

## IP-A1RM Y

### IP REMOTE MICROPHONE



The IP-A1RM is an IP remote microphone which is designed to make audio broadcasts to IP-A1 series receiving devices via network. It achieves clear microphone announcements without distortion thanks to its built-in compressor effect. It allows both individual and group broadcast so that single or multiple IP-A1 series receiving device(s) can receive the audio as flexible PA operation. Key button operation controls a variety of functions such as internal audio file playback, HTTP/HTTPS command set transmission and physical control outputs to control external devices.

## Key features

- Angle adjustable gooseneck microphone with compressor effect
- 10 function-assignable keys to initiate broadcasts or controls
- GUI calendar scheduler function (up to 2,000 settings)
- System mute function to mute all broadcasts made by every single IP-A1 series devices within the same network
- 1 AUX audio input (LINE/MIC selectable, phantom power On/Off)
- 2 control inputs, 1 control output and 1 mute control input
- Independent volume control for microphone and AUX input
- HTTP/HTTPS commands (send/receive)
- Audio file storage (20 files, total 80MB, WAV/MP3)
- PoE powered

## Specifications

|                           |  |
|---------------------------|--|
| Power Source              | PoE(IEEE802.3af Class 3)   |
| Power Consumption         | 3.5 W  |
| Audio Codec               | Opus, PCMU (G.711u), PCMA (G.711a), G.722  |
| Audio Transmission Method | SIP broadcasting: Unicast Audio Streaming<br>Group broadcasting: Multicast Audio Streaming   |
| Network I/F               | 100BASE-TX, Auto MDI/MDI-X, RJ45   |
| Network Protocol          | IP, TCP, UDP, TLS, HTTP, HTTPS, RTP, SRTP, RTSP, RTCP, SRTCP, ARP, ICMP, IGMPv3, NTP, SIP (RFC3261), SIPS  |
| Control Input             | 2 channel, no-voltage make contact inputs, open voltage: 5V DC, short-circuit current: 2 mA or less, push-in terminal block  |
| Control Output            | 1 channel, open collector output, withstand voltage: 30 V DC, control current: 150 mA or less, push-in terminal block  |
| Mute Control Input        | 1 channel, 24 V DC cut-off signal, control current: 5 mA or less, non-polar, push-in terminal block  |
| Microphone                | Unidirectional electret condenser microphone (With microphone indicator and microphone volume control)   |
| AUX Input                 | 1 channel, unbalanced, 10 kΩ<br>LINE/MIC selectable (Rated input: LINE: 0 dB (*1), MIC: -60 dB (*1)<br>PAD function (-20 dB (*1), AUX volume adjustable, Ø3.5 mm mini jack   |
| Monitor Speaker           | Cone-type speaker, Speaker volume adjustable, Rated Output: 1 W  |
| Operation                 | Operation key: TALK, HOME, REC, MONITOR, SHIFT/KEY LOCK<br>Function key: VOLUME, RIGHT, LEFT<br>Selection key: 0 - 9   |
| Indicator                 | LCD display: 3 (255 x 160 dots) with backlight<br>Indicator: Status indicator (green/blue/yellow/red), Microphone indicator (blue), LINK/ACT indicator (green)   |
| Functions                 |  |
| Manual broadcast/control  | Manual broadcasting: Microphone broadcast, Recorded audio broadcasting, AUX input broadcast<br>Manual control: control output, command set transmission<br>Control trigger: key operation  |
| Scheduler                 | Scheduled broadcasting and control by WEB-UI (Max. schedule settings: 2000)<br>Configurable actions: Internal message broadcast, AUX input broadcast, control output, command set transmission   |
| Event                     | Execute event triggered by control input<br>Configurable actions: Internal message broadcast, AUX input broadcast, command set transmission, broadcast disable, system mute  |
| Sound Source Files        | Max. 20 files (File storage capacity: 80 MB total)<br>Supported file format:<br>WAV file: 8/16/44.1/48 kHz sampling frequency, 8/16 bit, monaural/stereo<br>MP3 file: 32/44.1/48 kHz sampling frequency, 64 - 320 kbps, CBR/VBR, monaural/stereo<br>Repeat playback: Playcount (1 - 10 times) or Duration (5 - 3600 sec)<br>Interval time: 0 - 99 sec, Delay time: 0 - 99 sec<br>Control trigger: key operation, scheduler, control input, remote API (HTTP/HTTPS) |
| Recorded audio broadcast  | Audio recording and playback broadcast with the built-in microphone<br>Max. 2 minutes, 1 message   |
| Chime                     | Pre and post chime tones (applied for manual broadcast and internal audio file broadcast)<br>Preset chime tone x 5, editable tone x 2  |

