OKO M1a.4 Initializer Quick Start Guide

- 1) The OKO M3 Initializer is powered on by removing the plastic pull tab (string attached).
- 2) Green LED will blink slowly. RED LED should be OFF If both RED and Green LED's exhibit this pattern together the units battery is low and should be replaced
- 3) Turn Motors on but not fast enough to fly the drone. Green LED should start the sequence: 2 Blinks & Pause, indicating that motors have been detected If Motors are turned off the Green LED will return to the slow blink pattern
- 4) Increase Motor RPM to fly the drone.

LED's will start blinking at a medium speed, indicating hovering has been detected. If the drone lands and motors are turned off, the LED pattern will again return to the slow blink pattern.

- 5) Fly the drone quickly in a direction for 20 meters and bring it back to observe the LED pattern. LED's will start blinking quickly indicating flight has been detected. If the drone lands and motors are turned off before the arming cycle begins, the LED pattern will again return to the slow blink pattern.
- 6) Once Flight has been detected and T1 time has passed (default 30 seconds) the unit will begin arming.

LED's will display a fast RED and Green blinking.

Unit is Now Armed (Munition is Hot)

7) Once the RED LED starts flashing quickly the unit is armed and ready to initiate.
At this point the unit cannot be disabled short of powering off which is not recommended as such action could result in detonation due to movement of the unit.

Configuring Parameters / Configure Initiator

Parameters are configured and unit is optimised using the Android App OKO-M1.

The App OKO-M1 will only work with compatible M1 hardware

The App will run on all Android devices including phones and Tablets. App will NOT run on IOS.

Connect the M1 unit by first connecting the programming module to your android device via USB-C or Micro-B connector (note – the programmer connects to Android via cables on the side with both USB-C and Micro-B connectors)

OK permissions to allow OKO-M1 app to access FTDI hardware.

Select "CONFIGURE INITIATOR" button under the heading "Save settings on initiator"

Connect M1 unit via the supplied Micro-B cable to the programmer. NOTE1: if the M1 unit is plugged into any regular USB port it will NOT be recognised. No harm will occur to either port but the unit will not be detected.

The M1 unit does not need to be powered on (tab removed), it will power on in a non firing state by using power from the Android device. The unit in this state cannot create an initialisation pulse as the charge capacitor is grounded/disabled.

The M1 unit should be recognised and the on-board parameters read. If it is not, press the "DISCONNECT" button and then the "CONNECT" button.

Scroll down to the "Settings" and modify any settings as desired and required. NOTE: if you attempt to enter a setting below or above minimum or maximum values, the parameter will revert to its default value.

To program/save the new values to the unit, press "SAVE SETTINGS TO BOARD". The app will reply with "Settings saved to board".

Restoring Factory Defaults

Factory defaults can be set to unit by pressing the "FACTORY DEFAULTS" button in the M1 app once the board has been detected. No further action is necessary.

Saving Various Profiles for Programming Later

By using the sub section "Create and change presets for the initiator", various parameter / profiles can be created and saved within the app.

Select "Manage Presets"

Creating a brand new Preset

No unit needs to be connected Select "FACTORY DEFAULTS" to populate parameters or select a previously programmed Preset by selecting "READ" for that preset Modify Parameters as desired Select a Preset Slot from the "Presets configuration list:" by saving to that entry The preset name can be changed by selecting "NAME"

Saving Parameters from a pre-programmed unit as a Preset

Connect Unit Select "Read Board" App will indicate Success or Failure of Read and Parameters will be displayed Modify, if needed, any Parameters Select a Preset Slot from the "Presets configuration list:" by saving it to that entry The name can be Changed by selecting "NAME"

Programming Presets to a unit

Select "CONFIGURE INITIATOR" from the top menu screen Connect Unit If board is not Auto Detected select "CONNECT" – sometimes you may need to "DISCONNECT" and then "CONNECT" again Select "SAVE PRESET TO BOARD" button beside Preset desired in "Presets configuration list:" section

Board should be programmed.

Appendix A

See State Diagram For Details