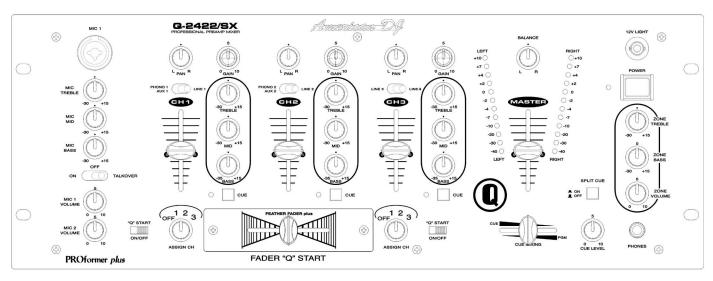
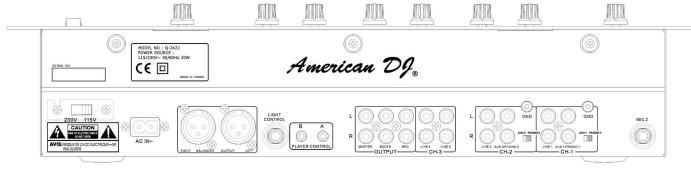
# American DJ. AUDIO



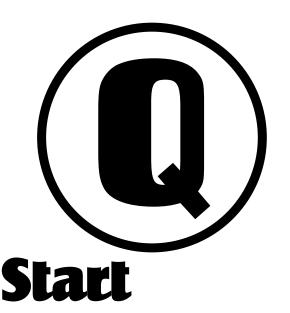
## **USER INSTRUCTIONS**

### Q-2422/SX Professional Preamp Mixer





# Q-2422/SH Featuring Fader "Q" Start



### **Main Features**

- 2 phono, 4 line, 2 auxiliaries & 2 mic inputs
- Fader "Q" On/Off switch RCA and Balanced XLR Outputs
- High quality Alps Feather Fader™ for smooth, clean cross fading
- Bass, mid & treble control for mics Volume control for each mic
- Fader "Q" Start\* (fader allows auto return to preset digital cue points)
- On/Off Channel assign switch Cue mixing slider Split Cue monitoring
  - Zone/Booth volume Treble, Mid. and Bass control per a channel
- High level headphone output
   On/Off/Talkover switch for DJ mic
   Soft-touch rubber knobs and fader handles for better control
   Pan and Gain for each channel
   12V BNC light connector for gooseneck light
   Left & right turntable ground connectors conveniently located on rear panel
   Master volume control
   Master Level Indicators with peak hold
   Left/Right master balance
   Cue Level Control
   Cue button with LED for each channel
  - Neutrik combo microphone connection 1/4"(6.3mm)/XLR Independent light control output for touch panels and chase controllers - 1/4" connection • Convenient "L"-Shape design allows you to mount other units directly against the mixer

The Q-2422/SX comes with a 2 year limited warranty!

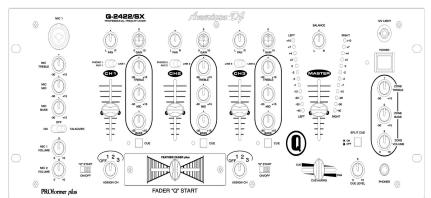
\* Compatible with American DJ CD Players also featuring Fader "Q" Start

© American DJ® AUDIO Los Angeles, CA 90058 USA Specifications subject to change without notice.

### **Quick Start Instructions:**

American DJ would like to thank for your purchase of this great product. For those of you that are to impatiant to read the entire user manual we have compiled these quick start instructions. We

hope that you will at least read through these instructions to familirize yourself with the basic understanding of the unit. The Q-2422/SX is part of American DJ's countinuing eveolution in audio technology. This unit has been built and desinged with the typical DJ in mind, by DJ's. We have attempted to provide you with the most relable product on the market by using only componedt made from quility products.



