



# Portable Operation

Why, How & What?

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Thursday November 2, 2023



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# Introduction

Portable ham radio operation is a way of using amateur radio equipment away from your licensed station address, usually in outdoor locations. Portable operation can also be useful in emergency situations, when regular communication systems are down or unavailable. These can include handheld, mobile or alternatives like field day at Llancloudy operating out of a tent / campervan.

# WHY

Why would you want to do it?

It can be a fun and rewarding activity that combines ham radio with hiking, camping, travelling, or exploring new places. It's possible to operate with less electrical noise or the challenge of making contacts remote of the home station or contests e.g. SOTA, RSGB Field day.

To operate a portable ham radio station, you need to consider the following factors:

**License and regulations.**

**Transceiver and accessories.**

**Power source.**

**Antenna and feedline.**



# License and regulations

You need to have a valid amateur radio license and follow the rules and regulations of the country or region where you are operating. You may also need to obtain permission from the landowner or authorities if you are setting up your station on private or public property.

You should always identify yourself with your callsign and the Suffix “/P” to indicate you are operating portable.

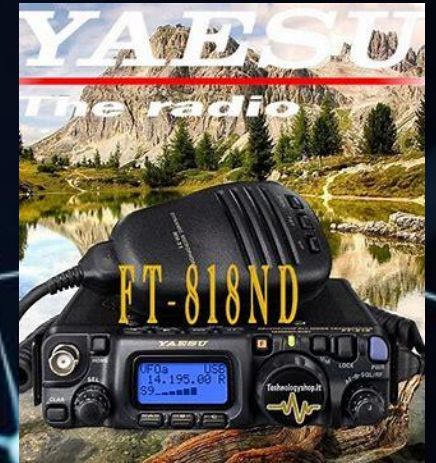


**Amateur Radio Licence**  
Guidance for licensees

# Tranceiver and accessories

You need to choose a transceiver that is suitable for your intended mode, band, and power level of operation. You may also need some accessories such as a microphone, headphones, keyer, tuner, SWR meter, etc. You should look for transceivers and accessories that are compact, lightweight, durable, and easy to use.

Example: Icom-705 / Yaesu FT-818 ND





# Power Sources

You need to have a reliable and sufficient power source for your transceiver and accessories. You can use batteries, solar panels, generators, or commercial AC power depending on the availability and suitability of each option. You should also have some backup power sources in case of emergency or failure. You should consider the weight, capacity, efficiency, and safety of your power sources when choosing them.



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**PORTABLE  
POWER  
PERFECTION?**



# Antennae and feeders

You need to have an antenna that is compatible with your transceiver and the band and mode of operation. You also need a feedline to connect your antenna to your transceiver. You should look for antennae and feedlines that are easy to set up, take down, and transport. You should also consider the performance, gain, directivity, and SWR of your antenna and feedline when choosing them.

Examples: Wire dipoles, End fed half wave antenna, Magnetic loop, Vertical, Yagis, Quad etc.





# How

Depending on your requirements there isn't a one glove fits all solution to portable operation.

Part of the licence conditions granted to Radio Amateurs is experimental and playing with the equipment and antennae to achieve what you want.

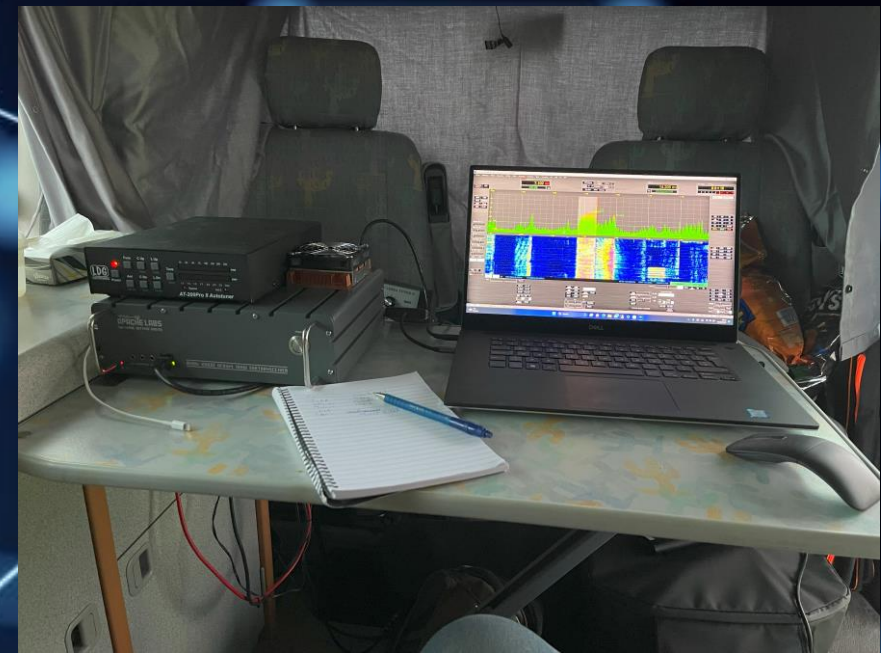
Experiment with different solutions, to achieve your own goals. What works for you may not work for someone else and vice versa.

These can be down to cost of equipment, bands required for operation, time available etc.



# What

What I did to achieve portable ops.







Thursday November 2, 2023



# GW3JVB Motorcycle Mobile







# Summary

Portable operation is fun and exhilarating. Great times can be had on your own or as part of a group or club. All in all, it's about enjoying the hobby and company of fellow amateurs and I can fully recommend it. Just get on and do it you won't regret it.



Questions

&

Answers



# Thank You

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