

SS8900

modular stereo audio console



• McCurdy

# SS8900 description

## THE McCURDY SS8900 MIXING CONSOLE CUSTOM FEATURES IN A STANDARD PACKAGE.

McCurdy Radio Industries Limited presents the SS8900, a low profile console designed for T.V. and Radio production facilities, offering most of the functions of a full recording console.

### Styling

The SS8900 console is styled for the 80's, incorporating the latest in low profile freestanding architecture. An independent industrial design group was given a free hand in the design of the SS8900 to ensure that the final package included the latest design trends. The all steel welded enclosure is designed to enhance its surroundings as well as providing a rigid package for the electronic modules. Modularity allows this console to fit through a 28 inch door for ease of installation. A full range of complementary furniture serves to enhance the SS8900 as the best choice in audio mixing consoles.

### Human Engineering

The low profile design has been achieved without forgetting the human engineering aspects of operating the console, leg room is sufficient for the tallest operator and each control can be adjusted from a sitting position.

Layout of all controls follows a convenient and logical operating position to minimize operator fatigue. The front panel is reinforced to prevent twisting and is supported by gas filled cylinders to allow lifting by one person.

All reflective surfaces use matt finished material to minimize glare from overhead lighting, indicator lights have been chosen to ensure visibility from off axis viewing points.

All modules are removable from the front of the unit and service procedures may be accomplished without taking the console out of service.

### Technical Specifications

Each component module has been designed from the ground floor up using the latest in proven technology to integrate and complement each of the other modules in the console.

Great attention has been paid to the aspects of headroom, transient response and isolation, in addition to the traditional test parameters of noise, response and total harmonic distortion. Switching transients, frequently a problem in large complex consoles have been eliminated on all operational controls by careful integration of each module within the SS8900 console.

Heat dissipation has been improved allowing the SS8900 to be used over long periods of time in enclosed studios. Multiple signal routing provides the operator with many types of signal processing paths and allows different styles of mixing to be accomplished on one console.

### Reliability

System reliability was set as one of the primary design criteria. Most components used within the modules are dual sourced, and have undergone a strict evaluation within the MRI design labs before being incorporated in the units. Quality control is carried out at all stages of the

manufacturing process and the complete console is burned in for 48 hours prior to shipment to the customer.

Dual power supply feeds ensure continuity of operation even when there is a power supply failure.

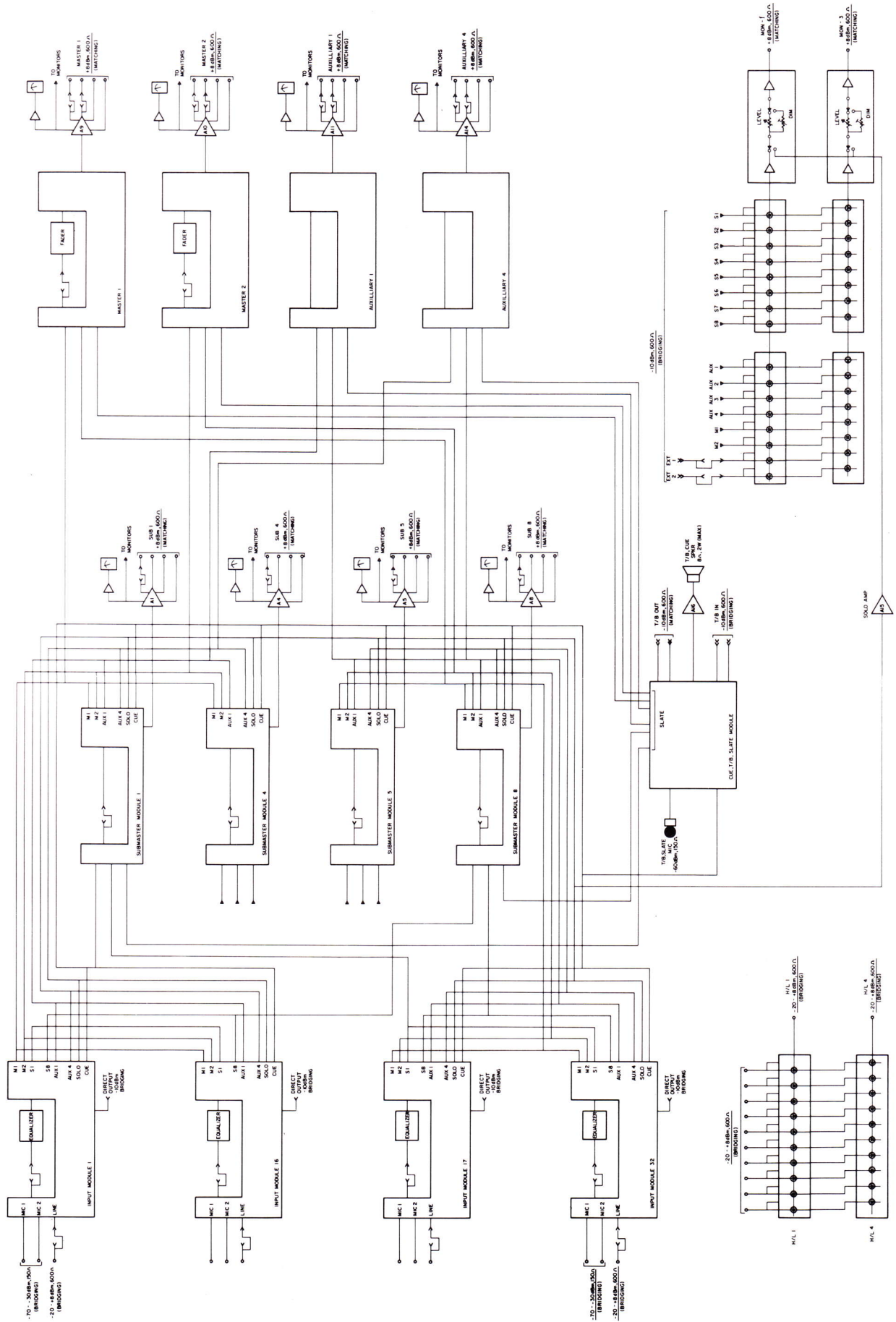
### Standard facilities.

