

Astronomy Section

General Information for Members



The Aurora Borealis from Vazon, taken by Astronomy Section member Martin Sarre.

Dear Member,

Thank you for your annual subscription to the Astronomy Section. Here is some information about the Section and its activities and useful links for general stargazing.

Subscription details

Your subscription runs from the 1st January to the 31st December. A reminder for renewal will be sent in early January each year and payment will be due by the 31st January. To be a member of the Astronomy Section, you must also be a member of La Société Guernesiaisie (LSG).

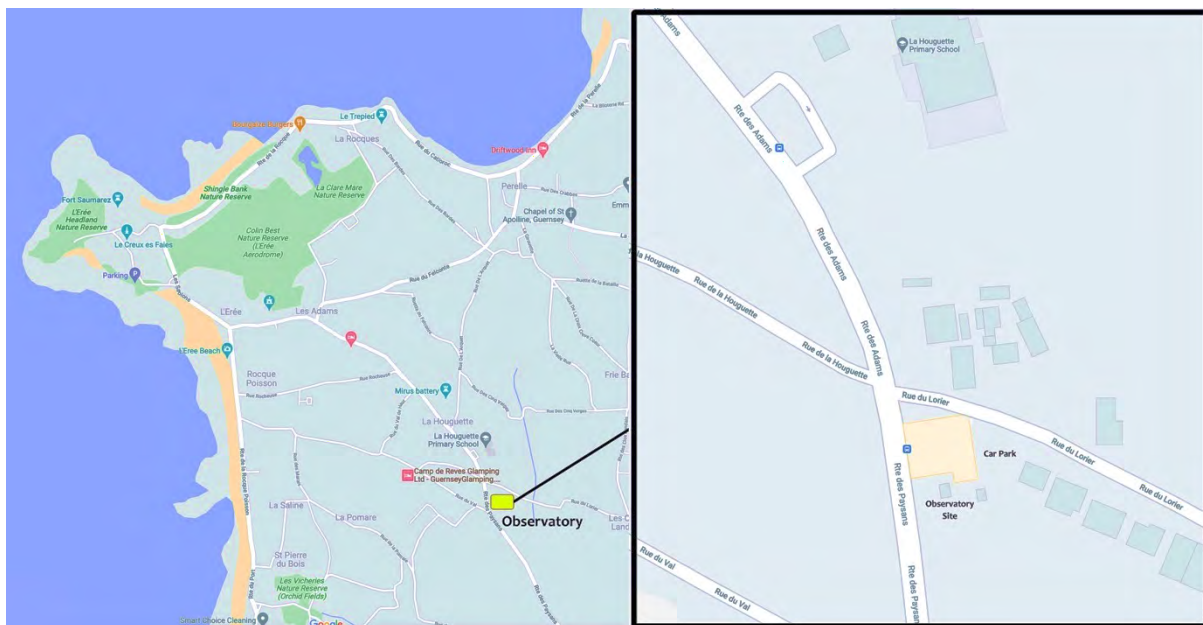
What does your subscription pay for?

It goes into the general funds to pay for the annual maintenance and running costs of the observatory site.

When and where do we meet?

The Astronomy Section aims to meet biweekly at the **David Le Conte Astronomical Observatory, Rue du Lorier, St Peter's** from 7.30pm to approximately 10.00pm. Meeting dates are given in regular bulletins sent out via email and are posted on our website: astronomy.org.gg. The biweekly meetings occur year-round, with a break during the summer, as the light evenings are not suitable for astronomy and many members are busy with family and holidays.

Here is a map of our location; we are just up the hill from La Houguette School. Take the left-hand turn after the school and then immediately right into the gravelled car park. The observatory buildings are to the rear of the bunker.



W3W: [sill.twinkl.heated](https://www.twinkl.com/locations/sill)

Covid

Our meeting room is quite small and poorly ventilated. We kindly ask, that if members have Covid they refrain from attending meetings.

What facilities do we have?

