Stationary and mobile target holders

for shooting practice

www.sterela-defense.com

sterela
DEFENSE & SECURITY

Stationary and mobile target holders

for shooting practice

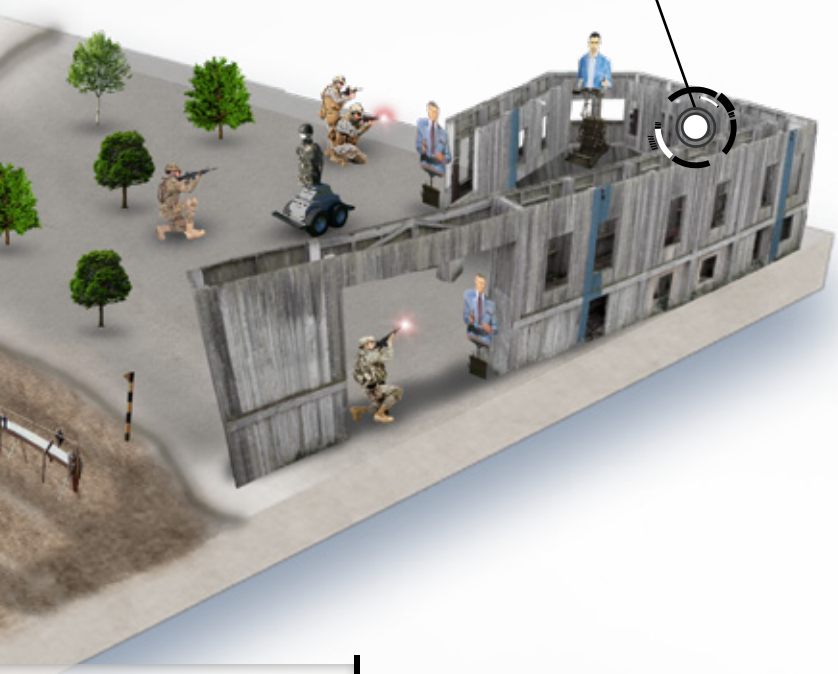
We provide systems for shooting practice with light and heavy weapons, using stationary and moving targets.
The target holders blend into the environment to provide target practice that is as close to the reality in the field as possible.

Operational simulation

Stationary and mobile targets

2D and 3D targets

URBAN SHOOTING TRAINING



FIELD FIRING RANGES

STERELA is specialised in developing equipment for shooting practice (live ammunition, airsoft, laser) in urban areas, on shooting-evaluation courses, on ranges with stands and on field firing ranges.

We have been providing state-of-the-art equipment since 1989 for:

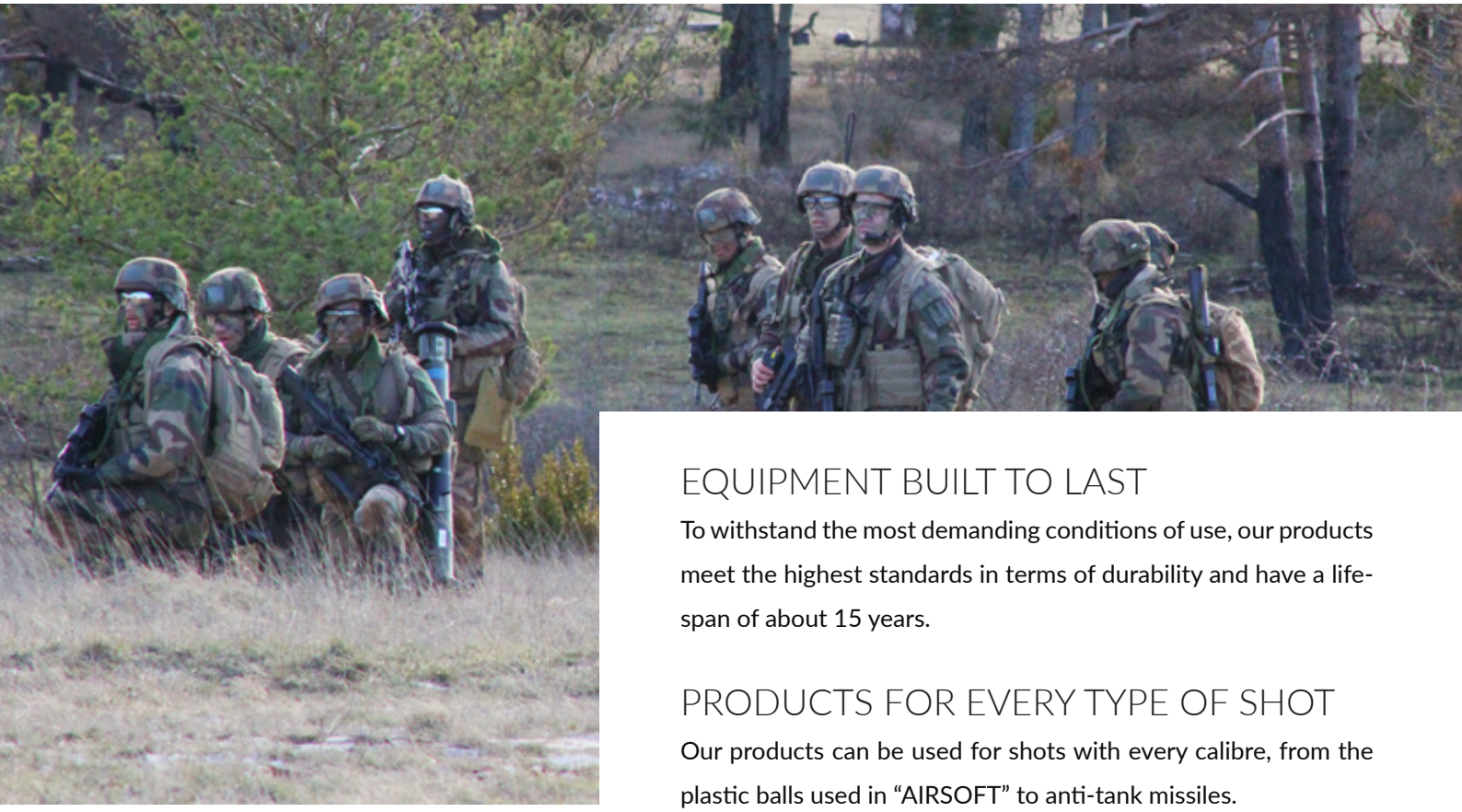
- *Teaching (stationary targets)*
- *Training (stationary and mobile targets)*
- *Field practice (stationary and mobile targets, mission scenarios, airsoft, laser).*

