# **Antigneous Instruction Manual**

## Written by Lexzach

### What is this?

Antigneous is an affordable, open-source fire alarm control panel (FACP). This is targeted towards hobbyists or areas that do not have the privilege of having an fire alarm system from a name-brand company.

## **Disclaimer!**

Antigneous is **not** officially approved for use as a fire alarm system. Although the creator has done everything they can to make sure the panel will work with zero issues, this cannot be guaranteed without extensive testing by official parties. If you do not accept the inherent risk of using a non-approved, homemade fire alarm system. **DO NOT USE THIS.** 

### **Table of Contents**

Getting Started	2
What you need:	
Fail-safe Mode	
Error Codes	

# **Getting Started**

What you need:

#### **REQUIRED - OPTIONAL**

Hardware:

- Wires
- ESP 32 Dev Kit V1 (or other compatible board) [x1]
- Micro USB cable for programming and powering the board [x1]
- 16x2 LCD screen with IC2 interface [x1]
- LEDs [x3]
- Momentary push buttons [x3]
- Arduino compatible relays [x3]
- Piezoelectric buzzer [x1]

#### Software:

- A copy of the Antigneous firmware
- Visual Studio Code with the PlatformIO addon

Lexzach 3

# Fail-safe Mode

Fail-safe mode is a specific mode included with the Antigneous panel. If your panel fails to boot, either from an error loading settings or something else. Fail-safe mode is intended to be a completely separate environment that is designed to boot up without fail. It does not require any interaction with the saved settings, and skips almost all of the boot-up code.

When the panel is in fail-safe mode, features are extremely limited. The only thing that works is the horn relay, strobe relay, smoke detector relay, silence button, and reset button. The reset button is the only thing that the user can interact with when the alarms are off, the reset button will restart the panel. When the alarms are on, the silence button can also be used to perform an audible silence. The coding on the alarms in fail-safe mode is continuous, and there is no verification or end-of-line resistor checks.

Fail-safe mode is not ideal to be in, and as the name suggests, is simply a mode that the panel can be in that ensures there is always fire detection, even if the panel is entirely unable to boot normally. Fail-safe mode should absolutely not be considered normal operation, and the reason for the panel not booting normally should be found and fixed immediately.

Antigneous Error Codes		
Error Code	Meaning	Solutions
1	The panel's settings have failed a validity check and must be reset to factory settings.	Press the <b>reset button</b> to boot into the fail-safe mode. Press the <b>drill button</b> to reset the
		panel to factory settings.
2	The panel's firmware has been updated to a new version, and must be reset to factory settings	Press the <b>reset button</b> to boot into the fail-safe mode.
	in order to add new settings into the panel EEPROM.	Press the <b>drill button</b> to reset the panel to factory settings.

#### **Error Codes**