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DIGITAL RADIO

RECEIVER TECHNOLOGY GUIDE

DIGITAL RADIOS



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LISTEN TO THIS!

Stop. And listen. Imagine a place where you can hear crystal-clear music, choose from hundreds of new stations not available on radio today and see the artist name and title on your screen – all without interference. Welcome to the world of digital radio. With millions of people around the world now able to receive digital radio transmissions, this sound is well within your reach.

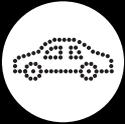
Digital radio is taking the old broadcast medium into the digital age. Digital radio is almost immune to the sort of interference that can make listening to today's conventional AM or FM radio less than satisfying. If you listen to FM in the car, you may have noticed hisses and pops as you drive along. That's caused by multipath interference when the FM signal bounces off buildings, trees and hills and arrives at your receiver out-of-phase with the main signal, confusing the transmission. Digital radio corrects this, which means that even in the most difficult listening environments – the center of a city with high-rise apartments and office buildings – the digital radio signal remains perfect. Digital radio also provides additional content, currently not available on the AM/FM dial. And new features such as on-demand radio, surround sound and rewind radio are possible with digital radio.

Two standards lead this listening revolution. Digital Audio Broadcasting (DAB) broadcasts in several countries in Europe including the United Kingdom and Germany. And it's also found in Canada and Asia in such places as Singapore and Taiwan. In the U.S., HD Radio™ technology is the FCC-selected standard for digital audio broadcasting. So today, wherever you are, wherever you go...you can be enthralled by the wonderful world of digital radio.





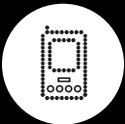
DIGITAL RADIO APPLICATIONS



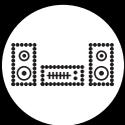
AUTOMOTIVE – A constant companion to commuters around the world, AM/FM car radios will be improved with DAB and HD Radio™ technology. This revolutionary change will be brought to this important application through aftermarket and original equipment model receiver manufacturers.



HOME AND PORTABLE – Many different types of radios touch people’s daily lives around the home, including mini/midi/micro systems, clock radios, boomboxes and desktop radios. They are battery-powered, AC-driven or a combination of both. While portables are transportable, these radios likely can be found on the kitchen counter, the nightstand or the desktop.



HANDHELDS – Handheld digital radios are a distinctive category from portable. These gadgets are battery-powered (some with AC adapters) and small enough to fit inside a shirt pocket. For people on the go, handhelds make radio ubiquitous.



HOME HI-FI – Driven by the emergence and rapid acceptance of digital media such as the DVD format, home Hi-Fi has become a force in the marketplace. As the engine behind the life-like surround sound requested by customers today, the audio/video (A/V) receiver system is a natural home for digital radio.



MODULES – Quick time-to-market solutions can be found through module suppliers, which provide pre-made circuit boards that plug into existing or new radio designs such as automotive, portable and home Hi-Fi.



DIGITAL AUDIO BROADCASTING (DAB)



Digital Audio Broadcasting is offering listeners throughout Europe and parts of Asia and Canada more than just radio. It's creating an unparalleled listening experience.

Digital radio dials up clear, pure sound – unheard of from radios before. DAB's data stream delivers personalized communication and information, such as on-demand traffic, weather, sports reports and other content. A fast-growing number of stations are broadcasting digitally, taking advantage of the vast market opportunities.

Manufacturers of DAB radios include: Acoustic Solutions, Cambridge Audio, Cenix, ELANsat Technologies, GyroSignal Technology, Hitachi, Intempo Digital, Kwang Sung Electronics, LG Electronics, Morphy Richards, Personal Telecom, Roberts Radio Limited, Sony and TBK.

TI, with software from RadioScape Ltd., leads the market with a complete solution for DAB. The TMS320DRE310 DSP-based baseband is the most highly integrated baseband on the market. TI's TMS320DRE200 is the lowest cost DAB digital radio solution available today. The two chips deliver maximum flexibility, the lowest cost and most power-efficient solutions on the market.

TI has already shipped 1 million DRE200 and DRE310 digital baseband chips to the DAB market.

Benefits include:

- The lowest bill of materials cost in the industry today
- The lowest system power consumption
- Flexibility, enabling more than just digital radio with easy-to-implement functions such as MP3
- A complete system design, incorporating the digital baseband, software, analog chipset, evaluation modules, reference designs and TI-based modules

See how today's hottest technology is turning radio on its ear.



SP 111

Available at under £90

KEY FEATURES & BENEFITS:

- DAB digital radio tuner with FM
- High quality extruded aluminum finish
- Headphone output
- Analog and optical outputs
- 4 dedicated station presets
- Auto scan feature for local and national stations
- Manual tuning aid
- LCD status display panel
- Station data display on LCD panel
- Remote control supplied (operates whole SP separate range)
- W:43 x H:8 x D:28.5 cm

PORTABLE KISS RADIO

Acoustic Solutions and **KISS** bring 'Fashionable Audio' to the high street for under £100



KEY FEATURES & BENEFIT:

- Portable DAB/FM radio
- 4-Line graphic 'blue' LCD
LCD: blue backlit graphic, contrast control,
(FM mode) 2 x 16 characters, (DAB mode) 3 x 16 characters
- Earphones with built-in antenna
- External AC/DC adapter (optional extra)
- 63 x 82 x 20 mm, 62 g
- FM frequency range: 87.5 – 108.0 MHz
- DAB Band-III range: 174 – 240 MHz
- Battery life (not supplied): 8 hours (DAB mode); 22 hours (FM mode)

Available today at your local retail store

Acoustic Solutions is a young, dynamic company formed by David Stobart in 1998. Since its first year of trading, the company has enjoyed rapid growth – 100 percent year on year – and is now recognized as the fastest growing audio brand in the UK. Its success is due to its ability to identify niche markets and then bring quality products such as speakers, home theatre, DVD players and DAB tuners to market in the shortest possible time scale.

The Acoustic Solutions portfolio of DAB products now boasts the 'stylish design' of their 'Portal' and 'In Car' range and the 'fashion-led' KISS portable DAB/FM. These complement the 'long-standing' SP111 DAB/FM Hi-Fi separate.

Acoustic Solutions continues to expand its distribution into the independent retailers and has also expanded into global markets with distribution channels established in America, Europe and the Far East.



