



The World Leader
In Data Elimination

MAGNETIC FIELDS

The Garner TS-1 and TS-1XT degaussers (hereafter TS-1) produce a single focused magnetic pulse lasting less than 50 milliseconds. The focused intensity allows the TS-1 to erase today's highest coercivity media, while also limiting the magnetic field exposure to 1 second for every 20 pieces of media degaussed. A person operating the TS-1 continuously for 8 hours would be exposed to less than 1% of the recommended magnetic field limit as identified by the leading authority, the American Conference of Governmental Industrial Hygienists (ACGIH).

DISTANCE FROM DEGAUSSER	MAGNETIC FIELD* (FRONT PANEL)	MAGNETIC FIELD* (SIDE)	DURATION OF FIELD
8 inches (20 cm)	170 gauss	74 gauss	< 0.05 Second
16 inches (40 cm)	40 gauss	17 gauss	< 0.05 Second
24 inches (60 cm)	19 gauss	6 gauss	< 0.05 Second

The Average Operational Distance (AOD) from the TS-1 operator to the front of the unit is 12-18 in. (30-45 cm). The ACGIH recommends that whole body exposure to continuous static magnetic fields be limited to 600 gauss for an 8 hour shift.¹ A person operating the TS-1 continuously for 8 hours would be exposed to less than 1% of the recommended limit because of the short duration of each pulse from the TS-1 (50 milliseconds) and the extremely small magnetic field outside of the unit (<40 gauss, AOD).

To put all these numbers into perspective, the chart below summarizes gauss field findings on common items.

ELECTRIC APPLIANCE	MEASURED MAGNETIC FIELD IN GAUSS*
Smart Phone (during a call or playing music)	240 gauss
Ear buds (connected to phone)	200 gauss
Electric Shaver	50-150 gauss
<i>Garner TS-1 (AOD 12-18")</i>	<i>40 gauss</i>

A smart phone emits 240 gauss while playing music or on a call. Ear buds that come with a typical phone or music player emit over 200 gauss for each ear bud. The higher quality the ear bud speaker, the more gauss emitted due to the higher quality of the speaker magnets.

The phone and ear bud speakers are continuous fields whereas the TS-1 field is only on for 1/20th of a second per 45 second cycle for the TS-1 and 15 second cycle for the TS-1XT. The TS-1's magnetic field exposure does not approach the magnetic field levels individuals are exposed to on a daily basis when using common personal items.

* Tests were performed using a FW Bell model 8010 gauss meter.

¹ 2005 "Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices," ACGIH Worldwide.