AL EFAH'S EOD/IEDD SOLUTIONS

Tools and equipment developed by EOD & IEDD trained Engineers.

Safety, Quality and reliability delivered at affordable pricing.

AL EFAH TECHNOLOGIES PVT LTD

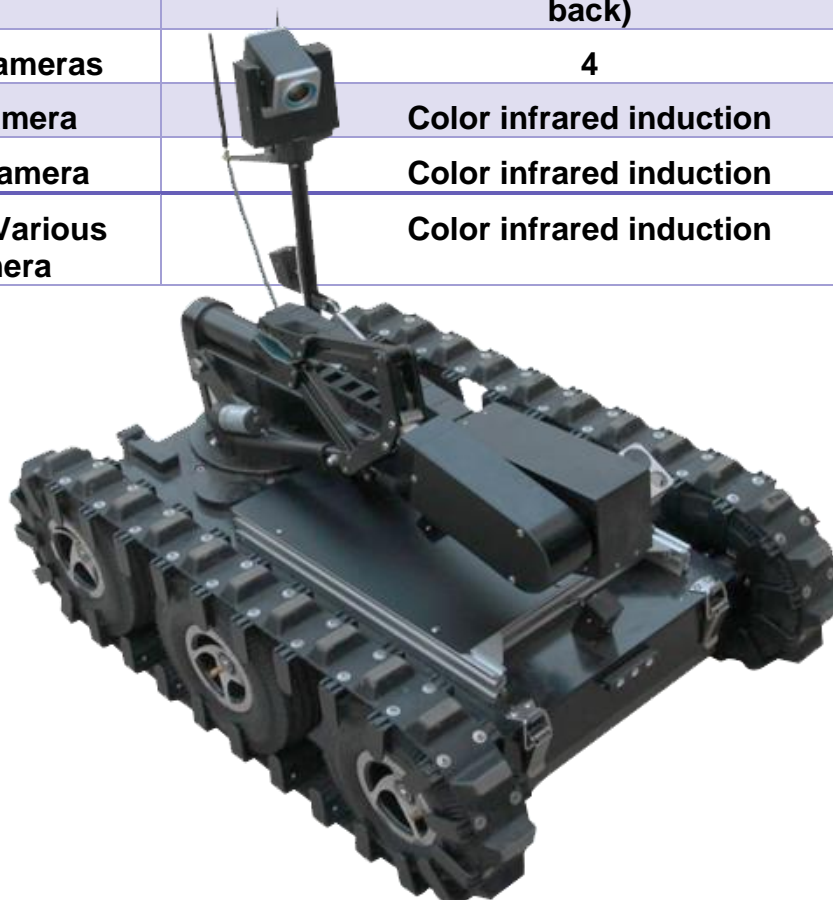# REMOTE & SEMI-REMOTE HANDLING KITS & TOOLS

EOD ROBOT PCR-02

PCR-02 EOD Robot is a versatile platform. It can carry various devices for different applications. It is a six wheeled tracked chassis with independent drive of each track to move in various environments. With a speed of more than 5 km/h it reaches its targeted area fast. Its manipulator with extendable arm ensures a large reach to one and half meters. It can move the suspicious objects, and when fully retracted can lift up to 40 kg. Monitoring system is made up of camera, monitor, antenna, etc. A set of LED lights is mounted each in front of body and at the back of the body.

- *High strength Aircraft grade Aluminium Alloy body.*
- *Optional accessories tools are available for specialized roles.*
- *Infrared Cameras enable night operations.*
- *Can move normally with 140 Kg load.*
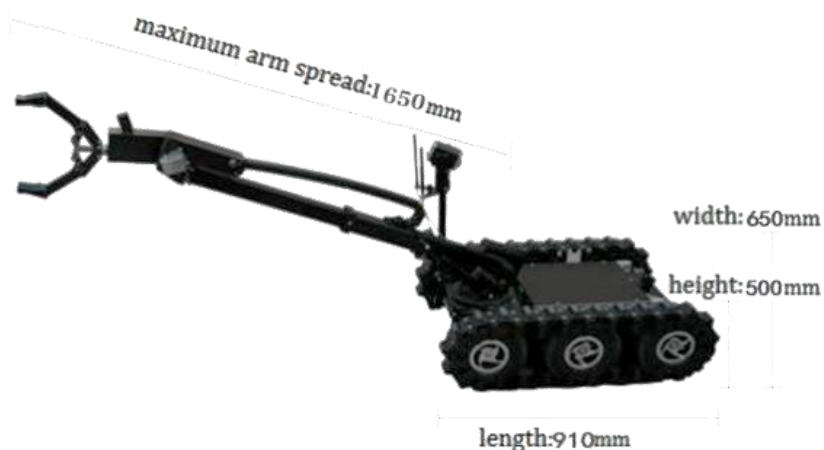- *A lift of 40 Kg with retracted arm.*

Platform Specifications

Dimensions	L*W*H: 910 * 650 * 550 mm
Weight	90kg (without accessories, package and control box)
Battery	DC24V lead acid rechargeable battery
Working time	≥ 5 hours
Maximum Speed	≥1.5m/s
Grade Ability	It can climb up the slope of 45° and stop steadily on the slope.
Climbing Stairs Ability	With traction-free assist, it can climb up and down the stairs of 160mm step height and 45° angle slope.
Drag Capability	≥500N
Turning Ability	In horizontal cement ground or bituminous pavement, the robot can turn clockwise or anticlockwise 360º.
Loading Capacity	When loading 140 Kg, it can move normally
Limited Passage Width	≤700mm
Control Distance	Wireless control: ≥150m (visible range) Wire control :100m (optional 200m);
Over-obstacle Capacity	It can cross the obstacle of 320mm height.
Floodlight	Two group LED floodlight (one group on the front and back)
Number of Cameras	4
Forward Camera	Color infrared induction
Backward Camera	Color infrared induction
Cradle Head Various focal Camera	Color infrared induction

