VIRTRA.COM

PRODUCT BROCHURE

INNOVATIVE. IMMERSIVE. INTENSE.

VirTra

INNOVATIVE. IMMERSIVE. INTENSE.

VIRTRA.COM
OUR MISSION

PRODUCT
To develop, manufacture, sell, and support the finest simulators, accessories, and training scenarios in the world. The high quality of our products will only be surpassed by the quality of our customer support.

ECONOMIC
To operate the company on a sustainable financial basis. To generate profitable growth, increasing value for our shareholders and ever-expanding opportunities for career growth for our employees. Our company’s goal is to represent the highest standard within our markets, from product quality to moral ethics.

INDUSTRY
To uniquely meet the needs of customers within our industry and to always seek innovative and better solutions to add value to our customers. To consistently consider other markets where we can substantially improve the quality and value provided to customers.
VirTra Inc., founded in 1993, provides the world’s most realistic and effective small arms training simulators to Military, Law Enforcement, Post Secondary Education, and Security agencies around the world. VirTra is the higher standard in firearms training simulation. Our full line of marksmanship, collective, and judgmental use of force simulators range from portable single-screen systems to the world’s most immersive firearms training simulator – the V-300™.

VirTra’s advanced firearms training simulators feature multi-directional sound, drop-in tetherless recoil kits, and video-based scenarios that allow threats to be engaged across multiple screens. We are the only company in the world to offer a video-based 300-degree simulator platform and our patented Threat-Fire™ hostile return fire system. At VirTra, we believe that personnel entrusted with lethal force and critical missions deserve the very best training available.
For many years, firearms trainers have developed training based on the old saying: “Train like you fight, fight like you train.” This proven philosophy applies especially to all aspects of firearms training simulation.

Whether you are an athlete, an artist or law enforcement professional, mastering a skill requires the repetition of proper technique until the ability to perform no longer requires conscious thought - it becomes second nature. What you practice in training will be repeated on the street under the pressure of an actual life or death encounter.

This was tragically illustrated during the infamous “Newhall Incident” in 1970. That incident impacted training procedures for enforcement agencies nationwide, however, these changes had not been incorporated into the simulation industry until now. Both good and bad habits are learned through repetition. Simulators traditionally have always involved a single screen directly in front of the trainee but the officers we have spoken to have told us that this method instills and reinforces the issue of tunnel vision.
As you know, reality paints a much different picture than training, as threats can come from all around us - sometimes from more than one direction at the same time. Through both the experience of our law enforcement professionals, and through our research, we have found that many people experience tunnel vision under duress which can compromise their situational awareness. This compromise is the driving force that evolved our training to a multi-screen environment.

The V-300™ provides 300 degrees of situational awareness, realistic threat scenarios, and an electronic-impulse device that induces real physical stress.

SINGLE SCREEN SYSTEM

Single screen trainers can condition officers to only anticipate threats happening directly in front of them.

MULTI-SCREEN SYSTEM

The V-300™ provides 300 degrees of situational awareness, realistic threat scenarios, and an electronic-impulse device that induces real physical stress.

With multi-screen use of force simulator technology, situational awareness becomes one of the key elements in the simulators we manufacture, the scenarios we create, and the people we employ - **all striving to provide the very best training available**. Single screen simulators simply fall short and are no longer a viable source for effective training. Fully immersive, realistic options like the VirTra V-300™ have now become the higher standard in simulated firearms training.
Panoramic photos taken on location.

Panoramic image applied to the V-300™ simulator for a fully immersive training experience.
One of the most important aspects of any simulator is the quality of the content. A combination of excellent visual and audio equipment gives our content designers the biggest and best capabilities for intense scenarios. VirTra utilizes subject matter experts in the development of its scenario training content to ensure that viable training objectives are created. VirTra goes to great lengths to guarantee our training content is superior in quality, realism, immersion, and relevance.

Filmed on location, scenarios run across multiple screens that create the only 300 degree, fully immersive training environment available today.

