

Authority On Radio Communications

SDR Digital Voice Receiver

The first software defined receiver of its kind to receive and decode virtually ALL popular digital modes.

MOTOTRBO™ DMR™ dPMR™ APCO P25 NXDN™ Icom D-Star™ Digital CR Yaesu Kenwood® Alinco EJ-47U

VFO-Z

VFO

SR.GRP

SRCH

SC.GRP

SCAN

SD/SDHC CARD PASS SET MODE IF BW

LOCK

MONI

SQL

1 ABC

PRIO

CONF

7 RST

OFFSET

.[]],

4 JKL

CLOCK

3 GHI

SR.PROG

6 OPQ

OPTION

9 xyz

M.in

ENT

CLR DEL

STEP

2 DEF

AGC

5 MN

EDIT

8 uvw

SLEEP

0 +- */

AOR Digital Voice Receiver AR-DV1

E FMG OD

VOL PUSH POWER

SQL PUSH DISP

AR-DV1 SDR Digital Voice Receiver

It's the FIRST software defined digital voice receiver to receive and decode virtually ALL popular digital modes such as: MOTOTRBO[™], DMR[™], dPMR[™], APCO P25, NXDN[™], Icom D-Star[™], Digital CR, Yaesu, Kenwood[®], and Alinco EJ-47U as well as conventional analog signals including AM, wide and narrow FM, upper and lower sideband and CW.



Giving monitoring operators the ability to receive a wide variety of digital and analog frequencies, the AR-DV1 can be used by military, federal, state and local law enforcement agencies, emergency managers, diplomatic services, news-gathering operations, and home monitoring enthusiasts in areas where government, law enforcement, amateur radio operators and public safety agencies use different digital formats.

The AR-DV1 can be operated independently or computer controlled (programmer friendly command list supplied) for easier programming and monitoring. It features:

SPECIFICATIONS

Micro-USB computer interface
Supply of programmer friendly command list for PC control through terminal software
Built-in SD/SDHC card reader for audio recording

Wide band coverage from 100kHz to 1300MHz

- Higher 1st IF frequency 1705 MHz provides higher image rejections
- CSV memory data capability for frequency uploads/downloads
- Easy firmware updates through SDHC
- 2000 memory channels (50 channels × 40 banks)
- Alpha-numeric channel labels
- Offset reception and priority channel selection
- Auto-notch filter

- Noise reduction
- Voice inverter
- Discriminator output for external decoders

Specifications are subject to change without notice or obligation. Other company and product names mentioned in this document are the property of their respective owners. Product and brand names used are for identification purposes only. *Cellular frequencies blocked in the US.

** Following restrictions apply:

D-STAR	Narrow band only. Data mode not supported.
ALINCO	Only with digital unit EJ-47U (voice mode F1E).
YAESU	V/D mode only.
DIGITAL CR	AMBE+2 system only.
NXDN	6.25kHz mode only.
dPMR	dPMR446 and Tier1 mode only.
P25	Non-encrypted, conventional mode only.
DMR	Tier 1 & Tier 2 modes, non-encrypted.

Frequency range:	100 kHz \sim 1300* MHz (Note: Specifications guaranteed above 530 kHz) (Cellular frequencies blocked for US consumer version)
Digital receive modes:	D-STAR (GMSK), ALINCO (GMSK), YAESU (C4FM), DIGITAL CR (C4FM), NXDN (C4FM), dPMR (C4FM), P25 (Phase 1) (C4FM), DMR (4FSK, 2X-TDMA). (**)
Analog receive modes:	FM, AM, Synchronous AM (SAH, SAL), USB, LSB, CW
Receiver system:	100 kHz ~ 18 MHz : Direct conversion 18 MHz ~ 180 MHz: Double conversion super heterodyne (1st IF: 393 MHz, 2nd IF: 31.0 MHz) 180 MHz ~ 1300 MHz: Triple conversion super heterodyne (1st IF: 1705 MHz, 2nd IF: 393 MHz, 3rd IF: 31.0 MHz)
IF filter bandwidths:	200 Hz, 500 Hz, 1.8 kHz, 2.6 kHz, 3.8 kHz, 5.5 kHz, 6 kHz, 8 kHz, 15 kHz, 30 kHz, 100 kHz, 200 kHz. (Receive mode dependant)
Receive assisted functions:	Auto notch, Noise reduction, Analog voice descrambler (not available for the US consumer version), AGC, Step adjust, Offset receive, Priority
Squelch modes:	Level squelch, Noise squelch, Voice squelch, Tone squelch, DCS
Frequency stability:	Less than +/- 2.5 ppm after warm-up (5 minutes)
Sensitivity:	530 kHz ~ 17.99999 MHz : 0.71μV typ. (12dB SINAD) 18 MHz ~ 1300 MHz: 0.32μV typ. (12dB SINAD)
Number of VFO's:	3
Memory channels:	2.000
Memory banks:	40
Search banks:	40
Priority channel:	1
Pass frequencies:	50 per bank or VFO
Audio outputs:	Internal speaker & speaker-out: min.1.0 W @ 8 Ohm, 12 V DC input. 10% THD. 3.5mm jacks for headphone, speaker-out and discriminator (FM only
Recording/playback media:	SD/SDHC, 1 channel, 19.2 kHz sampling in wav format. Approx. 7 hours recording for 1 GB.
Timer functions:	Sleep timer 30, 60, 90, 120 min., alarm and timer recording (once, daily, weekly)
PC connection:	Micro-USB for receiver control with command list.
Antenna input:	BNC, 50 Ohm
Maximum antenna input level:	+OdBm
Power requirements:	10.8 ~ 16.0 V DC, approx. 750 mA (at 12V DC)
Operating temperature:	0 ~ 50 °C, 32 ~ 122 °F
Dimensions:	Approx. 178 mm (W) × 50 mm (H) × 215 mm (D) (proj.excl.) 7.00 (W) × 1.97 (H) × 8.46 (D) inches
Weight:	Approx. 1.5 kg (3lb 5oz)
Supplied accessories:	AC power adapter, Telescopic antenna, 4GB SDHC card, printed manual including command list, PC Software not supplied.

The Serious Choice in Advanced Technology Receivers



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