Manipulator Gripper	
Manipulator Gripper Camera	**Color infrared induction**
Lift Capability	**Can move with clamping weight of 40K without dropping**
Max. Mechanical Arms	**1650 mm**
Gripper of Manipulator Maximum Expansion Range	**250 mm**
Arm Extension when stretch out and draw back	**500 mm**
6 Mechanical Arm DOFs	**Manipulator gripper opening and closing Manipulator gripper rotation Small arm rotation Telescopic arm extend and retract Big arm rotation Big arm rise and fall**
Rotation Angle	**Manipulator gripper can rotate clockwise and anticlockwise 360º; Small arm can rotate clockwise 150º and anticlockwise 110º; Big arm can pitch angle of 90º; Kidney basin can rotate clockwise 180º and anticlockwise 45º**

maximum arm spread:1650mm
width:650mm
height:500mm
length:910mm

Monitoring cradle head	
DOFs of Cradle Head	2 independent DOFs, adjustable rotation speed. Cradle rotation: 360⁰ continuous Maximum rotation speed of 130°/sec. Cradle pitching: -45°~ 120°, maximum pitching speed of 50° per second.
Control Terminal	
Box	Portable, waterproof, dustproof, high strength
Size	**≤ L 460 * W 370 *H 260 mm**
Weight	**≤ 10kg**
Display Screen	12-inch HB LCD, wide viewing angle, outdoor clear picture
Operation	High-quality rocker handle, human software interface design, easy observation and convenient operation
Display Image	It can monitor 4 video signals simultaneously or separately amplify one of 4 video signals
Information Display	Real-time voltage
Battery	Rechargeable 24V lithium battery, working time ≥ **3 hours fully charged.**
Control Box	Via the buttons and handle of control box, the operators can control video switch, zoom, moving, cradle rotating, floodlight, telescopic arm, gripper opening and closing, small arm rotating, big arm lifting, kidney basin rotating, wrist rotating, etc.

EOD Robot Capability Enhancements

EOD robots are versatile platforms and the applications of different users can vary based on the threat. Various multiple attachments to enhance the capability of any robot are offered.

EOD Robot Shot Gun

Multi-shotgun is offered to be mounted on a frame incorporating the Firing Actuation Mechanism, Laser Aiming, Camera and LED light. In EOD or IEDD operations remote controlled shot guns are used to gain access or shoot an area of interest. The gun used for the system is a multi-shot and semi-automatic. The gun has the capability to fire five shots. To install the gun on any robot the complete assembly is fitted to the Arm of the robot and connected to the local firing terminals.

EOD Robot disruptor mount

The disruptor mount is versatile to get adopted on different arms of robots. Every IED defeating robot has to be adopted for a water jet gun Disruptor. We provide an economical solution for mounting the disruptors on the robot. This is done on the robot arms. The product is rugged and field proven. The mounts are provided with integrated solution for Camera, LED and the Laser pointer. These are controlled by the robot control units by interfacing with the electronics.

EOD Robot X-ray mount

A universal mount which can adopt to various manual and digital X-ray systems for any robot. The X-Ray Mount attachment suitable for carrying diverse range of X-Ray Equipment Golden Engineering generators. The Mount is easily carried in the claw of the robot, allowing the X-Ray system to be placed around a suspicious object.

Audio/Video unit for EOD Robots

Various audio/ video sender's/ receivers options for EOD Robots facilitate aiming and robot tools' operations monitoring. The audio and video senders for EOD robots have been developed for monitoring the tools operations and for the aiming of the weapons to be fired.

Window breaker

The window breaker is used to gain access to a vehicle's windows by breaking its glass. It is a simple tool which can be adopted with any robot.

Artificial Diamond Inserted tip

Underwater ROV with claw HWM-2

The HWM-2 is a specialized underwater remotely operated vehicle (ROV) for professional and industrial purposes. It is lightweight aluminum alloy with compact body weighing less than 6KG (13 lbs) for single person portability and quick deployment in 3 minutes. It features a configuration of 8 Vectored Thrusters, enabling seamless movement in all directions. The ROV utilizes a hybrid power system, combining AC and battery power, to achieve an unlimited battery life.

Key Features

- Attachments such as Grabber Claw, Floodlight, Docking station, USBL underwater positioning, 700Wh battery, Auxiliary Camera, other Exclusive Enhanced Accessories.

- Built-in 4K/1200p camera with 12-megapixel EIS image stabilization,

- Powerful 4000 lumen LED lights

- Removable battery, and a removable Micro SD memory card.

- Suitable for Underwater search and rescue and the Hull & Dock inspection.

Specifications

ROV	
Size	500*280*180 mm
Weight	≦6 KG
Max depth	150 m
Max speed	1.5 m/s (3 Kn)
Runtime	Up to 5H
Battery	700 Wh
OperatingTemperature	-10℃~45℃
Horizontal radius	400 M
REMOTE CONTROLLER	
Size	160*155*125 mm
Weight	685g
Battery	2500mAh
Runtime	≥6H (depending on the environment)
Wireless	Wi-Fi supported
HDMI	Support
Handle spring	Maximum support 13 inch
CHARGER	
Power	2.9A/25.2V
ROV charging time	4.5H
RC charging time	2H
CAMERA	
CMOS	1/2.3 (SONY IMX377)
LENS	F1.8
Focus	1m
ISO Range	100-6400
FOV	152°
MAX resolution	12 Meg Pixel
Format	JPEG/DNG
Video	UHD:3840*2160 (4K) 30fps FHD:1920*1200 (1200p) 30/60/120fps
Slow motion	720p：8x (240fps) 1200p：4x (120fps)
Time lapse	4K/1200p supported
Brightness	2*2000 Lumens
Color Temperature	5000K~5500K
CRI	85
Dimming	Three gears

Standard Configuration

Name	Picture
Underwater ROV	
Highlight screen control box	
AC direct power cable with reel 200m	
Multi-function docking station	

Standard Configuration

USBL underwater positioning	
Floodlight	
Mechanical Arm	

Manual Telescope Pole Manipulator PKM-01

PKM-01 Telescopic pole is with an extendable design, manufactured from durable and lightweight rigid material. It does not make lethal splinters in the event of a nearby detonation. The tool attachment end of the pole is specilly made to receive different hooks and attachments. Supply of the pole includes a carry case. A specially designed can be made on customer request for a specific application.

