

A PRODUCT OF SOLTON ACOUSTIC GERMANY



ENGLISH

USER MANUAL QX 700



Important Safety Instructions



This symbol is used to alert the operator to follow important operating and precautions details in documentation.



This symbol is used to warn operators that uninsulated" dangerous voltages" are present within the equipment enclosure that may pose a risk of electric shock.

- 1. Save the carton and packing material even if the equipment has arrived in good condition. Should you ever need to ship the unit, use only the original factory packing.
- 2. Read all documentation before operating your equipment. Retain all documentation for future reference.
- 3. Follow all instructions printed on unit chassis for proper operation.
- 4. Do not spill water or other liquids into or on the unit, or operate the unit while standing in liquid.
- 5. Make sure power outlets conform to the power requirements listed on the back of the unit
- 6. Do not use the unit if the electrical power cord is frayed or broken. The power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
- 7. Always operate the unit with the AC ground wire connected to the electrical system ground. Precautions should be taken so that the means of grounding of a piece of equipment is not defeated.
- 8. Mains voltage must be correct and the same as that printed on the rear of the unit. Damage caused by connection to improper AC voltage is not covered by any warranty. 9. Have gain controls on amplifiers turned down during power-up to prevent speaker
- down during power-up to prevent speaker damage if there are high signal levels at the inputs.
- 10. Power down and disconnect units from mains voltage before making connections.

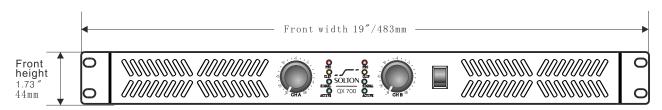
- 11. Never hold a power switch in the "0N" position if it won't there itself.
- 12. Do not use the unit near stoves, heat registers, radiators, or other heat producing devices.
- 13. Do not block fan intake or exhaust ports. Do not operate equipment on a surface or in an environment which may impede the normal flow of air around the unit, such as a bed, rug, weather sheet, carpet, or completely enclosed rack. If the unit is used in an extremely dusty or smoky environment, the unit should be periodically "blown free" of foreign matter.
- 14. Do not remove the cover. Removing the cover will expose you to potentially dangerous voltages. There are no user serviceable parts inside.
- 15. Connecting amplifier outputs to oscilloscopes or other test equipment while the amplifier is in bridged mode may damage both the amplifier and test equipment!
- 16. Do not drive the inputs with a signal level greater than that required to drive equipment to full output.
- 17. Do not connect the inputs / outputs of amplifiers or consoles to any other voltage source, such as a battery, mains source, or power supply, regardless of whether the amplifier or console is turned on or off
- 18. Do not run the output of any amplifier channel back into another channel's input. Do not parallel- or series-connect an amplifier output with any other amplifier output.**SOLTON** is not responsible for damage to loudspeakers for any reason.
- 19. Do not ground any red ("hot") terminal. Never connect a "hot" (red) output to ground or to another "hot" (red) output! 20. Non-use periods. The power cord of equipment should be unplugged from the outlet when left unused for a long period of time.

- 21. Service Information. Equipment should be serviced by qualified service personnel when:
- A. The power supply cord or the plug has been damaged;
- B. Objects have fallen, or liquid has been spilled into the equipment:
- C. The equipment has been exposed to rain;
- D. The equipment does not appear to operate normally, or exhibits a marked change in performance;
- E. The equipment has been dropped, or the enclosure damaged.
- 22. To obtain service, contact your nearest **SOLTON** Service Center.

