SEI RECORDER public safety recorder





SETUP AND INSTALLATION

SMALL SIZE

RECEIVER

Smart Equipment Innovators

seinnovators.com



SEI RECORDER

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RECORDER FEATURES

Wifi Connected Optional Cloud Connection

FIREHOUSE RECORDING

-RECORDS ALL RADIO TRAFFIC WITH DATE AND TIME -IDENTIFIES WHAT UNITS WERE TONED OUT -BACKUP AUDIO FILES TO LOCAL PC OR CLOUD

-LISTEN TO FILES FROM ANY DEVICE ON THE LOCAL WIFI NETWORK

-WITH CLOUD SERVICES IT WILL AUTOMATICALLY UPLOAD TO THE CLOUD ALLOWING ACCESS FROM ANYWHERE





FIREGROUND RECORDING

-MOBILE MOUNTING - CONNECTS TO RADIO IN VEHICLE OR RECORDER WITH RECEIVER

-RECORD ALL MOBILE AND PORTABLE FIRE GROUND TRAFFIC AT THE SCENE

-AUDIO FILES CAN BE ACCESSED FROM ANY PC WHEN THE UNIT RETURNS TO WI-FI RANGE AT THE STATION

-PLAY BACK LOCALLY ON YOUR CELL PHONE OR LAPTOP -SMALL SIZE EASILY MOUNTS ANYWHERE

-AUTO CONNECTS WHEN IN THE RANGE OF STATION WIFI -WITH CLOUD SERVICES IT WILL AUTOMATICALLY UPLOAD TO THE CLOUD WHEN BACK IN THE RANGE OF STATION WIFI ALLOWING ACCESS FROM ANYWHERE



Small Size





RECEIVER / RECORDER





Shuts Down if Vehical is Not Used

Playback and Configuration can be Accessed from any WIFI Device.

Browser Based Playback and Analysis. Calendar to easily find Historical Dispatches. Tone Decoder to Identify Tone Outs. Time Clock displays time as Recording Plays. "Auto Play" and "Click to Play" to easily review Incidents. Forward/Rewind by simply moving slider.

OPTIONAL CLOUD SERVICES:

Backup Files to the Cloud Automatically. Review Files from Anywhere in the World. Dispatch can Verify that Tones and Message Transmitted Correctly.

RECORDER SPECIFICATIONS

SD CARD CAPACITY 128 GB 4303 HRS

WHEN THE SD CARD IS FULL, IT STARTS RECORDING AT THE BEGINNING AGAIN

VOX OPERATION WITH SETTABLE THRESHOLD

WIFI ACCESS DIRECTLY FROM PHONE TABLET, PC OR FROM BUILDING WIFI ON ANY DEVICE IN THE WIFI NETWORK OPTIONAL CLOUD SERVICES BACKUP FILES ON THE CLOUD PLAYBACK AUDIO FROM ANYWHERE

MOBILE RECORDER WILL AUTOMATICALLY CONNECT WHEN IN RANGE OF THE WIFI SYSTEM

BACKUP FILES ON PC

POWER REQUIREMENTS 10 - 15 VDC

CURRENT DRAW 140MA MAX MOBILE UNIT SHUTS DOWN AFTER 24HRS OF NO IGNITION VOLTAGE (TO PREVENT LONG TERM BATTERY DRAIN IF VEHICLE IS NOT USED)

PLUG AND PLAY COMPATIBLE WITH ADVISOR AND RECEIVER

POWER REQUIRMENTS

MUST BE POWERED BY AN UNINTERRUPTIBLE POWER SUPPLY

IF THE POWER TO THE RECORDER IS INTERRUPTED, WHILE IT IS RECORDING, THE MEMORY CAN BE CORRUPTED. CONNECT TO A UPS IN THE STATION OR TO THE BATTERY IN A MOBILE INSTALLATION.

