



5.1 SURROUND MONITORING SYSTEM

recording | post-production | broadcast

Model 76 and Model 76D Central Controllers
Model 77 and Model 71 Control Consoles

76 76D 77 71

The StudioComm Model 77 Control Console and Model 76 Central Controller with analog outputs or Model 76D Central Controller with digital outputs enable simple and effective monitoring of 5.1 surround and stereo audio material. Designed for recording, post-production, and broadcasting applications. System features include:

- Digital audio inputs
- Analog outputs (Model 76)
- Digital outputs (Model 76D)
- Downmix
- Channel mute/solo
- Level adjustment, reference level, and dim



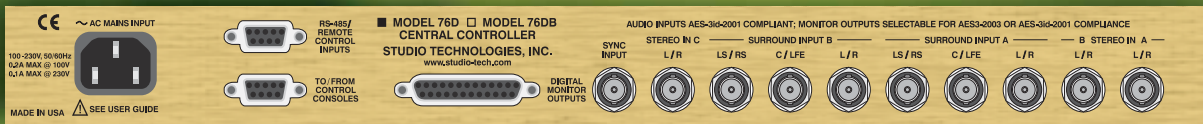
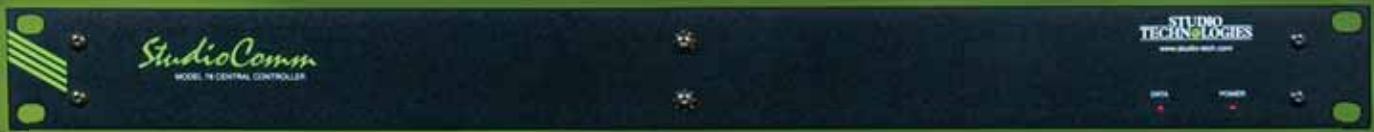
Model 77 and Model 71 Control Consoles

The Model 77 Control Console is the “command center.” Designed to reside at an operator’s location, it allows fingertip selection of all monitoring functions. Numerous LED indicators provide complete status information. Five buttons and associated LEDs enable quick selection of the surround and stereo input sources to be monitored. A large, easy-to-use rotary digital encoder provides control of the surround monitor output level in precise 0.5-dB steps. A 4-digit LED readout displays the level of the monitor output. The monitor output level can be adjusted via the rotary level control or pre-set using the reference level function.

The Model 71 Control Console works with the Model 77 to provide additional user locations with the most frequently desired functions: level adjustment, reference level, and dim.

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Model 76 and Model 76D Central Controllers Model 77 and Model 71 Control Consoles



Model 76 and Model 76D Central Controllers

The Model 76 and Model 76D Central Controllers are rack mountable and offer two surround (5.1) and three stereo (2-channel) digital inputs that are compatible with AES3id sources. Sample rates of up to 192 kHz and bit depth of up to 24 are directly supported. Exceptional dynamic range and extremely low distortion ensure that the audio quality of each source is maintained.

The Model 76 Central Controller has eight analog balanced line-level outputs organized as:

- Surround (5.1)
- Stereo (2-channel)

The Model 76D Central Controller offers 16 digital output channels with transformer-coupled outputs and selectable impedance (75 ohms or 110 ohms):

- Pre-fade surround (5.1)
- Pre-fade stereo (2-channel)
- Post-fade surround (5.1)
- Post-fade stereo (2-channel)

The Model 76D's sync input allows support for video (bi-level and tri-level), word clock, DARS, and AES3id. Sample rate conversion is available on one input. In addition, up to 340 milliseconds of digital delay can be selected to compensate for processing delays in an associated video path.

One Model 76 or Model 76D Central Controller can support a combination of up to four Model 77 or Model 71 Control Consoles.

