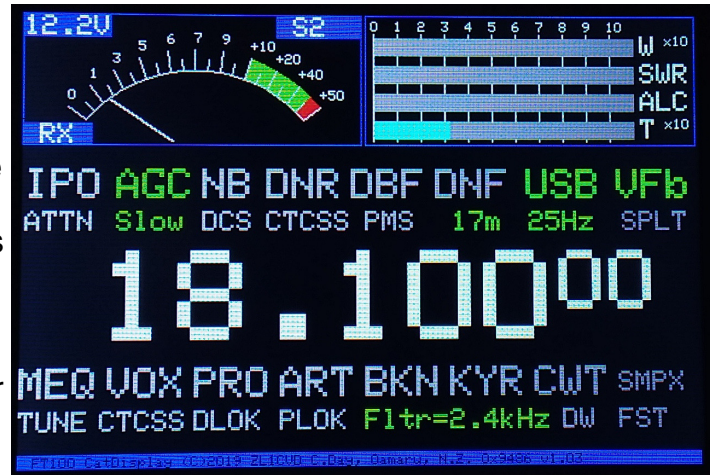


CatDisplay

Thank you for purchasing CatDisplay.

CatDisplay is an external screen that plugs into the transceiver CAT port. It is powered by the port, reads data from the transceiver, detects & decodes changes, then updates the display.

CatDisplay reads information from the transceiver only. It does not write information to the transceiver and cannot be used to control the transceiver. Unlike programs that control the transceiver, it can not cause EEPROM damage to the transceiver.



CatDisplay reads data direct from the transceiver CAT system. It is reliant on the way Yaesu updates this data. Not all changes you see on the transceiver screen or make with its keys and knobs are instantly updated.

CatDisplay plugs into the Yaesu CAT port. It does not have a “pass-through” port so you cannot plug another device into it. If you wish to use another CAT connected device and CatDisplay, that device (e.g. tuner) must have a CAT “pass-through” port, it must operate at the same baud rate and it must correctly pass through all CAT commands. Note many tuners only feature a rudimentary pass through port and do not interpret the actual traffic on the port. As a result they easily become confused & lock up with data congestion.

Compatibility

This version of CatDisplay works with all versions of Yaesu FT-100 & FT-100D transceivers only. Other versions available work with FT-817, FT818, FT-857 & FT-897. More are under development.

CAT Speed

The FT-100 series of transceivers only support one speed and type of serial communication which is supported by CatDisplay. Simply plug it in, turn on the transceiver and it will automatically update. No other changes or settings are required.

Known Issues

- **VFOa or VFOb only supported.** Some indicators will not function or report correctly if memory mode is selected.
- **Yaesu Manual Errors.** Errors were found in the Yaesu FT-100 user guide relating to CAT register operation. CWT, ART, BKN, KYR & FST flags may not work & could not be adequately tested before release.
- **Meter Scaling.** Signal levels for all meters (S, W, SWR, ALC & Temperature) were measured at 28MHz and scaled correctly for the test transceiver. It is highly likely there will be a variance between transceivers so treat all meter readings as a guide only.
- **SD Card Slot on display is not used.**
- CAT cable has fine pins in its plug & it plugs in 1 way only. Do not force it or you will break the plug or socket.
- The TFT display used is fragile and can be broken. Treat it with respect, do not place it in direct sunlight, do not squeeze or press on it.
- **High RF fields may cause interference.** If the display becomes corrupted during transmit, this is likely due to high RF field which needs to be remedied. The most common cause is poor earth connection, high antenna SWR or very close proximity to the antenna.

Other Enclosures

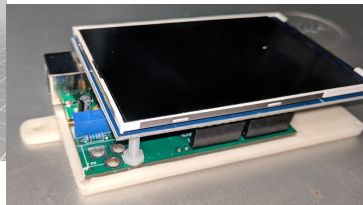
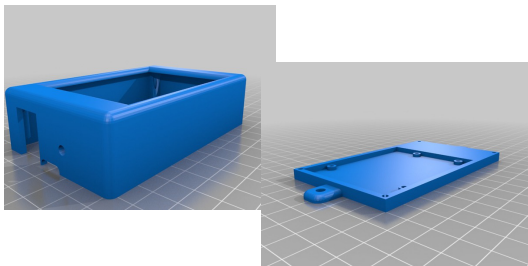
The Arduino Uno R3 clear case is easy to obtain and does provide a measure of protection. Here are some other solutions.

