

AUDIO PROCESSOR

Universal Audio Processor CORE



The Bogen **CORE** is a highly versatile digital mixer/processor designed for small to medium installations. Flexible hardware configurations, in blocks of 4: for 4 in/12 out, 8 in/8 out, etc. The CORE's PC-based software allows for design, downloading, reversal of in-box designs, and live monitoring, calibration, and routing. Three system hardware configurations are available: CORE8X8 (8 inputs, 8 outputs), CORE4X12 (4 inputs, 12 outputs), and CORE12X4 (12 inputs, 4 outputs).

Product Features:

- Configurable using PC/laptop software
- Programmable, scalable front panel knobs for analog control functions
- Full DSP drag-and-drop component library
- Third-party control via RS-232 serial and Ethernet
- Stack up to 12 units to increase number of inputs and outputs
- Listed to CE and UL standards

Hardware Components:

- Main Frame: 4 slots for input/output cards, 16 TTL/Analog Inputs, 8 TTL Outputs, RS485, RS232 Port, Ethernet Port
- Output Card: 4 channels with individual overload indicator, mute, meter, signal present, level control, and adjustable overload threshold
- Input Card: 4 balanced audio input channels with individual bypass, mute, -66dB to 0dB sensitivity select, phantom power, mute, RTO (route to output), VU meter, signal present, level control, and adjustable overload threshold

Software Components:

- Auto Gate, Noise Sensing, Compressor, Comp-limiter, Expander, and Ducker
- Equalizers: Mono & Stereo GEQ (1 Octave, 2/3 Octave, 1/3 Octave), Mono & Stereo PEQ (2, 4, 6, 8, 10, 16 bands)
- Dynamic Feedback Control
- Programmable Level Controls
- Stores up to 53 minutes of digital audio WAV file storage, triggered via calendar-based schedule or dry contact; 2 separate messages can be simultaneously output to independent zones
- Mixers: Auto, Matrix, Standard, and Room Combiner
- Noise Generators: White, Pink, Tone
- Page Control Module: for zone paging applications
- Create custom control interface screens via integral monitor window

Accessories
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Dimensions	Weight
17-1/8" W x 1-3/4" H x 11-5/8" D	8 lb.

MESSAGING & CALL STACKING SYSTEM

BOMDMU



Bogen's **BOMDMU** is a comprehensive system that provides page stacking, feedback elimination or pre-recorded messaging, and background music control in a single device.

Product Features:

- 3-Channel page stacker
- Record and temporarily store up to 16 pages or 4 minutes of audio per channel
- Feedback elimination; opens loop between input microphone and speakers
- Priority input with immediate, real-time access to paging system; overrides background music, stacking and messaging functions
- Record and Play up to 99 messages or 8 minutes or audio
- Message triggering via start input or host telephone system workstation
- Background music input
- Station or Dry Loop/Loop Start operation
- DTMF support for zoning
- 19" Rack mount design (1 rack space)
- 12V DC @ 1 Amp power supply included

Power Requirements	Dimensions	Product Weight
12V DC @ 1 A (included)	19" W x 1-3/4" H x 7" D	5.5 lb.

Pre-record Messages for Use in Emergencies

It is imperative that directives communicated using a public announcement system during an emergency are clear, concise, and worded so as to not cause panic or confusion. It is difficult to imagine all these criteria being met at the time an emergency is occurring. The individual making the announcement may themselves be shaken, confused, or not sure what to say.

Directive Announcements

The BOMDMU allows up to 99 messages (up to 8 minutes total in length) to be recorded in advance. These directives can include vacate the building, secure your location in the building, relocate to a particular area, etc. in cases of fire, an intruder, storm, etc. Since the individual who is aware of the emergency (and the appropriate message content that needs to be announced) is likely required to attend to the emergency situation rather than making announcements, it is best that such announcements be recorded in advance and played by an authorized individual. Messages can also be recorded in multiple languages.

AMBIENT NOISE SENSOR SYSTEM



ANS501 with Sensor Microphone



Bogen's Ambient Noise Sensor System electronically adjusts the level of a page or background music in applications where ambient noise levels are continuously changing. The ANS501 ensures that page announcements or background music are intelligible even during periods of high ambient noise levels. The system includes a sensor microphone module (ANS500M) that monitors the ambient noise level, and a 12V DC power supply.

