

Aftertouch - A controller found mainly on keyboard instruments which can sense how hard you press into a key after it is played. Aftertouch can change many different things about a sound.

Alpha Dial - A round, usually flat knob which one can turn to enter values into a synthesizer. Alpha dials are also commonly used to step through the synthesizer's patches.

Alternate Controller - A musical instrument other than a keyboard capable of producing MIDI signals for the purpose of controlling a synthesizer. Alternate controllers include MIDI saxophones, trumpets, clarinets, percussion instruments, string instruments, guitars, basses, and many other devices.

Ambience - The sound of sound waves bouncing around in a room which is so small that actual reverberation in is perceived.

Amplifier - A device which adds energy to an audio signal in electrical form for the purpose of making speakers work.

Amp - Another term for amplifier.

Attack - A control found on compressors and limiters which determines how quickly they start turning down the volume. Also a control found on synthesizers which determines how quickly the sound gets louder or brighter when a key is pressed on the synthesizer.

Attenuate - To reduce or turn down. Usually used in conjunction with volume.

Auxiliary Returns - (Also called aux returns) A pair of inputs found on mixers which have no features other than a gain control, and the knobs which acts as a gain control for these inputs.

Auxiliary Sends - A knob found on every channel of a mixer which makes a copy of the signal going through any channel and sends it to a jack on the mixer which is also referred to as an aux send.

Band - A range of sounds; high or low.

Banks - A grouping of patches in a synthesizer's memory.

Bass - Another name for the lo control on a shelving EQ unit.

Breath Controller - A real-time controller which can sense how hard you blow into it.

Chamber - A type of reverb which simulates the reverberation chambers used in early recording studios. Also a the actual room in an older facility to create reverberation.

Channel - A set of controls on a mixer which includes at least an input and a gain knob.

Chorus Rate - Determines how quickly the delay time in a chorus unit changes from long to short and back again.

Compress - To make smaller.

Compressor - A device which attenuates the volume of a signal in a ratio.

Console - Another name for a large mixer.

Cutoff - A control found on some synthesizers which determines how bright or mellow the tone of the sound is.

dB - The abbreviation for decibels.

Decay - A control on a synthesizer which determines how quickly the sound becomes less bright or how quickly the sound becomes less loud after a key is played.

Decay Time - The control on a reverb unit which determines how long the reverb lasts.

Decibels - The unit of measure for volume.

Desks - A name for large mixers.

Delay - An effect which simulates the echoes which occur in a natural acoustic space.

Delay Time - The amount of time between the original sound and the echo produced by a delay unit. Also the control on a chorus unit which sets the initial delay time the chorus unit uses.

Depth - A control found on chorus units which determines how much shorter or faster the delay time gets.

Diaphragm - The part of the microphone that collects sound.

Diffusion - A control on a reverb unit which determines how many echoes make up the reverb and subsequently determines how dense the reverb sounds.

Digital Chorus - An effects unit in which a very short delay time is constantly changed from short to long and back again over and over.

Digital Delay - An effects unit which simulates acoustic echoes.

Dynamic Level - The current volume level.

Dynamic Range - The difference between the loudest and softest volumes in a song.

Echo - A sound wave which hits a smooth, hard surface and bounces back to you.

Emphasis - Another name for resonance.

EQ - The abbreviation for equalization.

Equalization - An effects unit which allows you to adjust the volume level of the high, mid, and low parts of sound separately.

Expression Pedals - A real time controller which can sense how far forward or backward your foot is.

Faders - A slider which you can move up and down or side to side to change something about the sound.

Fc - The scientific abbreviation for cutoff frequency.

Feedback - A loud squeal which occurs when a PA system's microphone is pointed back at its speaker.

Filter Cutoff Frequency - Another name for the cutoff control found on some synthesizers.

Filter Sweep - The sound made when the filter's cutoff frequency is changed from its highest position to its lowest position or vice versa.

Foldback - A label sometimes used for aux sends on mixers intended primarily for live use.

Footswitch - A real-time controller which can sense if your foot is up or down.

