Audio Overview Guide

Flex/Max Series

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1. General Description

All Flex and Max units have some kind of audio functionality that can easily be integrated (synchronized and recorded) with video. This capability can be in hand used to utilize the two way functionality of the unit as well. This overview guide will show you the ways audio can be fully used in an installation along with how you can program your DVR to record it along with video.

Note: Always check with your state's laws before integrating audio with the DVR. Audio may be prohibited in business locations if not properly installed or indicated by the owner that it is being used.

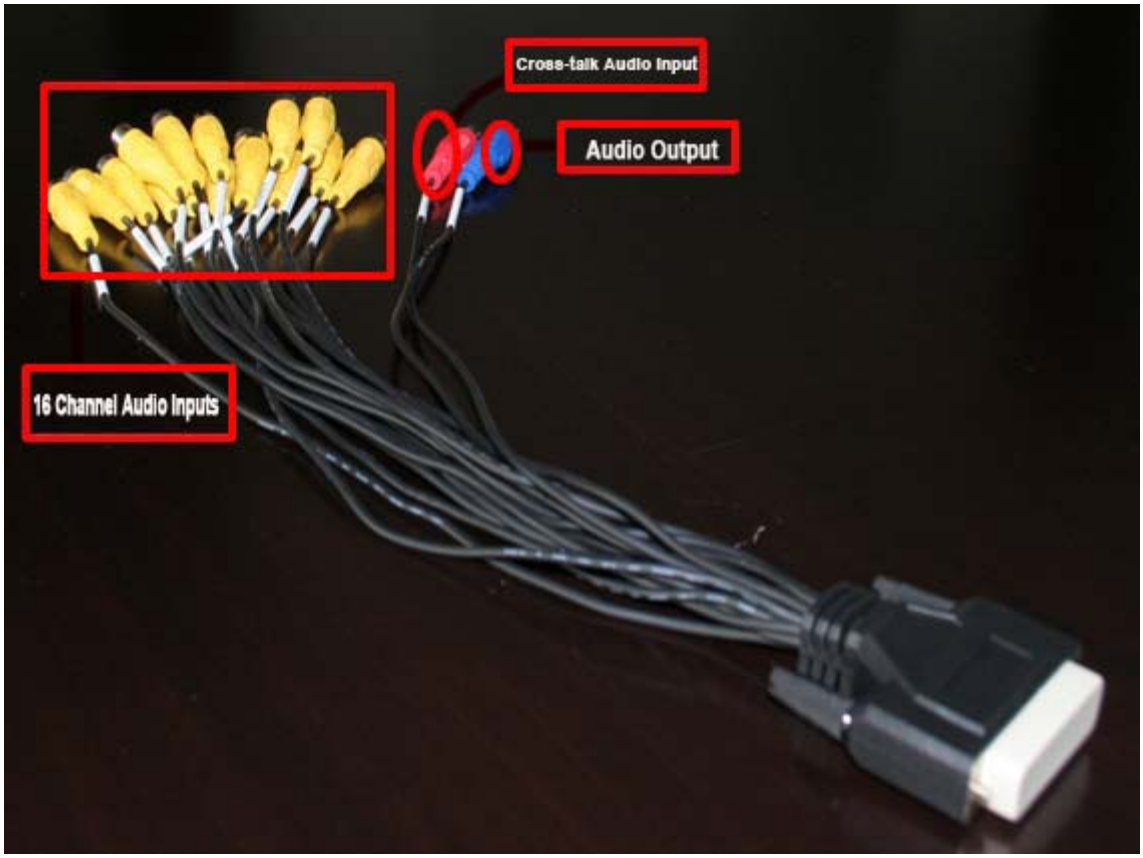
Flex/Max unit audio specifications:

Audio	
Audio Input	4/8/16 channel, BNC, 200-2800mV, 30K Ohm
Bidirectional Talk Input	1 channel, BNC, 200-2800mV, 30K Ohm
Audio Output	1 channel, BNC, 200-3000mv, 5K Ohm
Audio Compression	ADPCM

2. Rear Panel Connections

Naturally all Flex and Max units audio connections are made in the rear panel. Please be aware that depending on the version of unit you have, the connections may be different. Check with your manual to see if the audio connections are either on a separate dongle (described later on this page) or are soldered directly on to the main board. All audio connections will either be in the form of BNC or RCA connectors.

