

[AN040]



ADVANCED
NETWORK DEVICES

Activating Flashers

Version 2.2

8/14/2018

© 2018 ADVANCED NETWORK DEVICES

3820 NORTH VENTURA DR.

ARLINGTON HEIGHTS, IL 60004

U.S.A

ALL RIGHTS RESERVED

PROPRIETARY NOTICE AND LIABILITY DISCLAIMER

The information disclosed in this document, including all designs and related materials, is the valuable property of Digital Advanced Network Devices and/or its licensors. Advanced Network Devices and/or its licensors, as appropriate, reserve all patent, copyright and other proprietary rights to this document, including all design, manufacturing, reproduction, use, and sales rights thereto, except to the extent said rights are expressly granted to others.

The Advanced Network Devices product(s) discussed in this document are warranted in accordance with the terms of the Warranty Statement accompanying each product. However, actual performance of each product is dependent upon factors such as system configuration, customer data, and operator control. Since implementation by customers of each product may vary, the suitability of specific product configurations and applications must be determined by the customer and is not warranted by Advanced Network Devices.

To allow for design and specification improvements, the information in this document is subject to change at any time, without notice. Reproduction of this document or portions thereof without prior written approval of Advanced Network Devices is prohibited.

Static Electric Warning



TROUBLESHOOTING AND ADDITIONAL RESOURCES

Complete Support Site with User Guides & Help: <http://www.anetdsupport.com/>
Additional App Notes: <http://www.anetdsupport.com/AppNotes>
Customer Feedback Survey: <http://www.anetdsupport.com/survey>
AND Legal Disclaimer: <http://www.anetd.com/legal>

OVERVIEW

Many Advanced Network Devices (AND) endpoints come equipped with three flashers located directly above the LED display on the face of the unit. These flashers can activate in various ways to provide a visual element to paging and emergency notifications. New models come equipped with one red, one white, and one blue LED flasher, and older models include three white LED flashers. All models allow individual control of each flasher, as well as the ability to set unique preset behaviors for multiple events.

Three of the most common methods of activating the flashers reside in associated Priorities, SIP calls, and via functionality in the IPClockWise software. This document will detail each method. Note that you can configure all methods on the same endpoint at the same time.

We highly recommend upgrading all endpoints to firmware version 1.5.0001 or higher to gain access to all possible options.

ACTIVATING FLASHERS WITH MESSAGE AND AUDIO PRIORITIES

Each command our endpoint receives holds an associated priority in the range of 1 to 100. You can use this priority to activate pre-defined flasher behaviors. Some third-party software packages can assign a priority. Otherwise, the AND endpoint will treat any undefined event priority as 50.

If using the device's on-board web server to change the configuration, enter the IP address of an AND endpoint in the browser to access the web page interface. Go to **Device Settings** → **Priorities** to find the *Message and Audio Priorities* section (see below).

| Message and Audio Priorities help | | | | | | | | |
|---|---------|-----------------|--------------------|--------|-------|------------|-------------|------|
| Priority | Color | Brightness | Flasher Blink Rate | | | Flasher | GPIO Output | |
| | | Config Override | Left | Middle | Right | Brightness | GPO0 | GPO1 |
| High Priority (1-25) During Message: | Default | Default | on | slow | fast | bright | No | No |
| During Gaps (When Message Not on Display): | N/A | N/A | 2 sec | off | 4 sec | dim | | |
| Med. High Priority (26-50) During Message: | Default | Default | off | off | off | bright | No | No |
| During Gaps (When Message Not on Display): | N/A | N/A | off | off | off | bright | | |
| Med. Low Priority (51-75) During Message: | Default | Default | off | off | off | bright | No | No |
| During Gaps (When Message Not on Display): | N/A | N/A | off | off | off | bright | | |
| Low Priority (76-100) During Message: | Default | Default | off | off | off | bright | No | No |
| During Gaps (When Message Not on Display): | N/A | N/A | off | off | off | bright | | |

AND devices include four available priority ranges with configurable Flasher Blink Rate and Flasher Brightness. *Left* corresponds to the Red flasher, *Middle* corresponds to the White flasher, and *Right* corresponds to the Blue flasher. The *During Gaps* option allows selection of three matching fields, which can define behavior for audio only events. Refer to the following definitions for each option, and use the drop-down menus to select all settings based on user preference.

| Flasher Behavior | Device Settings Flasher Blink Rate | XML Config File Settings flashers/flasher_gaps |
|--|---------------------------------------|---|
| Selected flasher will turn off and/or remain off for the duration of the incoming message or audio event. | Off | 0 |
| Selected flasher will blink at a rate of once per second for the duration of the incoming message or audio event. | Slow | S |
| Selected flasher will blink at a rate of twice per second for the duration of the incoming message or audio event. | Fast | F |

| | | |
|--|-------------|-----|
| Selected flasher will turn on and remain steady for the duration of the incoming message or audio event. | On | 1 |
| Selected flasher will blink at the defined rate for the duration of the incoming message or audio event. | 2-9 seconds | 2-9 |

