Introduction:

MPEG Gearbox™ is DVEO’s new product line of broadcast quality, multichannel, real time, standard or high definition (up to 1080p), MPEG-2 to H.264 transcoders or MPEG-2 to MPEG-2 scalers. The MPEG Gearbox will transcode and process multiple streams up to CPU limitations. Typical dedicated transcodes are up to 16 SD streams, or 4 1080i or 1080p streams, or 6 720p streams.

Network Setup:

1) Unpack your MPEG Gearbox, power it up and connect two network cables from the MPEG Gearbox to a switch.

2) Connect your PC to the same switch (alternatively, you could use a crossover cable between your computer and the MPEG Gearbox).

3) The IP address for the MPEG Gearbox is on a label on the back of your system, just above the WAN port. Use this IP address to enter the web interface.

4) At the password prompt, enter admin for username and admin for password. These are the default security credentials.

5) Go to the “Network Setup” tab (the second from right tab) and configure all the network adapters on the MPEG Gearbox. Select Update.
6) Once you have changed all the settings, go to Toolbox -> Reset Unit and click on Reboot Now.

**NOTE:** Always reboot after changing the Network setup.

7) Re-configure the network adaptor on your PC to match what you configured on the MPEG Gearbox and connect to the web menus again.

8) If you ever lose connectivity with the unit and cannot get back in, you can use a keyboard and monitor to get access to the emergency recovery menu to lookup the current IP address and/or reset the machine to factory defaults.
Stream Setup – IP Input:

(See page 6 for ASI Input)

9) Go to the **STREAM SETUP** tab, **INPUT SETUP**, and define an input. The example below shows IP input. (Inputs and outputs will vary depending on which MPEG Gearbox system you have purchased.) Be sure to specify a name, enable the **Autostart**, and select Update.
10) Go to the **New Output** tab to the right of **Input Setup**. Select **Enabled**. Enter the **Stream Name** of the input you just defined.

11) At **Input Program(s)**, input the program number for the program desired. (For single program transport streams, enter the program number.)

12) At **Video Transcoding Format**, select the pulldown menu and choose from the following video transcoding methods:
   - No Video Transcoding
   - H.264 Video
   - MPEG-2 Video
13) At **Audio Transcoding Format**, select the pulldown menu and choose from the following audio transcoding methods:
- No Audio Transcoding (Embedded pass-through)
- Ogg Vorbis Audio
- AAC Audio
- MPEG-1 Layer II
- MP3 (ordering option)
- “SurCode for Dolby Digital” AC-3 (ordering option)

14) Edit all the remaining parameters of your output stream and select Update.

15) You can repeat steps 9 and 10 for all the output streams associated to a particular input.

16) Skip to page 10 for further instructions.
Stream Setup – Tuner/ASI Input:

(See page 3 for IP input)

17) Go to **SYSTEM STATUS** and click on **Tuner Status**. Select **Analyze Stream**.
18) The Stream Analyzer screen will appear. Make a note of the program ID number(s) you wish to transcode, and then close the Stream Analyzer screen.

19) Go to STREAM SETUP, then ASI #1 Setup, INPUT SETUP. Define your input parameters. Be sure to specify a name, enable the Autostart, and select Update.
20) Next, select **NEW OUTPUT**. Select Enabled. Enter the Stream Name of the input you just defined.

21) At **Input Program(s)**, input the number of the program desired.

22) Edit all the parameters of your output stream.

23) At **Video Transcoding Format**, select the pulldown menu and choose from:
   - No Video Transcoding
   - H.264 Video
   - MPEG-2 Video

24) At **Audio Transcoding Format**, select the pulldown menu and choose from:
   - No Audio Transcoding (Embedded pass-through)
   - Ogg Vorbis Audio
   - AAC Audio
   - MPEG-1 Layer II
   - MP3 (ordering option)
   - “SurCode for Dolby Digital” AC-3 (ordering option)

25) Select **Update**.
Streaming:

26) When all the output streams have been defined, go to TOOLBOX and click on the Service Control icon. Select one or more streams and select Start.

27) You should be able to see all the output streams on the network now.
28) You can check the status of the streams using the **System Status** tab. You should be able to see the throughput in the appropriate network adaptors.