Features

- *Heavy duty clamps.*
- *Female threads at end with one male threads end converter*
- *Provided with carrying bag.*
- *Tailored solution available for different lengths and specialized tools attachment.*

Specifications

Title	Specifications	Title	Specifications
Material	Carbon fiber	**Sections**	5 or on customer request
Extended length	3.75 m Longer lengths possible	**Retracted length**	0.93 m Or on customer request
Lift capacity	8 Kg for 3.75 meter extended length	**Pole weight**	Less than 4 Kg
Tools Hardened Steel Hooks set	1 x Plain Tip, 2 inch. 1 x Plain Tip, 1 inch. 1 x Plain Tip, ½ inch. 1 x Hook, Double.	**Rake tools**	Made for spring loaded pins
Tools	Boat Hook Nylon Marine Barbs Spear	**Forceps**	Forceps tools can be designed of different sizes on customer need

Universal Manipulator PKM-02

The PKM-02 UXO Manipulator is a lightweight telescopic arm designed to offer a 3-meter standoff distance when the operator is already protected by an EOD suit. The manipulator consists of three sections with locking mechanisms to securely hold the extended position. At the end of the telescopic arm is a universal mount for installation of different tools. A mechanical claw is the important tool installed. A counterweight and battery box are installed on the other end.

The operator control panel allows precise control over the claw's opening and closing positions, as well as continuous 360⁰ rotation of the claw. The open and close functions of the claw can be controlled either through visual feedback or an LCD screen. In addition to manipulating suspect objects, the device can also be utilized for positioning explosives charge for detonation.

Key features

- *High grabbing capacity*
- *3 meters' stand-off capability*
- *Rechargeable battery*
- *Adjustable counter balance*
- *Can be rotated 360° electrically and manually;*
- *Height of bracket adjustable with universal wheels which can be lock*

Specifications

Standoff distance	3 meters
Length of Telescopic Pole	450 cm
Lift Capacity	10 kg
Material	3 sections of High-strength light-weight carbon fiber / Aluminum alloy
Claw rotation	360° continuous 6 RPM on load
Manual adjustment of gripper	90 Degrees manual
Claw Opening maximum	220mm
Assembly Time	3 minutes
Battery Working Time	Rechargeable dry gel battery 1 hrs continually
Adjustable trolley	Yes provided
Camera	HD 1080 P 5.0 Mega digital camera. Optical Total Pixels :5.0 Mega, HD Video Output Interface: FPD-Link-III Waterproof : IP68
Screen	Size : 7 inch digital color screen with sunshade. Photo Format : JPG Storage External SD card: TF card 1 to 64 GB Port: USB 2.0 Voltage: DC :7-24V USB DC:5V AC Adapter: DC 12 V 1 A Built-in Battery : Li-battery 5000 Mah

IED Manipulator PCM-03
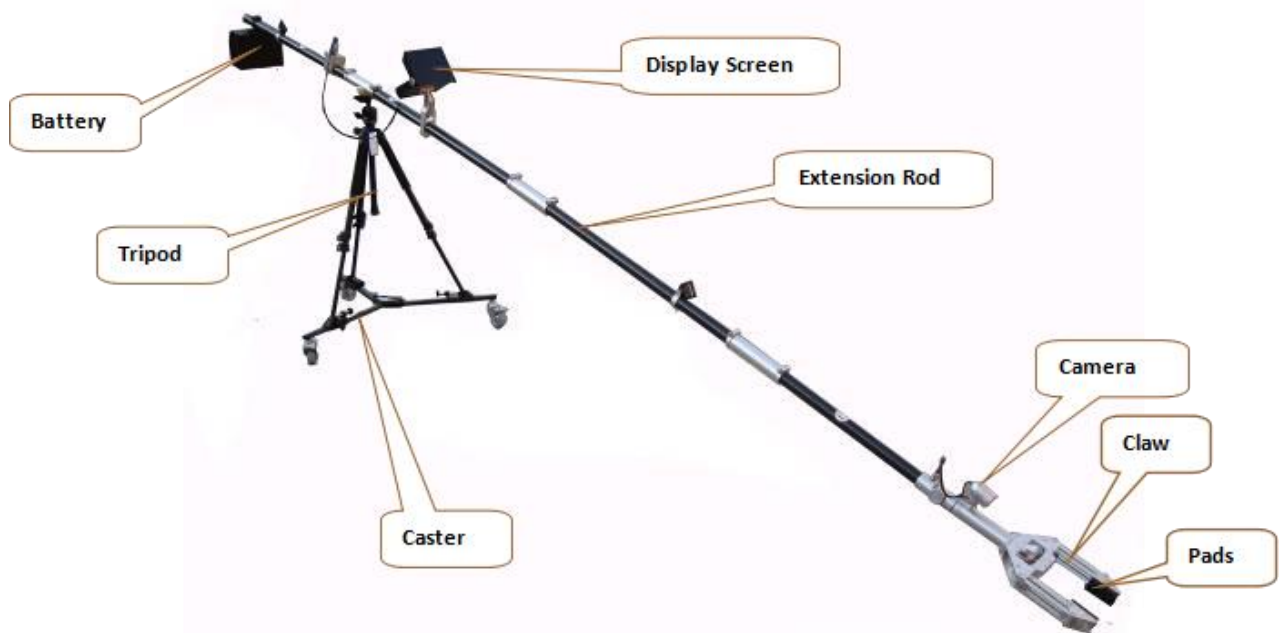
PCM-03 IED Manipulator provides an IED operator a stand of for 4 meters when already protected by an EOD suit. The claw's open and close is controlled through visual feedback as well as through a LCD screen. Situation of a safety distance of 3 meter or more has significant chances for an EOD operator's survivability with EOD Suits having overpressure suppression. Apart from moving suspect objects, the manipulator can be used to position disruptors, x-ray equipment and other EOD equipment.

- *High grabbing capacity: it can grab about 10 kg objects.*
- *Rechargeable battery*
- *Adjustable counter balance*
- *Mechanical claw can be rotated 360°*
- *Adjustable height bracket with universal wheels which can be locked;*
- *IR night vision camera and the LCD monitor operable in the night.*

Specifications

Standoff distance	4 meters
Grabbing Capacity	About 10kg
Material	High-strength light-weight carbon fiber
Total Weight of device	25kg
Claw rotation	360° manual
Length of Telescopic Pole	4.2m
Weight of Pole	10 kg
Assembly Time	3 minutes
Dimension (cm)	120x57x32
Types of Pads	3 types
Working Time	5 hrs continually
Weight of Battery	6kg
Display Size	8 inch LCD screen
Camera	420 lines high resolution CCD camera with IR
Operating temperature	-20℃ to +40℃
Storage temperature	-30℃ to +60℃

IED Manipulator PCM-02

PCM-02 IED Manipulator provides an IED operator a stand of 3 meters when already protected by an EOD suit. This significantly increasing operator survivability should a device detonate. It is comprised of the mechanical claw, mechanical arm, counterweight, battery box and controller. It can control the claw's open and close.. The claw's open and close is controlled through visual feedback as well as through a LCD screen. Apart from moving suspect objects, the manipulator can be used to position disruptors, x-ray equipment and other EOD equipment.

