MORE CONTROL. GREATER CAPACITY. ONE BOX.

Mix Select Button
Select mix A or B

Mode Selector
Select function of channel knobs

Assignable Channel Knob
Adjust settings and status
for each input

Front Panel 3,5 mm Aux Input

IntelliMix Mode
Toggle between mixer modes

Audio Output Meters and Limiter LEDs

Rear Panel Aux Input

7-pin Block Connector with Logic

Dante™ Network Interface Ports

SCM820-DAN rear panel shown.
Additional models shown on back page.

Mix A & Mix B Outputs

Per Channel Direct Outputs

Dual Mixer Button

Channel Select
Adjust input level and phantom power

Lockout and Reset
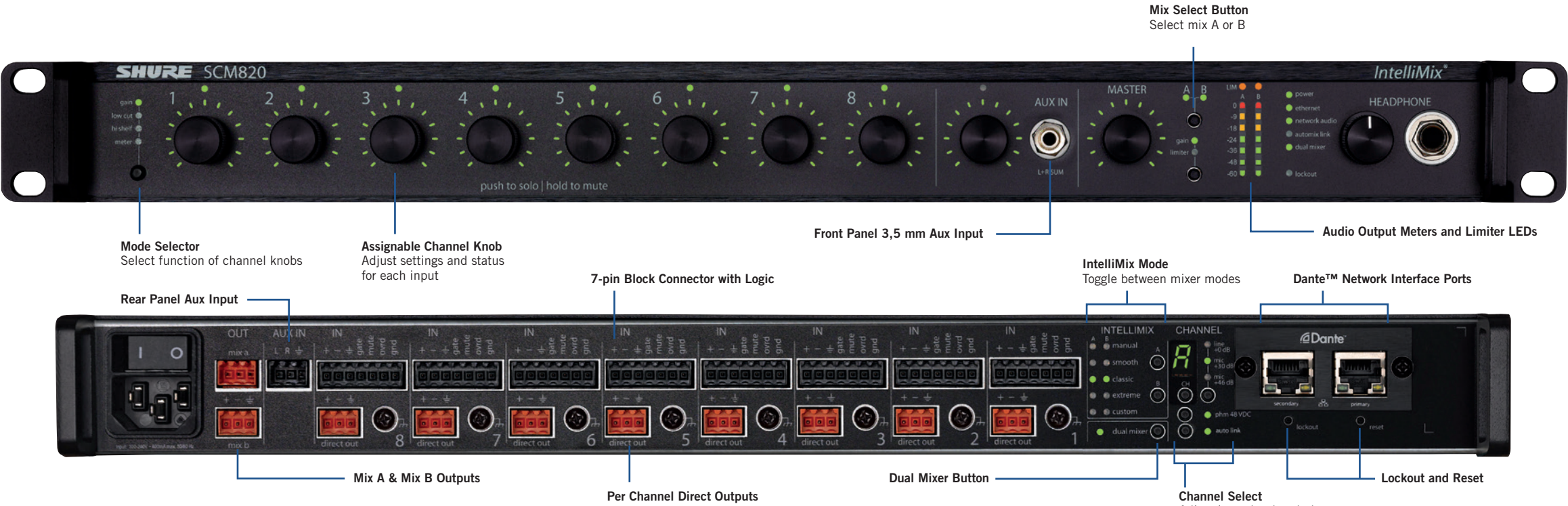

SCM820 Digital IntelliMix® Automatic Mixer

DIGITAL INTELLIMIX® AUTOMATIC MIXER

The SCM820 is the flagship Shure digital automatic mixer for seamless, natural-sounding speech in multiple microphone applications. This innovative 8-channel microphone mixer provides advanced new IntelliMix mixing capabilities along with convenient Ethernet connectivity and versatile configuration options.

IntelliMix® Technology
Preset, manual & custom modes

Dante™ Digital Audio
Multichannel audio over Ethernet

Digital Feedback Reduction
2 channels of patented Shure DFR

Remote Control
Convenient browser-based software

Dual Mixer Operation
One or two independent mixes

Model Variations
Multiple I/O configurations

Smart, Simple Controls

With an intuitive hardware interface and informative LED metering, the SCM820 packs an extensive range of control and visibility into a single streamlined rack unit.

Channel Control Knobs
Make quick adjustments to gain, low cut and high shelf EQ, and solo/mute functions.

LED Meter Rings
Channel and master meter rings vibrantly display input audio or IntelliMix gain levels.