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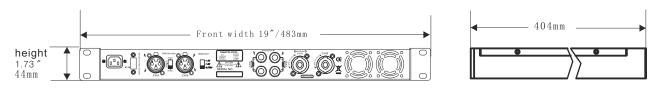
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QX 700 Front View

Rear&Side View

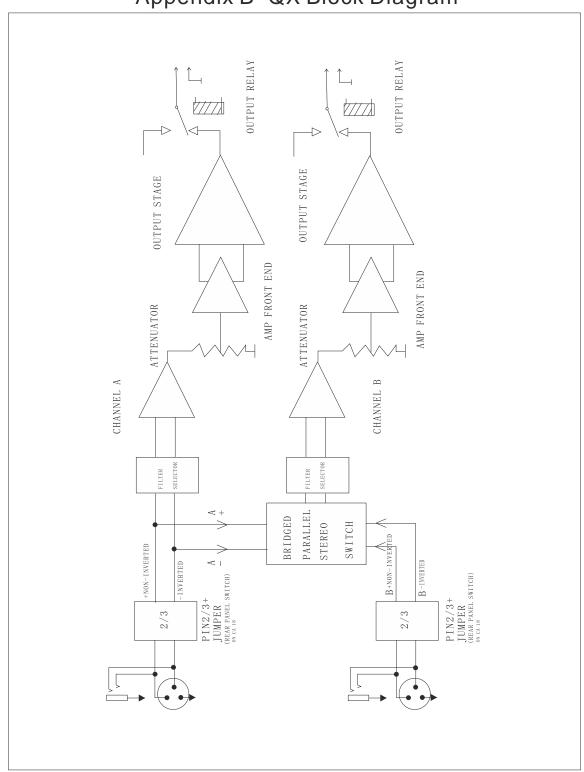


 ${\tt Speakon\ output\ model\ shown}$

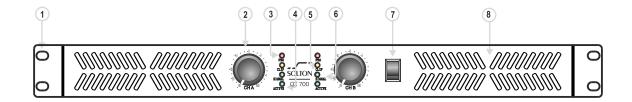
QX 700 Front View



Appendix B- QX Block Diagram







Front Panel

Front Panel

1. Rack Mounting Ears.

Two front panel mounting holes are provided on each mounting ear.

2. Input Attenuators.

Attenuator knobs allow precise setting of input gain for CHA and CHB.

3. Protect LED.

Indicates that the channel is in Protect mode (speaker disconnected by output relay).

4. Active LED.

Indicates that input to the amplifier is connected and the amplifier is turned on.

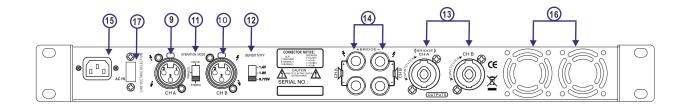
5. Clip LED.

Illuminates at the clipping threshold. Continuous illumination also indicates that ACL (Active Clip Limiting) protection circuitry is engaged.

6.Signal LED.

Illuminates to indicate that a signal (above the minimum threshold) is present at the amplifier input and that the signal is being amplified.





Rear Panel

7.AC Power Switch

This is the main power switch press to turn on the amplifier.

8. Fan Outlet Grills:

This amplifier series is cooled by two rear-mounted fans. Cool air flows over the heat sinks and exhausts through the front grills. Make sure these outlets remain clear to allow unrestricted air flow.

Rear Panel

9-10.Balanced XLR Input Connectors.

These connectors accept input signals on balanced XLR input plugs.



11.MODE SWITCH

This switch is used to choose the operating mode of the power amplifier:

Mode stereo: 2 inputs (channel A and B) and 2 outputs are used.

Mode parallel: 1 input (channel A) and 2 outputs are used.

Mode bridge: 1 input (channel A) and 1 output (channel A) are used (see binding post description)

12. Input sensitivity selector

This selector allows to choose the input sensitivity 0.775V, 1.00V, 1.40V.

13-14. Output Connectors.

Have two funtion output connectors. One is binding post another is speakon. Connection to the binding post can be made with bare wire. banana plugs, or spade lug terminations. Make connections to both the channel A and channel B terminals for stereo or Parallel Mode. Or a single connection across the red ("hot") terminals only of channels A and B for bridged mono mode. Using speakon-type speaker cables, make connections to both the channel A and channel B connectors for stereo or parallel mode. Or to the bridged mode connector for bridged mono mode

15.AC Power Cable. AC POWER INPUT.

