

Procedure

Viavi Leakage Rollout Guide Version 1.5

This Document is a multiple step procedure with action needed to be taken to maximize success in implementing a Leakage Roll of your Leakage equipment. Multiple videos as well a PDF links will be provided,

System Requirements

StrataSync

Law server

CT-X

ONX-620/630 (for measuring power levels and or OFDM)

Seeker X, MCA III

Leakage Accessories

Step 1

(Technicians and Supervisors)

Know your Leakage Accessories

See PDF of parts list and description and Truck installation

https://eguides.viavisolutions.com/catvleakage/pdf/leak_assessories_install.pdf

Watch Video for more Detail

<https://eguides.viavisolutions.com/catvleakage/video/assessandtruck.mp4>

1. TRI-LKG-SEEKER-X-MF
 - Main Frame (Meter)
2. TRI-LKG-SKR-X-VEH-MOUNT
 - Mobile Mount
3. TRI-LKG-SEEKER-MCA-WIFI
 - MCA III w/Wi-Fi
4. TRI-LKG-ANT-WFS-1
 - Wideband Field Service Antenna (130-450 MHz)
5. TRI-LKG-ANT-WFS-2
 - Wideband Field Service Antenna (450-1220 MHz)
6. TRI-LKG-ANT-WVM-2
 - Wideband Vehicle Mount Antenna (250-122MHz)
7. TRI-LKG-AVM-3
 - Antenna Vehicle Mount (whip, 130-250 MHz)
 - Default cut length (138 MHz)
8. TRI-LKG-SKR-X-DPF-1
 - Diplexer for Seeker X
9. TRI-LKG-GPS-MCA
 - GPS antenna for MCA III
10. TRI-LKG-NFP-1
 - Near Field Probe
11. TRI-LKG-MCAIII-WIFI-ANT
 - Dual Freq Wi-Fi antenna (2.4 & 5.0 GHz)
12. 22129837 Power Cable **Three pin connector and Cable**
 - MMT power cable
13. TRI-LKG-SKR-MCA-PWR-CBL
 - Power/Data Cable from MMT to MCA III
14. TRI-LKG-ANT-DIPLEXER-CBL
 - Diplexer to MMT cable
15. TRI-LKG-SKR-X-MM-WIRE-KIT
16. TRI-VEH-ARM-MMC1
17. Screws for Mounting MCA III to Mobile Mount
18. Leakage Bag
19. 3 mounting nuts

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Graphic 1: Leakage Accessories Kit

Step 2

(Technicians and Supervisors)

Decide where your **Seeker X**, **MCA III** and **Antennas** and **Cabling** should be placed in the truck and outside the truck

<https://eguides.viavisolutions.com/catvleakage/pdf/truckinstallationguide.pdf>

Watch Video for more Detail

<https://eguides.viavisolutions.com/catvleakage/video/assessandtruck.mp4>



Graphic 2: Antenna Placement



Graphic 3: Seeker X

Step 3

Mobile Mount Power up and GPS Verification (Techs)

- Verify Power up and GPS satellite connection

Watch Video for more Detail

<https://eguides.viavisolutions.com/catvleakage/video/Dockingturnon.mp4>



Graphic 4: MCA III

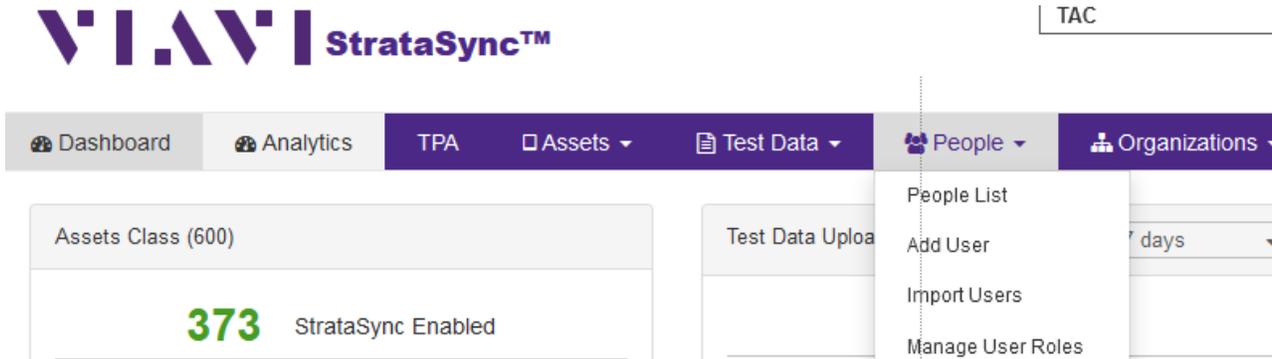
Step 4

Adding Techs to StrataSync (Administrators)

