StressVest Product Overview 2019

Force on Force Reinvented™

PERFORMANCE under stress... starts with TRAINING under stress.™

Uniformed Officers

STRESSVEST® SYSTEM

StressVest® is the world's first non-projectile, force on force, firearm tactical training system capable of creating stress through a pain penalty without fear of projectile injury for training Law Enforcement Officers and Military Soldiers. The system utilizes training firearms that fire a laser pulse which activates the StressVest® when it strikes center mass. Depending on the setting, the vest will either deliver a vibration or a safe, localized shock to the abdomen.

IR Laser (See Training Weapon Option page)

Receiver (Front & Back)

Vibration or Pain Penalty

Basic Single Package Includes:

- Lockable Storage Case
- Vest Receiver
- StressX® PRO Belt
- USB Cable & Chargers
- Transmitter

StressX® PRO Belt
StressVest® features an externally worn, wireless StressX® PRO Belt that delivers a safe, localized, fully adjustable shock through clothing or a vibration for role players. The StressX® PRO is the ONLY system in the world with Advanced Training Modes including Role Player, Stress Exposure, Move to Cover and Injured Officer.

Features:

- Infrared COM port for easy syncing to StressVest® and Instructor CQT Tablet.
- LED display shows Mode, number of Hits, and Shock Level.
- Hits counter displays number of Hits to StressVest®.
- Adjustable Shock Level: 1-Low to 5-Extreme
- StressX® PRO Advanced Training Modes
- Durable and weatherproof glass filled nylon case.
- Convenient USB port for remote software upgrading and recharging battery.

- Six electrodes deliver safe, localized shocks to abdomen through clothing.
- Moisture resistant smooth surface for easy cleaning.

ROLE PLAYER MODES
(Ensure SHOCK light is not illuminate)
1-Vibrates every hit
2-Vibrates after two hits
3-Vibrates after three hits

STRESS EXPOSURE MODES
(Set Appropriate Shock Level for Student)
4-Shocks every hit
5-Vibrates 1st hit, then shocks

MOVE TO COVER MODES
(Pain Penalty increases with Each Subsequent Hit)
6-Vibrates 1st hit, 2nd begins shock
7-Shocks 1st at low then increases
8-Shocks 1st at Med then increases

INJURED OFFICER MODES
(shock Continues to Fire Randomly for Set Time Period After First Hit)
9-Shocks randomly – 10 seconds
10-Shocks randomly – 20 seconds
11-Shocks randomly – 30 seconds
12-Vibrates randomly – 30 seconds

Electrical Safety Specifications
International Electro Technical Commission - Electrical Safety Standard
Power Source : 3.7 Volt Rechargeable Battery
Shock/vibration Location : Belt Worn Externally on Stomach
Maximum Voltage : 4,500 Volts
Maximum Amperage : Less than 1mA over a maximum discharge duration of 150msec
Maximum Joules : 0.092 Joules (92mJ)
The effects of electrical current passing through the human body are covered at length in the international Electro Technical Commission document IEC 479-2:1987. The Document states that a transient or capacitive discharge, as is the case with static electricity, requires energy in excess of 5 Joules (5000mJ) to produce a direct serious risk to health. The discharge of the StressVest® is 98% lower than this threshold.

THE STRESSVEST SYSTEM DELIVERS A SAFE, LOCALIZED, ELECTRICAL DISCHARGE.

Increase Your Target Zones

FACE SENSORS AND SIDE PANELS
The StressVest® was specifically designed to reward center mass incapacitation hits to the front and back of the torso. The addition of a face sensor and side panels will take your training to another level.

Features
StressVest® Face Sensors are fully integrated into the system. The electronics can be pre-assembled into any headgear, but presently come in either Black Baseball Cap or SWAT/Military Goggles.

Senses Hits To The Upper Facial Region
The StressVest® Face Sensor system uses the most advanced sensor technology in the world to capture laser hits to the upper facial region.
Sensors on the underside of the front of the Goggles and the visor of the Baseball Cap pick up any hits to the upper facial region. This registers a hit for either students or role players and will deliver either a shock or vibration depending how the StressX® PRO belt has been configured.

Side Panels
The addition of the side panels rewards students for incapacitation hits to the vital organs on the side of the body.

NEW! StressVest® Arm Shocker
You can't cut the pie without an arm. One of the most neglected tactical skills is keeping limbs tucked in tight when slicing the corner of a structure. Often students lead with their arm instead of their eyes. The arm shocker delivers a safe, localized shock through one layer of clothing to simulate a dominant arm injury forcing the student to continue the fight with their non-dominant hand. Features Advanced Training Modes and adjustable pain penalty. Multiple activation methods include an instructor key fob, laser strike to the sensors on the arm shocker or StressVest®.

