ALGO

8190 IP SPEAKER – CLOCK

High Intelligibility Speaker with Clock Display

The 8190 IP Speaker – Clock is a SIP-compliant and multicast-capable PoE network speaker often installed in classrooms to deliver clear voice paging, emergency notification, and background music with the addition of a clock display.



The 8190 IP Speaker – Clock is a network-based wall-mount speaker designed to deliver clear, speech intelligible communication. Using a four-speaker line array, the 8190 provides asymmetric sound dispersion for improved sound distribution in classrooms and other office environments. The speaker's digital clock automatically synchronizes with an NTP server, ensuring time accuracy.

Featuring wideband audio, Algo wall mount speakers provide enhanced speech clarity and intelligibility in most indoor locations, such as classrooms and hallways.

Leveraging multicast, the 8190 can simultaneously broadcast live voice or active ringtone over the network to other Algo IP Speakers (including additional 8190 devices) and IP Visual Alerters either all at once or in zone groups.

An embedded microphone allows the 8190 to monitor ambient noise where volume is automatically adjusted according to background noise levels for paging and alerting. The microphone may also be used for two-way talkback.

The 8190 contains 1 GB internal memory and is pre-loaded with several commonly used audio files for ring sounds. Users may also record or upload custom audio files, such as music, sound effects, or voice announcements.

As a 3rd-party, SIP-compliant speaker, the 8190 integrates into most leading UC, Collaboration, and Mass Notification platforms. The speaker supports Secure SIP (TLS & SRTP), secure provisioning, and web configuration (HTTPS).

FEATURES

- Wideband HD audio (G.722 voice codec) for high intelligibility speech
- Secure SIP using TLS and SRTP
- LED digital clock
- Configurable via user-friendly web interface or auto-provisioning
- Ambient noise response to automatically adjust audio output level
- Two-way talkback
- Multicast send and receive
- Configure up to 50 page zones
- PoE powered (IEEE 802.3af)
- Class-D amplifier
- Smart relay input for accessories
- Upload custom audio files for announcements and alert tones
- Front Button for configurable actions

APPLICATIONS

- Voice paging
- Emergency and safety notifications
- Background music
- Loud ringing
- Clock display
- Zoned paging and notifications
- Suitable environments include: classroom, cafeteria, office, hallway, reception area.
- The 8190 is ideal for audio communication (for the addition of visual communication, see the 8190S)

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8190 IP SPEAKER - CLOCK

POWER	
POWER SOURCE	PoE+ (IEEE 802.3at Type 2 Class 0) 48 V, 30 W
MAX POWER (AT DEVICE)	25.5 W
IDLE POWER	5-8 W, depending on time displayed on clock

SIP	
SIP EXTENSIONS	• 50 Page (Capable of hands-free talkback) • 10 Emergency Alert • 10 Ring
SIP SIGNALLING/ TRANSPORT PROTOCOLS	UDP, TCP, RTP
SECURITY	TLS, SRTP, Mutual Authentication
AUDIO CODECS	G.711 u-law, G.711 A-law, G.722 Wideband

MULTICAST	
RTP MULTICAST	Send and Receive 50 Zones
AUDIO CODECS	G.711 u-law, G.711 A-law, G.722 Wideband, Opus Fullband

COMPATIBILITY	
THIRD PARTIES	• RESTful API • Poly Group Page™ • InformaCast® (additional license required) • Intrado Revolution® • Microsoft Teams®

CONFIGURATION & PROVISIONING	
CONFIGURATION	Web interface or provisioning server
WEB INTERFACE	HTTP, HTTPS
PROVISIONING	• TFTP, FTP, HTTP, HTTPS • DHCP Options 66, 150, 160 • Reboot via SIP 'check-sync'
ZTP	Supported
SUPERVISION	Compatible with Algo Device Mangement Platform (ADMP), Algo 8300 IP Controller, any third-party SNMP monitoring software, and RTCP

NETWORKING	
NETWORKING	IPv4, IPv6, DHCP, VLAN, MDNS
LINK LAYER	LLDP, CDP
SECURITY	IEEE 802.1X
QOS	DSCP
NAT	STUN, TURN, CRLF Keep Alive, SIP Outbound
ADDRESS RESOLUTION	DNS, SRV Record
REDUNDANCY	Secondary and tertiary SIP server
TIME	NTP Server (up to four)

AUDIO	
SPEAKER	4 element wideband array
SPL	98 dBA at 1 m
MICROPHONE	Omnidirectional - talkback and ambient noise monitoring
FREQUENCY RESPONSE	100 - 15,000 Hz +/- 3 dB
DISPERSION ANGLE	140 deg H x 25 deg V (-6 dB 2 kHz)
AUDIO MEMORY & FORMAT	1 GB audio storage for WAV or MP3 files
AUDIO CONTROLS	Volume, AGC, Latency, LF Cut
ANTI-FEEDBACK DELAY	Cache to memory and release
AUDIO DELAY	Programmable 1-1000 ms synchronization delay (in multicast receiver mode)
MAX AUDIO POWER	8 W

CLOCK	
DISPLAY	White LED 2.25" (57.2 mm)

INPUT/OUTPUT	
RELAY INPUT	Normally open or normally closed dry contact with supervision. Algo 1202 Call Button, 1203 Call Switch, 1204 Volume Control, 1211 Single Button, 1212 Dual Button, EOL termination
RELAY OUTPUT	Max 30 V 50 mA (normally open)
FRONT BUTTON	Built-in illuminated button below speakers
OTHER PORTS	• Door control • 24 V Output

RELAY INPUT CURRENT DRAW DETECTION

THRESHOLD	ACTIVE	IDLE	TAMPER
NORMALLY OPEN	> 4 mA	< 4 mA	N/A
NORMALLY OPEN WITH SUPERVISION	> 20 mA	4-20 mA	< 4 mA
NORMALLY CLOSED	< 4 mA	> 4 mA	N/A
NORMALLY CLOSED WITH SUPERVISION	4-20 mA	> 20 mA	< 4 mA
NOMINAL 12 V SOURCE, CURRENT LIMITED TO 40 MA	Typical supervision resistor value = 1 kΩ		

ENVIRONMENTAL & MECHANICAL	
ENVIRONMENTAL	0 to +40 deg C (32 to 104 deg F); 10-95% RH non-condensing. Dry indoor locations only.
ENCLOSURE	High impact UV stabilized flame retardant plastic - light grey
DIMENSIONS (PRODUCT)	16" x 8.25" x 3" (40.7 cm x 21.0 cm x 7.6 cm)
WEIGHT (PRODUCT)	5.2 lbs (2.4 kg)
WEIGHT (PRODUCT+BRACKET)	7.2 lbs (3.3 kg)
WEIGHT (SHIPPING)	8.10 lbs (3.7 kg)
MOUNTING	Wall mount metal bracket included. Concealed wiring or surface conduit (1/2") Includes anti-tamper screws.

COMPLIANCE
RoHS, CE, FCC Class A, CISPR 22 Class A, CISPR 24, CSA/UL (USA & Canada)

FRONT



BACK



ORDERING CODES:

8190	IP Speaker Clock
8190-IC	InformaCast IP Speaker Clock

COMPATIBLE ACCESSORIES:

1202	Call Button
1203	Call Switch
1204	Volume Control
1211	Single Button
1212	Dual Button

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Note: Specifications are subject to change without notice. Some features may only be available in specific firmware or hardware releases.