Frequency - Another label for the cutoff frequency control on some synthesizers.

Gain - Volume in a channel. Also the name of the control which controls volume in a channel.

Gain reduction Meter - A meter found on compressors and limiters which shows the current amount of attenuation.

General MIDI - A standard for synthesizers which guarantees that certain sounds will be in certain locations in the synthesizer's memory.

Graphic EQ - A type of equalizer which has many different sliders, each of which adjust the volume of a different band of sounds, high or low.

Hall - A type of reverb which simulates the reverb found in large acoustic spaces.	Makeup Gain - The output volume on a compressor or limiter.
Hand-Held Microphones - A microphone which is designed to be held in your hand while performing.	Master Gain Controls - The master volume controls on a mixer.
Headphone Jack - A jack designed to accommodate a headphone plug.	Microphone - A device which turns sound waves into an electrical form.
Hi - A control found on EQ units which allows you to adjust the volume of high sounds.	Mic - An abbreviation for microphone.
Home Keyboard - A keyboard which typically has built-in speakers and auto accompaniments. You usually can't create your own sounds on these keyboards.	Mic Cable - A cable with XLR connectors on either end.
Increment/decrement - A pair of buttons found on many synthesizers which allow you to step through the patches in a synthesizers memory one at a time.	Mid - A control found on EQ units which allows you to adjust the volume of middle sounds.
Input - A jack which accepts incoming signals.	Millisecond - One one-thousandth of a second.
Insert Jack - A jack which acts as both an input and an output. When used with an inset cable, it can take all of the signal out of a channel on a mixer for processing by an external unit and can return the processed signal to the same mixer channel.	Mix - A control found on many different kinds of effects units which determines how much effected signal exits the unit versus the amount of unaffected signal exiting the unit.
Insert Cable - A cable which has one 1/4" connector on one end and two 1/4" connectors on the other end.	Mixer - A device which allows you to control and manipulate sounds in an electronic form.
Jack - A small hole which allows you to plug in the end of a cable and make an electrical connection between two devices.	Modulation Wheel - A real-time control found on most synthesizers which allows you to use one hand to increase or decrease vibrato on most patches.
Limiter - A device which makes an entire mix louder by turning down the volume of the loudest parts of the mix.	Modules - The parts of the earliest synthesizers which had to be connected with cables to make sounds.
Line Level - The level of signals used by a mixer.	Monitor - A wedge-shaped speaker which sits on the floor of a stage facing performers so that they can hear themselves.
Low - A control found on EQ units which allows you to adjust the volume of low sounds.	Monophonic - Able to play one note at a time.
	Mother Keyboards - A keyboard which can not make any sound of its own, but can control other synthesizers.

Multitimbral - The ability of some synthesizers to play more than one sound at a time.

Mute - A button found on many mixers which will momentarily allow you to completely turn down the gain on a particular channel without using the gain knob.

Numbers - A series of buttons on some synthesizers which allow you to choose patches from the bank you chose using the bank buttons.

Output - A jack which puts out signals.

Paddles - A single joystick like real-time controller which replaces both the pitch bend and modulation wheels.

PA System - A group of devices which amplify the volume of someone's voice or an instrument. Minimally, this includes a microphone, a preamplifier, an amplifier, and a speaker, connected in that order.

Pan - A control found on most mixers which allows you to determine how much of a channel's signal comes out the mixer's right output and how much of a channel's signal comes out the left output.

Patch Cord - A short cable used on early synthesizers to connect the instrument's modules together to make a sound.

Patch - A sound on a synthesizer.

Pedalboard - A set of pedals grouped in a keyboard-like arrangement which act as a keyboard for your feet. Pedalboards are found on most organs.

Phantom Power - +48 volts of current which travels from a mixer down a mic cable to provide power to some specialized studio microphones.

Ping-Pong Delay - A type of delay in which the echoes go back and forth between the right and left outputs of the delay unit.

Pitch Bend Wheel - A real-time control found on most synthesizers which allows you to smoothly increase or decrease pitch.

Plate - A type of reverb which simulates the old plate reverb units used in studios.