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www.acousticsolutions.co.uk

ACOUSTIC SOLUTIONS PORTAL 1, 2, 3

Stylish portable audio by Acoustic Solutions combined with **IDEO**, design-conscious DAB



KEY FEATURES & BENEFITS:

PORTAL 1

- Portable DAB radio
- Retro styling designed by IDEO London
- Crackle-free reception
- High-quality sound
- Easy alphanumeric tuning
- Built-in speaker
- Headphone output
- Line output
- Mains power adapter supplied
- Optional battery operation (6 'C' batteries)

PORTAL 2

- Portable DAB/FM radio
- Retro styling designed by IDEO London
- Crackle-free reception
- High-quality sound
- Easy alphanumeric tuning
- 6 DAB and 6 FM presets
- Built-in stereo speakers
- Headphone output
- Line output
- Mains power adapter supplied
- Optional battery operation (6 'C' batteries)



PORTAL 3

- Portable DAB/FM radio
- Pause and rewind live DAB radio for up to 5 minutes
- Crackle-free DAB reception
- High-quality sound
- Automatic tuning and alphanumeric sorting of DAB radio stations
- 6 DAB and 6 FM presets
- Built-in stereo speakers
- Output connections for headphones and line output
- Mains power adapter supplied
- Optional battery operation (6 'C' batteries)



Available today at your local retail store

CONTACT INFORMATION:

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www.acousticsolutions.co.uk



TRDAB2821

KEY FEATURES & BENEFITS:

- Dual-band DAB & FM radio
- 8 presets (4 DAB, 4 FM)
- Multifunction display with backlight
- Electronic volume control
- Auto scan tuning
- Auto time update via DAB
- Telescopic aerial
- Alarm clock with snooze and sleep function
- Optional battery operation

Available today at your local retail store

Alba was founded in 1917 by Alfred Balcombe to manufacture gramophones. Alba Radio Limited was acquired in 1982 by Harvard International Limited, which became Alba PLC when Alba was floated on the London Stock Exchange in 1987.

Alba Radio Limited is currently a UK market leader for lead-in, high-volume audio systems, portable stereo, TV, DVD and VCR.

ALBA

CONTACT INFORMATION:



Alba Radio Limited
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Arion Technology is a well-established manufacturer of advanced consumer electronics and has specialized in set-top boxes for digital television. DAB is seen as an extension of this concept and Arion is pleased to announce two new products to the DAB market, the DA-100E digital pocket radio and the DA-200E battery/mains portable radio. Both products offer the benefits of DAB and FM reception combined with modern stylish design.



DA-100E

Attractive hand-held DAB/FM radio

KEY FEATURES & BENEFITS:

- FM range: 87.5—100 MHz
- Stereo headphones (3.5 mm jack)
- Graphic LCD (128 x 64)
- Power: 2AA batteries, or external adapter
- Battery life: up to 8 hours
- 60 x 96 x 22mm, 160g
- **DAB – Band-III and L-band (optional)**



DA-200E

Portable DAB/FM radio

KEY FEATURES & BENEFITS:

- FM range: 87.5 – 108MHz
- Stereo headphones (3.5 mm jack)
- S/PDIF optical output
- Stereo line output
- 2-line LCD text display
- Power: 6 C batteries or external 9V adapter
- 300 x 145 x 110 mm
- **DAB – Band-III and L-band (optional)**

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www.arion.co.kr



AZUR 640T DAB/FM TUNER

The Azur 640T offers the perfect combination of digital and analog radio, delivering the highest levels of performance from both transmissions, in one elegantly designed package. At the heart of the design is the very latest DAB solution, incorporating a Texas Instruments DSP. This is allied to a high performance digital-to-analog converter. The Azur 640T also features Natural Contour Technology™ (NCT) to counter the sometimes flat presentation of some DAB radio stations.

KEY FEATURES & BENEFITS:

- Touch-button access to DAB and FM stations
- Receives traditional analog transmissions and RDS
- 24 Bit/192 kHz digital-to-analog converter
- Coaxial and digital outputs
- Natural Contour Technology (NCT) helps improve the quality of digital sources. The 'warm' setting adds an analog-like warmth and the 'lively' setting breathes life into heavily compressed programs
- Slim-line, elegant remote handset with full control

SPECIFICATIONS:

- **Waveband: FM, DAB Band-III, L-Band**
- Max consumption: 15 W

DAB & FM PERFORMANCE:

- Antenna input impedance: 50 ohms
- Adjacent channel selectivity (EN50248): 35 dB typical
- Far-off selectivity (EN50248): 55 dB typical

DAB PERFORMANCE:

- Frequency range (Band-III): 174 MHz – 240 MHz
- 0 dB output level: 2.2 Vrms
- THD&N @ 0 dB, 1 kHz output: 0.007% max
- Signal-to-noise ratio A-wtd: 100 dB min
- **Frequency range (L-Band): 1452 MHz – 1491 MHz**

FM RADIO PERFORMANCE:

- Frequency range: 85.5 MHz – 108 MHz
- RF sensitivity for signal-to-noise of 26 dB: 0.5 µV
- Large signal handling capacity: 500 mV
- Ultimate signal-to-noise ratio at 200 mV: 58 dB
- THD&N @ 200 mV RF input, 1 kHz audio, 75 kHz deviation: 0.15%

Established in 1968, Cambridge Audio has brought some of the most innovative and technologically advanced products to the Hi-Fi market. The new millennium saw Cambridge Audio leading the way in DAB digital radio tuners with an award-winning range, including the DAB300 (the world's first affordable audiophile digital radio), that put the company at the forefront of the DAB arena. This is a pedigree which Cambridge Audio continues to build upon.

Available today at your local retail store

 Cambridge Audio

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www.cambridge-audio.co.uk

For inquiries in USA: Audio Plus Services
Tel: 1 800 663 9352

Cenix was established in 1986 as an R&D company and manufacturer of audio products. Since then, it has become a high tech oriented company specializing in the design and manufacturing of digital audio products. In October 2002, Cenix was chosen as a Small and Medium Enterprise Bright Prospect by the Korea Development Bank. In July 2003, Cenix received the GD (Good Design) Award from the Korea Design Promotion Institute.



PDR-100

Portable DAB/FM receiver

KEY FEATURES & BENEFITS:

- 4 line graphic LCD with blue color LED backlight
- Supports LCD contrast control
- Supports backlight time control
- External AC/DC adapter
- Battery rechargeable
- Easy-to-use
- DAB/FM
 - Fully compliant with ETS 300 401 (Eureka 147)
 - Dynamic label display
 - Manual/auto/preset tuning service
 - Stereo earphone with integrated antenna



PDR-200

Portable DAB/FM receiver and MP3 player

KEY FEATURES & BENEFITS:

- 4 line graphic LCD with blue backlight
- External AC/DC adapter
- Battery rechargeable
- Supports 6EQ mode
- Easy-to-use
- DAB/FM
 - Fully compliant with ETS 300 401 (Eureka 147)
 - Dynamic label display
 - Manual/auto/preset tuning service
 - Stereo earphone with integrated antenna
- MP3
 - Supports embedded memory 128/256 Mbytes
 - Supports USB 1.1

CONTACT INFORMATION:

Cenix Digicom Co., Ltd.
584-4 Pajang-Dong
Jangan-Gu, Suwon City,
Gyeonggi-Do, Korea

Tel: +82 31 241 0021
Fax: +82 31 241 1817
www.cenix.co.kr



LAGIO-R102 AND LAGIO-R103

Portable DAB receiver

KEY FEATURES & BENEFITS:

- DAB and FM
- Crystal-clear sound
- Fully compliant to ETSI EN 300 401
- PTY seek selection
- Auto search or manual search
- User-friendly MMI interface
- IR remote control
- 6 presets on DAB and FM and quick click buttons
- 16 x 2 character LCM with blue color backlight
- Digital audio outputs:
optical digital S/PDIF (IEC958 @ 48 kHz) and
coaxial digital S/PDIF (IEC958 @ 48 kHz)
- **Supports DAB Band-III (mode I, II, III, IV)
and L-Band (mode II, III, IV)**

Founded in 2000 in the Hsinchu Science Park in Taiwan, ELANsat Technologies Inc. (ELANsat) is devoted to cutting-edge design in the digital communication field. ELANsat has provided excellent performance since its launch, largely due to the efforts of ELANsat's employees and the support from its parent company, ELAN Microelectronics Corporation (EMC) in Taiwan. With its experienced research and development (R&D) engineers, ELANsat has established a strong and solid background in the Radio Frequency (RF) and System Integration fields. ELANsat takes pride in providing quality products to our customers, bringing total solutions to OBM, ODM and OEM customers.

