OKM 2976

OKM Fusion Professional Plus Metal Detector

Instruction Manual - Model 2976

1. Introduction

The OKM Fusion Professional Plus is a sophisticated 3D ground scanner designed for treasure hunters, archaeologists, and engineers. It features an integrated inductive search coil and provides graphical 3D measurements, acoustic magnetic field measurements, and instant live images to assist in detecting hidden objects and formations.

2. Important Safety Information

Warning:

- Do not expose the device to water. The device is not waterproof.
- Handle and dispose of the Lithium-Ion battery with care according to local regulations.

3. Product Components

The Fusion Professional Plus package includes the following items:

- Control Unit
- Telescopic Rod
- Pre-configured Windows Notebook
- Notebook Mount
- USB Flash Drive with OKM 3D Studio Software
- Bluetooth Headphones
- Charger with Cable
- Travel Adapter
- Protector Case
- Quick Start Guide



Image: A visual representation of the included components, such as the telescopic probe, protective case, charger, flash drive, travel adapter, Bluetooth headphones, and USB charger.

4. Setup

4.1 Assembly

1. Attach the control unit to the telescopic rod.
2. Secure the notebook mount to the telescopic rod and place the pre-configured Windows notebook.
3. Connect all necessary cables as indicated in the Quick Start Guide.
4. Ensure the search coil is securely attached to the telescopic rod.

4.2 Charging the Device

Before initial use, fully charge the device's Lithium-Ion battery using the provided charger and cable. The operating time is approximately 12 hours on a full charge.

5. Operating Modes

The Fusion Professional Plus offers three distinct operating modes for various detection scenarios:

- **3D Ground Scan:** Analyzes 3D scan images of detected structures and objects to locate position, size, and depth of potential treasures.
- **Live Sound (Magnetometer):** Detects surface-level metal objects in real-time. Ideal for pre-scanning an area before a detailed 3D Ground Scan.
- **Live Stream:** Provides immediate visual feedback of the scanned area in representations similar to ultrasound images (Vertical Live Scan) or color-coded 2D representation (Horizontal Live Scan).



Image: The OKM Fusion Professional Plus metal detector highlighting its three operating modes: 3D Ground Scan, Live Sound (Magnetometer), and Live Stream.



Image: Detailed explanation of Vertical Live Scan, Horizontal Live Scan, Ground Scan, and Live Sound features.

6. Advanced Features

- **Multi-Sensor Live Scan (Horizontal):** Utilizes OKM's Multi-Sensor technology for faster horizontal scanning.
- **Ultrasound Live Scan (Vertical):** Uses the probe in vertical orientation for exploring narrow areas.
- **Pinpoint Targets:** The SRIS search coil assists in pinpointing objects during excavation. Utilize Live Sound and 3D Ground Scan to determine the object's location.
- **SRIS Search Coil:** Use to find shallow surface-level metallic objects. Activate the coil optionally when

configuring the operating modes.

