

RTS VLINK APPLICATIONS



RTS VLink - Control Panel

Advanced | Add View | Customize | Guest

Selectors

All Page	James	David	HD Music	Support	General PL
Service PL	Carl	1952-555-0199	Sam	Eric	Live Sally
Joe	Rick	Mark	Frank	Luke	Dave
Richard	Mike	Jesse	Weather	Live Feed	News

Geolocation

Map showing Santa Maria, Santa Barbara, and San Bernardino. Legend: Guest #19, Guest #18, Guest #17, Guest #16, Guest #15, Guest #14.

Live Feed

- Weather: Map of Asia with temperature markers (e.g., 12, 20, 29, 32, 34).
- Live Feed: Aerial view of a rocket launch.
- News: Studio interview with a news anchor. Text: **BREAKING NEWS** and **INTERVIEW**.

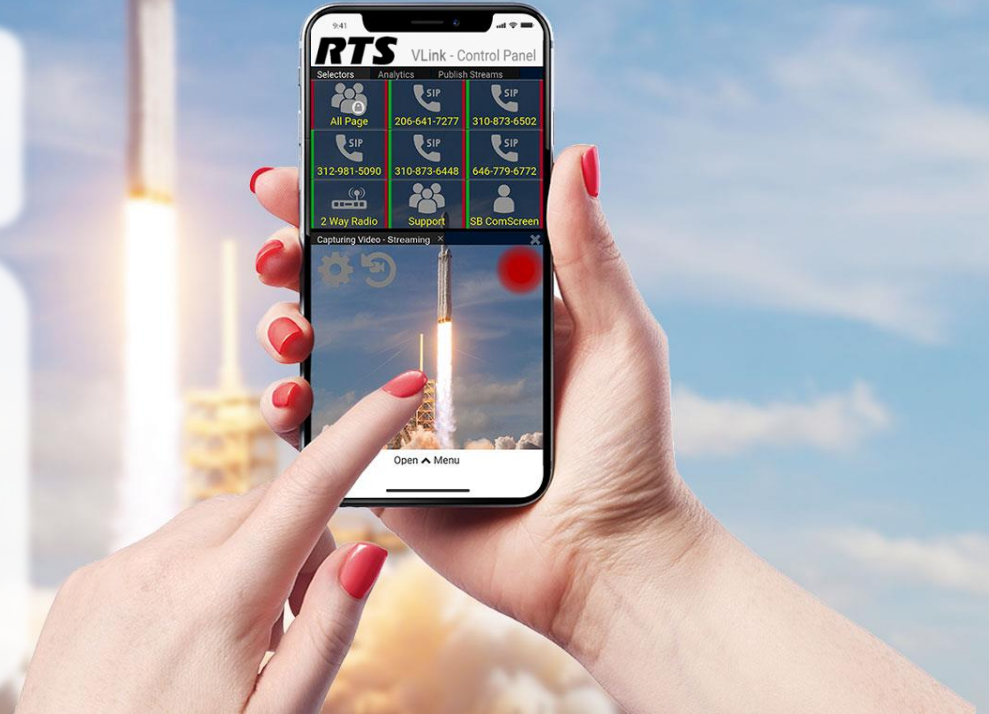


RTS VLINK APPLICATIONS

VLINK provides matrix access from smartphones, tablets or even connected laptops. With the VLINK app installed it is possible to communicate with other users on the hardware matrix system or stand alone. The smartphone behaves like a portable keypad.

Different use cases are possible for different user groups and levels:

1. VLINK Standalone
2. VLINK basic integration into matrix
3. VLINK intelligent integration into matrix
4. VLINK “cloud solution”
5. VLINK SIP



VLINK is an IP-software multi-channel / multi-access communications solution that can intelligently connect to RTS intercoms, creating the optimal fusion of hardware and software capabilities.

VLINK is highly scalable, supports virtually an unlimited number of point-to-points and PLs, boasts DAP integration, SNMP traps.