Available today at your local retail store

CONTACT INFORMATION:

ELANsat Technologies Inc.
ELANsat Sales Dep.

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E-Mail: sales@elansat.com
www.elansat.com



Genus Digital develops and markets a range of design-led digital products and services. Based in London, UK, Genus supplies the major UK/European retailers/networks with leading-edge and innovative devices including DAB digital radio, GPRS mobile phones and digital music/video players.



GENUS PR1i PORTABLE DAB / CD RADIO

DAB/FM/CD (MP3) player/alarm clock

KEY FEATURES & BENEFITS:

- DAB digital radio/pause and rewind
- Slot load CD player (MP3)
- FM radio (RDS)
- Integrated stereo speakers
- 10 DAB/10 FM presets
- Mains/battery operated
- Remote control
- **Optional L-Band DAB**



CONTACT INFORMATION:

Genus Digital
115 Westbourne Studios
242 Acklam Road
London, W10 5JJ, United Kingdom

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www.genusdigital.com

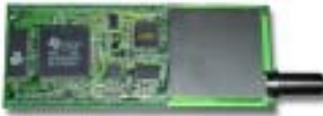


GYRO-1115, GYRO-1115L

GYRO-1115 DAB module is a versatile DAB module with integrated Band-III, L-Band, CDDA, MP3 and Windows Media® Audio (WMA) capabilities in a simple, highly-integrated, cost-effective package.

KEY FEATURES & BENEFITS:

- **DAB Band-III and L-Band (L-Band optional)**
- Supports MP3 Id Tag v2
- Supports DAB bit rate up to 256K
- Supports host mode or slave mode
- Auto-detect DAB mode I, II, III and IV
- Built-in LCD/Keyboard control and Self UI
- Supports CDDA
- Built-in external audio DAC signal interface
- Supports CD-MP3, up to 320K bit/sec
- I²C interface for slave mode control
- Supports CD-WMA, up to 192K bit/sec
- Single 5Vdc supply voltage
- Whole module is lead-free



GYRO-1114, GYRO-1114L

Dual-band (1114) and tri-band (1114L) DAB/FM/RDS receiver modules

KEY FEATURES & BENEFITS:

- **DAB Band-III with FM Band-II (1114), L-Band (1114L)**
- Fully integrated digital FM with RDS
- Small size: 110 x 44 x 15 mm
- Memory storage for rewind radio operations
- Single 5V supply operation
- Full integrated CD control without external microprocessor
- Keyboard/LCD direct connection
- Integrated HMI software for DAB/FM
- Ideal for portable radios, Hi-Fi and home audio application
- Single DAB/FM antenna connector
- TI DRE200-based design
- Optional S/PDIF and I²S
- Optional I²C or UART control
- Optional DSA CD interface
- Optional IR remote control

Founded by a group of energetic pioneers in the communication field, GyroSignal strives to develop and provide better quality and more innovative solutions for digital communication industries as well as consumer electronics markets. GyroSignal differentiates itself from its competition by having key R&D team members with more than a decade of practical experience and professionalism in the RF and digital communication fields. In addition, GyroSignal's R&D strength is coupled with strong sales and marketing, supply chain management, finance and administration professionals from industry-leading companies.

GyroSignal has become one of the most important DAB module manufacturers and plans to continue this momentum in 2005:

- Be the most admired company with the highest sales in Hong Kong for DAB products
- Become completely "green" in 2005. Newly developed products will all be lead-free
- Set up more offices to support customers. Most recent addition – China Shenzhen, December 2004

GyroSignal

CONTACT INFORMATION:

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www.gyrosignal.com



In the UK and Europe, the Dixons Stores Group has use of the Hitachi brand for an exclusive range of audio products. These include personal audio, portable radio, home audio and digital radio products.



HITACHI AX-M68D

DAB/FM/CD Micro Hi-Fi System

KEY FEATURES & BENEFITS:

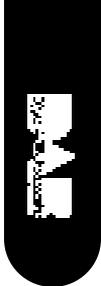
- DAB and FM radio
- CD player with motorized cover
- Auxiliary line input
- Bright vacuum fluorescent displays
- Maplewood effect speakers
- 25 RMS per channel
- 20 presets (10 DAB/10 FM)
- Scrolling text for DAB
- RDS station name and RDS text
- RF F-type connector
- Remote control

Available today at your local retail store

CONTACT INFORMATION:

The Hitachi AX-M68D is an exclusive branded product for the Dixons Stores Group

www.dixons.co.uk



PG-01

DAB digital radio with clock, alarm, sleep and snooze

KEY FEATURES & BENEFITS:

- Integrated 5-watt stereo speakers
- Dual-band DAB and FM
- Hand-finished classic wood finish
- Interference-free, crystal-clear digital sound
- Amazing choice of new DAB stations
- Removable telescopic aerial and F-type input connector
- Stereo headphone socket



KT SERIES

DAB digital radio with clock, alarm, sleep and snooze

KEY FEATURES & BENEFITS:

- Range of fashion colors
- Integrated 2-watt stereo speakers
- Dual-band DAB and FM
- Adjustable backlight setting
- Interference-free digital sound
- Amazing choice of new DAB stations
- Removable telescopic aerial and F-type input connector
- Stereo headphone socket

Intempo Digital's products combine the latest in DAB technology with cutting-edge style to produce the best-looking and most feature-packed radios around. Intempo Digital is committed to developing products which enhance your lifestyle and complement your living and working spaces. Our philosophy is simple – to develop products that make life easier, richer and a bit more fun!

The Intempo Digital brand was among the first DAB manufacturers in the world and supplies a network of retailers and distributors in the UK, Europe and the rest of the world.

Available today at your local retail store



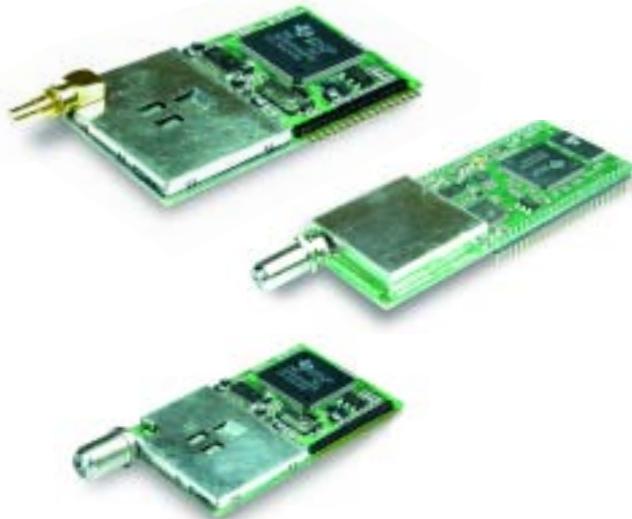
CONTACT INFORMATION:

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 Rhianon Lucas
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Established in Korea in 1972, Kwang Sung started as a manufacturer of IFT, RF coils, transformers and other coil products. Having solid industry experience, Kwang Sung successfully emerged as the specialist in developing a comprehensive range of electronic components in Hong Kong, Mainland China and Korea. Kwang Sung is dedicated to providing reliable sources of electronics tuner packs and modules, dielectric filters, L/C filters, transformers, inductors, antennas and coils.



