




training



Sundström 
SR500
Powered Air Purifying
Respirator (PAPR)



HOW TO...

 **HOW TO...**

**...prepare the SR500 PAPR
battery for first use**

BEFORE YOU START:

- Make sure the respirator and all its parts are clean and intact
- Make sure you are familiar with the equipment and know how to use it



If it is the **FIRST TIME** you unpack and use the respirator, you must first activate and charge the battery. The battery is already fitted to the respirator.



Pull the battery lock open.



Then slide the battery out of its compartment.



The new battery has a plastic sticker covering the terminals. Remove the tape and discard.



The electric socket is covered by a protective rubber tab that can be folded back to expose the socket.



Plug in the battery charger to a wall socket and to the battery.



There is an indicator light on the charger. Do not unplug the charger until the battery is fully charged and the charger displays a **GREEN** light. Slide the battery back into its position in the respirator fan unit until the lock clicks shut.

ORANGE means that the battery is charging.
YELLOW means that the battery is almost fully charged.
GREEN means that recharging is complete.

BATTERY TIPS:

- Always recharge battery BEFORE it is completely drained
- Don't try to recharge other batteries
- Don't use any other chargers
- Recharge the battery indoors
- The equipment becomes hot — do not cover battery or charger during recharge
- Keep battery and charger away from liquids and moisture
- Prevent short circuits by contact with metal objects
- Don't take battery apart
- Keep battery away from naked flame: risk of explosion



HOW TO...

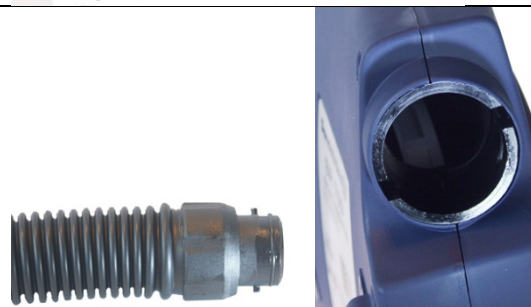
...assemble the SR500 PAPR

Place the fan unit upside-down. Fit the three tongues in one of the belt attachments into the slots in the fan unit. Continue pushing the attachment until it snaps into place. Repeat with the other belt attachment on the opposite side. Do not get left and right mixed up. Make sure the plastic 'wings' are curved downwards with the fan unit upside-down, as shown in the picture.



Head pieces come with their own breathing hose.

- Make sure the O-ring at the tip of the hose is intact.
- Insert the hose into the hole in the fan unit, fitting the two protruding lugs into the corresponding slots of the bayonet fitting.
- Turn the hose clockwise until it locks securely.



If using the SR500 with the SR200 full face mask, screw the threaded end of the hose into the front of the face piece.



HOW TO...

...attach particle filters to the SR500

Make sure you are using two Sundström particle filters.

Prefilters **MUST** be used.

If uncertain how to use filters, see the training module on Sundström filters.



You will need two filter adapters.



With even pressure using both hands, squeeze the filter into the filter adapter until it snaps into place. Repeat with the other filter adapter.

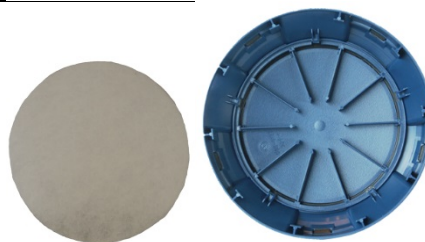
NOTE: only particle filters can be fitted to the filter adapters



Screw the assembled filter adapters into the threads in the fan unit.



Place a pre-filter into each filter cover.



Snap the filter covers with prefilters onto the screwed-on filter adapters.



HOW TO...

...remove filters from adapters

Insert a coin or similar between the filter rim and the filter adapter and twist the two apart.



HOW TO...

...attach gas filters

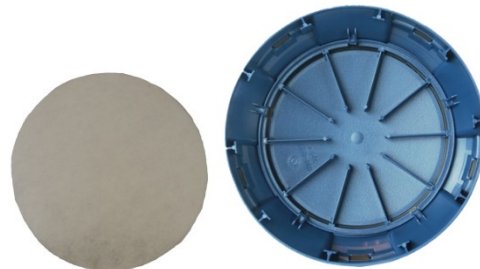
Screw two identical gas filters directly into the fan unit.



Gas filters must not be used on their own. A particle filter must be attached to the front of each gas filter. Squeeze the particle filter onto the gas filter using both hands and even pressure until it snaps into position.



Place a pre-filter into each filter cover.



Screw the combined main filters into the fan unit, and then snap the filter covers and prefilters onto the main filters.



