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NEW ORION FIRMWARE ADDS FEATURE & FUNCTION

The ORION Non-Linear Junction Detector has a new firmware release for keypad and HX (touchscreen) ORION 2.4, ORION 900, and ORION HX Deluxe models.

The update is available as a free download on the REI website. Firmware and installation instructions for keypad models and HX (touchscreen) models are different; so it is important to choose the correct model update.

Firmware updates incorporate bug fixes and performance enhancements that are often invisible to the user.

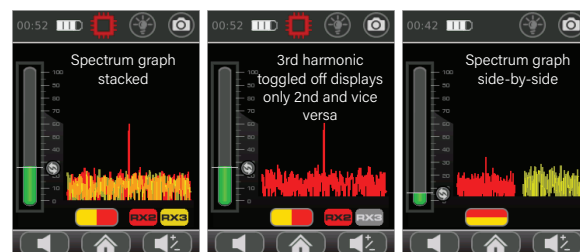
New Spectrum View for HX Models

The firmware update for *HX (touchscreen) models includes Spectrum View, a new software feature that shows spectrum display of the 2nd and 3rd harmonics.

The Spectrum View can show a 2nd or 3rd harmonic response before it registers on the LED bar graph. It can also improve discrimination between semiconductors and false responses.

Current production models are shipping with this latest firmware.

IMPORTANT REMINDER - if you would like to receive software update notifications directly, visit this page and enter your email:
www.reiusa.net/signup



Spectrum View provides several chart display options for comparing 2nd and 3rd harmonic responses.



The "Home" screen will have a Spectrum View button in place of the "Keypad" screen, which has moved to Setup\Tools\Keypad Screen.

TSCM TRAINING ON THE RISE

The REI Training Center will finish 2018 having trained the largest number of students ever. Over 50 classes were conducted at the Training Center in Cookeville, Tennessee. Scheduled classes ranged from one to five days in length. In addition to the scheduled training classes at REI, our 6 full-time instructors were kept busy throughout the year with onsite and offsite custom training courses.

Reasons for greater interest

The interest correlates directly to a greater need for quality professional training on ways to protect against information theft and illicit technical surveillance.

Corporate espionage is permeating every business sector - banking, legal, pharmaceutical, technology, even real estate. The growth of smart homes is raising privacy and legal concerns as homes placed on the market can gather intelligence from potential buyers who tour the homes, using built in cameras and microphones. Eavesdropping surveillance devices can be hidden in almost any facility. Installing listening devices can be really simple, cheap, and easy to disguise in just about any property, providing a way for sellers to see and hear conversations among buyers and agents. The high value of commercial property makes tactics like this even more lucrative.

Here's a story from March, 2018 on MarketWatch website titled "Home sellers now use spycams to gather intelligence on prospective buyers." www.marketwatch.com/.

The example of real estate surveillance may not be billion dollar corporate level espionage, but if a private home seller can exploit new cheap technology for economic gain, imagine the opportunity a bugged board room could generate.

Just as the article above illustrates, the more these kinds of incidents occur, the more likely they are to be published. Electronic, print, and social media have done a lot to increase awareness and spread information. Security tradeshow and conferences provide opportunities to see and experience the latest products and trends. Events like REI's Business

Intelligence Protection Seminars (BIPS) expose the general pervasiveness of technical surveillance threats and the need to consider it an important part of an overall security strategy. And of course, thorough in-depth TSCM training teaches how to recognize threats and the necessary steps to mitigate them.

If you need technical security training, take a look at the REI Training Center. The Countermeasures Core Concepts course in January is already full, so begin planning for February or March. [REI Training Center Page Here](#)



ANDRE Training

REI will hold a one-day ANDRE training course at the REI Training Center on February 28, 2019.

This course will provide a thorough overview of the ANDRE's operations, functions and will include hands-on exercises in our dedicated project rooms. Future ANDRE training will be integrated into the Countermeasures Core Level 1 Course and the RF OSCOR Level 2 course.

Date:	February 28, 2019 8:30 am - 4:30 pm
Cost:	US\$295 per student
Location:	REI Training Center 455 Security Drive Cookeville, TN 38506

[Register For The Course Here](#)

PROTECTING CONVERSATIONS WITH NOISE MASKING

Protecting meeting spaces from illicit eavesdropping is a growing necessity. Start by ensuring there are no devices located inside the room itself, whether hidden or visible, that could be compromised for illicit purposes. Some examples of devices are desk phones, mobile phones, or audio recorders hidden in furniture or everyday items. Another threat that must not be neglected is audio leakage from surrounding surfaces and adjacent offices. These are vulnerabilities for both those listening in on your meeting with illicit intent or the passive observer in an adjacent office.