RTS VLINK STANDALONE



PC/ Server
onsite or
remote

System requirements: Client

1. Windows, MAC, Android or IOS device

System requirements: VLINK software matrix

1. Operating system- Windows 10 Pro x64 or Windows Server 2016 x64 or later
2. System Memory – 8 GB RAM
3. System Hard Drive: 128 Gb SSD (minimum) to 256 Gb SSD (preferred)
4. Processor cores – A quad core processor will typically run 300 clients under moderate usage. For larger systems refer to the VLINK technical manual for core requirements

User Benefits:

1. Communication without a hardware Matrix – cost effective
2. Point to point, Partyline, IFB - flexibility
3. Remote communication from anywhere in the world
4. Allow for adding additional capacity via a simple license upgrade - scalability

Use Case Examples/ target group:

1. Remote Broadcast production
2. Temporary Live event communications
3. On-line Gaming Events
4. Corporate communications “conferencing bridges”

Application Description:

VLINK turns the familiar Apple iPad, iPhone, or Android device into the ultimate wireless intercom system. VLINK allows for a virtually unlimited number of users and channels. Flexible button programmability can meet the most demanding wireless communications requirements. Application users with smart devices can be connected through the download of VLINK without the need for any additional hardware respective matrix or other Keypanels.



BASIC INTEGRATION INTO MATRIX



Application Description:

VLINK can be connected to a traditional hardware matrix using simple audio tie lines. This can be achieved using the VLINK Virtual Device Interface (VDI) software, run together with Dante Virtual Sound card or Dante PCI card. This allows the creation of simple conference bridges between the VLINK and any OMNEO based matrix channel without keypad data!

System requirements: Client

1. Windows, MAC, Android or IOS device

System requirements : VDI “Virtual Device Interface”

1. Standard laptop with dual core processor
2. Dante Virtual Sound Software installed

System requirements: VLINK software matrix

1. Operating system- Windows 10 Pro x64 or Windows Server 2016 x64 or later
2. System Memory – 8 GB RAM
3. System Hard Drive: 128 Gb SSD (minimum) to 256 Gb SSD (preferred)
4. Processor cores – A quad core processor will typically run 300 clients under moderate usage. For larger systems refer to the VLINK technical manual for core requirements

User Benefits:

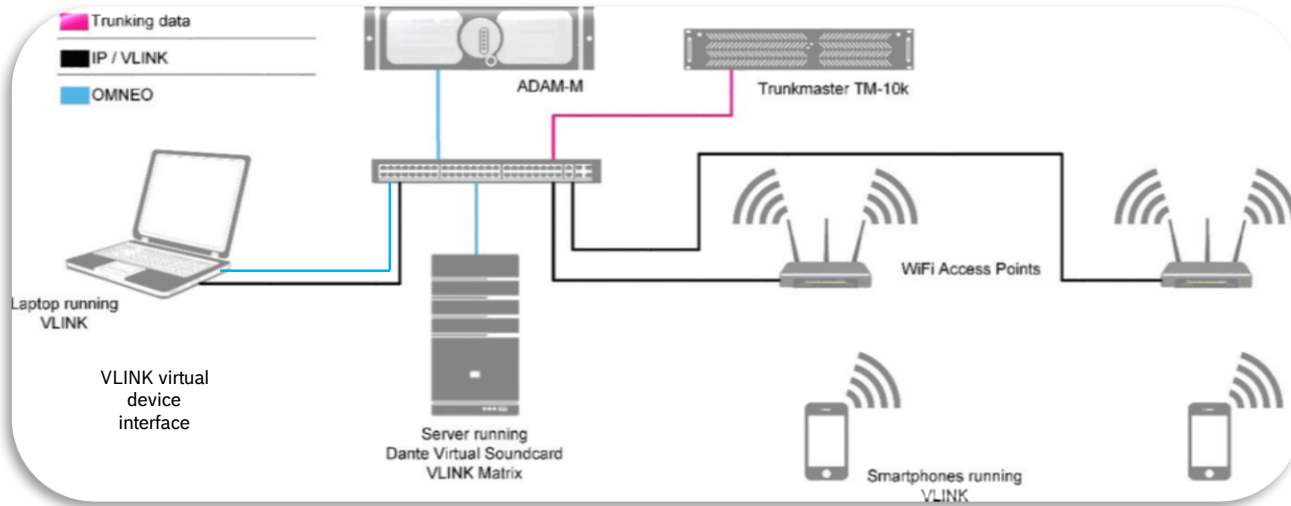
1. Communication with Matrix – integrated but not intelligent
2. Fixed Point to Point, Partyline, IFB - flexibility
3. Remote communication from anywhere in the world

