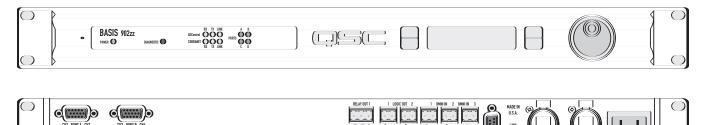
## DIGITAL SYSTEMS PRODUCTS

# **BASIS 902zz**



| ) | CHS PORT C CH6 | CH3 PORT B CH4 | 20 | QSControl | Coloraliet |
|---|----------------|----------------|----|-----------|------------|
|   |                |                |    |           |            |

QSControl.net, QSC's next generation network audio system, achieves the seamless integration of the company's signal transport, control, processing, and monitoring technologies. QSControl.net brings together QSC's digital, power amplification and loudspeaker products into a unified system that enables the user to administrate it all via a fully integrated graphical user interface. The new generation BASIS devices are designed to operate under the company's QSControl.net platform.

#### BASIS 902zz

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The BASIS platform meets the control, monitoring, signal transport and processing needs of amplification and loudspeaker systems over an Ethernet network. The BASIS 902zz units combine three distinct QSC technologies within a single hardware unit. Amplifier and loudspeaker control, monitoring and protection, configurable DSP, and CobraNet<sup>™</sup> audio transport are seamlessly integrated into one powerful single RU package.

Through QSControl.net, QSC's BASIS and next-generation RAVE and DSP products can be networked together and controlled from a single software interface. In addition, multiple networked computers can be set up to control and monitor all of the units simultaneously.

#### **Fixed Latency DSP**

Users of most other configurable DSP systems are familiar with a variable latency inherent in the processing configuration. Add more processing blocks and you also add delay, whether you want it or not. QSC's DSP engine is unique in having a short and fixed processing latency through the DSP subsystem. QSC's fixed latency DSP is configurable DSP that stays fast and predictable from one configuration to the next.

#### For more information, log onto www.qscontrol.net

| INPUTS   | DSP     | OUTPUTS        |          |  |
|----------|---------|----------------|----------|--|
| CobraNet |         | DataPort       | CobraNet |  |
| 24 of 32 | 24 x 24 | 4 (8 channels) | 32       |  |

### Features

- Amplifier and loudspeaker control, monitoring and protection
- Configurable DSP functions and signal paths
- Fixed latency DSP engine
- Ethernet controllable
- CobraNet audio transport with new intuitive GUI
- Two Ethernet ports CobraNet and control can be run over a single cable or be divided between the two ports. The CobraNet port is 100Base-T. The control port is 10Base-T.
- Each unit can store eight design configurations that can be changed on the fly
- · Snapshots can recall config or block and/or parameter settings
- Matrix mixer any size, up to 24 x 24
- Automixers gain sharing
- Routers any size, up to 24 x 24
- Gain controls any channel count, up to 24
- Graphic equalizers
- Filters high-pass, low-pass, all-pass, shelf, parametric, parametric shelf, Butterworth high and low-pass, Linkwitz-Riley high and low-pass, Bessel-Thomson high and low-pass
- Crossovers Linkwitz-Riley, Butterworth, Bessel-Thomson in-phase, Bessel-Thomson symmetrical, 2-way, 3-way, and 4-way general purpose adjustable
- · Compressors, peak limiters, AGC's, gates, dynamics processor
- Duckers up to 8 channels, up to 60 seconds fade in and fade out times, priority mix
- Pink noise, white noise, sine
- Delays
- Macros user-definable custom blocks