STERELA's shooting-practice equipment is designed to perfect individual gestures and techniques while placing shooters in realistic operational situations.
Our target holders can be used in automatic mode (without remote control when switched on), with remote controls or based on pre-scripted scenarios.
STERELA has always been careful to take on board the feedback provided by professionals involved in field operations and constantly updates its product ranges to meet soldiers' evolving needs in terms of training and operational firing practice in every type of environment: ***open terrain, confined spaces, urban areas, mountains, etc.***

Technical shooting	*Precision shooting*	*Mountain shooting*
Tactical shooting	*Collective shooting*	*Shooting in confined spaces*
Combat shooting	*Long-range shooting*	*Shooting in urban areas*

STATIONARY AND MOBILE TARGETS

Training and practice with light and heavy weapons



As an engineering company specialised in electronics and mechatronics, STERELA designs and manufactures equipment for weapons instruction, training and shooting practice, and also provides in-service maintenance of its products.

Since 1989, we have been constantly adapting our products to meet our customers' needs, without ever forgetting the primary requirement, i.e. the capacity to withstand the most demanding conditions of use.

The Department Head

EQUIPMENT BUILT TO LAST

To withstand the most demanding conditions of use, our products meet the highest standards in terms of durability and have a life-span of about 15 years.

PRODUCTS FOR EVERY TYPE OF SHOT

Our products can be used for shots with every calibre, from the plastic balls used in "AIRSOFT" to anti-tank missiles.

VERSATILE, COMPATIBLE SOLUTIONS

Our agile, versatile products can be adapted to every type of situation and circumstance (open terrain, shooting ranges, field firing ranges, etc.). They can operate autonomously (with batteries only, or batteries and solar power) or using the mains power supply. A single remote control is enough to control our entire product range.

MOBILE SOLUTIONS

In order to meet all the educational requirements of shooting instruction and practice, we have incorporated the concept of moving shots along two different axes into our product range, with movement in both longitudinal (withdrawal situations) and lateral directions.

INTERACTIVE TARGET HOLDERS

To make your training even more real, our targets are interactive. Simulation accessories (sound, lights, smoke, etc.) are used to enhance the scenario.

EDUCATIONAL AND SCRIPTED SOLUTIONS

Our products have been designed to meet every requirement in terms of learning, training and maintaining shooting skills. In addition to the shooting practice, the scenarios enable soldiers to draw on their other combat reflexes.

At the end of the session, the instructor can consult a performance analysis.

TRAINING COURSES FOR USING AND MAINTAINING EQUIPMENT

To get the most out of our products, we provide “user” training courses that enable you to fully master your training tools in order to provide the best education.

We also provide several levels of maintenance training, according to the autonomy desired.

SUPPORT SERVICES

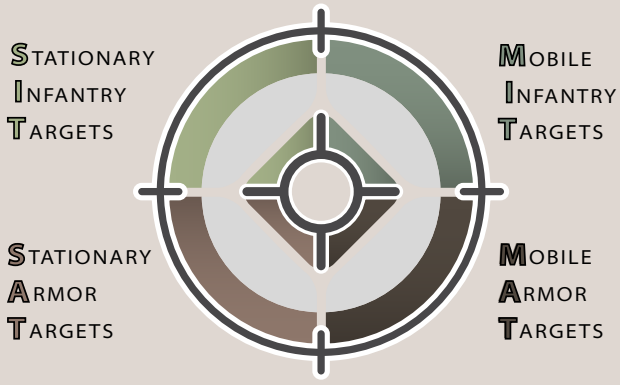
We provide various services (installation, commissioning, maintenance, etc.) to ensure optimum availability of your equipment.

TO MEET US

- *At trade fairs (national and international)*
- *By appointment (in our offices or yours)*

« Nothing is more conducive to conformity than a lack of education. »

Gustave THIBON (philosopher)



Foot soldiers
Commandos
Special Forces
Multi-weapon specialists
Army
Navy
Air-force

INFANTRY Targetry

PCI100 / MOV100 / PCI200M / PCI300 / PCI600/ CMI300NG / CMR300

STERELA is acknowledged around the world for its shooting-practice equipment for training areas, in particular, our stationary (SIT) and mobile (MIT) infantry firing solutions. Our equipment can be installed on any type of terrain and be used with any type of ammunition, from airsoft to large calibres. Our comprehensive range of products enables us to equip every kind of shooting range.

ANTI-TANK Targetry

PCA400 / SMAC500

Stationary (SAT) and mobile (MAT) anti-tank target holders simulate tank or other types of vehicles for live shooting practice and qualification programmes. Our field-firing-range target systems can be used for tactical exercises by detecting, identifying and firing at stationary and mobile tank targets in simulated combat conditions.