**Master Level -** Use this level control to set your volume output. Try never to send an output of more than +4dB to your system. Signal at levels higher than this will start to distord and may cause damage to your system and speakers. Remeber that a distorded signal from you mixer will only be multiplied throughout your system.

**Channel Trim Level -** The channel trim levels are not to be used as volume controls, never use the channel trim to set the output volume. These controls are used to aid in distortion control. Use these control to preset your signal level before the crossfader. With your channel faders in the maximum position, use the channel trim level to set an average output level of about +4dB on you master level meter.

**Headphones -** To avoid sever hearing damage alway be sure the headphone level is set to minimum before plugging them in. Never put the headphone on without making sure the headphone level is turned down.

**Main Mic** - The main mic connector uses a Nuetrik combo plug which allows you to connect either a 1/4" unbalanced jack or by a standart 3-pin XLR balanced connector. The main mic also has an indipendent volume control with seperate high and low level adjustments. When feedback occures when using the mic, try lowering the "low" level this may reduce the feedback. Always leave the mic level to it's minimum level when not in use.

**PHONO/AUX/LINE SWITCH (5) -** This switch is used to change the selected input from phono to line and vice versa. Channels 1 and 2 may be switched PHONO/AUX or LINE. Channel 3 may be switched LINE 3 or LINE 4. The selectors for AUX1/PHONO1 and AUX2/PHONO2 are on the rear panel (29).

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Thank you for purchasing the Q-2422/SX<sup>™</sup> by American DJ<sub>®</sub>. This unit is ready to be used, there Is no assembly required. Please read the following Instructions before installing or using your new unit.

CAUTION! - Keep this device away from rain and moisture!

### Safety Instructions

Always plug in the power last. Make sure that the Power switch is set to the OFF position before connecting other devices to the mixer.

Keep away from heaters and other heating sources!

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch on the mixer immediately. The arising condensation of water might damage your device. Leave the device switched off until it has reached room temperature.

Never put any liquids on the mixer or close to it. Should any liquid enter the device, disconnect from main power immediately. Have the device checked by a qualified service technician before operating again. Any damage caused by liquid entering the device is not subject to warranty!

Never let the AC cord come in contact with other cables! Handle the AC cord and all AC connections with particular care.

Make sure that the available voltage is not higher than stated on the AC voltage selector (26).

Before the device is switched on, all fader and volume controls should be set to 0 or minimum position.

Damages caused by manual modifications to the device or unauthorized operation by unqualified persons are not subject to warranty.

There are no user serviceable parts inside the mixer. For maintenance and/or service, contact an authorized American DJ® dealer.

### **Operating Determinations**

When installing this mixer, please make sure that the device is not exposed to extreme heat, moisture or dust! There should not be any cables lying around. Doing so endangers you as well as others. Do not operate the mixer in extremely hot (more than 30° / 100°F) or extremely cold (less than 5°C / 40°F) surroundings. Keep away from direct sunlight and heaters.

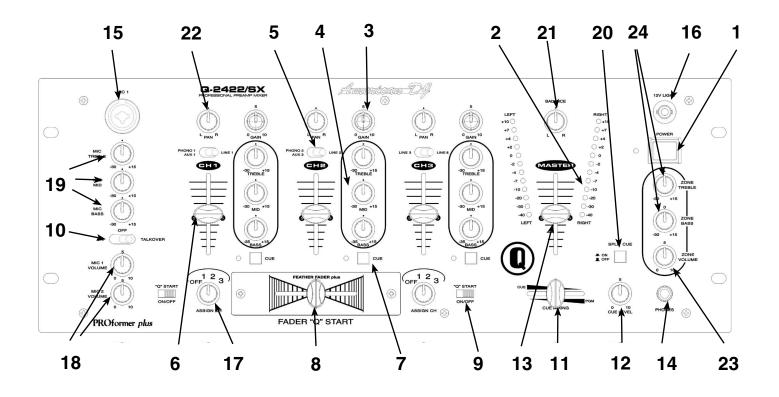
Operate the mixer only after becoming familiar with its functions. Do not permit operation by persons not qualified to operate the mixer. Most damages are the result of unprofessional operation!

