

# PANIC GRIP

Solve & Document the Crime



*Voice command or a press of a button that takes care of the process in seconds. Fast help is on the way before it becomes an unsolved one.*



# Panic Grip

## *Product Introduction*

"Panic Grip" is a software and hardware new invention that aids and solves specific crimes on potential victims through violence. Often violence comes to anyone unannounced from the moment you walk in or out of the house, work, or public places.

"Power Grip" invention is an automated program or application written for smartphone users coupled with a smartphone case embedded with circuitry inside it. This product use is either voice command or press of a button.

## *Cross-referencing with other inventions*

"Power Grip", has advantages compared to other products. Everyone has a smartphone. Adding more features to the smartphone, like Panic Grip, makes this handy and cheap. Press a button or voice command then "Panic Grip" application immediately starts. Next is the real-time audio, video, and map location recording of the event. Pre-configured list of contacts will receive notification via text message and email.

Competitors can only notify intended event recipients with no details provided. Competitors have a high cost and setup fee required during sign-up.

## *What does Panic Grip Solve?*

With the introduction of Panic Grip, Police Detective work will be much easier. Tracking the location of possible victims is now possible based on the up-to-date smartphone data transmission. It used to take days to locate abducted or violated people. With the use of Panic Grip, it will take minutes to less than an hour (depending on the complexity and variety of hindrances of the location). In addition, mounting evidence will come handy for the prosecutors. Products like KidControl GPS phone tracker, Pajawiri, Tracki GPS, LandAirSea 54 GPS Tracker are some of the products sold in the market now. None of these products come close to the Panic Grip's features. The Panic Grip app and smartphone case are paired hardware and software that makes a big difference. The difference is that pressing the button or voice activates the Panic Grip app. Once the Panic Grip app takes over, the smartphone requesting help is sent in a matter of seconds.

## *Technical Field*

"Panic Grip" is composed of both software and hardware. Automated commands have a series of sub-routine programs to be executed, resulting in several collected data ready for sharing. Figure 1 and Figure 1.1 – "Program Flowchart" executes the individual sub-routines call for executing the following collection of data. These data are recorded in audio, video, and map location. Strobe light flashing and high-pitch audible noise immediately follows.

**Step 1** – Program activation by way of voice command or press of a button.

**Step 2** - Sub-routine programs are called and executed.

*Continued from .... Technical Field page*

**Step 3** – The program checks for the closest tower signal for connection.

**Step 4a** – Condition - If the signal is not available, all data are placed in a queue to be sent later.

**4b** – Condition - If the signal is available, all data are processed to be sent to recipients.

**Step 5a** - Collected data will be sent to pre-selected contacts via Text messaging (SMS) and Email (SMTP) programs.

**Step 5b** - Using *silent* Voice Call and Email (SMTP) programs, the program checks for dial tone then a voice call connection is made to the 911 operator. The program issues a 4-second delay prior to playing a pre-configured audio announcement. *"I had been assaulted and can't talk; I'm sending you the recorded assault video, audio, and map. Please check your email"*.

**Step 6** – The *silent* voice call will be disconnected, then proceeds to the next step.

**Step 7**- The program deletes the Folder containing previously recorded audio, video, and map coordinates to prepare for a new set of data. 5-10 second recordings are preferable for faster transmission for intended recipients.

**Step 8** – Condition battery power greater than 10%; if so, proceed to the next step; otherwise, terminate the program. This step is crucial to provide the remaining smartphone power to locate the victim.

**Step 9** – Condition, Program checks for the presence or absence of new data in the Folder. If new data is available, repeat Step 3.

### ***Bluetooth Pairing sequence***

Both smartphone and Panic grip external case with printed circuit board inside is paired by performing these steps, and this is a must;

**Step 1** – Place both devices near each other for a better Bluetooth signal;

**Step 2** – From the smartphone screen, go to Settings, then enable Bluetooth (smartphone steps vary);

**Step 3** - Press the Panic Grip button twice to activate the Bluetooth discovery process (first-time setup);

**Step 4** – From the smartphone screen, locate if the Panic Grip device is in the list for selection; the select or highlight to be selected;

