



REMOTE CONTROLLED EXPLODER





COMPACT REMOTE CONTROLLED EXPLODER ATLAS 150 RC

The **ATLAS 150 RC** is a <u>radio-controlled electronic exploder</u>, designed for remote firing of electric detonators. It is a compact equipment, especially designed for explosive method of entry and other missions requiring low firing line lengths.



It consists of a control unit and <u>5 receiver units</u> (paired at the factory), packaged in a foamed carrying case. The housings are extremely rugged aluminium, IP 67 waterproof, dark colors, with dominant black and grey. They are particularly well adapted to harsh environments.

The receiver units control each one firing line and integrate a <u>line-continuity test</u>. They are equipped with versatile sockets, allowing to directly clamp the leads or to connect any type of 4 mm banana plugs. They are powered by two

4 mm banana plugs. They are powered by two

cheap and widespread photo lithium batteries, model CR 123.

The control unit allows to remotely control the receiver units <u>individually</u> (only one receiver unit) or <u>simultaneously</u> <u>by group</u> (several receiver units, chosen by the user). Its control panel indicates information from the receiver units: the battery voltage, the state of the radio communication, the level of capacitors' charge, the faults.

The firing procedure consists in <u>4 steps</u>: safety delay, arming, charging and firing.

TECHNICAL DATA

Receiver Unit

P 67 aluminium housing

imensions: 90 x 80 x 45 mm, 145 x 80 x 45 overal

Weight: 400 g approx

Power supply: 2 lithium batteries CR 123

Battery life: 150 hours minimum at 20°C, in sleep mode

1 firing output with integrated continuity tester

Output voltage: 30 V approximately Stored energy: 2 J approximately

Charging time : about 4 s

Radio frequency: 869 MHz - Radio Power: < 0.5W

Scope: >2500 m line of sight at 20°C Temperature: -20 ° C to + 55 ° C

Control Unit

IP 67 aluminium housing

Dimensions: 90 x 80 x 45 mm, 115 x 80 x 45 overall

Weight: 360 g

Power supply: 2 lithium batteries CR 123

Battery life: minimum 10 h at 20 ° C

Controls up to 5 receiver units

Radio frequency: 869 MHz - Radio Power: < 0.5W

Radio channel: 5 channels are available (factory set

Scope: >2500 m line of sight at 20°C

Charging: keep button CH pressed

• Discharge : release button CH

• Firing : keep button CH pressed + button F

This system incorporates many levels of security:

- a secure encrypted communication protocol
- a safety delay
- a multistep firing sequence
- the presence of a shunt on the line
- an automatic capacitors discharge
- a permanent control of the capacitors' voltage
- simultaneously press 2 buttons to trigger firing
- the firing is made only when the capacitors are fully charged
- safety terminals
- an operation supervision by a microcontroller
- the redundancy of certain functions.

Another system ATLAS-150 RC-2, with a less compact control unit, with improved ergonomics and advanced features is also available. Comparative table below.

	Dimen- sions control unit	4 steps firing procedure	Arming one or several receiver units	Keep CH button for char- ging	Auto dis- charge when CH is released	Button CH 1 press= charge 1 press= discharge	Button CH charges all armed receivers	Simulta- neous firing of all char- ged recei- vers	Individual firing when several receivers are charged	Pressing 2 buttons for firing
ATLAS- 150 RC	115x80x45 mm	Χ	Sequence of buttons	Χ	X		Χ	Χ		Χ
ATLAS- 150 RC2	175x80x45 mm	X	Dedicated button			X	Х	Х	Х	Х