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## AVDANCED Shooting Simulator

#### UP TO 6 LINES

LAW ENFORCEMENT AND MILITARY

# DAVNAR Tech

## **Advanced Shooting Simulator**

#### Mod. PTV-2 / PTV-4 / PTV-6

- (1) It can be set up for 1-2-4-6 lines. Dry fire. Easy installation in Fixed or Mobile Version.
- 2 Shooting range with fixed and moving targets, with parameterizable distances. Marksmanship exercises, Two Men Drills, Competition, Shoot Off, Joint Tactical Actions.
- Shooting Competition (Shoot Off) with Different Degrees of Difficulty and Unforeseen Situations. COMBAT DRILLS.
- Decision making exercises with simulation of real situations: Interactive videos and interactive 3D scenarios
- Weapons with wireless communication and/or Real Weapons replicas adapted for Special Forces
- Scenarios that can be customized to the user's needs. Pre and Post shot diagnostics with short and long weapons, and replicas.
- Daily, monthly, and customizable Reports of scores for each session and each shooter.
- Screens, Manuals and Reports in English, Spanish and Portuguese.
- Training with no risk of accidents, without ammunition costs and with minimal environmental impact.

#### Versions available with 2, 4 and 6 simultaneous lines, with weapon replicas with or without communication (depending on the model).



### **TECHNICAL SPECIFICATIONS**

	PTV-6	PTV-4	PTV-2
AAdvanced Shooting Simulator specific for Security and Defense Organizations - Local Police. With A WIDE RANGE of OPTIONAL benefits. A SPECIAL EVOLUTIONARY MAINTENANCE SERVICE IS OFFERED WITH PERMANENT UPGRADE OF THE SIMULATOR	Yes	Yes	Yes
CONVERSION KIT for GLOCK 17 Replicas (OR OTHERS) with blowback or IR laser ammunition for handguns and Assault Rifles Cal 9mm (without blowback) / OPTIONAL, SEE Kits for recoil weapons	6	4	2
3D exercises and real videos, 3D IPSC PRACTICAL SHOOTING TOOLBOX - UNLIMITED EXERCISES TO CREATE AND SAVE BY THE CUSTOMER; interchangeable background images / OPTIONAL: SEE customer-created videos	NEW FEATURES	NEW FEATURES	NEW FEATURES
Maximum Number of Shooters. Different independent exercises to practice marksmanship, two men, competing, or in joint tactical actions.	Up to 6; identifies EACH shooter	Up to 4; identifies EACH shooter	Up to 2; identifies EACH shooter
Projector: Full HD / Screen Dimensions:	4,20 m. x 2,40 m.	4,20 m. x 2,40 m.	4,20 m. x 2,40 m.
Projector - Screen Distance	5 m	5 m	4 m
DETAILED REPORTS on each exercise and video: PDF/E-Mail	Yes	Yes	Yes
Scalable models (ADDITIONALLY)	Model that may come from previous scaling	From 4 to 6 lines	From 2 to 4 or 6 lines

#### All Models Accept The Following Optionals

Exercises: The customer can purchase new 3D Exercises upon request. Videos can be made by the client (<3 min) and mastered by DAVNAR Tech.	Kits for Rifles 4.5/5.5/6.35 mm //.177/.22/.25 Shotgun 12/16 gauge without Blowback
Kits for other Long Guns with or without blowback CHECK BRANDS AND MODELS	Precision Kits for REAL Handguns: CHECK BRANDS AND MODELS
The PRE-FIRE and POST-FIRE of the weapon, with configurable times, is recorded and graphically represented in a target report.	Premium Training: Curved screen to create a more immersive environment.
HYBRID FUNCTION (practice with live ammunition) - INDOOR RANGE WITH SHOTS RECORD - and with dry fire - SHOOTING SIMULATOR -	Real life training with multiple screens (120° or 180° view)





### Non-Lethal Weapons Available with DAVNAR Tech Advanced Shooting Simulators

Virtual Non-Lethal Weapons that Immobilize the opponent in various ways. **Tactical** Pepper **Spray Tactical** Electric **Baton Tactical TASER** 

## Your Real Weapon for Virtual Shooting

With IR Laser Device

#### How does it work?

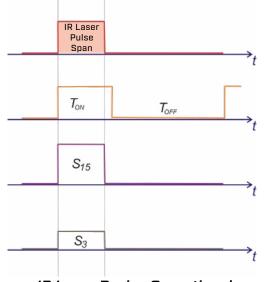
The IR Laser Device by DAVNAR Tech generates infrared laser light, providing instant visual information about the location of each shot during different exercises in the DAVNAR Tech Advanced Shooting Simulator. The IR Laser Device features a rechargeable battery and a mini-USB connector (with connection cable).