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SYSTEM CONFIGURATIONS

RECORD ALL TRAFFIC



RECORD ALL TRAFFIC OR ONLY AFTER TONE OUT



SYSTEM CONFIGURATIONS

RECORDS ALL TRAFFIC



RECORDS ALL TRAFFIC OR **ONLY AFTER TONE OUT**



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SYSTEM CONFIGURATIONS

MOBILE INSTALLATION

RECORD ON SCENE EMERGENCY COMMUNICATIONS

CAN BE READ OR DOWNLOADED WHEN THE VEHICLE IS PARKED WITHIN THE RANGE OF THE STATION WIFI SYSTEM

READ FILES ON SCENE WITH CELL PHONE OR LAPTOP







-RECEIVER/RECORDER COMBINED - PLUG IT IN AND CONNECT AN ANTENNA (PORTABLE OR EXT ANTENNA) -4000 HOURS OF RECORDING BEFORE IT STARTS TO RE-RECORD OVER THE OLDEST MEMORY -WIFI CONNECTION ALLOWS ACCESS FROM ANY DEVICE IN THE WIFI NETWORK OR CAN BE ACCESSED DIRECTLY FROM A CELL PHONE OR ANY WIFI DEVICE -OPTIONAL CLOUD WEBSITE AND STORAGE ALLOWS AC-CESS FROM ANY INTERNET CONNECTED DEVICE FROM ANYWHERE IN THE WORLD -PERSONAL CAN REPLAY THE CALL ON THEIR PHONE WHILE RESPONDING

FIRE GROUND RECORDING -CHANGE CHANNELS USING A CELL PHONE -PLAY BACK DIRECTLY TO A CELL PHONE AT THE SCENE

-CONNECT TO THE CLOUD IF VEHICLE HAS ON BOARD WIFI OR THROUGH A CELL PHONE AS A HOT SPOT THIS ALLOWS OFF SCENE PERSONAL TO FOLLOW THE COMMUNICATIONS AT THE FIRE SCENE IN ALMOST REAL TIME (APPROXIMATELY 60 SEC DELAY)

SETUP

<u>NEVER</u> UNPLUG WHILE THE UNIT IS RECORDING. REMOVE THE SOURCE OF AUDIO TO THE RECORDER BEFORE UNPLUGGING.

Use a computer with a WIFI card or adaptor to communicate with the Recorder

- **1** Reboot the Recorder by unplugging and plugging back in.
- 2 Connecting to the Recorder

Disconnect your computer from the WIFI network. Find the Recorder in the list of WIFI networks. If it is a new recorder, the name will be "seirecorder." Check the box for "Connect automatically." Password is "seirecorder123"

囗	Netwo Conne	rk 2 ected				
₽ <i>(</i> 7,	seireco	order				
•	Apt#2					
° //.	Conwa	y Peer 2.4G				
٩//	Conwa	y Peer 5G				
₽ <i>(</i> 7.	DIRECT-44-HP OfficeJet 5200					
₽ <i>(</i> 7,	guestn	etwork2				
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Netw Chang	vork & ge setting	Internet settir ıs, such as makin	1gs g a connectio	on metered.		
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Wi-Fi		Airplane mode	hotspot			
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\leftrightarrow \rightarrow	c S	192.168.50.	1	
Apps	🎽 Gmail 📕	YouTube	G Google	Netflix 🕯

3 - Open a new Browser. Enter a URL of "192.168.50.1"

13:51:04	Length: 00:00:04.5
11/19/2021 13 51 04 13 50 46 13 20 36 13 18 47 13 16 33 13 10 48 12 52 48	 PC-TD: 00:00:00 Options Auto Play Click to Play
12 41 16 12 37 24 12 27 51	

4 - The Recorder GUI will be Displayed. Click Button for the Configuration Screen

Sign in	
http://192.	168.50.1
Your conne	ction to this site is not private
Username	
Username Password	
Username Password	

5 - Enter: Username "admin" Password "seirecorder123"



6 - Select the dropdown box then select "Network"



7 - If a Network is Connected then it must be removed before proceeding with the setup Go to step 7A