Range of TARGET HOLDERS

PCI100

MULTIMODAL TARGET HOLDER
FOR SHOOTING EXERCISE

MOV100

MOBILE TRACK-MOUNTED TARGET HOLDER
FOR SHOOTING EXERCISE

PCI200M

POP-UP TARGET HOLDER FOR SHOOTING
EXERCISE IN MOUNTAIN SETTING

PCI300

POP-UP TARGET HOLDER
FOR SHOOTING EXERCISE

CMI300NG

MOBILE CARRIAGE TARGET HOLDER
FOR SHOOTING EXERCISE

CMR300

AUTOMATED OFF-ROAD MOBILE ROBOTIC UNIT
FOR SHOOTING EXERCISE

PCA400

POP-UP TARGET HOLDER FOR
ANTI-TANK SHOOTING EXERCISES

SMAC500

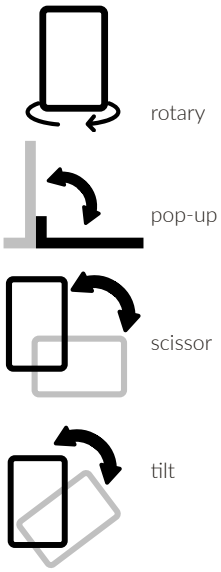
MOBILE TARGET HOLDER FOR
ANTI-TANK SHOOTING EXERCISES

PCI600

VERTICAL RISING TARGET HOLDER
FOR SHOOTING EXERCISES

PCI100

Multi-modal target holder for shooting exercises



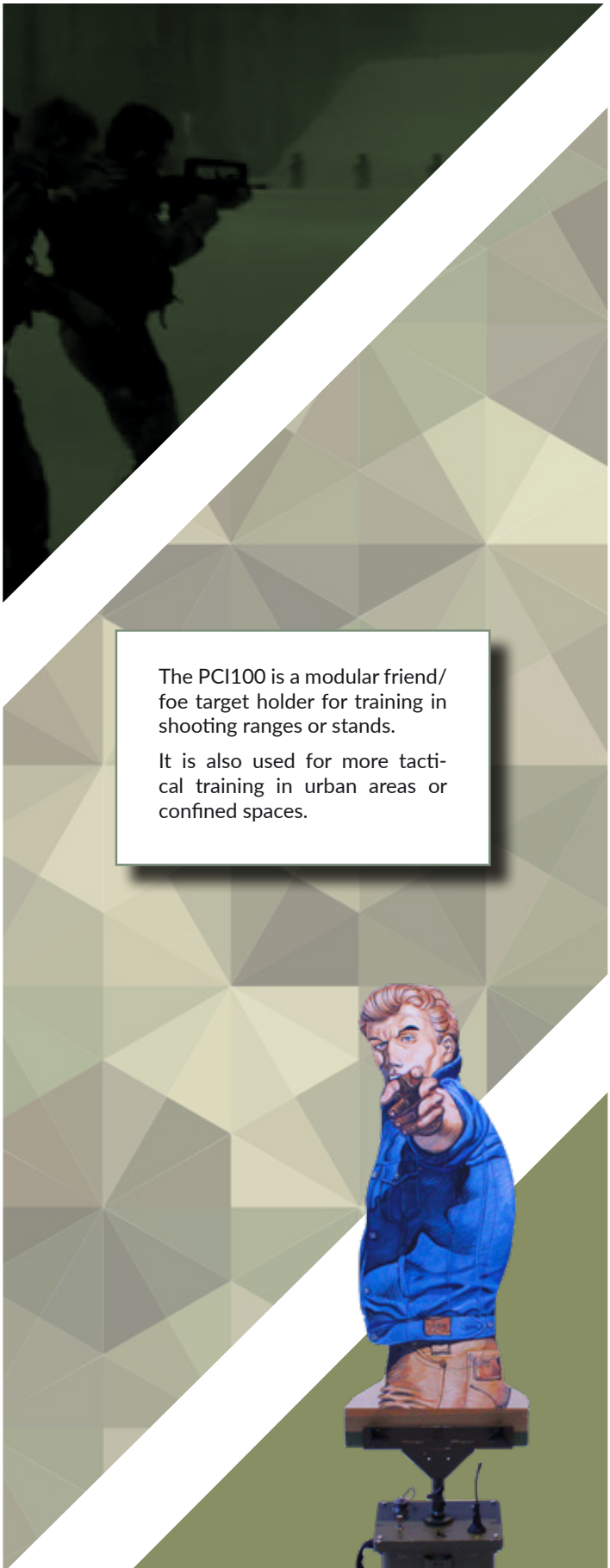
Characteristics

- Dimensions (HxLxW) mm : 458 x 264 x 214
- Weight without battery ≈ 10kg
- Protection: IP66 (max. water depth 20cm)
- Positions: Friend/Hidden/Enemy
- Sensitivity can be adjusted for different calibres
- X-hit: Management of the number of impacts required to «treat» a target
- Range up to 600m or 2000m (Long Range)
- Integrated rechargeable battery
- Autonomy: 5000 cycles (pivot)
- Automatic management of sensors and accessories
- Use temperature -20°/+60°
- Movement time ≤1s
- Distinction between impacts on Friend/foe
- Remote-controlled by MSR100 / SRC
- Accessories :

  Thermal modules / Motion detector

  Infrared barrier / Lamp / Sound / Pyrotechnics

  Mounting kits (stabilisers/wall bracket/tilting arm)

