

**EXERCISE:**

Create an EQ Preset for DVX audio output #2 using a structure

**SCENARIO:**

The client has so far been very pleased with our responsiveness and our ability to get them exactly what they want. During the close out of the last upgrade to the lobby, the manager, who is a bit of audiophile, noticed that there needs to be better intelligibility for the sound when the paging microphone is being used. He would like the ability to enable/disable an EQ curve from the touch panel. They will enable the curve when the mic is being used and disable it when just BGM is playing.

**OBJECTIVES:**

- Create a structure to hold the data for a single band of a parametric EQ
- Create a 3 element array of user defined type to hold the EQ settings for 3 bands of EQ
- Load data into the structure so that it can be recalled at any time via a button press
- The data you need to store in the structure is as follows:
  - EQ Filter type
  - The center frequency of that band
  - The (+ or -) gain value
  - The “Q” value
- When the paging EQ curve is recalled, send the data from the structure into the DVX inside a FOR loop.
- Create a separate “EQ Flat” button on the touch panel which will emulate the “Reset EQ” button within the DVX web GUI.
- Create a timeline that runs every ½ second to update the button feedback for the two EQ buttons.

