

ADVANCED TASER[®] SUMMARY WITH Q&As

Synopsis: The ADVANCED TASER[®] M26 is the only less-lethal weapon that can stop a truly aggressive, focused, combat trained attacker.

Time to Complete Incapacitation: 0.25 seconds.

Range: 21 feet police, 15 feet commercial

Method of Incapacitation: Electro-physical, involuntary contraction of skeletal muscle tissue. Overrides the motor nervous system, blocking command & control of the human body. Existing stun systems stimulate sensory neurons and can be over-ridden by a focused individual. The ADVANCED TASER directly stimulates motor nerve and muscle tissue, causing incapacitation regardless of mental focus, training, size, or drug induced dementia.

Long term injuries: None.

Short term injuries: Minor skin irritation.

Data Port System:

- The M26's on-board memory can download the time and date of its most recent 585 to protect officers from unfounded charges of misuse of force.
- The M26 is available with an option to remotely fire the Air Cartridge from underneath a rifle, robot, tactical mirror on a pole, camera, etc.

Sighting System:

- Ergonomic design tested by over 1,000 law enforcement trainers. Average distance from aim point (without using physical sight) was less than 1.5 inches.
- Physical sight on top of weapon for optical alignment. (Front sight post and rear sight posts.)
- Built-in laser sighting

Power Supply: AA Nickel-Metal Hydride batteries 1.2 Volts
AA Alkaline (Duracell[®] Ultra) batteries 1.5 Volts

Air Cartridge: Compressed nitrogen (1800 lb./in²).

Cartridge Shelf life: 5 years.

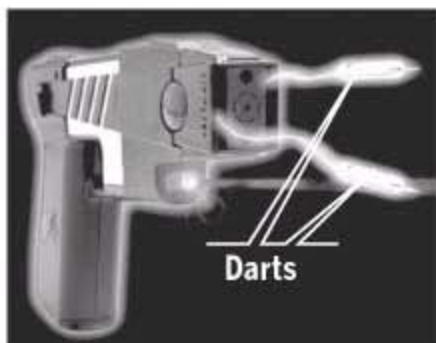
Weight: 18 ounces. including batteries and Air Cartridge

Energy: Power: **26 Watts**; Per Pulse: **1.76 Joules**; and Amps: **162mA Irms**

Training: The ADVANCED TASER uses the same hand motions and muscle memory as standard semi-automatic pistols, drastically reducing the amount of time required to train and increasing accuracy under stress. Recommended user training is 4 hours, instructor training is 8 hours.

HOW DOES AN ADVANCED TASER WORK? Upon firing, compressed nitrogen projects two ADVANCED TASER® probes 15 or 21 feet (depending on cartridge) at a speed of 180 feet per second. The probes are connected by thin insulated wire back to the M26. An electrical signal transmits throughout the region where the probes make contact with the body or clothing. The result is an instant loss of the attacker's neuromuscular control and any ability to perform coordinated action. ADVANCED TASER uses an automatic timing mechanism to apply the electric charge for 5 seconds.

How the Advanced Taser works



Fire: The Taser fires two darts up to 21 feet.

Strike: The darts are connected to the weapon by wires and attach themselves to an assailant's skin or clothing.

Shock: When the darts hit the assailant, the Taser sends a powerful shock through wires and into the assailant's body, incapacitating him. The shock can penetrate 2 inches of clothing.

Source: Taser International

Gannett News Service

HOW CAN THE ADVANCED TASER BE SO EFFECTIVE YET NON-INJURIOUS? The ADVANCED TASER does not depend upon impact or body penetration to achieve its effect. Its pulsating electrical output interferes with communication between the brain and the muscular system, resulting in loss of control. However, the ADVANCED TASER is non-destructive to nerves, muscles and other body elements. It simply affects them in their natural mode. More importantly, no deaths have ever been directly attributed to the TASER®.

