For the best angle in high-volume traffic barriers!
Lots of vehicles coming in and out? You need something that goes up and down. Fast!

The SECTOR is powered by a beefy custom-built DC motor and gearbox and can raise up to a three metre boom pole at a blistering pace of less than 1.2 seconds.

Operating slightly slower, the SECTOR will effortlessly raise up to a six metre pole smoothly and reliably.

The SECTOR lives fast – but it most definitely doesn’t die young. Designed for tough, high-volume usage, it will work all day, it will work all night - lasting for millions of cycles.

Add full battery backup, and the SECTOR is always at your service.

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**Main Features**

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**Rapid opening**

Lots of vehicles coming in and out? You need something that goes up and down. Fast!

The SECTOR is ideal for high-volume applications and puts a manically ticking metronome to shame – raising a three metre pole in under 1.2 seconds and lowering it just as quickly.

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**Battery backup**

With our 12V battery-driven motor, your security is never compromised. The SECTOR will continue to stay on, even when the power is off – beating up and down 3000 times during a 24 hour power failure before it needs a recharge.

If you’re expecting no power for a while, the built-in mains failure detection can be set to keep the barrier raised under power failure conditions.
High-torque boom pole operation
The SECTOR’s DC motor and reduction gearbox generate enough torque to make sure that your boom goes up and down forever and ever. Come sunshine, rain or howling winds, you’ll always be able to get in and out.

Safe sensitivity for boom pole lowering
Your boom won’t go BOOM on the roof of a visitor’s car. The SECTOR will detect any obstruction, so you’re safe – and won’t have to fill out any of those pesky insurance forms.

Robust, durable and slimline operator casing
Our slim SECTOR looks particularly fetching – and epoxy-coating, in a highly visible ‘traffic yellow’, keeps it safe from drivers with terrible eyesight. Available with different levels of corrosion protection for inland, coastal plains, and marine environments.

1. Refer to ‘Barrier housing specifications’ on back page

When size matters
Whether closing off an entrance from as narrow as three metres to as wide as six metres, there is a SECTOR model to suit. Fit the optional jack-knife and your SECTOR can even be fitted in areas with limited headroom.

Comprehensive input and output
With our intuitive, user-friendly LCD interface, setting up the SECTOR is not just simple – it’s child’s play. Set the SECTOR to handle any vehicle access control application with the touch of a button. To make things even easier, our state-of-the-art motor controller not only ensures smooth and reliable operation, it allows you to set your boom’s opening and closing speed to your liking.

Onboard loop detector support
If you’d like to add an additional loop, simply plug an 11-pin loop detector into the 11-pin socket provided, connect the loops and you’re good to go.
Operate wirelessly, thanks to CENTURION™

Besides its code-hopping technology offering the highest level remote control security, this CENTURION onboard receiver is both multichannel and multi-user, allowing a multi-button remote to operate any combination of the system inputs, such as Barrier Raise, Barrier Lower, etc. It stores up to 500 transmitter buttons, and amongst other access control features, it provides the ability to selectively add and delete transmitter buttons saved into its memory.

1. CENTURION code-hopping

SECTOR Controller Features

Hardware features

- Fully-sealed plastic housing for controller to prevent ingress of dirt and insects
- Easy setup of controller using LCD user interface
- Removable connectors on controller for easy maintenance
- Watchdog IC ensures full and safe operation of controller
- Optional Backup Memory Module allows backing up of all the information that has been set up in the system
- Standard pin plug-in bases pre-configured for approved 12V DC closing and free-exit inductive loop detectors
- Adjustable and removable controller mounting tray for easy wiring and commissioning

