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# ***SL1100***

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## ***Digital Call Logger User Guide***



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**NEC Corporation of America  
6535 N. State Highway 161  
Irving, TX 75039-2402**

Communications Technology Group



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# *Chapter 1 1-Port Digital Call Logging Unit*

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## **SECTION 1 INTRODUCTION**

This document describes the features and capabilities of the NEC 1-Port Digital Call Logging Unit hardware, Recorder software and Player software solution.

The Call Logging solution consists of a low-cost USB device that taps across the digital extension pair of an NEC digital telephone.

Recorder software combines with existing Player software to deliver a professional recording solution for small volume applications.

PBX extension recording has traditionally been limited to:

- ☐ Expensive multi-port devices installed with the PBX equipment.
- ☐ Expensive single port digital devices (very few are available).
- ☐ Low cost analog handset tap devices.

Our unique 'PBX-2-USB' technology elegantly addresses the problems associated with low-cost desktop recordings. The USB device provides all of the advantages of expensive digital recording solutions, at a price in line with many 'handset tap' solutions while delivering much greater value and performance.

The Digital Call Logging Unit is a USB device that can record audio, when installed in line with the phone recording only those calls involving the selected digital phone.



**Figure 1-1 1-Port Digital Call Logging Unit**

Following are the two main sections to the NEC 1-Port Digital Call Logging Unit:

- ☐ **Recorder** – used to record calls involving selected digital phones and store those audio files in a selected folder. The recordings can be stored on a remote PC as long as a drive can be mapped to the desired remote folder.
- ☐ **Player** – allows the user to listen to and manage the recorded calls. The Player can play audio files in the XTR or WAV format. Audio files can be played from storage locations on the local PC or a remote PC accessible via a mapped drive.



*The use of monitoring, recording, or listening devices to eavesdrop, monitor, retrieve, or record telephone conversation or other sound activities, whether or not contemporaneous with transmission, may be illegal in certain circumstances under federal or state laws. Legal advice should be sought prior to implementing any practice that monitors or records any telephone conversation. Some federal and state laws require some form of notification to all parties to a telephone conversation, such as using a beep tone or other notification methods or requiring the consent of all parties to the telephone conversation, prior to monitoring or recording the telephone conversation. Some of these laws incorporate strict penalties.*

## SECTION 2     DEVICE SUPPORT AND CONNECTIVITY

### 2.1     1-Port Digital Call Logging Unit

Figure 1-2 Digital Call Logger Configuration shows the connection configuration of a NEC PBX, telephone terminal, the NEC 1-Port Digital Call Logging Unit and the local desktop PC. The Call Logging Unit has one PC USB connector that provides power and streams all speech and call control information to the host PC and two digital phone line connectors that passively 'tap' across the PBX/Keyset digital connection and 'listen' across a high impedance bridge to the signalling on the line. That information is then recorded to a predetermined folder on the local PC.

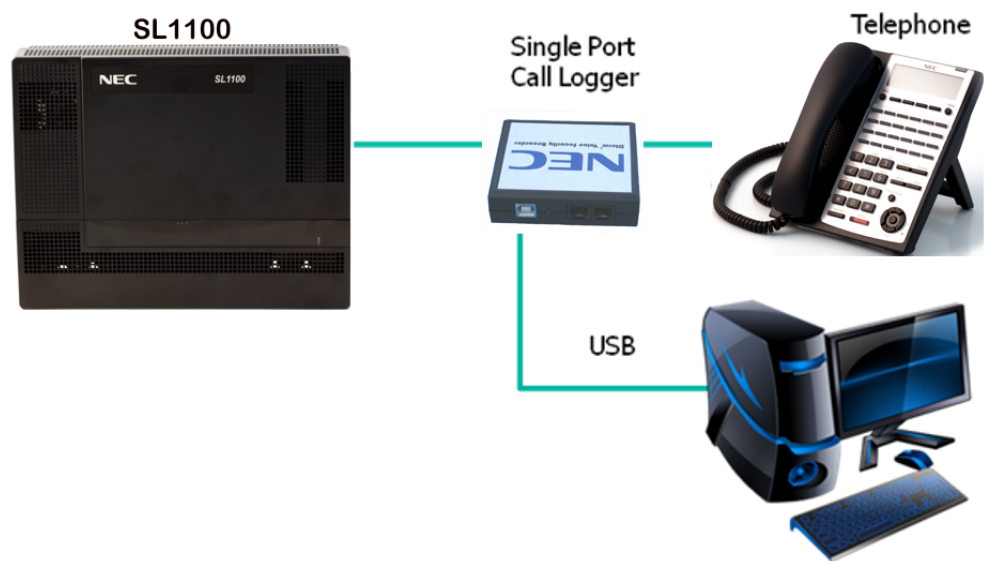


Figure 1-2 Digital Call Logger Configuration

### 2.2     Device Connections

The NEC 1-Port Digital Call Logging Unit device has three connectors:

- One PC USB connector, from which the device derives its power and streams all speech and control channel information up to the host PC, and the IP/Digital Player Application.
- Two Digital Phone line connectors that passively 'tap' across the PBX/Keyset digital connection and 'listen' in high impedance mode to the signalling on the line.

## 2.3 Device Performance

The device does not interfere with the communication between the PBX and the digital telephone. The device does not require USB power, or a connection to the PC to maintain the functionality of the telephone in its normal manner.

The device meets the appropriate FCC, CE and UL requirements required for this type of communications equipment.

## 2.4 Recorder Configuration

To configure the recorder, from the system tray right-click on the **NEC** icon and select **View Options**. The Options screen is displayed.