- **ABS Waterproof Junction Box / Enclosure with Clear Lid.**

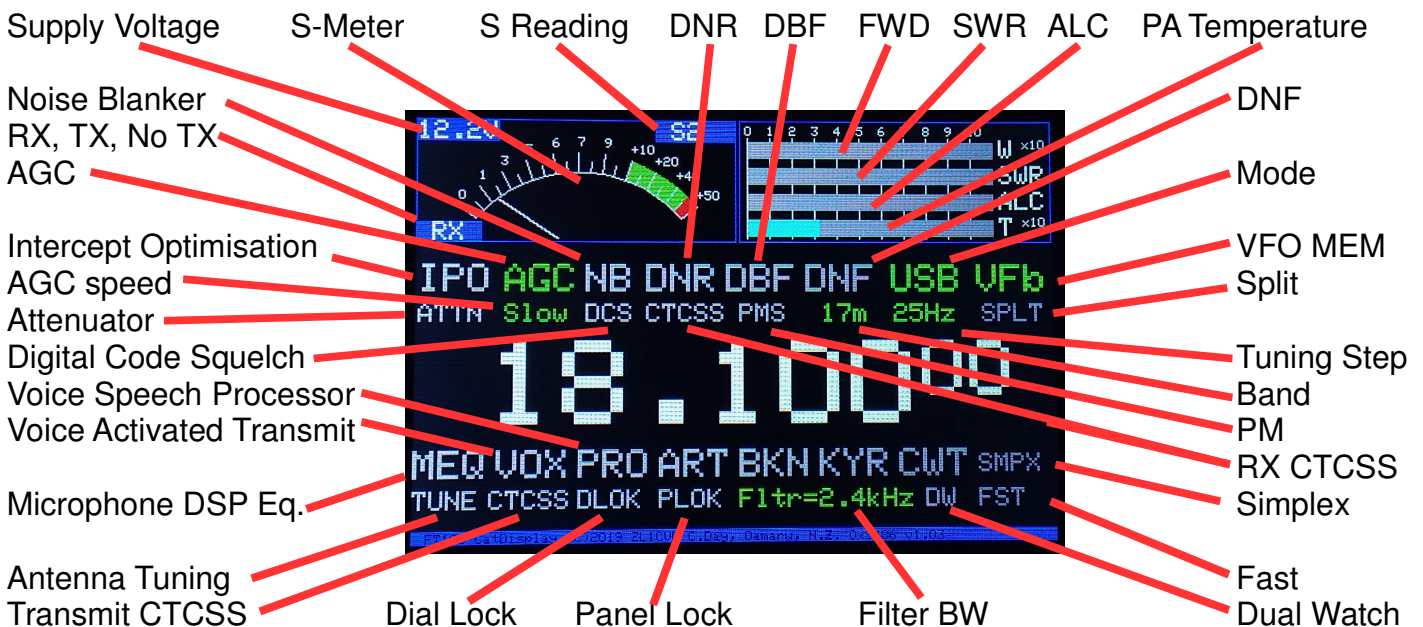
Measures 115mm x 85mm x 35mm. Available on eBay, AiExpress, Etc. Great in that they completely encase CatDisplay but unfortunately the clear lid has a moulding mark in the very centre which may need some polishing. You will need to drill a hole in the side to accommodate the CAT cable. A very good display option for Go Kits!

- **3D Enclosure by AK6DD Dave Duley**

A very nice 2 part 3D printed enclosure design that only suits the newer offset TFT display – the majority of CatDisplays shipped. If it looks like the pictures here, then it should be fine. The plans are available on <https://www.thingiverse.com/thing:3229807> so you can either print it yourself or pay for someone else to print and ship it.



CatDisplay FT100 Screen Layout



- *CatDisplay is proudly designed, programmed and marketed for Amateur Radio use by ZL1CVD Chris Day, Oamaru, New Zealand. It is a hobby project and not for commercial use or life saving purposes.*
- *This is a closed source product sold tested and assembled only.*

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