XBAG INSPECTION KIT
I.E.D. TEST CASE

XBAG INSPECTION KIT is an innovative inspection / training case, designed both for quality controls and for the training of security personnel, aimed at the detection and neutralization of improvised explosive devices (IEDs) and improvised incendiary devices (IIDs) at control stations equipped with RX equipment.
The case contains assembled IED and IID inert simulacra made of handcrafted materials, equipped with inert detonators, activation systems and power batteries and such as to reproduce the molecular mass of the original explosives, the same visual effects in the RX images and activate the alarms in the EDS equipment.
The simulacra are built with different modes and triggering / activation systems: for example, timer, mobile phone and any other modified electronic system. Through the appropriate connectors, it is possible to interchange the components with each other.
The use of the XBAG INSPECTION KIT for training purposes allows screeners to acquire, safely and effectively, greater skills and knowledge in the management of explosive and incendiary devices, increasing competences in case of real emergencies.
The XBAG INSPECTION KIT is also an optimal solution for inspection activities (covert test / mystery audit) carried out by the authorities and other supervisory bodies.

Composition of XBAG INSPECTION KIT

EXPLOSIVES

Example: In the image on the left, inert explosive type C-4 built with gummy material. It is an explosive simulacrum designed to last over time while maintaining its shape without altering the molecular consistency of the organic material.
This type of inert explosive does not contain any hazardous substances and cannot detonate, but can be used for training purposes.
It also provides a realistic experience without any risk to the safety of personnel or the surrounding environment.

DETONATORS

Example: in the image on the left, an inert electric detonator made of materials which are not dangerous for the environment and humans.
This type of detonator does not contain any explosive or dangerous substance (even if it reproduces it exactly with all its components) and cannot detonate, but can be used for training purposes while providing a realistic experience without any risk to the safety of personnel or the surrounding environment.

ACTIVATION SYSTEMS WITH BUILT-IN POWER SUPPLY

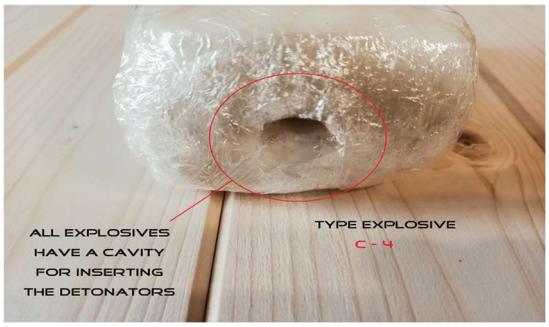
Example: In the image on the left, an activation system for timer IED with battery.
This system employs a mechanical or electronic timer, activated by a time trigger.
The timer activation system provides a realistic experience for security personnel who is also required to identify and detect IEDs in all its components (often consisting of commonly used objects).

POWER SUPPLY

Example: In the image on the left, a battery power supply. Essential for the functioning of IEDs / IIDs, it provides the energy required to activate the main explosive elements such as detonators. Usually, these batteries are of the alkaline or lithium type, and can also be very small in size to allow greater discretion when assembling the explosive device. However, the batteries used in IEDs and IIDs can also be customised types such as lead-acid batteries, so as to provide specific power according to the needs of detonators, explosives or incendiary substances. The existence of these batteries in explosive and incendiary devices represents a serious security threat, as they can also be used to activate explosives remotely, making it difficult to prevent terrorist attacks.

Modes of assembly

01

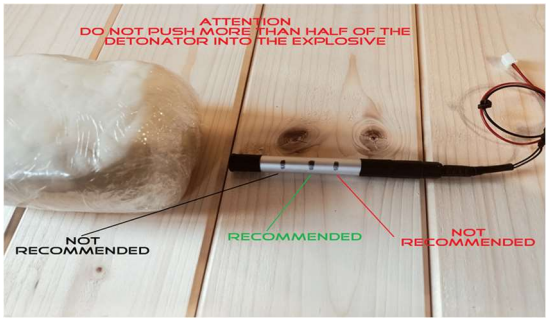


All simulated explosives not already assembled have a cavity in which to insert the detonator.
If, however, the detonator is to be placed outside the explosive, it can be placed anywhere with the help of adhesive tapes such as transparent paper tape or insulating tape.
N.B.: The use of any type of adhesive tape or glue may alter the integrity of the product, therefore, while not prohibited, its use is not recommended.

02

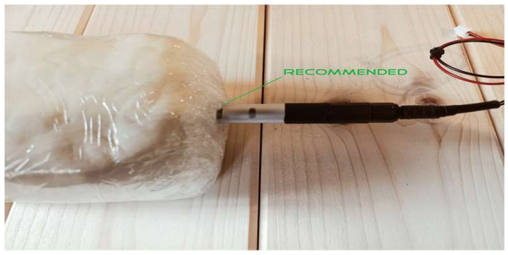
As shown in image 02, remember to insert the detonator correctly into the explosive cavity. While inserting the detonator, maintain the natural direction of the hole without pressing or levering against it so as to preserve the integrity of the mass and the detonator itself.

03



As shown in the picture above, it is recommended to push the detonator into the explosive cavity up to the middle of the cylindrical tube.

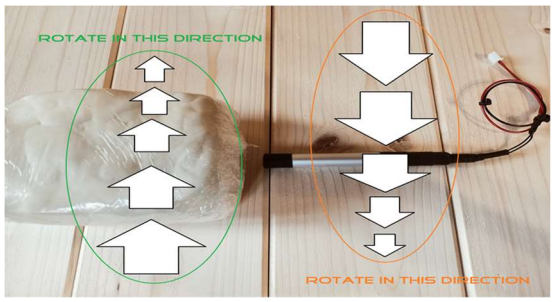
NOT RECOMMENDED 01: Partial insertion could cause the detonator to accidentally come out.
NOT RECOMMENDED 03: Nearly full insertion may result in damage to the parts during extraction.