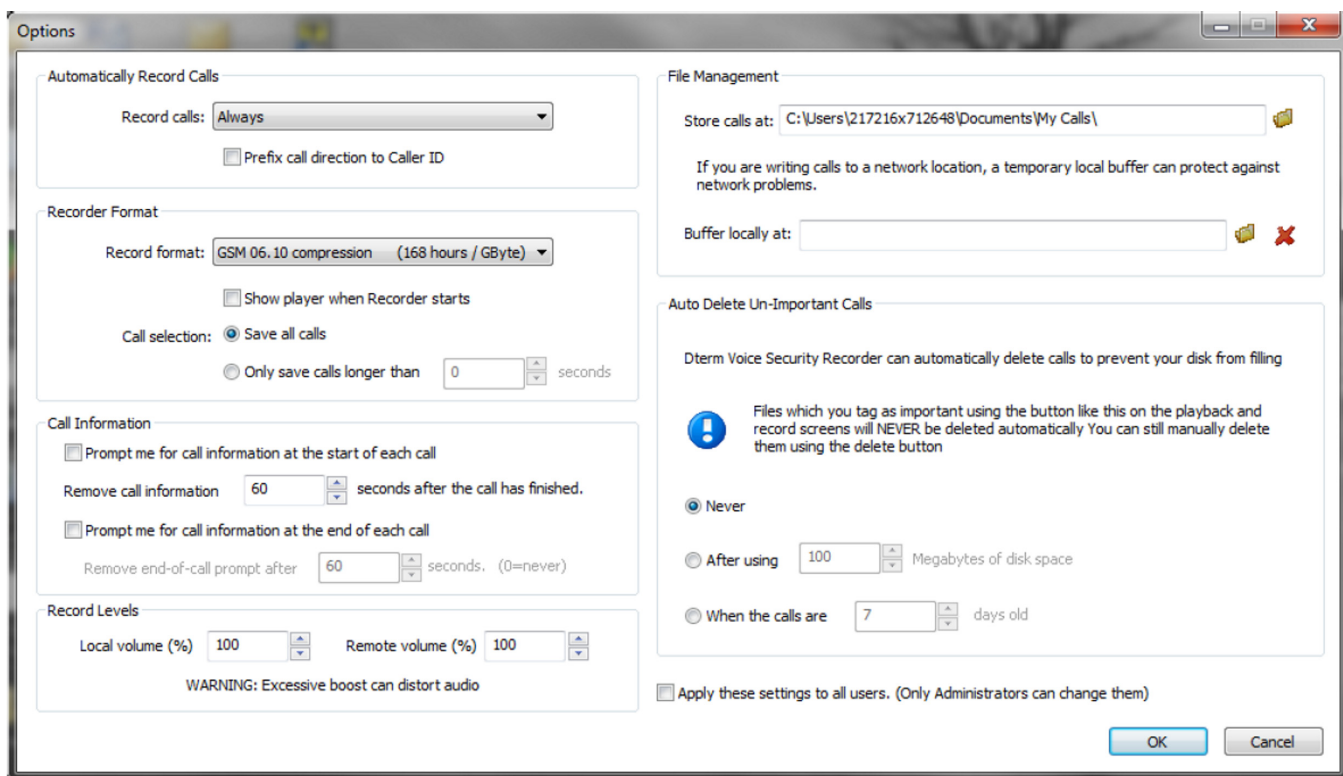


Figure 1-3 Digital Tap – Recorder Options

The View Options feature enables the installer/user to set up the options available for that user. Once modified, this can be set as non-viewable to the user, making it impossible for them to change (refer to [Section 4 Advanced Setup Options on page 3-8](#)).

- **Automatically Record Calls** – determines whether all calls are automatically recorded or if the recorder is intended for Manual Start/Stop only. Other options to record only incoming or outgoing calls may not be available on all installations depending on line provider and type of telephone instrument being used. For those installations that can identify incoming versus outgoing calls, these options are available.

By selecting the **Prefix** option, a '<' sign will be placed in front of the Caller ID to identify an incoming call and a '>' sign designates an outgoing call. In the case where the software cannot distinguish between incoming or outgoing it is identified as 'unrecognized' and a '?' is placed as a prefix.

- **Record format** – allows the user to select the recording format. 'Perfect Digital Recording' stores the recording in the PCM format taken directly from the recording device. This is the highest quality possible but can use a significant amount of space on the PC disk (35 Hours per GByte). The 'GSM 06.10' option (recommended) uses a compression technique to store the recording more efficiently (168 Hours per GByte). In practice, the difference in discernible quality is negligible so the default is for this format to be selected.

**Call selection** – determines the minimum length of a call that is saved. All calls are recorded from the very beginning of the call, but unless the call lasts longer than the period set, it will not be saved. This prevents short calls, miss-dials, etc., from being saved.

- **Call Information** – Prompt at Start of Call option opens the Recorder View window. This will occur any time the Recorder is active, even on very short calls. Prompt at End of Call option is often preferred, as this opens a window allowing the user to Save or Delete the call (if enabled) and also to add notes about each call if desired (refer to [Figure 1-4 Call Detail Screen Example](#)). This window will only open if the call has lasted the minimum period as defined in the previous option.

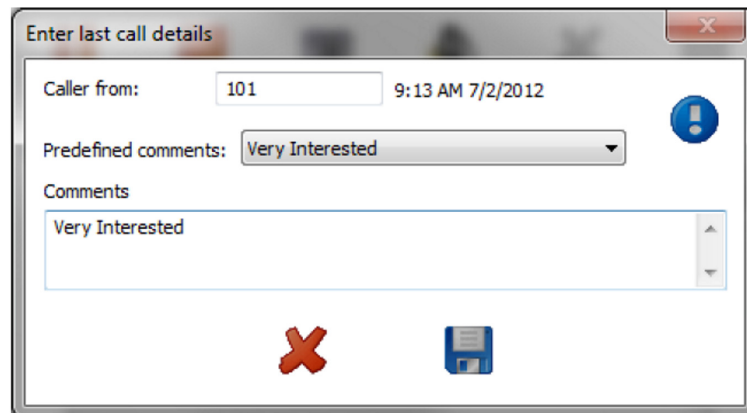



Figure 1-4 Call Detail Screen Example

- **Record Levels** – Each user can adjust the Recording Levels of either side of the conversation. The Local Volume is the recording level of the user; the Remote volume is that of the outside caller. If left at the default of 100% and 100%, no adjustment is made to the recording. Often the outside party is more difficult to hear in the recording due to level loss on the line; in that case an adjustment can be made to boost the level to the desired level. It is also possible, and often desirable, to decrease the volume if the Local side is too loud in the resultant recording.
- **File Management** – If the local user desires to manage their own calls, then using the default storage location created is often preferred, a My Calls folder is created under My Documents. If however, the calls are to be stored on a Network Drive for Centralized Call Management, then it is recommended that a local Buffer location be created on the Local PC. When a Local Buffer is created, the live call is buffered in the folder created (i.e. C:\Buffer) as an '.xtr.tmp' file. Once the call is completed, the recorder checks if the network location is available and if so, sends the call to the network storage location. If the network is not available, calls will continue to be recorded in the Buffer location. When one call is successfully sent to the network location, the entire buffer will also be transferred with no user intervention required.
- **Auto Delete** – automates the task of deleting calls after a predefined time or after a certain amount of space has been consumed. Calls marked as Important are Auto-Deleted by this routine.

