SAFETY & SECURTIY

EXPLOSIVES TRACE DETECTION

Explosives Threat Mitigation: Bruker **RoadRunner**

Innovation with Integrity

Choose Innovation – Choose Bruker

Bruker is recognised as the leading authority on the use of detection and identification technologies to mitigate the threat from the accidental or deliberate release of toxic gases, explosives and radioactive materials that could kill and injure civilians.

We offer the world's most comprehensive range of threat detection and identification solutions and can help you to assess how these can be best employed to protect people and property.

We develop, manufacture and supply technology worldwide for a range of customers and end users that need to protect people and property.

These include, but are not limited to governments, commercial enterprises and multi-national corporations who need to protect their employees and clients from the ever-increasing threat from terrorism.

Bruker is strongly committed to meeting its customers' needs by continuing to revolutionise the design, manufacture and distribution of detection tools based on our core technologies; by providing solutions that are regarded as the 'Gold Standard' by threat mitigation experts.

Explosives Trace Detection: RoadRunner

The Bruker RoadRunner is a battery-powered, hand-held, trace explosives detector that is both lightweight and portable. To maximise user convenience the system operates from rechargeable batteries and to further extend its duration in the field, these batteries are 'hot-swappable'.

The RoadRunner operates in two modes. A "sniffer" mode draws in vapours from volatile explosives and taggants and provides results in just a few seconds. To detect the presence of non-volatile explosive compounds, or to check personal property, the product integrates the same industry-standard swab-sampling system that is used in the Bruker DE-tector desktop trace explosives detector.

In addition to the dual-role explosives detection capability, RoadRunner also incorporates narcotics detection as standard. Typical applications of RoadRunner include environments such as airport security, building access control, customs facilities and prisons/remand centres.

Why specify RoadRunner?

- Industry-Standard IMS detection technology
  Time proven technology - the de-facto standard
- Detects trace explosives and trace narcotics
  Meets your needs in a single instrument
- Hand-held, portable trace detection
  In a go-anywhere battery-powered package
- Non-radioactive HEPI source
  Patented source reduces the compliance burden
- Patented CHIRP-IMS signal processing algorithm
  Provides sensitivity of a benchtop detector
- Automatic continuous self-calibration
  Optimises each measurement automatically
- Operates in sniff or swab modes
  Best configuration for different sample types
- Re-useable sampling swabs
  Reduce your operating costs / cost per test
- Uses the Bruker acclaimed "Traffic Light" software
  Simplifies operation in a pressured environment
- CE Marked and Aviation accredited
  Conforms to harmonised CE standards and ECAC

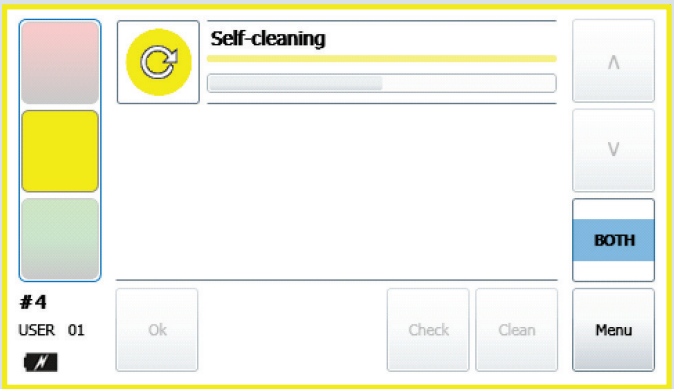
The Bruker RoadRunner is the first hand-held explosives trace detection instrument to offer the same outstanding detection performance as state-of-the-art benchtop ETD instruments - thanks to the incorporation of patented CHIRP-IMS technology and other Bruker innovations.

RoadRunner Software Overview

The Bruker RoadRunner software uses our acclaimed traffic light concept to simplify the display of the instrument status. This eases the burden on operators who often have to work in a pressured environment.

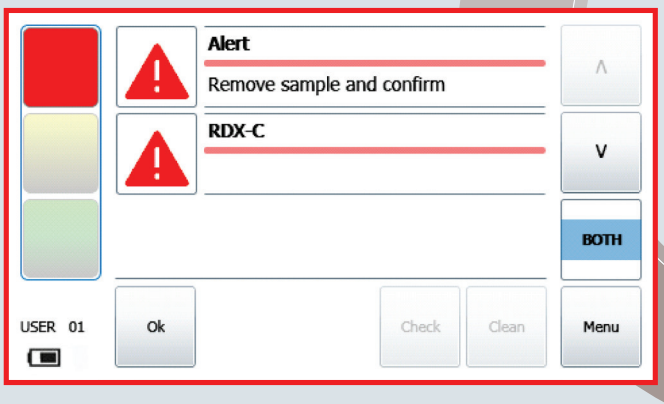
5. Self-cleaning

At the end of each measurement cycle the instrument automatically switches to a self-cleaning mode. This fully-automatic feature ensures that RoadRunner is always operating at its maximum sensitivity. In this way, it continues to offer you the same detection performance as benchtop ETD instruments.



4. Detection

When an illicit material has been detected, the traffic light symbol changes to red and a red alert icon is shown. At the same time, the name of the detected substance is stated unambiguously; so that the user can take action.