CQT Instructor Tablet

The CQT Instructor Tablet remotely configures and controls up to 20 StressVests®. The CQT Instructor Tablet manages and interacts with scenarios from start to finish to give the Instructor unprecedented control of the training environment from activating individual StressVests® to rendering all StressVests® inert. Real time data includes seeing hits and monitoring trainees heart rates. Use the CQT Instructor Tablet's camera to record and play back scenarios.

Features

REMOTE STRESSVEST® ACTIVATION
Activate any single StressVest® or "Hit All".

MONITOR STUDENTS HEART RATES
Provides real time heart rate monitoring during scenarios. Records high and low heart rates for debriefing.
CQT Instructor Tablet comes with two Heart Rate Monitors. Additional Heart Rate Monitors can be purchased separately.

SCENARIO EXECUTION
All StressVests® are not enabled until the Instructor presses the Scenario "Live" button. To stop a scenario the Instructor presses "Cease Fire" and all StressVests® are disabled.

IDENTIFY TRAINEES / ROLE PLAYERS
Input name and/or badge number. Role Player (Blue)
and Trainees (Grey).

RECORDS HITS
Allows Instructor to verify hits in real time.

CUSTOMIZED TRAINING MODES
Adjust & customize each StressVest® including shock (student) or vibrate (role player), shock level, and training mode. Advanced Training Modes include Stress Exposure, Move to Cover, Injured Officer and Role Player Modes.

WIRELESS BELT INTEGRATION
Each individual StressX® PRO belt is synced to the StressVest® CQT Instructor Tablet. Depending on the setting, the StressVest® wireless system will deliver a vibration for role players or a shock for students. The shock is adjustable to ensure the appropriate pain penalty for the level of the student.

FULL HD VIDEO CAMERA
Enables recording for instant student feedback and remediation. Archive videos for learning/demonstration purposes.

Dry Fire, CO2, or Blank Fire Training System → Laser Pulse to Front/Back or Side Panels → Vest Receiver → Activates Individual StressVest® → Vibration or Pain Penalty

Dry Fire, CO2, or Blank Fire Training System → Laser Pulse to Face Sensor → Face Sensor → Activates Individual StressVest® → Vibration or Pain Penalty

StressVest® IED Adaptor & Training IED's → Detonation of Training IED → Multiple StressVests® → Activates all StressVests® within preset "Kill Radius" → Vibration or Pain Penalty

StressVest® CQT Instructor Tablet → Instructor Initiated Remote Activation → Individual or Multiple StressVests® → Activates Individual or all StressVests® → Vibration or Pain Penalty

StressVest® Handheld Laser Activator → Laser Pulse to Front/Back or Side Panels → Vest Receiver → Activates Individual StressVest® → Vibration or Pain Penalty

S.W.A.T. The StressX® Tactical

OVERVIEW
At the request of Special Forces Groups and S.W.A.T. operators around the world, StressVest® has created the new StressX® Tactical system. The system allows operators to train with the StressVest® system, without the need for vest panels that can interfere with equipment mounted to load bearing vests.
The system is designed specifically for S.W.A.T. and Special Force teams who want to conduct the most realistic training scenarios possible without having the training gear that restricts normal operation of their equipment and weapons systems.
The StressX® Tactical non-invasive sensor design allows operators to train with their weapons and equipment in the exact same manner as they would during a real world encounter.

BENEFITS:
NO FACE MASK. No face mask to interfere with obtaining proper sight alignment on long guns.

NO VEST PANEL. No vest panel is required. This allows access to equipment mounted to load bearing vests.

MULTIPLE FEEDBACK METHODS. Select from vibration or six levels of pain penalties.

MULTIPLE MODES. Multiple modes designed to maximize specific training scenarios including modes that allow for injury simulation.

CUSTOMIZE YOUR MODES. Customizable modes available on request.

SIMULATE ARM INJURY. Ability to deliver pain penalty to arm which simulates dominant side injury.

INTEGRATED TRAINING IEDs. Will integrate with complete line of StressVest IED training devices.

The StressX® Tactical is specifically designed for CQT training such as room clearing, hostage rescue and building searches where firearm engagement occurs within 45 feet of the adversary. Role players are outfitted with a specific Role Player StressVest® that is designed to be hidden under a single layer of clothing and will only activate when accurate shot placement is displayed by your operators. Add the face sensor to your role player and create hyper realistic body armour drills.