- Username
- password

Watch Video for more Detail

<https://eguides.viavisolutions.com/catvleakage/video/stratadduser.mp4>



Graphic 5: Stratasync adding Techs

Step 5

Download Mobile Tech (Technicians)

- Login to Stratasync on Mobile Tech application to verify connection.
- Bluetooth to Seeker X to verify Connection

Watch Video for more Detail

<https://eguides.viavisolutions.com/catvleakage/video/stratmtseekerx.mp4>



Graphic 6: Mobile Tech (LE Bluetooth) to Seeker X

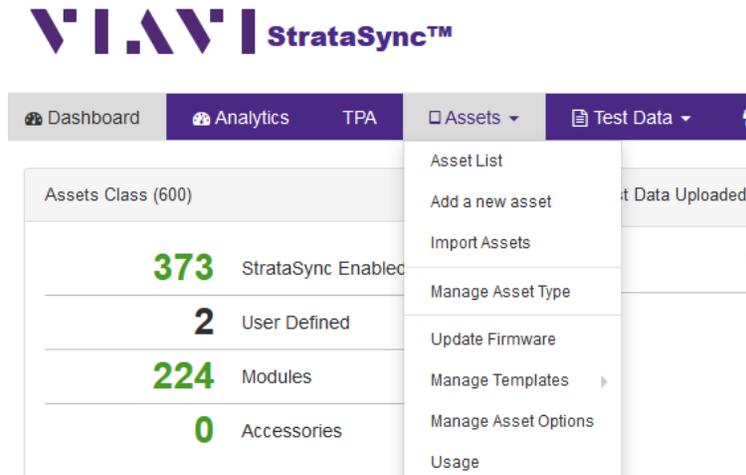
Step 6

StrataSync Firmware update to Seeker X (Administrators)

- Send Firmware update

Watch Video

<https://eguides.viavisolutions.com/catvleakage/video/seekmcafirm.mp4>



Graphic 7: New Firmware deploys

Step 7

Mobile Tech (Technicians)

- Update firmware in Seeker X using the Mobile Tech Application
- This may take up to 25 Minutes

Watch Video

<https://eguides.viavisolutions.com/catvleakage/video/seekerfirmupgrade1.mp4>



Graphic 8: Seeker Firmware Update

Step 8

Firmware update to MCA III (Technicians)

- Mount the seeker x in Mobile mount and turn on.
- Automatic firmware update

Note: Firmware of the MCA III is loaded to Seeker X and will be loaded to MCA III upon docking to the mobile mount

Watch Video for more Detail

<https://eguides.viavisolutions.com/catvleakage/video/mcafirmwaredown.mp4>



Graphic 9: MCA III Firmware Update

Step 9

Configuration set in Stratasync (Administrator)

- Seeker X (typically the same)
- MCA III (typically the same)
- MCA III (typically unique)

Watch Video for more Detail on Templates

<https://eguides.viavisolutions.com/catvleakage/video/seekerxmcaistratasyncconfiguration.mp4>

