

Basic Multicasting/Streaming For the Edje2000 & Edje2100

As of June 2003, Adtec manufactures two real-time MPEG streaming encoders. The Edje2000 has component & S-Video (Y/C) inputs and the Edje2100 has component, S-Video and ASI video inputs. The basic functionality of both is the same. The Edje2100, however, has many features for which the Edje2000 does not. Please contact your sales rep for information on these differences. All current Adtec products, other than the encoders, will decode one of these streams.

This document only contains information on the simple process of encoding, streaming, receiving and decoding of MPEG2 files from one Adtec unit to another.

Edje2000 Software (Encoding)



Edje2000 Software (Cont.)

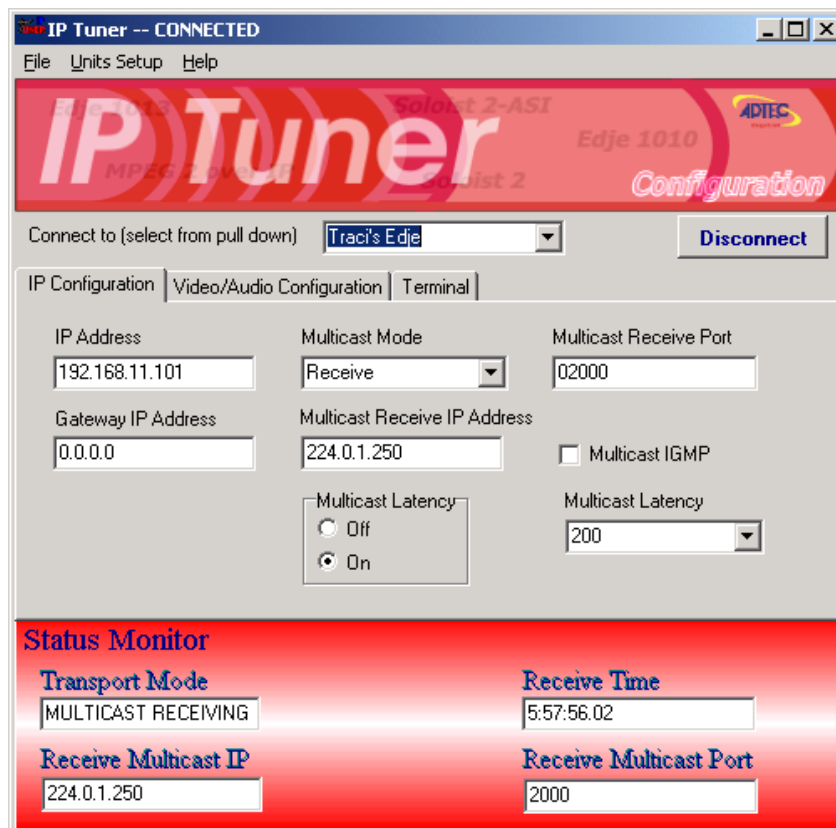
- 1) After making the initial cable connections, you can connect to the encoder using the default selections within the CONNECT drop-down menu.
 - After the connection is made, you can go to the IP CONFIGURATION tab to change the IP address of the unit to suit your needs. The MULTICAST fields will be explained later in the document.
 - If you have changed the IP address of the encoder unit, you must go to the UNITS SETUP menu and ADD the “new” unit to the CONNECT menu.
- 2) To adjust the streaming video properties, go to the VIDEO tab. The most basic MPEG2 video settings have been defaulted here. Adjust them as you see fit.
 - Depending on your network bandwidth & the quality of video you desire, adjust the BITRATE. This setting is the rate at which the incoming video/audio will be encoded. This can range from 300Kb/sec to 8Mbits/sec.
- 3) To adjust the audio properties, go to the AUDIO tab. Again, the average settings have been defaulted. Note: Digital audio is only available with the Edje2100.
- 4) The MULTIPLEX tab is where you setup more in-depth MPEG2 properties. For basic streaming from one Adtec unit to another, these need not change. Any setting on this tab will match the abilities of Adtec products.
 - MULTIPLEX DESTINATION is the choice of streaming the input signal over IP or to the optional internal drive.
- 5) As stated previously, the IP CONFIGURATION tab is where you setup the Ethernet properties. These settings are for the unit to which you are currently connected. The Multicast settings are for the stream that you are producing. Please note these settings.
 - MULTICAST MODE is set to “send” the MPEG2 stream via the MULTICAST SEND IP ADDRESS. This Multicast Send IP Address should range between 224.0.0.1 & 239.254.254.254.
 - The MULTICAST SEND PORT is defaulted to 2000 but is adjustable depending on your network needs. The “send” IP address and port settings will match with the receiving or decoding unit.
 - MULTICAST IGMP will allow the multicast to pass through a router which has IGMP version 1 or 2 capabilities.
- 6) If a Firmware upgrade is necessary, the IFP tab is where it will be done. Updated Firmware can be downloaded via the Adtec website (www.adtecinc.com). This is not recommended unless needed during troubleshooting or directed by Adtec Customer Service.
- 7) The TERMINAL tab is a tool used mainly during troubleshooting with Adtec Customer Service. It is similar to the MS-DOS Prompt of Microsoft Windows in that it allows you to speak directly to the unit. Bypassing the application. This can be dangerous unless you are an expert.

