

Uniden BCD160DN & BCD260DN: Advanced APCO P25 Setup Guide

Disclosure Notice: The BCD160DN and BCD260DN do not support trunked-track following.

Before programming your scanner, visit the **RadioReference Database** to gather the frequencies, talkgroups, and system parameters for your local area.

Software Requirement

This feature is supported from the scanner radio firmware version **V2.00.03**.

If you are configuring your scanner via a PC, **Uniden BCD160DN,BCD260DN_SS software version V2.00.00 or later** is required.

Understanding P25 System Types & Limitations

Check the "Mode" Column: Even if a system is labeled as "Project 25 Phase II" on RadioReference, individual talkgroups may still use Phase I. Always look at the **Mode** column in the talkgroup lists:

D = P25 Phase I (FDMA). Fully supported.

T = P25 Phase II (TDMA). Fully supported (requires a dedicated memory bank).

E = Encrypted. **Cannot be monitored by any scanner.**

Search Mode Limitation: Basic Search Mode **cannot decode Phase II audio**. Phase II monitoring requires specific "seed" identifiers (**SysID** and **WACN**) that must be explicitly programmed into a dedicated memory bank to authorize decoding.

Bank Setup & Squelch Rules (Very Important)

Phase I vs. Phase II Separation:

Phase I frequencies can be mixed with NXDN, DMR, or conventional analog channels in the same memory bank.

Phase II frequencies **must be placed in their own dedicated bank**. Mixing Phase II frequencies with other modes in the same bank will prevent proper digital decoding.

Scanner Trunking:

The BCD160DN and BCD260DN **do not support automated trunked-track following**.

To avoid missing replies on multi-site trunked networks, manually group your frequencies by region or site inside each bank (e.g., Denton, Lewisville, Fort Worth).

Squelch Setting:

Set your physical squelch knob to **2 or 3**. Setting it to **0** forces the receiver to open continuously on empty channels, drastically slowing down your scan cycle.

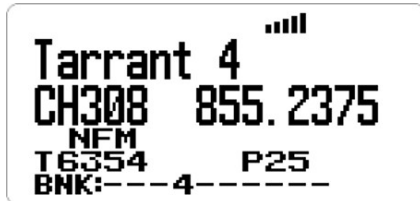
Note: The scrolling "SCAN" text on the LCD screen animates at a fixed rate and does not reflect actual physical scanning speed.

Example Bank Configuration

Bank [*]	System Type	Description
Bank 1	APCO P25 Phase II	Denton County Simulcast (Dedicated Bank)
Bank 3	APCO P25 Phase II	Lewisville Simulcast (Dedicated Bank)
Bank 4	DMR	Medical City Denton
Bank 5	APCO P25 Phase I	Fort Worth Fire (Layer 2)

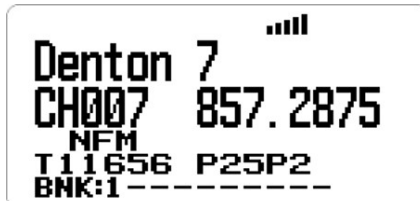
Screen Display Icons & Behavior

P25 (Phase I): Appears when actively decoding a Phase I voice signal. Displays the Talkgroup ID (e.g., T6354).



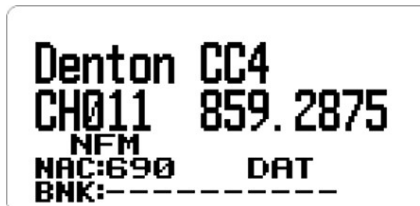
Tarrant 4
CH308 855.2375
NFM
T6354 P25
BNK:---4-----

P25P2 (Phase II): Appears when actively decoding a Phase II voice slot. The scanner automatically maps the active slot; manual slot tracking is unavailable.



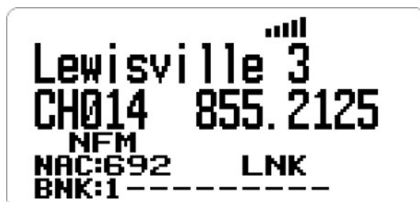
Denton 7
CH007 857.2875
NFM
T11656 P25P2
BNK:1-----

DAT (Data Channel): Indicates an active P25 Control Channel data stream. There is no voice audio, and the scanner will quickly resume scanning.



Denton CC4
CH011 859.2875
NFM
NAC:690 DAT
BNK:-----

LNK (Link): The scanner is actively trying to sync or connect to the system data stream. No audio is present.



Lewisville 3
CH014 855.2125
NFM
NAC:692 LNK
BNK:1-----

ENC (Encrypted): The transmission is encrypted and cannot be monitored. *Note:* If the system fails to send the encryption flag timely, the ENC icon might not appear, resulting in a raw, robotic digital noise stream.



Programming Steps

Option A: APCO P25 Phase I Setup

Menu → **Program Channel** → *Select your BANK*

P25 Phase 2 Mode → Set to **Off**

Edit Channel → *Select an empty channel slot* → Enter your frequency. (Program both **Red** control channels and **Black** voice channels from RadioReference).

Set Audio Type → Choose one of the following options:

ALL : Stops on all signal types. If enough digital data is present, it decodes it. If data is weak or missing, you may hear raw digital data noise.

Digital ONLY : Locks the channel profile to digital communication. *Note: Opening the squelch to 0 on this setting will not emit white analog static when no signal is present.*

Search (Excl.P2) : Automatically detects and decodes the active P25 NAC (Network Access Code) from the voice stream while bypassing Phase II overhead.

Set P25 NAC (Optional): Manually enter the hex NAC code (e.g., 692). This is highly recommended to prevent interference, and it is **mandatory** if you are trying to decode a **P25 One-Frequency Trunk** site.

Option B: APCO P25 Phase II Setup

Reminder: Phase II frequencies do not broadcast decoding seeds (SysID/WACN) natively in the voice data stream. You must look these up on RadioReference and save them to the Bank first. Only one set of system seeds is allowed per bank.

Menu → **Program Channel** → *Select your dedicated BANK*

P25 Phase 2 Mode → Set to **On**

Set Sysid → Enter the hex System ID from RR (e.g., 44A)

Set WACN → Enter the hex WACN number from RR (e.g., BEE00)

Edit Channel → *Select an empty channel slot* → Enter your frequency.

Set Audio Type → Set to **Digital ONLY**

Set P25 NAC → Enter the specific hex NAC for that frequency (e.g., 690). *Note: You can use multiple distinct NACs within the same bank, provided they belong to the same overarching SysID and WACN system.*

User Optimization & Troubleshooting Tips

Digital Waiting Time (D_WAITING): If you notice that the first syllable of a digital transmission is consistently cut off, adjust your **Digital Waiting Time** settings via your programming software. Setting this to between **100ms and 300ms** gives the processor a brief moment to evaluate and decode the P25 data stream before opening up the audio paths.

Control Channel Cleanup: After running your scanner for a few days, if you identify certain programmed control channels that never carry actual voice traffic, perform a **Permanent Lockout** on them (press and hold the **L/O**key). This stops the scanner from lagging on continuous data streams and increases your overall scanning speed.

Database Audits: Frequencies, site allocations, and talkgroup assignments change over time. Check the RadioReference database regularly to keep your programmed lists up to date.