Use Case Examples/ target group:

1. Remote Broadcast production
2. Sports Live event communications
3. Corporate AV events



INTELLIGENT INTEGRATION INTO MATRIX



Application Description:

The VLINK matrix software runs on a stand-alone computer. OMNEO is used to transmit audio between the matrix (an ADAM or ADAM-M or ODIN) and the VLINK system. In the example, VLINK is also being used on a laptop. The computer running VLINK has a Dante Virtual Soundcard installed, which is what allows the hardware to receive audio from any Dante-compatible device, in this case the OMI-card. Each connected device (two smartphones and a laptop, in this example) requires a valid license on the computer. The computer with the VLINK software behaves as a matrix, which is why the Trunkmaster TM-10k is required.

System requirements: Client

1. Windows, MAC, Android or IOS device

System requirements : VDI “Virtual Device Interface”

1. Standard laptop with dual core processor
2. Dante Virtual Sound Software installed

System requirements: Software Matrix

1. Operating system- Windows 10 Pro x64 or Windows Server 2016 x64 or later
2. System Memory – 8 GB RAM
3. System Hard Drive: 128 Gb SSD (minimum) to 256 Gb SSD (preferred)
4. Processor cores – A quad core processor will typically run 300 clients under moderate usage. For larger systems refer to the VLINK technical manual for core requirements

Additional Hardware Requirements

1. TM-10K Trunk Master

User Benefits:

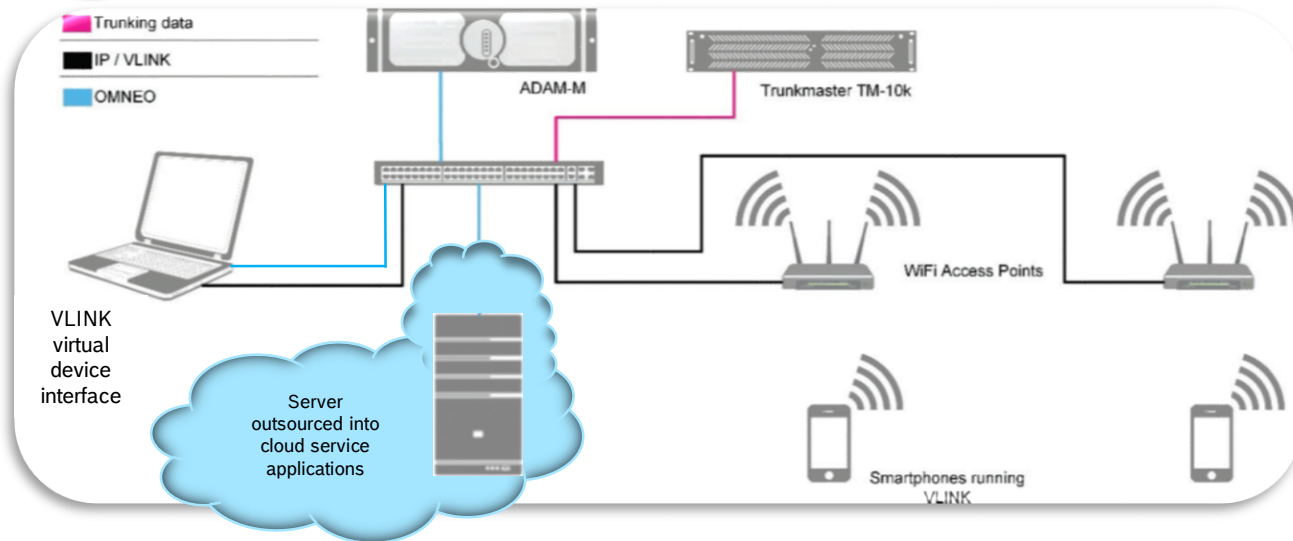
1. Fully integrated communication with hardware Matrix
2. Fixed Point to Point, Partyline, IFB - flexibility
3. Remote communication from anywhere in the world