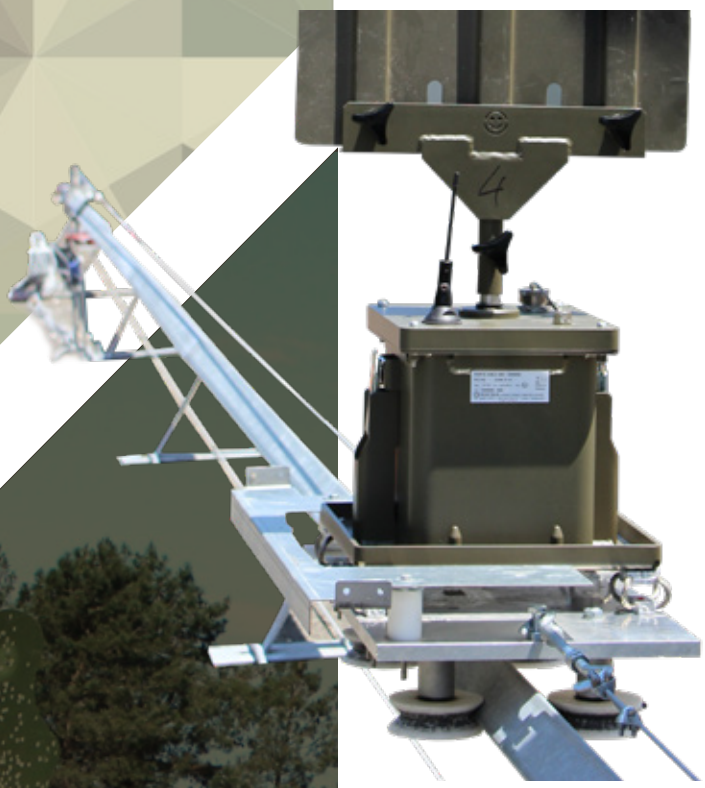


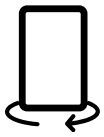
The PCI100 is a modular friend/foe target holder for training in shooting ranges or stands.

It is also used for more tactical training in urban areas or confined spaces.

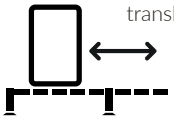
MOV 100 / LP

Rail-mounted mobility kit for PCI100





rotary



translation

Characteristics

- ⊙ RAIL : from 16 to 50 metres
- ⊙ Compliant with the IEC and CE EMC standards
- ⊙ Protection: IP55
- ⊙ Range up to 600m or 2000m (Long Range)
- ⊙ Mains power supply (230 V AC/50Hz/10A)
- ⊙ Speed: from 2 to 15 km/h
- ⊙ Use temperature: -20°C/+45°C
- ⊙ “Chaining” option: up to 3 trucks
- ⊙ Scenario ready: “Aggression”, “Flight”...
- ⊙ Remote-controlled by MSR100/SRC
- ⊙ Accessories:

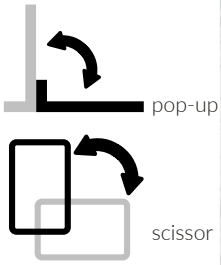
Air conditioning for cabinet (-20°/+55°)

The MOV100 is a mobile system allowing the movement one or more PCI100 target holders in a straight trajectory.

It can be used for training in both indoor and outdoor environments.

PCI200M

Pop-up target holder for shooting exercises in mountain setting



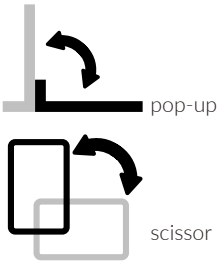
The PCI200 is a pop-up target holder for training troops in snow and mountain areas.

Characteristics

- ⊙ Dimensions (HxLxW) mm: 320x750x440mm with its sub-frame
- ⊙ Weight without battery: < 15kg
- ⊙ Protection: IP65
- ⊙ Positions: Hidden/Enemy
- ⊙ Sensitivity can be adjusted for different calibres
- ⊙ X-hit: Management of the number of impacts required to «treat» a target
- ⊙ Range: 2000m
- ⊙ Rack-mountable battery: 1
- ⊙ Autonomy: 1000 cycles
- ⊙ Automatic management of sensors and accessories
- ⊙ Use temperature: -25°C/+60°C
- ⊙ Movement time ≤1s
- ⊙ Remote-controlled by SRC
- ⊙ Accessories :
  - *Thermal module*
  - *Lamp/Sound/Pyrotechnics*
  - *Solar panel*

PCI300

Pop-up target holder for shooting exercises



The PCI300 is a target carrier for training troops on outdoor shooting complexes.

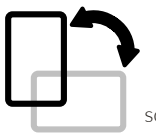
Its robustness and autonomy allow it to cover the needs of intensive training.

Characteristics

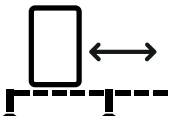
- Dimensions (HxLxW) mm: 250 x 680 x 580
- Weight without battery ≈ 34kg
- Protection: IP65
- Positions: Hidden/Enemy
- Sensitivity can be adjusted for different calibres
- X-hit: Management of the number of impacts required to «treat» a target
- Range up to 2000m
- Rack-mountable battery: 1
- Autonomy: 3000 cycles
- Automatic management of sensors and accessories
- Use temperature: -25°C/+60°C
- Movement time ≤1s
- Remote-controlled by SRC
- Accessories:
  - *Solar panel integrated in the cover*
  - *Mains power supply*
  - *Thermal modules*
  - *Arm for scissor-like appearance*
  - *Lamp/Sound/Pyrotechnics*