Electronic features

- Barrier raise and lower inputs
- Memory and non-memory barrier activation
- Onboard multichannel CENTURION code-hopping with the ability to:
  - learn transmitter buttons to specific functions (e.g. Barrier Raise, Barrier Lower, etc.)
  - selectively delete specific transmitters that have been lost or stolen
  - automatically learn transmitters (Autolearn) and
  - automatically delete transmitters that are no longer in use (Delete-Not-Present)
- Full configuration of barrier operating parameters including independent pole raise and lowering speeds, ramp-up and ramp-down angles
- Full configuration of barrier operating parameters including independent pole raise and lowering speeds, ramp-up and ramp-down angles
- Automatic closing
- Multiple Operating Profiles to suit region – select between I2A, CE, etc.
- Multichannel controller with integrated ChronoGuard timer technology (a world first)
- Free-exit facility™
- Remote boom pole status indicator™ (pole position, power failure, low battery, multiple collision detection and security light status indication)
- Courtesy / Pillar Light Timer with adjustable duration
- Fully configurable pre-delays with multi-modal pre-flash™
- Safety / Closing beam input with beam functional test
- Lock / Emergency stop input
- Ticket Vend Interlock

1. Inductive loop detector or infrared beams must be fitted
2. Remote LED must be fitted
3. An external pillar light must be connected to enable this feature
4. An external light must be connected to enable this feature
5. Infrared safety beams or equivalent detection device must be fitted
6. To use this feature, a normally closed emergency stop pushbutton must be fitted
7. This feature enables connectivity to a ticket vending machine
**ChronoGuard Timer Technology (a world first)**

The **SECTOR** is so advanced it takes access control at the traffic barrier entrance to the next level. With CENTURION's **ChronoGuard timer technology** onboard, any of the **SECTOR**’s inputs that activate the barrier can be set to operate automatically or be time-barred at any time you choose. Its built-in Real Time Clock and Calendar timer allows you to set up different exclusions, which can cater for public holidays, special Time-periods, etc. Once you’ve set up the **SECTOR**’s **ChronoGuard** using the intuitive LCD screen on the controller, you’ll start feeling particularly redundant. For instance:

Very often, traffic barriers are used in conjunction with motorised gates at the entrances to business parks, housing estates, etc. The traffic barrier controls access during the day when traffic volumes are high, while the gate is used at night when greater security is required. **ChronoGuard** can now be used to automatically switch operation from the **SECTOR** to the gate motor as and when required. Security has never been this convenient.

To increase security and control traffic flow you can automatically shut down certain traffic lanes controlled by the **SECTOR** at quieter times of the day, or over weekends and on holidays.

**ChronoGuard** gives you the ability to time-bar transmitters that have been learned into the system. This gives you the flexibility to control when your barrier can be opened by specific transmitter holders. For example, staff may be given access to the office park during the week, but on weekends you may wish to limit their access to the property.

**ChronoGuard technology** allows for almost unlimited time-based functionality, all of which is very simply set up on the controller via the intuitive menu system and LCD user interface. The following functionality is available:

- Time-activate many of the physical inputs and outputs of the controller (see table below)
- Time-bar many of the physical inputs and outputs of the controller, as well as particular remote buttons learned into the onboard receiver (see table below)
- The Real Time Clock and Calendar timer has the following flexibility:
  - It supports 100 Time-periods, that may be set according to:
    - Weekdays (M + T + W + T + F)
    - Any day of the week (M, T, W, T, F, S, S)
    - Weekends (S + S)
    - Every day of the week (M + T + W + T + F + S + S)
    - Special calendar events (family holiday, etc.) occurring on any date until the year 2100
    - Annual calendar events (New Year’s Day, etc.)
  - Allows for multiple Time-periods to be set during a 24-hour period

<table>
<thead>
<tr>
<th>Physical inputs</th>
<th>Physical outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M:</strong> Memory input</td>
<td><strong>Aux Out:</strong> Auxilary output</td>
</tr>
<tr>
<td><strong>NM:</strong> Non-memory input</td>
<td><strong>Aux IO:</strong> Auxilary input/output</td>
</tr>
<tr>
<td><strong>Raise:</strong> Barrier raise</td>
<td><strong>Phys</strong></td>
</tr>
<tr>
<td><strong>Lower:</strong> Barrier lower</td>
<td><strong>Phys</strong></td>
</tr>
<tr>
<td><strong>Loe:</strong> Holiday Lockout</td>
<td><strong>Phys</strong></td>
</tr>
<tr>
<td><strong>ILP:</strong> Inductive loop detector</td>
<td><strong>Phys</strong></td>
</tr>
</tbody>
</table>