Click **OK** to save the changes.

 *In order for the recorder to record all conversations, you should disable Windows Power Management. This application can stop the recorder by powering down the USB device or suspending the computer.*

# Chapter 2 Digital Recorder

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## SECTION 1 STARTING THE RECORDER

The Digital Call Logging Unit's Recorder can be started by double clicking the **Dterm VSR Recorder** icon, by choosing the **Dterm VSR Recorder** option in the windows start menu or by selecting on **View Recorder** after right clicking on the NEC icon from the system tray.

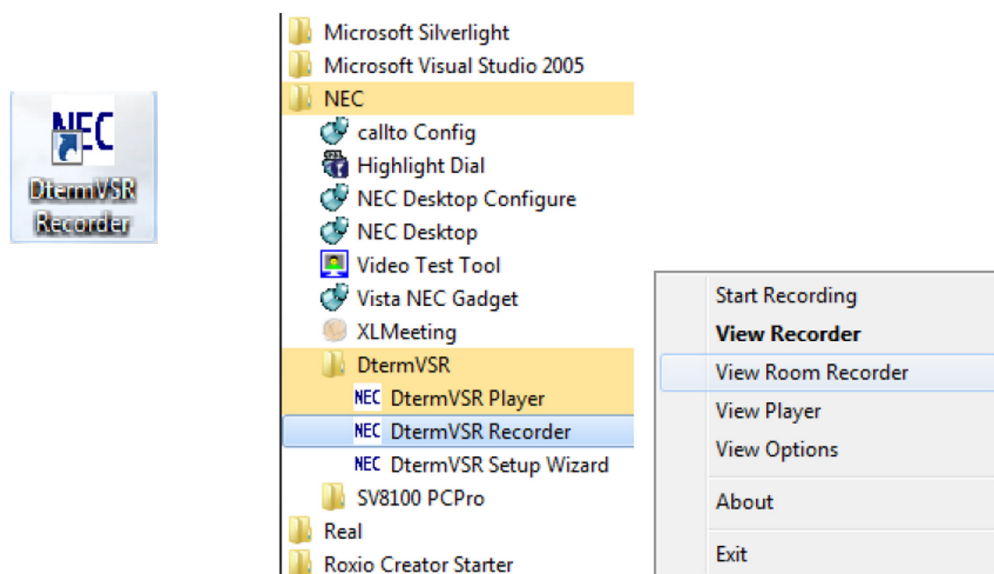



Figure 2-1 Recorder Startup Options

## SECTION 2 USING THE RECORDER

When using the Recorder it is possible to interact with the live recording if desired. The user can pause or stop the recording (if enabled) as well as add notes about the call, either by typing in as desired or selecting from a list of predefined comments that can be customized by each user. By clicking on the Snapshot icon, the current call is placed into the Player for immediate playback while continuing to record. The Speaker icon routes the audio from both sides of the recording through the PC Speakers. This system tray icon will flash yellow and red to indicate an active call being recorded.

 *There is a slight delay, as this is not the 'live' call, but a recording of what has just occurred.*

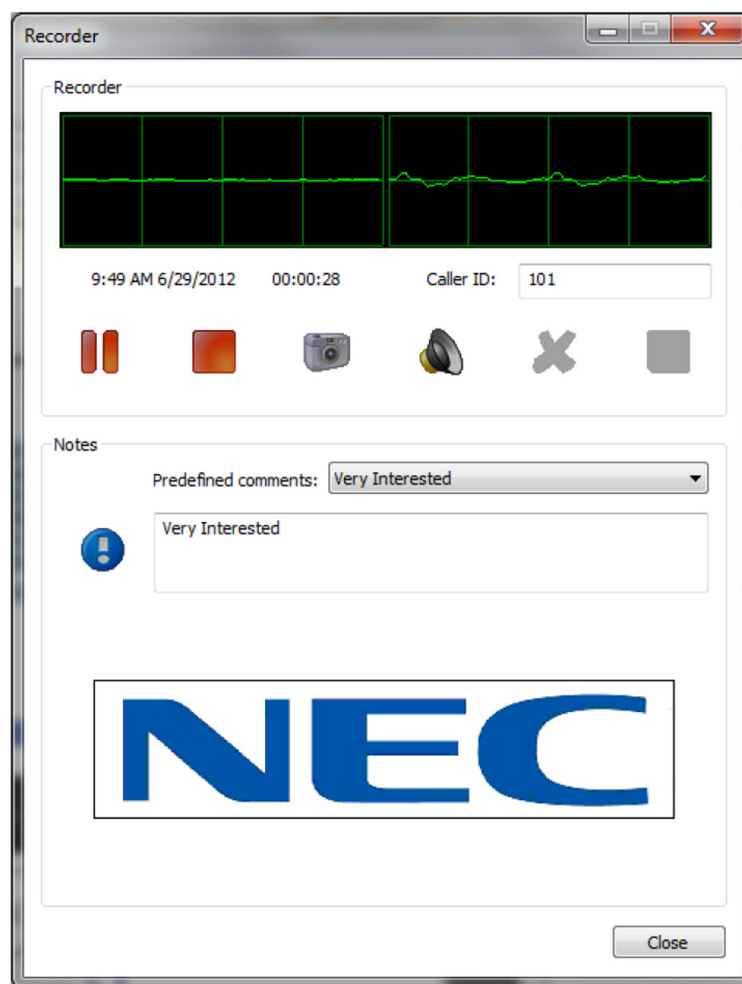


Figure 2-2 Recorder Screen

### SECTION 3 ROOM RECORDER

Room Recorder, when activated, switches the Recording Source from the Telephone to the user's microphone on their PC. This allows for Live Interview recordings, Dictation and many other uses. It is recommended that an Omni-directional microphone be used in this case. The auto gain control provides consistent recording results in most cases.



