How to use an HDZero^{TM} Programmer?

The programmer is for programming VTX and Cameras. It is consisted of two portions: (1) 5 buttons on the left side, which are for camera tuning, and (2) a button and a 7-segment LED on the right for VTX tuning.

- **Setup VTX**

  1. Connect the programmer with VTX as shown on the right
  2. Press the button and hold for more than 3s (Long press), it will show 'A',
  3. Press the button and release right away (Short Press) will loop between 'A', 'B', 'E', 'r', 'F' → Selecting Frequency band
  4. Long press again , it will show '1'
  5. Short Press will loop between '1' '2' … '8' → Selecting Channel
  6. Long press again , it will show '4.'
  7. Short Press will loop between '1.' '2.' '3.' '4' → Selecting emitting power.(1 = 25mW, 2=50mW 3=100mW, 4 = 200mW(def)
  8. Long press again , it will show '1.' (blanking '.')
  9. Short Press will loop between '1' '2' '3' '4' → Selecting mode (1=720p50 16:9, 2=720p50 4:3, 3=720p50 16:9, 4= 720p60 4:3). It is necessary to match camera to frame rate 50 or 60 as well.
  10. Long press again, LED will be off and settings are saved to flash. Please be noted that the flash is located only on HD Cameras, and legacy analog camera does not have.

- **Setup HD Camera**
  1. Connect the programmer with VTX
  2. Connect VTX with HDZero Compatible HD Camera (not shown on the FIG above)
  3. The left 5 buttons are for setting up camera settings.

- **Setup analog Camera**
  1. Connect the programmer with VTX
  2. Connect OSD pin of VTX with OSD pin of analog Camera
  3. The left 5 buttons are for setting up camera settings.