Live actors, not computer generated characters, allow us to capture the human element, revealing threat cues that further involve the trainee in the encounter.
ENHANCED TRAINING OPTIONS

VirTra’s patented Threat-Fire™ return fire, or “shoot back” device utilizes electric impulse to effectively simulate live fire with no safety equipment needed. There's no cleaning up of projectiles or potential of injury to the trainee. Less equipment equals less distraction, and more time to focus on training.

Use of an officer’s side arm or their real weapon, rather than “non-gun” replicas. Simple barrel replacement with our recoil kit enables the officer to work with the actual weapon they use every day. Our kits require no modification of the weapon and take minutes to install.


Superior Sound

With directional sound, we can develop higher levels of situational awareness by creating noise and distractions from all screens. Additionally, our raised training platform is equipped with acoustics that make the trainee hear as well as feel the vibrations and sounds within the simulator - adding to the immersive environment that creates a realistic model for the situations they face everyday.

LOW LIGHT TRAINING SYSTEM

Exposes the trainee to proper use of a flashlight in combination with weapon in low light environments. Develops confidence and ability with threat/target identification in low light situations.

SmartMag intelligent magazines allow for increased realism and kits are tetherless to allow freedom of movement within the simulator.

Use of Force Simulation

From a training standpoint, in today’s changing and litigious society, use of force encounters have become more critical than ever before. Our systems incorporate TASER® and OC spray as non-lethal training options coupled with branch-able scenarios designed to reinforce this critical area of training.
V-300™ SYSTEM FEATURES AND CAPABILITIES

Fully immersive 300-degree environment
Real-life scenarios and marksmanship training capability
Seamless high resolution video
Debrief and record a trainee’s performance, judgment, and reaction time
Multi-directional surround sound for unsurpassed audio realism
Arsenal of recoil kits available for most firearms
One year “Best in the Industry” warranty with 24/7 service and technical support

“The V-300™ shows how quickly judgment decisions have to be made, and if they are not made immediately and quickly, lives can be lost. You can’t put a dollar value on that or being prepared enough for the surprises that could be around every corner.”

Jason Grunwald
Commander of USMS Great Lakes Regional Fugitive Task Force
V-300™ IN ACTION!

SYSTEM SPECS

- 5 - DLP projectors
- 5 - Laser tracking cameras
- 5 - 10' x 7.5' projection screens
- 6 computers
- Rack mount chassis
- Intel® processors
- Hi-end graphics cards
- 8GB RAM
- 5 - Self powered monitor speakers
- Dual monitor instructor station with backlit keyboard and optical mouse

FOOTPRINT & CONFIGURATION

FRONT PROJECTION

REAR PROJECTION

Rear and Front V-Range™ projection shown.
The V-180™ is the higher standard for decision-making simulation and tactical firearms training. Three screens and a 180-degree immersive training environment ensures that time in the simulator translates into real world survival skills.

**V-180™ SYSTEM FEATURES AND CAPABILITIES**

- Fully immersive 180-degree environment
- Real-life scenarios and marksmanship training capability
- Seamless high resolution video
- Debrief and record a trainee’s performance, judgment, and reaction time
- Multi-directional surround sound for unsurpassed audio realism
- Arsenal of recoil kits available for most firearms
- One year “Best in the Industry” warranty with 24/7 service and technical support

"I would highly recommend this system to other chiefs in other areas and make it part of their training course."

*Ellis C Jackson Chief of Police, Thomasville Georgia*
V-180™ IN ACTION!

SYSTEM SPECS

3 - DLP projectors
3 - Laser tracking cameras
3 - 10' x 7.5' projection screens

4 computers
Rack mount chassis
Intel® processors
Hi-end graphics cards
8GB RAM

3 - 3D projectors
3 - 10' x 7.5' projection screens
3 - Laser tracking cameras
3 - Self powered monitor speakers

Dual monitor instructor station with backlit keyboard and optical mouse

FOOTPRINT & CONFIGURATION

FRONT PROJECTION

REAR PROJECTION

15ft / 4.5m
27ft / 8.2m

20ft / 6.0m
27ft / 8.2m
The V-ST PRO™ is a scalable firearms shooting and skills training simulator that offers superior training environments. The system's flexibility supports a combination of marksmanship and use of force training on up to 5 screens from a single operator station. The V-ST PRO™ is also capable of displaying 1 to 30 lanes of marksmanship featuring real-world, accurate ballistics.

