KENWOOD

# NXR-1000 series
Radios – For each and every

# NXR-1700/1800
## VHF/UHF РЕТРАНСЛЯТОР

NXDN™ DMR

## МУЛЬТИРЕЖИМНОЕ, ЭКОНОМИЧНОЕ, ЭКОНОМЯЩЕЕ МЕСТО РЕШЕНИЕ

Этот компактный многорежимный конвенциональный ретранслятор – ключевое оборудование цифровой связи, являющееся специализацией KENWOOD – поддерживает функции и характеристики, которые делают его достойным преемником существующих ретрансляторов DMR и NXDN, таких как TKR-D710/D810 и NXR-710/810. Цифровой протокол выбирается при заказе настройки отдельных устройств для DMR или NXDN с возможностью сохранения заводских настроек аналогового FM по умолчанию.

### ОБЩИЕ ХАРАКТЕРИСТИКИ

- 50/40 W – 1 W RF <uohgyfhsghklv□ (h50/40 W@50%, 25 W@100% Jhqbcpbde)
- Edcdhfidlcihaheyl□ afllvihlhley□ cfhhclhcdhlhc8□
- hevrhc 1.71-xcf□ OLED kbdhgdfb□ bpbnhufbbkie_yfb
- Hoesctleyl h□ lfhmehf□
- rclhdily
- h32dgeh□
- hpnhhhihlhdhe□ : DMR Tier II /NXDN Lbpbhggucghfm)
- USB-A Jat_feymbhdk_kk mh□
- rc In/Out Pin hl DB25
- Non-repeat Simplex / Semi-Duplex Mode□ for Analog and NXDN Digital
- Hot Standby System Redundancy
- lhcIL IP Network
- Fhhyfrmlapy
- SNMP Ihlhdhelyfhchlq_lghklb□ hsmxkbkl_fm
- lhd□ G.711 mbhdh_dh(ey□ l_klhhcdhgkhebbklhhggbo□ ibeh_gbc)
- □ lphhmieth,□
- IPIF to External Applications (for IP Console, OTAP) / Voice Logging*3 for NXDN only
- lhc SIP IF _ag_rg_hrexa□ □ (Lhevdhpbnhhc) *1, *2
- IP Bgl_n_ckbklgpbhgghh□ mie_gby (IPRCI)
- lhryahihlv (HTTPS)
- CW ID
- Lcfmyde□
- Fmevlclhydhphevy,□ lv h□ 16 Kclh ( eypbnhhh b :gehhhh )*2
- Voting Repeater + h15 J_kb_h□ (:geh□ / NXDN / DMR)*2, *3
- IPk_lvkhf_klbfyk_ibl_fb□ k_bb NXR-7 10/810 & TKR-D710/D810 (<hafhghklvaf_guhiheg_gbydd□ qklbkms_klmxsbopbnhuo□ lbpbhgguokbkl_f□

### ЦИФРОВОЙ – ОБЩИЕ

- lhc AMBE+2™ <hdh□□
- hlfrhff□ Pnhhceahhc
- Site Roaming
- RF-Link: NXDN / DMR*3
- Repeat Encrypted Voice/Data□ (AES / DES)
- ihdihevahlec□ lepmiichh□

### ЦИФРОВОЙ – NXDN

- FDMA – Very narrow 6.25 kHz & narrow□ 12.5 kHz bandwidths
- Dhphevc1hf *2
- Dhlhevhhlmi *1

### ЦИФРОВОЙ – DMR

- TDMA 2-slot 12.5 kHz bandwidth□ equivalent to 6.25 kHz very narrow□ bandwidth
- DMR Tier II dhg□gpbhgevguc□ □bf *2
- Repeat Encrypted Voice/Data (DMR Enhanced Encryption)
- lah□

### FM АНАЛОГОВЫЙ

- FM hg□gpbhgevguc□ □bf
- G□ dhevdh QT/DQT

*1: L□m_lkyhghe_gb□kbbl□fbgeevyh_ki_q_gby□ khf□klbfhklbkwlhcfh_evx□
*2: Hipbylhffghhh_ki_q_gby
*3: >hklmighiha□

## Informative Front OLED Display


A large OLED display featured on the front panel is capable of displaying the following information: MAC/IP Address, RSSI/TX Power Setting Icon, Channel Number/Name, and RF Frequency as well as Firmware/ESN/License/Error information and other statuses.

## Size Comparison with Conventional Repeaters

Volumetric capacity can be reduced even when compared with the NXR-710/810 and TKR-D710/D810 repeaters.