Model 76 Central Controller

General Audio	
Frequency Response	20 Hz to 40 kHz ± 0.05 dB (192 kHz sample rate)
Distortion (THD+N)	0.004%, ref 1 kHz, +4 dBu output
S/N Ratio	86 dB, ref +4 dBu output
Dynamic Range	greater than 106 dB
Crosstalk	104 dB @ 1 kHz; 90 dB @ 20 kHz, ref -1 dBFS input
Digital Audio Inputs five (18 audio channels)	
Configuration	two surround (5.1) and three stereo (2-channel)
Type	AES3id/SMPTE 276M (75 ohms, unbalanced)
Connectors	BNC
Supported Sample Rates	32, 44.1, 48, 88.2, 96, 176.4, and 192 kHz
Word Length	24 bits maximum
Sync Source	all inputs independently self-clocking
Analog Monitor Outputs eight	
Configuration	organized as one surround (5.1) and one stereo (2-channel)
Type	electronically balanced
Maximum Level	+26 dBu into 600 ohms or greater
Connector	25-pin D-subminiature female
Downmix	5.1 to stereo, stereo to mono
Stereo to Mono Bandpass Filter	
Response	-3 dB @ 100 Hz and 5 kHz, nominal, 12 dB/octave
Control Console Interface	
Type	RS-485, 115.2 kbit/s, 8-N-1
Connector	9-pin D-subminiature female
Power	12 volts DC, 200 milliamperes maximum
Remote Control Inputs two	
Functions	remote mute all, remote dim
AC Mains	
Requirement	100, 120, or 220/240 V, $\pm 10\%$, factory configured, 50/60 Hz, 30 watts maximum
Connector	3-blade, IEC 320 C14-compatible (mates with IEC 320 C13)
Mounting	one space in a standard 19-inch rack
Dimensions	19.00 in. wide (48.3 cm) x 1.72 in. high (4.4 cm) x 8.75 in. deep (22.2 cm)
Weight	8.8 pounds (4.0 kg)

Model 76D Central Controller

General Audio	
Supported Sample Rates	32, 44.1, 48, 88.2, 96, 176.4, and 192 kHz
Word Length	24 bits maximum
Internal Processing	32 bits
Dynamic Range	134 dB
Digital Audio Inputs five (18 audio channels)	
Configuration	two surround (5.1) and three stereo (2-channel)
Type	AES3id/SMPTE 276M (75 ohms, unbalanced)
Connectors	BNC
Sample Rate Conversion	available on Stereo Input C
Sync Input	
Sources	video (bi-level, tri-level), word clock, DARS (AES11), AES3id
Jitter	4 ns (p-p) maximum
Connector	BNC
Termination	75 ohms, selectable on/off
Digital Monitor Outputs four (16 audio channels)	
Configuration	organized as two surround (5.1) and two stereo (2-channel)
Type	AES3id/SMPTE 276M (75 ohms) or AES3 (110 ohms), selectable
Connector	25-pin D-subminiature female
Configurable Delay	0 to 340 milliseconds @ 48 kHz sample rate
Downmix	5.1 to stereo, stereo to mono
Control Console Interface	
Type	RS-485, 115.2 kbit/s, 8-N-1
Connector	9-pin D-subminiature female
Power	12 volts DC, 500 milliamperes maximum
Remote Control Inputs two	
Functions	remote mute all, remote dim
AC Mains	
Requirement	100 to 230 V, 50/60 Hz, 15 watts maximum
Connector	3-blade, IEC 320 C14-compatible (mates with IEC 320 C13)
Mounting	one space in a standard 19-inch rack
Dimensions	19.00 in. wide (48.3 cm) x 1.72 in. high (4.4 cm) x 7.00 in. deep (17.8 cm)
Weight	6.2 pounds (2.8 kg)

Model 77 and Model 71 Control Consoles

Application	up to a total of four Control Consoles can be connected to a Central Controller
Power Requirement (typically provided by Central Controller)	
Model 77	12 volts DC, 100 milliamperes maximum
Model 71	12 volts DC, 35 milliamperes maximum
Central Controller Interface	
Type	RS-485, 115.2 kbit/s, 8-N-1
Connector	9-pin D-subminiature female
Dimensions	
Model 77	7.20 in. wide (18.3 cm) x 2.20 in. high (5.6 cm) x 5.40 in. deep (13.7 cm)
Model 71	3.20 in. wide (8.1 cm) x 2.20 in. high (5.6 cm) x 4.1 in. deep (10.4 cm)
Weight	
Model 77	1.7 pounds (0.8 kg)
Model 71	0.8 pounds (0.4 kg)

At Studio Technologies we design and manufacture dependable, high-performance audio products for demanding professionals. For over 30 years we have never wavered in our commitment to building rock-solid products and offering outstanding customer service. Our products are used worldwide in broadcast, studio, stadium, and corporate environments.

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