Sage Alerting Systems
Digital ENDEC model 3644
Firmware Revision 1.1/89-30

Released July 25, 2016
Release notes rev B, July 28, 2016

Release notes for version 89-30 – for United States ENDECs only

This release includes support for the new national location code "000000" and the new National Weather Service event codes.

This release is only to be applied to ENDECs that already have any of these versions installed:

> 89
> 89-1
> 89-2
> 89-5
> 89-6
> 89-8
> 89-20

> If you have version 90 or 91, see the "Special Releases" section at the end of this document.

If you have any of the above releases installed, you may install this release. You don't need to have installed all the releases on that list. This release contains all the changes in 89-1 through 89-20. If you do not have at least version 89 installed, you must install version 89 before installing this update.

Note: The ENDEC release number is made up of a major and a minor release number. Release 89-6 is version 89, minor release 6. Likewise, version 89-15 is release 89, minor release 15. Therefore, for example, 89-30 would be a newer release than 89-6.

Do not install this release on ENDECs in Canada.

Here are the steps you need to install this release.

Step 1. Before installing this release, use the version button on the ENDEC's home page and check this line:

> **Board rev x/nn**, nn must be one of the versions on the above list.

> If you have any other numbers, do not use this release. If you have a version less than 89, install version 89 before installing this update.

Step 2. Download the firmware update file from here:

> https://s3.amazonaws.com/sagealertingsystems/release/89-30.x

Step 3. Install this release by using the Upload Firmware button on the ENDEC's home page. Upload 89-30.x

Step 4. After the reboot, use the version button on the ENDECs home page and check for this line:

> **Board rev x/nn**, nn will be 89.30 (note the ENDEC displays a '.' rather than a '-'.)

Note: the browser won't refresh on its own, you'll need to click the home button on the ENDEC's web page once it has rebooted.

Step 5. If you want add the new NWS event codes to any of your filters, you will need to download and install the new version of ENDECSetD on your PC. Download it from here:

https://s3.amazonaws.com/sagealertingsystems/release/EndecSetD51.msi

You can click run if your browser gives you the option, or you can save the file and then run it. Do not attempt to load the .msi into the ENDEC, you will get an error message.

Depending on your Windows installation, you may get a warning when you download or run the ENDECSetD installer. Various combinations of Windows 7 or 10, Chrome or Internet Explorer, and safe download programs will result in buttons you'll need to click to get through the installation.

Some of these are:
- Internet Explorer 11 -

  1. Click the "download" link; if prompted, choose "Save".
  2. After download completes, click the "View Downloads" button.
  3. In the list that appears, right-click the ENDECSetD51.msi entry and choose "Run Anyway".

- Microsoft Edge (Windows 10) -

  Follow the above steps as for IE 11. If the "Windows protected your PC" box appears, click the "More Info" link, then click the "Run Anyway" button.

- Google Chrome and Mozilla Firefox -

  Click the "download" link; once the download completes, simply run the downloaded file.

Release Contents

This firmware release contains all of the previously released updates to version 89, including the multi-exporter HD Radio support first added in version 89-20. It adds support for the new national 000000 code, and the other FCC mandated changes to how the National Periodic Test is handled.

It also implements an "auto filter" feature that will attempt to ensure that you put EAN and NPT messages on the air. This feature is discussed in detail below. Click the new "Verify Req" button on the ENDEC's tools page to see if your ENDEC will comply with the new rules.

Notable changes:

- Add support for 000000, allowing it to be added to filters.
- A NPT will override any alert other than an EAN. The EAN will override all alerts.
- Show the actual locations for EAN, the ENDEC previously showed all United States no matter what the actual location code was.
- Fixes to email messages to show full text of all logged CAP messages.
- Uses "EAS Participants" instead of "A Broadcast station or cable system" in most displays and logs. "Broadcast or Cable" is still used on the ENDEC's front panel alert building interface, to retain compatibility with posted instruction sheets.
- The station call sign is no longer spoken when it appears in the EAS boilerplate at the start of a CAP message.

- The new-for-2016 IPAWS intermediate certificates, used to authenticate CAP messages, are included.
- Support for the three new NWS event codes is included.

Auto filter

How the "auto filter" feature works:

First, the feature affects only incoming alerts (from EAS or CAP) that have the EAN or NPT event codes. As of July 30, 2016, the FCC now requires that an NPT be relayed immediately, just as with the EAN.

To avoid the necessity of going through your filters and adding the all US code, and adding your local codes, we have added a feature that will automatically keep you in compliance with the new rules. The same new feature also works with the EAN code.

The short version is that, if none of your existing filters match an EAN or NPT with an action of Automatic Relay, then the ENDEC will compare the alert to two internal filters, one for NPT and one for EAN. Both filters require Primary Entry Point as the originator, and will use the 000000 code for national alerts and Local Area for regional alerts.

No matter how your ENDEC is currently configured, it will send national EANs and NPTs, and in particular, the NPT scheduled in September 2016.

To give you confirmation that your ENDEC and its filter set (including the automatic filters) will relay the national EAN and NPT alerts, we've added a verify button on the tools page. Click it and the ENDEC will run an EAN and NPT with the PEP originator and 000000 location code through the filters. It will show the filter names that will match, and an indication that your settings are, or are not, compliant. This simulated alert is not logged or aired.

Note that your existing EAN filter probably has either no location listed, or has "all locations"; both forms will match any incoming location in the alert for EAN codes. This was the original workaround for the lack of an all of US location code. Now that there is such a code, "all locations" is no longer desired.

Therefore, when trying to match a filter against an EAN, the ENDEC will ignore the "all locations" or empty location setting, and will substitute 000000 and local area. This will make sure you don't carry a regional EAN that is not in your local area.

Special Releases

There were two non-standard releases issued in the past, version 90, and version 91. Neither of those versions meets the new 2016 FCC requirements. The special features of those versions are now included in the standard release. If you have version 90, your group engineering staff has been contacted. The intent is to upload version 89-30 over version 90, to get you on the same numbering scheme. The same applies to the small number of users running version 91.