The IR Laser Device and its digital shooting system operate when activated by a sensor, trig-



IRM IR Laser Device

gered by the vibration generated by the blowback effect; it is easily mounted on the Picatinny Rail of the replica.



IR Laser Device Operational Parameters



Pistol with IR Laser Device





#### How does it work?

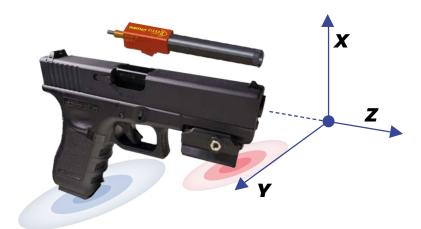
The most realistic way to practice virtual shooting with a real firearm is by using a DAVNAR Blowback Kit + VISÃO CUSTOM with a DAVNAR Tech IR Laser Device. The IR Laser Device is installed on the Picatinny rail of the firearm. The barrel is changed in the firearm during virtual shooting practice.

The change from a real firearm to virtual use results in a safe training, as the firearm barrel is removed, eliminating the chamber and any possibility of inserting real ammunition. It is replaced with a new barrel compatible with the firearm.

The system has been developed to be used with compressed CO2 gas, easily available and low-cost. This way you can experience the benefit of realistic training with blowback, where DAVNAR + VISÃO CUSTOM conversion barrels specific to each real pistol are used to achieve the recoil effect. SEE AVAILABLE MODELS - ASK ABOUT OTHER MODELS. **Blowback KITS** 

BRAND	MODEL	
GLOCK 17	gen 3	
GLOCK 17	gen 4	
GLOCK 17	gen 5	
GLOCK 19	gen 4	
GLOCK 19	gen 5	
Beretta	PT 92	
Bersa	TPR 9	
Taurus	1911	
Taurus	1911 BULL	
Taurus	PT 92	
Taurus	TS 9	
Imbel	MD 2	
Imbel	MD 1	
STI	2011	
VISÃO	3011	
OTHER MODELS UNDER DEVELOPMENT		

Every time the trigger is pressed, the slide moves as if a real shot is fired, and at the same time, an infrared IR laser pulse is generated as a result of the described movement.



It is worth noting that DAVNAR + VISÃO CUSTOM Blowback Kits come with qualified technical support when purchased from authorized agents.

## Long Guns, Rifles and Revolvers

#### How do they work?

For the adaptation to virtual use, both in 12 Gauge shotguns and in compressed air rifles or various replicas with or without Blowback, an IR Laser Device is used, placed at the end of the barrel, with or without the Picatinny rail.



If there is a Picatinny rail, the IR Laser Device is installed at the end of the rail. If there is no Picatinny rail, a Picatinny rail emulator is used (see image), and with every firing pin impact, the IR Laser Device emits a pulse that hits the screen of the Shooting Simulator as a result of the generated vibration.



Picatinny Rail Emulator Mount Example

Upon clients' request, a 12 Gauge cartridge emulator, a 9mm or .38 Caliber ammunition emulator can be supplied. This way the firing pin impacts a high-resistance rubber surface, solely to ensure the impact is not in a vacuum, thus reducing the vibration of the firing pin.

The use of the cartridge

/ ammunition emulator also provides greater safety, as it ensures the impossibility of inserting real ammunition during virtual shooting practice.

The installation at the end of the barrel tube of the IR Laser Device is temporary and only takes place during virtual shooting practice, using a Picatinny Rail emulator and two disposable self-locking plastic straps. When the shot is fired with the gun replica, carbine, rifle, shotgun, or automatic replica, the firing pin is activated. This generates a vibration that produces an emission of infrared IR laser light, getting instant visual information for the location of the shots during different shooting simulator exercises.



Revolver with Picatinny Rail Emulator

# **Pre-Post Shot Traceability** In Real Firearms and Replicas / Markers

#### DAVNAR Tech IRM-P IR Laser Device with communication with the Shooting Simulator.



The Samge Graphic on a Smartphone

The IRM-P IR Laser Device model comes with highly advanced technology, that not only emits adjustable sensitivity IR laser pulses and other configurable parameters, but also houses 6 active motion sensors using nano mechanics technology. Of all these, 3 sensors determine the moment of the IR laser shot, while the other 3 allow the processor of the Simulator / Virtual Shooting Range to 'draw' the movement of the weapon's tip prior to the shot -PRE-Graph- using axial and angular technology through analog-to-digital transducers and converters. They also depict the movement of the weapon's tip after the shot -POST Graph- in the 10 Zone Target

exercise report. All of this is possible because the IR Laser Device has wireless communication with the Simulator processor.