Key features

- *High grabbing capacity: it can grab about 15 kg objects*
- *3 meters stand-off capability*
- *Rechargeable battery*
- *Adjustable counter balance*
- *Can be rotated 360° electrically and manually;*
- *Height of bracket adjustable with universal wheels which can be lock*

Specifications

Standoff distance	4 meters
Grabbing Capacity	More than 10 kg
Clamp weight	More than 15 Kg
Material	High-strength light-weight carbon fiber
Claw rotation	360°
Claw Opening	20.5 cm
Total Weight of device	11 kg
Counter weight	9 kg
Length of Telescopic Pole	4.68m
Assembly Time	3 minutes
Working Time	5 hrs continually
Dimensions	1286 x 346 x140mm

Hook & Line Kit PCH-4

Hook and Line kit provides a bomb technician with a wide range of equipment/tools that can be deployed to gain access, to remove, manipulate and handle a suspect item. This kit is a vital part of EOD tools for any semi-remote IEDD operation. The kit consists of various hooks, ropes, pulley, lines, hanging ring, rod, clamping device, multifunction tool clamp, sling and so on. The kit has been developed with the inputs of various EOD operators and their experiences. This kit provides great flexibility with various options to handle the IED. An experienced EOD team can quickly construct a hook and line mechanism that enables the team to investigate and facilitate detonation and/or removal of suspicious materials with safety. A standard kit is listed below and can be tailored to any specific needs.

Configuration List 1- Part no PCH-4A

1 x Pulling handle, for 5.5mm line	1 x Hook, 12mm gate, single, plain, male thread
1 x Hook, 25mm gate, single, plain, male thread	1 x Hook, 25mm, double, plain, male thread
1 x Hook, 50mm, single, plain, male thread	1 x Hook, 12mm gate, single, barbed, male thread
1 x Hook, 25mm gate, single, barbed, male thread	1 x Hook, 25mm, double, barbed, male thread
1 x Hook, 50mm, single, barbed, male thread	2 x Eye ring, Ø25mm, female thread, fits to male thread hooks
10 x 'O' ring seals	2 x Rope sling, Ø3mm × 2m, soft eye
2 x Rope sling, Ø4mm × 2m, soft eye	2 x Rope sling, Ø5mm × 2m, soft eye
2 x Wire sling, Ø1.5mm × 2m	2 x Wire sling, Ø2.0mm × 2m
2 x Wire sling, Ø3.0mm × 2m	1 x Piton, 50mm length
1 x Piton, 70mm length	1 x Piton, 80mm length
1 x Self grip plier with eye, 10", 25mm gate	1 x Piton, 90mm length
2 x Karabiner, screw gate, 15mm gate, and 2400 kg max. load	2 x Karabiner, screw gate, 23mm gate, and 2700 kg max. load
1 x Snatch block with jammer cleat	1 x Shackle, "D" shaped, 1000kg
10 x Screw anchor, with eye, self-tap into wood	1 x Double suction pad with anchor point, Ø118mm pad, pulling strength 120kg
4 x Rubber door wedge	1 x Line Branch
1 x Clamp anchor, adjustable, 18" length, 3 sets feet to fit different shape object	1 x Multi-function pocket tool
1 x Telescopic pole for hooks, more than 3meters when extended	2 x Light weight spring grip, 16" length with eye
1 x Belt sling, 10mm width, 140cm length, Ø5 x 110cm line with eye	4 x Automatic opening snatch block, swivel eye, max. Load 600kg
1 x Hook, spring gate, 25mm gate	1 x Hook, spring gate, 50mm gate
1 x Mount, for spring hooks, male thread, to fit telescopic pole	2 x Splitter ball, use with Automatic opening snatch blocks, fits 5.5mm line
1 x Sledge - for rough terrain use	2 x Triple barbed hooks with 25mm eye
1 x Mount, for triple barbed hook, male thread, to fit telescopic pole.	10 x Sticky eye, 90x90mm
2 x Doorway anchor, 700-1100mm, with two eyes	1 x Transport case, heavy duty, with foam cutout.

Configuration List 2- Part no PCH-4B

1 x1.2m Rope sling Dia: 7mm Load: ≤180kg	1 x2.5m Rope sling Dia: 7mm Load: ≤180kg
1 xGalvanized Wire sling 0.45m Load: ≤20kg	1 x Galvanized Wire Sling 2m Load ≤150kg
1 x Galvanized Wire Sling 2m load ≤200kg	1 x Galvanized Wire Sling 2m load ≤400kg
1x M8 hook: 120x70x15mm; Mouth size: 50mm	1x M8 hook: 80x38x15mm; Mouth size: 25mm;:
1x M8 hook: 57x20x13mm Mouth size: 14mm	1xM8 Double hook: 75x58x38mm Mouth size: 25x2mm
5x Screw eye with 25mm long wood screw	1 x Grip Pliers
2x Ring Stainless steel Thread type: M8	2x SS Shackle Width: 12mm; Dia: 6.5mm Notch: 12.5mm Bore Load: ≤35kg
1x Nylon braided belt Sling Load: ≤100kg	4x Pyton
1x Door way anchor Rod Min. L: 705mm Max. L: 1150mm Load: ≤20kg at span ≤900mm Wt: 1.5kg	4x Snatch Block Pulley (self-opening) Dia: 50mm Outer size: 210x75x40mm For rope dia: 4-10mm Lift weight: 35kg
1x Opening Size: 200mm The depth of the clamp arm: 130mm	1x Sliding bar clamp Opening Size: 200mm Depth of clamp arm: 130mm
1x Snatch Block with jammer cleat	5x Karabiner
1x Connecting Bar 12×60mm with double positioning pins	1x Connecting Bar 13×80mm with long notch
10 x adhesive anchor	2x splitter ball
1 x Aluminum Double suction anchor	1x Dustpan
1 x Five-claw Anchor Hooks 65x60mm Pulling weight: 5kg Three-claw hook: 3kg	1x Three-claw Anchor Hooks 38x50mm Pulling weight: 3kg
2 x Anti falling hook 135x80x12mm Pulling weight: 50kg Lifting weight: 35kg	1x Line Branch
1x Multi-purpose Tool	1x Telescopic pole Length: 96 ~ 263cm
1 x Transport case, heavy duty, with foam cutout.	