## **PRELIMINARY SPECIFICATIONS – BASIS 902zz**

| ) Performance          | Dynamic range (AES-17, -60 dB method, all sensitivities)<br>Unweighted<br>A weighted<br>Distortion (20 Hz – 20 kHz, all sensitivities)<br>+4 dBu (max)<br>2 dB below clip (max)<br>Crosstalk (20 Hz – 20 kHz)<br>Inter-channel (max)<br>Inter-channel (max)<br>Inter-channel (max)<br>Intra-channel (max)<br>Intra-channel (max)<br>Intra-channel (max)<br>20 Hz – 20 kHz (max)<br>20 Hz – 20 kHz (typ)<br>Audio converters<br>Mute<br>Delay<br>Network to BASIS<br>CobraNet input through full DSP chain to analog output<br>Program outputs<br>Connector type | <pre>&gt; 112 dB<br/>&gt; 115 dB<br/>&lt; 0.009% THD+N<br/>&lt; 0.009% THD+N<br/>&gt; 75 dB<br/>&gt; 90 dB<br/>&gt; 85 dB<br/>&gt; 100 dB<br/>+/- 0.5 dB<br/>+/- 0.2 dB<br/>24 bit, 48 kHz, (output)<br/>Infinite attenuation<br/>Standard CobraNet<sup>™</sup> latency<br/>6.313 milliseconds</pre>   | <b>Low latency</b><br>3.646 milliseconds |
|------------------------|---|--|--|
| I/0                    | Cable type<br>Available "stock" lengths   | QSC DataPort cable, QSC p-n DPC-x ("x" designates cable length in<br>1, 2, 3, 4, 5, 6, 10, and 20 ft., custom lengths available  | feet)                                    |
|                        | Maximum qualified length  | 328 ft. (100 m) using QSC DP cable only. Non QSC cable limited to 6  | 6 ft. (audio only)                       |
| Monitor                | Control room foldback monitoring<br>Connector type<br>Pinout<br>Tap points<br>Monitor signal (unit off)<br>Maximum level<br>Impedance (nominal)<br>CMRR, 20 Hz – 20 kHz<br>Monitor<br>Freq. resp. (20 Hz – 20 kHz)<br>Distortion (20 Hz – 20 kHz)<br>Distortion (20 Hz – 20 kHz)<br>Noise floor<br>Output impedance (nom)<br>Output impedance (nom)<br>Output level<br>Control range (nom)  | 5-pin "phoenix style" (a.k.a. "euro style") detachable terminal block<br>1:4(input) 2:-(input) 3:CHASSIS GND 4:-(output) 5:+(outpu<br>8 internal input, 8 internal output, 8 amplifier (pre-, post-, amplifier)<br>Unity gain connection, relay bypass<br>+21 dBu<br>10k ohms<br>> 54 dB<br>Sum of monitor input and signal from internal monitor tap point(s)<br>+/- 0.5 dB<br>< 0.05% @ +4 dBu<br>> 90 dB<br>100 ohms<br>600 ohms<br>0 dB to -95.5 dB in 0.5 dB steps  | t)                                       |
| Control Inputs/Outputs | Relay outputs   Connector type   Configuration   Pinout   Switching capacity (nom)   Logic outputs   Connector type   Configuration   Pinout   Omni inputs   Connector type   Configuration   Pinout   Omni inputs   Connector type   Configuration   Pinout   Normal operating range   Potentiometer operation   Voltage tolerance   Current output   RS-232 port   QSControl port   Indicators   QSControl status   CobraNet status   Power   Diagnostic   DataPort status (port)   LCD data display  | 2 discrete floating relay switch outputs<br>3-pin "phoenix style" (a.k.a. "euro style") detachable terminal block<br>Electromechanical relay<br>1:NC 2:NO 3:COM<br>1A 30 VDC<br>4 discrete outputs<br>2-pin "phoenix style" (a.k.a. "euro style") detachable terminal block<br>Single-ended, TTL compatible<br>1:4(Signal) 2:4(CHASSIS GND)<br>6 discrete inputs for TTL logic, voltage control or passive resistance<br>2-pin "phoenix style" (a.k.a. "euro style") detachable terminal block<br>Single-ended, ground referenced<br>1:4(Signal) 2:4(CHASSIS GND)<br>Reads signals between 0-5 V nominally<br>Use 10k ohms for full range<br>+/- 48 V<br>0.5 mA with 10k pot (for passive resistive controls)<br>Female DB9 connector<br>Neutrik Ethercon RJ45 ruggedized data connector<br>Neutrik Ethercon RJ45 ruggedized data connector<br>Vellow Link, Tx, Rx, front panel Green Link, Tx, Rx, rear panel<br>Yellow Link, Tx, Rx, front and rear panel<br>Blue, front panel<br>Red, front panel<br>Tri-state (red, green, yellow), front panel<br>2 line x 16 character, backlit, front panel | S  |