

Setting Gain, EQ, And Compression During Sound Check

1. Setting Input Gains

Proper gain staging is the foundation for a clean and distortion-free mix.

Steps:

1. **Select the Channel:**
 - Press the **Select** button above the fader for the desired channel.
 2. **Access the Preamp Section:**
 - Use the **Gain/Trim knob** located in the preamp section on the top left of the console.
 - Press the view button to see the Preamp menu on the screen.
 3. **Set the Gain:**
 - Have the musician or vocalist perform at their expected volume level.
 - Adjust the gain knob while monitoring the **Input Meter** on the display.
 - Aim for the meter to peak between **-18 dBFS and -12 dBFS**, ensuring headroom for dynamic moments. Avoid red clipping indicators.
 4. **Enable Phantom Power (if needed):**
 - If using a condenser microphone or DI box that requires power, press the **+48V** button in the preamp section.
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2. Setting EQ

Equalization shapes the tonal quality of each input, ensuring clarity and balance in the mix.

Steps:

1. **Select the Channel:**
 - Press the **Select** button for the desired channel.
2. **Access the EQ Section:**
 - Press the **View button** at the bottom right of the **EQUALIZER Controls**.
3. **Adjust Frequency Bands:**
 - Use the **High, High-Mid, Low-Mid, and Low** knobs to adjust the four EQ bands.
 - Sweep the **Frequency** knob to find the specific frequency you want to boost or cut.
4. **Recommended EQ Adjustments:**
 - **Vocals:**
 - Roll off low frequencies below **100 Hz** to reduce rumble.

- Add a slight boost around **2–4 kHz** for clarity and presence.
 - **Guitars:**
 - Cut **200–300 Hz** to reduce muddiness.
 - Boost **3–5 kHz** for brightness.
 - **Drums:**
 - Kick Drum: Boost **50–80 Hz** for low-end thump and **2–4 kHz** for attack.
 - Snare Drum: Boost **120–200 Hz** for body and **4–6 kHz** for snap.
5. **Enable the EQ:**
- Ensure the **EQ On/Off** button is illuminated to activate your adjustments.
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3. Setting Compression

Compression controls the dynamic range of the input, ensuring consistent volume levels.

Steps:

1. **Select the Channel:**
 - Press the **Select** button for the desired channel.
 2. **Access the Compressor Section:**
 - Press the **View button** located on the bottom right of the **DYNAMICS Controls**.
 3. **Set Compression Parameters:**
 - **Threshold:** Adjust to determine when compression begins (e.g., start around **-18 dB** and fine-tune as needed).
 - **Ratio:** Set the ratio based on the input:
 - **Vocals:** 3:1 to 4:1.
 - **Instruments:** 2:1 to 3:1.
 - **Drums/Bass:** 4:1 to 6:1.
 - **Attack:** Start with a medium attack (e.g., **20–50 ms**) to retain natural transients.
 - **Release:** Set a medium release time (e.g., **100–300 ms**) to allow for smooth recovery after compression.
 - **Gain:** Use makeup gain to bring the output level back to an appropriate range.
 4. **Monitor the Gain Reduction Meter:**
 - Ensure the compression is subtle and transparent, with **gain reduction between 3–6 dB**.
 5. **Enable the Compressor:**
 - Ensure the **Comp On/Off** button is illuminated to activate the compression.
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4. Fine-Tuning the Mix

1. **Listen to the Full Band:**
 - Balance each input in the context of the full band mix.

- Adjust gains, EQ, and compression as necessary to ensure clarity and separation for each instrument and vocal.
2. **Monitor During Service:**
- Keep an eye on input meters and the overall mix.
 - Make small adjustments if needed to accommodate changes in dynamics or room acoustics.
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Best Practices for Sound Check

- **Communicate with the Team:**
 - Have musicians and vocalists perform at their expected service volume during sound check.
 - Provide feedback and adjustments in real time.
- **Focus on the Room:**
 - Walk the room during run through to ensure the mix translates well to the audience.