



Sound Transform Systems

June 10, 1995

To: **Jon Kjell Seljeseth**
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Dear Mr. Seljeseth,

My apologies for not returning your letter sooner. However, I am happy to report that many of your suggestions and concerns on improving the Serge system have been addressed as follows:

- Each front panel now has six retaining #6 machine screws w/ flat washers to firmly secure the assembly to the chassis box. The two additional retaining screws w/ flat washers have been added to the middle of the panel - both top and bottom edge, instead of only the four corner positions. This modification now prevents the undesirable quality of 'whimpyness'.
- The six panel retaining screws do not obscure the panel graphics.
- The front panel itself is now manufactured from one piece of .0625" medium-hard aluminum alloy, satin with a horizontal grain, and the graphics photo etched with machine milled component mounting holes. *ca 1.5mm*
- The graphic artwork on several modules has been modified slightly to give the system better visual continuity and 'feel' - however it must be understood that the modules comprising this system were developed over a 15 year period with many different people involved, which is intrinsic to its uniqueness. As far as the [DTG] & [DSG] graphics are concerned, they have been modified to be more congruent with each other. The graphics of the [PCO] & [NTO] have also been rearranged slightly. The printed catalog does not yet reflect these changes as we are currently working towards an Internet based on-line catalog and Serge 'Home Page'.
- The power supply and distribution sub-system have been completely redesigned to provide the finest in low-noise international linear (each with computer based test results of burn-in) and a modular, low-profile branch connector distribution system with added noise decoupling and visual display of the bi-polar supply operation at each branch node.

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The question of redesigning the entire system into a 'fully' modular chassis is a moot one. The size & weight vs. functional density is the highest in the analogue modular industry, both past and present. Designing each panel as a "superset" function module is the most flexible concept:

'VOICE', 'SIGNAL PROCESSING', 'CV GENERATION & PROCESSING', 'SEQUENCER CONTROL' and 'LOCATION MODULATION' classes of functionality are prime examples of this approach.

We have stayed with the 'banana' style of plug/jack for many reasons. This type of patching has been a staple of the Test & Measurement industry for over 40 years with its operational and failure characteristics well understood. I have found that inconsistencies in manufacturing standards in both 1/8" (3.5mm) mini-phone & 1/4" phone jacks & plugs have prevented the correct operation in several instances.

The only advantage to the phone jacks is their ability to 'normal' predetermined internal patch routing and provide external 'override' of those firmwired patches via patch cords. However, these 'normal' jack switch contacts are not generally made with high grade materials (i.e. - gold flash), except by special order, and do not provide the best audio signal path. Other aggregate problems associated with this type patching system: module to module ground loops, the inherent capacitance in shielded cables (high frequency response anomalies and phase distortion), and ground modulation jitter caused by the mechanical 'relay' effect between the slip-ring design of the sleeve of the jack and the plug, which is not a true connector.

We do provide multiple interface solutions that adapt to any type audio equipment including: Switchcraft 'Bantam' jacks, Audio Accessories 'TT' style jacks, Neutric & Switchcraft 'muti-pin' audio connectors, RCA phono, Switchcraft 1/8" mini & 1/4" phone jacks and AMP 'multi-pin' types. We also provide custom modifications to the Serge System including:

Toggle switch selection of CV sources on a per module basis

Additional jacks on a per module basis

I/O jack bays - on a per system basis

Servo-balanced electronic balanced signal I/O

Jensen ® transformer balanced signal I/O

Muti-pin AMP® connector termination bays

MIDI > CV subsystems based on the CLARITY RETRO XVI, KENTON Pro 4 or MPU-101

Custom module design and implementation

We made a few of the CV8 MIDI Converters and they worked OK. However, I'm not in the software business and the support of a inferior standard doesn't excite me in the least. Putting an embedded microprocessor in the same chassis with high grade audio is a mistake. The best way to handle the problem is to put the digi-stuff in its own rack and use a 'snake' connector cable to terminate with the Serge using the [CVI] CV Interface Module, a 3" module that provides eight independent channels (from CV's derived from the remoted MIDI>CV converter) each with LED display of that channels CV activity (luminosity shows amount of voltage and rate of change) and a banana jack output to take the CVs out, into the Serge.

The price of the CV Interface [CVI] is \$225.00US.

I agree that the triangle wave output on the [PCO] & [NTO] should be bi-polar in nature. That modification is now being assessed and will be made standard in the future provided we can do it modify the circuit without having to add an offset/buffer amp.

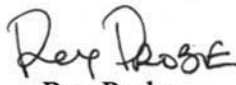
The Quad Voltage Controlled Mixer [QVM] supplants the [UPAP] as it is a far superior design - lower noise, increased dynamic range and accurate power panning. The [MXP] is long obsolete.

The grade of panel components is much, much higher in quality from the older systems. The switches and pots were selected by their 'feel' as well as manufacturing quality and batch constancy. The pots and knobs we now stock have a 1/4" dia. round shaft, not the 1/8" dia. shaft as in earlier incarnations of the system. (A few of the middle period systems had pots with 1/4" dia. shafts). What size shafts are on the pots on your beast? Let me know so I can send you the correct replacement knobs (at \$1.25 /ea).

As far as honing in a formal quote, please be aware that we do not sell kits, as I have seen the results. I quote systems on a panel basis (16" of module space) minimum. All of the modules you are interested in are in stock, with the exception of the [MPX] (which is now the [QVM]). What needs to happen next is the establishment of a module order (per panel) and the further discussion of the custom filter module, as outlined in your letter.

Thanks, Jon, for your constructive criticism and suggestions. Hopfully, now that the Serge Modular Music system has been brought to a new level of quality, it is now time to specify exactly your current system requirements and provide a formal quotation stating both price and delivery schedules. Thank you again for your patience, as we have brought back the dead.

Best Regards,


Rex Probe
President