When using a server-hosted configuration file, enter the appropriate lines within the opening and closing XML tags as shown below. Note the 3 digit flasher blink rate refers, from left to right, to the red, white and blue LED flasher respectively. Users can create up to twenty priority groups in a configuration file if desired.

```
<Priorities >
  <action priority="1-10" flashers="FFF,verydim" />
  <action priority="50" flashers="SF1,dim" />
  <action priority="51-75" flashers="F00,bright" />
  <action priority="90-100" flashers_gaps="345,bright" />
</Priorities>
```

In this example:

- The configuration for the first line will only activate for priorities 1-10. The Red , White, and Blue flashers will all flash fast, and they will illuminate at the very dim intensity.
- The second line configuration will only activate for priority 50. The Red will flash slowly, White flash fast, and Blue will remain on steady, all at the dim intensity.
- The third line configuration will only activate for priorities 51-75. Only the Red flasher will flash fast and bright, while the White and Blue will remain off.
- The fourth line demonstrates a special case, useful when activating the flashers on audio-only alerts (with no text display). The *flashers_gaps* attribute will trigger Red, White, and Blue to flash bright at 3, 4, and 5 second intervals respectively for the duration of the audio, with the corresponding priority level.

Any time you make changes to the configuration file, you must reboot the device to apply new settings.

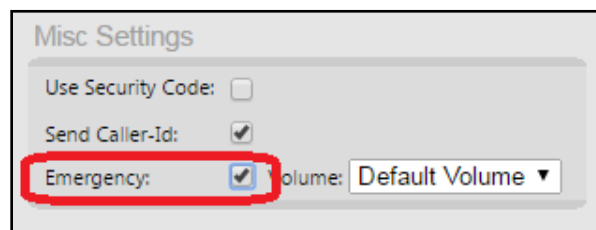
Note for Singlewire's InformaCast: You can take advantage of these priorities with Singlewire's InformaCast software (version 9.0.1 or newer). If necessary, update InformaCast:

<https://support.singlewire.com/s/article/Obtain-InformaCast-Virtual-Appliance-Software-Packages>

Configure InformaCast to match the priority range of AND devices (InformaCast priority levels default as only 1-3). Log into the InformaCast server, and go to **Admin** → **Broadcast Parameters**. Set the number of priority levels to 100, and click the *Update* button to save the new setting.

When creating InformaCast messages, you can now use the *Message Priority* field in the **Audio** tab to activate the configured priority actions on targeted AND devices.

Note on Syn-Apps' SA-Announce: When using SA-Announce, the default priority level of 20 applies to sent pages. If the *Emergency* option is checked in *Misc Settings*, the pages will send at a priority level of 10.



ACTIVATING FLASHERS USING SIP

AND endpoints can register as a SIP extension to many third-party SIP providers. When placing SIP calls to and from the device, the appropriate SIP settings can activate flashers while the endpoint rings, and while the call is in progress.

To enable this option within the web interface, enter the IP address of the device in a browser, and go to **Device Settings** → **SIP**. Look for the following option, and set the drop-down menu to "Yes".



When using a server-hosted configuration file, include the appropriate line among the required SIP configuration settings. The following example shows that this section includes the flasher parameter along with other settings (...).

```
<SIPConfig
...
  show_state_with_flashers="1"
/>
```

Any time you make changes to the configuration, you must reboot the device to apply the new settings.

Using either of these methods will now cause the flashers to blink when the endpoint rings, then all flashers will illuminate on steady during the SIP call. The flashers will turn off once the connection has closed.

ACTIVATING FLASHERS WITH IPCLOCKWISE EVENTS AND ALERTS

When using the IPClockWise software, you can program Events and Alerts to include custom flasher behaviors. The defined flasher behavior will activate every time the Event or Alert triggers, and you can make each unique.

To access the flasher settings, add a new Event/Alert, or open an existing one. Click over to the **Flashers** tab along the top of the window. Configure the desired settings as described below. The indicator within the Flashers tab will turn green once you make any changes to the flasher menus, showing the feature as now active. Make sure to select *Output Devices* in the Endpoint list below. Please note flasher activation does not require a text message or audio file, as in previous methods.



- **Brightness** - Indicates the intensity at which the flashers will illuminate when activated. The brightness value applies to all flashers activated by the Event/Alert. This option does not accommodate unique brightness for individual flashers.
- **Duration (in seconds)** – Corresponds to the number of seconds the flasher pattern will activate on each targeted endpoint from the time the Event/Alert triggers. If set to the default 0, flashers will remain active even after any associated text or audio concludes.
- **Red/White/Blue Flasher** – Use each drop-down menu to select the behavior for the corresponding flasher. The various options match those available in the firmware, as described earlier in this document (see **Flasher Blink Rate Table**).