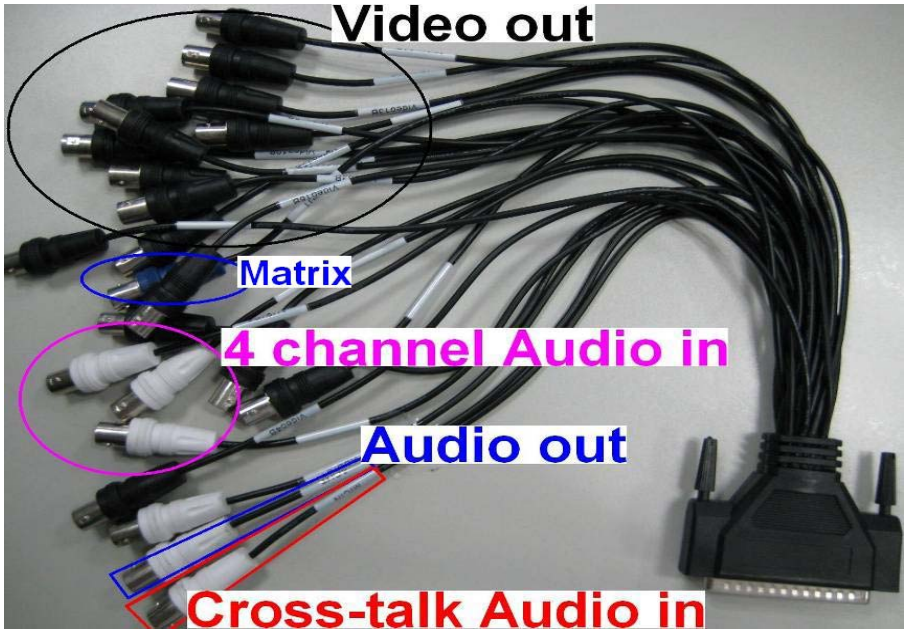
Below is a diagram of the 25 pin connector for the audio dongle. You would attach the dongle to the connector on the back of the DVR and connect the corresponding devices to it.

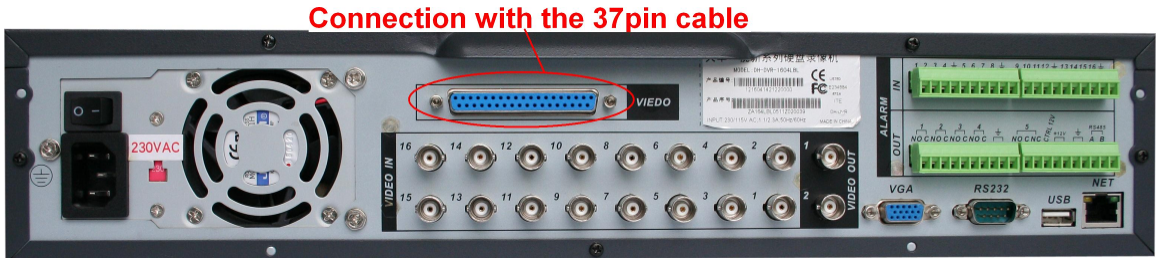


Yellow Connectors – Microphone connection per channel
Note: the connectors are individually labeled for the channels
Red Connector – Audio input (microphone for two-way talking)
Blue Connector – Audio output (for speakers)

The pictures below are from our matrix series of DVRs. As you can see, the connectors are slightly different in color and operation. Please note the differences below.

Note: the connector for the matrix unit is a 37 pin out.





Black Connectors – Single video loop out channels
Blue Connectors – Matrix outputs
White connectors – Microphone connections (up to 4 channels)
White connectors – Audio out and Microphone in (two way talking)
Note: the white connectors are labeled so you know which is which.

Note: in future builds, the connection orientation of these units may change without notice. Always refer to the unit's manual for further assistance.