CMI300NG

Mobile carriage target holder for shooting exercises



scissor



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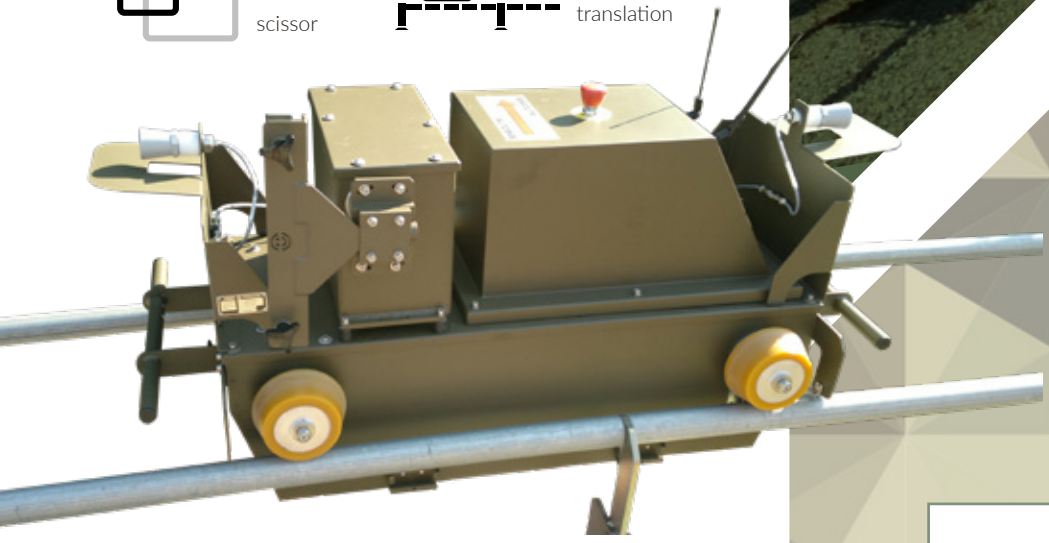
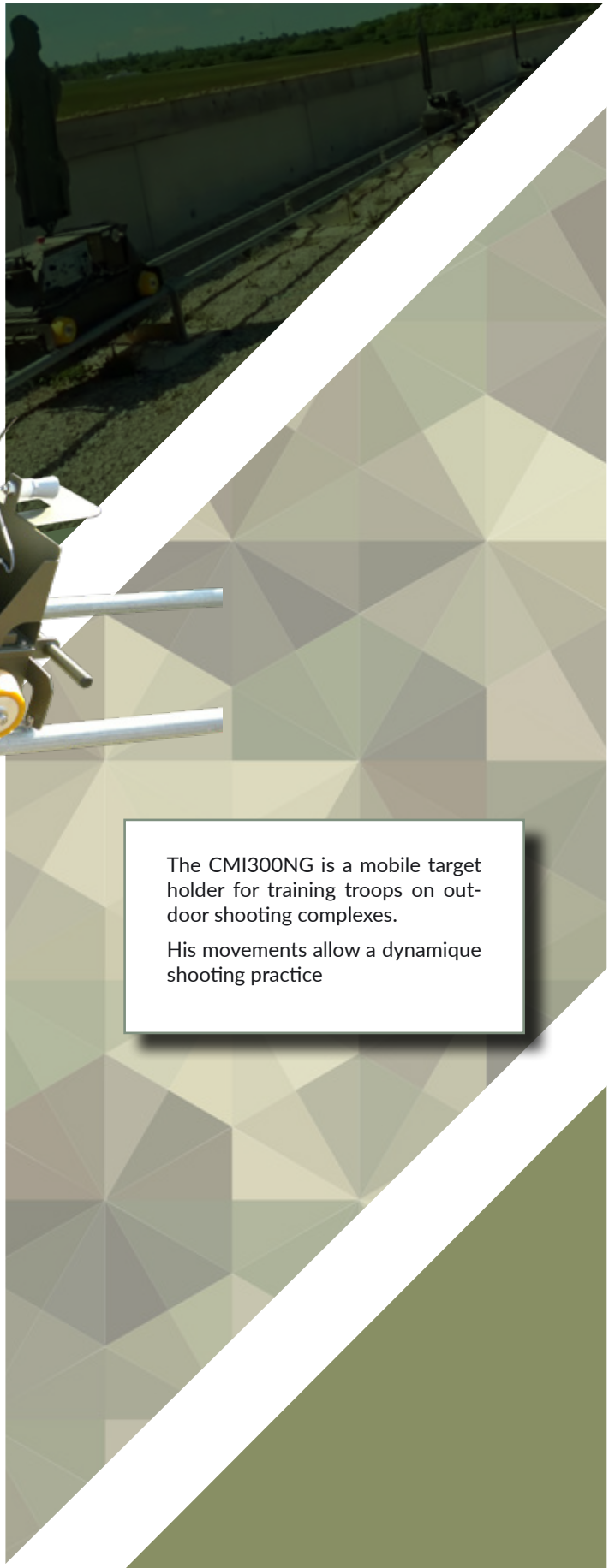




The CMI300NG is a mobile target holder for training troops on out-door shooting complexes.

His movements allow a dynamique shooting practice

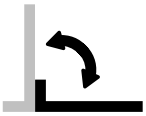
Characteristics

- Dimensions (HxLxW) mm: 560 x 1170 x 560
- Weight without battery ≈ 61kg
- Protection: IP65 electronics compartment / IP54 mechanical structure IP54
- Positions: Hidden/Enemy
- Sensitivity can be adjusted for different calibres
- X-hit: Management of the number of impacts required to “treat” a target
- Range up to 2000m
- Rack-mountable battery (1 or 2 units)
- Autonomy: 16km (with 2 batteries)
- Smoke management
- Speed: from 2 to 15km/h
- Rail: 30m <-> 1000m
- Use temperature: -15°C/+50°C
- Contact-free “Chaining” mode (2, 3 trucks);
- “Flight” mode (when one target is treated, the others flee)
- Remote controlled by SR
- Accessories:
  - *Arm for 3D model*
  - *Pyrotechnics*
  - *Thermal modules*

CMR300

Automated off-road robotic unit for shooting exercises

The CMR300 is a terrestrial drone for training troops out-doors.