Seeker X Configuration Details

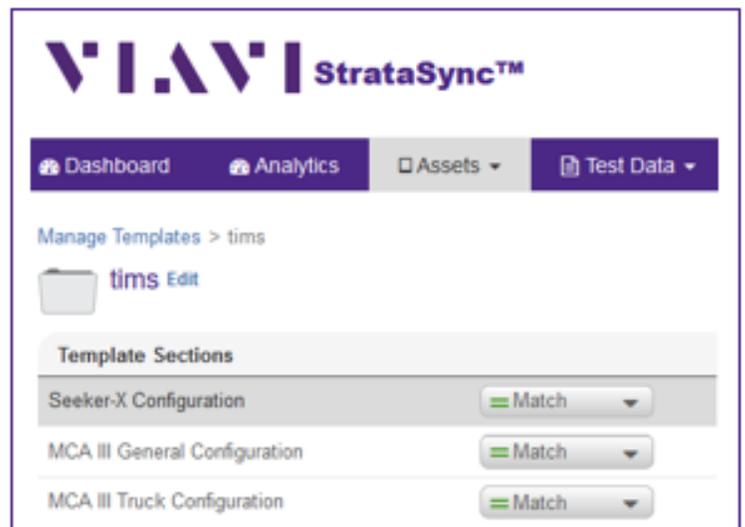
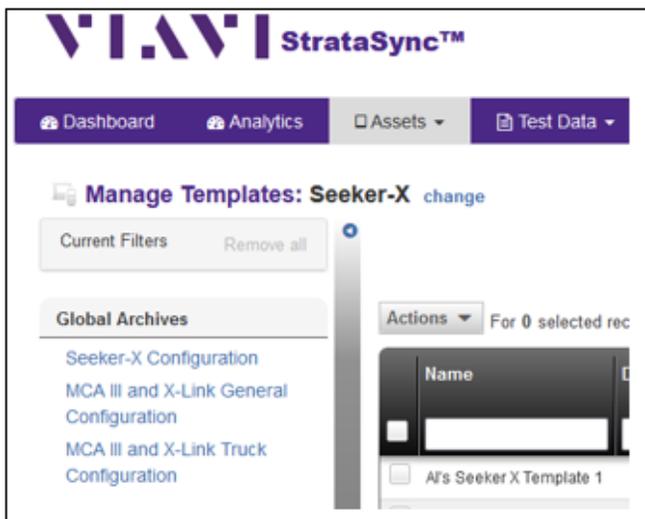
<https://eguides.viavisolutions.com/catvleakage/video/seeker%20x%20strata%20configuration.mp4>

MCA III General Configuration Details

<https://eguides.viavisolutions.com/catvleakage/video/mcaiiipart1.mp4>

MCA III Unique Configuration Details

<https://eguides.viavisolutions.com/catvleakage/video/mcatruckpart2.mp4>



Graphic 10: Stratasync Configuration file

Step 10

Sync Seeker X with Mobile Tech App (Technician)

- Use your Mobile Tech App sync to Download Seeker X and MCA III Configuration files to Seeker X

Note: MCA III files are contained in Seeker X and then loaded into MCA III when Docked to the Mobile Mount

Watch Video for more Detail

<https://equides.viavisolutions.com/catvleakage/video/seekerxdownconfig.mp4>



Graphic 11: Seeker X and MCIII Configurations Update

Step 11

Sync Seeker X with Mobile Wi-Fi and Law verification (Technician)

- Test the Wi-Fi connection Mobile Mount MCA III
- Test the Law Connection through Mobile Mount MCA III

Watch Video on WIFI Connection

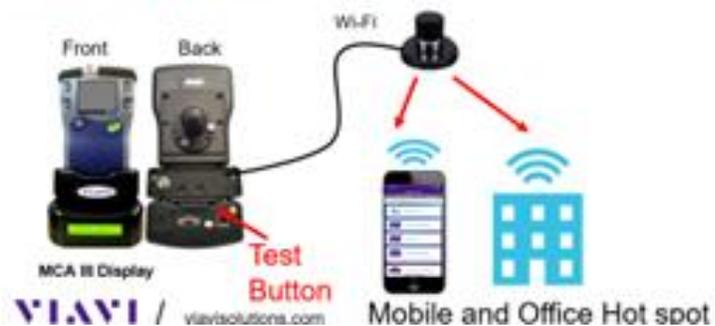
<https://eguides.viavisolutions.com/catvleakage/video/mcawifitest.mp4>

Verify Law connection Video

<https://eguides.viavisolutions.com/catvleakage/video/manupload.mp4>

Verify On MCA III

In your Truck



Graphic12: Testing WIFI and Law Connections

Step 12

CT-X (Head End Engineer)