Use Case Examples/ target group:

1. Remote Broadcast production
2. Live sporting event communications
3. Aerospace communications
4. Industrial application “power utilities”



INTELLIGENT CLOUD INTEGRATION



Application Description:

The VLINK matrix software can run in cloud services like AWS (Amazon WEB Services). OMNEO is used to transmit audio between the matrix (an ADAM, ADAM-M or Odin) and the VLINK system. In the example, VLINK's "VDI" is being used on a laptop. The computer running VLINK "VDI" has Dante Virtual Soundcard installed, which is what allows the cloud matrix to receive audio from any Dante-compatible device, in this case the OMI-card. Multiple sessions of "VDI" can be run at the same time for additional audio lines. This example is fully integrated to share resources between the cloud matrix and the hardware matrix, which is why the Trunkmaster TM-10K is required.

System requirements: Client

1. Windows, MAC, Android or IOS device

System requirements : VDI "Virtual Device Interface"

1. Standard laptop with dual core processor

System requirements: Software Matrix

1. Operating system- Windows 10 Pro x64 or Windows Server 2016 x64 or later
2. System Memory – 8 GB RAM
3. System Hard Drive: 128 Gb SSD (minimum) to 256 Gb SSD (preferred)
4. Processor cores – A quad core processor will typically run 300 clients under moderate usage. For larger systems refer to the VLINK technical manual for core requirements
5. Dante Virtual Sound Software "virtual machine version"

Additional Hardware Requirements

1. TM-10K Trunk Master

User Benefits:

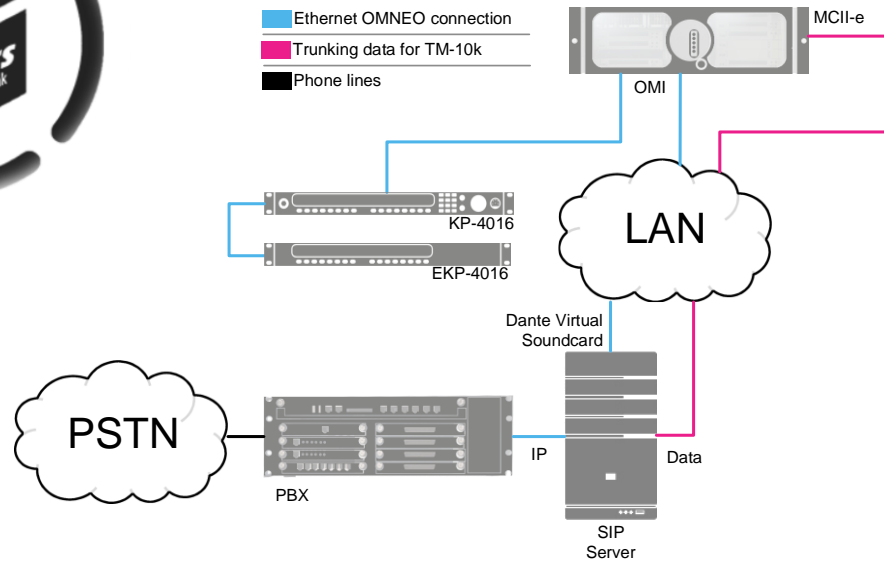
1. Fully integrated communication with hardware Matrix
2. Fixed Point to Point, Partyline, IFB - flexibility
3. Remote communication from anywhere in the world
4. Matrix is virtualized so no hardware to maintain on site.
5. Easy creation of redundant server instances