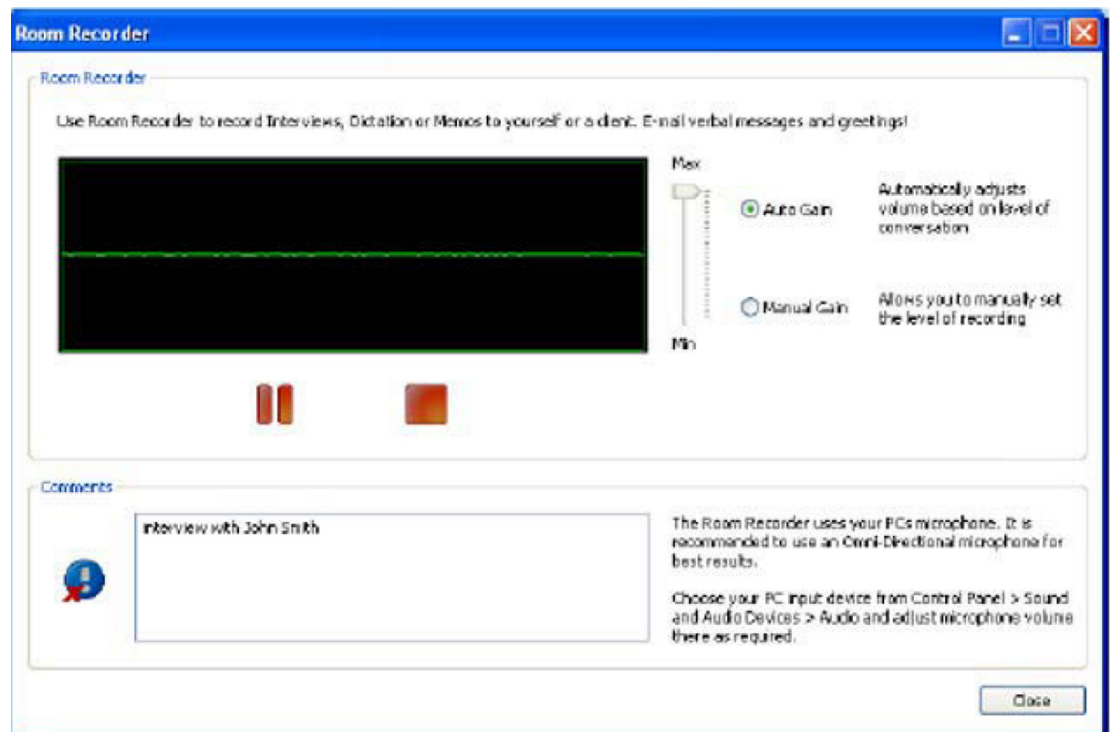


Figure 2-3 Room Recorder Screen

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# Chapter 3 Digital Player

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## SECTION 1 STARTING THE PLAYER

The Digital Call Logging Unit's Player can be started by double clicking the **Dterm VSR Player** icon, by choosing the **Dterm VSR Player** option in the windows start menu or by selecting on **View Player** after right clicking on the NEC icon from the system tray.

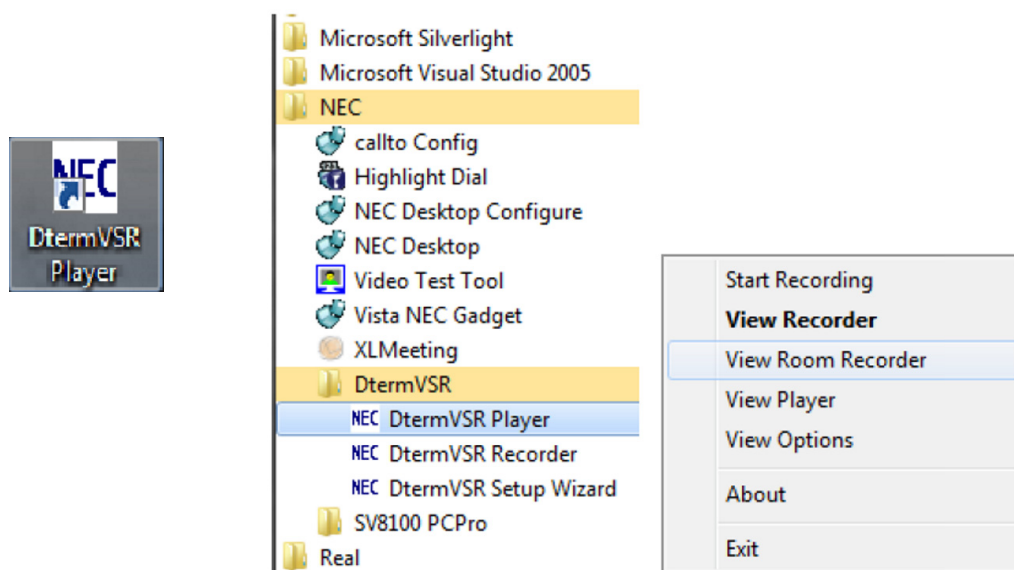
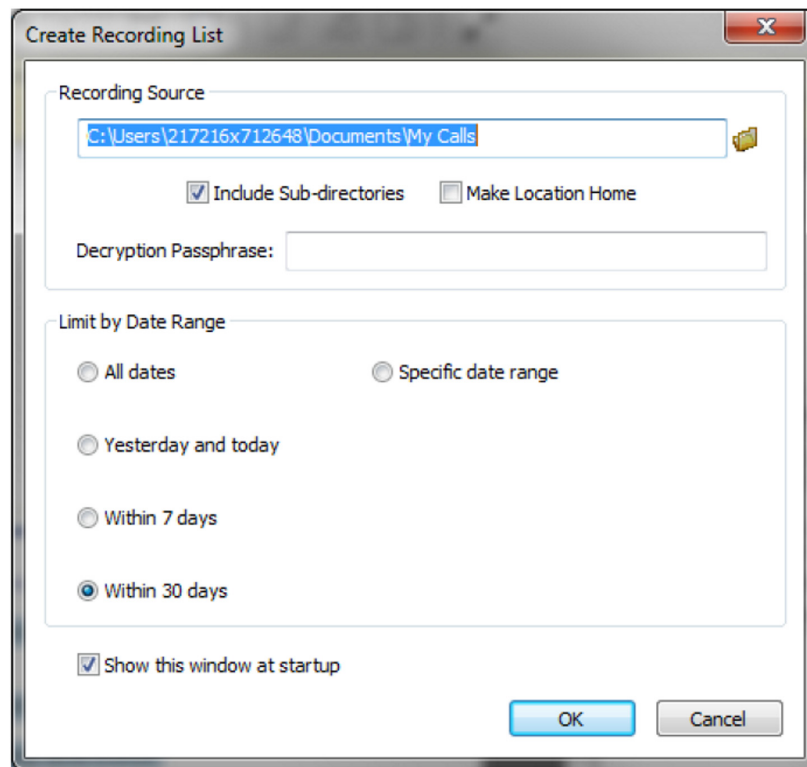


