# **SINKING CLOCK** Notes

5/18/2023

This is a standard LCD digital alarm clock. The hour digits are severed, but enough is visible to read the time.

#### Interface

#### HI/LO/OFF

The LED display can be bright, dim, or off. If this clock sits next to your bed, it would be very irritating to have it on all night long. If set to OFF, the display would come on automatically when the alarm goes off. This is one button. Each time pressed, it cycles through each of these modes.

#### ALARM

Option 1: One button. Press to turn the alarm on, and off. Hold continuously when using the HOUR and MINUTE buttons to set the alarm time

Option 2: Two buttons. One for alarm on/off. The second button needs to be held down continuously when using the HOUR and MINUTE buttons.

An indicator light on the top of this clock is on when the alarm is activated

#### **HOUR**

Press to set the hour digits for the time, and the for the alarm when the alarm set button is held down.

### MINUTE

Press to set the Minute digits for the time, and the for the alarm when the alarm set button is held down.

#### SNOOZE

This is a touch sensor, or motion sensor on the top surface of this clock. This should only require a very lite touch to operate. Touch it once quickly to delay the alarm for 10 minutes. The alarm indicator light remains on. Touch it for 3 seconds or more to turn the alarm of. Then, the indicator light will turn off.

#### **Power Source**

External adapter connected to the backside with a barrel connector jack. This can easily be changed to a 120V or 240V unit depending on what country it will be used in.

## Additional Thoughts / Issues

There should be a battery to keep the set time if the power is ever cut. I know this is easy to do, but would this be a battery that is continually charged by the power adapter, or is it a battery that would need to be replaced by the user after it naturally runs down over a few years? I would prefer that it is a battery that never needs replacement, so I don't need to add a panel for the customer to remove to change batteries. Additionally, lithium batteries are the best, and the most common rechargeable battery, but these make shipping more difficult. There are many regulations and restrictions regarding anything with lithium batteries in it. This needs to be thought through.

Some clocks have a wifi connection, so the time is automatically set. Good for the user, but I think this may have issues. The laws regarding any product with wifi is different in every country. Therefore, every product needs to be certified to be sold in that market. This would of course be very expensive. If I can not find a way around this, it is probably not realistic.