**V-ST PRO™ SYSTEM FEATURES AND CAPABILITIES**

### V-MARKSMANSHIP™

Caliber, muzzle velocity, projectile mass, projectile length, max range, ballistic coefficient and environmental factors are all crucial in understanding the motion of projectiles being fired from a weapon. VirTra’s knowledge of these critical components is what makes the V-Marksmanship™ software the industry’s superior choice for accurate firearms training.

- **MULTIPLE RANGE ENVIRONMENTS**
  - Indoor/Outdoor (daytime/nighttime)
  - Capable of shooting to distances up to 500m

- **REAL WORLD BALLISTICS**
  - Replicate live fire
  - Independently verified greater than .08mil accuracy
  - Customizable End User ammunition

- **WEAPONS**
  - Customizable End User configuration
  - Accounts for sight height, zero range, caliber, barrel twist, barrel length
  - Supports multiple weapons on the same lane

- **COURSE OF FIRE AUTHORING SOFTWARE INCLUDED**
  - Import end user paper style target
  - Pre-Installed DoD small arms courses of fire
  - On-the-fly course of fire modification

- **DEBRIEF CAPABILITY**
  - Video Capture and replay
  - Identify shot sequence

### USE OF FORCE

Use of force continuum training includes support for officer presence, verbal commands, OC, TASER®, less lethal impact weapons and deadly force options. VirTra employs full time law enforcement and military use of force Subject Matter Experts to create and produce scenarios for the V-ST PRO™.

- **VIRTRA STAFF SUBJECT MATTER EXPERTS**
  - Force Science Analyst Certified
  - Combined 100+ years of real world experience

- **VIRTRA STAFF VIDEO PRODUCTION CREW**
  - Industry professionals in video and post production
  - Extensive screening and audition process
  - LE and MIL only use true to life
  - Professional actors for realistic immersion

- **REALISTIC SCENARIO LIBRARY**
  - Based on after action reports
  - Multiple training points within each scenario
  - Objective based training

- **CONSEQUENTIAL TRAINING**
  - When VirTra’s patented Threat-Fire™ is utilized
  - Influences physiological changes
  - Elevates threat awareness during scenario training
V-ST PRO™ IN ACTION!

LAW ENFORCEMENT APPLICATIONS  
COMMERCIAL APPLICATIONS  
MILITARY APPLICATIONS

SYSTEM SPECS

- 1 Hi-Res projector
- 1 Hi Speed tracking camera
- 2 powered speakers
- 1 computer - Intel® processor, SSD HD
- Hi-end graphic card
- Instructor station
- Single monitor

FOOTPRINT & CONFIGURATION

SCREEN SIZE
Choice of 14' or 16' Screens
* 16' is the most common configuration. Additional and customizable configuration options available.

SOFTWARE PACKAGE
V-Sim™  
V-Author™ Player  
V-Marksmanship™  
V-Marksmanship Authoring Capability

Scan the QR code with your smart phone device or visit https://vimeo.com/95547587 to view a product demo of VirTra's V-ST PRO™
The V-100™ is a single screen, affordable, judgmental use of force firearms training simulator. The extensive library of realistic training scenarios is capable of supporting the entire use of force continuum from verbal skills, less than lethal options (TASER®, beanbag, pepperball, OC) to lethal force. The system fully supports marksmanship and skill building from basic to advanced.