Use Case Examples/ target group:

1. Remote Broadcast production
2. Live sporting event communications
3. Aerospace communications"



RTS VLINK SIP



Application Description:

VLINK has the ability to be configured as a SIP interface to multiple SIP systems available on the market. It operates in the same manner as the traditional RTS TIF-2000/4000 pots interfaces. VLINK SIP provides the user the ability to dial or receive phone calls into a RTS hardware matrix. The VLINK SIP solution connects directly to the Master controller of an RTS system and does not require a trunk master to operate. It supports up to 8 separate SIP servers. The audio to the RTS hardware matrix is connected using either the OMI card or direct to ODIN matrix with Dante Virtual Sound card or Dante PCI card. Each SIP line requires an assignable port in the RTS hardware matrix.

System requirements: Vlink SIP

1. Operating system- Windows 10 Pro x64 or Windows Server 2016 x64 or later
2. System Memory – 8 GB RAM
3. System Hard Drive: 128 Gb SSD (minimum) to 256 Gb SSD (preferred)
4. Processor cores – A quad core processor will typically run 300 clients under moderate usage. For larger systems refer to the VLINK technical manual for core requirements
5. Dante Virtual Sound Card installed for up to 64 SIP lines, for system over 64 SIP lines use the Rednet PCI card which supports 100 channels total

User Benefits:

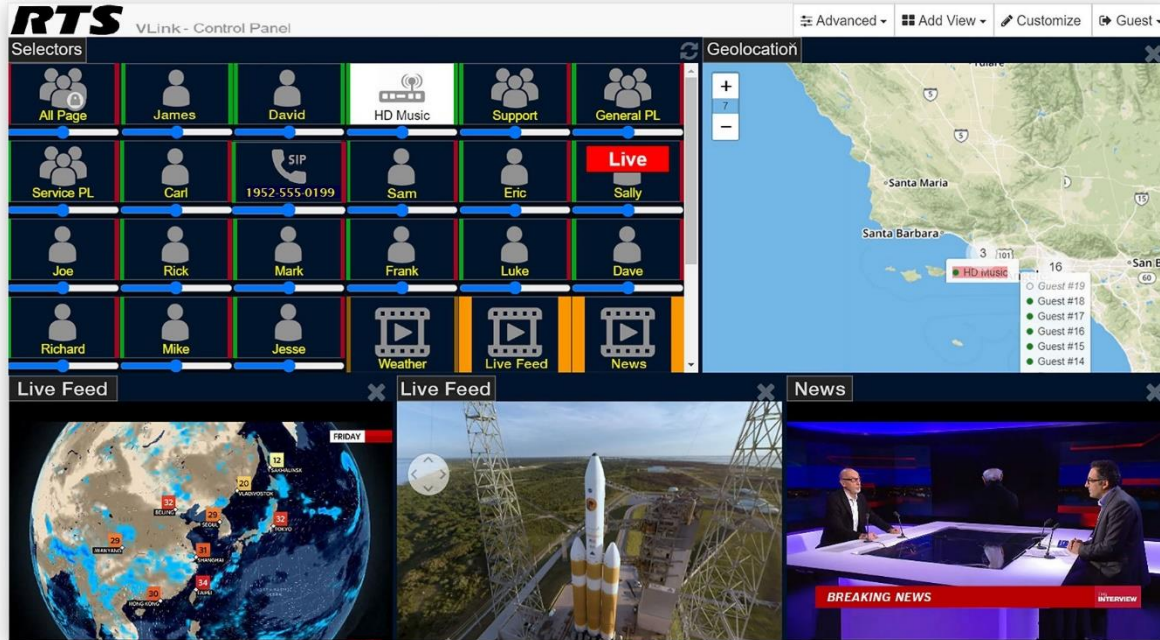
1. Use the latest telephony technology – POTS is going away!
2. Fully integrated phone support send and receive
3. Support for up to 8 separate SIP servers
4. Support up to 100 SIP lines per server.

