

QUICK START GUIDE | Sound Diversionary Payload

in partnership with TYPHON®

version 1.0.0 | September 2023

Non-lethal, reloadable diversionary payload system that plugs onto our compatible sUAV/sUGV/Tactical Camera Head. This Sound Diversionary Payload provides operators with five single or five simultaneous deployments, each measured at 165+db, to assist with tactical entry.

SYSTEM COMPONENTS

▶ THE PAYLOAD PARTS ◀

SKY-HERO Payload Cradle



- 1 ON/OFF Slide Switch 2 Anchoring Eyelet 3 8-Way Connector Pins 4 Rivets 5 Clips

■ Sound Diversionary Payload related elements

TYPHON Cartridges

Live (Black)

Test (Blue)



▶ COMPATIBLE UNITS ◀

Loki⁺
MkII

Sigyn⁺
MkI

Narfi⁺
MkI



* Requires Sky-Hero Payload Bracket for Loki MkII and Sigyn MkI (not included)

▶ ACTIVATION CONTROL ◀



- 1 ON/OFF 2 Menu 3 Unit Activation 4 Arm 5 Fire

● GCS MkII related elements

ASSEMBLE



Ensure that the selected unit is switched off (battery removed for Loki MkII), as well as the Sky-Hero Payload Cradle slide switch **1**, before following the payload fitting instructions below, otherwise internal components may be damaged

1. Take the appropriate payload connection bracket and fit to body of the unit intended to use the Sound Diversionary Payload ➔ **Fig. 1**



Only applies to Loki MkII sUAV or Sigyn Mkl sUGV, as the attachment system is already integrated into the top of the Narfi Mkl Tactical Camera Head. Refer to the Loki MkII/Sigyn Mkl Payload Bracket Quick Installation Guide for setup instructions

2. Remove rubber cover from pogo pin connector and fit the Sky-Hero Payload Cradle into the appropriate bracket on the selected unit: ➔ **Fig. 2**

- a) Insert the anchoring eyelet **2** first
- b. Make sure retaining clips **4** and 8-way connector pins **3** are aligned
- c) Click rear of cartridge holder into retaining holes on payload bracket
- d. Check that the retaining clips and pins of the 8-way connector are fully engaged

3. With the drone, ground robot or camera head facing away from the operator, insert the Typhon cartridge into the front of the payload cradle: ➔ **Fig. 3**



Once payload cradle is fitted to unit body the device is then ready to accept either a blue, Typhon Test cartridge or a black, Live Typhon cartridge

- a) Push in the cartridge until you hear a “double click”
- b) The Typhon cartridge is now installed within the Sky-Hero Payload Cradle

OPERATE

A. ACTIVATING EQUIPMENT

1. Switch on the GCS MkII controller by pressing and holding the ON/OFF button **1**
2. Slide the slide switch **1** on the front left of the Sky-Hero payload cradle forward to activate the payload system
3. Power up the selected unit, either by pressing the ON/OFF button on the Sigyn Mkl sUGV or Narfi Mkl tactical camera head, or by inserting the battery into its compartment on the Loki MkII sUAV
4. Switch on the selected unit link **5** from the handheld controller

FIG. 1

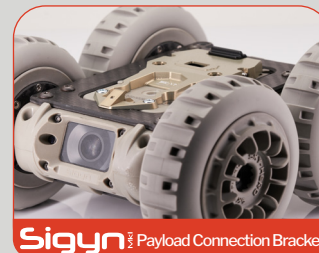


FIG. 2

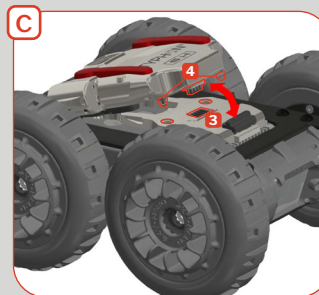
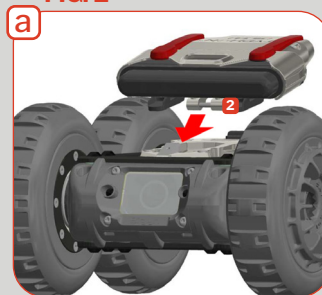


FIG. 3

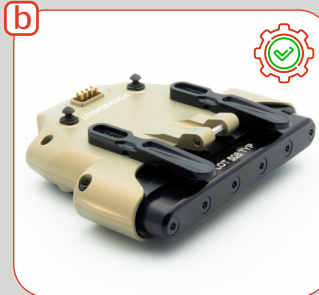


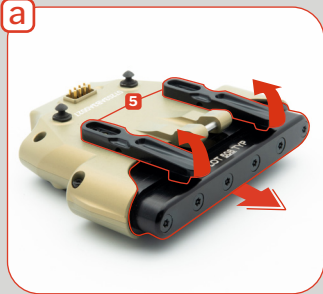
FIG. 4



FIG. 5



FIG. 6



B. GCS MkII DISPLAY INFORMATION ▶ Fig. 4

Once the devices are operational and bound together, you'll notice that:

1. The letter «P», highlighted in yellow, is displayed in the top right hand corner of the GCS MkII screen, indicating that the payload has been detected and its additional capabilities have been correctly associated
2. Also, a message is displayed in grey detailing the actions to be taken to operate the sound diversionary payload: « L to arm Typhon »



If this last notification doesn't appear, you may have deliberately modified the commands to assign a different action to the L button. To resolve this:

1. Press button 2 on the GCS MkII to access the main menu
2. Select « Loki/Sigyn Settings »
3. Enter this sub-menu and select « Button Allocation »
4. Scroll down to « L command » and select « Arm Payload » from the list

C. INITIATION OF THE SOUND DIVERSIONARY PAYLOAD ▶ Fig. 5

1. Move the selected unit platform to the intended area of initiation
2. Push and hold the top left ARM button 4 on the GCS MkII "Armed" and "R to trigger" will be displayed on the screen and the top banner will change from grey to red in colour
3. Whilst keeping the top left-hand button 4 depressed, press the right top FIRE button 5 on the GCS MkII to initiate the Typhon's cartridge
- 3'. If you do not wish to continue with the deployment, it can be made safe by releasing the ARM button 4. The banner will revert to a grey colour and « L to ARM Typhon will be displayed »



By default, single shot is selected. To alter the cartridge initiation from a single-shot to 5-round burst (or vice versa), enter the GCS MkII Advanced Settings menu:

1. Press the button 2 on the GCS MkII to access the main menu.
2. Go to « Advanced settings »
3. Select « Payload Settings » and then « Typhon Preferences »
4. The effective « Trigger Mode » is displayed
5. In the next menu, set the required deployment mode : «single» or «multi»

RELOAD



Before removing a live/blind Typhon cartridge from the selected unit, that unit and the Sky-Hero Payload Cradle switch 1 should be switched off

1. Remove the Typhon cartridge from the Sky-Hero Payload Cradle: ▶ Fig. 6
 - a) Lift up both pins 5 at the same time and unplug the used cartridge
 - b) The Typhon cartridge is now uninstalled inside the Sky-Hero Payload Cradle
2. Reload the payload cradle with a new live/blind cartridge or, if you do not plan to use the system again, store or dispose it, following your local procedures

— TRIGGER OPTION —

The activation of the Diversionary Sound Payload can also be dedicated to a third party operator using the optional Sky-Hero independent trigger device **Fig. 7**, which is wired to the GCS MkII controller via a USB-C cable.

A. CONNECTING & ACTIVATING TRIGGER ▶ Fig. 8

1. Install the Sky-Hero Payload Cradle on the deployed unit and activate it following the previously explained process
2. Switch on the GCS MkII controller by pressing and holding the power button ①
3. Connect the trigger device ② to the GCS MkII ⑥ using a USB-C cable
4. Power up the trigger system by pushing up the switch ④ on the back of the unit:

On the GCS MkII :

- The power charge LED ⑥ near the USB-C connector will be light up
- An additional message is displayed on the top banner : [TR Con]

On the trigger device :

- First of three LED noted **PWR** will be light up in blue ③, meaning the system is well paired with the installed payload on the robotic unit

B. FIRE THE DIVERSIONARY SOUND PAYLOAD WITH THE TRIGGER ▶ Fig. 9

Once the devices are operational and wired together :

5. **a** Remove the mechanical safety pin ④ on the trigger device
6. Press the front plate ⑤ to arm on the trigger and hold it down

On the GCS MkII :

- An additional message is displayed on The message on the top banner is replaced by [TR Arm] highlighted in red

On the trigger device :

- The **ARM** LED is lighting up in green ③

7. **b** Then press the button noted FIRE ⑥ to activate the payload

On the GCS MkII :

- A new message on the footer banner is displayed : **Payload trigger command sent**

On the trigger device :

- The **FIRE** LED is lighting up in red ③



Several additional LED warnings ③ on the Trigger device need to be considered:

1. If the PWR LED on the top of the trigger device is blinking blue that means that no payload has been found by the trigger
2. If the PWR LED on the top of the trigger device is blinking red that means the trigger battery needs to be replaced

FIG. 7

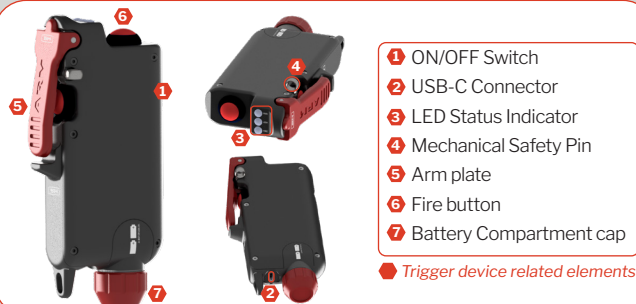


FIG. 8



FIG. 9