Edje2000 Software (Cont.)

After all settings have been configured to your preferences, simply click RECORD. Your Adtec Edje encoder is now encoding to an IP stream or to a drive.

IP Tuner Software (Decoding)

As stated previously, most any current Adtec product will decode a stream from an Edje2000 or Edje2100. However, this section is tailored toward an Edje unit receiving the stream.



- 1) After making the initial cable connections, you can connect to the decoder or receive unit using the default selections within the CONNECT drop-down menu.
 - After the connection is made, you can go change the IP address of the unit to suit your needs.
 - If you have changed the IP address of the encoder unit, you must go to the UNITS SETUP menu and ADD the "new" unit to the CONNECT menu.

IP Tuner Software (Cont.)

- 2) Using the IP CONFIGURATION tab, you can enable the Multicast receive properties.
 - The MULTICAST MODE setting enables the unit to receive.
 - The MULTICAST RECEIVE IP ADDRESS and PORT should be set to match the Multicast settings on the encoder. Once again, this IP range should be between 224.0.0.1 & 239.254.254.254 with the port typically being 2000.
- 3) The VIDEO/AUDIO CONFIGURATION tab allows you to choose the output video mode (NTSC, PAL, etc.). The BLANK mode sets the type of output you would like when the unit is NOT receiving and/or playing from the hard drive. This is defaulted to black.
- 4) The TERMINAL tab is a tool used mainly during troubleshooting with Adtec Customer Service. It is similar to the MS-DOS Prompt of Microsoft Windows in that it allows you to speak directly to the unit. Bypassing the application. This can be dangerous unless you are an expert.

After the Multicast Mode RECEIVE is selected, your decode unit should begin receiving, decoding and playing the multicast stream.