16. Air cooling windows

This part is the air cooling window. Do not obstruct!

17.FUSE Holder. 1U Rear panel is adjustion AC input voltage.



QX Series Amplifier Specifications

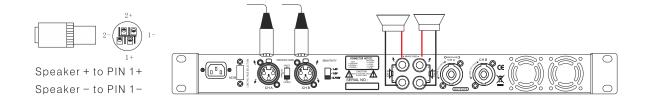
| 1kHz, 0.1% THD+N | QX 700 |
|--|--|
| 80Stereo Power | 200W+200W |
| 4ΩStereo Power | 350W+350W |
| 2ΩStereo Power | |
| 8a Bridged Mono Power | 650W |
| 4ºBridged Mono Power | |
| Max RMS Output Voltage (each channel) | 56V |
| Max Peak Output Voltage | 80V |
| Frequency Response (+0 / -0.3dB, 1W/8\Omega) | 20Hz-20kHz, -3dB@135kHz |
| Power Bandwidth (rated power at 4 \alpha, 1 \%THD+N) | 20Hz-20kHz, -1dB/+0.5dB |
| TourClass Protection | ACL, IGM, AutoRamp, short circuit, DC voltage, turn-on/off transient, current inrush, sub/ultrasonic input |
| THD+N (rated power, $4\Omega/1$ kHz) | <0.1% |
| SMPTE IMD (rated power, 81, 60 Hz & 7kHz) | <0.05% |
| Damping Factor (10-400Hz at 8 Ω) | 300:1 |
| Input CMRR (1kHz) | > 60 dB |
| Standard Input Sensitivity (rated power at 812) | 0.775V |
| Input Impedance (balanced/unbalanced) | 20kΩ/10k |
| Hum and Noise ("A" weighted, -80 dBW) | 98dB |
| Crosstalk ("A" weighted, full power at 41) | > - 60dB |
| Class | AB |
| Input Connectors (per channel) | Female ♂ XLR (pin 2+, configurable for pin 3+,ground 1+) |
| Output Connectors (per channel) | 5-way binding posts or Speakon connectors |
| Filter Storage | 18800uF |
| Power Supply (factory configured) | 230V,50Hz |
| Thermal Emissions (1/8 Power, 4Ω) | 2030 BTU/hr |
| Thermal Emissions (1/3 Power, 4Ω) | 2726 BTU/hr |
| Cooling | Two rear panel variable speed DC fans. |
| LED Indicators (per channel) | PROTECT,CLIP,-15dB,SIGNAL,BRIDGE,PARALLEL,POWER. |
| Construction | Steel chassis, 16 gauge. Double thickness in rack ear areas. |
| Chassis Dimensions(HeightxWidthxDepth to rear rack ears) | 44 × 480 × 404mm |
| $Back\ Dimensions (HeightxWidthxDepth)$ | 105 × 585 × 580mm |
| Gross Weight | 13.5kg |
| Net Weight | 10.5kg |
| | |

 ${\tt SOLTONReserves}\ the\ right\ to\ make\ changes\ or\ improvements\ in\ manufacturing\ or\ design\ which\ may\ affect\ specification.$

² Year Warranty

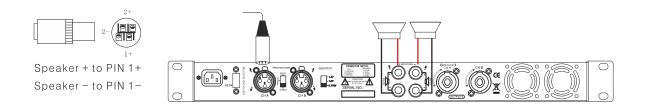


Stereo Mode Connections (Speakon Output Connectors)

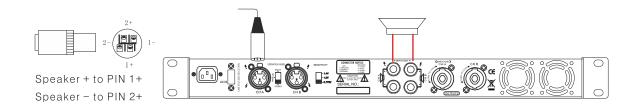


Parallel Mode Connections

(Speakon Output Connectors)



Bridged Mono Mode Connections (Speakon Output Connectors)







SOLTON Acoustic

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