3. Setting up Audio for Encoding

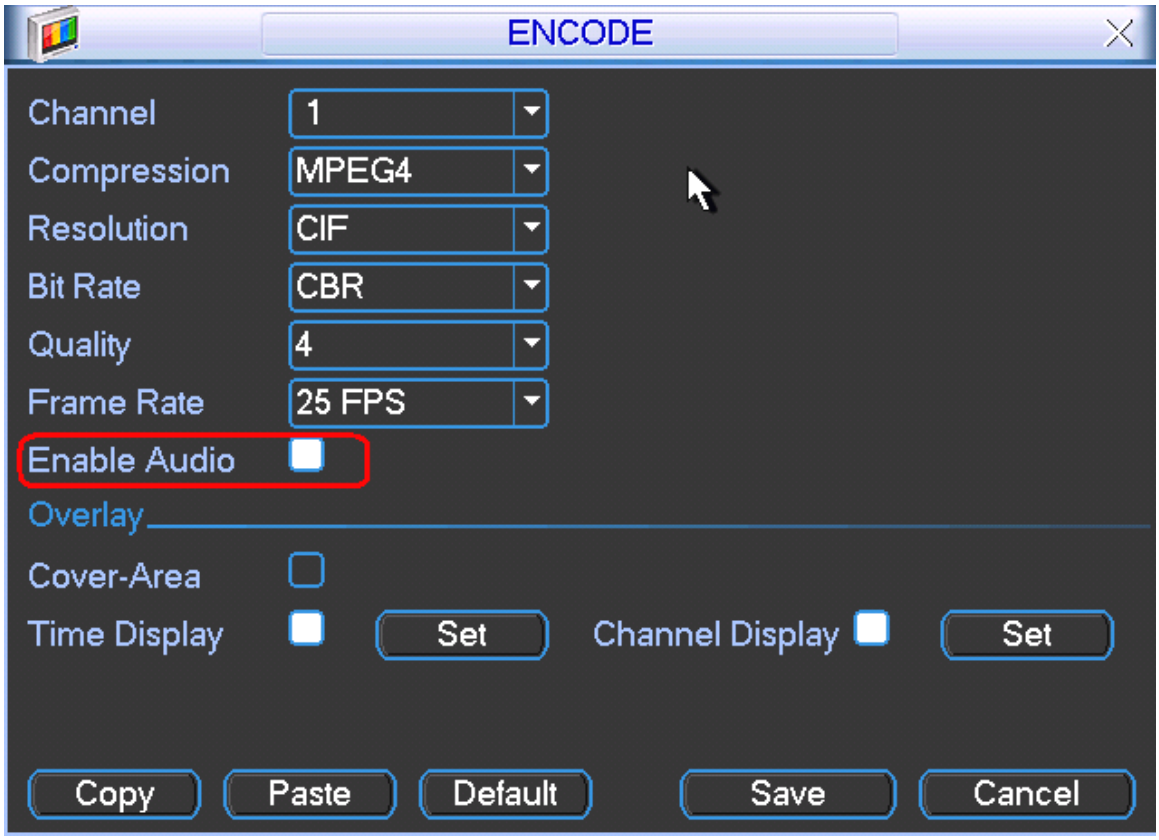
The main reason for installing microphones for audio is to obviously record it along with the video. With the Flex and Max units, you will need to make a few adjustments to allow it to record audio. The below walkthrough can be used for both the Flex and Max units.

1. **Start by making sure all microphone/speaker connections are made on the back of the unit. Double check that the microphones are corresponding to the desired channel you want them to record on.**

2. **Now log in to your DVR (at the head unit) and navigate to the Encode section (Main menu>Settings>Encode).**

3. **Change the channel(s) at the top for what you want to add audio to. Highlight the audio option in the settings to enable audio for that channel. That's it!**

Note: you can adjust multiple channels before saving at the bottom.