DOES THE TASER AFFECT THE HEART OR A CARDIAC PACEMAKER? The ADVANCED TASER's output is well below the level established as "safe" by the federal government in approving such devices as the electrified cattle fence. In a medical study, Dr. Robert Stratbucker tested the M26 at the University of Missouri and confirmed that the T-Wave does not interrupt the heartbeat or damage a pacemaker. Any modern pacemaker is designed to withstand electrical defibrillator pulses that are hundreds of times stronger than the ADVANCED TASER's output. The ADVANCED TASER current of 1.76 Joules is well below the 10-50 joule threshold above which cardiac ventricular fibrillation can occur.

ISN'T HIGH VOLTAGE LETHAL? High voltage, in itself, is not dangerous. One can receive a 25,000-volt shock of static electricity from a doorknob on a dry day without harm. The physiological effect of electrical shock is determined by: the current, its duration, and the power source that produces the shock. The typical household current of 110 volts is dangerous because it can pump many amperes of current throughout the body indefinitely. By contrast, the ADVANCED TASER power supply consists of 8 AA alkaline 1.5-Volt batteries capable of supplying 26 Watts of electrical power for a few seconds.

WILL THE TASER CAUSE ELECTROCUTION? No. The output is metered by the electronics and the electrical energy in each pulse is always the same, regardless of the target condition. The electrical output will not be transferred from one person to another even if they touch. Over 1,000 individuals have personally tested the ADVANCED TASER.

WHAT ARE THE AFTEREFFECTS? A person hit with an ADVANCED TASER will feel dazed for several seconds. Recovery is fast and the effects stop the very instant that the M26 shuts

off. Some will experience critical response amnesia and others will experience tingling sensations afterwards. The pulsating electrical output causes involuntary muscle contractions and a resulting sense of vertigo. It can momentarily stun or render immobilized. Yet, the ADVANCED TASER's low electrical amperage and short duration of pulsating current, ensures a non-lethal charge. Moreover, it does not cause permanent damage or long-term aftereffects to muscles, nerves or other body functions. A January 1987 Annals of Emergency Medicine study reported that similar TASER technology leaves no long term injuries compared with 50% long term injuries for gun shot injuries.

MUST THE PROBES PENETRATE THE BODY TO BE EFFECTIVE? No. The electrical current will "jump" up to two inches as long as both probes are attached to clothing or skin. At most, only the 3/8-inch needlepoint will penetrate the skin. They have less energy than a spring propelled BB. Both probes need to contact the body or else contact clothing and be within two inches of the body to stop an attacker.

WHAT IF THE PROBES MISS? The ADVANCED TASER can work if one probe hits a human and the second falls on grass or dirt as the power grounds. However, the results depreciate substantially if the second probe lands on concrete, asphalt or not all on wood floors. Otherwise, the M26 can be used in a touch-stun mode. The user is thus provided with two backups. A secondary Air Cartridge is available that holds a backup cartridge below the ADVANCED TASER's handgrip. A final backup if the probes miss the target is the touch stun feature. Should the user miss or engage a second attacker, the ADVANCED TASER can applied directly to the target and it will work like a powerful touch-stun device.

CAN THE ADVANCED TASER CAUSE FIRE? The ADVANCED TASER will not ignite standard solids or even black gunpowder. However, the spark from an ADVANCED TASER can ignite some flammable liquids, vapors, meth labs or sensitive explosives. The ADVANCED TASER should not be used anywhere that cigarettes are forbidden for fire safety reasons. The ADVANCED TASER should never be used on anyone who has been sprayed with an alcohol based chemical spray -- including some alcohol based pepper sprays -- which could ignite.

WHAT ABOUT THE POTENTIAL OF EYE INJURY FROM THE ADVANCED TASER? The ADVANCED TASER should always be aimed at the attacker's chest or back, since both probes need to hit some part of the body to be effective. The torso provides the largest surface area to hit. *The ADVANCED TASER should never be aimed toward an attacker's face.* This is a serious self-defense device and should be treated as such. Moreover, putting any sharp object into an eye is potentially dangerous to the cornea.