Product Features:

- Automatically adjusts paging level as ambient noise levels rise and fall
- Balanced and unbalanced input and output
- AUX inputs bypass gain control feature
- Unbalanced stereo AUX inputs (summed mono)
- Supports up to 4 sensor microphones (one ANS500M included) wired in parallel for large areas
- Sensor microphones can be located up to 2,000 feet from control unit
- Only 2 wires needed for connection of sensor microphones
- Microphone module includes an adjustable mounting bracket for precise positioning
- Connects easily between pre-amp and power amp or to amplifier insert jacks
- Sensitivity and max boost control
- Adjustable ramp speed

Power Requirements	Dimensions	Product Weight
12V DC Power Supply (included)	Control Unit: 5-1/4" W x 3" H x 1-1/4" D	1 lb.
	Sensor Microphone: 2" W x 2-1/8" H x 7/8" D	4 oz.

Accessories



ANS500M
Sensor Microphone
(one included w/system)

NIGHT RINGER



NR100

The NR100 converts any paging system into an after-hours night bell alert system. The NR100 connects to the paging system's amplifier and emits a ringer tone through the paging system's speakers, thus eliminating the need for loud old-fashioned bells positioned throughout a facility. The NR100 is an efficient and easy way to alert security or personnel of incoming calls during non-business hours.

Product Features:

- Responds to 90V ring signals or external contact closures
- Produces dual-frequency electronic ringer tone
- Easily connects to any paging system
- Automatically mutes background music while ringing
- Ringer volume control
- Compact size
- Low current draw
- No maintenance
- FCC Part 68 Registered

Power Requirements	Dimensions	Product Weight
External 24V DC @ 25 mA, power supply <i>(not included)</i>	5-1/4" W x 3-1/4" H x 1-1/4" D	1 lb.

Accessories

PRS2403
24V DC
Power Supply



VOICE-ACTIVATED RELAY



VAR1

The VAR1 is a relay device that monitors audio activity over a wide range of input voltages and operates two sets of C-Form relay contacts in response to detected activity. The VAR1 can be used to detect voltages as low as signals directly from a microphone or as high as signals from 70V speaker systems. A low-level output of the detected audio, transformer-isolated from the input, is also available for use with other equipment. The VAR1 can also be used as a balanced, low-impedance MIC pre-amp.

Product Features:

- Two sets of C-Form (both N.O. and N.C.) relay contacts respond to audio activity
- 4 levels of input signals: microphone, 600-ohm line, 25V, and 70V speaker systems
- Built-in balanced, low noise, high gain microphone pre-amp
- A transformer-isolated, 600-ohm small signal level output of detected audio available
- Works with self-amplified or central-amplified paging systems
- Separate microphone pre-amp gain control
- Adjustable release delay – 0.25s to 25s
- Trigger threshold adjustment
- Relay active indicator light

Power Requirements	Dimensions	Product Weight
External 12V to 24V DC @ 100 mA <i>(not included)</i>	5-3/8" W x 3-7/8" H x 1-3/8" D	1 lb.

Accessories

PRS40C
12V DC Power
Supply



DIGITAL FEEDBACK ELIMINATION



Digital Feedback Terminator DFT120

The **DFT120** eliminates the acoustical feedback loop created by the telephone handset and the paging speaker while providing high-capacity, high-quality recording and playback of audio pages.

Product Features:

- High sampling rate for excellent playback quality
- Able to record a message while another is being played
- Stacks up to 16 messages for playback
- 240 seconds of total audio memory
- Automatic or externally controlled unit operation for recording, play, and stop
- Activates recording by loop start trunk, 4-wire dry loop, audio trigger, or DTMF
- Digital recording and playback of pages, 60-second maximum message length
- Adjustable delay between messages
- Message repeat, abort, stop, and pre-page tone option
- 8- or 600-ohm output impedances
- Zone control DTMF tones stripped from message and regenerated
- Volume control
- Adapter included

Power Requirements	Dimensions	Product Weight
12V Power Supply (included)	10" W x 6-3/4" H x 1-1/2" D	3 lb.

Accessories



TAMB2
Telephone Access Module

TALK BACK AMPLIFIER



TBA15

The **TBA15** is a unique amplifier that permits loudspeakers to be used as microphones to provide hands-free, two-way conversations through the paging system*. In the idle state, the TBA15 uses the attached speakers as microphones and feeds this signal out to a telephone line. When the TBA15 senses a paging signal on the telephone line, it will switch on its 15W amplifier and use the speakers conventionally.

Product Features:

- Hands-free 2-way conversations through the paging system
- 15 watts of speaker power
- Works on 25V and 70V speaker systems
- Adjustable switching sensitivity control for switching from listen to talk
- Adjustable switch-back delay prevents chopping of pages and provides smooth 2-way conversations
- Talk Back and page volume controls
- Mute input forces amplifier into page mode
- Perfect accessory for zone paging applications
- Resettable circuit breaker with thermal protection

* Page port connection should be a duplex line for talk back applications.

Power Requirements	Dimensions	Product Weight
120V AC	19" W x 5-1/4" H x 2-5/8" D	7 lb.

