

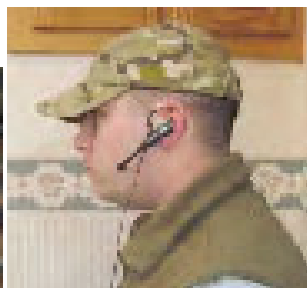
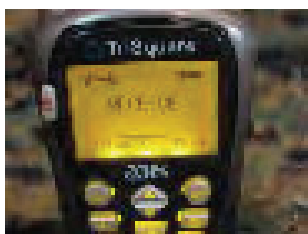
## Gear Geek's

Military/Recreational Gear Reviews

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### TriSquare TSX300 Radio

Labels: **Electronic Devices**



**TriSquare** currently (as of this posting) has 2 radio styles available... the **TSX100** and the **TSX300**. The TSX100 is the more basic model, with the TSX300 having added features. For this review I'll be covering the TSX300.

What really drew my attention to the TriSquare products, and the TSX300 in particular was the advanced options at a cost that I've seen less advanced radios sell for. The thing that particularly jumped right out at me was the "frequency hopping" capabilities. One piece of gear that I used on a regular basis in the military was the **SINCGARS** radio. The military makes these radios secure by using frequency hopping. Frequency hopping spread spectrum is when the radios change frequencies in sync with each other. The TSX300 changes frequencies every few tenths of a second and randomly cycles through 50 frequencies. All other radios set to the same channel (10 billion available) will hop frequencies at the same time. This frequency hopping channel allows you to speak uninterrupted and on a secure radio. This technology alone is worth the cost of the radios...but, as they say on the infomercials...there's more...

These radios operate in the 900 MHz spectrum which gives them added range. I haven't had a chance to do some long distance testing on them, but for normal tactical or recreational use they have worked pretty good. They are primarily "line-of-sight" radios, but they work pretty well in the woods and rural areas. Under optimal conditions you can get a few miles out of these radios...but I'd say under normal conditions you can expect a mile or two.

Many radios out there have several channels that you can set your radios to in order to separate groups of people so they can all talk on their own channel...however, these radios have 10 billion channels to choose from. These channels can be programmed into the radio and they can be named so that identification of each "group" is made easy, and just the push of a couple channels changes you through groups. When each person transmits, the persons radio call sign that's been assigned to their radio will show on the receiving radio's screen. Each radio also has a private channel. With the private channels two people can talk person to person without others hearing them.

Another advanced option is cloning. While in close distance to each other the settings of radios can be cloned so that the other radios will all have the same settings. This is very useful for adding a radio to your group and being able to clone all the contacts.

There is a call button on the radios and many different options for the alert. The volume and "ring tone" can be changed and there is also the option of having either the ring tone, the ring tone with vibration alert, or just vibrating alert.

Not only do these radios offer voice communications, you can also send text messages. Just like talking on the radios, you can choose what group or individual private channel you send the text message to. If you can text message on a cell phone, you can use this feature on these radios. They do not have predictive texting, so you have to scroll through the letters. There are pre-stored messages and your sent/received messages are stored in the radio.

If you're out hiking or on an operation and need to know what the weather's going to be like...these radios also have several NOAA weather channels for your local weather forecast.

Included with this radio package are two headsets. The headsets use a rubber coated ear piece that is flexible and can be adjusted to your ear size/shape. They're super comfortable and stay in place pretty good. They have an in-line PTT (push-to-talk) button that has a switch to toggle between PTT and VOX (voice activated). The quality of the transmission suffers a little bit with these headsets, but they offer stealthy transmissions. Even when the call button or text message alerts sound, they sound through the headset instead of the speaker on the radio. The plug-in for this headset is the single pin style.

Battery life is great on these radios. On the included rechargeable batteries you're looking at around 15 hours and approximately 45 hours on 3 AA batteries. This is based on the 5/5/90 duty cycle. The 5/5/90 duty cycle is an industry standard and refers to 5% transmit, 5% receive and 90% standby. Obviously the more you

use the radios the shorter the battery life will be. When the radios are in standby they go into low-power mode to help save the battery life.

Charging the rechargeable batteries is made really easy with the included desktop charger. Just drop the batteries or the radios in the charger and a fully drained battery will be fully charged in 12 hours or less. If you happen to leave the radios/batteries on the charger...no problem. The charger is a trickle charger...meaning that once the batteries are charged the power is cut back so that the batteries aren't damaged, but leave a small trickle of power so the batteries don't self-discharge. The radios will also work while in the charger, so if you need to charge the battery while maintaining communications you can do so.

Although these radios aren't waterproof...they've held up quite well in a thunderstorm and several hard rain storms. They weren't protected from the elements and performance was not affected.

Here are a few more features:

1. Voice Activation Feature with 3 sensitivity levels.
2. Key pad sounds on/off
3. Storage of 100 contacts.
4. Backlit Dot Matrix LCD screen
5. Backlit keypad
6. Caller ID
7. Call waiting
8. Durable design.
9. Removable belt clip. The radio can be easily removed from the belt clip when wearing the clip.
10. Keypad lock (volume can be adjusted while keypad is locked).

Overall, for recreational use and for small unit military style training this radio's been excellent and for the cost, this radio packs a lot more features into it than the competition.