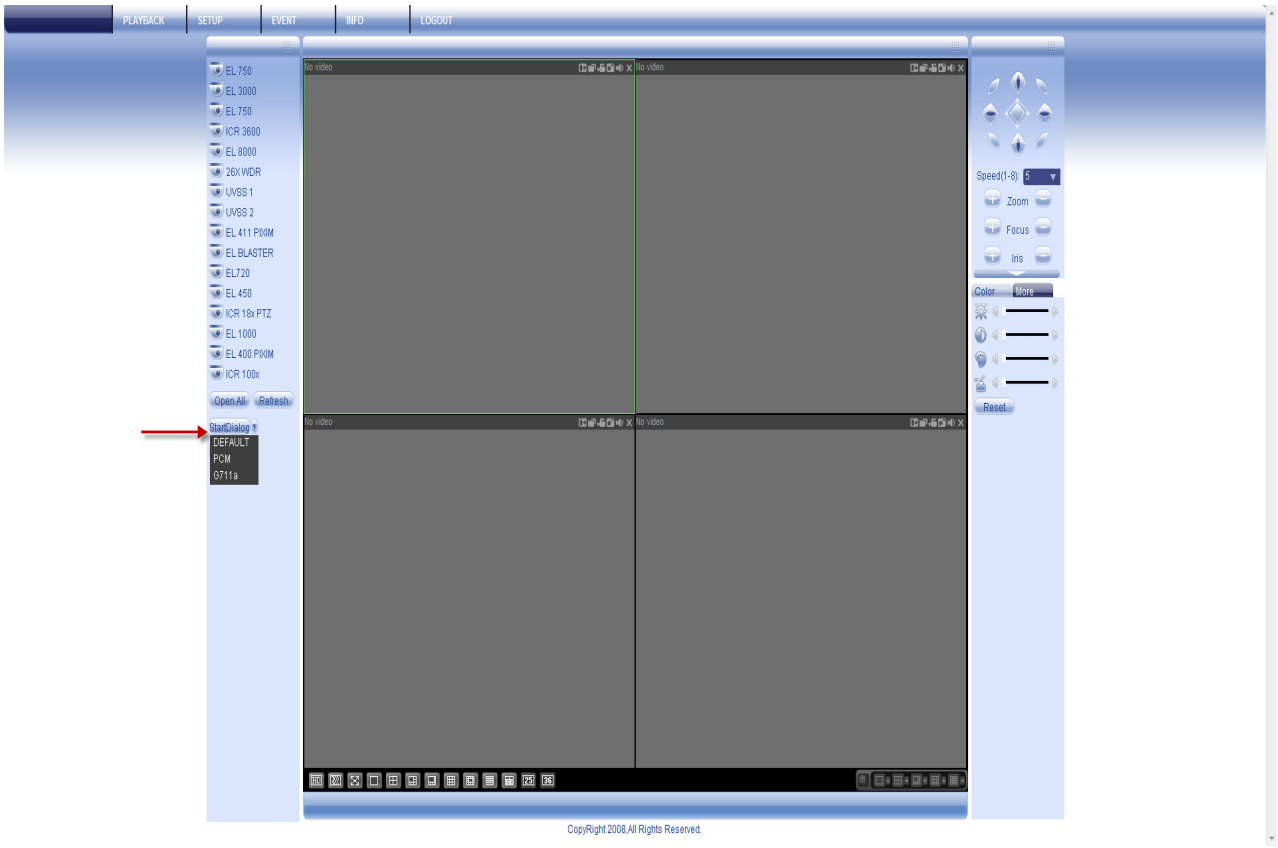
4. Two-way Audio

Two-way audio functions as a way to communicate back and forth from a remote user and a user that's near the head unit. This function works great at un-supervised businesses and homes. Follow the below steps to get it setup.