- Brief Overview
- Set Tags and Level
- Use ONX to Set Proper Tag Level

CT-X Physical Overview

<https://eguides.viavisolutions.com/catvleakage/video/ctxip.mp4>

Set Tags Video

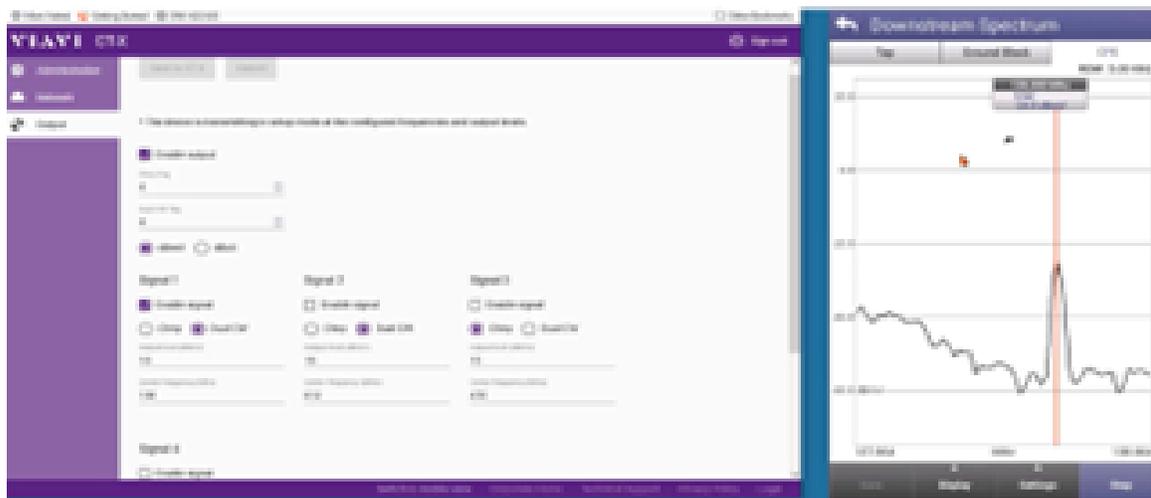
<https://eguides.viavisolutions.com/catvleakage/video/ctx-4tag4output.mp4>

10 Step CT- x setup PDF

<https://eguides.viavisolutions.com/catvleakage/pdf/Quick%20Card%20Remote%20CT-X%20Setup%20rev%201.3.pdf>



Graphic 13: CT-X Front Panel



Graphic 14: CT-X HTML Frequencies and Tag Settings

Step 13

Law X (Administrator, Technicians)

- Brief Overview

Law overview Video

https://eguides.viavisolutions.com/catvleakage/video/law_overview.mp4

Law check List

<https://eguides.viavisolutions.com/catvleakage/pdf/Law%20Software%20Check%20List.pdf>



Graphic 15: LAW X

Step 14

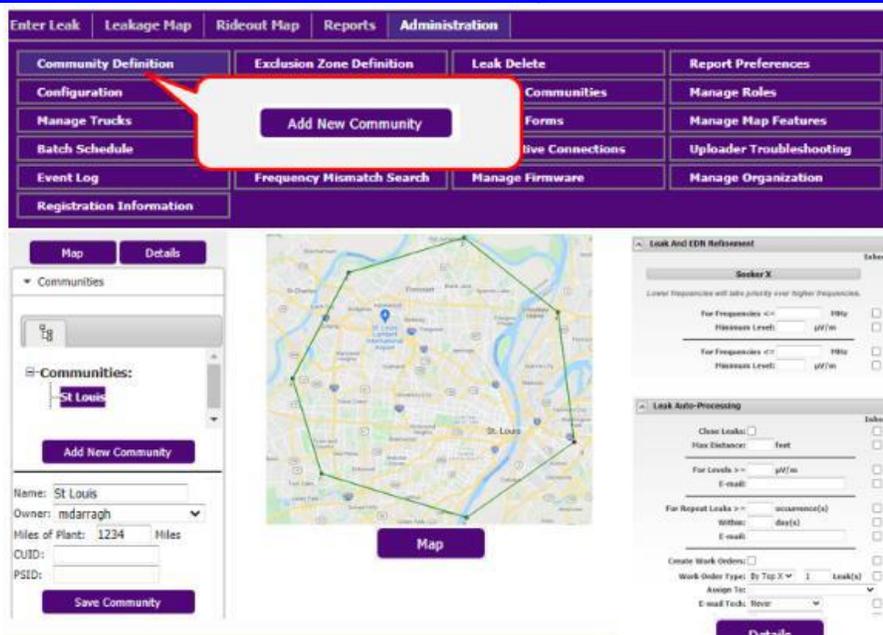
LAW X Administrator, Technicians)