|                                |  |
|--------------------------------|--|
| Command Set                    | 20 commands can be registered in each of 10 command set, GET method, POST method |
| Clock Accuracy                 | ±13 seconds per month  |
| Time Adjustment                | Manual time setting, Time adjustment by NTP server                               |
| Power Outage Protection Period | 24 hours (RTC time retention, at +40 °C (104 °F)                                 |
| Operating Temperature          | 0 °C to +40 °C (32 °F to 104 °F)   |
| Operating Humidity             | 90 %RH or less (no condensation)   |
| Finish                         | ABS resin, black, paint  |
| Dimensions                     | 224 (W) x 47.2 (H) x 136 (D) mm (8.82" x 1.86" x 5.35") (excluding microphone)   |
| Weight                         | 630 g (1.39 lb)  |
| Included Accessories           | Zip tie x 2  |
| Optional Accessories           | Wall mounting bracket: WB-RM500  |

(\*1) 0 dB = 1 V

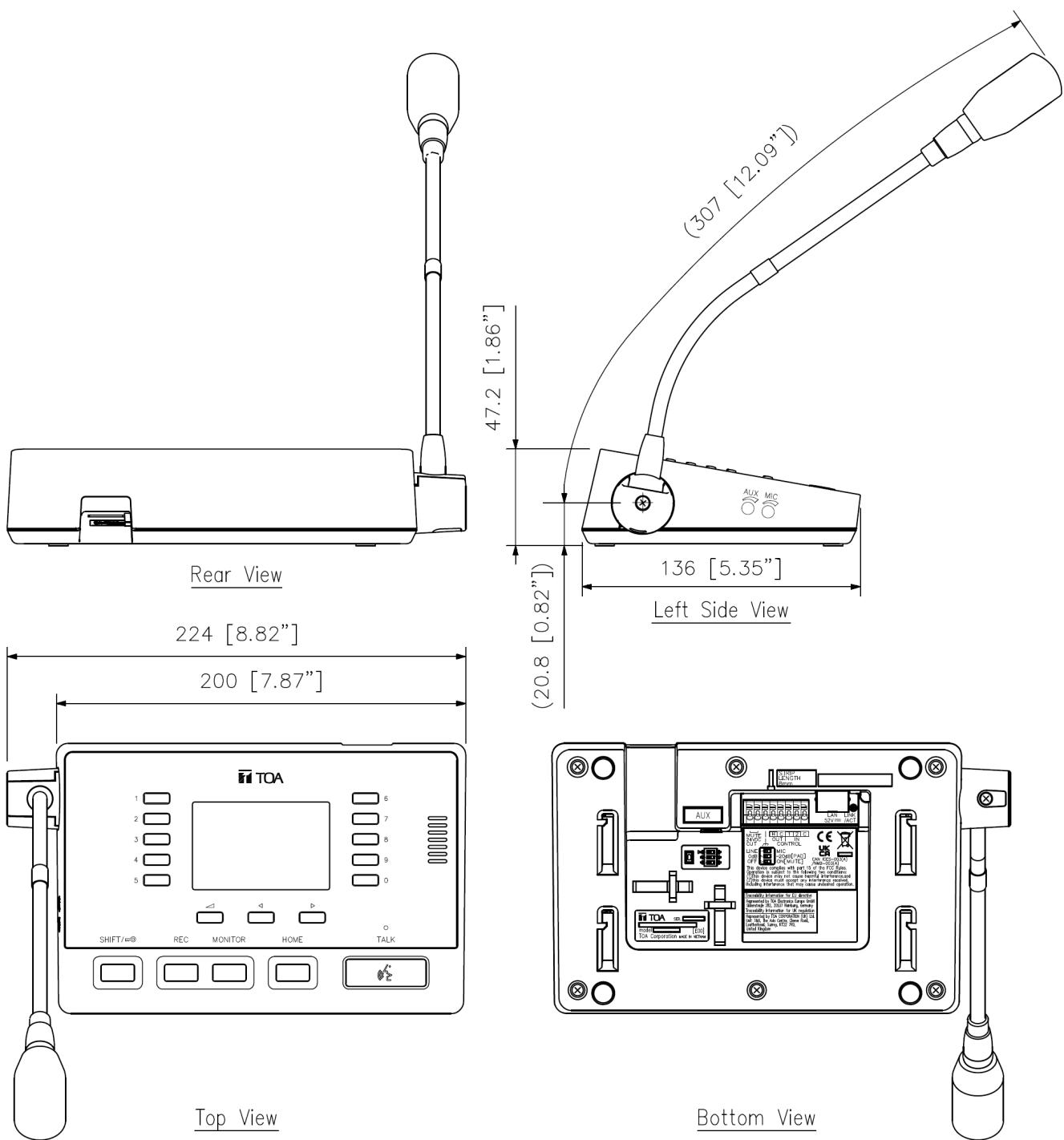
These specifications apply to the firmware verion 3.4.0 or later. For the latest specifications and firmware, please refer to the TOA DATA Library (<https://www.toa-products.com/international/>)

