

## TECHNICAL SHEET

# SCOIATTOLO STAIR CLIMBER



The **SCOIATTOLO** stair climber is designed for transporting coffins. It is a mobile device that does not require any fixed wall installation. Operable by a single operator, although use with a second operator is recommended.

Its structural and functional features allow it to overcome straight stairs, spiral stairs, and stairs with trapezoidal steps. Its compact dimensions make it easy to maneuver and ideal for navigating narrow corridors, small landings, and tight staircases.

The device is powered by an electric traction system with a motor driven by an internal battery, rechargeable via the built-in charger.

Ascent and descent speeds are managed and kept constant by the electronic control board.

A removable control unit allows a second operator to assist in particularly narrow or complex staircases.

CODE	MODEL	MIN/MAX HEIGHT (CM)	WIDTH (CM)	CAPACITY (KG)	WEIGHT (KG)
<b>CSS160</b>	BASE	110/202	56	180	63

## TECHNICAL DESCRIPTION

The device consists of a single body with a metal frame.

At the rear, there are two height-adjustable guide handles equipped with grips and control elements. On the left handle, there is a switch for selecting the direction of movement and a brake release button that operates on the wheels of the triangular group. The brake release button ceases to function upon release if the direction selector is set to ascent or descent. On the right handle, there is the drive button, which, when pressed (and the direction is selected), disengages the wheel brake and the motor brake, subsequently initiating the movement of the triangle. By controlling the pressing mode of this button, the operator can choose whether to ascend the staircase continuously or step-by-step.

The “dead man’s” type braking system ensures that the moment the operator releases the drive button, the brakes immediately and automatically engage, preventing any slipping of the wheel group. The operator can brake the stair climber at any time, regardless of the position on the stairs or the operator’s position on the step, including the edge of the step. The system, which uses the rotation of the cluster of three wheels, ensures that one of the three wheels always positions itself to act as a braking fulcrum when necessary.

On the same handle, there is an optical indicator showing the battery charge level and the system’s operational status. Both buttons are recessed within a shaped ring designed to prevent accidental activation due to impacts or unintentional movements. Using specific locking systems, the handle height can be adjusted to better suit the operator’s handling needs. Near the handles, on the upper part of the rear frame, there is a support stand with a wheel that allows the unit to be safely positioned on the ground in a stable position and permits ground movement without having to bear the weight.

On the side of the casing, there is a socket equipped with fuses for powering the integrated battery charger.

At the bottom, the transmission system is located, which includes the DC electric motor, the gearbox with the triangle shaft directly mounted on its output element, the wheel braking system, the electronic control board, and the battery charger.

A normally engaged brake is mounted on the motor’s output shaft, allowing the triangle to be stopped in any position on the stairs and maintaining the seat’s tilt angle relative to the wheel position during use on flat surfaces. A safety device is mounted on the input element of the gearbox, preventing rotation in case of malfunction.

The transmission system ends with the characteristic triangular structure, at whose ends the double wheel clusters are symmetrically positioned. Brake pads operated by a lever system connected to a geared motor simultaneously act on the wheels. Both braking systems engage automatically upon releasing the drive button.

## OTHER TECHNICAL DATA

12-month warranty (excluding wear parts such as the battery).

- Unladen weight: 60 kg.
- Maximum load capacity: 180 kg.
- Climbing range: 72 flights with maximum load.
- Climbing speed: 4 sec per step.
- Capable of climbing straight, spiral, and trapezoidal stairs.
- Maximum climbable inclination: 40°, equivalent to 84% gradient.
- Minimum landing maneuvering space: (90x90) cm.
- Climbable step height: 4-20 cm.
- Minimum tread depth: 15 cm.
- Height-adjustable guide handles.
- Guide handle grips made of non-slip rubber.
- “Dead man’s” type drive button on the right handle, protected by a specific ring to prevent accidental activation.
- Direction selector switch on the left handle.
- “Dead man’s” type button on the left handle, protected by a specific ring against accidental activation.
- Covering casing over the entire transmission unit.
- DC motor, 12V 150W.
- Sealed lead-acid maintenance-free battery, 12V 55Ah.
- Battery charger power supply: 230V~ 0.5A.
- Gear unit directly transferring motion to the movement triangle.
- System that activates triangle movement during descent only when the mechanism detects the edge of each step.
- Triangle wheel group composed of two clusters of three wheels each, made of high-traction, non-slip, non-marking rubber.
- Two small-diameter swivel wheels at the front for easy maneuverability on flat surfaces.
- Support stand with wheel, facilitating loading and horizontal handling.
- Built-in “switching” battery charger with multi-phase charging to optimize and preserve battery life.
- Automatic motion disable system during battery charging phase.
- Optical indicator showing charger operating status during charging.
- Electronic system managing movement while maintaining constant speed.
- Automatic shut-off after 3 minutes from the last command, engaging the brake on the triangle wheels.
- Power socket with fuses protecting the battery charger.
- Optical indicator for battery charge level on the right guide handle.
- Electrical circuit protection fuses, visible at the base of the frame.

## ACCESSORIES

### STANDARD EQUIPMENT

Reinforced support frame for better landing stability

### OPTIONAL ACCESSORY

5/7-rung ladder for direct loading/unloading from transport vehicles