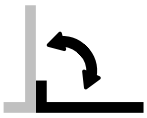


Characteristics

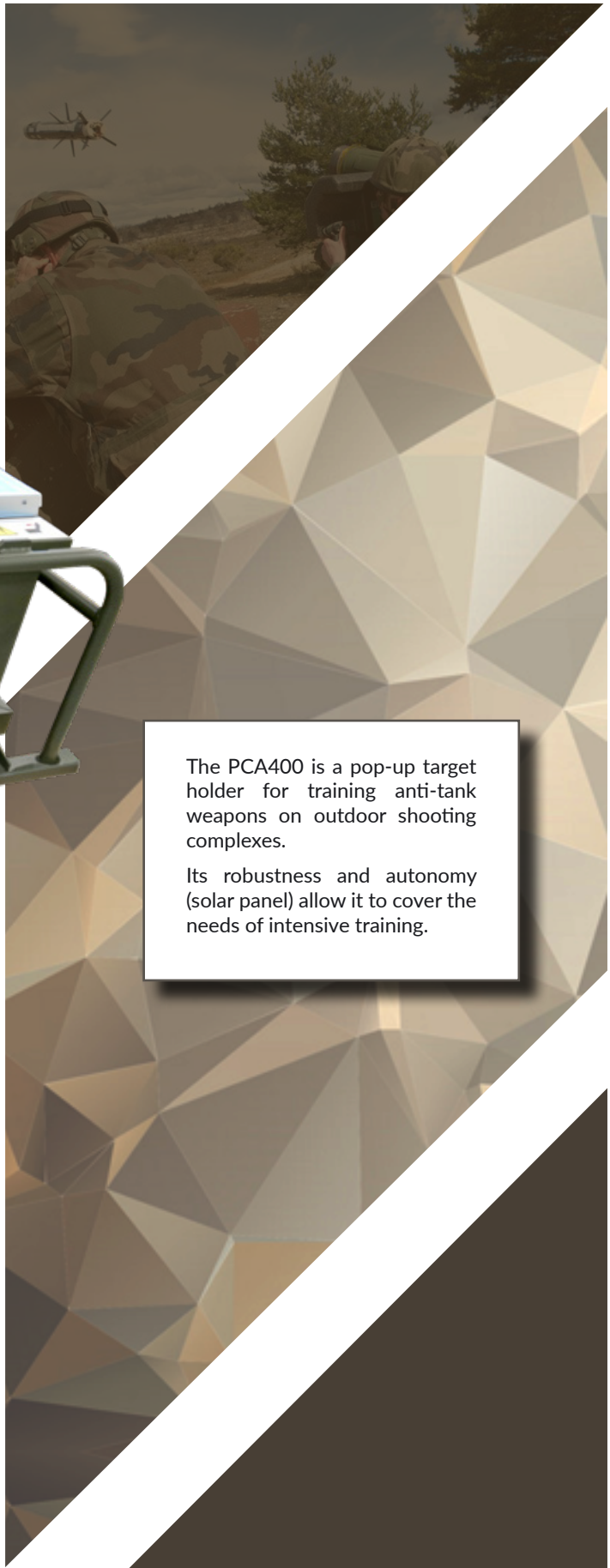
- (LxW) mm: 1000 x 800
- Weight: 150kg
- Payload: 150kg
- Protection: IP55
- Positions: Hidden/Enemy
- Speed: up to 15km/h
- Off-road 4 x 4
- Gap-crossing capacity: 20cm
- Auto-rotation
- Maximum admissible slope: 30%
- Autonomous navigation
- Autonomy: >8 hours
- Range up to 100m
- Use temperature: -10°C/+50°C
- Can carry different adapted modules
- CE compliant (in accordance with the Machinery Directive 2006/42/EC)

PCA400

Pop-up target holder for anti-tank shooting exercises



pop-up



The PCA400 is a pop-up target holder for training anti-tank weapons on outdoor shooting complexes.

Its robustness and autonomy (solar panel) allow it to cover the needs of intensive training.

Characteristics

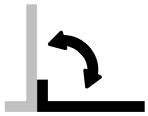
- ⊙ Dimensions (HxLxW) in mm: 511 x 1100 x 760
- ⊙ Weight without battery ≈ 125kg
- ⊙ Protection:
  - IP65 electronics compartment
  - IP22 Mechanical structure
  - Max. water depth 20cm
- ⊙ Positions: Hidden/Enemy
- ⊙ Sensitivity can be adjusted for different calibres
- ⊙ X-hit: Management of the number of impacts required to “treat” a target
- ⊙ Range up to 2000m
- ⊙ Rack-mountable battery (1 or 2)
- ⊙ Autonomy: 100 cycles (1 battery), 250 cycles (2 batteries)
- ⊙ Movement time: ≤3s
- ⊙ Use temperature: -20°C/+50°C
- ⊙ Remote controlled by SRC
- ⊙ Accessories:
  - *Solar panel integrated in the cover*
  - *Mains power supply*
  - *Thermal modules*
  - *Lamp/Sound/Pyrotechnics*

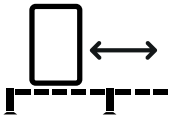
SMAC500

Mobile target holder for anti-tank shooting exercises

The SMAC500 is a mobile targeting system designed for anti-tank weapons fire drills on outdoor fire complexes.

The motor can propel and tow 2 target carriages.