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### PC Requirements

|             |  |
|-------------|--|
| Display     | 1920 x 1080 resolution or greater  |
| OS          | Windows 10 Pro (64 bit edition)<br>Windows 10 Home (64 bit edition)<br>Windows 11 Pro<br>Windows 11 Home |
| Web Browser | Google Chrome<br>Microsoft Edge  |

## Dimensions



UNIT: mm

Note: Numerical values in parentheses are for reference only.

## A&E specifications

The IP remote microphone shall be able to make audio broadcasts with a built-in gooseneck microphone to IP audio endpoints via network. It shall be equipped with a built-in audio compressor to avoid distortion and achieve clear microphone announcements. The IP remote microphone shall allow both individual and group broadcast by using SIP and Multicast protocols.

The IP remote microphone shall be equipped with ten selection buttons which are function-assignable to activate a variety of different broadcasts and controls.

Twenty multi-cast ports shall be available for group paging and shall have the facility of storing up to twenty audio files with the code of WAV or MP3 format internally. The device shall have the flexibility of broadcasting these files from a calendar schedule at predetermined times or repeated when necessary triggered from a control input, or from remote API (HTTP).

The IP remote microphone shall be capable of muting other TOA IP-A1 series devices such as IP-A1AF, IP-A1PA12, IP-A1PC238, IP-A1PC580R or IP-A1PC580S within the same network.

Remote settings shall be achieved by connection to a Windows® based personal computer and by using the PC's browser, operational settings, functions and system status can be established.

The IP remote microphone shall have an electronically balanced 10k Ω AUX audio input with LINE/MIC selection with switchable ON/OFF 12 V DC phantom power and a corn-type monitor speaker.

The built-in monitor speaker shall be able to be used for recording monitoring and two-way communications.

The independent volume control shall be available for AUX audio input and a built-in microphone.

The IP remote microphone shall have two control inputs and one control output with an additional 24 V DC mute contact.

The IP remote microphone shall offer priority status among the various broadcast modes that will override and interrupt a lower priority broadcast.

Power source shall be supplied from a PoE switching hub.

The IP remote microphone shall be housed in black ABS resin enclosure and its dimension shall be 224 (W) x 47.2 (H) x 136 (D) mm (8.82" x 1.86" x 5.35") weighing 630 g (1.39 lbs).Optional extras:

Wall mounting bracket: WB-RM500

manufactured by TOA Corporation Manufacturer: TOA Corporation

Model: IP-A1RM