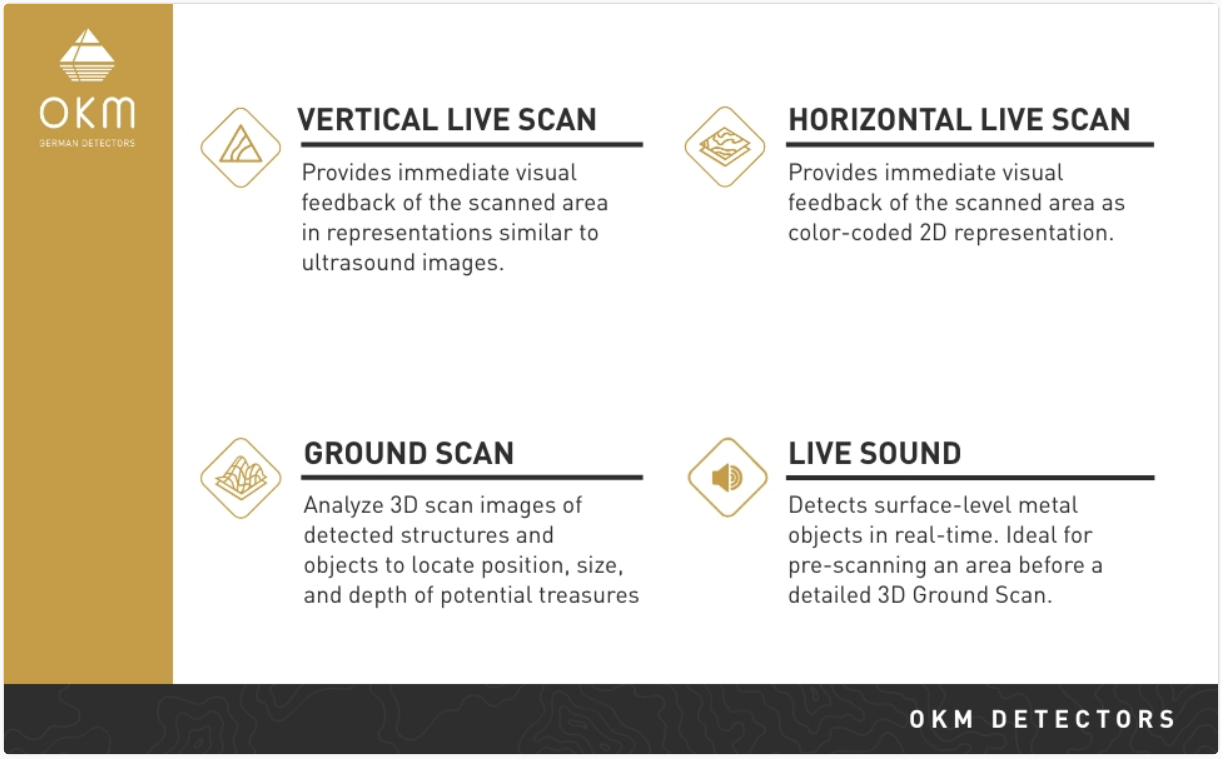


Image: Visual breakdown of Multi-Sensor Live Scan, Ultrasound Live Scan, Pinpoint Targets, and SRIS Search Coil functionalities.

6.1 Depth Range

The Fusion Professional Plus is capable of detecting objects down to a depth of 21 meters (69 feet), making it suitable for deep treasure hunting and archaeological surveys.