Polyphonic - The ability of a synthesizer to play more than one note at a time.

Polyphony - A measurement of the number of notes a synthesizer can play at a time.

Preamplifier - A device which raises microphone level to line level so that microphones can be used with line mixers.

Predelay - A control found on reverb units which allows you to set the amount of time in milliseconds between the beginning of a sound and the onset of the reverb. Increasing this time makes the listener perceive a larger acoustic space.

Programming - The art of creating a new sound on a synthesizer.

Pulse - A raw sound found in early synthesizers which can sound anywhere from hollow to nasal.

Q - Another name for resonance.

Rack - A special box used for mounting studio equipment.

Rack Screws - Screws specially designed to secure equipment into a rack.

Ratio - A set of numbers which express the relationship in decibels of the input volume and output volume on a compressor or limiter.

Reflection - A single sound wave which bounced off a smooth, hard surface and returns to you.

- Regeneration** - A control on a delay unit which determines how many times an echo repeats as it fades out. On a synthesizer, regeneration is another name of resonance.
- Release** - A control on a compressor or limiter which determines how long it take the unit to stop turning down the volume after the volume drops below the threshold. On a synthesizer, the release control determines how slowly the sound becomes dull or fades away after you let up the key.
- Release Velocity** - A real time control which can sense how quickly you release a key on a keyboard. Most modern synthesizers can respond to release velocity messages, but almost none can create these messages.
- Repeat** - Another name for regeneration on a delay unit.
- Resonance** - A control on a synthesizer which adds a sparkling, whistling quality to sounds.
- Reverb** - Another name for reverberation.
- Reverb Time** - Another name for decay time on a reverb unit.
- Reverberation** - occurs when many reflections come back to our ears so quickly that we are unable to hear each echo separately. In order to hear reverberation, you must be in a large enough room.
- Ribbon Controllers** - A real-time control which can sense pressure from your finger and can sense its position and control different things about a synthesizer's sound.
- Robert Moog** - The father of modern synthesis and the designer and builder of the first modern synthesizer.
- Room** - A type of reverb which simulates the acoustic response of a small acoustic space.
- Save** - A button found on most synthesizers which allows you to save any changes you have made to a patch.
- Saw** - A raw sound which almost every synthesizer could make which sounds very buzzy.
- Shelving EQ** - Equalization which uses
- Sine** - A raw sound found in older synthesizers which sounds very pure and mellow.
- Solo** - A button found on most mixers which allows you to momentarily mute all channels but the one on which you pressed the solo button.
- Solo Level** - A single knob found on larger mixers which allows you to set the volume level of soloed channels.
- Sound Waves** - Sounds which are travelling through the air.
- Speaker** - A device which changes sounds in electrical form into sound waves traveling through the air.
- Square** - A raw sound found on early synthesizers which sounds hollow.
- Stereo** - A sound in which a slightly different signal comes out of the left and right speakers.
- Stick** - A real time control which takes the place of pitch bend and modulation wheels on some keyboards.
- Sustain** - A control found on some synthesizers which allows you to set the level of brightness or volume the synthesizers will hold at while you are holding down a key.
- Synthesizer** - A musical instrument which puts out sounds in an electrical form.

Thaddeus Cahill - Patented the first synthesizer.

Threshold - A volume at which a compressor or limiter starts to work.

Tone Modules - A synthesizer without a keyboard.

Treble - Another name for the high control on a shelving EQ unit.

Trim - A control found on most mixers which allows you to set the gain on the mixer's built-in mic preamps.

Velocity - A real time control which can sense how hard you strike a key. Velocity messages usually change volume and/or brightness.

Vladimir Usachevsky - Wendy Carlos's teacher who helped to design the first modern synthesizer.

Wendy Carlos - A student of Vladimir Usachevsky who went on to record an album of classical music using Bob Moog's synthesizer.

Write - Another name for the save button found on synthesizers.

XLR Connector - A three pin locking connector used on microphone cables.

X-Y Pads - A real-time control which can sense pressure from your finger both side to side and forwards and backwards. X-Y pads can control two things about a sound at once.