HOW TO...

...operate the fan unit

The SR500 is operated with a single button. Switch on the fan by pressing the button once.



The fan will start and perform a self-test. During the test, the display symbols will light up, the beeper will sound, and the vibrator will buzz.



After the self-test, the display will show only the small fan symbol, indicating that the fan unit is running normally at 175 litres/minute air supply. The PAPR is ready to use.



Press the button once more to enter boost mode. The fan goes up in speed, delivering air at 240 l/min, and the large fan symbol lights up. Press the button again to return to normal air speed.



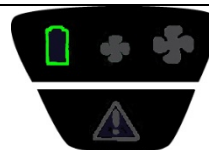
To turn the fan off, press and hold the button until the motor switches off and the display goes black.



HOW TO...

...monitor the battery power

Steady green: more than 70% charge.



Flashing green: 50–70% charge.

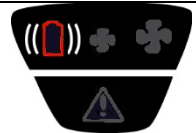


Steady yellow: 20–50% charge.



Flashing red: 5–20% charge.

Keep an eye on the display and be prepared to leave the area.



Flashing red, beeper, vibrator: less than 5% charge.



WHAT TO DO:

- Stop work.
- Do not remove the respirator or head piece!
- Leave the area immediately — go to a safe environment with clean air.
- Replace the battery with a fully charged one.



HOW TO...

...recognise alarms

If the airflow dips below the selected flow rate (175 l/min in standard mode and 240 l/min in boost mode), the following will happen:

- A red triangle will flash on the display.
- A pulsing beep will be heard.
- The built-in vibrator will buzz.

WHAT TO DO:

- Stop work.
 - Do not remove the respirator or head piece!
 - Leave the area — go to a safe environment with clean air.
 - Inspect the equipment and fix the cause of the dip in airflow.
-



If the particle filters are clogged, the following will happen:

- The red triangle on the display will flash.
- The beeper will sound for 5 seconds every minute or so.
- The vibrator will buzz for five seconds.



WHAT TO DO:

- Stop work.
- Do not remove the respirator or head piece!
- Leave the area — go to a safe environment with clean air.
- Replace the particle filters with new ones.

IMPORTANT! There is no warning for spent gas filters.



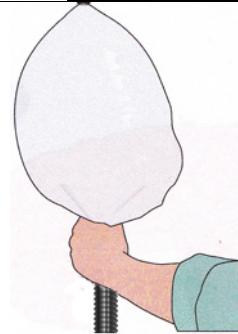
HOW TO...

...perform a functional check

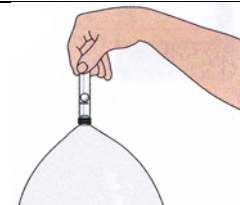
Make sure the SR500, headpiece and filters are intact and correctly assembled.
Switch on the PAPR.



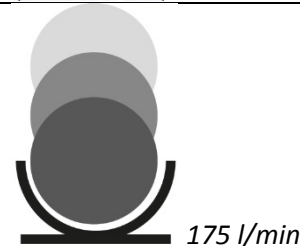
Place the entire facepiece or headpiece into the test bag and seal off by closing your hand around both the bag and the breathing hose.
IMPORTANT! Do not in any way obstruct, squeeze together or bend the breathing hose.



With the other hand, hold the flow tube up vertically from the bag.



The floating ball in the tube should be on the line marked 175 or slightly above it.



If the floating ball isn't on or above the line, shake it a few times, and make sure the tube is completely vertical.

If it seems impossible to get a successful measurement, call your supervisor. Do not use the equipment.



Now test the alarm functions of the SR500. With the fan unit running, and still sealing off around the breathing hose, block the exhaust of the test flow tube with your thumb or hand.



The following should happen:

- The red triangle should flash on the display.
- A pulsing beep should sound.
- The built-in vibrator should buzz.



When the air block is released, all alarms should stop after about 15 seconds.



HOW TO...

...wear the SR500 PAPR

The fan unit should sit in the small of your back.



If using a headpiece, let the breathing hose run straight up your back without kinks or bends.



If using the SR200 full face mask, run the breathing hose around your waist and up along your chest.



HOW TO...

...clean the SR500 PAPR

For normal cleaning and disinfection, use Sundström's cleaning tissues.



Alternatively, use a mild detergent and water and wipe the regulator all over with a soft cloth or sponge. Warm water may give a better clean. Leave to dry and store in a dry, clean area at room temperature away from direct sunlight.



IMPORTANT! Never use solvents to clean the equipment.



Watch this on 
(using your SmartPhone, tablet or computer)



(<http://youtu.be/72WWzLzMIMo>)