NOTE: *The StressX® Tactical is optimized for indoor training. It is not designed for mid to long range encounters outdoors. If this type of training is desired, please utilize the traditional StressVest® sensor vest.*

The StressX® Tactical Controller is 100% compatible with the traditional StressVest sensor vest.

Officer equipped with StressX® Tactical System
Belt Shocker
Arm Shocker
Blank Fire Pistol Laser Insert
StressVest® UTM™ Blank Fire Pistol Conversion Kit
Hit Kit™ Helmet Sensors
StressX® Tactical Controller (Mounted on the back)

NEW IMPROVED BELT SHOCKER
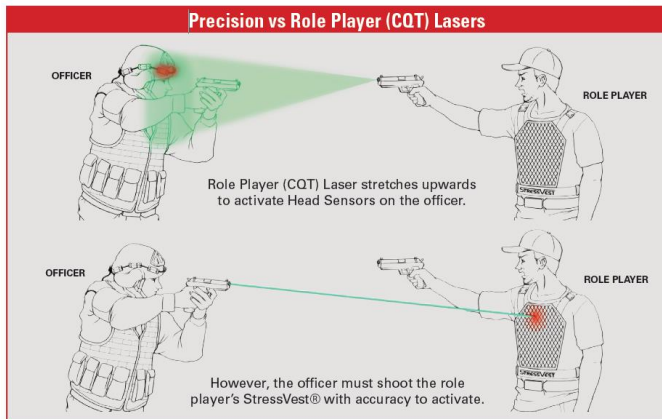Delivers safe localized shock
Up to Level 6 of pain penalty
Military Specifications
Improved durability and water resistance
More compact

How Does The StressX® Tactical System Work**?**

Precision vs Role Player (CQT) Lasers

Role Player (CQT) Laser stretches upwards to activate Head Sensors on the officer.

However, the officer must shoot the role player's StressVest® with accuracy to activate.

Precision Laser - Point of aim accuracy required. Forces your officers to shoot accurately under stress.

Role Player (CQT) Laser - The Role Player (CQT) Laser is designed to work in conjunction with the Hit Kit Sensors as illustrated on the officer below.

Role Player (CQT) Laser Range
Maximum effective range 45 ft – indoor
Maximum effective range 15 ft – outdoor direct sunlight

Military
Stress X Elite

OVERVIEW
Utilizing safe, localized and adjustable electrical impulses, the StressX® ELITE is the world's most advanced haptic feedback system for combative training.
Designed to meet the rigors of military training, the StressX® ELITE can be integrated with existing M.I.L.E.S. gear, StressVest® receivers, and/or Training IED's.
The Belt Shocker is placed around the waist of the soldier beneath their ballistic vest. When activated, it will deliver the instructor specified electric pulse stimulus. An Arm Shocker can also be attached to affect the dominant shooting arm of the soldier.

INTRODUCE A SAFE PAIN PENALTY TO MILITARY COMBAT TRAINING

BENEFITS:
STRESS EXPOSURE TRAINING. Adjustable pain penalty (Shock Level 1 - 6) allows the instructor to set the appropriate pain penalty to match the performance level of the student being trained.

MULTIPLE TRAINING MODES. Allows users to simulate battlefield injuries or increase the pain penalty each time the soldier is hit.

CUSTOMIZE YOUR MODES. Customizable modes available on request.

SIMULATE ARM INJURY. Ability to deliver pain penalty to dominate side arm to interfere with shooting platform.

INTEGRATED TRAINING IEDs. Will integrate with training IED devices using StresssVest® Multifunction IED Adaptor.

StressX® Elite can be used with *TRADITIONAL STRESSVEST®, STRESSVEST HIT KIT™ SENSORS*, or *M.I.L.E.S.* gear used by most Special Forces and military agencies.

Training Weapon Options
Handguns, long guns, specialty, training IEDs

BLANK FIRE
StressVest® has partnered with UTM™ to create StressVest® UTM™ Conversion Kits that are compatible with a StressVest® laser insert. With each blank round fired the laser insert will emit an eye safe laser pulse that will activate the StressVest® giving you the most realistic non-projectile force on force training possible. Also available for carbines using UTM™'s 5.56mm blank.

StressVest® UTM™ Pistol Conversion Kits
- Most Conversion Kits are a simple barrel/chamber replacement.
- Laser Insert is threaded into front of barrel (Precision or Role Player (CQT) laser).
- Barrel is blocked and dedicated for blank fire training requiring only safety glasses.
- Each blank round fired will emit an eye safe laser pulse that activates the StressVest® giving the most realistic non-projectile force on force training possible.
- Currently available for most pistols including Glock, SIG Sauer, Beretta, and H&K.

