

INSTALLING THE DLI LOGGER SERVICE VER. 3.2.x

STEP1:

For USB to T1 logger installation, go to step 2.

For first time installations, connect the logger and let the drivers install BEFORE* installing the software.

Note: The hardware wizard may appear multiple times, depending on your logger model. Let each installation fully complete.

Start the device manager (start/run devmgmt.msc) and choose the USB Serial Port:

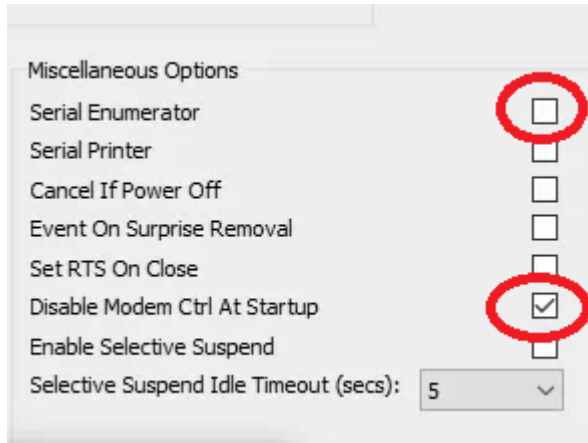
- > Network adapters
- ▼ Ports (COM & LPT)
 - USB Serial Port (COM7)
 - USB Serial Port (COM8)
- > Print queues
- > Printers

Right-click on the USB Serial Port and select Properties...

Select Driver: Verify that the Driver Provider is FTDI.

Select Port Settings, then Advanced.

Uncheck *Serial Enumerator* and check the *Disable Modem Ctrl At Startup*.



Select OK

If it is a F16W logger, repeat the process for the second USB to Serial port. Other Fxx series loggers will have only one USB to Serial port per logger.

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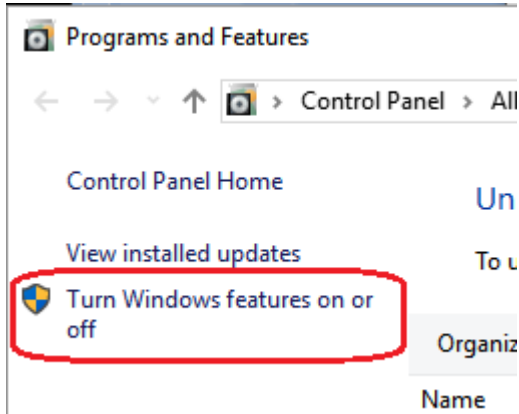
STEP 2:

Before installing, please note that Microsoft DOT Net Framework 2.0 is required. For Windows 8.x and higher and Windows Server 2008 and newer:

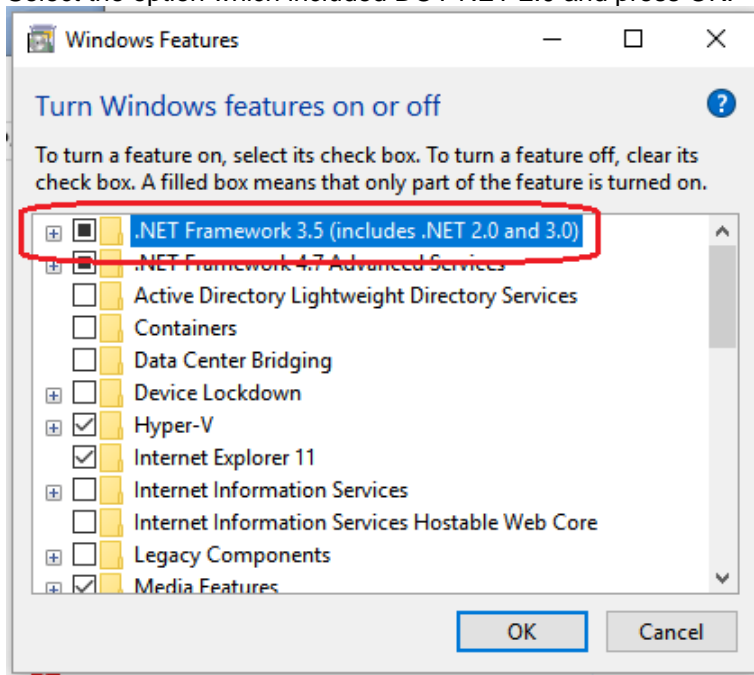
Press Start/Run...

Type *appwiz.cpl* and press enter.

Select Turn Windows features on or off



Select the option which included DOT NET 2.0 and press OK.