AEB-1, AEB-2, AEB-3 (BAND-III & FM)

DAB tuner module for home Hi-Fi audio and car audio

KEY FEATURES & BENEFITS:

- Frequency range:
Band-III: 174 ~ 240 MHz
L-Band: 1452 ~ 1492 MHz
FM: 88 ~ 108 MHz
- Sensitivity Band-III: -98 dBm
- **Sensitivity L-Band: -92 dBm**
- Output: digital/analog audio
- Control bus: SPI, I²C
- Input connector: 50 Ω SMB or 75 Ω F-type
- Power supply: +3.3 V / 330 mA
- 70 (105) x 40 x 10 mm

CONTACT INFORMATION:

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www.ksparts.com



MERCANTILE AND GENTRY

TYPICAL KEY FEATURES OF MERCANTILE AND GENTRY DIGITAL RADIO PRODUCTS:

- **DAB Band-III and FM with L-Band option**
- 5 DAB and 5 FM presets
- RDS and station information (FM)
- Twin 12-watt speakers giving superb audio quality with surround sound
- 11 stunning designs in hardwood veneers or hand-finished lacquer
- Extra large display with backlight
- Rewind, forward, replay functions
- Pause, record received audio to MP3 or internal memory
- Digital optical/coax and analog outputs
- USB port and integral SD memory card reader

Mercantile and Gentry (M & G) Audio is a dynamic Malaysian company which designs, manufactures and markets a wide range of advanced DAB receivers in hand-finished hardwood veneers and rich, lustrous lacquers.

M & G Audio is a partnership with credentials second to none. It brings together RadioScape, one of the pioneers of digital radio technology, and some of Malaysia's most respected consumer electronics manufacturers and system integrators.

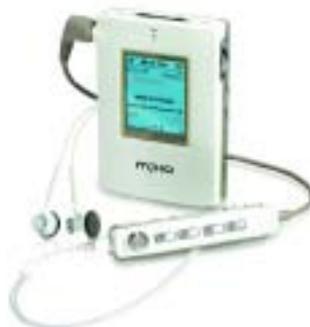
Recognizing that DAB technology is set to herald a new golden age of radio, the company offers a product range specializing in elegant, hand-crafted neo-retro designs. By building radios with superb acoustic performance, as well as integrating the latest advanced features such as record, replay and rewind radio with full MP3 capabilities, M & G supplies a wide range of independent audio specialists in the UK and Europe. M & G is dedicated to cutting-edge technology coupled with elegant, classic radio design and outstanding acoustic performance.

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www.mercantilegentry.com

MNBT provides innovative and technologically advanced digital multimedia broadcasting handsets. With extensive digital technologies experience on satellite and terrestrial digital set-top boxes, mobile phones, and DAB/DMB core technologies, MNBT plans to be a leading global company with the best integration of mobile communication and broadcasting systems.



PD 100

Handheld DAB/MP3 player

KEY FEATURES & BENEFITS:

- **Band-III and L-Band (optional)**
- Comfortable 8-Line, large graphic LCD with blue backlight
- Fast and accurate tuning
 - Joystick control for easy navigation
 - Autostore programming for radio tuning
 - 10 favorite station presets
 - Full screen DLS display
- Stereo earphone with antenna
- Rechargeable Li-ion battery
- Record and playback (voice/audio recorder)
- MP3 player (MP3 and Windows Media® audio format)
- 128/256 MB built-in flash memory
- Software upgradeable via USB
- USB 1.1 interface



CONTACT INFORMATION:

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www.mnbt.co.kr





DAB10-256

DAB receiver

KEY FEATURES & BENEFITS:

- DAB Features
 - Fully compliant with ETSI EN300 401
 - Mode I, II, III, IV with auto-detection
 - All audio mode (mono, dual mono, stereo, joint stereo)
 - Supports full Band-III
 - Announcement support
 - Time shift recording available
- MP3 Features
 - Decoding format: MPEG 1/2/2.5 layer 3, Windows Media® Audio, ASF, OGG (Opt.)
 - Support ID tag (v1.0/1.1/2.0)
 - Sound effect: EQ, SRS-WOW (Opt.)
 - Voice recording
 - Real-time MP3 encoding
 - Storage: 128MB, 256MB and more
- Sleek, silver profile
- First fully digital walkman

MOPIX was established in April 2004 and specializes in the design and marketing of portable multimedia appliances. MOPIX's employees are very knowledgeable in the field of digital broadcasting (DVB/ATSC, STB). MOPIX continues to develop innovative portable media products (PMP) that including digital broadcasting, especially DAB/DMB.

CONTACT INFORMATION:



MOPIX
#204, Gumije2johap Building,
144-1, Gumi-Dong,
Bundang-Gu, Seongnam-Si
Gyeonggi-Do, Korea 463-800

Tel: +82 031 717 2051
Fax: +82 031 717 2031
www.mopixdigital.com

Morphy Richards has been a known and trusted brand in UK home appliances for over 65 years, and a market leader in UK small domestic appliances since 1994. Morphy Richards has an established audio business and a very strong consumer association with radio as a medium.



ORDIO DAB-27015

KEY FEATURES & BENEFITS:

- FM RDS and DAB
- Stereo sound
- 14 presets
- Headphone compatible
- Stereo line out
- RF F-type connector
- Mains and battery operation



ORDIO DAB REWIND-27016

KEY FEATURES & BENEFITS:

- DAB digital radio-rewind up to 10 minutes
- FM RDS
- Stereo sound
- 2 x 16 character display
- 14 presets
- Headphone compatible
- Optical digital line out
- RF F-type connector
- Mains and battery operation

morphy richards

Available today at your local retail store

CONTACT INFORMATION:

Morphy Richards
Nadia Scott / Nick Richards
Talbot Road, Mexborough
South Yorkshire, S64 8AJ
United Kingdom

Tel: +44 170 958 2402
Fax: +44 170 959 0549
www.morphyrichards.co.uk



DR301

Portable DAB digital radio, FM radio, MP3 player

KEY FEATURES & BENEFITS:

- **World coverage (Band-III/L-Band/FM Band)**
- Automatic DAB mode selection (I/II/III/IV)
- DAB signal recording and playback
- DAB rewind (time shift playback)
- Mass storage device (SD support)
- MP3/Windows Media® Audio playback



DR601

Portable DAB digital radio (kitchen radio)

KEY FEATURES & BENEFITS:

- **World coverage (Band-III/L-Band/FM Band)**
- Automatic DAB mode selection (I/II/III/IV)
- Preset, auto and manual tuning
- Built-in stereo speaker system
- Battery and mains operation

Available today at your local retail store

As the IT industry, centered in mobile and digital technology, is changing rapidly, Personal Telecom, Inc. (Perstel) is committed to value and innovation, offering customer-oriented thinking, product reliability, progressive concepts and cutting-edge technology. Perstel is qualified for its retaining technologies by many government bodies, enterprises and corporations. Since the company was founded in 1996, both executives and employees have maintained their focus on achieving customer-oriented management. Perstel has the noted distinction of bringing the first handheld DAB receivers to the market.