Configuration List 3- Part no PCH-4C

1 x Pulling Handle	1 x Hook, Plain Tip, 1 inch
2 x Hook, Plain Tip, 2 inch	2 x Hook, Double
1 x Hook, Plain Tip, 1/2 inch	5 x Anchor Pad, Self-Adhesive
1 x Coupler, Single w/pin (on pole)	1 x Telescoping Pole
2 x Piton	2 x Suction Anchor, Single Pad
2 x Carabineer, Standard	1 x Clamp, Cantilever Jaw
2 x Seizers, Forceps, Lg & Sm	2 x Snatch Block/Pulley, Self-Opening
2 x Snatch Block/Pulley, Standard	2 x Pulley Opener
1 x Mirror, Pocket Search	4 x Endless Loop Slings, 2 Lg & 2 Sm
1 x Backpack	1 x Clamp, Ratchet
1 x Clamp, Needle Nose	1 x Suction Cup Bridge, Med
1 x Clamp, Lightweight Spring Grip	1 x Clamp, Line Branch
1 x Clamp, Large Mouth w/Eye	1 x Clamp, Vise Jaw w/Eye
1 x 2" 'backpack' Hook, 3/4 Closed	2 x Rope Sling
2 x Door Stops	4 x Shock Cord, 2 Long & 2 Short
2 x Sling, Wire, Long & Short	2 x Anchor, Wall Nuts, Lg&: Sm
2 x Sling, Webbing w/D-Ring, Lg	2 x Karabiner, Locking
2 x Karabiner, Express Set (3-PC)	1 x Clamp, Bar w/Jaws
1 x Rod, Extension Set w/feet	1 x Hook, w/ Spring Gate
1 x Hook, Strap Cutter	5 x Wood Screw Eye
15 x Replacement Adhesive Anchor Pad	

Personal Hook & Line PCS-P1

Hook and Line kit provides significant flexibility for a bomb technician for a semi remote approach to a suspected item. A one man carry HAL kit has set of basic tools to manipulate and remove a suspected item. An experienced EOD operator will quickly construct a hook and line mechanism that enables to investigate and facilitate disposal or safe removal of suspicious material. A configuration can be customized according to your threat. item to configure a one-man carry HAL Kit

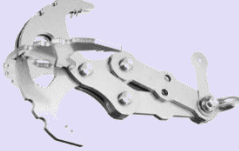| No.	Name	Picture	Qtyy v	Specification	Material
1	Thigh bag PCS-B1		01		1000D Water proof nylon
2	Folding Strap cutter PCS-C2		01	Length : 145 mm	Cutting head High carbon Alloy Steel and handle made of ABS
3	Carabineer with roller of different sizes PCS-C1		04	Major axis:25kN Minor axis:8kN Open gate:8kN	7075 aircraft grade aluminum
4	Multitool PCS-MT		01	Length : 143 cm Pouch	Hardened Stainless steel

No.	Name	Picture	Qtyy v	Specification	Material
4	Spring Grip Clamp PCS-G1		2	4 inches	Steel Or Nylon
5	Tweezers, Forces PCS-T1		1		Stainless steel
6	Self-Grip Pliers PCS-G2		1	7 inches	Nickle plated
7	Rope Sling PCS-S1		1	2 meters long	Steel or Aramid with steel eye ends
8	Foldable Grappling hook PCS-H1		1	Weight : 300 g	Stainless Steel
9	Telescopic Spear Hook PCS-H2		1	60, 90, 120 cm	Aluminum Alloy and Stainless Steel
10	Self-Adhesive Screw Hook PCS-H3		06	Can bear upto 5kg	Material: Acrylic
11	Plastic Hook Stakes PCS-H4		06	ABS plastic 7.87 inches long	Ground Support Nails

Aramid Line on Reels & Spools

Aramid line are offered for use with the Personal HAL kits. Light weight braided Aramid lines on sturdy reels provide handy solution. Options can be selected for line size, color and material. Also, the length of the line can be selected based on the operational requirement. Spools/ reels options are offered for different lengths of the lines.

Aramid Braided Rope

- Available from 2mm to 10 mm.

- High Break strengths.

- Low elongation less than 8%.

- Available in Kevlar, UHMWPE and PE materials.

Rope Color Options

Line Strength Chart (Lbs)*

Size	2 mm	3 mm	4 mm	5 mm	6 mm	7 mm	8 mm
Kevlar	600	1,350	2,400	3,750	5,400	7,350	9,600
UHMWPE	750	1,680	3,000	4,680	6,750	9,180	12,000

* Break strength given are tentative figures and may increase or decrease with the braid and core material construction. Each lot will have accurate figure at the time of placing order.

Reel and Spools Options

Coated Alluminum Alloy Finger Spool PCS-R1

- *Accamodates upto 30m of 3mm line.*
- *Fits on finger*

Thumb stopper Plastic Reel PCS-R2

- *Accamodates upto 100m of 3mm line.*
- *Wide handle for gloves.*
- *Snap at the line end.*

Winder Style ABS Reel PCS-R3

- *Accamodates upto 250 m of 3mm line.*
- *Handbrake anti-reverse reel*
- *27 cm*
- *Firm line compression grip.*

Winder Style Stainless Steel Reel PCS-R4

- *Accamodates upto 350 m of 3mm line.*
- *Winder Weight 1125g*
- *Firm line compression grip.*

Winder Style Alloy anti-reverse reel Reel PCS-R5

- *Accamodates upto 450 m of 3mm line.*
- *Megnesum Alloy construction.*
- *With shoulder strap.*