Dual Mixer Mode
Route two entirely different and independent automixes to mix A and B outputs.

Output Mix Control
Front-panel master gain and limiter control section with output signal meter strip.

Hardware/Software Control
Adjust settings directly on the front and back panels or through the browser-based control software.

Analog & Digital Connections

The SCM820 provides enhanced I/O support to engineers - in both application flexibility and digital connectivity - to make setting up, configuring and managing systems easier and more efficient.

DB25 or Logic-enabled Block Connector Models
Eight channel inputs on the back panel connect to mic or line level audio sources.

Direct Outputs
Per-channel direct outputs allow the SCM820 to be used as an insert processor or for recording.

Dante™ Digital Audio Networking
Dante-equipped models provide multichannel digital audio I/O over Ethernet and enable linking to additional SCM820 units.

Mix A and B Outputs
Connect line or mic level mix outputs to a sound reinforcement system, mixing console or recording device.

Aux Inputs
Route a mono signal straight to the mix outputs from front and back panel auxiliary inputs, bypassing the IntelliMix bus.

6,5 mm (¼") Stereo Headphone Output
For channel and mix monitoring.

Networked Solutions

Networking options available with the SCM820 enable advanced control and signal routing. Link multiple units together on a network, then control their settings and signal path remotely from a PC or Mac.

Standard Ethernet or Dante Digital Audio
Choose the best networking option for the application.

Dante Upgrade Card
Upgrade standard Ethernet models to add Dante digital audio.

Linking Mixers
Dante-equipped SCM820 mixers can be linked to form large automixes of up to 12 units (96 channels of audio).

Control System Compatible
Connects to AMX and Crestron controllers.

IntelliMix® Technology
PROPRIETARY AUTOMIXING FUNCTIONALITY

Noise Adaptive Threshold (NAT)
Continually adjusts the gate threshold for opening a channel.

Number of Open Microphones Attenuation (NOMA)
Determines the ideal gain attenuation for a mix output as additional channels are opened.

Last Mic Lock-On (LMLO)
Keeps the most recently activated microphone open until another microphone is activated.

MaxBus
Ensures that only one channel is opened per sound source, reducing comb filtering for clear, intelligible speech.

IntelliMix® Modes
TAILORED AUTOMIX STYLE PRESETS

Classic
Ideal for noisy environments, such as live sound reinforcement, classic mode uses fast-acting, seamless channel gating and consistent perceived ambient sound levels.

Smooth
Ideal for quiet environments, such as broadcast or recording applications, smooth mode dynamically balances system gain between open and closed channels.
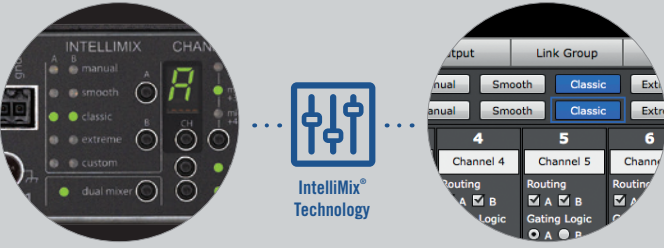
Extreme
A more aggressive form of classic mode, extreme mode is configured to achieve maximum gain before feedback by completely attenuating closed channels.

Manual
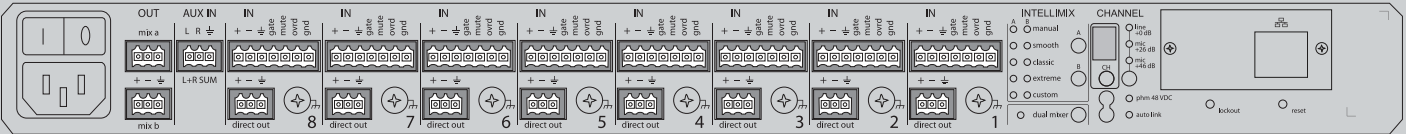Deactivates IntelliMix to allow the SCM820 to operate as a standard mixer.

Custom
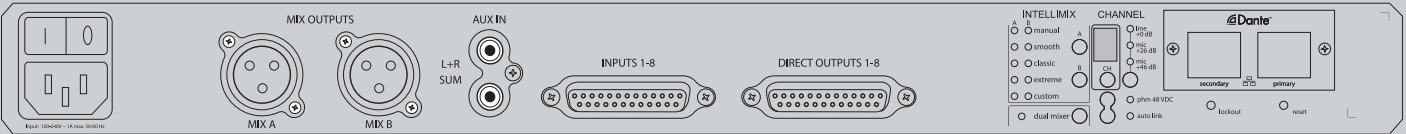Allows customized IntelliMix settings to be saved to a computer and quickly loaded onto the device.