Perstel

CONTACT INFORMATION:

Personal Telecom, Inc.
7th F., Jeljon Tower II, 159-4 Jeongja-Dong
Bundang-Gu, Seongnam
Korea 463-834

Tel: +82 31 728 6600
Fax: +82 31 728 6799
www.perstel.com



RD-7 GEMINI 7

Mains/battery portable radio with rewind

KEY FEATURES & BENEFITS:

- DAB/FM wavebands
- Rewind, record and pause functions
- FM RDS station name and text display
- 10 station presets
- 16 x 2 character backlit LCD display
- Rotary tuning, volume, treble and bass controls
- Line output socket
- Headphone output socket
- Mains or battery operation (6 C cells)



RD-11 GEMINI 11

Mains/battery portable radio with rewind

KEY FEATURES & BENEFITS:

- DAB/FM wavebands
- Rewind, record and pause functions
- FM RDS station name and text display
- 10 station presets
- Large 16 x 2 character backlit LCD display
- Rotary tuning, volume, treble and bass controls
- Line output socket
- Headphone output socket
- Mains or battery operation (6 D cells)



Available today at your local retail store



CRD-9 GEMINI 9

FM/DAB radio/alarm clock

KEY FEATURES & BENEFITS:

- Wake to radio or buzzer alarm
- Sleep/snooze functions
- FM RDS station name display
- 10 station presets
- Large easy-to-read 16 X 2 display
- Amber display backlight (multi-level)
- External FM/DAB aerial socket
- Headphone output socket



RD-10 GEMINI 10

1950's styled mains/battery portable FM RDS/DAB digital radio

KEY FEATURES & BENEFITS:

- DFM/DAB wavebands
- FM RDS station name display
- Easy-to-read 16 x 2 character LCD display
- Amber display backlight
- Stereo headphone socket
- Rotary tuning and volume controls
- Stereo line output socket
- Battery or mains operation via AC adapter (supplied)
- Other colors available

Roberts Radio is the UK's leading brand in portable radios. In 2003 it announced the Gemini range of DAB digital radio products, with many new models added in 2004. Roberts supplies major retail chains and independent retailers with a broad range of digital and analog radios. The company's strong reputation is built upon the quality of its products, which are noted for their superior audio performance and construction.

Available today at your local retail store

ROBERTS
Sound. The Connection.

CONTACT INFORMATION:



Roberts Radio Limited
 P.O. Box 130, Mexborough
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 United Kingdom

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 Fax: +44 170 957 1255
 Email: Information@Robertsradio.co.uk
www.robertsradio.co.uk

Sangean Electronics Inc. is one of the world's oldest and largest manufacturers of DAB, multi-band, portable and pocket-size radios. Sangean has been a leading authority in the radio field throughout the world since 1974 and has 520 employees, factories in Taiwan and China, and sales offices in Taiwan, Hong Kong, USA and The Netherlands (for the European market).

With the aid of the newest technology, Sangean manufactures high quality digital and analog world receivers, pocket-size radios, time-controlled clock radios, utility radios, DAB radios and nostalgic design radios with excellent sound and reception quality next to an appealing design.

Sangean distinguishes itself in the world market by combining technology and precision with quality in all its functionality, its design and an orientation towards the needs of its customers. That is why Sangean is proud to be an OEM producer for many well known international brands. Sangean products can be purchased throughout the world and are supplied by large retailers. Most electrical distributors, dealers, radio specialists, nautical and marine shops have Sangean products in their range.

SANGEAN



DDR-3

FM/DAB receiver in wooden cabinet

KEY FEATURES & BENEFITS:

- AC operated only
- DAB/FM wavebands
- Radio Data System (RDS) functions with radio text, program type, station name and time/date
- Easy-to-read multifunction LCD display
- 5 station presets each waveband
- Menu display/selection of all major functions
- Search/manual tuning
- Rotary control for station/menu selection; rotary volume and tone controls
- External DAB aerial socket
- External FM F-type antenna terminal
- Optical output for Hi-Fi system
- Multifunction infrared remote control
- AC mains socket



DPR-2

FM/DAB receiver

KEY FEATURES & BENEFITS:

- Battery/mains operation
- DAB/FM wavebands
- Radio Data System (RDS) functions with radio text, program type, station name and time/date
- Easy-to-read multifunction LCD display
- 5 station presets each waveband
- Menu display/selection of all major functions
- Search/manual tuning
- Rotary control for station/menu selection; rotary volume and tone controls
- External DAB aerial socket
- AC mains socket
- 4 D (UM-1) batteries

Available today at your local retail store

CONTACT INFORMATION:

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 Tel: +31 77 382 9344, Fax: +31 77 3875357
 sales@sangean.nl, www.sangean.nl

Sangean Electronics Inc., Asia
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 Tel: (886) 2-2225-0303, Fax: (886) 2-2223-3549
 info@sangean.com.tw, www.sangean.com.tw



TDE-6001-A2

TBK's DAB modules make it easy to implement DAB function into any receiver. Their compact size is a perfect fit even for portable solutions. These modules are designed to be flexible and utilize the latest cutting-edge DSP technology.

KEY FEATURES & BENEFITS:

- TEF-1001-A1 (RF Front-end – Band-III)
- **TEF-2001-A1 (RF Front-end – Dual band)**
- TDE-1001-A1 (Band-III only)
- **TDE-2001-A1 (Dual Band)**
- TDE-2002-A1 (using DRE310)
- TDE-5001-A2 (Band-III + AM/FM)
- **TDE-6001-A2 (Dual Band + AM/FM)**
- Excellent sensitivity for use in car audio and indoor products
- Digital audio (S/PDIF) and analog audio output
- I²C for external control
- Compact, fully shielded module
- Display of FIC, ensembles, components, dynamic label
- Compact design of 42 x 65 x 8 mm (Band-III) enables it to be built into a variety of form factors such as car audios and portables

For the last 25 years, TBK Electronics Corp. has maintained the top position in producing RF tuners for car audio. We have advanced into providing amplifiers and communications for cars, working toward the creation of a multimedia world inside every car where audio and communication are integrated into one system. Through ever continuing R&D and managerial innovation, we continue to hold our lead as the foremost in the industry.

CONTACT INFORMATION:

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www.tbk.co.kr



Around the world, the TEAC name is synonymous with high-quality, high-performance consumer gear – not surprising when you consider that TEAC has been a leader in the industry since its earliest reel-to-reel recorders.

Today, TEAC manufactures an entire spectrum of products from top-quality, table-top CD/radios with great designs to high fidelity audio video components. For many audiophiles, the TEAC label is a symbol of pride, one that shows they are serious about audio quality. Industry experts share this enthusiasm for TEAC products, giving them consistently high marks for performance.

TEAC. World leaders in engineering excellence.