REI's Acoustic Noise Generator (ANG) uses audio noise to mask confidential conversations protecting the outer perimeter of a meeting space from eavesdropping. It uses basic technology, which has been utilized for many years, but proper implementation requires a comprehensive understanding of the environment in which the ANG will be deployed. In order to implement layered protection correctly, first answer these questions regarding the meeting space you are trying to secure.

1. What is the square footage of the room?
2. Are there any windows in the room?
3. Is there a drop-ceiling or raised floor?



An effective deployment plan can be decided on once that information has been gathered. The ANG uses two different types of devices in order to protect private conversations: audio transducers that are physically attached to building materials and omni-directional speakers that are mounted in a structure's air-gap spaces.

TRN-2000 transducers work by injecting acoustic noise into walls, ceilings, windows, plumbing, air ducts, and any other vulnerable structures. While attaching a few transducers to drywall might imply it is effectively masking the private conversation in a meeting space, the reality is without properly layering the transducers, there will still be audio leakage vulnerabilities present. The effective diameter per transducer is 4 to 5 feet; meaning if you have an eight-foot wall on one side of the room, two transducers will need to be placed to ensure the entire wall remains protected.

Windows can be compromised from outside the room if they are not protected as well. Adding a transducer to the window will disperse vibrations throughout the material, preventing audio detection tools like a laser microphone from capturing room audio.

Finally, air gaps like drop ceilings and raised floors above or below a meeting room can be vulnerabilities



TRN-2000 shown installed on metal drywall support structures for best result

PROTECTING CONVERSATIONS CONT'D

as well. To combat this, REI's Omni Directional Speaker projects masking noise into drop ceilings, closets, crawl spaces, and other vulnerable air spaces helping to conceal the conversation.

For best results, noise masking equipment should be installed during construction of the meeting space. Alternatively, installing sound masking in existing structures requires a full understanding of the ANG's capabilities and best practices for installation. In those cases, REI's Rapid Deployment Kit provides the tools and accessories to rapidly deploy a complete ANG system in a medium sized meeting room. The kit includes the following:

- Acoustic Noise Generator (2)
- TRN-2000 Audio Transducer (24)
- Omni masking speakers (2)
- ASA-2000 Acoustic Spectrum Analysis Software
- Various tools, cables, and accessories

To learn more visit the ANG product page on our website or reserve your spot in the 5-day Countermeasures Core Concepts course offered at REI's training facility in Cookeville, Tennessee. This course not only covers the ANG, but offers a complete overview of counter surveillance components, related equipment, and existing threats.

REI

*Rapid
Deployment
Kit*



TESTING VOIP PHONES FOR VULNERABILITIES

A search of the term 'VoIP Phone Vulnerabilities' results in a torrent of articles discussing network hacking and how to protect networks from outside intruders. VoIP data protection is a legitimate security concern I.T. departments must address. However, it is too often overlooked that VoIP phones are still just phones that transmit conversations from one point to another using cable. In some cases, many of the same cables are used for the VoIP phone as the POTS phone that preceded them.

Remember that VoIP phone security is more than just protecting data traffic. The cables that carry VoIP data can also be used to transmit non-VoIP information. This could include audio from a hidden microphone or video from a camera. Physical access to cabling and phone devices can, and will continue to be exploited for illicit purposes.

To learn more about how the TALAN 3.0 protects business telephone systems, please visit <https://reiusa.net/talan>.

Also, consider attending one of REI's training courses that discusses in-depth what this article has covered. To view upcoming courses, click [here](#).