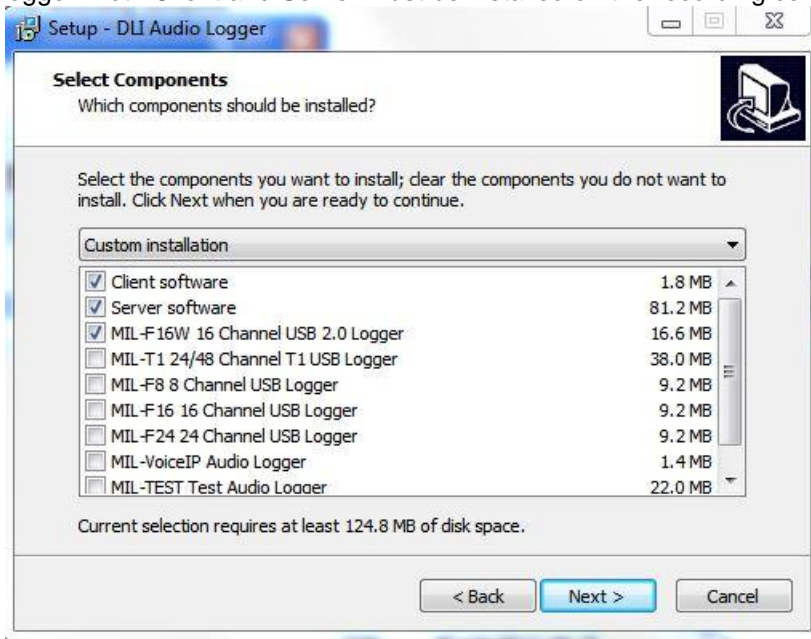


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STEP 3:

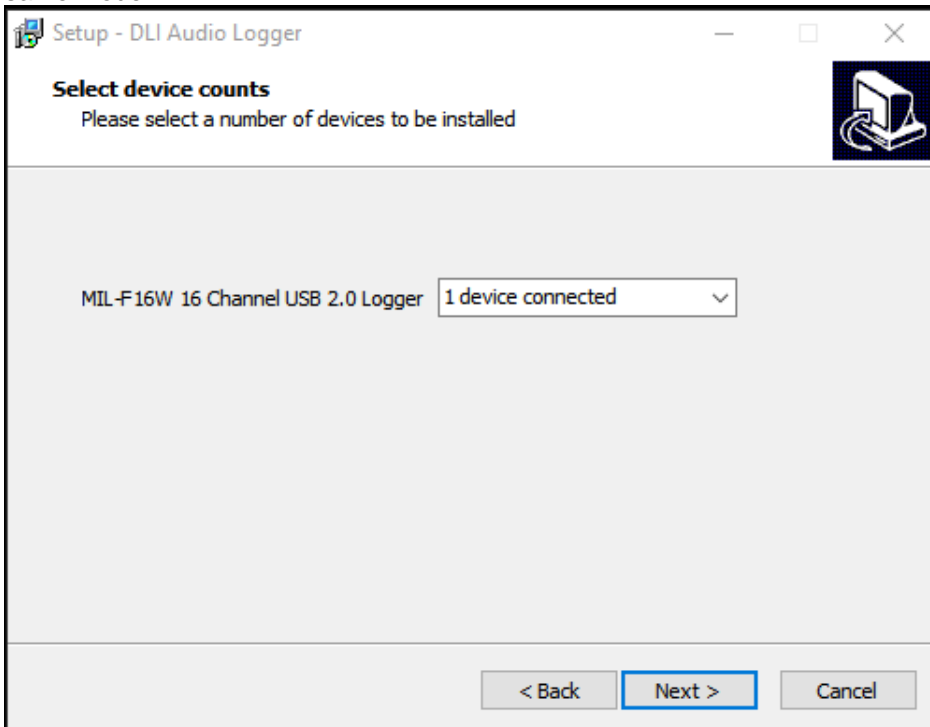
Install the Service software:

Select **Server Software**, **Client Software** and **MIL-xxx Logger Software**, where the -xxx is the model of your logger. Both Client and Server must be installed on the recording computer.



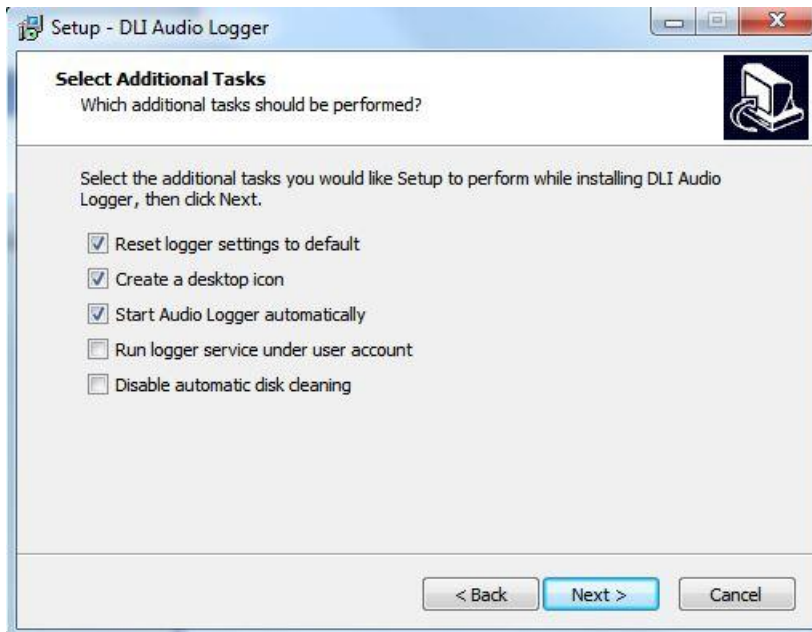
Three items must be checked on a recording system.

If more than one device is being installed in the same computer, set the number here. Multiple devices must be the same model.



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Reset logger settings to default: Any settings previously set will be overwritten with default settings. This must be checked for the first installation. If upgrading software version, leave this unchecked.

