

SCHIEBEL



AN-19/2
MINE DETECTING SET

AN-19/2 MINE DETECTING SET



INTRODUCTION

The AN-19/2 is one of the most widely used and easily recognizable mine detectors in the world. It has been developed to meet the requirements for mine clearance on the battlefield as well as humanitarian demining. It is in service in many countries worldwide, including NATO countries and is the U.S. Army standard metal detecting set, designated AN/PSS-12.

Because of its compact, lightweight design and the low mutual interference between two detectors, the mission suitability of the AN-19/2 for fast and accurate terrain reconnaissance is ideal. The equipment will also detect mines at a limited depth in fresh or salt water. Independent of ambient temperature, the excellent discrimination characteristics of the AN-19/2 qualify the equipment for use in all climates. The AN-19/2 is a rugged, long-life product based on rigorous standards of quality control in the manufacturing process and the use of first-class components.

MAIN COMPONENTS

The AN-19/2 features a modular design that benefits the user in two ways: First, it provides maximum flexibility to the user, who may operate the system in whatever configuration is most comfortable. Second, the detector provides ease of maintenance, because damaged or non-functional parts may be swapped for troubleshooting or to continue operations.

The main components are:

- Electronics unit
- Search head
- Telescopic pole
- Headphone
- Carry bag
- Transport case

OPERATION

The AN-19/2 Mine Detecting Set can be operated to full effect by novice personnel. Experience has shown that a total of 8 hours equipment training is sufficient to provide the operator with the capability to search and locate mines in the field.

The equipment is set up for operation as follows:

- Insertion of batteries
- Assembly of unit
- Powering on
- Adjustment of sensitivity and headphone volume
- Sensitivity check with test piece

The equipment requires approximately three minutes to be ready for operation. The recommended sweep speed of the search head is about 0,5 m/s to 1 m/s. The detector performs equally well when the search head is used in a “padding” motion, usually in tight spaces or around brush. A signal will sound in the headphone when the head passes over a metal object. For accurate location, the search head is moved cross-wise over the spot where the mine is detected. The acoustic signal will reach maximum strength directly above the centre of the object and it will change in volume and frequency to assist exact localization. This feature will also enable an experienced operator to estimate the size, and in many cases, the shape of the object.

QUALITY

The quality control system used in the factory is in full conformance with ISO 9001. It has been audited and certified for compliance with the above requirements. All electronic components are fabricated to military standard and no limited life cycle components are used.



SUMMARY

The AN-19/2 is a highly reliable and sensitive mine detector capable of detecting very small amounts of metal. The unit is lightweight with very low mutual interference between two detectors. It features a built-in test for functional checkout and an automatic malfunction warning feature.

The equipment is designed to withstand rough treatment, extremes of temperature and adverse weather conditions without calibration. All parts required for operation are carried and stored in the backpack carry bag. Assembly, powering on and operation are simple and fast. With minimum instruction, the AN-19/2 can be operated in any terrain to include shallow fresh or salt water. The AN-19/2 Mine Detecting Set is proudly manufactured to ISO 9001 quality standards and recognized for its highly reliable operation and low life cycle cost.

UPGRADE

The upgrade consists of a new search head and a new electronics card which, once installed, allow the detector to act either as an AN-19/2 or an ATMID™ depending on which search head is used. It's increasing sensitivity and allowing operation of the detector in mineralized soils such as laterite and magnetite.

AN-19/2 TECHNICAL DATA

NATO Stock Numbers (NSN): 6665-21-906-1023
6695-12-316-9427

POWER SUPPLY

Type of batteries: ANSI standard size D
IEC standard size LR20
Number of batteries: four 1,5 V dry battery cells

TYPICAL OPERATING ENDURANCE

At medium temperature
with alkaline batteries: 70 hours

DETECTION RANGES

Mine with very small metal content
(Test Piece 5 CM 0.15 g): > 10 cm (4")
Typical anti-tank mine: > 50 cm (20")

ENVIRONMENTAL

Storage temperature: -55°C to +85°C
(-67°F to +185°F)
Operational temperature: -40°C to +70°C
(-40°F to +158°F)

WEIGHTS

AN-19/2 Mine Detecting Set	6,02 kg (13.27 lbs)
Search head with telescopic pole	1,22 kg (2.69 lbs)
Electronics unit	1,02 kg (2.25 lbs)
Headphone	0,17 kg (0.38 lbs)
Carry bag	1,41 kg (3.10 lbs)
Transport case	2,20 kg (4.85 lbs)

DIMENSIONS

Transport case	800 x 315 x 125 mm (31.6" x 12.4" x 4.9")
Electronics unit	185 x 80 x 150 mm (7.3" x 3.1" x 5.9")
Search head	267 mm (10.5")
Telescopic pole (extended)	
Armrest to search head heel	1200 mm (47.2") 1300 mm (51.2") 1400 mm (55.1")
Armrest to search head toe	1400 mm (55.1") 1500 mm (59.0") 1600 mm (63.0")
Telescopic pole (collapsed)	770 mm (30.3")

All data are subject to change without notice

SCHIEBEL

MINE DETECTION SYSTEMS

For further information, orders and delivery please contact one of the following offices:

Schiebel Mine Detection GmbH Margaretenstrasse 112, A-1050 Vienna, Austria, Tel. +43 (1) 546 26-0
Schiebel Technology, Inc. 8464 Virginia Meadows Drive, Manassas, VA 20109, USA, Tel. +1 (540) 351-1731
Schiebel SE Asia House 14, Street 47, P.O. Box 96, Phnom Penh, Cambodia, Tel. +855 (23) 430131

Visit us at www.schiebel.net or contact us by e-mail: minedetection@schiebel.net