Large Handle Derlin screw break PCS-R6

- *Accamodates upto 500 m of 3mm line.*

Accessories for lines

Crocodile line Grip **PCS-G3** Fine workmanship, easy to use and carry. Must for smaller lines for good grip.	
Stainless Steel Line Compressor **PCS-G4** Three sizes	
Single drift hook with line- PCS-H5 heavy duty bolt snap at the other	
Double drift hook with line- PCS-H6	
Bungee ropes- PCS-C4 Stainless steel clip Dia 3/8 inch Lenghts 4, 5, 6 ft	
Sling Belt- PCS-C5 Pull 22 KN	

Multi-function knife pliers
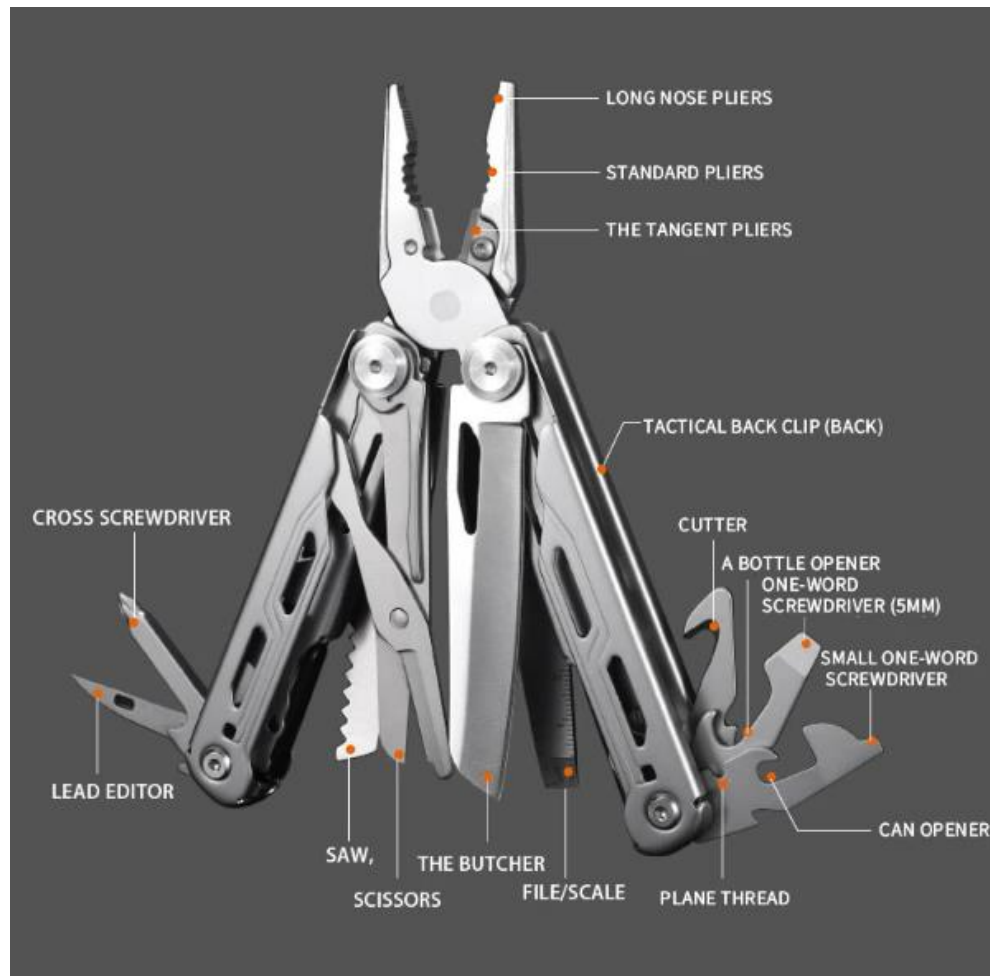
Features

- *Multifunctional tools to meet the needs of use.*

- *Upgraded structure, integrated handle.*

- *Scalable batch header.*

- *High hardness and wear resistance.*

- *Contains needle-nose pliers, wire cutters, wire cutters, medical emergency pliers and other functions.*

Key Specs

Main material: 440A stainless steel

Full length: 161 (mm)

Items - Pliers x 1, Nylon bag x 1, Box x 1, Screw bit x 12

Non-Magnetic Prodder NMP-01

Copper-beryllium alloy probe

Insulated non magnetic handle

Description

The non-magnetic prodder is made from Copper-beryllium alloy which is special non- magnetic materials for detecting underground or delivery goods that increases safety factor in detecting dangerous goods. No spark will be generated in a collision with metal. It is a one-piece, foldable, sectional, mine-prodder that has been designed for easy stowage by de-mining operators when breaching minefields or under-taking mine clearance work.

Features

- *It can be carried in a pocket or webbing pouch.*

- *It is supplied with a first guard to offer protection from blast and fragments from anti- personnel mines.*

- *It is made from copper-beryllium alloy.*

- *Telescopic prodder.*

Specification

Handle length	**35 cm**
Weight	**6 ounce**
Probe Material	**Copper-beryllium alloy**
Handle Material	**No magnetic insulation material**

Demolition Day Boxes

Different hand tools and consumables are necessary for a reliable disposal operation. May it be the disposal of friendly munitions or an EOD/IEDD operation after a render safe procedures; reliable and safe tools are vital for preparing final disposal explosives charges. We provide you all these little things to have your operations safe. You may build your own box from these kit items. The complete kit is packed in rugged transportation container.

DDA1 configuration

3 x pair of leather gloves	1 x Search light
1 x multi-tool set including a crimping tool	Heavy duty Knife
Cutting board Hard Wood	2 x head light
1 x mesh cloth adhesive tape 50 mm x 25 m	6x grounding bars
1x Day Operation Pelican case with cut foam for tools	1 x cutter
3 pair of protection glasses	Wire Cutter
1x hammer	1x hammer soft
Screw driver Set	Strap cutter
Nail puller and pry	Hook knife
Screw driver copper	

Optional items

Warning boards with base	2 x folding spade
Thigh pouch	10 x low order Shape charges
6x grounding bars	200 x det cord connector

EOD Crimping tools

The detonators and caps need a reliable connection with the safety fuse. Crimper cutter tools are a vital item in the demolition kit. These options are available.

EACR-01

This is a brass material crimper with proven performance.

EACR-02 Dual Crimper

The Dual detonator crimper is manufactured with non-sparking, non-magnetic material. It provides clear cuts of the safety fuse and the detonation cords.