Never use spray cleaners to clean the faders! Never use solvents or abrasive detergents to clean the mixer! It is recommended that you use a soft damp cloth. Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

### Connections (Refer to diagrams on pages 6 & 8)

- Make sure that the **POWER SWITCH (1)** is set to OFF. Before connecting other devices to the mixer, all units have to be switched off and the **MASTER FADER (13)** is set to 0.
- Make sure that the available voltage is not higher than stated on the voltage selector (26) before connecting to power.
- In order to obtain the highest sound quality, only use high quality American DJ®, Ameri-Cable ™ cables for connecting devices. Make sure that the cables are properly fixed.
- Connect your amplifier to the **BALANCED OUTPUT JACKS (28)** or the **MASTER OUT JACKS (31)**. Make sure that the channels are set properly.
- For recording, connect your tape recorder or cassette deck to the **REC OUT JACKS (33).** The REC OUT level will not be influenced by the **MASTER FADER (13).**
- Connect your microphone to either the 1/4 inch (6.3mm) MIC 1 JACK (15) on the front panel, or the 1/4 inch (6.3mm) MIC JACK 2 (38) on the rear panel. You can adjust the microphone volume output by turning the MIC 1 or 2 VOLUME (18) knobs. MIC 1 TREBLE, MID & BASS may be controlled by the MIC BASS, MID & TREBLE KNOBS (19) above the TALKOVER switch.
- You can connect 2 turntables using the LEFT & RIGHT RCA PHONO 1 (35) AND PHONO 2 JACKS (35) on the rear panel. You can only control the turntables signal after you have switched the PHONO /AUX SELECTOR SWITCH (36) on the rear panel to PHONO, plus you must change the PHONO/AUX/LINE SWITCH (5) on the front panel to PHONO/AUX. The signal is then controlled via the CH-1 AND CH-2 FADERS (6).
- Connect your tape player, tuner, sound effects, CD player, and cassette decks etc. to the LEFT & RIGHT RCA LINE SIGNALS (34, 35, & 37) on the rear panel. The signal is then controlled via the CH-1, CH-2 AND CH-3 FADERS (6) when the PHONO/AUX/LINE SWITCH on the front panel (5) is switched to LINE. CD players, cassette decks etc. may also be connected to the LEFT & RIGHT RCA PHONO/AUX JACKS (35 & 37) on the rear of the unit. You can only control this signal after you have switched the PHONO / AUX SELECTOR SWITCH (36) on the rear panel to AUX, plus you must change the PHONO/AUX/LINE SWITCH (5) on the front panel to PHONO/AUX. The signal is then controlled via the CH-1 AND CH-2 FADERS (6).

