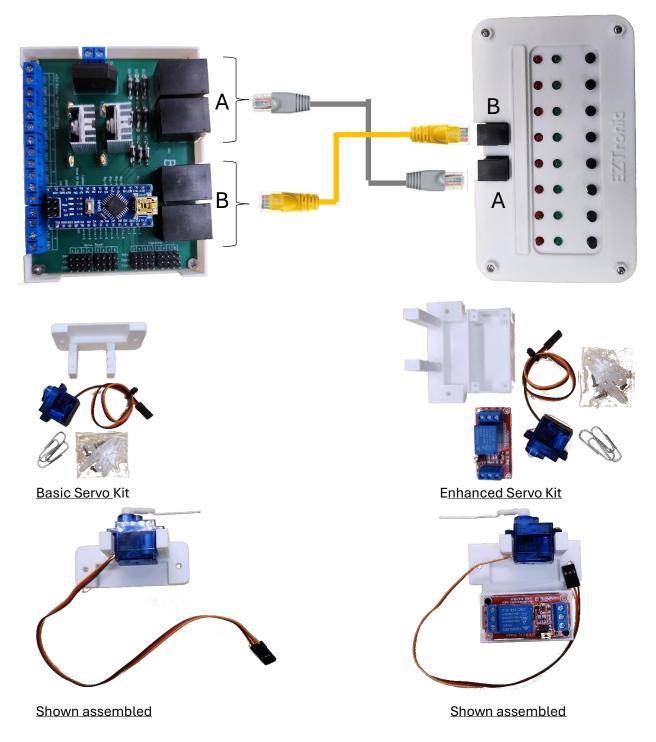
EZTronic HO turnout Controller



EZTronic Pushbutton-Display

#### Wiring Explanation:

2 CAT5 cables are needed –both CAT5 test cables are provided with the HO Turnout Controller. One cable from "A" to "A" and the other cable between "B" and "B" as shown below. If using insulated or plastic frogs, you will use our *Basic Servo Kit*. If setting up for a metal frog turnout, you would use our *Enhanced Servo Kit*.



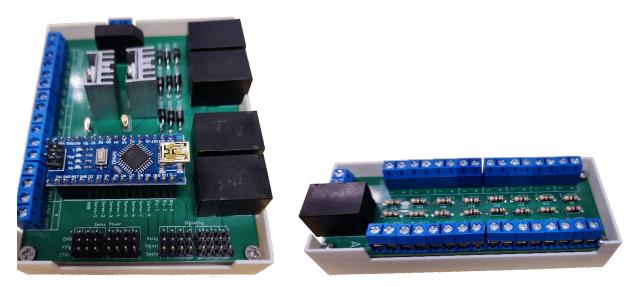
# Configuration 2: Turnout Controller with Breakout-LED Board and Breakout-Pushbutton Board

Product Components:

- (1) turnout Controller
- (1) Breakout-LED Board
- (1) Breakout-Button Board

#### Description:

This setup utilizes one Breakout-LED board and one Breakout-Button board, providing the modeler with a custom setup whereby the hobbyist can select his/her own pushbuttons and LEDs and configure them on a panel of their own choosing



HO Turnout Controller

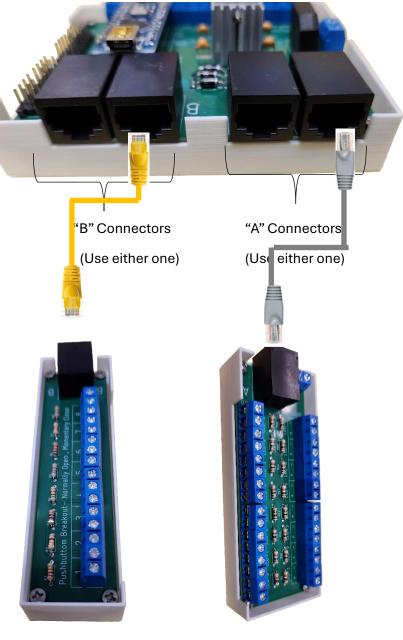
Breakout-LED



**Breakout-Pushbutton** 

Wiring Explanation Configuration 2:

Using the 2 CAT5 cables supplied with the HO Turnout Control, wire from Controller "A" to Breakout-LED and Controller "B" to Breakout-Pushbutton. Add a wire pair from Controller 5V Relay Power screws (choose one, it doesn't matter) to the Breakout-LED screw terminals.



Breakout-Pushbutton Uses one "B" connection

Breakout-LED Uses one "A" connection

#### Wiring Explanation Configuration 2 (continued):

As shown below, add one power wire pair from the 5V and Ground Relay Power connectors over to the Breakout-LED screw terminals next to the CAT5 connector. On the Breakout-LED board you will see a 2-position screw connector immediately adjacent to the CAT5 black connector. The "+" side is marked on the PCB and is the far left/outside screw terminal closest to the plastic case edge. The screw on the right (closest to the CAT5 connector) is "-" for ground.

This connection provides the proper power from the <u>HO Turnout Controller</u> over to the <u>Breakout-LED Board</u> so the LEDs can be illuminated.



