



Penarth Yacht Club

Handheld Radio Standard Operating Procedures

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Introduction

1. This document explains HOW to use the handheld radios provided by PYC.
2. It does NOT cover policy for radio use, which may differ between training, racing, and types of races (e.g. small Saturday race vs. Open Meeting).
3. PYC currently operates the IC-M37. If other radio types are used (e.g. personally owned or borrowed) the user is expected to familiarise themselves with the model before use at a PYC event.

Safety and Legality

4. The handheld radios are provided for communication between the OOD, the balcony, and anyone else involved in safety or race operation (e.g. extra safety boats, training instructors).
5. Legally PYC members who do not hold an SRC (Short Range Radio) Certificate are allowed *limited* use of a radio transceiver, namely:
 - Channel 37 for race operations
 - Channel 16 for distress calls
 - Channel 68 at the instigation of the Cardiff Harbourmaster
5. If you normally use reading glasses you will need them to check and adjust the radio settings and for any advanced use (e.g. lock/unlock; change channels).

Radio Operation

Turn on and check settings

Here's the IC-M37 screen



Every use should involve a check of the radio settings.

- Turn the radio on (small round blue button, bottom right of control panel)
- Check that screen is per the pictures, namely:
 - Low Power selected
 - Lock selected
 - Battery Charged
 - Channel 37A selected (note: one radio is set to Channel 68)
 - Region set to 'INT'

(see General Notes at the end of this document for explanations).

Now carry out a radio check.

Radio Check

You will need a helper with another club radio. If more than two radios are to be used try to check them all at the same time.

- You must move a reasonable distance apart (e.g. balcony to slipway)
- Make a call from each radio using call etiquette (see General Notes below)

To check the Channel 68 radio you will first need to change channel to 37 - do not run a check whilst on channel 68.

If the check is successful you're good to go. If not, proceed to Squelch / Volume Setup.

Squelch / Volume setup.

To be able to hear transmissions properly both Squelch and Volume need to be set correctly.

Squelch adjusts the set's sensitivity, so if you have the Volume up but sensitivity low you may not hear transmissions.

Here's how to adjust Squelch and Volume:

Check the Volume to ensure you have at least 2 bars showing (if not, see Volume Adjustment below)

The squelch level is adjusted with [VOL/SQL MONI] and the big arrow buttons.

This can be done with the 'Lock' sign showing (unlike some other functions).

Two dabs on the [VOL/SQL MONI] button enter the squelch adjustment mode. The SQL indicator starts blinking (bottom right of the screen). Now adjust the squelch level with the big arrow buttons until you hear white noise

Now move to the Volume level to get this white noise to an appropriate level (not too noisy on the balcony; louder if you're in the rescue boat).

To move to Volume adjustment mode you need two more dabs on the [VOL/SQL MONI] button. The Vol indicator starts flashing. Now adjust the volume level with the big arrow buttons until the white noise is at the appropriate level.

Then back to SQUELCH (one more dab), and push the 'UP' big arrow button to make the radio less sensitive until the white noise just goes away. One more dab to exit Squelch / Volume adjustment and you're done.

Time for another Radio Check.

Channel 16

Channel 16 is used to contact the emergency services (i.e. the Coastguard). Whether to use Channel 16 is a subject for the PYC Safety Policy, but if you need to do it, here's how.

Bear in mind that after getting to Channel 16 and contacting the Coastguard you will be asked to move to another channel to continue the conversation. If you're not confident to do this you should consider whether to start the process or find another way to make contact (scoop and run; phone).

In brief, the radio must be 'unlocked' and the '16' key pressed. From there it's

normal 'Push To Talk' operation using the side button. However the Coast-guard will ask you to move to another channel, that they specify, to continue the exchange without blocking Channel 16.

Channel 16 Procedure.

The following instructions presume the radio is in standard PYC setup;

- monitoring channel 37a or 68;
- Locked.

