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# SCORPE



## User Manual SCORALP F16

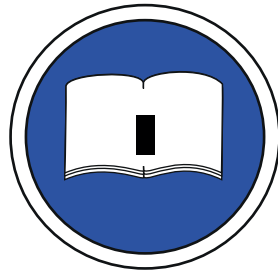
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# 1. General information and instructions



**Thank you for choosing the Scoralp F16 fan.**

The purpose of this manual is to guide you in the correct use of the device, its routine care, as well as its preventive maintenance.

This document is an integral part of the product and must be kept in a known location, accessible at all times to operating personnel.

To guarantee your safety, that of the people around you, and to preserve the lifespan of the fan, it is imperative to strictly follow all the instructions and recommendations contained in this manual.

The Scoralp F16 fan must only be used by persons who have read and understood this manual. Every operator required to handle the fan must be able to freely consult these instructions. Appropriate training in the deployment of ventilation equipment during operations is highly recommended.

This manual contains essential information regarding the handling, use, and safety of the Scoralp F16 fan.

Safe use implies strict compliance with the instructions described in this document, compliance with the local accident prevention rules in force, and the application of general safety provisions.

All technical characteristics, diagrams, and illustrations presented in this manual are based on the data available at the time of its writing.

Scorpe Technologies reserves the right to make technical modifications aimed at improving its products at any time.

## 1.1 Explanation of symbols

In this instruction manual, warnings are accompanied by symbols. The different instructions begin with signal words that emphasize the severity of the danger.

**The instructions must be strictly observed in order to avoid accidents, injuries, and material damage**



**Danger !**

Indicates the presence of an immediate danger which, if not avoided, can lead to severe or even fatal injuries.



**Warning !**

Indicates the presence of a danger which, if not avoided, can cause severe or even fatal injuries



**Caution !**

Indicates the presence of a danger which, if not avoided, can cause minor or slight injuries.



**Attention !**

Indicates the presence of a danger which, if not avoided, can cause material damage..



**Note !**

Highlights useful advice and recommendations, as well as information for efficient and flawless operation.

## 1.2 Limitation of liability and warranty conditions

All the information and instructions contained in this operating manual have been compiled taking into account the standards and regulations in force, the latest technical advances, as well as our knowledge and experience acquired over many years.

The Scoralp F16 fan is exclusively intended for positive pressure ventilation and smoke extraction operations in the context of rescue interventions.

Any other use is considered improper and potentially dangerous. In the event of non-compliant use resulting in damage to the equipment, the manufacturer's warranty will be automatically voided.

If in doubt about the use or operating conditions of your Scoralp F16 fan, please contact Scorpe Technologies directly for advice and validation.

The manufacturer declines all responsibility and the warranty shall not apply to damage occurring under the following circumstances:

- Non-compliance with the operating manual
- In the event of damage caused by a deviation from the use of the product defined by Scorpe Technologies (for example, for a use not validated by Scorpe Technologies).
- Intervention by unqualified personnel
- In the event of modification of the product in any form whatsoever
- Technical modification(s)
- Use of unauthorized spare parts
- In the event of maintenance and servicing not being carried out or being carried out incorrectly
- In the event of damage caused by the use of defective parts or accessories; incompatible with or not recognized by Scorpe Technologies.
- In the event of tampering with safety devices.

## 1.3 Copyright

All elements of this operating manual (texts, illustrations, diagrams and photos) may be used without restriction and without the need to request prior authorization.

## 1.4 After-sales service

If you require any information, please do not hesitate to contact our after-sales service. The contact details for the after-sales service can be found on our website: [www.scorpe.net](http://www.scorpe.net)

To contact the after-sales service by phone, please dial: +33 (0)3 26 84 70 94.  
The fax number is: +33 (0)3 26 08 24 11

For any equipment return, please contact our after-sales service who will indicate the return procedure and the address to which the equipment must be returned.

## 2.Safety

This section of the operating manual provides a comprehensive overview of all important safety aspects, ensuring optimal protection of operating personnel, as well as safe and flawless operation of the equipment.

Any failure to comply with the handling and safety instructions contained in this operating manual may result in significant hazards.

### 2.1 Intended use

The equipment of the Scoralp F16 Fan has been designed and tested solely for use in accordance with the intended fields of application described here.

All other activities are strictly prohibited.

- The fan has been designed so that it can be operated by a single person.
- The fan is used solely for positive pressure ventilation. Under no circumstances for extraction.



**Attention !**

Any use of the equipment beyond the limits of its intended use and/or diverging from these instructions may result in hazardous situations! Therefore, strictly observe the following instructions: the equipment must only be used for the aforementioned purposes.

