APPLICATION NOTE – AUGUST 2013

Soundcraft/BSS BLU-Si BLU link Card

Personal monitoring using a BLU link System

BLU link is an audio network developed by BSS and is used in installations all around the globe. Being proprietary to HARMAN, dbx have adapted this network for use in a personal monitoring system applicable for live sound performance or in the studio.

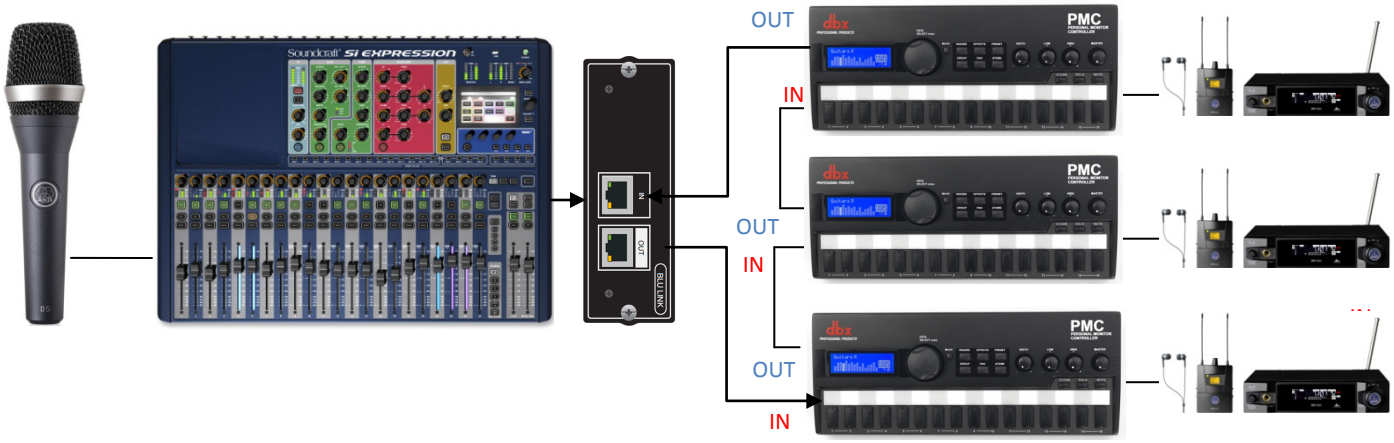
The PMC can receive any 16 of the up to potentially 256 incoming BLU link signals and allows the user control of their own mix of the incoming channels. In order to 'add' signals to this network, dbx and Soundcraft have co-developed the **BLU-Si** BLU link option card that slots into the back of the console to allow direct access to the network. In this example, all mic and instrument feeds are connected to the Si Expression (or other console such as Si Compact or Si Performer), and gain of those signal sources is then controlled by the console.

A simple connection to this system would be as follows.

In this system we are running the inputs of the Si Expression 2 through the channel direct outputs, patching them to "BLU link 1-16". These are then being put on the network, run through a standard Cat5 cable to the dbx PMC 16 personal monitoring system. This unit then has independent level control of 16 channels of audio. This mix is individual to the musician, with the main input channel levels being controlled by the input gain controls on the console.