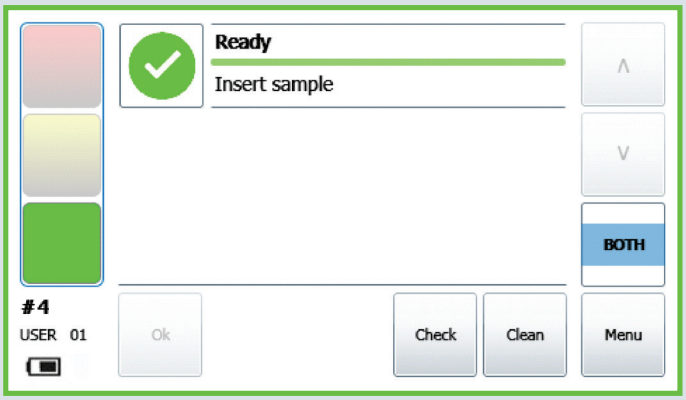


3. No Detection

In the absence of any detected substances, a yellow traffic light is displayed along with a yellow icon with a hand symbol. This shows that the sample swab should be removed (in the particulate detection mode). The clear text message confirms that illicit substances have not been detected.

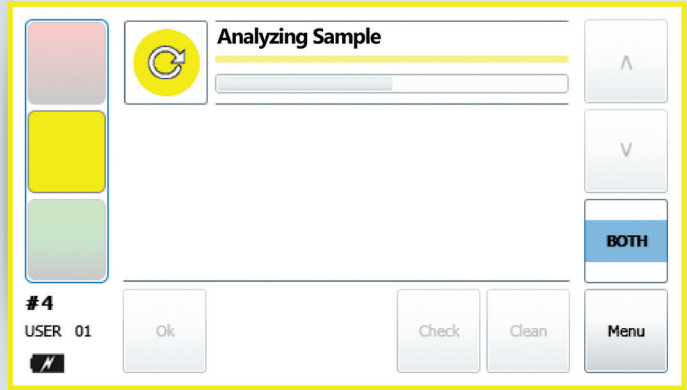
1. Start

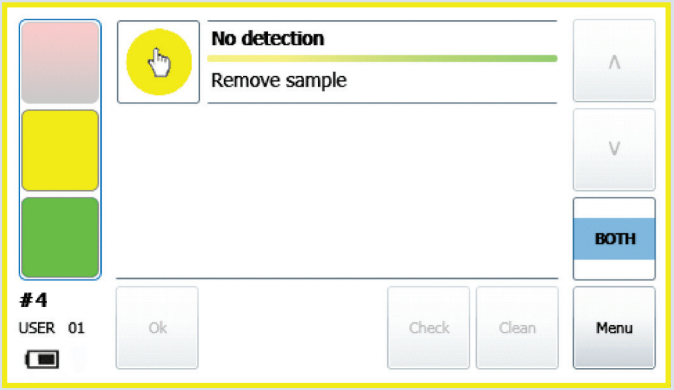
A green traffic light symbol to the left of the display is linked to a green icon showing a checkmark. This shows the instrument is ready to use. A plain text statement confirms the instrument ready status.



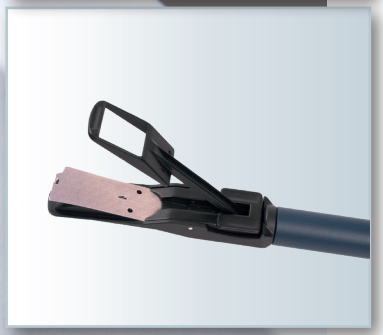
2. Measurement

In the few seconds it takes RoadRunner to make the measurement, a yellow traffic light symbol and a yellow icon containing a rotating arrow are shown. A plain text message confirms the measurement is proceeding.





RoadRunner: At a Glance



Summary Specifications

Detector Type	Hand-held detector for trace explosives / narcotics
Detector Technology	IMS
IMS Source	Non-radioactive HEPI Source
Sample Type	Vapour and Trace Particulates
Vapour Samples	Detection initiated by a trigger
Swab Samples	Automatic on swab insertion
Software Type	Traffic light user interface
Software Operation	Touch screen, 4.3" LCD panel
Printer	External, non-integrated
Size	H= 330 mm x W=340 mm x D=130 mm
Weight	3.4 kg including battery
Battery	Li-Ion rechargable, hot-swappable
Run Time	Battery ~ 4 h
Power Inlet	19V DC (±10%) 90W max.
Data (LAN)	10/100 Base-T, RJ45
Data (USB)	USB 2.0, Type A

Current specifications of the Bruker RoadRunner can be found in the Product Specification Sheet (PSS), a copy of which is available on request.

COMPONENTS INCLUDED WITH ALL SYSTEMS

- Pack of 120 sample collectors (swabs)
- Two rechargeable Li-Ion batteries
- Battery charger
- 19V DC power supply
- Confidence Sample
- List of substances in Explosives library
- List of substances in Narcotics library
- Operator Manual

OPTIONAL ACCESSORIES

- Bruker Service Contracts
- Off-line data analysis packages
- Sampling wand
- Telescopic extension to sampling wand
- Nitrile Gloves (Pack of 100)

Global Resources – Local Focus

Bruker has support centres of technical expertise in every major area of the world providing sales, applications and engineering support for our complete product range. With more than 6,000 employees at 90 locations worldwide you can be confident that the support team fronts a uniquely integrated global resource. Research and development specialists, applications professionals and highly trained engineers in every field are dedicated to your investment in our equipment.

Superior Detector Performance
For highly sensitive detection, identification and quantification of chemical, biological, explosive and radiation threats. Superior performance and high reliability comes as standard.

Applications Support
Systems are configured to meet your needs and result from our detailed evaluation of your requirements.

Standards & Compliance
All our systems are manufactured in ISO9001 compliant factories; so you can be assured of superior quality and performance.

Software & Data Systems
Designed to industry standards on the Microsoft® platform, our software can be integrated with your security managementnsoftware.

Training
User Training and User-Level Maintenance is part of our standard Scope of Supply. Our goal is simple; to minimise your cost of ownership.

Low Maintenance
All our systems are designed for extended maintenance periods and reduce the through-life-costs of your investment.

Bruker Optics is continually improving its products and reserves the right to change specifications without notice.
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