Create a desktop icon: This will create icons on the desktop for your convenience.

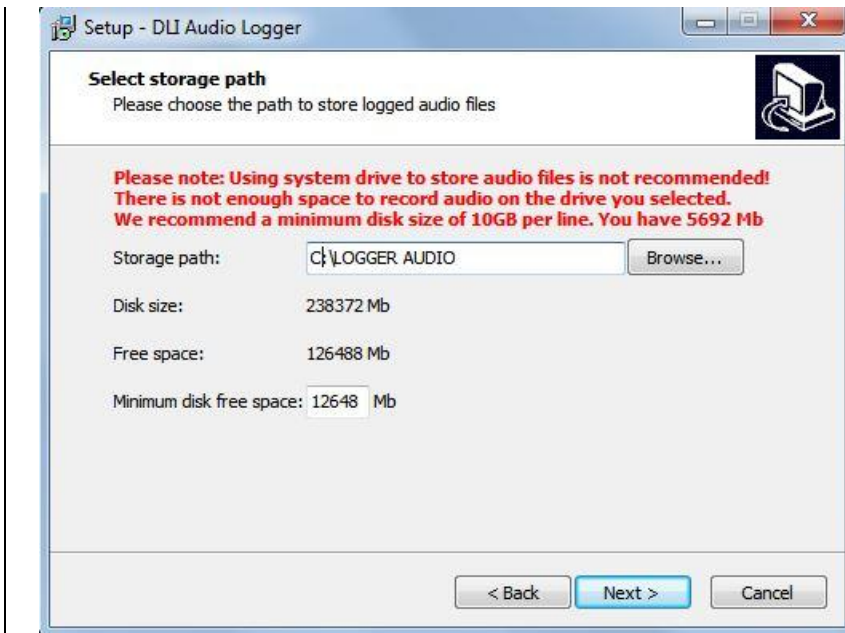
Start Audio Logger automatically: The logger will run immediately after installing and automatically when the computer starts.

Run logger service under user account: Required if recording to a network drive. While this is not recommended, it is possible on a good performing network. Note: Username must be entered as **DomainUsername**. The user name must have local administrator rights to the local computer and full network permissions to the shared directory on the server.

*I recommend installing the services without this option. Install normally and verify proper operation. Then, follow the instructions "Recording to a network drive" available in the download center <https://www.digital-loggers.com/downloads/>

Disable automatic disk cleaning: This disables the automatic purging of old recordings. You must manually ensure that the disk does not run out of space if this option is selected.

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Select the drive to where you would like the recordings stored. It is recommended to use a secondary drive for recordings of at least 10GB per channel, however it is not required. The warnings on the example above are simply recommendations.

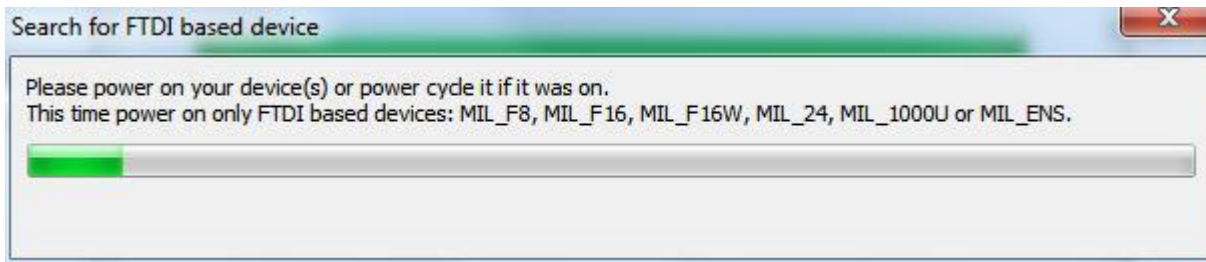
If you are updating the version of recording software, it is normal to get a warning about the disk size or disk space. The software does not yet know that recordings already exist on the drive.



Now press the install button to begin the installation.

After a time, you will be prompted to plug in and power on the device. This should go away quickly if the device is already powered on and connected.

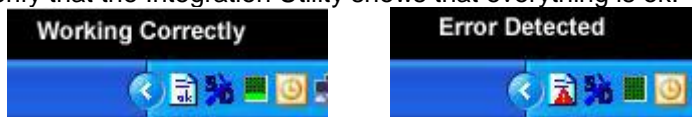
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Start the DLI Service Manager and verify that the services are running. If not, start them by clicking the *Start All* button.



Verify that the Integration Utility shows that everything is ok.