SR-L50DAB

DAB/FM/CD radio

KEY FEATURES & BENEFITS:

- DAB/FM stereo tuner
- Plays CD and CD-R/RW discs
- DAB tuning by station name
- 10 preset station memory (5 DAB, 5 FM)
- Built-in subwoofer with variable bass boost control
- Digital clock, sleep timer, daily timer
- Multifunction dot-matrix display
- Display brightness control
- Full-function remote control
- Output power: 15 watts (8 Ω, 1kHz, 10%THD, RMS)
- Speaker: 63 mm x 2, 73 mm x 1 (subwoofer)
- 3.5 mm headphone jack
- 395 x 205 x 210 mm

TEAC

Available today at your local retail store

CONTACT INFORMATION:

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Tel: +01 92 381 9630

www.teac.co.uk



DAB118, DAB118L DUAL BAND (DAB 118) & TRI BAND (DAB 118L)

DAB / FM receiver module for Hi-Fi, home or kitchen audio

KEY FEATURES & BENEFITS:

- **Dual band (FM and Band-III – DAB118) / Tri band (FM, Band-III and L-Band – DAB118L) operation**
- Fully compliant with DAB standard
- Built-in FM radio to cover all analog and digital radio broadcast service
- Single 3.3 V operation to simplify and save system cost
- Channel Seeker™ auto search function to seek and save all available DAB channels in that region
- Last channel memory
- Stereo audio line out; S/PDIF output (option)
- Supports CD playback
- MP3/Windows Media® Audio decoding (option)
- Offers both master and slave control for flexible product system design



DAB 218, DAB 218L DUAL BAND (DAB 218) & TRI BAND (DAB 218L)

DAB / FM receiver module for portable DAB or multimedia players

KEY FEATURES & BENEFITS:

- **Dual band (FM and Band-III – DAB218) / Tri band (FM, Band-III and L-Band – DAB218L) operation**
- Low power consumption design for portable application
- Compact size
- Full features as DAB118 and DAB118L
- DMB ready (option)
- Field upgradable to ease updating the latest firmware and features

Tekcom Industries Ltd., a subsidiary of IDT International Ltd., has been a RF product manufacturer in the communication field for over 15 years. Pioneers in VHF and UHF communication devices design and manufacturing, Tekcom produces small power transceivers, high power professional transceiver and marine VHF radio design. With its solid experiences in professional RF design, the company launched a new business unit last year to offer a full range of digital broadcast modules to enable other audio or multimedia manufacturers to quickly enter this digital entertainment world with quality products.

TEKCOM

CONTACT INFORMATION:

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Fax: 852 2694 7872
www.tekcom.com.hk





HD RADIO™ TECHNOLOGY



HD Radio™, the standard digital format in the United States, is changing radio forever. While listeners enjoy crystal clarity of sound, TI's technology is allowing broadcasters to develop innovative ways to deliver programming.

NPR's Tomorrow Radio project, for example, allows broadcasters to transmit a second station over their frequency, doubling the FM bandwidth. Rewind radio and surround sound transmission take radio to new levels of enjoyment and functionality for listeners and broadcasters alike.

Manufacturers of HD Radio include ANAM, Delphi, JVC, Kenwood, Kiryung, Panasonic, Sanyo, TBK, Toko and Visteon.

TI and its software partner, iBiquity Digital Corp., are leading the digital radio market with innovative baseband solutions and a software radio approach that lets manufacturers easily add new features or standards.

TI's TMS320DRI300 and TMS320DRI350 are the industry's lowest cost single-chip basebands. They provide all of the digital functions required to build an AM/FM and HD Radio receiver along with audio post-processing and MP3 and Windows Media® Audio (WMA) CD support. The DRI350 DSP-based baseband combines IF-sampled AM/FM and HD Radio processing on the same chip to deliver unparalleled integration.

These solutions provide many benefits, including:

- Reduced system costs – TI's solutions are the most cost-effective solutions available for either a bolt-on or an integrated approach.
- Minimized risk while adding value – Software radio concept allows for adding future features even after development begins.
- Improved system cost and differentiation – Integrate other features in an HD Radio receiver, including MP3 and WMA CD.



TUNE SUITE

Tune Suite is a group of components designed to receive broadcast radio transmissions in custom-installed home entertainment systems. The Quadritune chassis can house up to four independent tuner modules so that different people in the same home can listen to different broadcasts at the same time. Modules include XM Satellite Radio, AM/FM/WX (Weatherband) or the new HD Radio™ module. Users can custom order the Tune Suite beginning with just two radio tuner modules or more. Many Tune Suites can also be combined in a single system for more demanding residential or commercial environments. Tune Suite can be controlled by ADA's family of music controls, ADA's PC Tune Suite program, and touch-screen and IP-based control systems.

KEY FEATURES & BENEFITS:

- Designed for use with ADA whole-house entertainment systems, your custom application or standalone operation
- Compatible with HD Radio digital FM and AM broadcasts for superior CD quality sound
- Compatible with existing (analog) FM and AM broadcasts
- Provides artist, song title and other information on tuner display or remote keypads
- No special antenna required
- For analog only broadcasts, displays RDBS data (where available)
- 30 combined presets per tuner module
- Up to 4 tuners of any combination (XM or AM/FM HD) in a single two-rack space unit
- Cascade from 1 up to 27 tuners on a common RS-232 controllable bus
- XM Satellite Radio module option

Audio Design Associates Inc. (ADA) is the leading innovator of custom-installed electronics and a founding member of CEDIA (Custom Electronics Design and Installation Association). Founded in 1977, ADA manufacturers distributed audio and video systems for whole-house, multi-room entertainment as well as electronics for high-end home theater systems. As the recognized brand of excellence, ADA offers products designed to provide superior sound quality and ease of use. All products are manufactured with pride in the United States of America.

ada audio
design
associates®

CONTACT INFORMATION:

Audio Design Associates, Inc. (ADA)
602-610 Mamaroneck Avenue
White Plains, NY, 10605

Tel: 914-946-9595
Fax: 914-946-9620
E-mail: literature@ada-usa.com
www.ada-usa.com



Founded in 1979, Boston Acoustics, Inc. is a renowned performance and value leader in the audio industry. Boston designs, manufactures and markets high performance audio systems for use in home music and audio-video systems, aftermarket and OEM automotive systems, and custom built-in audio systems.



RECEPTER RADIO® HD

High performance digital AM/FM table radio

KEY FEATURES & BENEFITS:

- Groundbreaking HD Radio™ technology
- Purpose-built Boston speaker driver is capable of wide dynamics impressive tonal range
- The tuner's high selectivity allows it to lock in on closely spaced stations
- Patented BassTrac® circuitry delivers smooth, distortion-free sound
- Memory tuning for up to 20 AM/FM presets in any order desired
- Two independent clock alarms that can be set for waking up to music, beeper or both
- Multi-line display shows song title, artist, station name and other broadcast data
- Handy "credit card" size remote control

Boston
Boston Acoustics

Available today at your local retail store

CONTACT INFORMATION:

Boston Acoustics, Inc.
Colleen Cronin
300 Jubilee Drive
Peabody, MA 01960

Tel: 978 538 5000
Fax: 978 538 5199
www.bostonacoustics.com



KD-SHX900

Car CD receiver – 1-DIN size CD receiver with built-in HD Radio™ tuner

KEY FEATURES & BENEFITS:

- FM digital with CD-like audio quality
- AM digital with FM-like audio quality
- Accurate, drift-free reception
- Wireless data services including on-demand radio
- Automatic blending of digital and analog signals
- Station name display
- ID3v2 data (artist, song title, album title, etc.)
- CD/CD-R/RW/MP3/Windows Media® Audio playback
- Full-color OEL display
- Motorized slide-out face
- 200-watt MOS-FET power supply
- Digital 7-band iEQ

Headquartered in Wayne, New Jersey, JVC Company of America is a world-leading consumer electronics manufacturer. The company distributes a complete line of video and audio equipment, including camcorders, VCRs, D-VHS recorders, DVD players, satellite systems, color televisions, home and portable audio equipment, mobile entertainment and recording media.