If no Network is connected then Go to step 8



7A - Click the Dropdown Box and Select the Network to be removed



7B - Click on the "Remove button and wait for the wheel to stop



7C - Exit the Config screen Go back to step 1

SEI Recorder	Configuration	SEI Recorder Configuration
Please Choose × Please Choose Audio Time Network Tones Radio Cloud	Exit ReBoot	Time Exit ReBoot Current Time Status Recorder Time: Thu Apr 21 2022 14:48:14 GMT-0400 (Eastern Daylight Time). Local Device Time: Thu Apr 21 2022 14:48:13 GMT-0400 (Eastern Daylight Time). Time Difference 1.173 Seconds Select Recorder TimeZone and Synch Time with Local Device America/New_York Syncronize

8 - Select "Time" in the dropdown box. Select the City with the Correct Time Zone Click "Synchronize" to sync the time with the computer. (It will periodically sync with the network)

9 - Setup Audio Select "Audio" from the dropdown box





Adjust Mic Audio - Speak into the mic at a normal level and adjust the mic level (B) so it does not extend over the Red Lines (A) You can click on the Slider and adjust with the arrow keys

Adjust Receiver Audio - Feed a Signal into the Radio 1000HZ at 1.5KHZ Dev at -90dbm Adjust the rec level (G) so the Signal does not extend over the Red

Lines (A)

You can click on the Slider and adjust with the arrow keys

Adjust the VOX level (H) so any systemic noise does not extend over the green lines (C)

Mic and Rec Audio can be Gated (D) w/high or low outputs (E) (Example: A COR or a CTCSS Decode can gate the Rec Audio A PTT level change can gate the Mic Audio)

Advisor Slave (F) - If checked - the recorder only records when the advisor is tripped The Advisor alert relay must be programmed for "on until reset"

10 - SELECT "Tones"

SEI Recorder Configuration						
	Exit	ReBoot				
_	_					
	⁻ Configur	Configuration				

SEI Recorder Configuration								
Tones V Exit ReBoot								
ToneA	ToneB	Department	Color	СР				
701	1130	North Conway FD	#FFFF00	1	Save	Remove		
701	903	North Conway AMB	Yellow	2	Save	Remove		
1669	702	Conway Village AMB	#FFFF00	7	Save	Remove		
1669	871	Center Conway FD	Yellow	6	Save	Remove		
1082	871	Redstone FD	#FFFF00	2	Save	Remove		
903.2		Paramedics	Yellow	3	Save	Remove		
1669	1082	Conway Village FD	#FFFF00	1	Save	Remove		
					Add			

Enter Tone A, Tone B the Department Name and the Hex Code or the Official Name for the Color. (htmlcolorcodes.com)



The Department Name can be Displayed when the Recording with the Tones is Selected.

The Recording for each Department can show in a Different Color.

11 - SELECT "Radio"

In the Receiver/Recorder unit, the channel can be changed from the GUI.

Add as many Channels as you want.

- Enter the Ch Number
- Enter the Ch Name
- Enter the Frequency (with 4 digits after the decimal point)
- Enter the CTCSS or DCS according to the chart below (Leave Blank for CS)
- Enter Band Width 12.5 OR 25 (for Land Mobile must always be 12.5)
- Ènter Squelch (1 is Usually Good)
- (Leave Volume at 8) Selecting "Save" writes it to memory.



