

The logo for Vintagedesign, featuring the word "vintagedesign" in a bold, white, sans-serif font with a slight glow effect, set against a dark blue rectangular background.

## SU1

### Summing Unit

Thank you for purchasing the Vintagedesign SU1. The vintagedesign products are assembled by hand in Sweden. The SU1 utilizes a 100% discrete (no IC's in the signal path!) transistor circuit with high quality components like Carnhill (St'Ives) transformers.

#### **The design**

The SU1 is a 16-channel summing unit with two separate side chains for parallel processing. After the first amplification stage, the signal is splitted and amplified before the two stereo sends. Two discrete balanced stereo returns allow you to blend the sends with the main signal. Each of the three signal paths has its own level control and cue/mute switch.

SU1 can be linked with a SU1P, for a total of 32 channels.(48 channels is possible) The mix buss is a floating, fully balanced design. Channels 1-8 are switchable as dual mono or stereo pairs, while channels 9-16 are grouped as four fixed stereo pairs.

To enable insertion of outboard gear between the DAW (or DA converters) and the SU1, each channel/pair features a -10 or -20 dB pad switch, ensuring the outboard gear interfaces at proper levels.

SU1 is fully a discrete circuit design with two single-ended transformerbalanced class A amplifiers and 8 discrete OP amps.

## Front.

**Ch1-8** are switchable as stereo pairs or as dual mono. Each channel is provided with a -10/-20dB pad.

**Ch9-16** are four stereo pairs. Each pair is provided with a -10/-20dB pad.

**Sidechain mixer** SU1's sidechain mixer lets you easily add parallel compression to your mix. SU1 has two sends and two returns.

The mixer has three levelcontrol, one each for Sidechain 1 and 2 ( SC1, SC2 ) plus one control for the main signal. Above each control there's a switch for Mute (M) and Solo (S). Sidechain send is a level control for the sends.

**Headroom meter** The headroom meter shows the internal level before the sidechain mixer/sends. Its calibrated to show peak at +15dBm at the output with both master and main level at full.

When the +15dB flashes there's 10dB more before the outputstage clips!  
Sidechain sends can only handle +18dB.

**Main Level** The master level lets you fintune the output level.

## Backside.

**Line inputs.** Two DB 25 connectors is provided for the channel inputs. Ch1-8 and ch9-16.

**Sidechain send returns.** A third DB 25 connectors is provided for the sidechain sends and returns.

1. Sidechain 1 L return
2. Sidechain 1 R return
3. Sidechain 2 L return
4. Sidechain 2 R return
5. Sidechain 1 R send
6. Sidechain 1 L send
7. Sidechain 2 R send
8. Sidechain 2 L send

**Buss in.** This is an inputs for a SU1P add-on unit. Two termination jumpers are located inside the unit behind each XLR connector. Remove these when you're connecting a SU1P to this inputs.

**Main Output.** Transformer balanced floating outputs, max output +26dB into 600ohms load. Two 600 ohms termination jumpers are located inside the unit behind each XLR connector.

If you're connecting this unit to a unit with 600ohm input impedance, remove the termination jumpers!

**Unbal output.** Unbalanced output connected before the output transformer, 4 dB below the main output level.

**24VAC.** This unit has an internal powersupply with separate regulated power for switching and headroom-meter. Require 24V AC / 800mA.

### Chassi ground

The chassi is connected to the signal ground! The short cable is located inside the unit and is located infront of the 24V AC input, fastened the one of the circuitboard screws.

### Input signal ground

There's two jumpers to lift the ground on the inputs, jumpers are located side by side of the two blue transformers!

### Jumpers

All jumpers are inplace as default!

## OBS!

### Signal indicator led's!

I got a request to add "signal present" leds on each input channels but as the input is passive, floating balanced and without any buffers, crosstalk would trigg leds on other channels!

### Cables

Input cables are standard DB25 multi cables with Tascam standard!