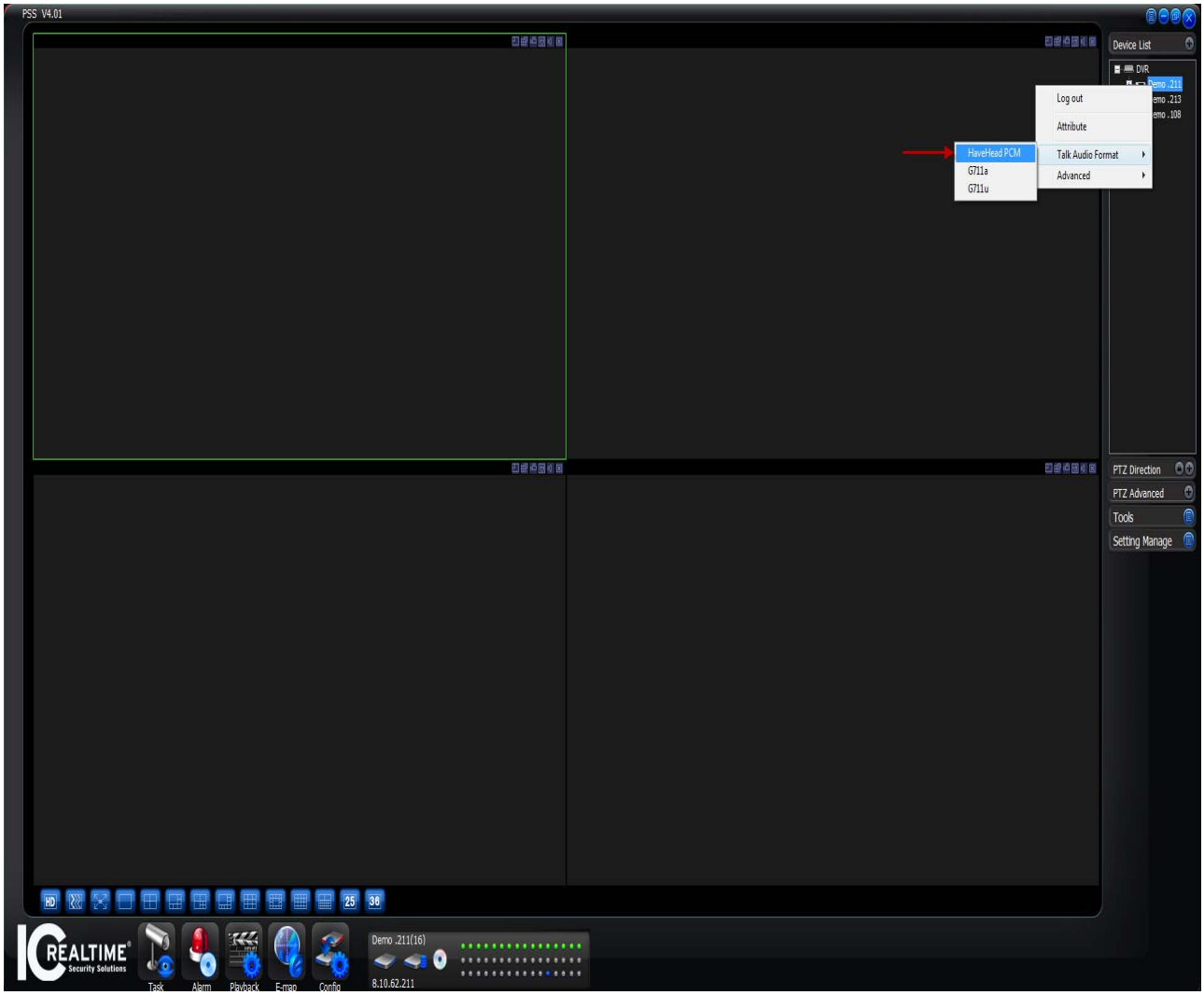
1. **Start by connecting a microphone to the specific connector relating to the model of DVR you have (see the first couple of pages). Now connect a speaker system to the audio output of the DVR. Note: some DVR models will have a specific connection labeled "Mic output" or "Bidirectional talk output". Use this connection for the speaker system.**

2. **Login to the DVR through its web interface or the PSS client software.**

3. **In the web interface, look to the left hand side for a "Start Dialogue" button. Click it to activate the two-way talk function. You can now begin your conversation. Note: please make sure you have a microphone attached to your computer and it is actively working.**



4. **In the PSS client software, right click on the DVR you want to use the two-way function on and choose “Talk Audio Format”. Choose any of the encoding options to start the conversation.**



Note: the clients may change in the way you activate the two-way function with out notice. Always refer to your user manual for more information.