The site comprises a meeting room with projection facilities, where we hold our talks, with a kitchenette at the rear for refreshments. In addition, we have a timber-framed roll-off roof telescope building, which houses our research-grade telescopes. There is also a store with attached out-house type toilet and a grassed external area with concrete pads.

Library

We hold about 300 astronomy-related books which members may borrow. If you wish to borrow one, please speak to any member of the Committee.

Newsletters – *Sagittarius* and *Astronomy Section Bulletin*

We produce one annual newsletter called *Sagittarius*, which contains details of astronomical events for the coming year. We also produce a regular *Bulletin* which gives details of the upcoming meetings and activities.

What activities are there at biweekly meetings?

We typically have a talk that might be online or in person by a member. To cater for all interests, the talks may be on a variety of subjects, including planetary science, deep space, cosmology, stellar processes, historical astronomy, exoplanets or space missions. They are suitable for people of all levels. Notification of talks is given in the Bulletin.

The observatory site has dark skies that are Bortle 2/3, making it ideal for observing. If the weather is suitable during a biweekly meeting, then the telescope building may be opened for observing. Alternatively, we have portable computerised GOTO telescope that members may learn how to use and, once deemed competent by the Astronomy Committee, may use unsupervised during a Tuesday meeting.

Occasionally, during a meeting, we may ask members collectively what activity they wish to do and then aim to accommodate the consensus, but typically if a member has prepared a talk, then this will take precedence.

Drinks and biscuits are available in the kitchen and members may help themselves. There is an honesty box and price list displayed.

Members own equipment

We are happy to assist members with the use of their own equipment. Members may bring their own telescope along on a biweekly meeting and make use of the dark location. We have external concrete pads and power outlets. However, please note that the use of members equipment on site is at the members own risk - our insurance policy does not extend to members equipment. Members must strictly adhere to all relevant Health and Safety Policies and Procedures when using their own equipment.

Members cannot use their own equipment during public events.

Loan-telescopes

We have manual telescopes that we loan out to members for use at home, enabling members to observe at a time that suits them. If you wish to borrow one, please speak to any member of the Committee.

Maintenance

Three buildings and associated grounds/parking require regular maintenance and Section members often volunteer to assist with the upkeep. This keeps the running and maintenance costs to a minimum and thus, the membership rate affordable.

Courses

Occasionally we run courses such as *An Introduction to Stargazing* or public talks which are bookable through our Eventbrite site [here](#).

Families and Juniors

LSG has a Junior Division which organises a range of regular activities that involve many of the LSG Sections, including archaeology, bats, entomology, ornithology and marine biology. If you would like to find out more, please contact the Junior Officer (eca@societe.org.gg).

Website

On our website, you will find a calendar giving dates of the biweekly meetings. You will also find a selection of articles on astronomy and the history of the Astronomy Section. There is a monthly section on what is currently in the night sky and details of the International Space Station (ISS) passes over Guernsey.

Data Protection

La Société Guernesiaise has Data Protection and Data Security Policies, which are displayed on the Section's notice board. You may also request a copy from the LSG Secretary or Astronomy Section Secretary.

If you cease membership or do not renew, then all your details held by the Astronomy Section will be deleted to comply with general data protection regulations and you will no longer receive communications from the Astronomy Section.

Policies and Procedures, Health and Safety/Risk Assessments and Fire Safety

Our Policies and Procedures, Health and Safety/Risk Assessments and Fire Safety Information is displayed on the Section's noticeboard and website [here](#). Fire Safety information is also given at the end of this booklet.

To keep members, visitors and equipment safe, all members must comply fully with the Health and Safety Policies and Procedures. Failure to comply may result in exclusion from certain activities.

Annual Business Meeting (ABM)

The Astronomy Section typically holds its ABM on the last scheduled biweekly meeting of November each year. All Section members are notified of the date not less than 28 days beforehand. Any member wishing to stand for a committee position should make their intention known to the Astronomy Section Secretary not less than 21 days beforehand and state the names of a proposer and seconder who must be members of the Astronomy Section. An agenda is sent to members not less than 14 days beforehand.