Procedure:

- Unlock the radio – press the Hi/Lo / Unlock key for a second (i.e. long press; a dab just switches the radio power output).
- Press the 16/C button. This will set the radio to communicate on Channel 16.
- Now use normal 'Press To Talk' to communicate with the Coast-guard (see 'Radio Etiquette' below)
- "Mayday, Mayday, Mayday"
"This is Penarth Yacht Club [spoken three times]
"Mayday"
Your position
The nature of distress [for example, "we have a casualty in the water]
Immediate assistance required
How many people are involved
Any other information
"Over"
- When asked by the Coastguard to move channels, press the CH button then the big Up/Down arrows to move to the specified channel.

Channel 68

Channel 68 is the 'South Wales Radio Channel' used by the Cardiff Harbour Authority. PYC have been asked to monitor this channel in case the Authority need to contact us. We therefore have one radio permanently set to this channel. This radio should normally stay on the balcony with the Reserve duty. It should only be used in response to a call instigated by the Authority.

General Notes

Explanation of standard settings

Channel 37

It is illegal to use marine radios unless you hold the correct certification. The exception to this is Channel 37 which is set aside for yacht clubs. Do not use the PYC provided radios on any other channel unless

- you're making a distress call on Channel 16
- the Harbour Authority has instigated a call to you on channel 68.

Low Power.

Marine radios have 2 power settings – High and Low. High power should only be used to transmit over long distance (e.g. > 5 miles). Use of Hi power has the potential to interfere with many other users due to the greater range it covers. Therefore club use should always be restricted to Low power.

If your radio is not working CHECK SQUELCH FIRST (see above) rather than upping the power.

The Power setting on the club radios is (confusingly) combined with the Lock key. As per our standard settings you should always see the word 'Low' displayed near the top left hand side of the screen when setting up. If you don't this means High power is selected. Just to keep it complicated, some channels will automatically switch to High power – 16 being one of these - so if you're using Channel 16 the Low power indicator will automatically extinguish.

To change back to Low power, dab the Hi/Lo/Lock key to toggle the setting.

Lock selected.

PYC radios in standard operation should always be Locked to prevent accidental changes to settings. An excerpt from the manual follows:

→ Push and hold [**Hi/Lo** 

'I' showing.

The IC-M37 radios that PYC provide can also operate in the USA and Canada, which have different channel settings. To operate successfully at Penarth the symbol 'I' should be displayed at the bottom left of the screen (for the IC-M37 the display should show 'INT').

The Knob on the top

The knob on the top of the set, next to the aerial, doesn't adjust anything. It's a cap that can be unscrewed to fit an optional microphone on a wire. Please don't unscrew it.

RADIO USE ETIQUETTE

Calling.

When making a call

- Listen for a bit to make sure no-one else is using the channel (e.g. CBYC)
- Press the PTT (Press To Talk) button on the side of the handset.
- Wait half a second
- Then always start with the name of the station you're calling, e.g. PenYachtBase. This will allow all the other listeners to stop having to pay attention.
- It's normal to repeat the station name you're calling two or three times for the first transmission.
- So:
 - *PenYachtBase*
 - *PenYachtBase*
 - *PenYachtBase*
 - *this is*
 - *PenYacht1*
 - *PenYacht1*
 - *Over*
- Release the PTT button and wait for reply; if you get no reply be patient. Radio regulations specify an interval of at least two minutes, and a maximum of three attempts before giving up. Although you can then start again three minutes later.
- As the conversation progresses, still ALWAYS start your transmission with the name of the station you're calling (PenYachtBase) – since they're now listening once will do.
- When you're finished your end of the conversation 'Out'. Not 'Over and Out'.

Radio Check

- when making a Radio Check simply add 'Radio Check please' before saying 'Over'. Your checker can reply with 'Loud and Clear' or whatever is appropriate.

Document References / Further Reading

REFERENCE NUMBER	DOCUMENT TITLE
1	no longer applicable.
2	RYA VHF Handbook. Code G31.f Author Tim Bartlett.
3	ICOM Instruction Manual - IC-M37

Document Control

Version History

Version	Description	Author	Date Created
Draft 0.1	1 st Draft	Steve Arthur	October 2017
Issue 1.0	First issue	Steve Arthur	23 rd October 2017
Issue 2.0	Second issue - to include new radio type IC-M37	Steve Arthur	12th February 2020
Issue 2.1	Update for 2022	Steve Arthur	26/5/22
Issue 3.0	Updated for 2023. References to ICM-35 removed	Steve Arthur	