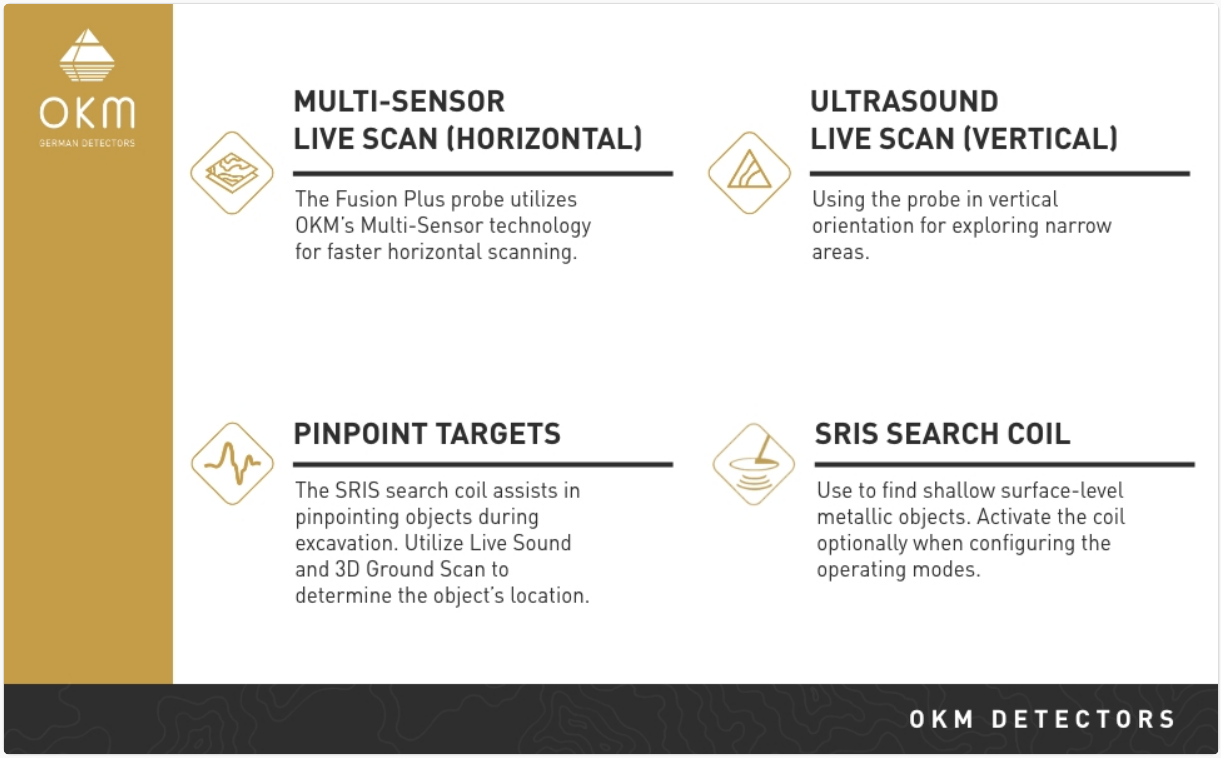


Image: Illustration showing the impressive depth range of the OKM Fusion Professional Plus, capable of detecting objects up to 21 meters (69 feet) deep.

7. Specifications

Attribute	Detail
Brand	OKM
Model Number	2976
Color	Black
Material	Metal
Power Source	Battery Powered (1 Lithium Ion battery included)
Item Weight	14.5 Kilograms (31.9 pounds)
Product Dimensions (L x W x H)	37.4" x 3.1" x 37.4"
Extended Length	37.4 Inches
Search Coil Size	3.1 Inches
Battery Life	Approx. 12 Hours
International Protection Rating	IP54
Recommended Uses	Metal Detection, Treasure Hunting
Language	English, German

8. Maintenance

To ensure the longevity and optimal performance of your OKM Fusion Professional Plus, follow these maintenance guidelines:

- **Cleaning:** After each use, wipe down the device with a soft, dry cloth. Avoid abrasive cleaners or solvents.
- **Storage:** Store the device in its protector case in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Care:** Do not overcharge or completely drain the battery. If storing for extended periods, charge the battery to approximately 50% and recharge every few months.
- **Connections:** Regularly check all cable connections for wear and tear. Ensure they are clean and securely fastened.

9. Troubleshooting

If you encounter issues with your Fusion Professional Plus, refer to the following common troubleshooting steps:

- **Device Not Powering On:** Ensure the battery is fully charged. Check all power connections.
- **No Signal/Weak Signal:** Verify that the search coil is properly connected. Adjust sensitivity settings. Ensure you are using the correct operating mode for your environment.
- **Erratic Readings:** Perform a ground balance calibration. Check for strong electromagnetic interference from nearby power lines or other electronic devices.
- **Headphones Not Connecting:** Ensure Bluetooth headphones are charged and in pairing mode. Refer to the headphone manual for specific pairing instructions.

For persistent issues, please contact OKM customer support.

10. Warranty and Support

The OKM Fusion Professional Plus comes with a**2-year warranty**. This warranty includes:

- Service and support for all levels of experience.
- Exclusive service at our headquarters in Germany.
- 1 hour of instruction for your device.
- 90-day technical support with a personal contact.

For warranty claims or technical assistance, please refer to the contact information provided in your Quick Start Guide or visit the official OKM website.