SEI Recorder Configuration									
Radio									
ch	Description	Freq(MHz)	CTCSS	DCS	BW	Squelch	volume	1	
1	CONWAY FD	155.7600	114.8		12.5	1	8	Save	Remov
2	CON CH 2	154.4450	114.8		12.5	1	8	Save	Remove
3	BART/JACK	154.1450	173.8		12.5	1	8	Save	Remove
								Add	

CTCSS CODES Leave Blank for Carrier Squelch. 67.0, 71.9, 74.4, 77.0, 79.7, 82.5, 85.4, 88.5, 91.5, 94.8, 97.4, 100.0, 103.5, 107.2, 110.9, 114.8, 118.8, 123.0, 127.3, 131.8, 136.5, 141.3, 146.2, 151.4, 156.7, 162.2, 167.9, 173.8, 179.9, 186.2, 192.8, 203.5, 210.7, 218.1, 225.7, 233.6, 241.8, 250.3 DCS CODES 023, 025, 026, 031, 032, 036, 043, 047, 051, 053, 054, 065, 071, 072, 073, 074, 114, 115, 116, 125, 131, 132, 134, 143, 152, 155, 156, 162, 165, 172, 174, 205, 223, 226, 243, 244, 245, 251, 261, 263, 265, 271, 306, 311, 315, 331, 343, 346, 351, 364, 365, 371, 411, 412, 413, 423, 431, 432, 445, 464, 465, 466, 503, 506, 516, 532, 546, 565, 606, 612, 624, 627, 631, 632, 654, 662, 664, 703, 712, 723, 731, 732, 734, 743, 754 DCS codes must be followed by N or I for Normal or Inverse.

12 - Setup Cloud Service

SELECT "Cloud"



If the Optional Cloud Service is going to be used, then 3 Keys will be emailed to you. Each key must be Copied (Carefully) and Pasted into the box, then Set one at a time.

The Wheel will spin while the Key is Being Set.

=I Recor	der Conti	
oud	~	Exit ReBoot
	Cloud	Key Configuration
Set Key 1	UnSet Key 1	
**************	**************	***************************************
****************	********************	
Set Key 2	UnSet Key 2	1
Set Key 3	UnSet Key 3	î.
****************	*******************	
	ct vour local R	adio Shop to enable Cloud Services
Please conta		
Please conta		Device Id
Please conta	284b2d90	Device Id
Please conta	284b2d99	Device Id 12b827eb78cc47
Please conta	284b2d99	Device Id 912b827eb78cc47
Please conta	284b2d99	Device Id 912b827eb78cc47

13 - Rename the Recorder

SELECT "Network"





Enter the New Name for the Recorder (NO SPACES) and Click "Configure"



When the Wheel stops spinning -Close the Browser.

14 - Connect to WIFI Network THIS MUST ALWAYS BE THE LAST STEP

Reboot the recorder by Unplugging and Plugging back in.

Wait for the new Name to show up in the WIFI List.

Select the new Name and click on Connect automatically.

Open a Browser and Enter 192.168.50.1

17.	Valley Vision 3-2G
<i>°(</i> .,	car1 Secured
	Connect
٩//.	DIRECT-44-HP OfficeJet 5200
٩//	SEI
•	Fryes
•	Kathulhu's home
(h.	Family Room Speaker.o,
Netv Chang	vork & Internet settings ge settings, such as making a connection metered.
(î.	மீ நிலை Mobile
Wi-Fi	Airplane mode hotspot





Go to the Configuration Screen



Select Network

SEI Record	er Configuration
Network	Exit ReBoot
Wifi Configutation WiFi AP(Select or Type) Passphrase Add Remove	Wifi Status Signal Strongths
AP/IP Configutation RecorderName Seirecorder Passphrase/Admin Passwd IP Address for AP 192.168.50.1 Configure	-42 dBm DIRECT-44-HP OfficeJet 5200 AP Status Station 9c:c9:eb:24:9c:d9 (on uap0) inactive time: 4000 ms rx bytes: 655253 rx packets: 5293 tx bytes: 7490613 tx packets: 7861 tx failed: 0 tx bitrate: 72.2 MBit/s rx bitrate: 52.0 MBit/s authorized: yes authorizet: yes associated: yes

Click on the WIFI AP Dropdown Box and Select the WIFI Network

Enter the WIFI Passphrase

Click Add

When the wheel stops spinning, close the Browser and Reboot the Recorder

You can now connect with the Recorder on the WIFI Network, using "new name".local (example: recorder1.local)

Go Back into Configuration > Network and make note of the IP Address. Then EXIT.