5V Relay Power Connectors on bottom of PCB

Breakout-LED



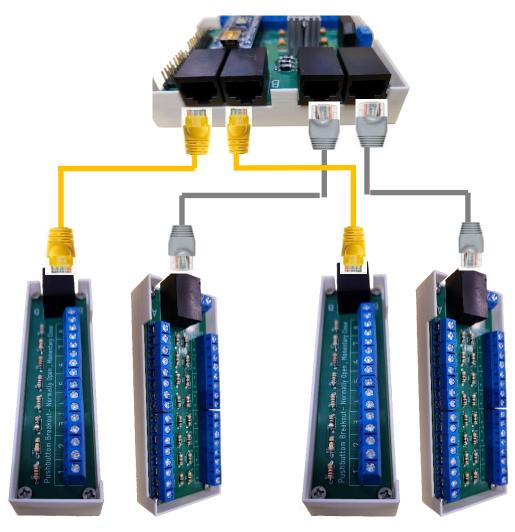
## Configuration 3A: Freemo Custom User Setup

Product Components shown for 2 custom setups:

- (1) HO Turnout Controller
- (2) Breakout-Pushbutton
- (2) Breakout-LED

#### **Description**:

This configuration is tailored for Freemo users, offering flexibility with either two integrated pushbutton displays or a combination of breakout LED and pushbutton boards. This diagram will show examples for using two Breakout configurations for a totally custom look and feel.



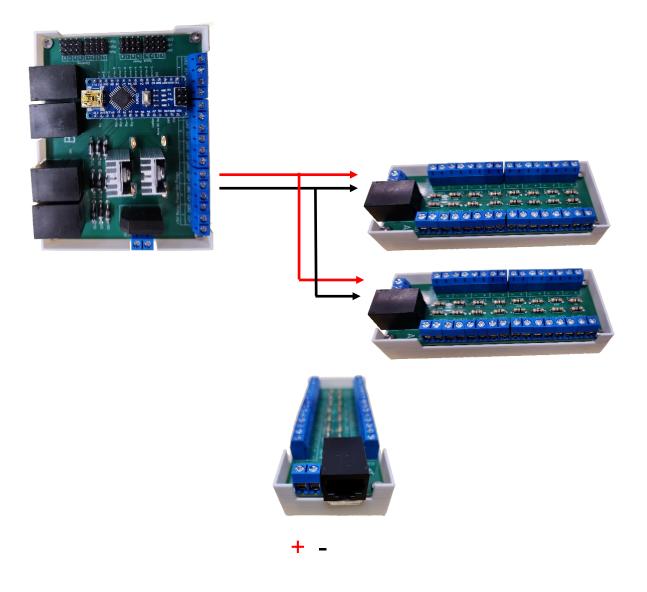
Other side of Freemo Table

One side of Freemo Table

#### Wiring explanation Freemo Custom User Setup 3A

As shown below, add two power wire pairs from the 5V and Ground Relay Power connectors over to the Breakout-LED screw terminals next to the CAT5 connector. On the Breakout-LED board you will see a 2-position screw connector immediately adjacent to the CAT5 black connector. The "+" side is marked on the PCB and is the far left/outside screw terminal closest to the plastic case edge. The screw on the right (closest to the CAT5 connector) is "-" for ground.

This connection provides the proper power from the <u>HO Turnout Controller</u> over to the <u>Breakout-LED Board</u> so the LEDs can be illuminated.



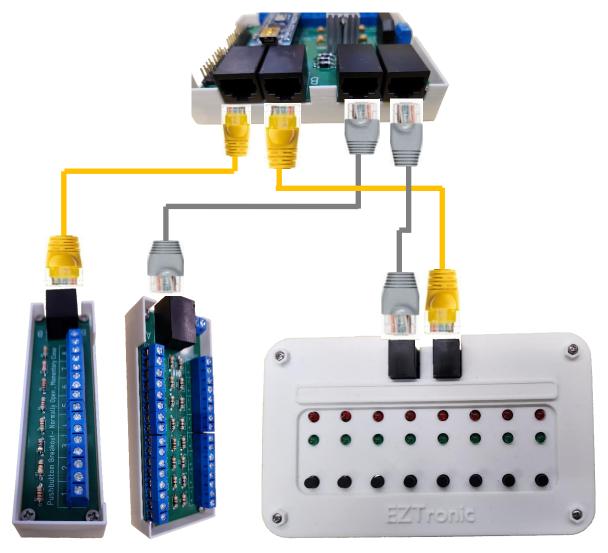
### Configuration 3B: Freemo Mixed Custom & Integrated User Setup

Product Components shown for 1 custom setup and 1 integrated setup

- (1) HO Turnout Controller
- (1) Breakout-Pushbutton
- (1) Breakout-LED
- )1) Pushbutton Display

#### **Description**:

This configuration is tailored for Freemo users, offering flexibility with either two integrated pushbutton displays or a combination of breakout LED and pushbutton boards. This diagram will show examples for using one custom setup and one Pushbutton Display



One side of Freemo Table

Other side of Freemo Table

#### Wiring explanation Freemo Mixed Custom & Integrated Setup 3B

As shown below, add one power wire pair from the 5V and Ground Relay Power connectors over to the Breakout-LED screw terminals next to the CAT5 connector. On the Breakout-LED board you will see a 2-position screw connector immediately adjacent to the CAT5 black connector. The "+" side is marked on the PCB and is the far left/outside screw terminal closest to the plastic case edge. The screw on the right (closest to the CAT5 connector) is "-" for ground.

This connection provides the proper power from the <u>HO Turnout Controller</u> over to the <u>Breakout-LED Board</u> so the LEDs can be illuminated.