Use Case Examples/ target group:

1. Remote Broadcast production
2. Sports Live event communications
3. Corporate AV events



RTS WebRTC CONTROL PANEL



Application Description:

WebRTC is the new standard for real-time communications allowing for extremely low latency, excellent echo cancellation, and high quality 48KHz audio. Upgrade your mission critical communications using the latest and greatest technology. Configure virtually unlimited point-to-points, fixed groups, and conference channels. Communications is always-on and non-blocking diminishing physical distance.

System requirements: Vlink WebRTC

Android:

The VLink WebRTC Control panel is also available as an app on the Google Play Store. The app requires that your device is running Android 4.4 KitKat or later.

Note: The VLink WebRTC Control Panel application and the VLink Control Panel applications are different, upgrade to VLink version 6 is required (entire port system needs to be updated to Version 6).

IOS:

There is currently no VLink WebRTC app available for IOS devices. As an alternative we recommend following these steps: Go to the VLink Virtual Matrix Control Panel from Safari. In the bottom menu tap the share button. Select "add to home screen"

Other:

A device running the Google Chrome Web Browser is required to use the Web Control Panel.

User Benefits:

1. Matrix Communications w/ low latency 48KHz audio
2. Multi-channel video monitoring (from programmed stream URLs only)
3. Geo-positioning to view the precise location of other users
4. Screen sharing, video steaming and video output

Use Case Examples/ target group:

1. Remote Broadcast production
2. Sports Live event communications
3. Corporate AV events



ADDITIONAL RTS VLINK OPTIONS

VLINK-8REDNT VLINK-2REDNT VLINK-8SIPREDNT VLINK-2SIPREDNT	VLINK-REDNT: Add redundant ports to your Vlink intercom or SIP interface
VLINK-Lite	VLINK-Lite: simplistic "wireless intercom" system limited to 8 PL's and 64 users. No Intelligent trunking to ODIN / ADAM, SIP, and NO WebRTC are available/included.
VLINK-LiteUPG	VLINK-LiteUPG: upgrades the Vlink-Lite Version to a full Vlink Version
VLINK-REC	VLINK-REC: Audio Recording: enables audio recording on a per client basis (audio recording port required for each user, SIP connection, or device interfaced you wish to record)
VLINK-ENCRYPT	VLINK-ENCRYPT: 256-bit AES Encryption: adds AES 256-bit encryption to system (must be applied to all system ports)
VLINK-VIDEO	VLINK-VIDEO: Video Streaming: enables live video capture and streaming from WebRTC clients (video must be enabled for all system ports)
VLINK-VIDEO I/O	VLINK-VIDEO I/O: Video Streaming & Output: enables live video capture and streaming from WebRTC clients as well as output to third party video routers (video must be enabled for all system ports)



VLINK Rental license program

- ❑ priced per license/month (**Net Pricing – no base or further discount**)
- ❑ minimum 3 month purchase
- ❑ Renewal of License Agreement will lead again to a minimum 3 month rental period.

Minimum requirements to use:

Trunk Master – needs OMNEO card or ODIN

Standalone VLINK does not require a Trunk Master or OMNEO device.

NOTE: There is no rental of any hardware associated with this VLINK rental proposal. All hardware to be sold as normal.