**Step 5** – Press the Panic Grip button once to complete and accept the pairing process;

**Step 6** – from the smartphone screen, verify the completion of the pairing process.

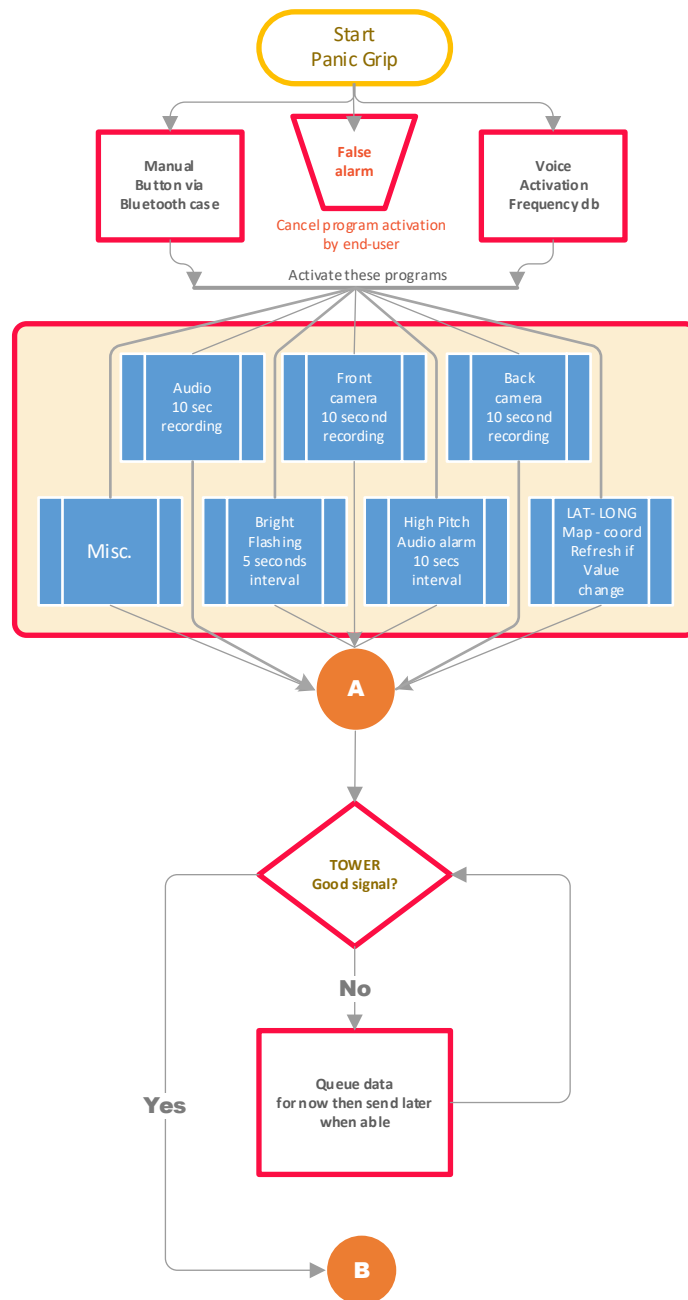


Figure 1 – Program Flowchart

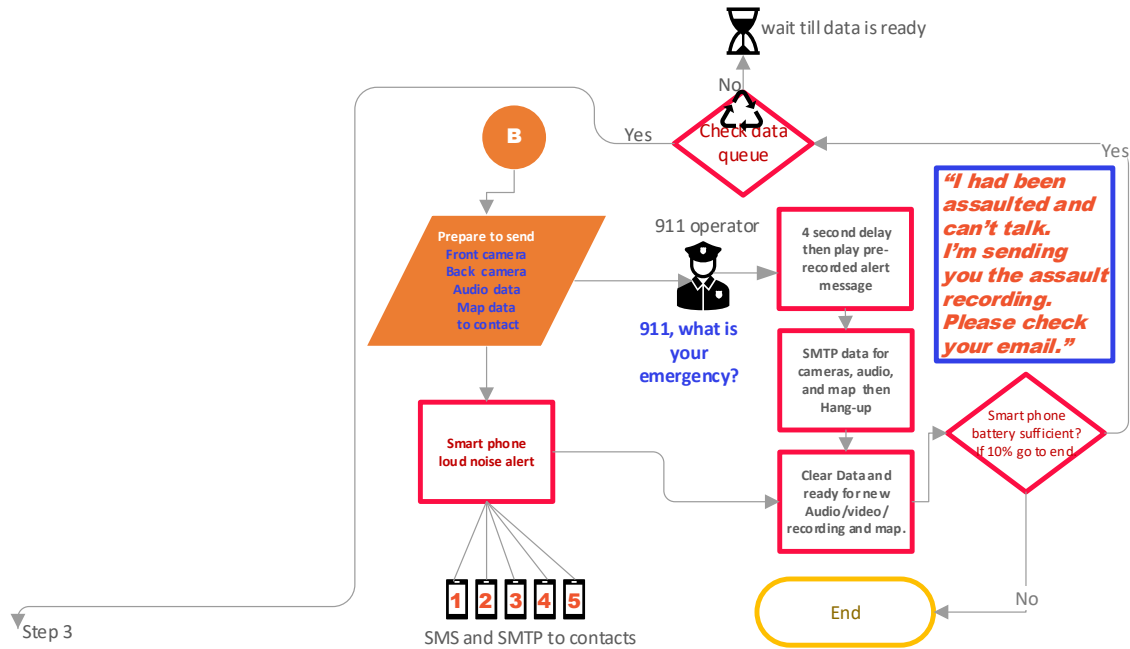


Figure 1.1 – Program Flowchart

The smartphone case with an embedded printed circuit board has these components;

1. Coin-sized Lithium-ion Battery
2. Bluetooth Microchip
3. Activation Button and
4. Alternative USB port for charging/programming
5. Reset Button

Both smartphone device and smartphone case pairing are performed through Bluetooth. An optional USB port will be used for both future programs and charging the Lithium-ion battery. Preferable smartphone case power replenishment is the reversed-charging method. OTG function or On-the-Go allows the smartphone case to charge its lithium battery via Bluetooth. Figure 2 is an example of 2 devices performing reverse charging wirelessly.



Figure 2 – Reverse charging

Reverse charging is technology available now. Placing the Bluetooth device near or on top of the other device makes this process possible. The benefit of this wireless charging of Bluetooth device eliminates carrying extra wires to connect 2 Bluetooth devices for charging the lithium-ion batteries.