Build Communities

- Setting Map Boundaries

Set up Communities Video

<https://eguides.viavisolutions.com/catvleakage/video/lawcommunity.mp4>



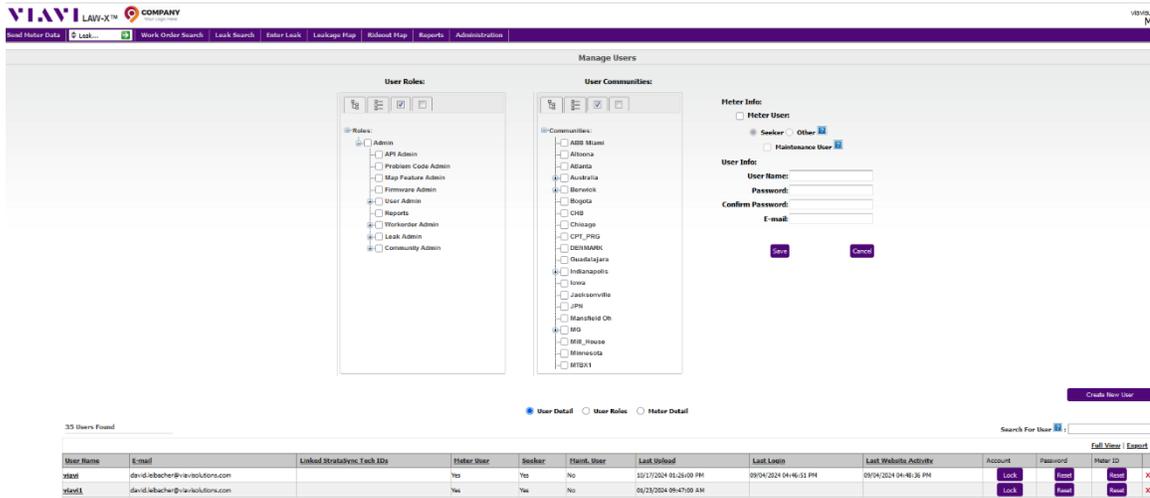
Graphic 16: Law X Community Definitions

Step 15

LAW X (Administrator, Technicians)

- Add Users
- Manage Trucks
- Manage Users and Truck Video

<https://eguides.viavisolutions.com/catvleakage/video/manuserstruck.mp4>



17: Manage user screens

Step 16

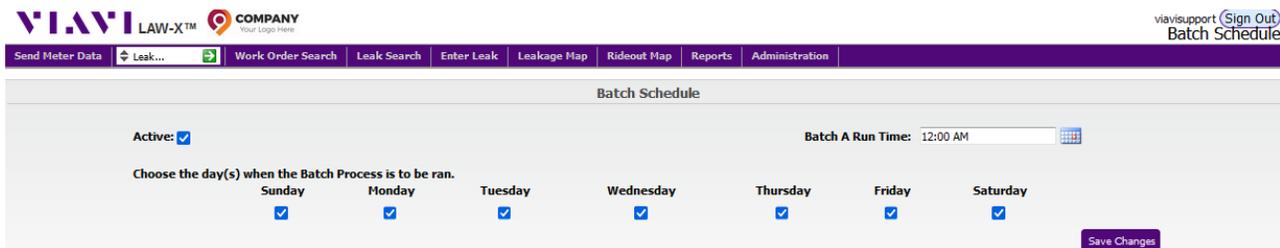
LAW X (Administrator, Technicians)

Batch Schedule and Configuration

- Set Batch Schedule
- Times setting to run Leakage data
- Configuration Parameters

Batch Schedule Video

<https://eguides.viavisolutions.com/catvleakage/video/batch.mp4>



Graphic 18: Batch Schedule

Running a live Batch Process Video

<https://eguides.viavisolutions.com/catvleakage/video/batchprocess.mp4>

Configuration Parameters (Most likely settings needed)