StressVest® UTM™ Rifle and Submachine Gun Conversion Kits
Conversion Kit is a simple drop in bolt replacement.
Barrel Mount Laser Insert mounts on the end of the barrel of a converted carbine or rifle.
With each 5.56mm blank fired an eye safe laser pulse is emitted that will activate the StressVest® giving the most realistic non-projectile force on force training possible.

Note: *All StressVest® UTM™ Conversion Kits require a StressVest® Blank Fire Laser Mount (Precision or Role Player (CQT) laser)*

StressVest® UTM™ Conversion Blanks
Train anywhere, no longer real estate/terrain, or location dependant.
Train with minimal Personal Protective Equipment (PPE) - Safety Glasses Only.
Use your weapon without a Blank Firing Attachment (BFA).
Simple weapon conversion kit design prevents "Live" rounds from being fired.
Simple clean up, No Lead, and 100% Tox Free.
Available in 9mm or 5.56mm.

StressVest® has partnered with some of the leading manufacturers in the world of training lasers, training firearm conversion kits, and dedicated training pistols. The following training firearm

options do not fire any type of projectile and all deliver an eye safe laser pulse that was specifically engineered to activate the StressVest®.

DRY FIRE
Dry Fire training weapon options are available in dedicated handgun replicas and also cartridges that function in any 9mm, .40/.45 Cal and 38 Special/357. Shotgun adaptor is also available.
- SIRT Trainger – dedicated training pistol
- SMART Firearms Training Gun – dedicated training pistol
- Laser Ammo – SureStrike Cartridge
- Laser Ammo – 12 G Shotgun Adaptor

Portable Sound System *(Audio Solution for Dry Fire)*

Audible shot sound with each trigger pull of SIRT RF Pistol
• Plug-in or battery operated
• 3 Channel Instructor key fob for additional sound effects *(screaming crowds, explosions, alarms, machine gun fire, etc.)*
• Auxiliary input to play your own sound files
• Works with current SIRT RF Trainer model

ELECTRIC / CO2 RECOIL / AIRSOFT
Dedicated M4's available, as well as drop in CO2 recoil kits for most semi-automatic and automatic firearms.
- Electric M4 – Dedicated M4 Training Rifle
- Laser Ammo – Spider Adaptor
- DVORAK CO2 – Recoil System Kits

Precision vs Role Player (CQT) Laser

Dramatically increase hit ratios with the new Role Player (CQT) laser!
Unlike the current Precision laser that demands point-of-aim accuracy, the Role Player (CQT) laser allows for a larger surface area activation. It is the best solution for training tactics and decision-making with firearms during scenarios where engagement occurs within 45 feet. The Role Player (CQT) laser is available for both handguns and long guns.

BENEFITS:
The Role Player (CQT) laser provides a larger activation area, ensuring activation of the StressVest® even when it is partially obstructed by the arms or weapons of the individual wearing the vest.
The vertically aligned, elongated shape of the Role Player (CQT) laser beam limits the degree of left to right aiming variance, forcing a higher degree of accuracy compared to other cone shaped laser systems.
Effective range out to 45 feet!

Will work with HIT KIT™ Goggles. The kit eliminates the need to wear the vest system, perfect for S.W.A.T. and military wearing tactical vests.

LIMITATION:
The Role Player (CQT) laser is primarily designed for indoor use. The effective range of the Role Player (CQT) laser is limited in direct sunlight. (Use StressVest® Precision laser for outdoor training requiring greater distances.)

Integrated Training IEDs

The IED Adaptor integrates ANY training IED with the StressX® Elite (also compatible with StressVest® and StressX® Tactical) producing the world's first IED training system with pain penalty. Preset your "kill radius" from 0 to 100ft and all StressVests® within that radius will be activated upon detonation.

Features

STRESSVEST® IED ADAPTOR

When the IED is detonated it will activate the StressVest® IED Adaptor that will send a signal (LED and/or RF) to the StressX® Elite. The StressVest® IED Adaptor is also compatible with StresVest® and StressX® Tactical system.

When the StressX® Elite is activated it will deliver either a pain penalty (shock) or vibration depending how they have been set up by the Instructor. Place the StressX® Elite in Injured Officer Mode for the added training benefit of teaching students the proper mindset for winning encounters.

The products are designed to produce the look and feel of IED threats, while eliciting the appropriate physiological and psychological response associated with an attack.

Benefits of using non-pyro IED simulators:
- Safe - enables direct contact training.
- Large visual impact relative to safe operating distance using powder.
- Large visual impact relative to safe operating distance using powder.
- Low operating cost. Uses 12 gram CO2 cartridges and rubber burst cartridge.
- No fire hazards.