- *Materials: Hi-Strength Aircraft Quality Aluminum*
- *Finish: Hard Anodized.*
- *Length: 6.8 in. (173mm)*
- *Width: 1.8 in. (46mm)*
- *Thickness: 0.35 in. (8.9mm)*

Detonator/ Blasting Cap Box

The Detonator box can hold ten detonators and is made of tough plastic and locking clip.

Cutter Knife

Different cutters can be provided with industrial grade and with ceramic cutting blade

Folding Spade

A must have tool for explosive disposal activities. It is compact size and folding design make it easy to pack or carry. Made of special corrosion resistant stainless steel, durable and hardness. It is lightweight and has a comfortable non-slip grip.

Blaster Multi-meter

   This compact and bright yellow 106 is MSHA approved and safe for all blasting circuit measurements. Equipped with a new LCD backlight feature and a standard nylon protective case, the 106 employs solid state surface mount technology for the same ruggedness and reliability you have come to expect.

Current Output: <4mA

Weight: 5 oz. (.14kg)

Size: 4.6 x 2.4 x 1.1 (25x60x27 mm)

Ranges: 1 (1 ohm-2K ohms)

Battery Type: 9V

Lighting Solutions for Night operations

The EOD/ IEDD operations can seriously get hampered due to poor light conditions. Various options for portable lights for the night operations are offered.

Rechargeable 72 W Man-portable light

Power: 72w

Working time: 20hrs (Low) 4.5 hrs (High)

IP Rate : IP65

eight :5.5Kg (lead-acid) , 4kgs (lithium)

Charging Time: 8-10H

Mass height : 79cm

Color : Black or yellow

Function : Flood into Spot in 1 second

SEARCHLIGHT

Light Source: Fluorescent

Lamp Power(W): 25

Lamp Luminous Flux (lm): 2000

Working Temperature(℃): -20 - 40

Working Lifetime (Hour): 50000

Lamp Body Material: Aluminum Alloy

Bulb: CREE T6 10W LED

Waterproof: IP68

Viewing angle: 30 degree

Industrial Head Lamps

This industrial LED head lamp has rechargeable battery lighting period to more than 12 hours. The light is sealed to IP65 standard and aluminum body. Effetsive in EOD search during time of emergency.

Non Magnetic Anti-Spark Tools

Nonmagnetic kits are essential for working in EOD/ IEDD tasks to avoid threat of magnetic field and spark initiating of an IED or a UXO. Tools are made of Beryllium-Bronze alloy (Be-Cu) king it 100% non-magnetic tool set but also it is a non-sparking tool kit. The kits are also suitable for safe working in other explosives atmospheres like a gas station, fuel Shops or where volatile fumes exist. All tools are suitable for contact usage and are supplied individually certified.

Customization. A customized kit with tools defined for requirements of particular working environment can be prepared. Special hand tools for specialized applications are also available. The tools are placed in a packing with cut foam to accommodate all the tools.

Alluminium Case	Soft Case	Hard Case

36 Pcs Tool kit AENM-36B

Sr no	Tool	Size	Sr no	Tool	Size
1.	Tweezers	200mm	2.	Probe straight & right angled	187mm
3.	Knife	185mm	4.	Scissors	225mm
5.	Hacksaw Frame	500mm	6.	Hacksaw Blade	300mm
7.	Putty Knife /Scraper	40mm x 200mm	8.	Wire Brush	4x19
9.	Screwdriver Flat	3x50mm	10.	Screwdriver Flat	4.5x150mm
11.	Screwdriver Flat	6x100mm	12.	Screwdriver Flat	8x150mm
13.	Screwdriver Flat	10x300mm	14.	Screwdriver Offset	6x150mm
15.	Screwdriver Offset	6x130mm	16.	Screwdriver Offset	10x140mm
17.	Screwdriver Cross Head	No.1x75mm	18.	Screwdriver Cross Head	No,2x125mm
19.	Screwdriver Cross Head	No.3x200mm	20.	Screwdriver Cross Head	No.4x300mm
21.	Pliers Adjustable	200mm	22.	Pliers Flat Nose	150mm
23.	Pliers Snipe Nose	150mm	24.	Side Cutter	150mm
25.	Wire Snipper	170mm	26.	Pliers Round Nose	150mm
27.	Pliers Combination	200mm	28.	Adjustable Spanner	18x150mm
29.	Adjustable Spanner	30x250mm	30.	Adjustable Pipe Wrench	50 x 350mm
31.	Ballpein Hammer	0.68Kg	32.	Club Hammer	1.8Kg
33.	Cold Chisel	16x160mm	34.	Cold Chisel	25x230mm
35.	Pry Bar	16 x 455mm	36.	Swan neck bar (Wrecking Bar)	455mm

55 Pcs Tool Kit items AENM-55A

			2		
	Anti-spark pliers		4	Anti-spark opened spanner 12Pcs 6mm to 32mm	
	Anti-spark pliers nose		6	Anti-spark combination spanner 18Pcs 6mm to 32mm	
	Anti-spark pliers cutter		8	Anti-spark pipe Wrench 12''	
	Anti-spark screw driver 4pcs (6mm to 12 mm)		1	Anti-Spark Pipe Wrench 15''	
	Anti-spark adjustable wrench 8''		1	Anti-Spark Pipe Wrench 18''	
	Anti-spark adjustable wrench 10''		1		

46 Pcs Tool Kit items AENM-46A

Circular mallet	1 P		Heavy hammer	3 P
Saw frame	500 mm		Saw blade	300 mm
Marking tool	187 x 32 mm		Chisel	20 x 200 mm
Chisel	16 x 150 mm		Knife	180 mm
Adjustable wrench	150 mm		Adjustable wrench	250 mm
Wrench pipe	350 mm x max 50 mm		Pliers long nose	200 mm
Pliers Side cutting	150 mm		Pliers Combination	200 mm
Flat-Nose Pliers	150 mm		Round-Nose pliers	200 mm
Needle nose pliers	150 mm		Tweezers	200 mm
Scissors	225 mm		Screw driver	3 x 50 mm
Screw driver	6 x 100 mm		Screw driver	4 x 150 mm
Screw driver	8 x 150 mm		Screw driver	10 x 300 mm
Screw Driver	10 x 140 mm		Philips Screw driver	1 x 80 mm
Philips Screw driver	2 x 100 mm		Philips Screw driver	3 x 150 mm
Philips Screw driver	4 x 200 mm		Wires brush	125 mm
Slotted Offset Screwdriver	140 x 5 mm		Slotted Offset Screwdriver,	160 x 12 mm
Lever	15 x 500 mm		Measurement tape	20 m
Spanner	8 x 10 mm		Spanner	9 x 11
Spanner	10 x 12 mm		Spanner	12 x 14 mm
Spanner	14 x 17		Wrench, Hex Key	1.5 mm
Wrench, Hex Key	2 mm		Wrench, Hex Key	2.5 mm,
Wrench, Hex Key	3 mm		Wrench, Hex Key	4 mm
Wrench, Hex Key	5 mm		Wrench, Hex Key	6 mm

