

SOTABEAMS ContestConsole for Icom radios

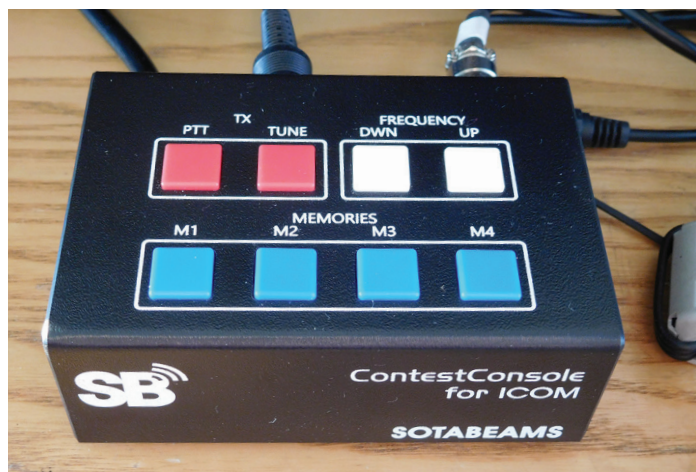


PHOTO 1: The ContestConsole used with the IC-7300.



PHOTO 2: The rear apron of the ContestConsole.

Over the years since the introduction of the computer chip, amateur radio contesting has developed into an interesting fusion of this technology and operator skills, such that there seems a black box for just about everything in this wonderful hobby of ours. This review is about one such 'gadget' aimed at making the testers life a little easier.

Contesting aids

In contesting, the aim is to work as many stations as possible in a given time period, maximising both points per contact and contact rate per hour. In long 24 or 48 hour contests, this can place quite a strain on the operator, especially in SSB phone contests where one can end up speechless or, at the minimum, with a sore throat.

Things aren't as bad in CW or datamode contests where the computer takes on much of the load, using keyboard macros to send the contest exchanges and do the logging. For SSB operators, however, talking into a microphone for hours on end can become quite stressful. So, when I was invited to try out and review the SOTABEAMS ContestConsole for Icom radios, I was keen to see if it could make contest operating easier.

Just a month earlier, I had been the very fortunate winner of one of the major prizes, an IC-7300, at the RSGB Convention so I was keen to try the ContestConsole with my new equipment.

ContestConsole features

The SOTABEAMS ContestConsole comes in a very neatly presented 11 x 7.5 x 4cm black ABS enclosure, with very clear labelling of the eight operator push buttons on the top (Photo 1)

The top surface of the ContestConsole houses eight push buttons in two groups of two and one group of four. Two red buttons provide instant TX PTT and a Tune facility (to be described later). Two white buttons provide instant up and down frequency control – a feature of great value and safety in, say, a mobile installation. The other four (blue) buttons are programmable message memories that can be set up for contest CQs or test messages, both on phone, CW or PSK.

Note that the actual messages are stored in the station transceiver rather than the ContestConsole, which basically is a switch unit to access the messages remotely from the transceiver.

The rear apron of the box (Photo 2) has an 8 pin socket for an Icom microphone, plus a mini jack socket for an auxiliary microphone. Another mini jack socket offers an external

PPT connection to your station footswitch while a four pin DIN socket is connected, via an optional (supplied in my case) cable, to the 4 pin white Molex connector found on most Icom transceivers. This is often used to provide +13VDC for external auto ATUs but, in this case, it allows the ContestConsole to switch the transceiver to a low output (10W) tuning transmission for such as amplifier or manual ATU adjustment.

Without this console, IC-7300 owners would either have to make their own lead and switch assembly or reduce power manually using the front panel control on the transceiver, together with either pressing the Morse key in CW mode or switching to RTTY and pressing the PPT – altogether a tedious process! With the SOTABEAMS console, all it takes is a press of the red Tune button on the top of unit.

The ContestConsole was designed with the IC-7300 in mind but it works with a wide range of other Icom radios:

| | | |
|-----------|-------------|--------------|
| IC-2300H | IC-2730 | IC-275 |
| IC-575 | IC-7000 | IC-703 |
| IC-706 | IC-707 | IC-7100 |
| IC-718 | IC-7300 | IC-7400 |
| IC-746 | IC-746PRO | IC-756 |
| IC-756PRO | IC-756PROII | IC-756PROIII |
| IC-7600 | IC-7610 | IC-7700 |
| IC-78 | IC-7800 | IC-7850 |
| IC-7851 | IC-9100 | IC-910H |
| ID-4100A | ID-4100E | |



PHOTO 3: The Console installed at G3PHO with the IC-7300 transceiver (right).



PHOTO 4: Programming IC-7300 voice memories.