StressVest® Reality Based Training Instructor Certification

COURSE OVERVIEW
The StressVest® RBT Instructor Course is designed to teach safe use of the StressVest® System, reality based scenario and delivery, threat cue and pattern recognition drills, and role player strategies. This course will educate Instructors on the most up-to-date advancements in scenario and stress performance based training. This dynamic course has many practical hands-on exercises and informative videos designed with the Instructor in mind.

COURSE TOPICS:

StressVest® Operation & Safety
The StressVest® system is the most advanced, force on force training system available. Safe and appropriate use of the StressVest® system will be discussed along with blank fire, dry fire and CO_2 recoil training weapon options. This section also teaches how to utilize the software-based controller that allows for various modes of operation that can radically enhance performance of your students. This includes Stress Exposure, Move to Cover and Injured Officer modes.

Understanding Human Performance Under Stress
The most advanced research and application methods in the area of human performance under stress will be examined. Stress Inoculation and Stress Exposure training will be directly covered. This section is a must for any Instructor desiring to develop themselves as a court declared expert in the area of police use-of-force dynamics.

Testing Performance Under Stress
Scenario based training is simply the most effective way to ensure your students are prepared to respond appropriately during a real world encounter. Instructors will be shown how to effectively design testing scenarios that will identify individuals who require remedial training. The system of testing will also assist in identifying the type of remedial training required to quickly bring the student up to the desired level of performance.

Pattern Recognition & Response Training
Traditional Stimulus - Response training is not reflective of most real world encounters. A review of most encounters shows a laundry list of threat cues leading up to the final threat stimulus. This area of training will have the most profound effect on the performance of your students but is often the most overlooked and underutilized area of training. This section of the course will forever change the way you approach training your students for the real world.

Being An Effective Role Player
Role playing is the most important aspect of scenario based training. Regardless of how well structured a scenario has been formed, inadequate role playing can render the scenario useless. Instructors will be shown how to identify candidates for role playing, how to properly prepare the role player for the scenario, and how to control the role players performance during the scenario. This section of the course alone will dramatically improve your existing program.

Designing Effective Scenarios
To design effective training scenarios, instructors must ensure that the scenario is clear and concise, and built to drive the student to reach the desired objective. Too often scenarios ramble on with ambiguity, causing confusion and failure with students. This section will teach Instructors how to maximize the use of every second during the scenario. The use of Stress Templates will be utilized to assist in developing scenarios that create the same stress responses that would be felt in a real world event.

Delivering Effective Scenarios
The course dedicates ample time to actual running of scenarios. Each participant will be required to deliver several scenarios to put into practice theories learned on the course. This hands-on training is the most beneficial aspect of the course.

The StressVest® Advantage

STRESS INOCULATION TRAINING - True Stress Inoculation Training requires an incremental exposure to a stressor. Since non-lethal training ammunition has a consistent mass and velocity, the pain penalty is not adjustable. The StressVest® has an adjustable pain penalty that allows the instructor to set the penalty to the appropriate level of the student being trained.

GREATER SAFETY & REALISM - Since the StressVest® system utilizes eye safe lasers and no projectiles, it allows a safety template never before seen in force on force training. There is no longer a fear of unprotected individuals entering the training area. Training does not require special protective equipment that covers body language, facial cues and recognition.

CENTER MASS REWARD SYSTEM - One of the most common complaints from firearms instructors conducting force on force training is that students are rewarded regardless of their shot placement. The StressVest® only activates when hit in the upper torso region.

COST SAVINGS - There are several training firearm options available for use with the StressVest®. This includes dry fire, CO2 recoil, and blank fire kits. No additional costs are incurred for additional protective equipment, non-lethal training rounds or extra safety personnel.

NO DAMAGE OR CLEAN UP - The StressVest® system allows for training in the actual environment that law enforcement and military conduct their business without worry of damage or messy clean-up. Train anywhere . . . anytime.

REALISTIC SHOOTING DISTANCES - The accuracy and distance using lasers is a ballistic match to the issued ammunition. This includes the ability to shoot through windows or windshields.

ADVANCED TRAINING MODES
The StressX® PRO Wireless Belt allows for several modes:
Stress Exposure Mode: The level of shock can be set for each individual student.
Move to Cover Mode: Each successive hit will result in an increase in pain penalty. This will force the student to move during the fire fight.
Injured Officer Mode: After the student is hit, they will continue to receive a random pain penalty for the rest of the scenario. This teaches students proper mindset for winning encounters.
Role Player Mode: Delivers a vibration instead of a pain penalty. The StressVest® can be set to activate only after a specified number of hits occur.

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