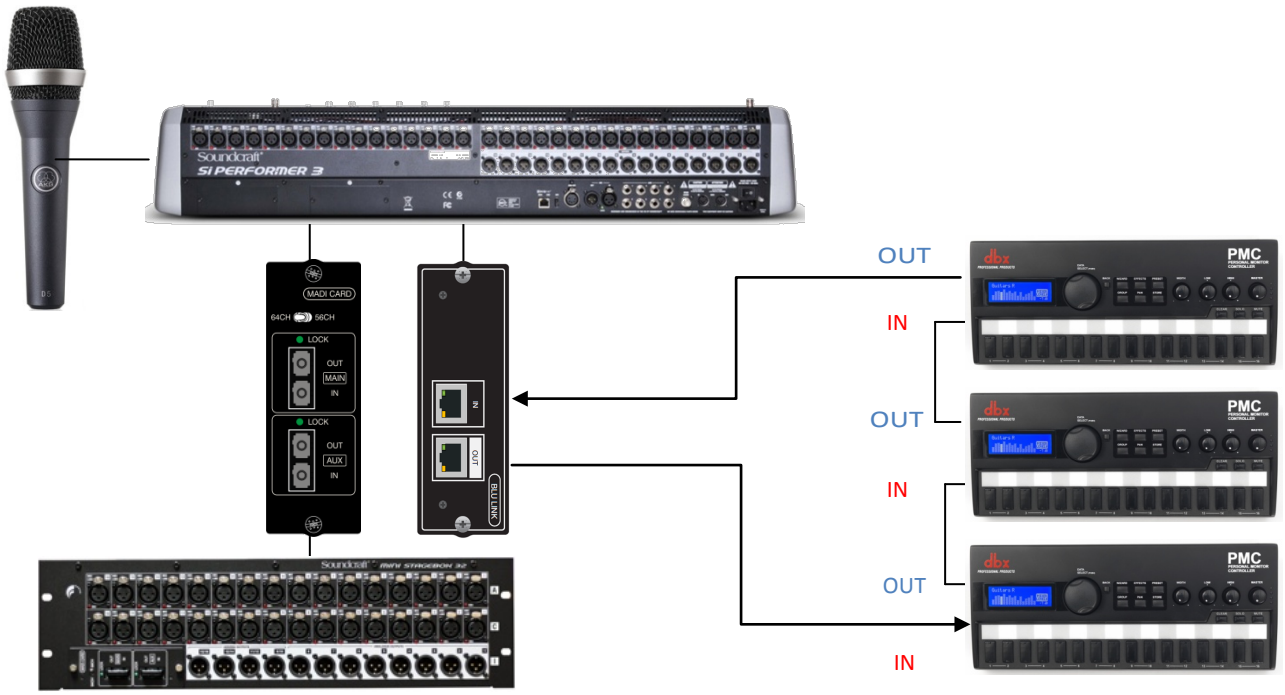
Using our patented D.O.G.S system you can control fluctuating gains of different inputs and create a very stable and comprehensive personal monitoring system for a live or studio performance. (see our D.O.G.S whitepaper for more information)

For times when more than one personal monitoring system is required, the PMC units can be daisy-chained through the IN/OUT Cat5 ports to provide a personal monitoring system for several musicians.



The above diagram shows 3 personal monitoring units receiving all 32 channels being sent from the console, from which each PMC may select its own 16 channels for a personalised mix. The stereo line or XLR outputs of the PMC can also be sent to a wireless in-ear transmitter system for freedom of movement.

Adding the Soundcraft Mini Stagebox



When BLU link is used with a Soundcraft Si Performer, you can run a stagebox on one option slot using MADI, and a BLU-Si card connected to the PMCs through BLU link in the second slot. This would allow for remote I/O and a personal monitoring system on a larger show where the console is located further from the stage.

Integrating the Si Expression into a Soundweb London BLU link Network

Systems already using BLU link are now accessible to any Si Expression, Si Compact or Si Performer console thanks to the new **BLU-Si** BLU link option card. BSS Soundweb London systems are used in installations across the globe in hotels, retail complexes, conference centres, sports stadiums or large nightclubs, and now the BLU link system is available to an Si console.

The new Soundcraft BLU link card allows access to the BLU link network without the need for analogue inputs and D/A and A/D conversion. This way an Si Expression, Si Compact or Si Performer console can accept signals from the network, process and mix them and return them to the network. As an example, this means a console may be easily and quickly patched into various locations where BLU link network Cat5 connections are available. **NOTE: Only one BLU-Si card/console combination may be used on a BLU link bus at any time.**

It is possible using internal DIP switches to choose which channels from the 256 available in the BLU link ring can be accessed by the 32 channels on the BLU-Si card. Separate switches for both input and output channels on the BLU-Si card allow the 32 console channels to be patched as a block to banks of BLU link channels 1-32, 33-64, 65-96.... up to 225-256. The BLU-Si card **must** be the master clock for the Soundweb London network. *(Slave mode expected late 2013)*