### **Front Panel**

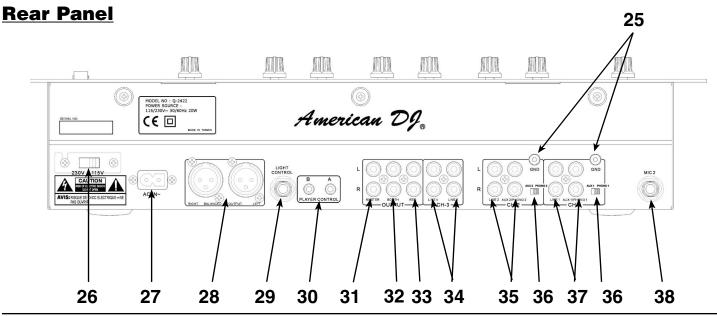


- (1) POWER SWITCH Red LED will light when power is ON.
- (2) MASTER LEVEL Dual LED's show the level of the left and right master output.
- (3) CHANNEL GAIN CONTROL Used to set the level of the output signal for its designated channel.
- **(4) CHANNEL BASS/MID/TREBLE CONTROL -** Used to increase or decrease the LOW's, MID's, and HI's of the output signal. The Q-2422/SX features "Rotary Kills" with -35dB to +15dB output control.
- **(5) PHONO/AUX/LINE SWITCH -** Used to select the input to be sent to the individual channel. Channels 1 and 2 may be switched PHONO/AUX or LINE. Channel 3 may be switched LINE 3 or LINE 4. The selectors for AUX1/PHONO1 and AUX2/PHONO2 are on the rear panel (36).
- (6) CHANNEL FADER Used to adjust the output level of each channel.
- (7) CUE BUTTONS Engage the CUE button to monitor the assigned channel.
- (8) FEATHER FADER™ CROSSFADER Mixes the signals of the assigned channels. To assign channels use the ASSIGN SWITCH (17) located on either side of the crossfader. When the crossfader is set in the center position, both assigned channels can be heard at once.
- **(9) ON/OFF "Q" START-** Start and stop the CD Player with the slide of the fader. The ON/OFF "Q" START switch activates this FADER "Q" START feature. When in the ON position, the FADER "Q" START allows the signal to return automatically to preset digital CUE POINTS on your American DJ CD Player (also featuring FADER "Q" START). For example, each time you slide the crossfader to far left, the CD Player will be triggered to play the song from the beginning of the preset CUE POINT. Refer to your American DJ CD Player User Manual for setting CUE POINTS. Turn the ON/OFF SWITCH to the OFF position to disengage the "Q" Start function and resume to a normal fader.
- (10) TALKOVER SWITCH While in the ON position the microphone can be used at any time, while this will not attenuate any other channels. When the switch is in the TALKOVER position, the microphone is

### **Front Panel Cont.**

hot, meaning that when the microphone is in use all channels attenuate -15dB except the MIC. When the microphone is not being spoken into all channels return to normal. In the OFF position, all signals return to their original level and the microphone is off.

- (11) CUE MIXING CONTROL Mixes the signal to be monitored. The monitor signal comes from the Prefader. This means it will not be affected by the channel faders. You can monitor each channel individually. Connect your headphones to the HEADPHONES jack (14). Slide the CUE MIXING CONTROL (11) to CUE and select the desired channels with the CUE switches (7). When you slide the CUE MIXING CONTROL to PGM (PFL switches without function), you can cue the output signal of the mixer. If the CUE MIXING CONTROL is set to the center position, you can cue both the channel signal you selected and the output signal. With the CUE LEVEL control (12), you can adjust the phones volume without changing the output signal.
- (12) CUE LEVEL CONTROL This knob controls the headphone output volume.
- (13) MASTER FADER This slider control the master output volume.
- (14) **HEADPHONES JACKS** Use this jack to connect the headphones. Headphones from 8 Ohms to 600 Ohms can be used. 16 Ohms is recommended. The headphone input is conveniently located on the face panel.
- (15) MIC 1 JACK You can connect microphones with a 1/4 inch (6.3mm) jack or XLR connector.
- (16) BNC JACK FOR GOOSENECK LAMP This jack is used to connect an American DJ 12V DC gooseneck lamp.
- (17) ASSIGN SWITCH Used to select which channel is to be mixed with another.
- (18) MIC 1 & 2 VOLUME CONTROL Adjust the microphone volume of MIC 1 and MIC 2.
- (19) MIC BASS, MID, AND TREBLE CONTROL Use these controls to fine-tune the MIC 1 signal. Increase the LOW's by turning the MIC BASS CONTROL to the right, increase the MID's by turning the MIC MID CONTROL to the right, and increase the HIGH's by turning the MIC TREBLE CONTROL to the right.
- (20) SPLIT CUE Control and monitor headphone signal. Slide fader to the left to hear the source music from channel or channels selected by CUE BUTTONS (7). Slide fader to the right to hear PROGRAM MIX (PGM) output. The smooth CUE MIXING fader is designed for fast and frequent headphone monitoring.
- (21) MASTER BALANCE CONTROL Used to adjust how much of the signal is sent to the left and right MASTER OUT jack (31).
- **(22) PAN CONTROL -** The balance control for each channel, or how much left and right signal for the specific channel. There is a PAN CONTROL for each of the 3 channels.
- (23) ZONE VOLUME, (24) ZONE BASS/TREBLE Use ZONE VOLUME (23) and ZONE BASS & TREBLE (24) knobs to control the output signal for the ZONE. (i.e. other rooms in a club, another amplifier, a satellite speaker system, a microphone paging system or the DJ control booth monitors).