Figure 3-1 Player Startup Options

## SECTION 2 CONFIGURING THE PLAYER

When the Player is launched the Create Recording List window comes up by default (refer to [Figure 3-2 Create Recording List on page 3-2](#)). In this window, the Recording Source settings allow the user to select the folder where the recordings are stored. The default is C:\Users\name of user logged in\Documents\My Calls.

Additionally, the Player user can determine whether or not to look for call recording records in subdirectories and what passphrase to use if call recordings are encrypted.



**Figure 3-2 Create Recording List**

- ☐ **Limit by Date Range** – allows the user limit the calls displayed for playback to certain date ranges or days.
- ☐ **Show this window at startup** – setting allows the user to view or not view this window at startup.

Click **OK** to accept settings.

## SECTION 3 USING THE PLAYER

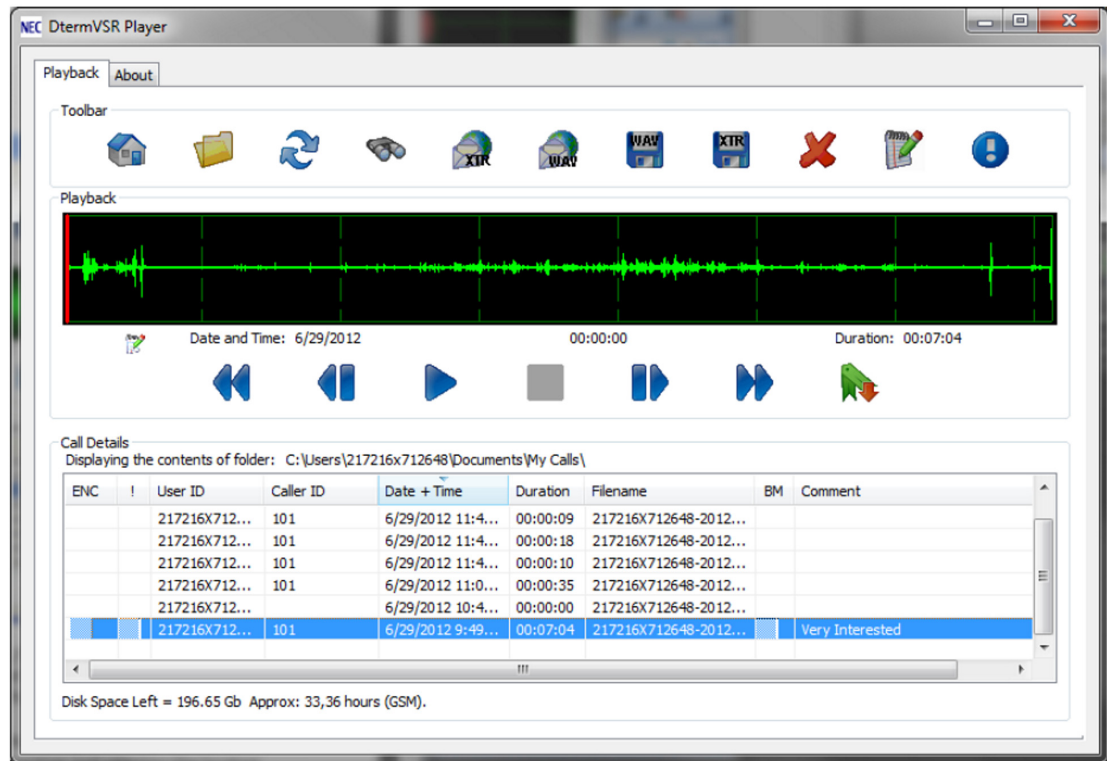





Figure 3-3 Digital Player – Playback Tab


The ability for a user to stop, pause, email, delete and/or convert recordings as well as view the player and sys tray icon can be restricted on a per user basis. This is explained in [Section 4 Advanced Setup Options on page 3-8](#) of this document.

### 3.1 Basics

By default, the player is directed to your storage folder that is set up in the Options Area under File Management. By selecting the **Home**  icon, the Player will return to view calls from this location. While this view is displayed, new calls appear as they are generated. You can view calls from other locations by selecting the **Browse**  function and selecting the location from which to view calls, either on your local PC or network location.

The **Refresh**  option performs a new scan of the folder in view.

## 3.2 Search

Select **Search**  to enable searching for calls in view by User ID, Caller ID/Number Dialed, Comment or All. The search will then bring into view results from the current view that matches your criteria.