**V-100™ SYSTEM FEATURES AND CAPABILITIES**

- Real-life scenarios and marksmanship training capability
- High resolution video
- Debrief and record a trainee’s performance, judgment, and reaction time
- Arsenal of recoil kits available for most firearms
- One year “Best in the Industry” warranty with 24/7 service and technical support

*“The VirTra simulator allows Marksmanship and Realistic Scenario Based Training to take place on a daily basis without the need for a shooting range, protective equipment, role players, safety officers, or a scenario based training site.”*

**Officer Yong Lee, Bellevue PD**
Instructor/Firearms Training Coordinator Bellevue, WA
**V-100™ IN ACTION!**

**SYSTEM SPECS**

- **Desktop Speakers**
- **12 ft Screen**
- **14 ft / 4.2m**
- **12 ft / 3.6m**
- **15 ft / 4.5m**
- **18.6 ft / 5.6m**

**FOOTPRINT & CONFIGURATION**

**SCREEN SIZE**

12 ft

**SOFTWARE PACKAGE**

- V-Sim™
- V-Author™ Player
- V-Marksmanship™
- V-Marksmanship Authoring Capability

Scan the QR code with your smartphone device or visit https://vimeo.com/95547587 to view a product demo of VirTra's V-ST PRO™
SCENARIO AUTHORING SUITE

VirTra continues to revolutionize simulation training with the latest addition to our product lineup, the V-Author™ Software Suite. Create, edit, and train with content specific assets suited to your agency’s training objectives.

CREATE, EDIT AND TRAIN WITH EASE

V-Author™ software allows users of the VirTra Simulation equipment to create, edit, and train with content specific to agency training objectives and environments. V-Author™ is an easy to use application capable of almost unlimited custom scenarios, skill drills, targeting exercises and firearms course-ware proven to be highly effective for users of VirTra simulation products.

CUSTOM CREATE YOUR OWN CONTENT!

Specific, real world environments or scenes can be photographed and uploaded to the V-Author™ software where a library of characters, props, visual effects and animated targets can be added with a few clicks of the mouse. Use panoramic photographs of high risk locations, scenes of previous use of force incidents or use our pre-loaded environments to quickly and easily train with the V-Author™ software.
V-AUTHOR™ PRO
Shoot & create your own custom assets for fully customizable scenarios.

V-AUTHOR™ STANDARD
Standard pre-package assets to start authoring scenarios.

AUTHORING STATION
Computer station equipped with hardware and software used for scenario creation and asset development.

SOFTWARE/HARDWARE PACKAGES
Adobe After Effects, Quicktime 7 PRO, Panoramic Stitching Software: Autopan Giga3

STANDARD ASSET
Pre-assembled scenarios, Background assets, Props, Reactive Targets, Still Targets, and Special Effects.

TRAINING COURSE
ON LOCATION - 2 DAY CLASS
An in depth class on V-Author™ for shooting/capturing/editing assets in creating your own fully customizable scenario.

ON LOCATION - 5 DAY CLASS
An in depth class on V-Author™ for shooting/capturing/editing assets in creating your own fully customizable scenario.

ON LOCATION - 5 DAY CLASS
An in depth class on V-Author™ for shooting/capturing/editing assets in creating your own fully customizable scenario.

ON LOCATION - 2 DAY CLASS
Class on V-Author™ using the pre-package assets included in the V-Author™ Standard package.

Scan the QR code or visit virtra.com/v-author/ to learn more.
SIMULATOR UPGRADES

Top-of-the-line VirTra simulators are compatible with a large selection of the best training accessories on the market, many of which are only available to VirTra customers. Take your training program to new heights with some of these superior training tools.

1. Platform Sound Effects: Powerful amplifier and transducers that permit trainees to actually feel sounds for increased realism.
2. Elevated Training Platform: 16” raised platform positions trainees on-level with the screens, specially designed for the simulator.
3. Borderless Screens: Eliminates the 5 inch black border between screens.
4. Breachable Door: Specially-designed door for repeated break-ins and stage extension allows room-clearing training and CQB exercises.
5. Touchscreen Upgrade: An easy to use touchscreen upgrade permits user-friendly system operation by the instructor.
SIMULATOR ACCESSORIES

These accessories extend the capabilities of our firearms training simulators, allowing you to customize and enhance your military engagement skills and law enforcement use of force training.

1. **OC SPRAY**: Laser-based OC training device use for non-lethal options.

2. **Threat-Fire™**: Clip-on patented Threat-Fire® return fire simulator device delivers safe and adjustable electrical shock to simulate return fire and enhance realism.