- **X** – physical connection to an external device, eg. Inductive Loop Detector, SMARTGUARD keypad, etc.
- **Phys** – Interfaces with onboard CENTURION code-hopping receiver
- **Aux IO** - open collector output that can be used to drive an external relay for operating any external device, eg. water feature, security lights, etc.
Technical Specifications

<table>
<thead>
<tr>
<th>SECTOR 3</th>
<th>SECTOR 4.5</th>
<th>SECTOR 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input voltage</td>
<td>90V - 240V AC ±10%, 50/60Hz</td>
<td></td>
</tr>
<tr>
<td>Motor voltage</td>
<td>12V DC</td>
<td></td>
</tr>
<tr>
<td>Motor power supply</td>
<td>Battery-driven (standard capacity: 7Ah)</td>
<td></td>
</tr>
<tr>
<td>Battery charger</td>
<td>CP64A</td>
<td>1.8A @ 12.6V</td>
</tr>
<tr>
<td>Current consumption (max)</td>
<td>176mA</td>
<td></td>
</tr>
<tr>
<td>Boom pole length</td>
<td>3.0m</td>
<td>4.5m</td>
</tr>
<tr>
<td>Boom pole raise time (adjustable)</td>
<td>1.2 sec</td>
<td>3 sec</td>
</tr>
<tr>
<td>Manual override</td>
<td>Allen key operated from outside unit</td>
<td></td>
</tr>
<tr>
<td>Maximum number of operations per day</td>
<td>3000</td>
<td></td>
</tr>
<tr>
<td>Duty cycle - mains present</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>Operations in standby with 7Ah battery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huf day</td>
<td>3000</td>
<td></td>
</tr>
<tr>
<td>Full day</td>
<td>5000</td>
<td></td>
</tr>
<tr>
<td>Collision sensing</td>
<td>Electronic</td>
<td></td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-15°C to +65°C</td>
<td></td>
</tr>
<tr>
<td>Onboard receiver type</td>
<td>CENTURION code-hopping multichannel</td>
<td></td>
</tr>
<tr>
<td>Receiver code storage capacity</td>
<td>500 transmitter buttons</td>
<td></td>
</tr>
<tr>
<td>Receiver frequency</td>
<td>432kHz</td>
<td></td>
</tr>
</tbody>
</table>

1. Can operate off a solar supply; consult your local CENTURION dealer for assistance.
2. Can increase battery capacity for longer standby times.
3. Boom pole raise and lower times are both individually configurable to suit individual installation requirements.
4. Based on 23°C ambient temperature and unit not in direct sunlight.
5. Based on an output torque of less than 50% of rated.
6. Based on basic operator excluding closing loop detector.
7. Limited by daily usage.

Barrier housing specifications

- **Application**
  - Inland areas: Zirc-protection mild steel with epay coating
  - Coastal plains: Grade 430 stainless steel with epoxy coating
  - Marine areas: Grade 316 brushed stainless steel

- **Main housing surface protection**
  - Mild steel: hot dip galvanised
  - Mild steel: hot dip galvanised

- **Base frame surface protection**
  - Sheet metal housing with 1.5mm wall thickness; separate fabricated base frame with 3mm wall thickness to raise housing above ground

- **Colour**
  - Traffic yellow

- **Housing protection rating**
  - IP 55

Barrier pole specifications

- **Material and profile**
  - Aluminium, round profile with plastic end cap

- **Dimensions**
  - Outside diameter: 76.2mm; Wall thickness: 1.27mm

- **Weight**
  - 600g/metre

- **Surface protection, colour and markings**
  - Epoxy-coated white with red reflective tape

Overall Dimensions

- **285mm**
- **304mm**
- **343mm**
- **97mm**
- **25mm**
- **118mm**
- **80mm**
- **437mm**
- **304mm**
- **97mm**