<table>
<thead>
<tr>
<th>Question:</th>
<th>Answer:</th>
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<tbody>
<tr>
<td>What does the Low Cut button do?</td>
<td>This is a high pass filter, which cuts frequencies below 75Hz at a rate of 18dB per octave. We recommend you use low cut on all microphones except kick drum, bass guitar, bassy synth patches or recordings of earthquakes. This helps cut out unwanted low frequency noises, like the mic stand rumbling around on stage.</td>
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<tr>
<td>What makes the Onyx Microphone Preamps so special?</td>
<td>Since the Onyx Preamp is designed for use at &quot;real world&quot; gain settings, it will handle anything from +22 dB line level down to microvolt-level signals from a ribbon mic, without adding noise! With its clean sound, impressive headroom and dynamic range you can almost hear the carpet patterns. Connect whatever mic you like into the Onyx preamp, and rest assured you will get transparency, headroom and detail that's simply unrivaled.</td>
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<tr>
<td>What is Direct Monitoring?</td>
<td>Direct monitoring gives you the ability to hear channels 1 and 2 right from the preamp. This is helpful for accurate latency free listening of the input signal. Direct monitoring is only for hearing the unprocessed audio that is coming into Blackbird.</td>
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<tr>
<td>What outputs should I use for my monitor amp or powered monitors when I'm recording?</td>
<td>The Control Room outputs are for your Studio Monitors. If you have powered monitors, like the Mackie HR824s, connect them directly to the Control Room outputs. If you have passive speakers and an amp, connect the Control Room outputs to the amplifier line inputs and power the speakers from the amp. In the C/R Source section of the mixer, select the things you want to hear in your headphones and the Control Room outputs and adjust the level with the CTL Room / Sub mix fader (or knob).</td>
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**Question:**

How do I connect my compressor to the main mix, and my reverb to the vocals?

**Answer:**

The compressor is a "serial" processor, which means that it is placed in-line with the signal it is processing. The signal flows through the compressor, is compressed as a whole and sent on to the next device. It can be connected to the main bus inserts, or the main outputs can go into the compressor inputs and the compressor outputs go to the next device. EQs and noise gates are other "serial" type processors. The reverb unit is a "parallel" processor and it is connected to the auxiliary Sends and Return buses (in most cases). Turn up the Send on the channels you want the reverb on, and turn up the Return to mix in as much of the reverb as needed to the main mix. The dry signal is heard along with the reverbed signal at the same time; they run parallel to each other. A reverb can be inserted into an insert jack to affect only one channel, but you are still adjusting the mix control on the reverb for the amount of "wet to dry" mix coming out of the channel. The wet and dry sounds are running parallel inside the reverb.

**Question:**

Is an insert jack an input or an output?

**Answer:**

It's both! The entire signal from the corresponding channel, subgroup, or mix bus is sent through this jack. The tip of this jack is an output, which is commonly used to send signal out to a serial processor (compressor, equalizer, sonic maximizer, etc.); the ring is an input which allows signal to return from the processor; and the sleeve is a ground connection. Because the insert jack is an input and an output, it creates a loop, which is formed when a signal processor is inserted between the output (tip) and the input (ring). The insert jack can also be used as two different types of direct outs. If a tip-sleeve 1/4" cable is plugged all the way in to the second click, the signal is sent out from the tip (output) of the insert jack and does not return to the ring (input), which breaks the loop and does not allow signal to flow through the rest of the channel. This is referred to as a direct out with signal interruption. If a tip-sleeve 1/4" cable is plugged in only to the first click, the signal is sent out the cable and continues through the channel, since the insert loop has not been broken. This is referred to as a direct without signal interruption.
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<td>Will I get separate tracks going into my computer via USB? (2404/3204)</td>
<td>The 2404/3204 VLZ4 can send 4 tracks out via USB. What feeds this output is the Main Mix/Sub 1-2 and Sub 3-4/Aux 5-6. So whatever is coming out of your Main Mix/Sub1-2 and Sub3-4/Aux 5-6 is what will go out via USB.</td>
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<td>Can I plug my mp3/cd player into one of the Mono channels?</td>
<td>Yes you can, but it is not going to sound very good. The main reason is that the headphone jack actually has two separate streams of audio in the one connection. When you put this into the Line input on a channel, the two separate streams will not get along too well and things such as phase cancellation will occur. The way to do it is to get a splitter cable that separates the single stereo connection into two separate connectors, then, either connect them into a stereo channel strip or two mono channels (one panned left and the other right). You can also use the Tape input as well as an Aux return.</td>
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### Question:

**What’s the deal on the stereo line inputs channels on the 1202 and 1402-VLZ4? Stereo or mono? Balanced or unbalanced? -10 or +4... And what’s the difference?**

### Answer:

Yes. That is, balanced and/or unbalanced, stereo and/or mono. The inputs on these channels are engineered to handle both balanced and unbalanced, and there are separate stereo [L/R] and mono inputs. All 1/4 jacks are bal/unbal and receive line level at +4 dbu or -10dbV. The difference is in units of measurement. -10 dbV (volts, where 0dbV=1 volt) results in a signal voltage of .316 (used in most consumer electronics). dbu (units, the way sound is measured), and +4 dbu result in a signal of 1.23 volts (what most pro-audio gear uses). Set the +4/-10 switch appropriately. If you want to use these as mono channels, just connect your cable to the left input only.

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### Question:

**What’s this Alt 3/4 Bus thingy all about?**

### Answer:

If you mute a channel on the 1202 or 1402-VLZ PRO where does it go? Nowhere? The Bermuda Triangle? S.E.T.I. broadcasts? No, actually it goes to the Alt 3/4 Bus. This has many applications and can be especially useful if you need to separate a signal to go somewhere other than the main mix, like to a multitrack recorder. You can send just those muted channels to your recorder and overdub while you listen back to your prerecorded tracks at the same time in the control room.