HOW WILL THE ADVANCED TASER PREVENT CRIMINAL USE? Our mission is to ensure technology can play a positive role in our society. To that end, an Anti-Felon Identification (AFID) system is used so criminal use of the ADVANCED TASER can be traced from evidence dispersed by the device itself to provide the exact identification of the Air Cartridge purchaser. No other self-protection device in the world -- guns, chemical and pepper sprays, touch-stun devices or batons -- can be traced from evidence at the scene of the crime directly to the registration of the user.

WILL THE PROBES STICK TO BULLETPROOF VESTS? Some bulletproof vests are made specifically to stop only bullets and gun shot projectiles -- not knives or sharp devices such as syringe needles. Should the probes attach to clothing in front of the soft body armor, the T-Wave can penetrate some of these vests with near full-effect. Although most bulletproof vests are made to stop bullets, the vests are porous and will not stop the flow of electrons. A

bulletproof jacket with metal shock plates can cause the probes to bounce off the target. However, some companies have reported that there is soft body armor that has filled the porous material with rubber and/or plastics, which may prevent the T-Wave from penetrating the body armor. Twaron[®] is difficult for the TASER-Wave to pass through in bulk.

WHAT IS THE BEST-SHOT AT MAXIMUM RANGE? As long as the spread of the probes is at least four inches, the ADVANCED TASER will be extremely effective. To ensure that the spread is greater than four inches, the ADVANCED TASER should be fired at a target several feet away. The optimum shot is from seven to ten feet away from the target to achieve maximum effect using a 15-foot cartridge and 12-18 for a 21-foot cartridge.

DOES TEMPERATURE HAVE A DETRIMENTAL EFFECT ON THE ADVANCED TASER? Yes. The weakness to the system is not the ADVANCED TASER. The batteries limit the effectiveness in cold and extremely hot temperatures. Alkaline batteries perform poorly at freezing temperatures. However, Nickel Metal Hydride (NiMH) rechargeable batteries can be substituted in a freezing climate, as their performances are better suited in colder climates. The heat issue is only an issue if the ADVANCED TASER were left sitting in the sun, once again adversely affecting the batteries. As for the Air Cartridge, it utilizes compressed nitrogen (an inert gas). The ADVANCED TASER compressed air capsules have successfully held their charges at temperatures of minus 20° F and up to 160° F. Moreover, altitude will not adversely effect the firing of an ADVANCED TASER. In addition, the temperature will not effect the T-Wave. However, as with any product containing polycarbonates and other thermoplastics, the ADVANCED TASER and Air Cartridges should never be left in direct sunlight.

SUMMARY POINTS:

- Truly incapacitating: This less-lethal system is solely designed to stop the most hardened of targets: extremely violent, aggressive, goal-oriented and drug induced suspects.
- It can't kill or maim innocent bystanders, damage buildings or aircraft fuselages with stray bullets.
- Won't damage buildings or aircraft: It is a defensive device and can't penetrate walls, doors or glass.
- It is far more effective than other less-lethal self-defense devices, such as pepper sprays or beanbag weapons -- no cross-contamination or blunt instrument damage inflicted.
- It uses the same muscle memory as that of a firearm for police under stress. The ADVANCED TASER records the last 585 firings to protect law enforcement from false allegations of misuse.
- Training is simple and the learning curve is relatively flat – critical in training multiple users
- The ADVANCED TASER is 26 Watts. Its amperage is 0.162 – not enough to cause damage to the human body. It is 50,000 Volts.
- Effective against most conventional body armor and other counter-measures.
- The stun gun backup does not make this a one-shot only device.
- Lifetime Warranty.
- It will not cause a heart attack or damage a pacemaker; will not cause electrocution, even if target is standing in water.
- It will not cause urination or defecation.