Contacts:

General enquiries: astronomy@societe.org.gg
Secretary: astronomy.secretary@societe.org.gg
Hon Treasurer: astronomy.treasurer@societe.org.gg
Membership Secretary: astronomy.membership@societe.org.gg

Some Useful Links for Astronomy

A weather forecast for astronomy in Guernsey:

https://www.metcheck.com/HOBBIES/astronomy_forecast.asp?LocationID=4948

Solar System Astronomical Data

<http://www.heavens-above.com>

Planetarium Software

There are various planetarium programmes and apps for your phones and tablets to help you find your way around the night sky:

<https://www.ap-i.net/skychart/en/start>

<http://stellarium.org>

<http://www.bisque.com/sc/pages/TheSkyX-Editions.aspx>

<https://starrynight.com/starry-night-7-professional-astronomy-telescope-control-software.html>

<https://skysafariastronomy.com>

<https://store.simulationcurriculum.com>

Solar System Orrery Software

<https://www.solarsystemscope.com>

Books

If you are a beginner, you might find a basic annual stargazing guide useful:

2025 Guide to the Night Sky by the Royal Observatory Greenwich or

Philip's 2025 Stargazing by Nigel Henbest.

other useful books include:

Philip's Stargazing with a Telescope by Robin Scagell

Philip's Stargazing with Binoculars by Robin Scagell

Philip's Guide to the Night Sky by Sir Patrick Moore

Turn Left at Orion by Dan M. Davis and Guy Consolmagno

Observing the Night Sky with Binoculars by Stephen James O'Meara

Deep Sky Companions: The Messier Objects by Stephen James O'Meara

Deep Sky Companions: The Caldwell Objects by Stephen James O'Meara

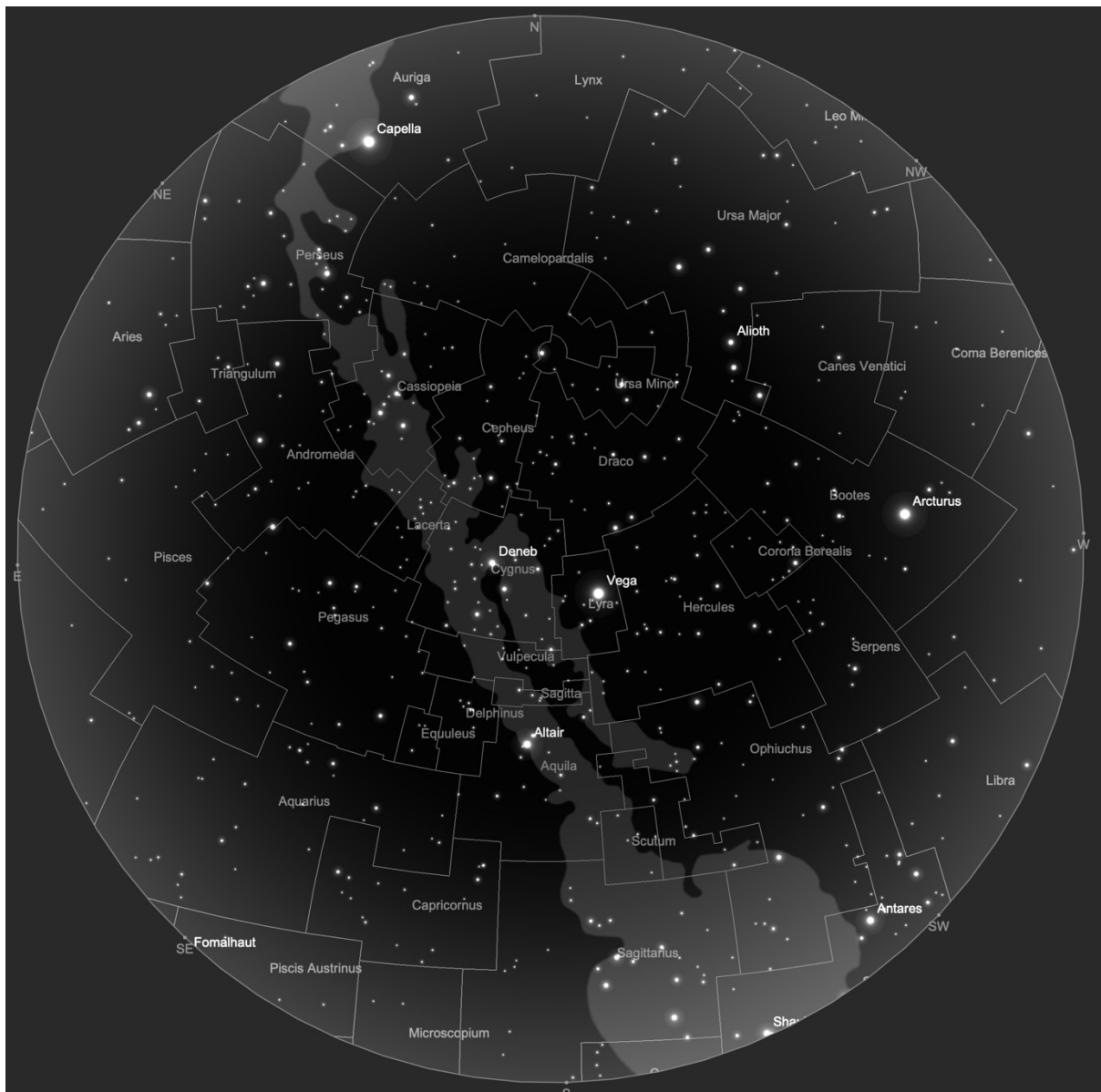
Monthly Magazines

These are great if you are a beginner, they give lots of useful information about what is currently visible in the night sky and have articles on all aspects of astronomy and equipment. The *BBC Sky at Night* or *Astronomy Now* are recommended. The Section subscribes to *Astronomy Now*, there are past copies available for members to take home and keep.

Finding your way around the night sky

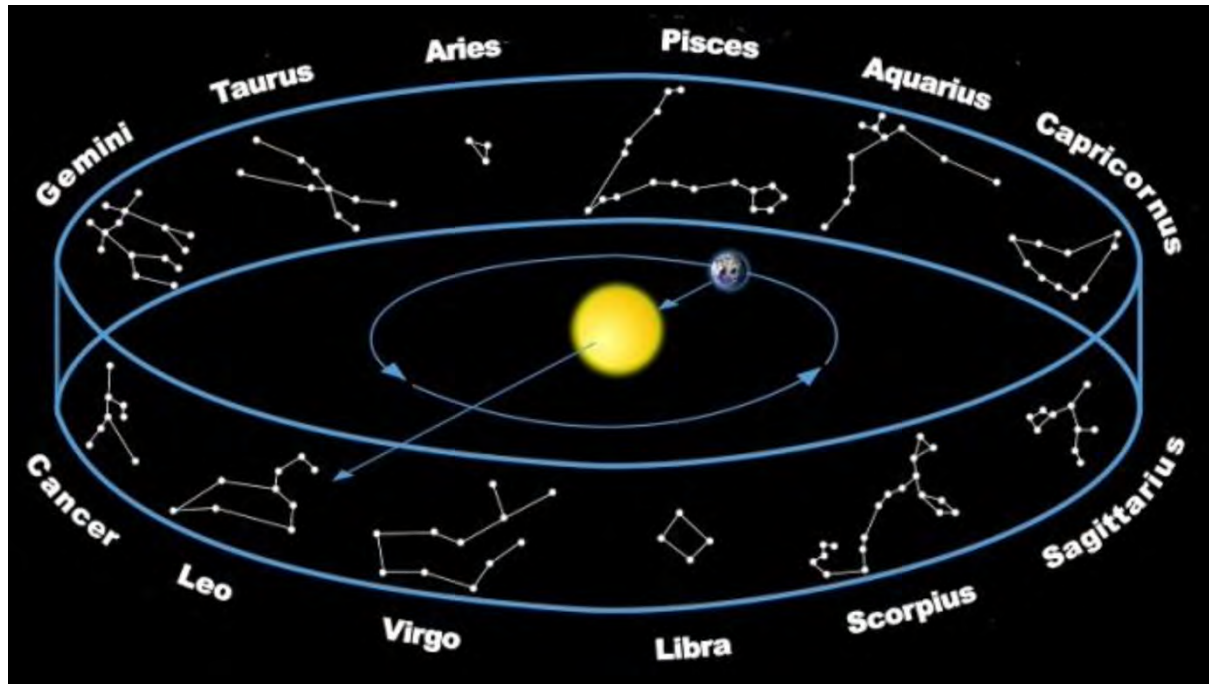
What is a constellation?