The NXR-1000 Series repeaters require only a quarter of the rack space compared to the NXR-710/810 or TKR-D710/D810 Series models.

In addition, the NXR-1000 Series repeaters take up only half the rack space of other 1U repeaters that are 19-inch wide.

## SPECIFICATIONS

| GENERAL | | NXR-1700 | NXR-1800 |
|---|---|---|---|
| Frequency Range | | 136 - 174 MHz | 400 - 470 MHz |
| Channel Capacity | | 32 | |
| Channel Spacing | Analog | 25 / 20 / 12.5 kHz | 25 / 20 / 12.5 kHz |
| | Digital | 12.5 / 6.25 kHz | 12.5 / 6.25 kHz |
| PLL Channel Step | | 6.25 / 5 / 3.125 / 2.5 kHz | 6.25 / 5 / 3.125 kHz |
| Frequency Stability | | ± 0.5 ppm | |
| Power Supply | | 10.8 - 15.6 V DC | |
| Current Drain | Standby | 0.6 A | 0.7 A |
| | Transmitting | 12.0 A (Max. power), 9.0 A (25 W) | |
| Operating Temperature | | -30 °C to +60 °C | |
| Antenna Impedance | | 50 Ω | |
| Dimensions (W x H x D) | Incl. Projections | 214.5 x 44.0 x 242.9 mm | |
| | Excl. Projections | 208.5 x 44.0 x 211.5 mm | |
| Weight (net) | | 1.9 kg | |
| Applicable Standards | ETSI (EMC) | EN 301 489-1, EN 301 489-5, EN 55032, EN 55035 | |
| | ETSI (Spectrum) | EN 300 086, EN 300 113, EN 300 219, EN 301 166 | |
| | ETSI Safety | EN IEC 62368-1 | |

Specifications are measured according to applicable standards.
Specifications shown are typical and subject to change without notice, due to advancements in technology.
Details and timing of firmware and software updates are subject to change without notice.

| RECEIVER | | NXR-1700 | NXR-1800 |
|---|---|---|---|
| Sensitivity | DMR (5 % BER) | -7 dBµV (0.22 µV) | |
| | DMR (1 % BER) | -5 dBµV (0.28 µV) | |
| | NXDN (3 % BER) 12.5 / 6.25 kHz | -6 dBµV (0.25 µV) / -8 dBµV (0.20 µV) | |
| | NXDN (1 % BER) 12.5 / 6.25 kHz | -5 dBµV (0.28 µV) / -7 dBµV (0.22 µV) | |
| | Analog (20 dB SINAD) | -3 dBµV (0.35 µV) | |
| Selectivity | Analog 25 / 20 / 12.5 kHz | 80 / 78 / 74 dB | 78 / 76 / 72 dB |
| FM Hum & Noise | Analog 25 / 20 / 12.5 kHz | 55 / 53 / 50 dB | |
| Intermodulation | | 72 dB | |
| Spurious Rejection | | 85 dB | |
| **TRANSMITTER** | | **NXR-1700** | **NXR-1800** |
| RF Output Power | | 50 - 1 W (50 W @ 50% Duty, 25 W @ 100 % Duty) | 40 - 1 W (40 W @ 50% Duty, 25 W @ 100 % Duty) |
| Spurious Emission | | -36 dBm < 1 GHz, -30 dBm > 1 GHz | |
| FM Hum & Noise | Analog 25 / 20 / 12.5 kHz | 55 / 53 / 50 dB | |
| Audio Distortion | | 1 % | |
| Digital Protocol (DMR) | | ETSI TS 102 361-1, -2, -3 | |
| Emission Designator | | 16K0F3E, 14K0F3E, 14K0F2D, 12K0F2D, 8K50F3E, 7K50F2D,7K60FXD, 7K60F7D, 7K60FXE, 7K60F7E, 7K60FXW, 7K60F7W, 8K30F1E, 8K30F1D, 8K30F7W, 4K00F1E, 4K00F1D, 4K00F7W, 4K00F2D | |

## APPLICABLE ENVIRONMENTAL SPECIFICATIONS

| MIL-STD | 810F | 810G | 810H |
|---|---|---|---|
| High Temperature | 501.4/Procedure I , II | 501.5/Procedure I , II | 501.7/Procedure I , II |
| Low Temperature | 502.4/Procedure II | 502.5/Procedure II | 502.7/Procedure II |
| Temperature Shock | 503.4/Procedure I , II | 503.5/Procedure I | 503.7/Procedure I |



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