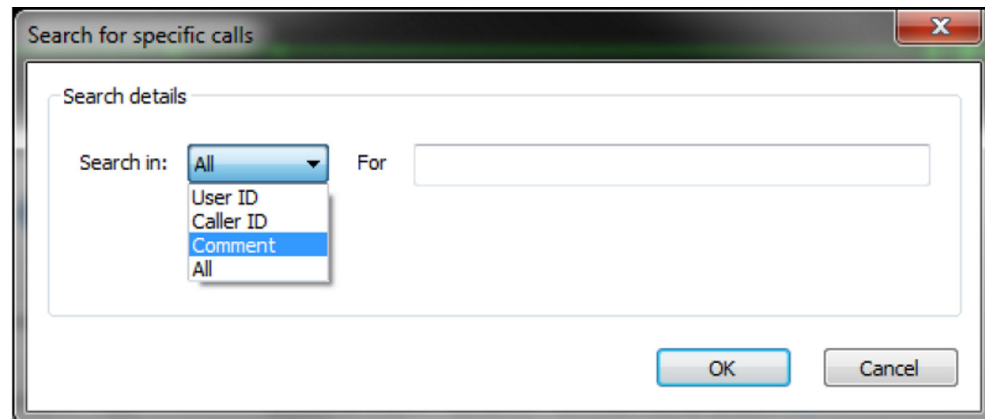






Figure 3-4 Search for Specific Calls Screen

## 3.3 Email


To email as a proprietary and secured formatted recording select the first email  icon option. This attaches the recording to an outbound email message; an auto-text is generated with a link to where the recipient of the email can download a free player.

The other email option is to select the email as **WAV**  icon, this first converts the recording to a wav file, then attaches to an outbound email message.


## 3.4 Save

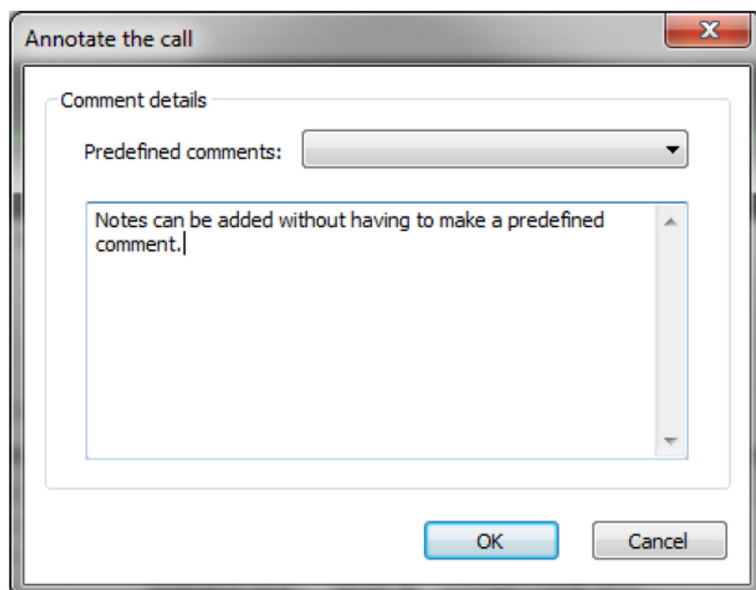
It is often desirable to **Save** and **Move** important calls from one storage  location to another. This is done quickly and easily by selecting the recording in the Player then clicking on the **Save** icon. This XTR option will save the recording to another location in the native '.xtr' file format. By selecting the **WAV**  option, it converts the file to a WAV format and then allows the recording to be saved in the desired location.

## 3.5 Delete

To delete an unwanted call, select the call or calls to be deleted and click on the **Delete**  icon.

### 3.6 Notes

By selecting the **Notes**  icon, the user can add notes to be stored as part of the call record. Any item in the notes field can be used later to find a particular call. Notes can be selected from a list of Predefined comments or by simply typing notes in the section shown below.



**Figure 3-5 Annotate the Call Screen**

 *Predefined comments can be customized for specific uses, this is detailed below.*

### 3.7 Customize Predefined Comments

Located in the Program directory, which is loaded at default in:

- **Windows XP** – C:\documents and settings\All Users\Application Data\DtermVSR Player\Configuration, is a file called Comments.txt.
- **Window 7** – C:\Program Data\NEC\DtermVSR (Recorder or Player)\Configuration, is a file called Comments.txt.

To edit this file, click on the file to display a Comments.txt window:

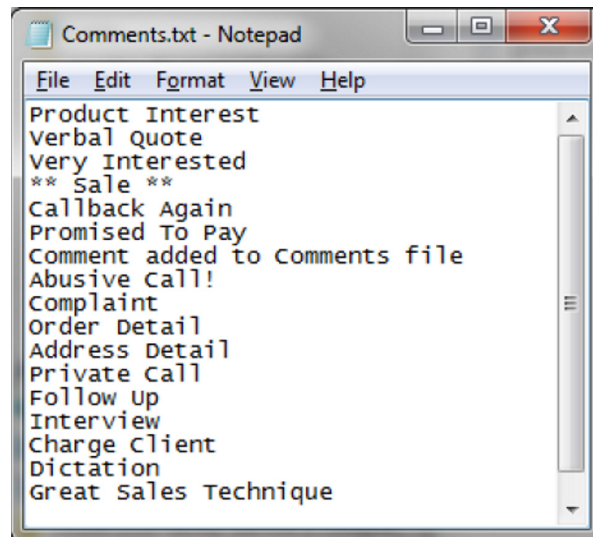



Figure 3-6 Comments.txt Example

Type in a column any number of comments and how you would like them to appear. Once completed, select **File>Save** and replace the existing Comments.txt file. The new list then appears in your drop down menus. This places the selected text in the comments field. More text can be appended to the notes if desired.

 The application (Recorder or Player) must be re-launched before newly added comments are displayed.