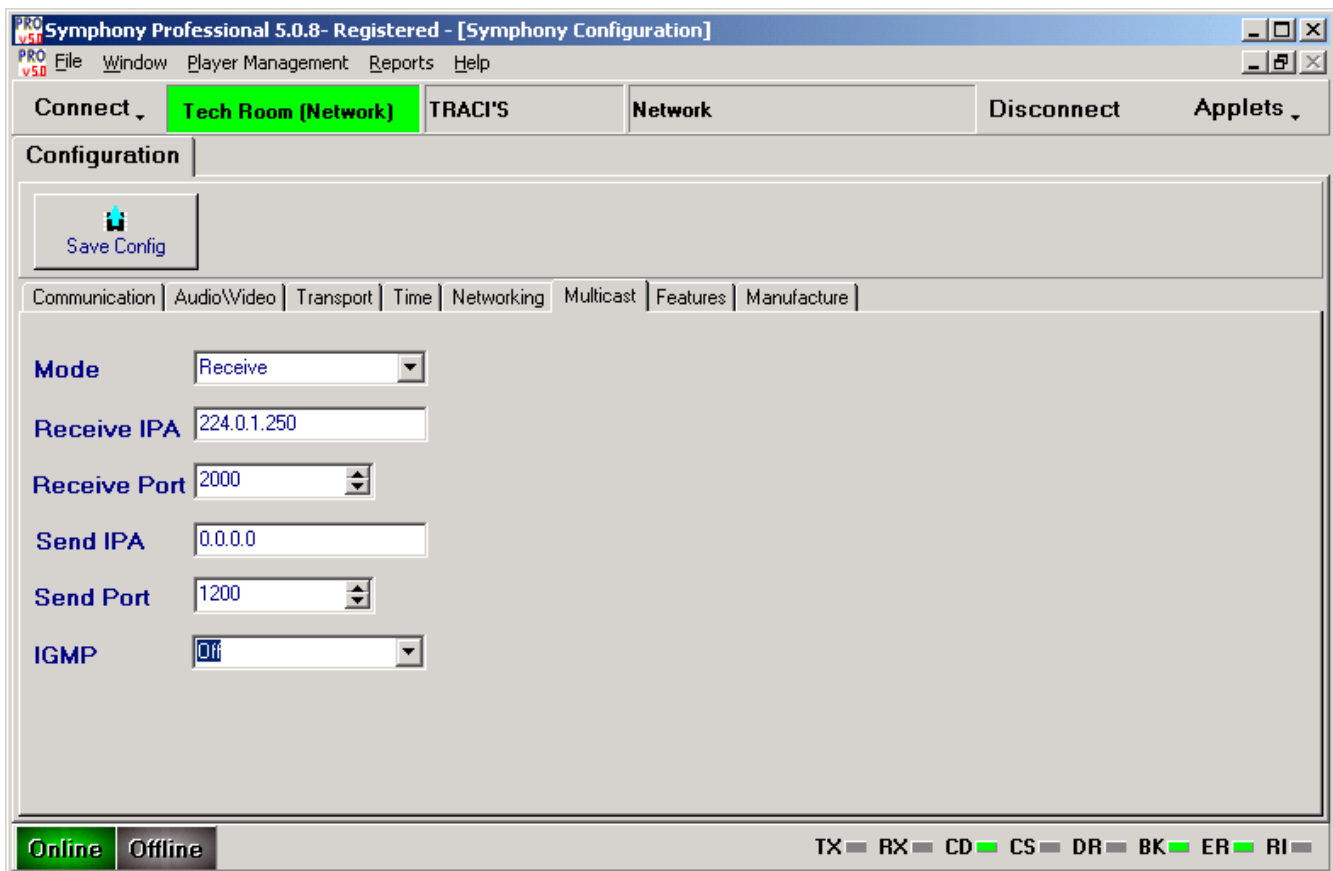
Symphony Pro

Symphony Pro can be used for most all Adtec products, encoder and decoders alike. Therefore, it is not condensed to the “bare essentials” needed for streaming video.

- 1) After making the initial cable connections, you can connect to the encoder using the default selections within the CONNECT drop-down menu.
 - Once connected, you may change the IP configuration of the unit by selecting Applets > Setup > Configuration from the drop-down menu on the right. These tabs should automatically fill with the current settings of the unit.
 - To change the network properties of your Adtec unit, go to the NETWORKING tab. Here you will note all the typical networking attributes plus a few extras. Usually, only Unit IP Addresses and Gateway IP Addresses are changed for average networking.
 - If you have changed the IP address of the encoder unit, you must go to APPLETS > LOCATIONS and ADD the “new” Location & unit to the CONNECT menu. Please refer to the HELP menu for this process.

Symphony Pro (Cont.)

- 2) The settings concerning Multicasting are contained in the MULTICAST tab of the Configuration applet.
- Choose if you would like this unit to SEND or RECEIVE from the Mode drop-down.
 - Choose which IP address and Port you would like this unit to use sending or receiving.
 - IGMP will allow the multicast to pass through a router which has IGMP version 1 or 2 capabilities.



After making all the necessary changes and configurations, you must click on the SAVE CONFIG button. Otherwise, when the unit is reset, it will revert back to the previous configuration.

If you have further questions you may contact **Adtec Customer Support** at (615) 256-6619 x166, by e-mail at support@adtecinc.com or visit our website at www.adtecinc.com.