<https://equides.viavisolutions.com/catvleakage/video/lawconfiguration.mp4>

Configuration Parameters		
Parameter	Value	Description
Client	VIAVI Solutions Inc.	Name of client
ClientNameForHomeBasePOI	Home Base - VIAVI	Title to be shown on the home base POI
Address1ForHomeBasePOI	5808 Churchman Bypass	Street address for home base POI
StateForHomeBasePOI	IN	Two letter state code for home base POI
CityForHomeBasePOI	Indianapolis	City for home base POI
ZipForHomeBasePOI	46203	Zip or Zip+4 for home base POI
CountryForHomeBasePOI	USA	Country for home base POI
DefaultPassword	viavi	Default password when a user password is reset
ArchiveLAWRecordOlderThan	1100	How many days old should records be before archiving
NtpServer	ntp.your.org	NTP Server
DisplayUnits	0	0=uV/m, 1=dBuV/m, 2=dBuV
DistanceUnits	0	0=Miles, 1=Kilometers
OneLeakPerWorkOrder	0	1 = Constrain to one leak per work order, 0 = No constraint
GPSJitter	6	Maximum radius in meters of GPS variation allowed for a Maintenance Tech to be considered stationary
ClientReportLogo		Client-defined image displayed in the reports
ClientWebsiteLogo	th.jpg	Client-defined image displayed in the website
LeakLocation	0	1 = Send the repair tech to the observed street location, 0 = Send the repair tech to the projected leak location
StreetMinLevel	0	> 1 = Minimum required leak level in microvolts per meter (uV/m) at the street, 0 or 1 = No minimum leak level
FirstQuarterStartDate	January 1	The first quarter beginning date. Valid days are 1-28.
DefaultMapFeatureIcon	feature.png	Default icon used for Map Feature points
DefaultMapFeatureColor	#a52a2a	Default color used for Map Feature lines
WorkOrderZoom	18	Default zoom level used on Work Orders. Valid range is 2 - 18.
MapsAPIKey		API key used to authenticate API requests.
MapsAPIClientID		Client ID used to authenticate API requests.
MapsAPIChannel		Channel parameter used by Google Maps Platform to provide more detailed reports.
MapsAPIReferrer		HTTP referrer used to restrict API requests.
MapsAPIURLSigningSecret		URL signing secret used by Google Maps Platform to digitally sign API requests.
RepairComplianceRequiresPreFix	1	Repair Compliance Report requires a Prefix Snapshot. 1 = true, 0 = false
RepairComplianceRequiresPostFix	1	Repair Compliance Report requires a Postfix Snapshot. 1 = true, 0 = false

Graphic 19: Configuration Settings

Step 17

Ride Out (Administrator, Technicians)

- Auto or Manual Upload

Verify Uploader Log Report View Video For Details

<https://eguides.viavisolutions.com/catvleakage/video/driveouttest.mp4>

Manual upload to Law

<https://eguides.viavisolutions.com/catvleakage/video/manupload.mp4>

Follow the Upload / Data flow Automation

• MCA III activity

- Force Upload



Force Upload from MCA III



Button to upload

MCA III

WIFI UPLOAD IN PROGRESS

View Active Connections live in LAW-X

MCA III

UPLOAD COMPLETE

View Active connections

- See meter connection live
- Record count increases in progress

Active Connections			
- Pause -			
Monitoring Connections on Port 24026			
2 Active Uploads Found			
Tech Id	Truck Id	Record Count	Upload Start
MRD22	MRD21 TRK	136	04/24/2020 01:28:00 PM
MRD21	MRD21 TRK	203	04/24/2020 01:27:57 PM

• Uploader Log Report

- Who uploaded & when
- Record count
- Leaks associated w/upload

2 Uploads Found

Uploader Log Report

Upload Date	Tech Id	Truck Id	Total Records	Total Leaks	Export
<u>04/24/2020 01:28:00 PM</u>	MRD21	MRD21 TRK	203	Waiting	
<u>04/24/2020 01:28:00 PM</u>	MRD22	MRD21 TRK	136	0	

Underlines Indicate more information is available specific to the upload

0 leaks show immediately if no leakage values in file

Waiting for batch process to run if leakage values present in file

LAW-X Rideout Map

- Available immediately

LAW-X Leakage Map

- Leaks on map following batch process
- EDN's on map immediately

Grahic 20

View Active Connection Video

<https://eguides.viavisolutions.com/catvleakage/video/activeconnectionsandport.mp4>

Step 17

Law X on Mobile Tech

Install on Phone

Mobile tech Law information

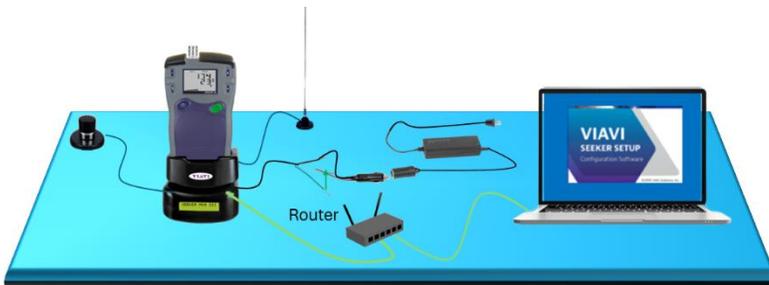
View PDF for Details

<https://eguides.viavisolutions.com/catvleakage/pdf/MobileTechLAW.pdf>

Other useful information

<https://eguides.viavisolutions.com/catvleakage/>

Test Bench



<https://eguides.viavisolutions.com/catvleakage/pdf/Leakage Test Bench Version 2.pdf>

Test Leak



Test Truck antennas daily to verify antennas are working properly

https://eguides.viavisolutions.com/catvleakage/video/Leakefield1_2.mp4