Available today at your local retail store

JVC
The Perfect Experience / —

CONTACT INFORMATION:

JVC Company of America
Pete Karmazyn, National Product Specialist
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1700 Valley Road, Wayne, NJ 07470
United States

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www.jvc.com



For over 40 years, Kenwood has designed audio and video products that are powerful, easy to use and guaranteed to enhance your entertainment experience. Kenwood has produced dozens of groundbreaking products, including the most popular stereo receiver ever sold in the United States, the world's first audio/video amplifier for home theater use and the first anti-theft car cassette deck. Kenwood continues to lead the way with the most popular HD Radio tuner, the KTC-HR100.



KTC-HR100

Kenwood's KTC-HR100 HD Radio™ tuner provides great digital sound along with program information such as artist and song title, and significantly improves performance in the face of multipath interference. The KTC-HR100 easily connects to any 2005, 2004 or 2003 Kenwood HD Radio-ready in-dash receiver via the 5-line changer terminal. Complete HD Radio tuner control is provided via the receiver's front-panel control buttons, and HD Radio program information is shown on the receiver's LCD display.

KEY FEATURES & BENEFITS:

- Fully compatible with HD Radio digital FM and digital AM broadcasts for dramatically improved sound and fidelity
- Fully compatible with existing (analog) FM and AM broadcasts
- Provides artist, song title and other content information
- Uses existing AM/FM antenna
- Compatible with all 2005-2003 Kenwood HD-ready in-dash receivers (connects via 5-line changer terminal)
- Special features for use with broadcast equipment, including "Broadcaster Mode" for transmitter blend delay calibration, and an available rack-mount
- Certified by iBiquity Digital, Inc.

KENWOOD

Available today at your local retail store

CONTACT INFORMATION:

Kenwood USA Corporation

Tel: 1 800 Kenwood
www.kenwoodusa.com



KHD-100

KHD-100 is an HD Radio™ system that provides high quality digital sound and program information for songs and artists over HD Radio technology. KHD-100 is a hideaway type and can be installed very easily in a car by the user. Additionally, the KHD-100 is capable of decoding MP3 files in MMC or CD format.

KEY FEATURES & BENEFITS:

- Supports HD Radio digital AM/FM
- Supports analog AM/FM
- Automatic blending for analog and digital signal
- Uses current AM/FM vehicle antenna
- ID3 Information (album, artist, title, etc.) display
- Various graphic LCD displays (160 x 32 dot pixel)
- MMC interface
- Supports decoding of MP3 files
- User-friendly interface
- Supports Tomorrow Radio

Kiryung Electronics was established in 1990 and has been very successful in the satellite video receiver field. Kiryung specializes in the Digital Conditional Access System for SVR and introduced the SDARS (Satellite Digital Audio Receiver System) radio receiver in 2002.

The company has very strong engineering capabilities in the fields of highly complex hardware platform designs, embedded software for low level drivers, OS, interactive platforms, good graphic user interfaces and digital RF development at a reasonable cost. Kiryung is also developing HD Radio™ and Telematics systems based on its previous experience in digital technology. Kiryung hopes to become the 'Leader in Digital.'

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Panasonic Consumer Electronics Company, a division of Matsushita Electric Corporation of America, markets a broad line of digital and other consumer electronics products. Based in Secaucus, N.J., Matsushita Electric Corporation of America is the principal North American subsidiary of Matsushita Electric Industrial Co. Ltd. (NYSE: MC) and the hub of Panasonic's U.S. marketing, sales, service and R&D operations. Additional information on Matsushita Electric Corporation of America and Panasonic is available at www.panasonic.com.



CQ-CB8901U

Windows Media® Audio (WMA), MP3, CD-player/HD Radio™ receiver with full dot matrix display

KEY FEATURES & BENEFITS:

- MOS-FET high power amp (50W x 4 max.)
- SQ7 (7-band sound quality)
- 5V/60 ohms preamp-out (front, rear, subwoofer)
- Switchable HPF and LPF (crossover)
- SBC-SW (super bass controlled subwoofer)
- HD Radio
- XM satellite radio ready
- 18 FM and 6 AM presets
- WMA/MP3 playback from CD-R/RW discs
- DVD/CD changer control
- Customizable 3DDM (3D dot matrix) display
- Dual AUX input
- Motorized and removable full front panel
- Day and night design

Available today at your local retail store

CONTACT INFORMATION:

Panasonic Consumer Electronics Company
 Ken Baker, Mobile Electronics Division
 One Panasonic Way, 1-B9
 Secaucus, NJ, 07094, USA

Tel: 201-392-6261
www.panasonic.com





HDR551

HD Radio™ radio receiver and MP3 player (US only)

KEY FEATURES & BENEFITS:

- Digital FM/AM and analog FM/AM
- Mass storage device (SD support)
- Radio signal recording and playback
- Direct encoding
- IBOC Technology

As the IT industry, centered in mobile and digital technology, is changing rapidly, Personal Telecom, Inc. (Perstel) is committed to value and innovation, offering customer-oriented thinking, product reliability, progressive concepts and cutting-edge technology. Perstel is qualified for its retaining technologies by many government bodies, enterprises and corporations. Since the company was founded in 1996, both executives and employees have maintained their focus on achieving customer-oriented management. Perstel has the noted distinction of bringing the first handheld DAB receivers to the market.

HD
Radio

Perstel

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www.perstel.com



Sanyo Electric Co., Ltd. (NASDAQ:SANYY) is a \$20 billion manufacturer and distributor of consumer and commercial electronics, including multimedia and telecommunication products. Based in Chatsworth, California, Sanyo Fisher Company (a division of Sanyo North America Corporation, a subsidiary of Sanyo Electric Co., Ltd.) markets PCS phones, audio systems, portable and mobile electronics, televisions, DVD players, dictation devices, digital cameras, home appliances, LCD projectors, security video equipment and air conditioning systems.



ECD-HD1990M

MP3/Windows Media® Audio (WMA) CD Receiver with built-in HD Radio™ tuner

KEY FEATURES & BENEFITS:

- Supports HD Radio digital FM/AM
- Supports analog FM/AM
- Automatic blending of digital and analog signals
- Station name display
- ID3 information (artist, album title, song title, genre)
- CD/CD-R/RW/MP3/WMA/CD-Text playback
- 4-tone fine pitch full dot matrix VFD
- 10-band/ 6-mode parametric EQ
- 7-mode ambient sound control
- Time-alignment control

SANYO

CONTACT INFORMATION:

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Fax: 818-717-2703
hyoshida@sanyo.com





TDI-1003-A2, TDI-2003-A1

TBK's HD Radio™ modules make it easy to implement HD Radio technology into any receiver. The modules are designed to be flexible and utilize the latest cutting-edge DSP technology. There will be no hardware changes in future models.