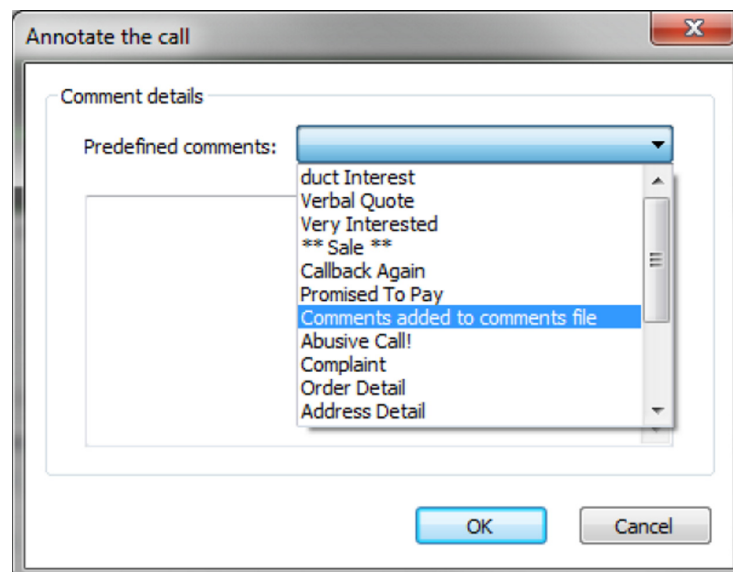




Figure 3-7 Annotate the Call – Comments Added



### 3.8 Important Calls

Calls can be marked as **Important** by selecting the call and simply clicking on the Important  icon. This highlights the call in the list and keeps the file from being automatically deleted as set in the Recorder.

### 3.9 Bookmark Calls

A Bookmark can be added to a Recording at any place. This can be used to highlight an important part of the call making it easy to find in the future. To Bookmark a part of the recording simply select the Bookmark  icon at the point desired and the graphic will display an area bookmarked in blue as shown below:

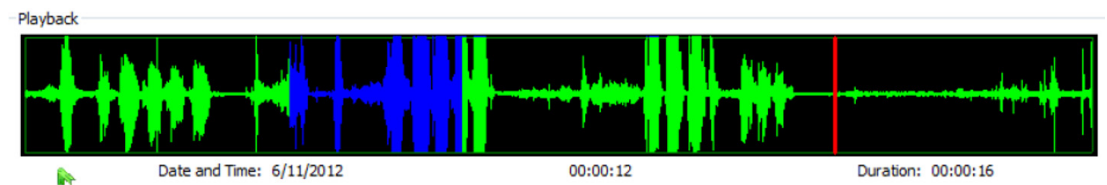



Figure 3-8 Example of Bookmarked File


There will also be a small Bookmark icon in the Call Details area for that call. When a bookmarked call is selected, the icon changes to  allowing the bookmark to be removed.

### 3.10 Playing Calls

To play calls select the desired recording from the Call Details section and the selected call will be loaded into the Player. To move to any point of the recorded call, click on the desired point of the waveform in the Playback window. There is also the option of using the playback control options below. This gives the option to play, pause, rewind or fast forward by 10 or 30 seconds or stop.



Figure 3-9 Playback Controls

 During playback, the **Play** button becomes the **Pause** button.

### 3.11 Sorting Calls



Calls loaded into View in the Player can be sorted by clicking on the individual column header. For example, sort for all 'important' calls, or perhaps all calls that have comments associated with them. To return to the previous view, simply hit the Refresh icon.

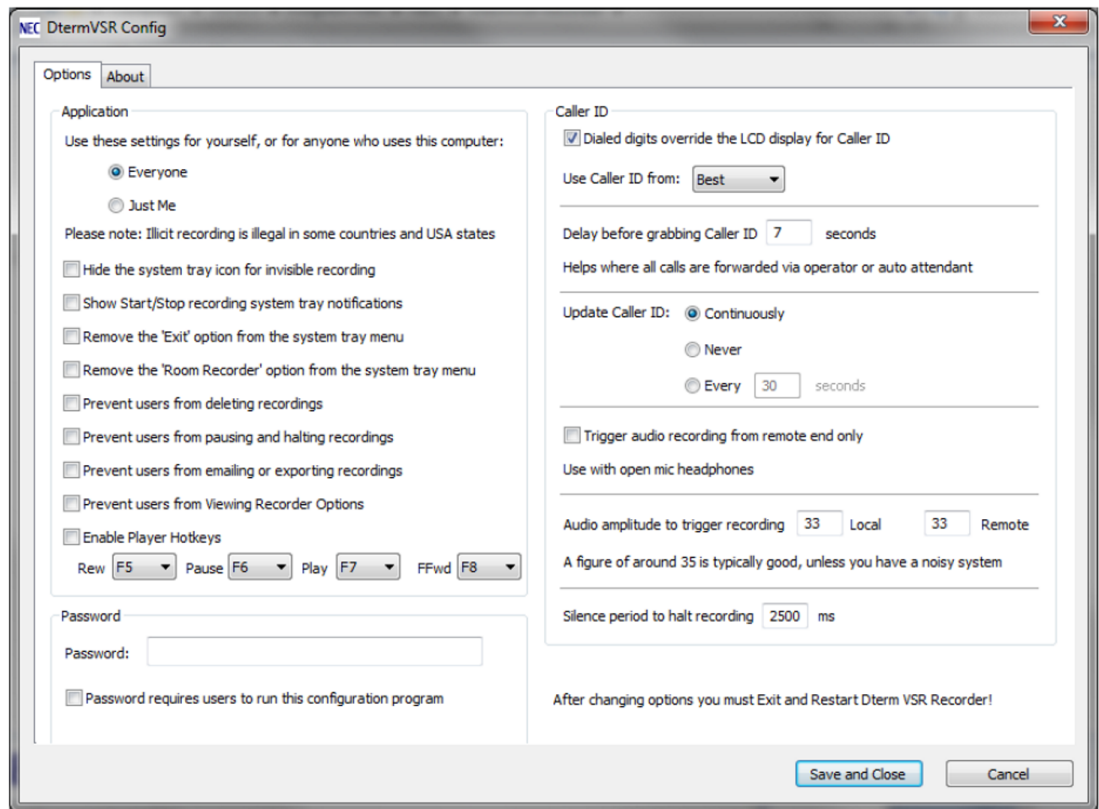
ENC	!	User ID	Caller ID	Date + Time	Duration	Filename	BM	Comment
		132	>trk025	6/11/2012 3:18...	00:00:16	132 - 2012-Jun-11-15...		
	!	Henry Norris	5555552218	4/11/2005 3:43...	00:00:07	Henry Norris-2005-AP...		
	!	Henry Norris	5555556578	4/4/2005 9:31...	00:00:07	Henry Norris-2005-AP...		This is a sample comment entry
	!	Henry Norris	5555553987	4/5/2005 3:22...	00:00:07	Henry Norris-2005-AP...		
	!	Henry Norris	5555555570	4/5/2005 4:32...	00:00:07	Henry Norris-2005-AP...		