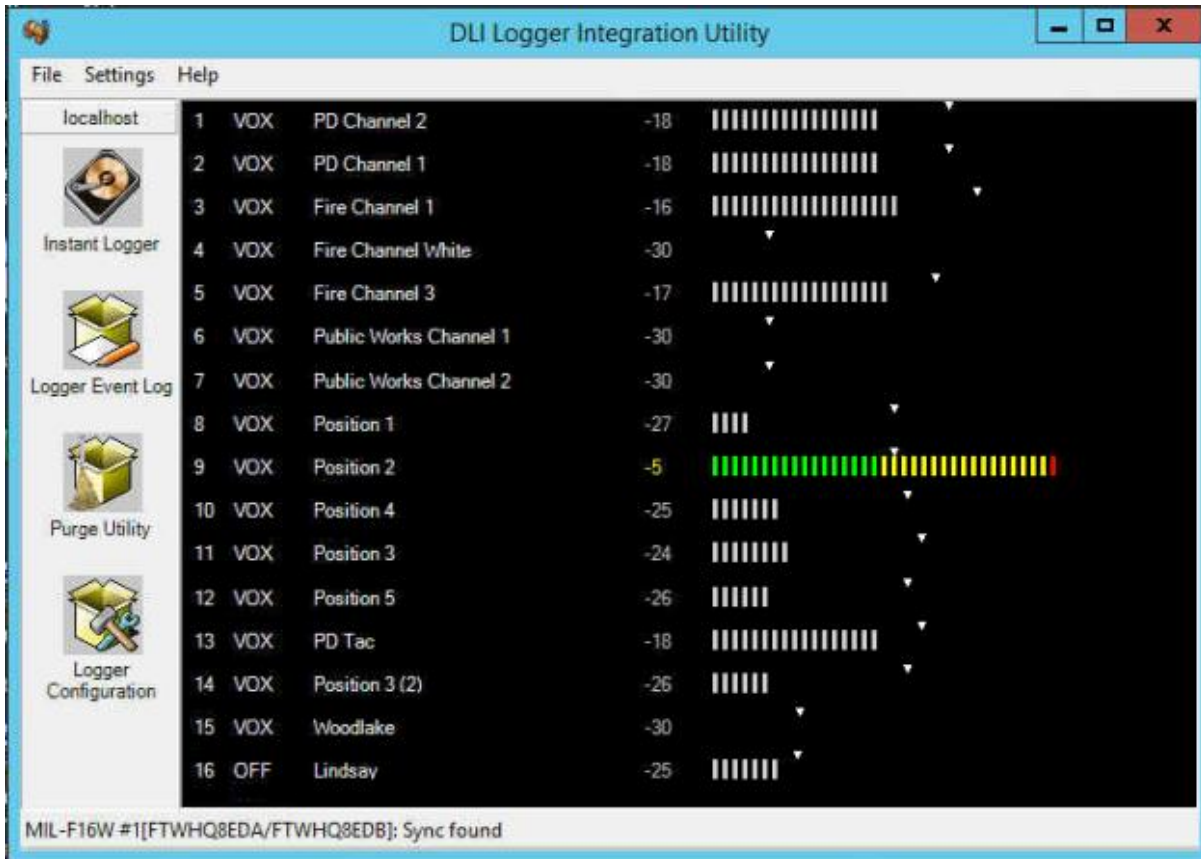


Double-click on the icon to display the utility on the screen.
Select the Logger Configuration icon on the left

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STEP 4:

Adjusting when recording occurs - VOX trigger level



Note the state of the channels. When the audio level bars are non-existent or not colored, no recording is occurring. If the bars are green, yellow or red, recording to a file is occurring. Be sure that the bars are not colored when no audio is present. If there are no bars, observe the color of the dBm number (the negative numbers to the left of the bar. E.g.: -30). If it is yellow, it is recording. If white, the channel is not recording. It is normal for there to be a delay in the screen and the coloring. This application runs at a lower priority than the recording services.

On DLI Audio Loggers without automatic gain control such as the MIL-F8 and the MIL-F16, the volumes knobs on the unit (gain controls) and VOX trigger level in LoggerConfig will need to be adjusted. Adjust the audio level so that touch tones cause the recorder bars to go well into the red. Recording will continue and the bars will be colored after the last audio signal until the timeout has expired.

When the lines are quiet, set the VOX Trigger Level so that the recording is not triggered (white) but audio causes the recording to start. You may need to adjust the VOX Trigger Level again. Adjusting these levels correctly is required for proper Caller-ID and DTMF decoding.

With the FXX series of loggers, Complex Mode (CMP) may be used if the phone lines are wet lines. These lines will have 48VDC. Picking up the phone line or a noise (such as ringing) will trigger recording. This mode is recommended for wet lines. The VOX trigger level may be set a little higher since only ringing needs to be detected to start recording. Ringing must be recorded to decode caller-ID since the caller-ID is transmitted between the first and second rings.

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ADDITIONAL INFORMATION:

Trigger Mode summary

VOX - Voice Activated Recording. Detected audio starts recording. Recording continues until the timeout.

Disable (OFF) - Nothing will be recorded to this channel.

Complex (CMP) - Either low DC voltage detected **or** audio will trigger recording. (Normal on-hook voltage is 48VDC)

LoopStart (LPS) - Recording will occur while DC voltage is low. (Normal on-hook voltage is 48VDC)

Continuous (CNT) - Recording will always occur. Max file size is determined by the Minimum Call Length setting.

External (EXT) - Recording will occur when the relay is closed, telling the logger that the phone is off-hook. This

requires a system that supports contact-closure. *Only 24 channel loggers support this feature.

Clicking on the line number will open Windows explorer to the recording directory if there are recordings.

Right-click on the "mode" to change the recording mode.

Click on the Line Name to change the name of the recording folder.

Using the mouse you can drag the VOX trigger level to the appropriate location.

