# DASDEC<sup>™</sup> interface with Inovonics 730 RDS Encoder

### Introduction

Digital Alert Systems

The DASDEC EAS/CAP Encoder/Decoder includes many interfacing options for communicating important EAS events to radio listeners and television viewers. One unique method of communicating with radio listeners is through the Radio Data System (RDS) or Radio Broadcast Data System (RBDS). RDS is a communications protocol standard for embedding small amounts of digital information in conventional FM radiobroadcasts, usually song title, artist, station identification, etc. In this way FM radio listeners with RDS equipped tuners can view textual information. Leveraging this ability to communicate additional text Inovonics, a leading provider of RDS encoding equipment and Digital Alert Systems with their award-winning EAS/CAP systems have worked together to blend these two

technologies and form a means for FM stations to better serve their listeners and the public in general by displaying the EAS information through the RDS to their receivers. A simple example is shown in Figure 1.

The DASDEC uses an IP-based interface referred to as Net CG to communicate with the top-of-theline Inovonics 730. The Model 730 is a TCP/IPcapable, full-function dynamic Radio Data encoder capable of scrolling song titles and other information on the RDS radio faceplate. All of the important static IDs, traffic and other 'flags' are supported, as well as specialized EAS applications.



## Figure 1. Example of DASDEC and Inovonics 730 RDS Encoder at FM Station.

#### Configuring the DASDEC

Setting up an IP interface on the DASDEC is very easy.

 Log onto the DASDEC box either remotely or locally from the web browser interface. The default User Name is "Admin" and the password is "dasdec". (Note: User Name and Password are case-sensitive)





Digital Alert Systems A division of **Monroe Electronics** 585-765-1155 | fax 585-765-9330 100 Housel Ave. | Lyndonville | NY | 14098 www.digitalalertsystems.com

#### Revision: 1.0 Publication: APNDAS-118

Copyright © 2011 Digital Alert Systems, a division of Monroe Electronics Inc. Information herein is considered accurate at the time of publication. We constantly strive to improve our products and services therefore some specifications are subject to change without notice. DASDEC, MultiStation, and EAS-Net are trademarks of Digital Alert Systems and Monroe Electronics.

2. Go to Setup>Net Alerts> Net CG tab.



Figure 3. Net CG tab is under Setup > Net Alerts

 Activate (enable) the client by selecting both the *Alert Fowarding to Net CG devices* and *Encoder Originated Alerts Sent to Net CG devices* by placing a check box in each of these selections



**4.** The page will expand, Click the Add Net CG Client Interface button.



Figure 5. Selection for adding new Net CG client

5. The page expands to enter more information. It is a good idea to add a descriptive name identifying the Station and device In the Client Interface Name box as shown in the Figure 6 below. Each client interface created is shown in the pull down menu to the left of Select Net CG client once it is saved.

Configure Net CG Client Connection (client IP & program values apply to both Origination and Forwarding)	
*KZXZ – Inovonics 730  Select Net CG client	Add Net CG Client Interface (effective immediately)
There is 1 defined client interface (max is 5).	Duplicate Net CG Client Interface (effective immediately)
	Delete this Net CG interface (effective immediately)
KZXZ – Inovonics 730	Client Interface Name
Senable Client Interface. Enabled. Uncheck to dis	able client.
Select a protocol option. OCOMPIX NewsScroll OCOMPIX Autocast OSimple Chyron Intelligent IF Raw Chyron IntellF & ChyTV Simple ChyTV IF OCODI Net CG OCayman Graphics Fox Splicer/DCM Inovonics RDS730	

Figure 6. Example name of interface. Note the name will appear in the pull down list after accepting changes

- **6.** Select **ENABLE Client Interface** to turn on communications with this client. You can turn off the communications link by deselecting this box without losing the other parameters.
- 7. Using the radio buttons select Inovonics RDS730



Figure 7. Enabling the client and selecting Inovonics 730 protocol.

8. Enter the Remote CG Host IP address and Remote CG Net Host Port. This is the Inovonics IP address and varies by site. The interation parameters can be adjusted to suit the environment. The values for both Test alert and Non-test alerts can range from 1 to 20. This will allow the text to repeated the indicated number of times OR until the alert expires. As an example if interation value is set at 18 and the alert time expires after only 15 interations the system will stop and not continue displaying.

I	A simple network interface that supports sending abbreviated EAS alert text to the Inovonics RDS Model 730 RBDS Encoder.
I	10.15.125.12 Remote CG Net Host IP 1 Test alert iterations (1-20 or until test alert expires)
I	Address 1 Non-test alert iterations (1-20 or until alert expires)
I	10001 Remote CG Net Host Port 15 RBDS Data update period in secs (5-60, for alert
	Compact.nyll:5221,NS:88885,Cnyl V:2002;Cayman:2002;CC:M:801;RUS/50110001 messages larger then RBDS 64 char buffer size)

Figure 8. Example showing IP address and host port for Inovonics 730.

The values for both Test alert and Non-test alerts can range from 1 to 20. This will allow the text to repeated the indicated number of times OR until the alert expires. As an example if interation value is set at 18 and the alert time expires after only 15 interations the system will stop and not continue displaying. The RDBS Data buffers are only 64 characters, therefore the update period adjusts how quickly the text is "paged" or changed from 64 character crawl to 64 character crawl. This typically set for 15 secs however this may be adjusted to suit each station.

- **9.** MultiStation<sup>™</sup> users: Select which station the crawl data will be used in the pull down menu asside **Base Station Alert Text Mode**.
- **10.** EAS event code and FIPS location code filters: By default, all messages with any FIPS locations and any EAS code are processed and passed to the Inovonics RDS encoder. The DASDEC supports the selection of specific EAS event code and FIPS location codes in order to restrict the processing to specific EAS alert types and locations. Both FIPS and EAS codes have a toggle controlled interface to set specific filters for limiting message processing. The example shown in Figure 9 all FIPS codes selected (checked) and all EAS codes selected (checked).

5		
4	Use Base Station Alert Text 🗘 Base Station Alert Text Mode	
	All FIPS codes trigger. Enabled. Alerts with any FIPS locations will trigger Net CG device. Uncheck to choose specific triggering FIPS.	
	✓ All EAS codes trigger. Enabled. Alerts with any EAS code will trigger Net CG device. Uncheck to choose specific triggering EAS Codes.	
	✓ All incoming alert Station IDs trigger. Enabled. Alerts with any Station ID will trigger Net CG device. Uncheck to configure specific triggering Station IDs.	
	Do not use GPI triggers <b>GPI Trigger</b> - Optionally designate GPI inputs required to trigger this net interface.	

Figure 9. Setting for selecting the station text and other filtering options.

Two other filiter options allow selection of specific incoming station ID's and GPI triggers. This provides selective activation only if a specific pre-defined station ID orginated the alert and/or the GPI setting matches.

**11.** When done with page configuration make sure to accept changes.



Figure 10. Setting for selecting the station text and other filtering options.

#### Configuring the Inovonics RDS 730

As long as the 730 is running firmware version 2.9 (shipping on all new products since Dec 2010) then the 730 will accept the commands listed in the paper right out of the box. It also will temporarily override anything that might be coming from a station's automation system.