PURPOSE-BUILT WAVETRONIX RADAR
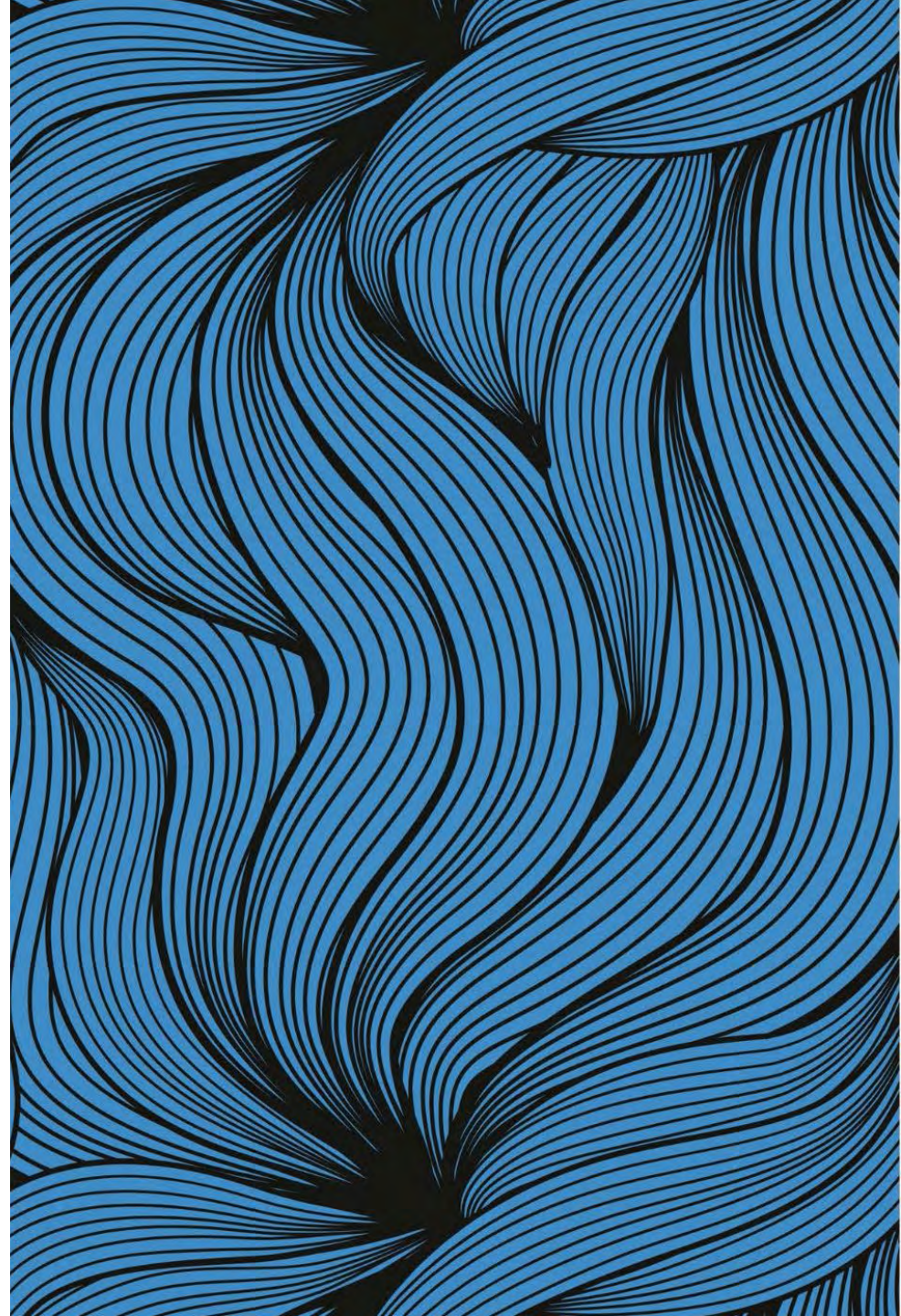
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SPENCER BANTA WAVETRONIX

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THE WAVETRONIX MATRIX STOP BAR DETECTOR

- Uses a "Matrix" of 16 tuned FMCW radar beams

- Sends/Receives signals at over 3200 times per second

- Tracks vehicles through a 90 degree field of view that extends out 140 ft.

- Includes Radar Vision ™ technology to detect and track in two dimensions

- Reports real-time presence of both moving and stopped vehicles

What does Wavetronix Matrix "Look" like?

PURPOSE-BUILT WAVETRONIX RADAR.

ALREADY IN HAWAII.