(\*) We offer a FREE application for smartphones, so that IRM-P IR Laser Device users are able to practice weapon control before and after each shot on their phones, without the need for any Simulator. The manufacturer has developed a website that is accessible to IRM-P IR

IRM-P Laser Device

Laser Device users, where customers who subscribe with a minimal annual fee can re-set their IR Laser Device and adjust settings for different firearms.

#### Settings website for PRE-POST Laser Devices

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Pistol with Picatinny Rail and IRM-P Laser Device

## **Replicas** with IR Laser Device

#### How do they work?

#### These are Markers / Pistol Replicas with original brand markings and licenses, powered by Green Gas - CO2 -/ Battery. The IR Laser Device and its digital firing system activate when triggered by a sensor, responding to the vibration produced by the blowback effect; it is easy to mount on the Picatinny Rail of the replica.

The Laser Device generates an infrared laser light, providing instant visual information about the location of each shot during different exercises in the

DAVNAR Tech Advanced Shooting Simulator. The IR Laser Device come with a rechargeable battery and a mini-USB connector (with connection cable). 

#### **New ACCESORY Features** Under CONTINUOUS DEVELOPMENT







# Real Shooting Practice with Remote Viewing and PRE-POST Shot Recording





# **Other Accessories**

#### **Tactical Stress Jacket**

Screen shot sensitive vests. The Jacket Stress System emits an infrared pulse by which the shooter feels in its own body the shots received from each opponent through a vibration of the vest.

The system records the shots received and who shoots each Jacket Stress System.



#### **Tactical Flashlight**



illuminates the screen in exercises that take place in low light. With this accessory, shooters gain experience in darkness, using a weapon and a flashlight simultaneously.

#### **Military Grade Cases with Foam Interior**





# Immersive Training Experience

#### Multiple Screen System

With a 180° View





#### **Curved Screen**

Hybrid Indoor Range: Real & Virtual

With Shots Recording and Remote Viewing



# DAVNAR CLOUD

DAVNAR Cloud is a complete and modular service platform for DAVNAR Tech Advanced Shooting Simulators.

One of the benefits provided by DAVNAR Cloud is the Report Management System. It is a web application that can be added as a service to any client that has a DAVNAR Tech Advanced Shooting Simulator that requires it.

The DAVNAR Cloud Reporting System has a role structure: shooters, instructors, and owners, each with a different need to view the information stored.



The DAVNAR Cloud Reporting System pro-

vides statistical calculation operators: standard deviation, square mean, algorithms for using the Gaussian distribution, with different confidence intervals and others. The System has an Artificial Intelligence (AI) engine that analyzes the data and provides suggestions for interpretation of the reports produced.

That is why we say that the DAVNAR Cloud Reporting System allows monitoring and a process of continuous improvement in the shooter's skills, guaranteeing optimal results over time.

DAVNAR Cloud is an expanding platform, as new needs for tools as a service arise from our clients. The Reporting System is part of the data maintenance service originated in the DAVNAR Tech Advanced Shooting Simulators, at a very low monthly cost, for each shooter.

# KILL HOUSE



Premium Training with Stress House function -CQB, CQC-: Modular and portable unit, for raid training and to recreate kill house/shoot house scenarios. Reports made by the Simulator on the performance of each man. Wireless system for recording virtual shots of opponents and officials.

# KILL HOUSE

#### Figures - 3D







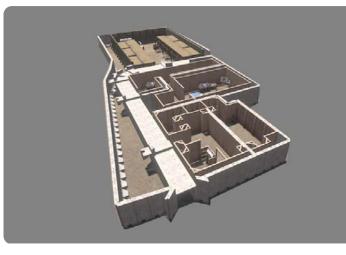






#### **Real Video**





**KILL House Facilities Used** for Training

# TRAINING

# **REAL VIDEOS**

Real training exercises to improve the skill of the shooter who moves through a virtual training field, training coordination and speed following the shooting sequence.

Customers can create their own videos (t < 3') - Optional.



# **INTERACTIVE 3D**

Advanced training to improve the skill of the shooters moving through a virtual training field, exercising coordination and speed in which they must follow the shooting sequences, complexity, and configuration.

This exercise is ideal to develop the Drill 2 IN THE CHEST 1 IN THE HEAD; this exercise is used to train Special Forces around the world.















# TOOLBOX IPSC-IDPA

FOR 3D STAGE DESIGN

CUSTOMIZED 🗘

DESIGNED () ESPECIALLY FOR INSTRUCTORS



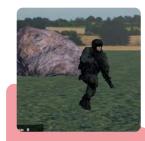
## New Exercises Under Constant Development



**FBI Target** 



**Training Field** 



**Moving Targets** 



Sequence 10

#### EXERCISES FOR M-16



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#### **POLICE TRAINING EXERCISES**









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