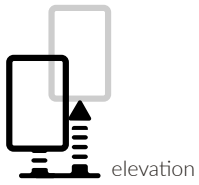


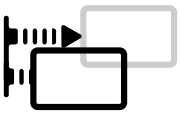
Characteristics

- Dimensions (HxLxW) in mm:
  - Motor system: 1430x4320x1650
  - Truck: 1350x6220x1600
  - Target: 2000x4000
- Motor-system weight: 3100kg
- Wagon weight: 1000kg
- Protection: IP55
- Speed: from 0 to 40km/h
- Maximum admissible slope: 5%
- Positions: Hidden/Enemy
- Sensitivity can be adjusted for different calibres
- X-hit: Management of the number of impacts required to “treat” a target
- Radio range up to 5000m
- Autonomy: 85km
- Use temperature: -20°C/+50°C
- Radio-controlled by UCG500/ Local control unit
- Chaining: up to 3 wagons
- On-board electronics (ASR/ABS)
- Accessories:
  - *Thermal modules*
  - *Pyrotechnics*

PCI 600

Vertical rising target holder for shooting exercises

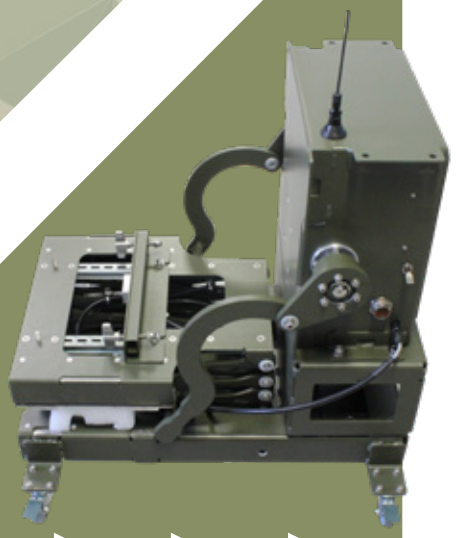




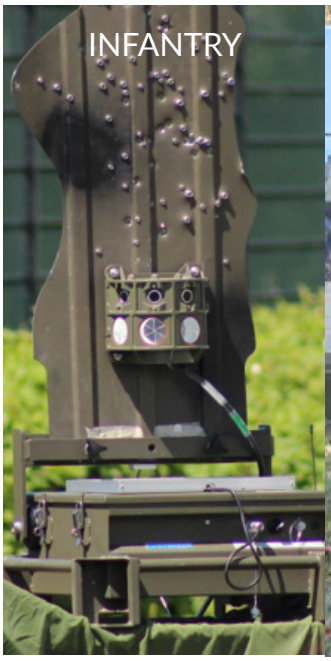
The PCI600 is a target holder for indoor, outdoor shooting range, urban and confined space training.

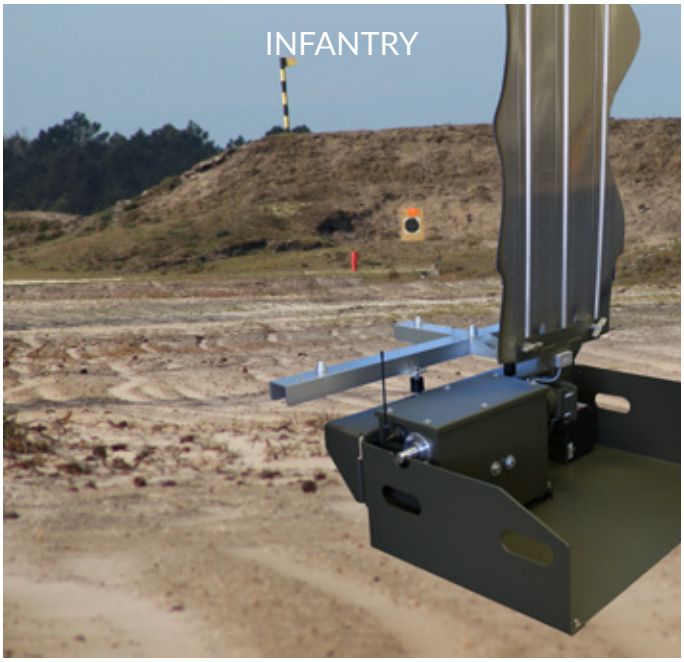
Characteristics

- Dimensions (HxLxW) mm: 700x680x560
- Weight (without battery) ≈ 50kg
- Protection: IP65 (Max. water depth 15cm)
- Positions: Hidden/Enemy
- Sensitivity can be adjusted for different calibres
- X-hit: Management of the number of impacts required to “treat” a target
- Range up to 2000m
- Integrated rechargeable battery
- Autonomy: 900 cycles
- Use temperature: -20°C/+60°C
- Movement time ≤1s
- Remote controlled by MSR100/SRC
- Accessories:
  - *Thermal module*
  - *Motion detector*
  - *Infrared barrier*
  - *Lamp/Sound/Pyrotechnics*
  - *Mains power supply*



IMPACT ACQUISITION





LASER

- Ensures compatibility between the target and the virtual simulator (vehicles, tanks and light weapons).

Characteristics

- Laser range: 40m to 2.5km
- Angle spectrum: 1cm to 1000m
- Weight: >2.5kg
- Dimensions (HxLxW): 190x137x194mm
- Use temperature: -20°C/+40°C
- Sealing: IP66

LOMAH

- A localisation system that provides impact coordinates on a shooter's screen.

Characteristics

- Minimum projectile speed: 450 m/s
- Precision: <20mm
- Use temperature: -10°C/+60°C
- Supervision: Up to 100 systems

ACCESSORIES

Combat effect simulators and sensors

STERELA's accessories enable the target holders to be used in different contexts, making the soldiers' training even more realistic.

THERMAL MODULE

Thermal signature module for night-time shooting situations.

FLASH-SOUND MODULE

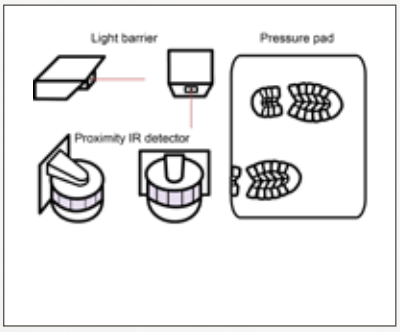
Sound (130 dB) and light generator that simulates enemy fire or contextual sounds (shots, explosions, etc.).