Figure 3-10 View Player Example

## SECTION 4 ADVANCED SETUP OPTIONS

NEC has also provided the option of making additional adjustments to the use and functionality of the user interface. These advanced options further limit, modify and improve the end user's experience. The configuration program is accessed by browsing to the default installation location in **C:\Program Files\NEC\DtermVSR Recorder** and clicking on the **DtermVSR Config.exe** file (refer to [Figure 3-11 Digital Config – Options Tab on page 3-9](#) for an example of available settings).

-  *The customer takes all responsibility to ensure they are meeting legal requirements. NEC provides the user option settings in order to meet customer demands and cannot be responsible for misuse of the product.*
-  *For any changes made in the DtermVSR Config Program to take effect, the application must be exited and restarted. To exit the program, from the system tray, right click on the **NEC icon** then choose **Exit**.*



**Figure 3-11 Digital Config – Options Tab**

## ☐ Installation on Shared PC


Use these settings for yourself, or for anyone who uses this computer:

- ☒ Everyone  
☐ Just Me

Please note: Illicit recording is illegal in some countries and USA states

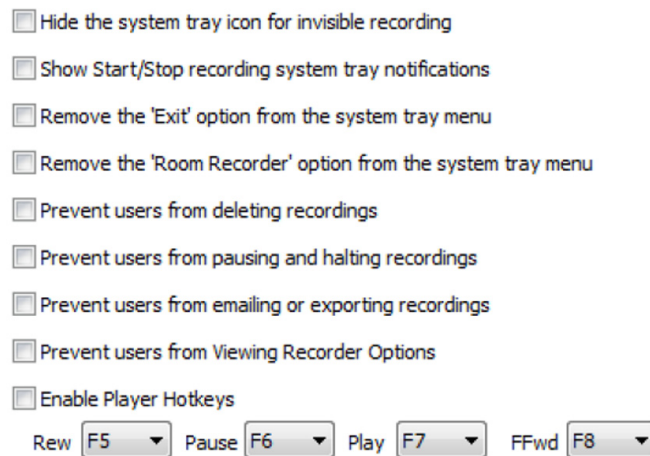
**Figure 3-12 Shared PC Settings**

Everyone – setting used if installing on a PC that has multiple user log-on IDs and it is preferred that all calls, regardless of the user logged in, are stored in the same folder and have all the same settings.

 The user ID Header on each recording is taken from the PC User Login ID. If each user logs into the PC with a unique login, the recordings are searchable and can be sorted by the various User IDs.

Just Me – if desired, each user can have their own settings, i.e., different storage folders etc. If this option is used, it will be necessary to install the application under each user log-in on the PC.

- ☐ Restricting Features and Functions  
The following features can be restricted on a per user basis:



☐ Hide the system tray icon for invisible recording

☐ Show Start/Stop recording system tray notifications

☐ Remove the 'Exit' option from the system tray menu

☐ Remove the 'Room Recorder' option from the system tray menu

☐ Prevent users from deleting recordings

☐ Prevent users from pausing and halting recordings

☐ Prevent users from emailing or exporting recordings


☐ Prevent users from Viewing Recorder Options

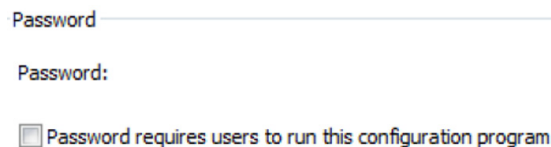
☐ Enable Player Hotkeys

Rew  Pause  Play  FFwd

**Figure 3-13 Restricted Feature Settings**

- ☐ Password

 This option requires the Password in order to access the DtermVSR Config Program.



Password

Password:

☐ Password requires users to run this configuration program

**Figure 3-14 Password Setting**

- ☐ **Caller ID**  
Used to adjust how the recorder reads Caller ID information delivered to the telephone.

Caller ID

☒ Dialed digits override the LCD display for Caller ID

Use Caller ID from: Best

Delay before grabbing Caller ID 7 seconds

Helps where all calls are forwarded via operator or auto attendant

Update Caller ID: ☒ Continuously

☐ Never

☐ Every 30 seconds

**Figure 3-15 Caller ID Settings**

The Recorder software reads the data for Caller ID from the information provided by your carrier. For analog phone lines, leave this setting at **Best**. The remaining options are for different interface devices.

- ☐ **Headsets or Hot Mics**

☐ Trigger audio recording from remote end only

Use with open mic headphones

**Figure 3-16 Headset/Open Mic Setting**

Check this option if the recorder doesn't consistently stop the recording function or, background office noise triggers the recorder while not on the telephone (open mic).

- ☐ **Adjust Sensitivity**

Audio amplitude to trigger recording 33 Local 33 Remote

A figure of around 35 is typically good, unless you have a noisy system

Silence period to halt recording 2500 ms

**Figure 3-17 Sensitivity Setting**

In the vast majority of cases no adjustments are needed here. With some lines a start/stop trigger for recording is based on a signal level, to make these triggers more sensitive lower the values above, less sensitive raise them.

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# **SL1100**

## **Digital Call Logger User Guide**

NEC Corporation of America

Issue 1.01



NEC Corporation of America  
4 Forest Parkway, Shelton, CT 06484  
800-365-1928  
[www.necsl1100.com](http://www.necsl1100.com)