Logger Configuration Wizard

The Logger Wizard that can help in the initial configuration and is available here:

<http://www.digital-loggers.com/downloads/>

LINE SETTINGS

The screenshot shows the 'DLI Logger Integration Utility' window. The interface is divided into several sections:

- Summary Settings Table:** A table listing 19 lines (Line01 to Line19) with columns for Line Name, Line Allocation, MB/Day, Allocated Days, Usage, and Pre-R.
- Section Editor:** A panel on the right showing settings for 'Line13'. It includes sections for Common Call Analysis Settings, DTMF Settings, File Settings, and Recording Settings.
- Line Allocation (MB):** A section at the bottom right explaining the purge mechanism based on disk free space.

Line Name	Line Allocation	MB/Day	Allocated Days	Usage	Pre-R
Line01	527	54	9	54 MB/Day (0
Line02	527	28	18	28 MB/Day (0
Line03	527	11	47	11 MB/Day (0
Line04	527	4	131	4 MB/Day (1	0
Line05	527	0	0	0	0
Line06	527	0	0	0	0
Line07	527	0	0	0	0
Line08	527	0	0	0	0
Line09	527	0	0	0	0
Line10	527	0	0	0	0
Line11	527	0	0	0	0
Line12	527	0	0	0	0
Line13	527	0	0	0	0
Line14	527	0	0	0	0
Line15	527	0	0	0	0
Line16	527	0	0	0	0
Line17	527	0	0	0	0
Line18	527	0	0	0	0
Line19	527	0	0	0	0

Section Editor - Line13

- Common Call Analysis Settings:** Enable Call Analysis: Yes
- DTMF Settings:** DTMF Interdigit Delay: 5.0, DTMF Interval: 30.0, DTMF Start Interval: 30.0, DTMF Threshold: -7
- File Settings:** Allocated Days: 0, Line Allocation (MB): 527, Line Name: Line13, Pre-Record Time (seconds): 0, Storage Path: LocalPath, Trim Silence: -100
- Recording Settings:** Mode: VOX, Signaling Pattern: 11xx, Silence Byte: FF, VOX Timeout: 0

Line Allocation (MB)
When the "Minimum Disk Free Space" is reached (in the system settings) a purge is triggered. When purging occurs, if the size of the calls in this line exceed the number entered here, it will be pruned back to the size set here.

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Line Settings			
Common Call Analysis Settings			
Settings	Options	Default	Explanation
Enable Call Analysis	Yes, No	No	Enable or disable decoding DTMF and Caller ID from the audio. This must be OFF for a T1-PRI
DTMF Settings			
Settings	Options	Default	Explanation
DTMF Interdigit Delay		5.0	Do not change
DTMF Interval		30.0	Do not change
DTMF Start Interval		30.0	Do not change
DTMF Threshold	-30 - -1	-7	The level at which audio will start decoding touch-toned (DTMF). Set too low (toward -30) can cause erroneous numbers/letters. Set too high and DTMF may not be decoded.
File Settings			
Settings	Options	Default	Explanation
Allocated Days	1-9999		Number of days allocated for recording. No less than this number of days will be available in this channel. This is disabled until there is history.
Line Allocation (MB)	1-9999999999		Amount of storage reserved for this channel. The purge will never delete this amount of data.
Line Name	Any Legal Folder Name (up to 32 characters)	Linexx	*Ignored if SimplePurge is selected in the system settings. (version 3.2.3.0 or later) The name of the recording folder for the channel. All line names must be unique.
Pre-Record Time (seconds)	0-9	0	The number of seconds to pre-record.
Storage Path	LocalPath	LocalPath	The Storage Path defined in Storage Paths settings.
Trim Silence	disabled, -30 to -1	disabled	The level below which any audio will be deleted from the end of the recording.
Recording Settings			
Settings	Options	Default	Explanation
Mode	VOX, Disable, Complex, LoopStart, Continuous	VOX	VOX - Voice Activated Recording. Detected audio starts recording. Disable - Nothing will be recorded to this channel. Complex - Either low DC voltage or detected audio will trigger recording. LoopStart - Recording will occur while DC voltage is low. Continuous - Recording will always occur. Max file size is determined by the Minimum Call Length setting Note: Not all modes are available on all loggers.
VOX Timeout	0-99	20	How long after the last audio is detected that

