THE NEW AR5001D

PROFESSIONAL GRADE COMMUNICATIONS RECEIVER
Super Wide Range

- 40 kHz to 3.15 GHz in 1 Hz steps.
- Up to 0.01ppm frequency accuracy.
Multi-mode reception

- USB/LSB, CW, AM, SAM, FM, wide FM, FM stereo
- CTCSS, DCS, DTMF, APCO 25 (option)
Direct sampling architecture

- 14bit/65Ms/s in VLF, LF, HF bands for high IMD and IP3 characteristics.
Digital signal processing

- 45.05MHz IF processed by independent signal processor.
- No AGC circuitry used in analog stage for high level accuracy & IF-out linearity.
FFT signal analyzer

- Fast refresh spectrum display, adjustable 400kHz to 10MHz.
Wideband IF-OUT

- 15MHz wide analog IF
- Optional 1MHz wide digital IF (I/Q) for spectrum recording & playback on PC.

(25MHz-3.15GHz)
High accuracy reference frequency

- 0.01ppm with optional GPS receiver.
Simultaneous reception

HF

Channel 1

+ 

VHF/UHF

Channel 2 + Channel 3

Max. 5 MHz
DDS local oscillator

- Fast frequency switching (100 steps/sec)
SD audio recorder

- Up to 240 hours of wav audio recording on a 32GB SDHC card.
Detect and watch analog wireless camera transmissions.
AF IQ-OUT

- 12kHz IF output for DRM decoding on PC.
NEW AR5001D

The power from the inside!

RF FRONT-END

LOCAL OSCILLATOR

Top cover removed
NEW AR5001D

All RF-front ends are carefully designed by microwave CAD (Computer Aided Design) system for optimum performance.

High front blocks:
- 1~2GHz
- 2~3.2GHz
- 25MHz~1GHz
NEW AR5001D

LOCAL OSCILLATORS ARE CAREFULLY DESIGNED BY MICROWAVE CAD (COMPUTER AIDED DESIGN) SYSTEM FOR OPTIMUM PERFORMANCE
NEW AR5001D

The power from the inside!

HF BLOCK
Direct Sampling Architecture

CONTROLLER & DEMODULATOR

10 BPF BLOCKS

Bottom cover removed