- (25) GND (GROUND TERMINALS) Connect the ground lead of the turntables with these terminals. This will reduce humming and popping noises. There are two convenient ground terminals located on the rear of the mixer.
- (26) AC VOLTAGE SELECTOR Select between 115V/50Hz or 230V/60Hz. Make sure that the selector is set to the proper voltage you are using.
- (27) AC CONNECTION Standard IEC plug with detachable AC power cord.
- (28) BALANCED OUTPUT Balanced XLR-plug output for the master signal.
- **(29) LIGHT CONTROL -** Buffered audio output for light controllers that can use external input. Great for Touch Panels and Chase Controllers.
- (30) PLAYER CONTROL Input mini plugs from CD player controller into these jacks, input CD 1 into jack 1 and CD 2 into jack 2.
- (31) MASTER OUT Parallel output of P.A. output. Connect with the input of a power amplifier.
- (32) BOOTH OUT Left and right RCA output jacks controlled by the ZONE (23, 24) controls on the front panel.
- (33) REC OUT Connect to your record unit. The REC OUT level is not influenced by the MASTER FADER (13).
- (34) CHANNEL 3 INPUT JACKS Connect CD players, tape decks, DAT machines, and all other non-magnetic equipment to the line level inputs. Line level musical instruments with stereo outputs such as Rhythm Machines or Samplers should also be connected to LINE inputs. The RCA input jacks are color code, the red jack represents the right channel and the white jack represents the left channel.
- (35) CHANNEL 2 INPUT JACKS Connect CD players, tape decks, DAT machines, and all other non-magnetic equipment to the line level inputs. Line level musical instruments with stereo outputs such as Rhythm Machines or Samplers should also be connected to LINE inputs. When connecting turntables with MM pickup cartridge use the Phono inputs. The RCA input jacks are color code, the red jack represents the right channel and the white jack represents the left channel. Be sure your turntable are connected to the AUX/PHONO jacks, you must also be sure that the AUX/PHONO (38) switch is set to the "PHONO" position. Never plus in a line level input in to these jacks while the AUX/PHONO (38) switch is set to the "PHONO poistion, this may cause damage to your mixer and/or audio system. When the AUX/PHONO (38) switch is set to the "AUX" position, the jacks will only accept a line level input.

### **Rear Panel Cont.**

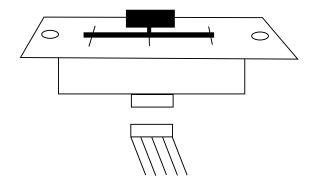
(36) PHONO / AUX SELECTOR SWITCH - Changes phono to an extra line; allows the DJ to use a CD player or other input device in the same line as the phono line. When using a turntable select PHONO, and when using other input devices select AUX. PHONO/AUX lines can be used with LINES 1 and 2. The PHONO /AUX SELECTOR SWITCH gives the DJ the possibilities of 2 extra input lines.

(37) CHANNEL 1 INPUT JACKS - Connect CD players, tape decks, DAT machines, and all other non-magnetic equipment to the line level inputs. Line level musical instruments with stereo outputs such as Rhythm Machines or Samplers should also be connected to LINE inputs. When connecting turntables with MM pickup cartridge use the Phono inputs. The RCA input jacks are color code, the red jack represents the right channel and the white jack represents the left channel. Be sure your turntable are connected to the AUX/PHONO jacks, you must also be sure that the AUX/PHONO (38) switch is set to the "PHONO" position. Never plus in a line level input in to these jacks while the AUX/PHONO (38) switch is set to the "PHONO poistion, this may cause damage to your mixer and/or audio system. When the AUX/PHONO (38) switch is set to the "AUX" position, the jacks will only accept a line level input.

