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Innovative Touch Screen Radio First to Use "RadioDNS"

As Internet connectivity becomes more pervasive, broadcasters are finding new and different ways to link broadcast signals with related content on the Internet. Under a "collaborative project" called RadioDNS (<u>http://radiodns.org</u>), a method has been developed for Internet-connected radio receivers to derive relevant Internet domain names from a radio station's signal using information



already being transmitted, without requiring the inclusion of some new signal component or new data field.



RadioDNS is a technology process that standardizes the lookup of an Internet domain name from standard metadata broadcast on a variety of different radio broadcast systems including analog FM utilizing the Radio Data System (RDS) data subcarrier, HD Radio digital radio (both AM and FM band), and two European digital radio systems, DAB (www.worlddab.org) and Digital Radio Mondiale (DRM, www.drm.org). The Radio DNS process will allow a radio receiver with Internet connectivity to convert existing broadcast parameters such as station frequencies, RDS Program Information (PI) codes, and HD Radio Transmitter Identifier (TI) codes into a resolvable fully qualified domain name (FQDN). Once the FDQN has been resolved, the receiver (using the Internet) can query a RadioDNS database (currently under development) and ultimately determine the Web site with relevant content for the radio station being received.

In September, a new radio receiver was announced in the U.K., which is the first to incorporate a visual, image-based application called "RadioVIS" which is based on the RadioDNS framework. British radio manufacturer PURE (Hertfordshire, U.K., <u>www.pure.com</u>) in September introduced the Sensia, "the world's first high resolution DAB digital and Internet-connected radio," with a unique, large color touch screen which delivers a state-of-the-art and intuitive user-



interface. The football-shaped Sensia is shown in the photo above and a variety of screen shots from the Sensia are shown above left. PURE has indicated that the Sensia will be available from the end of October and will cost about \$400.

Sensia's large, 5.7 inch, 640 x 480 high resolution color touch screen gives users a unique way of interacting with Internet and radio content including podcasts, DAB and analog FM, a growing set of custom PURE "apps" such as weather, news, Picasa, Facebook or Twitter (see screenshot above), and new material such

as station slideshows which are accessed using RadioDNS technology and delivered to the receiver over the Internet. Sensia is also a media streaming device, enabling users to listen to music stored on a home computer or network storage device using WiFi connectivity. Detailed specifications on the Sensia are provided in the table at right.

Sensia has a sophisticated touch screen interface which allows users to view and interact with the radio in an iPhone-like fashion: scrolling and spinning lists, tapping to select, sliding controls and swiping to change views. Users can choose between a multi-panel and a full screen view. The screen consists of a visual panel for viewing Apps, station slideshows or album artwork; a list panel for scrolling through lists of radio stations or music stored on a PC; a "now playing" panel and a control bar for

DAB & FM	Stereo digital radio with full Band III, and FM reception. ETSI EN 300 401 compliant and capable of decoding all DAB transmission modes 1-4 up to and including 192 kbps. Supports FM RDS and RadioText. Future upgrade supported for DAB+
Wireless	802.11b and 802.11g supported with WEP and WPA/WPA2 encryption
Frequencies	Band III 174-240 MHz and FM 87.5-108 MHz
Antennas	Captive telescopic (VHF), internal WiFi
Presets	30 DAB, 10 FM and unlimited Internet radio favorites (maximum of 10 until user registration at www.thelounge.com)
Media streaming	Audio codecs supported include WMA (Standard V9), AAC, MP3, MP2, Real Audio (cook). Media streaming requires UPnP server or PC/MAC running UPnP server software (supplied upon registration to www.thelounge.com)
Controls/ display	5.7" touch screen display (capacitive sensing, 64k colors, 640 x 480 TFT LCD), standby button

operating Sensia. Sensia also connects to The PURE Lounge, a radio and media portal (<u>www.thelounge.com</u>) which acts as an index to selected Internet audio content and where users can register their radio as well as save and organize favorites. Also available from The Lounge and via Sensia is a unique selection of PURE Sounds which can be used in conjunction with the "sleep" and "wake" features of the radio, to "...relax you to sleep or wake you in a positive frame of mind."

An optional rechargeable battery can be used with the Sensia to support portable listening. Sensia also comes with an RF remote control which allows users to control the device from up to 30 feet away without direct line-of-sight between the radio and the remote.

Additional information about the Sensia is available on the Internet at www.touchmyradio.com.