RECOMMENDED 02: it is recommended to follow the instructions to avoid numbers 01 and 03

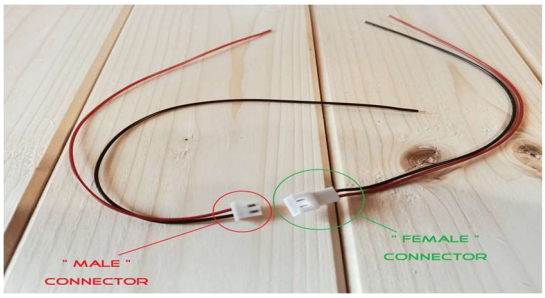
N.B.: If, over time, the detonators should become increasingly frictionless during insertion into the explosive mass, making the forced pressure excessive, it is recommended to slightly moisten the detonator with moisturizing oil for skin, using latex gloves and a cloth that does not release impurities. The use of cooking or motor oil could worsen the insertion of the detonator by creating more friction.

04



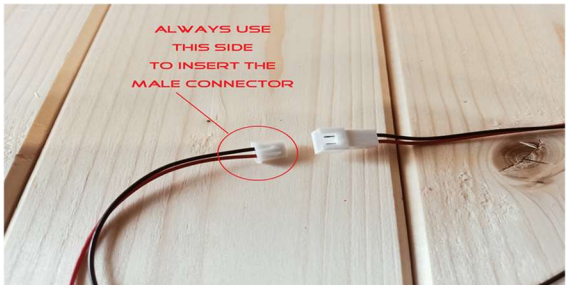
As shown in image 04
it is recommended to push the detonator inside the cavity of the explosive, rotating the explosive mass clockwise and the detonator counterclockwise (or vice versa) so as to create the screwing effect. To remove the detonator, perform the same action by grasping the detonator in the middle.

05



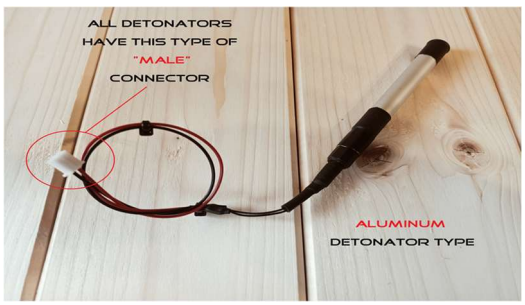
As shown in image 05, each component is equipped with MALE / FEMALE electrical connectors.
The connectors allow to create various assembly combinations.

07



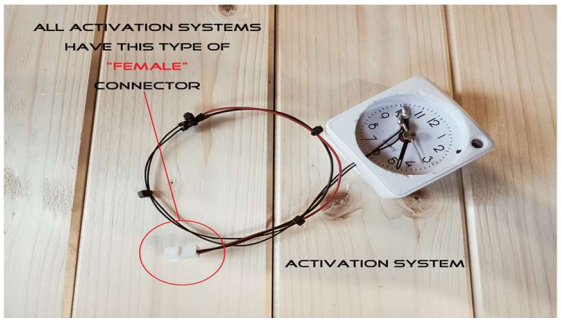
As shown in image 07, the MALE connector is equipped with a small interlocking rail to prevent a polarization failure of the power supply.

06



As shown in image 06, each detonator is attached to a MALE connector.

08

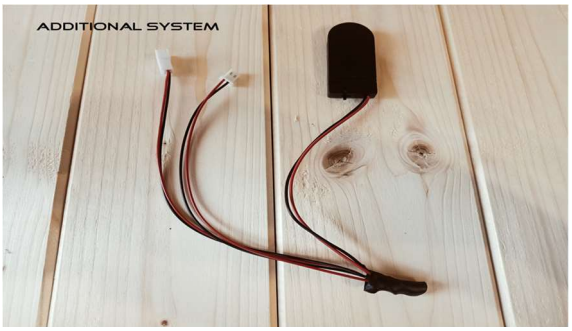


As shown in image 08, each activation system is attached to FEMALE connector.

09

As shown in image 09, the function of the connectors is to join, as already explained above, the various activation systems and detonators together, creating a wider choice than the single pre-packaged IED.

10



As shown in images 10 and 11, an **additional activation system** makes it possible to make the operating scheme of an IED fully real. The **additional** system, which may be a power supply or activation system, **is placed at one of the two poles of the main power supply or activation system**, making the IED inert until this third element is activated. This scheme is generally at the base of an electrical or mechanical circuit with remote activation.

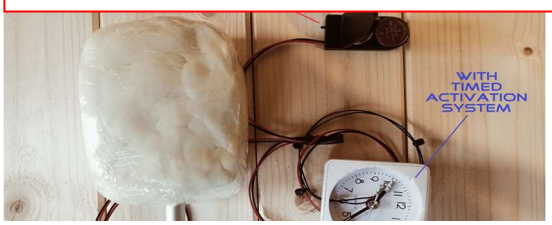
11

12

13

Final comments

ATTENTION: when handling and assembling the components included in the XBAG INSPECTION KIT, it is recommended to always use latex gloves in order to preserve the integrity of the products. Although the contents of the XBAG INSPECTION KIT are composed of inert objects, it is FORBIDDEN to use batteries with a full energy load or batteries with extraneous polarised cables or not already in the supplied kit in order to avoid accidental short-circuits, as the batteries could also explode. Only secured devices such as mobile phones, alarm clocks, altimeters, etc. may be used.



As shown in image 12, the additional power or activation system interrupts the power like a switch and then triggers it at the desired time.