(38) MIC 2 INPUT JACK - Connect your microphone with 1/4 inch (6.3mm) jack plug here. The signals may be controlled by the MIC 1 VOLUME KNOB (18). BASS & TREBLE for MIC 1 can be adjusted by the MIC BASS CONTROL KNOB (19) and the MIC TREBLE CONTROL KNOB (19). MIC 2 volume can be adjusted by the MIC 2 VOLUME KNOB (18). There is also a XLR-plug for MIC 1 (15) on the front panel.

### Replacing the Crossfader

- 1. Disconnect the mixers main power supply
- 2. Using a number two Phillips screw driver, unscrew the each of the stainless steel retain screws that hold the crossfader in place.
- 3. Gently remove the crossfader from its seated position. You may need to wiggle the crossfader slightly to remove it.
- 4. After removing the crossfader, disconnect the ribbon cable that attaches the crossfader to the PC board. Grasp the crossfader by its base and pull the ribbon cable by its connector not the actual cables. The connector is desired to only fit one way, so don't worry about the connectors orientation.
- 5. Connect the new crossfader to the ribbon cable and replace in reverse order.



### **Technical Specifications - Model Q-2221/X**

Model: Q-2422/SX<sup>™</sup>, 2 Channel Mixer Power supply: AC 115/230V, 50/60Hz switchable

**Dimensions:** 19" W x 7" D x 2.25" H / 482x 176x 65mm

**Weight:** 8.5 lbs. / 3.8 kg

Crossfader: FF-Plus - Optical detecting fader start control - Low grounding impedance crossfader

**Power Consumption:** 5W typical, 7W w/ full headphone output

Headphone impedance: 16 Ohms

### Input Sensitivity (Level/Impedence):

Line: -14dBV (200mV) 12K Ohm +/- 2dB

Microphone: -49 dBV (3.6mV0 / 3K Ohms +/- 3 dB

**Phono:** -48dBV (4mV) 47K Ohms +/- 3dB **Aux:** -14 dBV (200mV) / 47K Ohms +/- 2dB

### Output Sensitivity (Level/Impedence):

Rec Out (RCA): -10dBV (316mV) / 2.2K Ohms +/- 2dB

Master Out (RCA): 0dBV (1V) / 610 Ohms +/-2dB

Phones (Load+320hms): -8dBV (0.4V) /33 Oms +/-2dB

### Maximum Output (Load + 47K, THD = 5%)

**Rec:** < 18dBV (8V)

Master (RCA): < 18dBV (8V) Blanced (XLR): < 18dBV (8V)

Channel Balance: Within 3dB

### Frequency Response:

• Line: 20Hz - 20KHz, ± 1dB

• **Phono:** 20Hz - 20KHz, ± 1.5dB (RIAA)

• Aux: 20Hz - 20KHz, ± 1dB

• Microphone: 20Hz - 20KHz, +1,-3dB

### THD - Total Harmonic Distortion (1Khz, 0dBV Output):

Master Output (Load = 47K Ohms): Less than 0.2%

Phono: (Load = 32K Ohms): Less than 0.5%

### Channel Equalizer:

**Bass** =  $+12 \pm 1$ dB,  $-22 \pm 2$  dB at 70KHz / **Mid** =  $+12 \pm 1$ dB,  $-17 \pm 2$  dB at 1KHz / **Treble** =  $+13 \pm 1$ dB,  $-27 \pm 2$  dB at 13KHz

### Microphone Equalizer:

Bass =  $+12 \pm 1$ dB,  $-12 \pm 1$  dB at 100KHz / Treble =  $+12 \pm 1$ dB,  $-12 \pm 1$  dB at 10KHz

### Warranty & Service:

The Q-2422/SX<sup>™</sup> has a 2-year limited warranty. Please mail in warranty card as soon as possible to validate your warranty.