The following list provides some of the basic functions available in the standard SS8900 package:

- Balanced circuitry throughout the console including jackfields, inputs, outputs and customer equipment ports.
- 32 input channels with a choice of 8 submasters and 2 masters or 6 submasters and 4 masters.
- Two mic and one line input per channel with full range sensitivity switches to accommodate different levels without degrading system headroom.
- A visual indicating headroom monitor on both pre and post fader levels for each channel and submaster.
- Four auxiliary send points, each with individual level control.
- Switched cue and solo functions with additional fader end cue.
- Phase reversal switches and Hi pass filters conforming to the slope characteristics of the SMPTE dialogue filter for voice processing.
- Full range pan pots on each input and submaster module to allow dynamic positioning of the sound image.
- A choice of two types of equalizer, four band or three band.
- Full submaster or master selection for each channel.
- Four auxiliary channels with equalizers.
- A complete mixdown monitor system with talkback and slating capability.
- Programmable DC control boards to allow customer choice of remote functions.
- A choice of either VU or PPM.
- A 32 x 9 jackfield with 32 spare jacks for customer wiring.
- Insertion points for compressors.
- Front and rear access doors, large cable knockouts and cable shrouds allow neat wiring of all inputs and outputs.
- D.C. control functions
  - Microphone module control outputs.
  - A switch select: Open collector.
  - B switch select: Open collector.
  - Ch On tally: Open collector.
  - Ch Off tally: Open collector.
  - Ch On pulse: Open collector follows on button push.
  - Ch Off tally: Open collector follows on button push.
- Remote control functions
  - Ch On: Requires mom. closure to ground.
  - Ch Off: Requires mom. contact to ground.
  - Ch On/Ch Off: Toggles between on/off.
  - Cough: Ground defeats audio to pgm and aux if post CH ON.
  - Cue: Assigns audio to cue bus when grounded.

This list provides only some of the functions available in the standard SS8900. For a complete technical description of the package, please request the SS8900 engineering brochure.

# SS8900 functional



# SS8900 specifications

## Input level:

-70dBm to -30dBm, mic inputs  
-20dBm to +8dBm, line inputs

## Insert level:

-10dBm, bridging (input, sub and master modules)

## Output level:

+8dBm, nominal

## Input impedance:

microphone inputs: Greater than 10 x source  
impedance of 150 ohms  
line: 20K ohms bridging

## Output load impedance:

600 ohms

## Headroom mic inputs:

Minimum 40dB

## Headroom mixer bus:

Minimum 35dB

## Headroom output amps:

Minimum 16dB

## Gain:

78dB nominal  
(12dB in hand on all faders)

## Equivalent input noise:

mic input to master pgm output; -125dBm over 50kHz  
bandwidth with -70dBm sensitivity.  
Line input to program output; 80dB signal to noise ratio  
over 50kHz bandwidth with +8dBm sensitivity.

## Frequency response:

±1dB, 20Hz to 20kHz  
Microphone inputs: ±0.5dB, 30Hz to 15kHz  
Line inputs: ±0.5dB, 20Hz to 20kHz

## Total harmonic distortion:

Less than 0.5%, 20Hz to 20kHz at 10dB  
above normal operating level and output level of  
+18dBm.

## Crosstalk:

Better than 65dB below test level on adjacent  
channels, 30Hz and 15kHz.

## Switching transients:

Less than 6dB above noise on all operational controls.

## Power requirements:

115V, 50/60Hz A.C.

# SS8900 ordering information

This brochure covers only major functions and facilities available in the standard SS8900. For a complete technical description please request the SS8900 engineering brochure. For additional assistance, application, and pricing information, contact the nearest McCurdy Radio office.

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