PHOTO 5: The SB Contest Console being used in the 70MHz UKAC Contest at G3PHO, IO93GG.

Setting up

The ContestConsole could not be easier to set up and use. Plug the flying lead of the ContestConsole into the microphone socket on your radio and plug your normal microphone into the socket on the rear of the unit (Photo 2). Install a separate footswitch lead if required. In my case, I already had a footswitch directly connected to the transceiver so I didn't use the Console facility.

In less than five minutes I was up and running with the IC-7300 and testing all the push buttons prior to programming the four memories using the IC-7300 memory facility. There are usually some radio settings that need changing before the memory buttons will function – look for 'external keypad' in the radio manual for details.

Do not connect two microphones at the same time. If connecting a microphone via the ContestConsole, use either the 3.5mm socket or the 8 pin socket, not both. I always use a Heil Pro headset that has its own PPT connection to the footswitch in preference to the fist mic that comes with the IC-7300.

On some radios, an external storage device (memory card or USB stick) might be needed for voice memories to work. Full detailed instructions can be downloaded in PDF format from www.sotabeams.co.uk/content/CCICOM.pdf

The next step was to program the four memories. This process is detailed in the IC-7300 manual. The IC-7300 has eight such memories, all of which can be displayed on the transceiver front panel screen (Photo 3). It is very important to set the initial recording levels and the Tx audio drive levels so that you do not overdrive the transceiver. The adjustments can be accessed via the on screen buttons shown on the right in Photo 3. The transmit audio can be conveniently monitored using the Icom transceiver monitor or by listening on a suitably attenuated external receiver.

The ContestConsole controls Memories 1 to 4, so I decided I would have the ContestConsole do the most commonly used

ones such as CQ Contest, CQ DX and QRZ contest. I programmed two CQ memories (T1 and T2 in the photograph), one with my personal callsign and the other with my club call, G5TO, so that the unit could be used on field days and other club contests. It is a real advantage to use the ContestConsole buttons instead of the touch screen on the IC-7300 as it reduces the chance of greasy marks being put on the transceiver screen. I also set up the IC-7300 to display all eight memories, including those of the ContestConsole. Voice Memories 5 to 8 can be programmed to less used functions such as "Is this frequency in use?" or just one's callsign. Ideally, all eight memories would have been on the ContestConsole but this would have meant smaller push-to-operate buttons in order to allow an extra four to be placed on the upper surface of the black box and, maybe, a small increase in the price of the unit. Other operators may prefer having no on-screen memory display in preference to the spectrum and waterfall display of the IC-7300. In that case they would need some sort of separate reminder of which memory keys did what.

The ContestConsole in operation

The ContestConsole arrived at my house just a few days before the RSGB November 2018 70MHz UK Activity Contest, so this was an ideal occasion to put it through its paces.

A pre-Contest net with some of Sheffield and District Wireless Society members confirmed that the Voice Memory's audio was excellent quality and at the correct level, indistinguishable from the microphone-generated audio.

I used the CQ Contest memory from soon after the contest started. Just one press of blue key M1 sent out "CQ Contest from G3 Papa Hotel Oscar, G3PHO Contest" and back came the replies. The change from Tx back to Rx was very fast, with no discernible delay. The QRZ key, M4, was also used from time to time.

The UK Activity Contest was not as hectic as, say, the CQ Worldwide SSB contest, so the ContestConsole has not yet been subjected to hour after hour of continuous use but even the short UK Activity Contest event proved its worth in contest conditions, allowing a sip of tea in between QSOs! I should mention that I have also programmed M1 to M4 on CW with suitable Morse messages. However, since I use Wintest, an integrated contest logger-cum-keying program, any ContestConsole contest memories are rather superfluous. Instead, I have programmed M1-4 with non contest macros: M1: CQ DX DE G3PHO, M2: G3PHO, M3: 599 TU, M4: QRZ?

I don't think I will use these often as I am quite competent with a keyer and paddle but, for those operators whose CW is a little shaky, these programmed memories could help them chase DX more successfully. The documentation says it can also be programmed for PSK but I have not tried that.

Summary

The SOTABEAMS ContestConsole is a low priced but effective aid to successful contesting, especially those in voice modes. It would be a very useful adjunct to field day equipment and long 24 to 48 hour DX Contests. It is extremely simple to install and use and is highly recommended. My thanks to SOTABEAMS (www.sotabeams.co.uk) for letting me try out this product. Richard, G3CWI from SOTABEAMS tells me that many users find the ContestConsole of great benefit for general operating - not specifically contesting.

The ContestConsole is available for £69.95 either direct from SOTABEAMS or from Martin Lynch & Sons.

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