Software and hardware-based control of key system settings

Selected Specifications

SCM820 rear panel shown

SCM820-DAN-DB25 rear panel shown

SCM820 - Control Software
REMOTE SET-UP AND CONTROL

SCM820 Control Software provides convenient management, monitoring, and configuration support for all key system settings. It features a rich, browser-based graphical user interface and is accessible from any networked computer.

Control tabs

Inputs
Manage parameters and monitor audio levels for each input channel

IntelliMix
Configure IntelliMix modes and route channels to mix outputs

Outputs
Manage parameters and monitor audio levels for each direct output channel and mix outputs

Link Group
Create and manage larger automixes through linking multiple devices

Preferences
Manage global device settings

DFR (Digital Feedback Reduction)

Enhancing the expansive feature set already available through the SCM820 control software, DFR (Digital Feedback Reduction) adds two channels of adaptive EQ filtering to find and attenuate feedback frequencies, noticeably improving gain before feedback in live sound reinforcement systems.
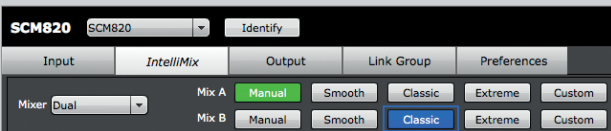
- Two channels of patented Shure Digital Feedback Reduction
- Assignable to input channels and mix outputs
- Automatic feedback detection and filter deployment
- Up to 16 filters per channel
- 25 Hz to 20 KHz bandwidth
- Up to 18 dB gain reduction per filter
- Selectable low/high Q filter width (1/40th or 1/70th octave)

Input Tab

Output Tab

IntelliMix Modes

Digital Feedback Reduction

SCM820 Digital IntelliMix® Automatic Mixer

Features	**Audio Frequency Response**	20 Hz to 20 kHz (±1 dB)
	Dynamic Range *20Hz to 20 kHz, A-weighted, typical*	Analog-to-Analog: 110 dB Analog-to-Dante, Dante-to-Analog: 113 dB
	Dimensions	44 mm x 483 mm x 366 mm (H x W x D)
	Weight	5,5 kg (12 lbs)
	Power Requirements	100 to 240 V AC, 50-60 Hz, 1 A
	Operating Temperature Range	−18°C (0°F) to 63°C (145°F)
Analog Connections	**Configuration**	Channel Input, Mix output: Active balanced Aux Input: Stereo unbalanced Direct Output: Impedance balanced
	Clipping level	Channel Inputs Line (+0): +20 dBV, Mic (+26): -6 dBV, Mic (+46): -26 dBV Aux Input +10 dBV
	Phantom Power	48 V DC, selectable per channel, 7 mA max.
	Max Output Level	Line (+0): +20 dBV, Line (-20): 0 dBV, Mic (-46): -26 dBV
Digital Signal Processing	**AD/DA Converter**	24-bit, 48 kHz, 113 dB dynamic range typical
	Latency	Analog to Analog: 0,51 ms Analog to Dante: 0,29 ms
	Gain Adjustment Range	Channel Input, Mix Output: −110 dB to +18 dB
	Input Processing	Low cut, high shelf
	Output Processing	8 band PEQ (incl. low and high shelving filter), limiter
	Networking Interface	SCM820: Single Port, 10/100 Mbps Ethernet SCM820-DAN: Dual Port, Gigabit Ethernet, Dante digital audio
Available SKUs	**SCM820**	8 Channel Digital Automatic Mixer, block connectors
	SCM820-DAN	8 Channel Digital Automatic Mixer, block connectors, Dante Digital Audio
	SCM820-DB25	8 Channel Digital Automatic Mixer, DB25 connectors
	SCM820-DAN-DB25	8 Channel Digital Automatic Mixer, DB25 connectors, Dante Digital Audio
	A820-NIC-DANTE	Dante Digital Audio Upgrade Card for SCM820 Standard Ethernet Versions
	DB25 Accessory Cables	DB25 to 8 XLR Male, DB25 to 8 XLR Female, DB25(x2) to 8 TRS

Dante is a trademark of Audinate Pty Ltd.

Note: All specifications are subject to change.

SEAMLESS MIXING.
ADVANCED CONTROL.