It is a group of stars that looks like a particular shape in the sky and has been given a name. They are not connected to each other at all; some stars in a constellation might be close while others are very far away. They are joined together by imaginary lines and over time, cultures around the world have had different names and numbers of constellations depending on what people thought they saw. Today, there are 88 officially recognized constellations and just over half of them can be seen from the northern hemisphere. Astronomers have given the 88 constellations boundaries that divide the sky into segments.



What is the zodiac?

The 12 zodiac constellations are situated within a 9° band on either side of the ecliptic plane. This 18° wide imaginary line traces the apparent path that the Sun, Moon, and planets take over the course of a year. For ancient peoples, the zodiac constellations will have served as a calendar and indicator of the seasons.



What is an asterism?

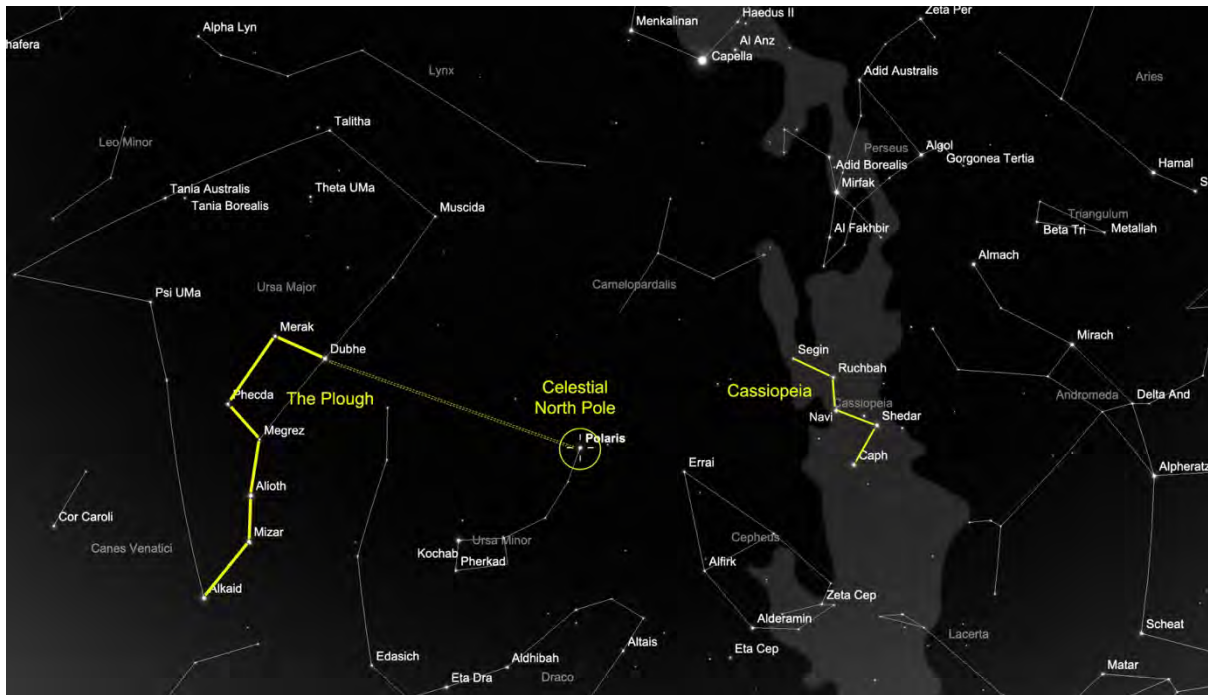
It is a collection of brighter stars that forms a distinct pattern in the night sky. They can be entirely within a single constellation or span across multiple constellations. The most famous asterism is The Plough.