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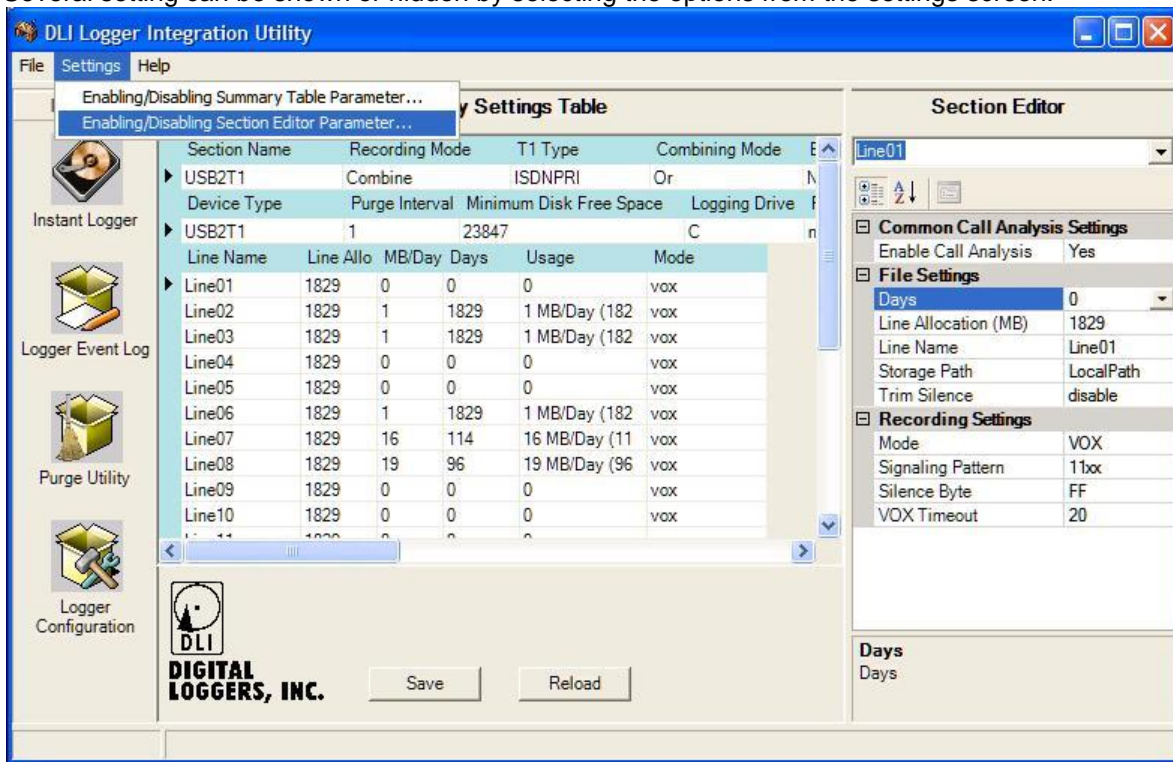
VOX Trigger Level -30 to -1 -30

the logger should quit recording.
The level at which audio will start recording.
Used to determine the method of determining an off-hook condition on a T1 line. When this pattern corresponds to channel signaling bits, data will be logged. Symbols can be 0, 1 or X. 0 means that the signaling bit must be 0, 1 means that the signaling bit must be 1 and X means that the signaling bit can be either 0 or 1.

SignPattern 4 characters (x, 0, 1) 11xx

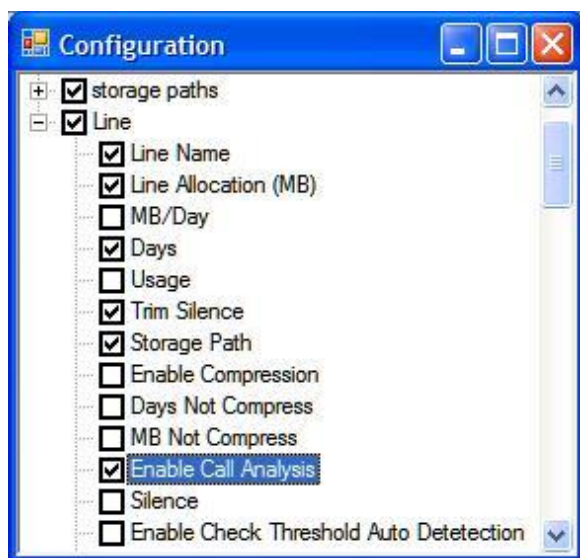
CUSTOMIZING THE CONFIGURATION SCREEN

Several setting can be shown or hidden by selecting the options from the settings screen.



Here I added "Enable Call Analysis" to the line settings screen.

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Enabling Call Analysis - decoding incoming and outgoing phone numbers:

Section Editor - Line Settings:

Set **Enable Call Analysis** to **Yes** for each line. (Right-click and copy the settings to other lines)

* **Do not enable Call Analysis on a T1-PRI** or it will overwrite the D_Channel decoding.

LOGGER SPECIFIC SETTINGS AND INFORMATION

F-XX (F-8, F-16, F-24, F16W)

Chip ID0	[SYSTEM USE ONLY]	0	The serial number of the first logger. This is automatically entered by the application.
Chip ID1	[SYSTEM USE ONLY]	0	The serial number of the second logger. This is automatically entered by the application.
Chip ID2	[SYSTEM USE ONLY]	0	The serial number of the third logger. This is automatically entered by the application.
Chip ID3	[SYSTEM USE ONLY]	0	The serial number of the fourth logger. This is automatically entered by the application.
Chunk Divisor	1,2,4	1	How often to look for audio in data. Setting this too high can cause severe performance degradation.
Sync High Byte	55	55	Sync Bytes (DO NOT CHANGE)
Sync Low Byte	55	55	Sync Bytes (DO NOT CHANGE)

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MIL-T1:

The Logger Configuration Wizard can help in the initial configuration and is available here:

<http://www.digital-loggers.com/downloads/>

The Wizard will set the below settings for you

The lights on the logger will not flash green until the application is running and in synch.