KEY FEATURES & BENEFITS:

- TDI-1003-A2 (all-in-one module using DRI300),
TDI-2003-A1 (IDM using DRI300)
- Application for HD Radio IBOC and analog AM/FM
- RF, DSP, IDM module is on board
 - mini size: 41.2 x 110 x 12.6 mm – with shield case
 - IDM size: 61.6 x 40.8 x 12 mm – without shield case
- Provides high sensitivity and low distortion
- Automatic blending of analog and digital
- Digital service supports MPS, SIS, etc.
- I²C for external control

For the last 25 years, TBK Electronics Corp. has maintained the top position in producing RF tuners for car audio. We have advanced into providing amplifiers and communications for cars, working toward the creation of a multimedia world inside every car where audio and communication are integrated into one system. Through ever continuing R&D and managerial innovation, we continue to hold our lead as the foremost in the industry.

CONTACT INFORMATION:

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www.tbk.co.kr

Toko, Inc. is a multinational manufacturer and marketer of leading-edge electronic components, assemblies and systems. Toko's widespread electronics technology spans many fields of technical expertise and has allowed a diversification into integrated circuits, magnetics, electro-ceramics, RF, power and radio tuner module designs. Toko's expertise in RF products, in both discrete and module form, represents key components for the consumer electronics and automotive industry.



Ibiquity  Radio Certified

HD RADIO™ DECODER MODULE (TME1217)

The Toko HD Radio decoder (TME1217) is a fully integrated module that would be fitted to a radio main board. This module takes input data from the digital baseband and processes the output signal into digital audio, in I²S format. Control and data interface is provided via an I²C format. The Toko HD Radio Decoder Module (TME1217) has a low profile compact design which offers a quick solution to manufacturers looking for a reduction in development time and resources.

KEY FEATURES & BENEFITS:

- HD Radio, digital AM/FM audio and data decoding
- Digital/analog audio selection
- Digitally controlled via I²C bus
- Operating voltage: 1.2 V, 3.3 V
- 82.6 x 49.2 x 14.6 mm
- Flash memory: 2 M x 16 bit
- SDRAM: 2 M x 32 bit

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HD RADIO™ RECEIVER FOR AUTOMOTIVE APPLICATIONS

Visteon is a key partner with iBiquity Digital Corporation in developing HD Radio technology products for the automotive industry. Practical implementation of IBOC technology radios is enabled by Visteon's MACH® DSP technology.

KEY FEATURES & BENEFITS:

- HD Radio FM significantly reduces multipath spitting and signal drop out
- HD Radio AM provides high-fidelity audio quality and significantly reduces signal drop out

HD Radio FM provides a high-speed wireless data pipe into the vehicle and HD Radio AM provides a medium-speed data pipe into the vehicle:

- Enables OEM to provide consumer with data applications such as traffic, weather and e-commerce
- Data reception with HD Radio technology can be customized to users' preferences and current location
- User can receive basic program details (e.g., song title, artist)
- Entertainment and e-commerce content from data pipe can be used in vehicle's rear-seat entertainment system in conjunction with high-quality audio

Visteon's proprietary DSP radio technology enables HD Radio signal reception:

- Seamless transitions between digital and analog signals
- Fully compatible with traditional analog broadcasts
- Uses existing AM/FM vehicle antenna

Flexible and scalable display solutions:

- Multiple levels of display solutions to match various HD Radio data reception
- Supports new data capabilities as they become available from broadcasters
- Low-level solution: display program-associated data, such as song title and artist
- High-level solution: display application data such as traffic, weather and news

Developed from Visteon's existing digital radio architecture:

- Reduced time-to-market
- Increased confidence in product design using proven technologies and components
- Efficient, proven system design with minimum number of ICs

Visteon Corporation is a leading full-service supplier that delivers consumer-driven technology solutions to automotive manufacturers worldwide and through multiple channels within the global automotive aftermarket. Visteon has about 72,000 employees and a global delivery system of more than 200 technical, manufacturing, sales and service facilities located in 25 countries.

CONTACT INFORMATION:

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www.visteon.com





TEXAS INSTRUMENTS' STRATEGIC PARTNERS



RadioScape is a leading designer of digital radio receiver modules which are manufactured under license and which use Texas Instruments' digital radio baseband devices. RadioScape's Software Defined Radio allows manufacturers to differentiate their products with short development cycles. Features available include DAB digital radio with FM, RDS, CD and MP3 capability. TI, with software from RadioScape, Ltd., provides a complete digital radio solution with its TMS320DRE200 or TMS320DRE310 DSP-based digital baseband. These basebands deliver maximum flexibility along with low-cost and low-power requirements.

RadioScape's products and solutions enable broadcasters and receiver manufacturers to satisfy the explosive demand for new digital radio products and services. www.radioscape.com



In one of the most revolutionary moves since Frank Conrad introduced radio broadcasting in 1919, iBiquity Digital Corporation (iBiquity Digital) has created HD Radio™ technology, the technology that will allow radio broadcasting to digitally enter the 21st century.

HD Radio technology, a breakthrough in radio broadcasting, allows digital radio signals to ride the same airwaves as analog AM/FM radio, bringing crystal-clear sound from any radio station to the listening public along with integrated wireless data services that will put news and entertainment at your fingertips. Unlike other technologies, this is the only FCC-approved system that provides for true, end-to-end digital broadcasting within the existing spectrum in conjunction with continued analog broadcasts to legacy receivers.

TI partnered its expertise in DSP technology with software by iBiquity Digital Corporation, the sole developer and licensor of HD Radio technology, to develop the TMS320DRI300 and TMS320DRI350 basebands. These low-cost HD Radio basebands allow digital radio manufacturers to launch innovative and differentiated products for mobile entertainment. www.iBiquity.com

ACOUSTIC SOLUTIONS



SP111



PORTABLE
KISS RADIO



PORTAL 1



PORTAL 2



PORTAL 3

ALBA



TRDAB2821

CAMBRIDGE AUDIO



AZUR 640T DAB/FM TUNER

CROWN



CDR 140

FERGUSON



FRG-120D

HITACHI



AX-M68D

INTEMPO DIGITAL



PG-01



KT SERIES

LG ELECTRONICS



LPC-BM340



LF-BM340

MORPHY RICHARDS



ORDIO DAB-27015



ORDIO DAB REWIND-27016

PERSONAL TELECOM



DR101



DR201



DR601



BLUENOTE

ROBERTS RADIO LIMITED



CRD-9



RD-3



RD-11



RD-5



RD-6R



RD-7



RD-8



RD-10



RD-12

SANGEAN



DDR-3



DPR-2



DCR-9

SONY



XDR-S1

STEEPLETONE



SDAB1

TANGENT



DAB-50

TEAC



SR-L50DAB

BOSTON ACOUSTICS



RECEPTOR RADIO® HD
Available Spring 2005

JVC



KD-SHX900

KENWOOD



EZ500



KTC-HR100

PANASONIC



CQ-CB8901U



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