## 2.2 Operator's responsibility

In addition to the occupational safety instructions contained in this operating manual, all safety, accident prevention, and environmental protection regulations applicable to the equipment's area of use must be observed.

In particular :

- The operator must stay informed about current occupational safety regulations and determine, through a risk assessment, any additional hazards arising from the specific working conditions at the equipment's installation site.
- The operator must clearly define and assign responsibilities for installation, operation, maintenance, and cleaning.
- The operator must ensure that everyone required to handle the equipment has fully read and understood the operating manual.
- Moreover, they must organize regular staff training and inform personnel about the hazards associated with using the equipment.

**The operator is responsible for ensuring the equipment remains in perfect working order.**

**In particular:**

- After each use, and at least once a year, a qualified person must carry out a visual inspection of the equipment.
- Every three years, or if there is any doubt about the equipment's safety or reliability, a functional check must be performed.

## 2.3 Personal

In this operating manual, the following qualifications are specified for the different areas of activity:

- Qualified person: an individual trained by the operator on the potential hazards associated with their tasks in the event of incorrect behavior.
- Specialized personnel: individuals who, due to their specialized training, knowledge, and experience, as well as their familiarity with the manufacturer's regulations, are capable of carrying out the tasks assigned to them and independently recognizing potential hazards.



## Attention !

Risk of injury if qualifications are insufficient! Improper handling of the equipment can cause personal injury and property damage. Specific tasks must only be entrusted to the individuals listed in the relevant chapters of this manual. If you have any doubts, consult a specialist immediately.



## Note !

Do not operate the equipment if you are under the influence of alcohol, medication, or drugs!

## 2.4 Personal protective equipment

When handling rescue equipment, wearing personal protective equipment (PPE) is essential to minimize injury risks. Failure to wear this gear can result in severe injuries.

Safety clothing is mandatory for all tasks. Wear close-fitting work clothes with tight sleeves and no loose parts. The primary purpose of these clothes is to protect you from the equipment's moving parts.

1. Always wear steel-toed safety shoes to protect yourself from heavy falling objects and to prevent slipping on slick surfaces.
2. Wear work gloves when operating the equipment to protect against sharp edges and shattered glass.
3. You must wear a helmet with a visor to guard against flying debris, falling parts, and broken glass.
4. Along with the visor, safety glasses are required to protect your eyes from splinters.

For certain tasks, you also need to wear the following:

Hearing protection is mandatory, in addition to the standard protective gear, to prevent hearing damage.

## 2.5 Behavior in case of danger and accidents

Preventive measures:

- Always be prepared for an accident
- Set up a safety perimeter so operations can be carried out quickly, calmly, and without interference
- Train regularly so that deploying the equipment becomes an automatic reflex
- Keep first aid gear (first aid kits, blankets, etc.) close at hand
- Make sure staff are familiar with accident warning systems, first aid, and rescue equipment
- Ensure that access routes for emergency vehicles are always kept clear

In the event of an accident:

- Shut down the equipment immediately
- Start first aid measures
- Evacuate people from the danger zone
- Notify the supervisors on site
- Call a doctor and/or the fire department
- Clear the access routes for emergency vehicles

## 3. Technical specifications

- Diameter: 16"
- Airflow and runtime:
  - 100% Mode: 11 590 m<sup>3</sup>/h - 45 min of operation
  - Boost Mode: 12 260 m<sup>3</sup>/h - 30 min of operation
- Weight (without batteries): 22.5 kg
- Dimensions: 565 x 615 x 320mm

# 4.Operation

## 4.1 Basic principles

### Positive Pressure Ventilation (PPV) fan principle

The Scorpal F16 fan is designed to create overpressure inside a building. By blowing air through an opening (door, window, gate), it drives out smoke, heat, and toxic gases toward the exits. This technique improves visibility, lowers the temperature, and makes it easier for rescue teams to operate.

### Fan positioning

- Do not place the fan too close to the opening -> the air will not cover the entire surface area.
- Do not angle it too high or too low -> risk of losing efficiency.

### Battery power supply

The F16 runs on 2 batteries of the same brand mounted on their dedicated rack (Milwaukee, Bosch, or Makita, depending on the version). See rack connection details in section 4.2.

1. Check that the batteries are charged.
2. Insert the batteries into the rack, following the indicated direction.
3. Make sure the on/off button is set to OFF before inserting.
4. Verify that the batteries are properly locked (listen for them to click into place).

Never force a battery into its slot.

Do not handle batteries with wet hands or in a water-saturated environment.