MIL-T1 (Standard):

Decoding incoming Caller ID

Enable call analysis as indicated above

Section Editor - System Settings:

File Settings:

Set **Number Field Content on Incoming Call** to **DTMF**

Set **Number Field Content on Outgoing Call** to **Disable**

MIL-T1 (PRI-ISDN) NI-2:

Decoding incoming DID (possible if the PRI signaling contains DID numbers)

Section Editor - System Settings:

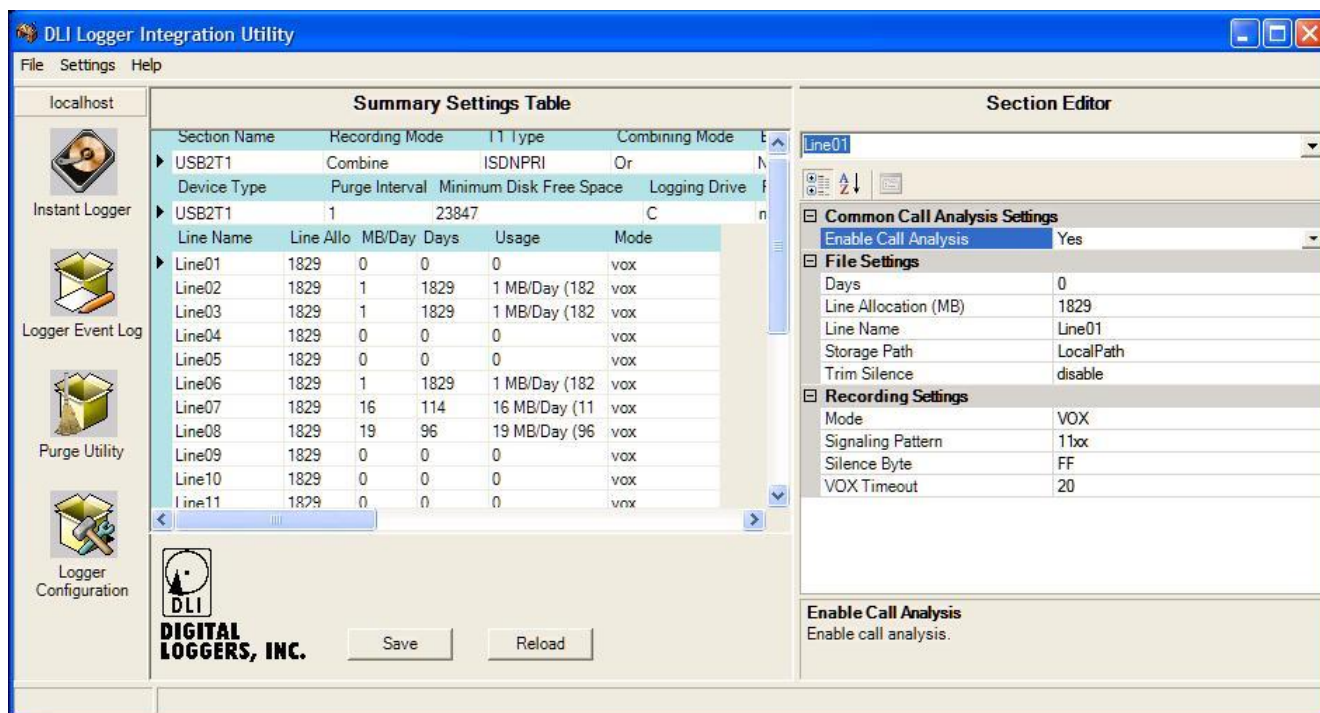
File Settings:

Set **Number Field Content on Incoming Call** to **Called**

Set **Number Field Content on Outgoing Call** to **Calling**

Go to the Section Editor select USB2T1 from the drop-down list

In the Signaling Section, set **PRI VOX Mode** to **D_Channel**



Next, in the Section Editor, select Line01.