Order Information:

VLINK rental part number F.01U.388.142





RTS PART NUMBERS

F.01U.216.945	VLINK-8	VLINK 8 Port virtual Intercom matrix Software license to support up to 8 virtual VLINK keypanels on PC, or smart devices. System support SIP VOIP telephony and RTS trunking. Any PC, smart devices and Trunkmaster is not included. All required software can be download free of charge from the RTS website.
F.01U.264.751	VLINK-2	VLINK 2 Port virtual Intercom matrix Software license to support up to 2 virtual VLINK keypanels on PC, or smart devices. System support SIP VOIP telephony and RTS trunking. Any PC, smart devices and Trunkmaster is not included. All required software can be download free of charge from the RTS website.
F.01U.388.141	VLINK-8REDNT	Software intercom redundant - 8 ports
F.01U.388.143	VLINK-2REDNT	Software intercom redundant - 2 ports
F.01U.388.144	VLINK-8SIP	Software interface SIP - 8 ports
F.01U.388.145	VLINK-2SIP	Software interface SIP - 2 ports
F.01U.388.146	VLINK-8SIPREDNT	Software interface SIP redundant - 8 ports
F.01U.388.148	VLINK-2SIPREDNT	Software interface SIP redundant - 2 ports
F.01U.388.142	VLINK-1RENTAL	Software intercom - 1port rental



RTS PART NUMBERS

F.01U.393.239	VLINK-SVU	Software Version Upgrade -1 port	<p>VLINK-SVU (Software Version Upgrade): entitles purchaser to upgrade to the next release version.</p> <p>Note: Upgrade to VLink v6 (entire port system needs to be updated to Version 6) for the following new features and capabilities:</p> <ul style="list-style-type: none"> -WebRTC control panel w/ low latency 48KHz audio -Multi-channel video monitoring (from programmed stream URLs only) -Geo-positioning -Alerts -Screen sharing -NDI support -Single sign on authentication (SSO)
			<p>New additional ports can be ordered in Version 5 or Version 6 , specify when order ! (entire System needs to be on the same version)</p>
F.01U.393.240	VLINK-Lite	Software VLINK limited Intercom -1 port	<p>VLINK-Lite: simplistic "wireless intercom" system limited to 8 PL's and 64 users. No Intelligent trunking to ODIN / ADAM, SIP, and NO WebRTC are available/included.</p>
F.01U.393.241	VLINK-LiteUPG	Software Upgrade Lite to VLINK -1 port	<p>VLINK-LiteUPG: upgrades the Vlink-Lite Version to a full Vlink Version</p>
F.01U.393.242	VLINK-REC	Software Upgrade VLINK Recording -1 port	<p>VLINK-REC: Audio Recording: enables audio recording on a per client basis (audio recording port required for each user, SIP connection, or device interfaced you wish to record)</p>
F.01U.393.243	VLINK-ENCRYPT	Software Upgrade VLINK Encryption-1 port	<p>VLINK-ENCRYPT: 256-bit AES Encryption: adds AES 256-bit encryption to system (must be applied to all system ports)</p>
F.01U.393.244	VLINK-VIDEO	Software Upgrade VLINK Video -1 port	<p>VLINK-VIDEO: Video Streaming: enables live video capture and streaming from WebRTC clients (video must be enabled for all system ports)</p>
F.01U.393.245	VLINK-VIDEO I/O	Software Upgrade VLINK Video I/O -1 port	<p>VLINK-VIDEO I/O: Video Streaming & Output: enables live video capture and streaming from WebRTC clients as well as output to third party video routers (video must be enabled for all system ports)</p>

THANK YOU!



The main interface of the RTS VLink - Control Panel. It features a grid of selectors for various content and participants, a geolocation map, and live feed windows.

Selectors					
All Page	James	David	HD Music	Support	General PL
Service PL	Carl	1952-555-0199	Sam	Eric	Live Sally
Joe	Rick	Mark	Frank	Luke	Dave
Richard	Mike	Jesse	Weather	Live Feed	News

Geolocation

Map showing Santa Maria, Santa Barbara, and San Bernardino. A red pin indicates the location of HD Music.

Live Feed

- Weather: Satellite view of Earth with temperature overlays.
- Live Feed: Aerial view of a rocket launch.
- News: Studio interview with a 'BREAKING NEWS' banner.