**Never turn on the fan with only one battery inserted. The F16 must always run on two batteries of the exact same brand and capacity.**

**Before inserting or removing batteries, make sure the switch is set to OFF. Check that both batteries have the same level of charge.**

## Starting up

1. Position the fan according to the placement instructions.
2. Turn the on/off switch to ON.
3. Select the fan speed.
4. Check the airflow at the building entrance: it must cover the entire opening.
5. Adjust the fan's position or angle if necessary.

Once the airflow is established, the building is under positive pressure and the smoke will be forced out through the designated exit openings.

## 4.2. Mains operation

The Scoralp F16 fan can also be powered by the mains supply using the dedicated plug.

Procedure:

- Check that the switch is in the OFF position.
- Unclip the mains plug.
- Unwind the power cable from the reel on the fan.
- Unscrew the waterproof cap from the plug.
- Connect it to a secure electrical outlet (230V).
- Power up the device by pressing ON.

Never handle the power cable with wet hands.

Do not use in wet environments.

Use only with a secure 230V 50Hz outlet.

Clip the plug back in the correct orientation.

## 4.3. Fan housing orientation



The Scoralp F16 fan housing is designed to be adjustable so you can adapt the airflow to the situation.

Adjustment:

- Pull the indexing pin with one hand.
- With your other hand, tilt the housing into one of the 13 available positions (every 15 degrees).
- Release the indexing pin to lock the position.
- Make sure the locking system is fully engaged after making your adjustment.

**Do not force the housing, always use the dedicated indexing pin.  
The right setting covers the entire opening and optimizes smoke extraction efficiency.**

## 4.4. Handles

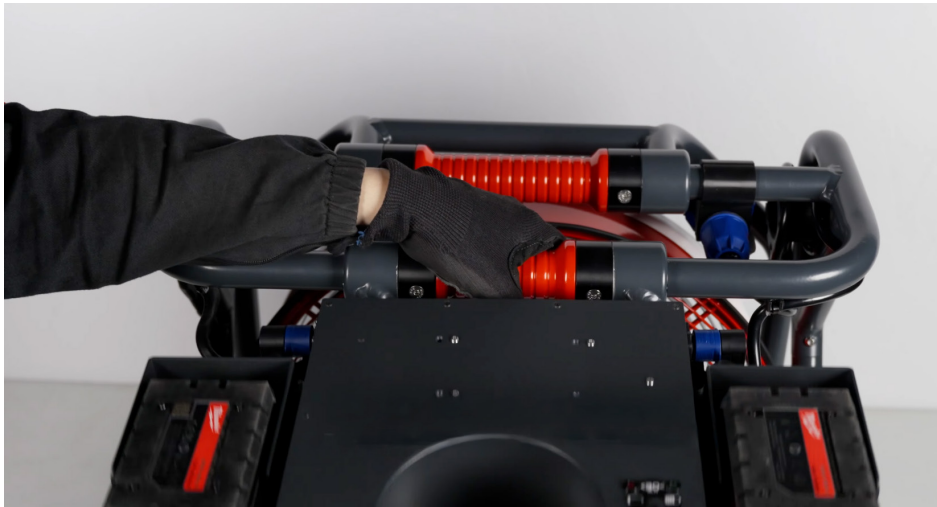
The Scoralp F16 fan is equipped with two ergonomic red handles, each serving a distinct purpose:

**Transport handle (the large red handle):**



Used to extend and fold away the transport handle, making the fan easier to move around.

## Control panel adjustment handle (the small red handle):



**Used to set the control panel in either the storage or operating position.**

Note that it is impossible to use both handles at the same time.

Operating principle:

The system works by simply rotating the locking handle:

Turn the handle with one hand as far as it will go (in either direction) to unlock the position.

With your other hand, you can then move the control panel or the transport handle without letting go of the red handle.

Once unlocked and the part is moved, release the handle.

The mechanism will lock itself back into place once it reaches the final position.

### **Important:**

- Make sure the device is turned off and the blades have completely stopped before moving it.
- When packing it away, hold onto the moving part to avoid sudden impacts or slamming.
- Always verify that the handle is properly locked again after making an adjustment (you should hear a click).
- Always carry the fan using the designated transport handle.
- Never pull the fan by the power cable or the battery rack.
- Do not carry the fan by the control panel handle.

## 4.5. Control panel

The control panel houses all the main functions for the Scoralp F16 fan.



Key to components:

Main ON / OFF button → turns the device on or off.

Boost mode button → switches the fan to boost mode.

Light button → turns on the LED strip when needed.