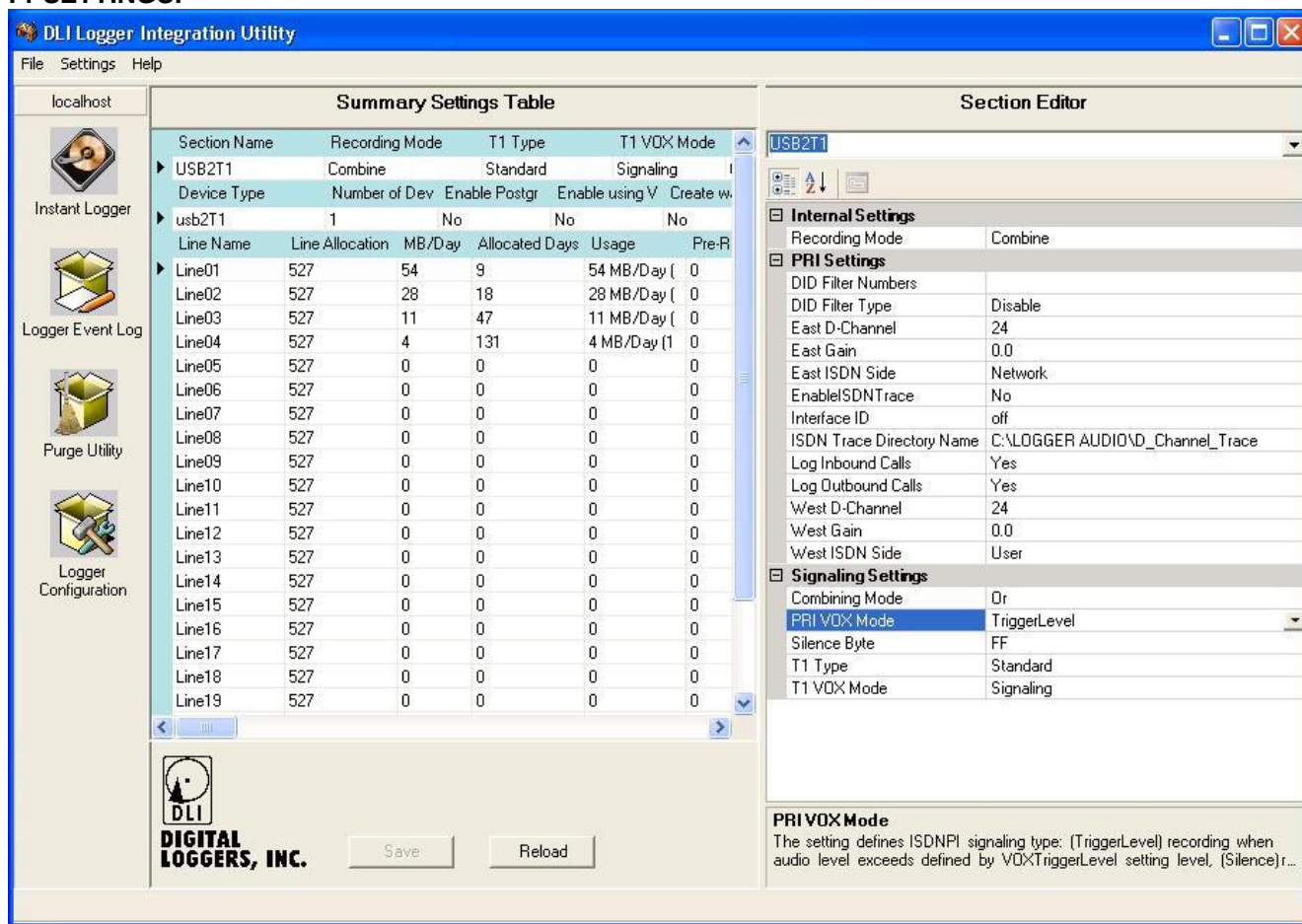
Be sure that Enable Call Analysis is set to No on each channel or it will overwrite the D_Channel decoding.

Next, in the Section Editor, select Line24.

Set **Mode** to **disable** to prevent full time recording of the signaling channel.

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T1 SETTINGS:



T1 SETTINGS EXPLAINED:

USB2T1			
Internal Settings	Options	Default	Explanation
RecordingMode	Normal, Combine	Combine	Records both sides of conversation in the same presents record (Combine) or each side separately (Normal).
Signaling Settings	Options	Default	Explanation
T1 Type	Standard, ISDNPRI	Standard	This setting defines T1 signaling type. The possible types are: (Standard) - using T1 robbed bits and (ISDNPRI) starting recording when audio level is higher than predefined level (or D-Channel signaling).
PRI VOX Mode	TriggerLevel, Silence, Constant, D_Channel	TriggerLevel	Defines ISDNPRI signaling type.
			TriggerLevel: Records when audio level exceeds the VOXTriggerLevel setting..
			Silence: Records when the signal differs from the value defined in SilenceByte setting.
			Constant: Records when the signal changes.
			D-Channel: Records when the connection is

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			established by D-Channel PRI signaling.
T1 VOX Mode	Signaling, Signaling_and_Level	Signaling	Defines T1 signaling type: (Sign) Records when the T1 signaling bits combination appears.
			(Sign_and_Level) when T1 signaling bits combination appears or when audio level exceeds defined by VOXTriggerLevel setting.
Combining Mode	Or, And, East, West	Or	This setting defines how the east and west signaling are summed.
Silence Byte	00-FF	FF	This setting defines value of signal, which accepted as a silence for the Silence mode.
PRI Settings	Options	Default	Explanation
East ISDN Side	Network, User	Network	Type of side of PRI interface on the east T1 line.
West ISDN Side	Network, User	User	Type of side of PRI interface on the west T1 line
East D-Channel	1-24	24	D-Channel number on the east T1 line
West D-Channel	1-24	24	D-Channel number on the west T1 line.
EnableISDNTrace	Yes,No	No	Enable ISDN Trace.
ISDN Trace Directory Name	Any drive letter or *UNC path		Location where the ISDN trace is saved.
Interface ID	off,0-128	off	If enabled, set will record calls only with explicitly defined interface ID.
West Gain	-20-20	0	Add gain to west channels.
East Gain	-20-20	0	Add gain to east channels.
Log Inbound Calls	Yes,No	Yes	Enable to logging of inbound calls.
Log Outbound Calls	Yes,No	Yes	Enable to logging of outbound calls.
DID Filter Numbers	comma separated DID list	empty	List of DID numbers to record or not record when DID Filter Type is set.
DID Filter Type	Disable, RecordOnly, DoNotRecord	Disable	The DID filter excludes from recording calls with certain DID numbers.It may filter calls in two modes
			RecordOnly, Record a call only with defined in the DID Filter Numbers setting DID numbers
			DoNotRecord, Don't record the calls with the set DID numbers.

*Windows XP users will need to install the appropriate DOT NET 2.0 from the DOT NET folder on the installation CD.