85 Pcs Tool Kit items AENM-85B

	Tool	Size		Tool	Size
1.	Tweezers	200mm	1.	Probe Straight & right angle	187mm
2.	Knife	185mm	2.	Scissor	225mm
3.	Hacksaw frame	500mm	3.	Blade hacksaw	300 mm
4.	Scraper	40x 200mm.	4.	Wire Brush	4x19
5.	Screwdriver Flat	3 x 50mm	5.	Screwdriver Flat	4.5 x 150mm
6.	Screwdriver Flat	6 x 100mm	6.	Screwdriver Flat	8 x 150mm
7.	Screwdriver	10x 300mm	7.	Screwdriver Offset	6x 150mm
8.	Screwdriver Offset	6x130mm	8.	Screwdriver Offset	10 x 140mm
9.	Screwdriver Philips	No.1, 75mm	9.	Screwdriver Philips	No.2 x 125mm
10.	Screwdriver Philips	No.3 x 200mm	10.	Screwdriver Philips	No.4 x 300mm
11.	Pliers Adjustable	200 mm	11.	Pliers flat nose	150 mm
12.	Pliers Snipe nose	150mm	12.	Cutters side	150mm
13.	Wire nipper	170mm	13.	Pliers Round nose	150 mm
14.	Pliers Combination	200 mm	14.	Spanner Adjustable	18x 150mm
15.	Spanner Adjustable	30x 250mm	15.	Wrench Pipe	50 x350mm
16.	Hammer ball pin	680g	16.	Hammer club	1.8 Kg
17.	Chisel	16x160mm	17.	Chisel	25x230mm
18.	Pry bar	16x 455 mm	18.	Swan neck bar	455mm
19.	Ratchet	½" Square	19.	Sliding bar	½" Square
20.	Extension bar	½" x 100mm	20.	Extension bar	½" x 250mm
21.	Universal joint	½" Square			
22.	Socket ½"	10, 11,12 , 13, 14, 15, 17, 19, 22, 24, 27, 30 mm			
23.	Socket ½"	7/16", ½", 9/16", 5/8", 11/16", ¾", 13/16", 7/8", 15/16", 1", 1-1/16", 1-1/8"			
24.	Hex Wrench	1.5, 2, 2.5, 3, 4, 5, 6, 8, 10 mm			
25.	Hex Wrench	1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", ¼", 5/16", 3/8", 7/16"			

Portable Industrial Light RALS144

Remote Area Lighting System RALS-144 is suitable for security and rescue operations with up to 12000 Lumens illumination. It comes with convenient low battery warning system and waterproof activation switch. Fully extendable mast with 360 degree rotating head. It is selectable for High/Mid/Low/Flash switch. Telescoping handle and rugged wheels are provided for ease of transport. Quick release extension lock makes adjusting the height of two light head.

Key features

- *Quick flood to Spot*

- *Rechargeable Lithium or Lead-acid batteries*

- *360-degree illumination (Unique Light Head Design)*

- *Light and case are in one, easy to install*

- *Portable with wheel, telescoping mast and protective case,*

- *Strong Function: Bluetooth and remote control, Intelligent power display.*

Specifications

Light Source	LED
Lamp Heads	2
Number of LEDs	48
Emitting Color	White
Option	flood- spot
Mass height extended	2M
Waterproofing	IP65
Battery	12V 24Ah lithium
Lamp Power (W)	144 W
Weight (kg)	Less than 20
Input Voltage(V)	AC 220V(± 10%)
Lifespan (hours)	50000
Material	Plastic
Warranty (Year)	1-Year
Lighting solutions service	Lighting and circuitry design
Run Time	4.5 hours high power to 20 hours with low power
Charge time	6.5 H
Case type	Rugged

Spotlight & floodlight

Telescoping pole

Charging port

Digital power display

Switch

Light connector

Lock catch

Case

Wheel

PUMP ACTION SHOT GUN
FROM DAUDSONS ARMOURY

Daudson Armoury firearms have withheld the test of time and gained their reputation over the years by delivering consistent reliability, durability and affordability. The pump action gun cartridges are chambered by pulling the pump handle and spent cartridges are expelled by the same sliding action. The shots capacity of the gun is on the requirement of the customer. Also different barrel lengths are also provided.

The guns made at Daudsons factory are light weight, high strength and long life materials. Pump-action guns have diverse uses in hunting, used around runways for bird control as well as has been adopted by all three services Army, Navy and the Air force.

Specifications

Item	Parameter
Caliber	12 Gauge
Firing mode	Pump action
Barrel	Chrome Molybdenum high grade Steel alloy
Barrel Length	15, 18, 21 to 30 inches options
Total Length	10" plus barrel length
Receiver	High strength aluminum alloy.
Magazine capacity	5+1 or 6+1 Rounds on the customer requirements
Surface treatment	All parts are surface treated for a very long life and corrosion resistance purposes.
Weight	15" Barrel - < 2.65 Kg when unloaded 18" Barrel - < 2.8 Kg when unloaded
Chamber size	3"
Safety	Safe lock/ Manual thumb safety
Cartridges	12 Bore shots LG, SG, No 4, 6 & 8
Magazine	Metallic
Choke	Cylinder bore
Accessories	Carry bag, Cleaning Tool kit, Gun Sling, Maintenance Equipment case, Manual with operations, maintenance and spares parts.
Optional items	Removable Picatinny rail Hard case Butt stock & pistol grip options Strap on the front loading handle

Daudsons Armoury Pakistan has been a hunting and sporting Firearms Manufacturer since 1954. DSA specializes in shotguns, pump action shotguns, handguns, anti-riot weapons and similar products.

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