Speed potentiometer → adjusts the airflow as required.

Low battery indicator → lights up to warn that the batteries are nearly depleted.

Connector → allows connection to a 230 V supply.

Battery connector (color-coded) → connects to the matching battery rack.

Battery level indicator buttons → Lets you check the available runtime during storage; if the light is green, more than 30 minutes remain. (Data applies to the batteries listed in section 4.2).

**Control screen:**



- Battery level indicator
- Rotor speed from 0 to 100%
- LED strip lighting logo
- Airflow temperature indicator
- RF indicator → Shows if the remote control is connected to the fan.



## Attention !

**Boost mode cannot be used when plugged into the mains**

### 4.6.a. Installing Milwaukee battery racks

The Milwaukee rack is compatible with M18™ series batteries (High Output and Forge). All runtime data is based on a 12 Ah battery.

1. Positioning the rack
  - A. Place the battery rack into its designated slot on the side of the fan, making sure it faces the right way. The right rack goes on the right side of the casing, and the left rack goes on the left.
  - B. Check that the rack lines up properly with the mounting points.
2. Securing the rack
  - A. Insert the provided retaining screw.
  - B. Tighten it with an Allen key until it locks.
  - C. Give the rack a gentle pull to make sure it is securely attached.
3. Plugging in the connector
  - A. Identify the colored connector on the rack.
  - B. Plug it into the matching colored connector on the control panel.
  - C. Push until you hear it click into place.



## Attention !

- **Never force a connector into a slot of a different color.**
- **Check that the cable isn't pinched, twisted, or damaged.**
- **Always install two M18™ batteries with the same capacity.**

## 4.6.b. Installing Bosch battery racks

The Bosch rack works with ProCORE18™ series batteries. All runtime data is based on a 12 Ah battery.

1. Positioning the rack
  - A. Put the battery rack into its designated slot on the side of the fan, making sure it faces the right way. The right rack goes on the right side of the casing, and the left rack goes on the left.
  - B. Check that the rack lines up properly with the mounting points.
2. Securing the rack
  - A. Insert the included retaining screw.
  - B. Tighten it with an Allen key until it locks.
  - C. Give the rack a gentle pull to verify it is firmly attached.
3. Plugging in the connector
  - A. Find the colored connector on the rack.
  - B. Plug it into the matching colored connector on the control panel.
  - C. Push it in until you hear it click into place.



### Attention !

- **Never force a connector into a differently colored slot.**
- **Make sure the cable isn't pinched, twisted, or damaged.**
- **Always install two ProCORE18V™ batteries of the exact same capacity.**

## 4.6.c. Installing Makita battery racks

The Milwaukee rack is compatible with Makita XGT™ 40V series batteries. All runtime data is based on a 5 Ah battery.

1. Positioning the rack
  - A. Put the battery rack into its designated slot on the side of the fan, making sure it faces the right way. The right rack goes on the right side of the casing, and the left rack goes on the left.
  - B. Check that the rack lines up properly with the mounting points.
2. Securing the rack
  - A. Insert the included retaining screw.
  - B. Tighten it with an Allen key until it locks.
  - C. Give the rack a gentle pull to verify it is firmly attached.
3. Plugging in the connector
  - A. Find the colored connector on the rack.
  - B. Plug it into the matching colored connector on the control panel.
  - C. Push it in until you hear it click into place.



### Attention !

- **Never force a connector into a differently colored slot.**
- **Make sure the cable isn't pinched, twisted, or damaged.**
- **Always install two XGT™ 40V batteries of the exact same capacity.**

## 5. Step-by-step startup

This procedure outlines the steps to safely and correctly operate the Scoralp F16 fan.

### 5.1. Pre-use checks

Before each use, run through the following checks:

1. General condition of the fan (blades, grille, frame).
2. Cleanliness of the air inlets and outlets.
3. Presence of two compatible and charged batteries.
4. The on/off switch is set to OFF.

**Do not use the device if any part is damaged or missing.**

### 5.2. Positioning the fan

Carry the fan to the point of attack.

Place the device in front of the main opening (door, window, bay).

Keep a distance of 2 to 5 meters from the opening.

Adjust the tilt angle so the airflow covers the entire height and width of the entrance.

Check that it is stable on the ground.

## 5.3. Installing the batteries



Insert the two batteries into the matching rack (Milwaukee, Bosch, or Makita).

Check that they are properly locked in (you should hear a click).

**Make sure both batteries are the same brand, the same capacity, and have the same charge level.**

## 5.4. Turning on

Make sure the fan is positioned and angled correctly.

Switch the on/off button to ON.