Where to start your journey learning the night sky

The first thing is to find a dark location and let your eyes adjust to the darkness. Over a period of about 20 minutes, you will start to pick out more and more stars as your eyes adapt.

The best place to start is to find the north so you can orientate yourself. To do this find the asterism called **The Plough** which looks like an old fashioned plough or ladle. It is circumpolar, which means it is always visible in the night sky. It sits just a little over halfway between the ground and directly above your head, so if you spin around a full circle, you will find it. The Plough comprises seven stars; join up the two stars *Merak* and *Dubhe* with a line and project that line about four times the distance between the two stars and you will find a bright star which is *Polaris*, the pole star, which sits very close to the celestial north pole. *Polaris* is not very bright, but it is bright enough to stand out from the fainter stars around it.

Almost directly opposite The Plough is the constellation **Cassiopeia**, which is a wonky “W” or “M” shape which stands out quite clearly. This is also circumpolar.



Finding The Plough and Cassiopeia is a good start to navigating the night sky. From this point onwards use a chart of the current night sky, such as those provided in a monthly astronomy magazine, an annual guide to the night sky such as those listed above, or an App on your phone or tablet. If you use an App, remember to set it to red-light mode so you don't destroy your night vision.

If you own a pair of binoculars use them to look at the night sky, you will see many more stars and you can start to learn how to star-hop to various objects. Two excellent books for this are *Turn Left at Orion* or *Observing the Night Sky with Binoculars*.



David Le Conte Astronomical Observatory
Rue du Lorier
St Peter's
Guernsey
GY7 9JU
email: Astronomy.Secretary@societe.org.gg

Fire Safety at the David Le Conte Astronomical Observatory

In the main building we have two fire extinguishers, one water and the other CO2. In the telescope building we have a CO2 extinguisher.

If there is a fire and you think it is safe to tackle it without harming yourself, we have two fire extinguishers to the right just inside the door to the main building. There are instructions on both cylinders. This is an extra guide for their safe use and your safety in the unlikely event there should be a fire.

If the fire is electrical or you smell burning wires or insulation then if it is safe to do so, switch off the appliance at the main wall socket. In any event it is probable that the RCD Consumer Unit will trip. There is one in the kitchen on the left hand side of the rear wall which is located in a wall cupboard, and one in the telescope building on the left hand side wall at high level. These actions might prevent a fire developing.

You must also ask anyone else in the room to leave and go to a safe distance outside.

In the event that you have to use a fire extinguisher:

- **NEVER** place yourself in a position where you cannot safely exit the building. Always have your back to the open door when facing the fire so you can exit safely if it becomes too dangerous.
- **NEVER** approach too closely to the fire or put yourself in harm's way.
- If you lose control of the fire, or think you might then call the fire brigade on 999.
- In the event of loss of electrical power, the telephone is fitted with a backup battery so will still work.
- Keep the doors open at all times, particularly if using a CO2 extinguisher.

Please familiarise yourself with the location of the extinguishers and their use.

If there is a fire incident please inform the Secretary of the Astronomy Section, or another Astronomy Section Committee Member.