Reasons Wavetronix Is Perfect for Hawaii
- Non-Intrusive Detection (Nothing installed in the road)
- Detection can be based on speed and/or distance
- Maintenance Free (No Cleaning, No calibration)
- Works in inclement weather
- Easy Mounting and Installation

This is mature technology
- Out in the field for over 10 years
- Proven in the toughest of environments
- Collects and stores SPM data
- Best-in-class Advance detection also available
- Made in the USA. Infrastructure funding compliant.

No problems with Lenses! (There are no lenses)

Who uses us? (Agencies with at least 30 Intersections)

- State detection standard – Oregon DOT - POWER USER
- State detection standard – Montana DOT – POWER USER
- State detection standard – Utah DOT – POWER USER
- Installing and retrofitting– WashDOT, Alaska DOT – POWER USER, etc.
- City of Tampa, FL. POWER USER
- Georgia Department of Transportation, GA – POWER USER
- Huntsville, AL
- Ohio DOT
- TxDOT Fort worth, TX
- Kansas City, MO
- Cities of Portland (POWER USER), Beaverton, Salem, Eugene, OR.
- Clackamas County, OR.- POWER USER
- Washington County, OR.
- Evansville, IN
- ALDOT, AL

- City of Dallas, TX
- Corpus Christi, TX
- Vermont, VTRANS
- Toronto City, ON
- City of Knoxville, TN
- Ohio DOT District 3
- NJDOT, NJ
- City of Nashville, TN
- FDOT District 5
- Overland Park, KS
- Colorado DOT
- Oklahoma City, OK
- Houston, TX
- PennDOT Harrisburg
- Wyoming DOT

Connectivity

◦ Click cabinet unit can send data via rack card (170 environment) 2 channel or 4 channel cards

◦ Click cabinet unit can send data via SDLC. 2070E and/or ATC environment. 64 channels of detection. Make it dance and sing!

◦ ATSPM data built in for your traffic reports and timing

◦ Built-in ethernet port. IP addressable. Remote viewing. Remote report downloading.

◦ Uses less bandwidth and data than video. For cellular communication applications. Don't clog the pipe.

It's already here. On Maui...

12/06/2018	Single sensor/bought demo	5/4/2019	1/2020
• Demo'd Matrix on Maui for Maui County	• Papa Ave.	• Complete Intersection installed at Kuikahi-Waiale (Go on Google Earth to see the sensors in place!)	• Installed intersection at Mill and Main St.

Easy Installation

◦ No traffic control was needed.

◦ Easy to mount

◦ Easy to aim

Installed as a 90-day demo (Maui) at Lipoa/Piilani Hwy

◦ Demo stayed up for @ 10-12 months due to pandemic

◦ Results when taken down?

"Good morning, I live at Hokulani Golf Villas, Kihei…We notice recent service at intersection at Lipoa St. & Pi'ilani Hwy no longer recognizes a scooter or a moped. Crossing Pi'ilani Hwy Unless there is a car also… That means you must either wait for a car to come behind you or turn on What can be fast moving Dangerous Hwy at times…Please consider changing it back to allow streetlight to also recognize just a Moped or scooter…Thank You Ami Saffron"

It's already on Oahu…

2021…	Single sensor	6/8/2021	NOW
• Loops failing at Kamehameha/Whitmore	• Left turn SB	• Installed	• No maintenance needed. No one needs to clean it, adjust it, etc.

The crew said…

Wow. That was easy!

So…Oahu is the first island using this right?

I told them Maui County beat them.

WHAT?!?! Those guys? They beat us?

World class detection

- Amazingly accurate. Has been compared with loop detection/video verification by UDOT. 98% accuracy comparison*

- I could not find any independent accuracy studies published on the internet since 2018. My feeling is that many academics do not want to show favoritism to any particular type of detection.

- Not only detection – Automatic Traffic Signal Performance Metrics – NO ADDITIONAL CHARGE!

- Three most important reports resident on cabinet control device. Full suite available with ethernet connection.

- You own the data. Don't buy it back!

SIDE FIRE ON OAHU. IN USE FOR OVER 10 YEARS.

What do you get from ATP when you get Wavetronix Sensors?

- Free training – 2 full days for complete understanding in your agency.

- Complimentary set-up and alignment service (not installation or wiring) to be sure that you have an accurate, working system. We also know how to do the wiring so we can advise…

- Trained ATP technician or salesperson (me) to assist with the set-up

- Personally: Over 400 hours of training in Wavetronix products. Countless hours of field work.

- Advice on how to set up ATSPM zones – Using in Oregon, Idaho…

- Advice on best practices that other agencies use

- Technical expertise on how to get the most out of your free reports