Adjust the fan speed using the dial.

Check the airflow at the building entrance -> it needs to cover the whole opening.

Adjust the position or tilt if needed.

## 5.5. During use

Keep a constant eye on the airflow and smoke extraction.

Keep the area in front of the blower grille clear of obstacles.

Make sure a smoke exit opening is available and unobstructed.

## 5.6. Stopping the fan

Switch the on/off button to OFF.

Remove the batteries if you are done using the device.

Wait for the blades to stop completely before moving it.

Never carry the device while the blades are still spinning.

## 6. Servicing and maintenance

Regular maintenance of the Scoralp F16 fan is essential to keep it reliable, maintain its performance, and extend its lifespan.

All the tasks described below must be carried out by trained personnel with the power turned off (batteries removed).

### 6.1. Routine cleaning

Regularly clean the grille with a soft, slightly damp cloth. Remove any dust, dirt, or buildup that might block the airflow.

Do not use solvents, abrasive cleaners, or pressurized water jets.

### 6.2. Visual inspections

Before and after each use, check:

- The condition of the frame, handles, and wheels.
- That there are no cracks, bending, or loose parts.
- The condition of the protective grille (no broken or missing wires).
- That the battery rack and electrical connector are securely attached.

### 6.3. Periodic checks

Every 6 months or after heavy use:

- Check that the rack screws are fully tightened (using an Allen key).
- Test the on/off button to make sure it works properly.
- TestRun the fan at full power to check the airflow.
- Replace any part that shows abnormal wear.

## 6.4. Storage

- Store the fan in a clean, dry, and temperate location.
- Keep the device out of the weather during storage.
- Store it resting on its wheels.
- Make sure the control panel and transport handle are set to their storage positions.

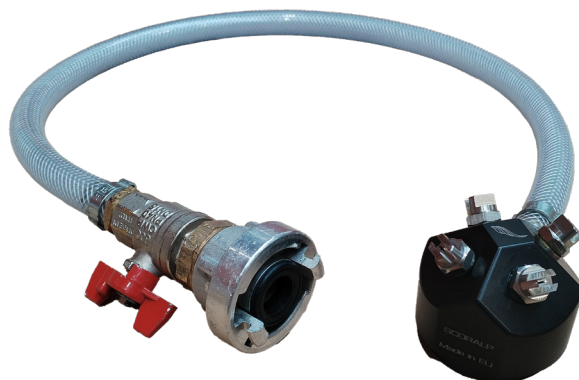
## 6.5. Maintenance

Any work beyond the steps described above must be handled by an authorized **Scorpe Technologies technician**.

Only use original spare parts to keep the product safe and compliant.

# Options

## A. Mister



The mister sprays a fine water mist to complement the airflow generated by the fan.

Main use: cooling down smoke, particles, and gases.

The misting module attaches directly to the front grille's center cap using a magnet. You connect it to a regular water line using a standard coupling.

Maintenance: drain the system after use and clean the nozzles regularly to prevent scale buildup.

## B. Stabilizer

The stabilizer is an accessory that gives the fan extra stability on rough or uneven ground. It is attached to the rear of the fan's frame.

How to use:

- Position the fan as explained earlier in section 4.1.
- Fold out the stabilizers to the position you need.
- Check the stability.
- Follow the standard startup steps to turn on the fan.

Recommended for outdoor jobs (sloping roads, uneven ground, etc.).

Always double-check that the stabilizer is securely locked before turning the fan on.

Make sure to properly pack away the stabilizer chocks before moving the fan.

## C. Remote control



The fan can be equipped with a wireless remote for remote operation.

Available functions:

- Fan speed adjustment.
- Boost mode (do not use boost mode on mains power).
- Turning on the LED strip.
- Recommended range: up to 25 meters. Going further is possible but not recommended.
- Power: Battery.

Operation:

1. Turn the fan on manually using the ON/OFF button.
2. Press the On/Off button on the remote to take over the fan controls. An RF indicator will show up on the fan's screen.
3. Adjust the fan speed and turn on the LED strip using the corresponding buttons on the remote.

If the signal is lost, you can still control the device directly from the control panel.

The remote disconnects automatically as soon as you manually adjust the rotor speed on the control panel.

## 7. Guarantee

The SCORALP fan comes with a full 5-year warranty (1 year for the batteries).  
(This does not cover shipping and customs fees, if applicable).

If you experience any issues, please contact::

**SCORPE TECHNOLOGIES**  
**After-Sales Service**  
Email : [simon.hammer@scorpe.eu](mailto:simon.hammer@scorpe.eu)  
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