REI

BUSINESS INTELLIGENCE PROTECTION SEMINAR

SAVE THE DATE

SAN DIEGO
2.12.19

PHOENIX
2.14.19

REI
RESEARCH ELECTRONICS INT'L

2019 TRAINING CALENDAR

Countermeasures Core Concepts Level 1

January 28 - February 1

RF OSCOR Course Level 2

February 4 - 8

TALAN Telephone Countermeasures Course Level 2

February 4 - 8

VoIP Course Level 3

February 11 - 15

Countermeasures Core Concepts Level 1

February 18 - 22

RF OSCOR Course Level 2

February 25 - March 1

RF Certification Level 3

March 4 - 8

SPANISH COURSE PACKAGE

Spanish RF OSCOR/TALAN Level 1 & 2

March 11 - 22

Countermeasures Core Concepts Level 1

March 18 - 22

RF OSCOR Course Level 2

March 25 - 29

TALAN Telephone Countermeasures Course Level 2

March 25 - 29

TALAN Certification Level 3

April 1 - 5

Countermeasures Core Concepts Level 1

April 22 - 26

RF OSCOR Course Level 2

April 29 - May 3

TSCM IN THE NEWS

COUNCILMAN FOUND GUILTY OF ORCHESTRATING KICKBACK SCHEME, PLANTING HIDDEN CAMERAS

Source: CBS Philly

Article: <https://cbsloc.al/2PgVaMi>

PHONE RECORDINGS PROMPT EAVESDROPPING CHARGES

Source: Record Eagle

Article: <https://bit.ly/2Spbgpi>

AT SOUTH KOREAN BEACHES AND SWIMMING POOLS, A WAR AGAINST TINY SPY CAMERAS

Source: The Washington Post

Article: <https://wapo.st/2Eb9ll6>

COLOMBIA 'DISMANTLES CLANDESTINE SPY NETWORK'

Source: Columbia Reports

Article: <https://bit.ly/2OOGxAT>

BEING WATCHED AT WORK: APS SPENDS THOUSANDS ON PRIVATE INVESTIGATORS

Source: KRQE Albuquerque

Article: <https://bit.ly/2OxRqGg>

TRIANGLE'S INNOVATION, HIGH-TECH INDUSTRY STOKES ESPIONAGE FEARS

Source: WRAL

Article: <https://bit.ly/2FS3faW>

URBANA SCHOOL LEADER CHARGED WITH EAVESDROPPING ON BOARD MEETING

Source: WAND 17

Article: <https://bit.ly/2PYDN7n>

REI is on Twitter!

Want to keep up with REI's latest developments and get more #TSCM in the News stories? Follow us @REI_TSCM



TRADESHOWS & SEMINARS

BIPS SEMINAR

Beyond Physical Security REI Seminar

February 14, 2019

Phoenix, AZ

<https://reiusa.net/news/bips/>

SECURITY AND POLICING

March 5-7, 2019

Farnborough International Exhibition and Conference Centre

Farnborough, UK

<https://www.securityandpolicing.co.uk/>

BIPS SEMINAR

Beyond Physical Security REI Seminar

February 12, 2019

San Diego, CA

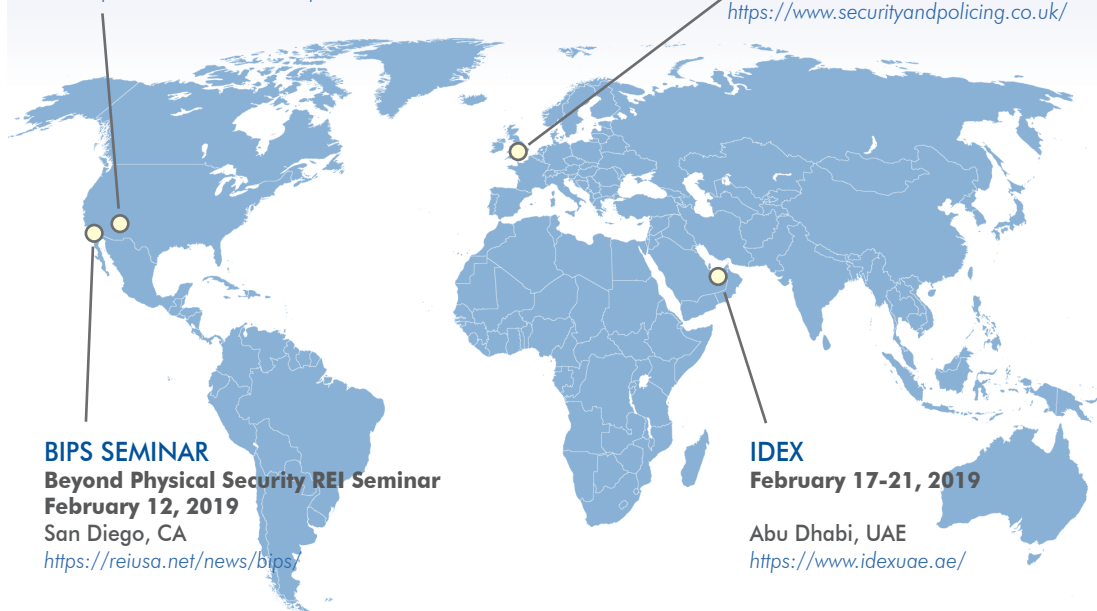
<https://reiusa.net/news/bips/>

IDEX

February 17-21, 2019

Abu Dhabi, UAE

<https://www.idexuae.ae/>



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