Accessories



TAMB2
Telephone Access Module



ZPM3
Zone Paging Module

TONE GENERATOR



TG4C

The **TG4C** is designed to produce four different types of tones for use as alarm or announcement signals in paging systems. An audio signal can be routed through the TG4C to allow easy installation in paging systems. During generation of the tones, the routed audio will be suppressed.

Product Features:

- 4 types of tones: slow whoop, steady, pulsed alarm, and chime
- Tones triggered by external contact closure (momentary or long duration)
- Choice of continuous generation of tone or two-burst operation (except for steady tone)
- External audio signal can pass through the TG4C and is suppressed during tone generation
- Adjustable tone level & pitch
- 600-ohm output
- Tone generation reset available



Power Requirements	Dimensions	Product Weight
Wide power supply range, 12V to 48V DC @ 30 mA (power supply not included)	6-3/4" W x 5-3/4" H x 2" D	2 lb.

Accessories



PRS40C
12V DC Power Supply



WMT1A
Matching Transformer

DOOR PHONE



Shown with bezel frame (included)



Shown without bezel frame

Analog Door Phone ADP1

Bogen's ADP1 Door Phone provides convenient remote, hands-free two-way communication between two locations. Durable, weather-resistant, stainless steel construction protects against vandals and varying weather conditions.

Product Features:

- Weather-resistant
- Vandal-resistant brushed stainless steel faceplate with mounting gasket and heavy-duty call button
- Suitable for indoor or outdoor station, door, or gate communication
- Secure entry access to commercial, industrial, or residential locations
- Push button initiates the call at remote location
- Connect directly to an analog PABX/KSU station programmed for ringdown operation
- Adjustable microphone and speaker volume
- Adjustable call timeout (15 seconds to 2 minutes)
- Call limit timer can be disabled
- Responds to CPC pulses
- Hands-free communications
- Auto-answer feature allows monitoring of remote location
- Powered by telephone line; no power supply needed
- Fits interior and exterior dual gang electrical boxes (user supplied)

Dimensions	Product Weight
5" W x 5" H x 1-7/8" D; 6-3/8" W x 6-3/8" H x 1-7/8" D (with bezel frame)	2 lb.

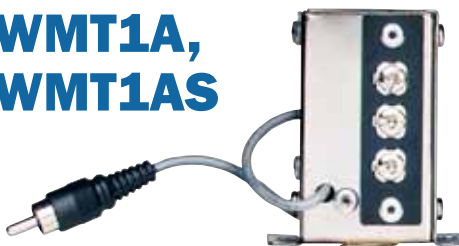
Connecting Amps to Other Equipment

When connecting amplifiers to other equipment, these transformers are a "must have" because they can solve a variety of problems.

- Where signal levels are insufficient to drive an amplifier's AUX input to full volume, installing either model on the input will increase the voltage to the input by about 5 times, providing plenty of level.
- Where input ground loops are causing a hum problem, the isolation transformer on either transformer can break the loop and eliminate the hum.
- When unbalanced signals need to be sent over long distances, either model can balance them at both the send and receive sides and reduce the possibility of noise pickup.
- Both models allow a microphone input to be used with an AUX-level signal input. By moving a jumper, the attenuation is changed on the high-impedance side to be 100 times less than the signal level on the 600-ohm side.
- The WMT1AS model can also convert 25V and 70V speaker levels down to the levels appropriate for AUX inputs on amplifiers.

MATCHING TRANSFORMERS

WMT1A, WMT1AS

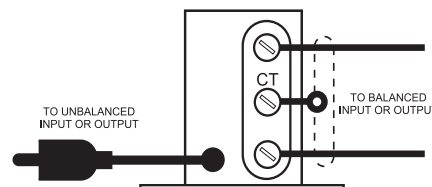


WMT1AS adapts speaker-level signals to AUX level.

Models WMT1A and WMT1AS are general-purpose matching transformers that allow proper connections between high (10k-ohm) and low (600-ohm) inputs and outputs. Both models can be used to balance an unbalanced line or provide isolation between two pieces of equipment. Both models can be configured to produce a balanced, microphone level signal from a line-level signal such as that from a pre-amp or music source. In addition, Model WMT1AS can adapt speaker level signals (25V/70V systems) to a level suitable for the AUX input of an amplifier.

Product Features:

- Hi-Z, 10k-ohm primary impedance
- Lo-Z, 600-ohm secondary impedance, balanced with center tap
- Matches high-to-low impedance or low-to-high impedance
- Adapts line-level signals to microphone inputs
- RCA connector for Hi-Z side
- Screw terminals for Lo-Z side
- Small steel enclosure w/ mounting ears allows easy mounting anyplace



Dimensions	Product Weight
2" W x 2-3/8" H x 1-1/4" D	4 oz.