FLASH LAMP MODULE

Lamp that simulates an enemy lit up by a torch or lighter.

PYROTECHNIC MODULE

Pyrotechnic effect generator.



SENSORS-DETECTORS

Provide dynamic interaction with the system (light barrier, IR or pressure proximity detector).

INSTRUMENTATION

The targets can be controlled by:

- **Portable remote-control**
- **Smartphone/tablet (Android application)**
- **Fixed control unit (control room)**

MSR 100

- Remote control for PCI100, PCI600 and MOV100. Management of 20 target holders per module and one MOV100 mobile truck. Results displayed on screen.

CHARACTERISTICS		
600	**Range (m)**	2000
<1	**Weight (kg)**	<2
50 x 187 x 106	**Dimensions (mm)**	40 x 280 x 210
IP65	**Protection**	IP65
5 days	**Autonomy**	hot swappable
2,6"	**Screen**	10" (touch-screen)

SRC

- The SRC remote control allows you to simultaneously manage and coordinate 500 equipment holders, roll out scenarios and consult the training results.

STERELA's stationary and mobile targeting equipment can be used to deploy a wide variety of training situations, manage scenarios and retrieve results.

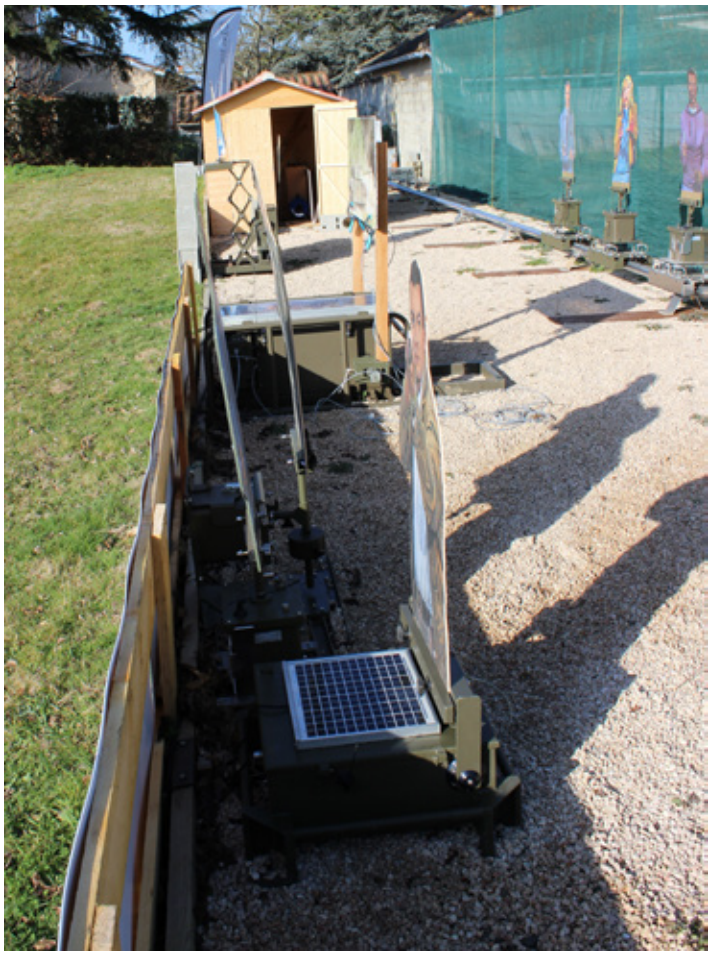
DEMONSTRATION AND TRAINING AREA

Operational training preparation

STERELA has a special area devoted to demonstrations and training.

Here, you will be able to appreciate the performance of our equipment by handling it directly and through other practical situations.

STERELA places a comprehensive range of targeting equipment at your disposal, with different movement options, movement directions and accessories, in order to meet your specific training objectives.



SERVICES

STERELA Defence and Security has all the resources required to support your requirements directly or indirectly in France and abroad.

- ⊙ Consulting and project management
- ⊙ Installation
- ⊙ Commissioning
- ⊙ Maintenance
  - Preventive
  - Corrective
  - In-Service
  - After-sales service
  - Remote maintenance
- ⊙ Training
  - User
  - Maintenance
- ⊙ Support
  - Dedicated email support
  - Hot Line
  - Remote assistance
  - Stock management
- ⊙ Engineering
  - Supplementary studies
  - Obsolescence management
  - Configuration management
- ⊙ Documentation
  - User
  - Maintenance

RANGE OF TARGET HOLDERS

STERELA Targetry Systems

TARGET-HOLDER	SIT	SAT	MIT	MAT	MOVEMENT
PCI100	⊕				Rotary / Pop-up / Scissor / Tilt
PCI200M	⊕				Pop-up / Scissor
PCI300	⊕				Pop-up / Scissor
PCI600	⊕				Rising / Lateral
PCA400		⊕			Pop-up
MOV100			⊕		Pop-up / Scissor / Translation
CMI300NG			⊕		Scissor / Translation
CMR300			⊕		Pop-up / Navigation
SMAC500				⊕	Pop-up / Translation

3D TARGET	POWER SUPPLY	REMOTE CONTROL	PAGE
⊕	Battery	MSR100 / SRC / AUTO	p7
⊕	Battery/Solar	SRC / AUTO	p9
⊕	Battery/Solar	SRC / AUTO	p10
⊕	Battery/Mains	MSR100 / SRC / AUTO	p15
	Battery/Solar/Mains	SRC / AUTO	p13
⊕	Mains	MSR100 / SRC	p8
⊕	Battery	SRC	p11
⊕	Battery	REMOTE CONTROL	p12
⊕	Diesel	SRC500	p14

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