3. **TMaR**: Real-time monitoring, recording, and playback device. Use for training debrief.

4. **TASER®**: Laser-based TASER® use for non-lethal options.

5. **Low Light**: Hardware and software for low-light training - includes 2 flashlights.

6. **Wireless Host**: Required for wireless recoil kits and Threat-Fire® device to connect to the VirTra simulator.
Our entire line of recoil kits produce powerful recoil action, operate at the correct cyclical rate, and can even be installed in the trainee's own weapon. VirTra's recoil kits can also save money, while providing a level of safety beyond that possible with live ammunition.

**TETHERLESS RECOIL KITS**

Real firearms don’t have tethers, inspiring VirTra to develop a tetherless recoil system. Our recoil systems simulate the most realistic recoil without the obstruction of pressure supply tubes or electronic wires, allowing the trainee a full range of movement.

Recoil systems improve shooting skills and without ammunition, dramatically reducing the cost of training with no harmful gasses, blank cartridges or lead deposits.
STANDARD RECOIL KIT

The SRK system differs from the TRK system by use of a tethered air supply. The air can be supplied from a separate tank or small belt pack. This allows more mobility than other tethered systems due to the fact that the trainee can have a small and lightweight tank on their belt or back.

RECOIL KIT ACCESSORIES

Refill and Recharge stations provide cost effective and unlimited training.

1. Refill Station
   Table-top refill station for all refillable magazines.
   Easy to use with a push of a button.

2. Recharge Station
   Recharges the internal battery for up to four magazines at once.

RECOIL KITS THAT FIT A VARIETY OF DIFFERENT WEAPONS

VirTra is constantly developing new models. Contact us for your specific needs.
RETURN FIRE SIMULATOR

Patented Threat-Fire™ return fire, or “shoot-back” device utilizing electric impulses to effectively simulate live fire with no safety equipment needed. Unlike shoot back cannons, there is no firing of projectiles which lowers the risk of potential injury to the trainee.

Less equipment equals less distraction, and more time to focus on training.

ADDS REAL consequences to FIREARMS TRAINING

Fully integrated into VirTra’s firearms training simulators, the Threat-Fire™ represents a higher standard in simulation. Trainees learn to handle consequences in training – the best possible simulation experience in preparation for duty.

THREAT-FIRE™ FEATURES AND CAPABILITIES

- **Enhances realism and effectiveness of training** - Electric impulses add stress and consequences to training.
- **Lightweight** - Compact, light, and durable clip-on training device.
- **No aiming required** - Trainer can focus fully on the trainee.
- **Wireless** - Freedom of movement inside and outside the simulator.
- **Environmentally Friendly** - Powered by rechargeable battery pack.
- **Compatibility** - Fully integrated into all VirTra simulators.
- **Safety** - No eye protection required. Fail-safe impulse protection.
- **Adjustable** - Impulse wirelessly adjustable from 0.2 to 2.5 seconds from 50ft away.
- **Effective** - Can penetrate many layers of clothing.
PATENTED AND COMPACT RETURN FIRE DEVICE

VirTra’s patented Threat-Fire™ return fire, or “shoot back” device utilizes electric impulse to effectively simulate live fire with no safety equipment needed. There’s no cleaning up of projectiles or potential of injury to the trainee. Less equipment equals less distraction, and more time to focus on training.

In accordance with Section 287(a) of Title 35 of the United States Code, the reader is hereby placed on notice of VirTra’s Simulators and Systems with Threat-Fire™ Function

SYSTEM SPECS

Power : 100-240VAC @ 50-60 Hz
Output : 80,000V @ 0.13mA
Weight : 1 lb
Size : 2.25” W x 6.0” H x 1.75” D

USER WARNING

The Threat-Fire™ is designed to be placed on a trainee in the belt area. The Threat-Fire™ unit is not to be attached to trainees in areas other than the belt area. It should be operated and monitored by a professional.

Scan the QR code with your smartphone or visit virtra.com/threat-fire/ to learn more.