SEI Recorder Config			
Network ~			
Wifi Config WiFi AP(Sele Pa DIF Pa DIF Sul Val R SEI Fry AP/IP My Recc Kat NOTES CC Passphrase/Ad IP Address 192.168.50 Config	gutation ect or Type) RECT-44-HP Offic PV ley Vision2G res res-Guest rspectrumWiFi70 thulhu's home UMCguest Imin Passwo s for AP).1 GUIPE	Connect ESSID: eJet 5200	ed Networ



Go Back into Configuration > Network and make note of the IP Address. Then EXIT.

Connecting to the Local WIFI Network can be Tricky depending on the Router.

"Recorder Name".local should work in most Cases.

Connect with the Recorder IP Address However the Router can Change the Address.

The most dependable way is to Make a DHCP Reservation in the Router for the Recorder IP Address so the Router won't Change it.

Connecting through the Cloud is the most Reliable way to Connect to the Recorder. You just go to your Own Website and Connect from any Device.





CONNECTION TO RADIO

J1 RJ45 RADIO

CABLE

- **1 PTT BRN RECORDER ONLY NORMAL OPERATION NO CONNECTION**
 - USING WITH ADVISOR ENCODE CONNECT TO RADIO PTT
 - IF MIC AUDIO IS LIVE ALL THE TIME THEN CONNECT TO RADIO PTT AND SETUP GATING IN AUDIO MENU (SEE PAGE 11)
- 2 TX AUDIO OUT BLU NOT NEEDED UNLESS ADVISOR ENCODE IS USED
- 3 RX AUDIO IN YEL SQUELCHED AUDIO NOT ADJUSTED BY VOLUME CONTROL (IF NEEDED, THE RX AUDIO CAN BE GATED BY CONNECTING PIN 7 TO A CTCSS DECODE OR A COR PIN)
- 4 TX AUDIO IN GRN CONNECT TO MIC AUDIO IN THE RADIO (A JUMPER, WITH AN INLINE CONNECTOR, IS PROVIDED TO CONNECT TO THE BACK OF THE MIC JACK IN THE RADIO SO THE CONTROL HEAD CAN STILL BE REMOVED) (IF TX AUDIO IS HARD TO CONNECT TO IN THE RADIO THEN A MODULAR MIC JUNCTION BOX CAN BE USED TO PICK UP THE MIC AUDIO IF THE MIC HAS A MODULAR CONNECTOR, PAGE 18)
- 5 POWER RED B+ 12 15VDC
- 6 GROUND BLK GROUND
- 7 OPTIONAL RX AUDIO GATE ORG (IF NO SQUELCHED AUDIO IS AVAILABLE THEN PIN 7 CAN CONNECT TO COR OR CTCSS DECODE TO GATE THE RX AUDIO) (SEE PAGE 11)
- 8 IGNITION SENSE WHT 12 15VDC (IN A MOBILE INSTALLATION, CONNECT TO AN IGNITION SOURCE, IN A STATION INSTALLATION CONNECT TO B+)
- J3 RJ45 RADIO THE ADVISOR ENCODER/DECODER PLUGS INTO J3 (IF IT IS USED) (NOT USED IN MOBILE INSTALATIONS



Mic Audio

It can be Difficult to get Mic Audio from the Radio. You must go into the Radio and run a Wire out to the Recorder.



Mic Junction Box

An optional Mic Junction Box is Available for use with Radios that use RJ45 Mic Jacks. The Mic Plugs into the Junction Box and a Cable runs from the Junction Box to the Radio. Mic Audio, Mic PTT, Gnd etc. can be Picked Up in the Junction Box and Run Back to the Recorder.

WARRANTY

The SEI Recorder is warranted to be free from defects in material or workmanship for a period of 1 year from the date of purchase. Damage due to misuse or modification is not covered under this warranty. The unit must be returned to the factory and we will repair or replace it (at our option) at no charge.

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