Audio Connectors

There are a variety of different audio connectors available. The most common types are 3-pin XLR, RCA, and Phone jacks.

3-pin XLR

3-pin XLR connectors are mainly used for microphone balanced audio signals. Using a balance signal reduces the risk of inference.

- Pin 1 is the earth (or shield)
- Pin 2 is the +ve (or 'hot')
- Pin 3 is the -ve (or 'cold).

There are a number of different XLR's - 3-pin, 4-pin, 5-pin etc

3-pin XLR Female(Left) **3-pin XLR Male(Right)**	

1. The three hole of blue (left) is female connector. For Output communication.

2. The three pin of black (Right) is male connector. For Input communication.

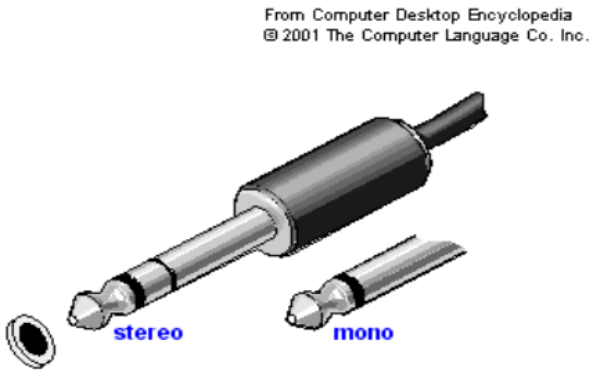
¼"Phono Jack (6.5mm Jack)

There are two types of phono Jacks: Mono and stereo. The mono jack has a tip and a sleeve, the stereo jack has ring, a tip and a sleeve.

- On the mono jack the tip is the +ve, and the sleeve is the -ve or shield.
- On a stereo jack being used for a balanced signal, the tip is the +ve, the ring is the -ve, and the sleeve is the shield.
- On a stereo jack being used for a stereo signal (left and right), the tip is the left, the ring is the right, and the sleeve is the shield.

Jacks also come in various sizes - phono (¼"), 3.5mm, 2.5mm. The wiring for all of them is the same.

1/4" Stereo Jack(left)
1/4" Mono Jack(Right)



RCA

RCAs are used a lot for home stereos, videos, DVDs etc.

The RCA can carry either audio or video. It is wired the same way as a mono jack: The center pin is the +ve, and the outer ring is the -ve or shield.

- RCA Connector is commonly used to carry audio and video signals
- Yellow - Video
- White - Audio (L)
- Red - Audio (R)

Modern Recording studio console

Mixing Consoles (Mixer Boards, or just Mixers) are the iconic symbol of the modern recording studio.

A Mixer can be divided into three sections

1. Input section

2. Output section

3. Monitor section

Input section (Here are the main parts of each and what they do:

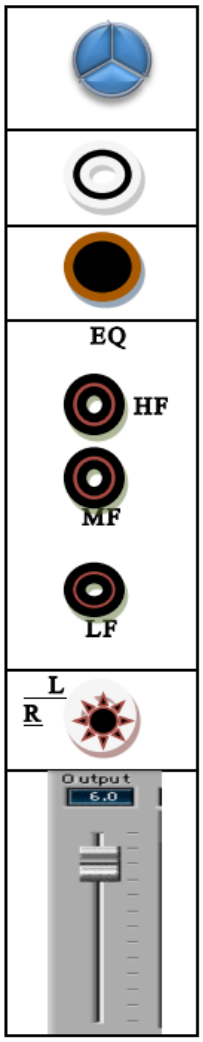
- Inputs connect to your mics, electric instruments, and recorder outputs.
- Faders are sliding volume controls that affect the loudness of each instrument.
- EQ knobs adjust the tone quality of each instrument (bass, treble, midrange)
- Aux knobs set the amount of reverb or other effects, and also can be used to set up a monitor mix or head phone mix.
- Pan pot can be used to set the left, centre, right.
- Channel assign buttons route each input signal to the desired recorder track.

Output section

- Master fader set the overall of the entire stereo mix.
- Group faders set the overall of each group or sub mix.
- Output connects to your recorder inputs.
- Display Meters help you set the recording level (to prevent distortion and noise)

- **Monitor section**
- Monitor controls select what you want to listen to.
- Aux knobs or channel faders set up the monitor mix.

Typical input module



1. XLR INPUT
2. GAIN CONTROL
3. AUX SEND
4. PARAMETRIC EQUALIZER
5. PAN POT(TRIM KNOB)
6. FADER ASSIGN