Water Fire Extinguisher



Figure 1

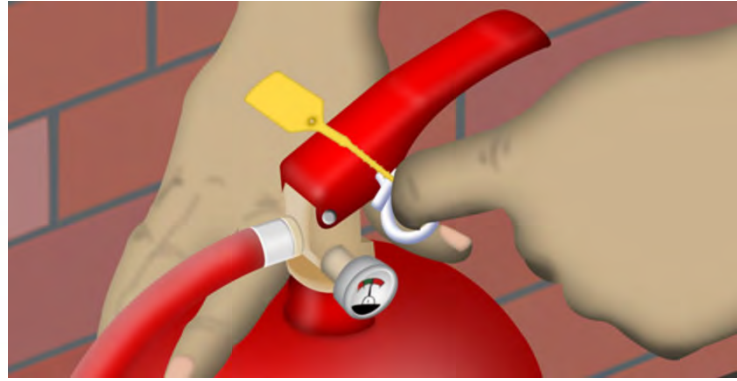


Figure 2

Use: Combustible materials like paper, wood, curtains

Do NOT use on liquid or electrical fires.

How to use:

1. For plain water extinguishers: check that there is no live electrical equipment in the area.
2. Pull the safety pin (Fig.2), this will break the tamper seal.
3. Hold the end of the nozzle securely.
4. Squeeze the lever to start discharging the extinguisher.
5. Aiming the extinguisher nozzle:
 - a. *Fires spreading horizontally:* Aim the nozzle at the base of the fire, moving the jet across the area of the fire.
 - b. *Fire spreading vertically:* Aim the nozzle at the base of the fire, slowly moving the jet upwards following the direction of the fire.
6. As the fire starts to diminish carefully move closer to it.
7. Ensure all the fire has been extinguished, try to focus on any hot spots that may re-ignite.

CO2 Fire Extinguisher



Figure 3

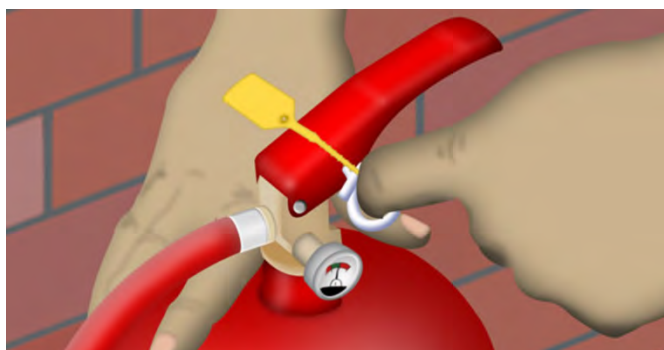


Figure 4

Use: Flammable liquids such as paint and petrol; electrical equipment such as computers.

Do NOT use on Combustible materials like paper, wood and curtains or flammable gasses.

How to use:

1. Pull the safety pin (Figure 4), this will break the tamper seal.
2. Do not hold the horn, as it becomes extremely cold during use and can lead to severe frost burns.
3. Squeeze the lever to start discharging the extinguisher. Please note that the CO2 extinguishers make a very strong discharge noise, which is normal.
4. Aiming the extinguisher:
Flammable liquids: Aim the horn at the base of the fire and move across the area. Be careful not to splash the burning liquid with the powerful jet of the CO2 extinguisher.
Electrical equipment: Switch off the power, where safely possible, to prevent later re-ignition and then direct the horn straight at the fire.
5. Please note that a CO2 extinguisher only has a very short discharge time.
6. Ensure all the fire has been extinguished as re-ignition is easily possible when a CO2 extinguisher has been used. CO2 gas drifts off after use and if the fire is still very hot it might just re-ignite.
7. Be aware that in a confined, poorly ventilated space toxicity can occur if a CO2 extinguisher is used. Inhalation of concentrated CO2 causes the same symptoms as not having enough oxygen, including difficulty breathing, dizziness, and loss of consciousness. Anyone exposed to concentrated CO2 should seek fresh air immediately.

blank