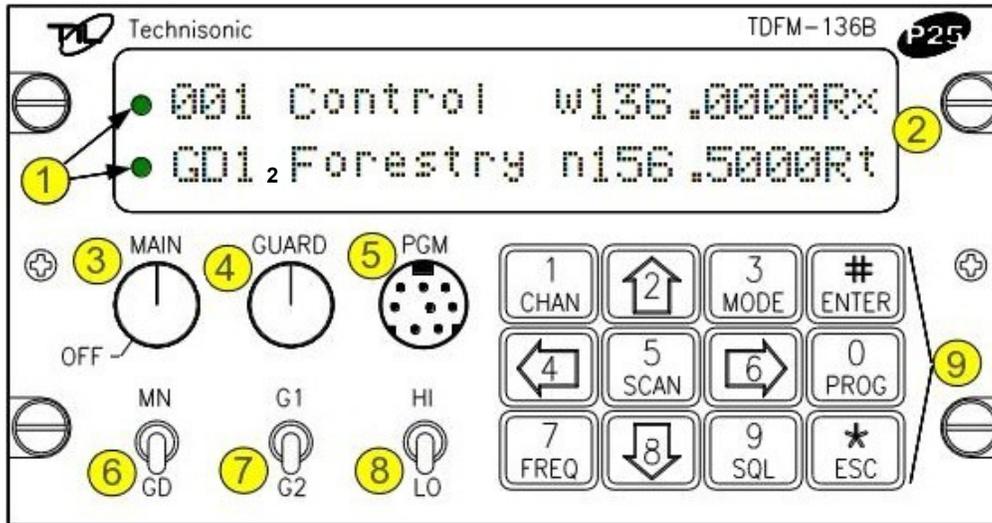


For Radio Firmware: 1.x.x



1. LED channel squelch indicators – Lights when signal received (Top: Main, Bottom: Guard).
2. Channel parameter display – (2 line by 24 character LED display) (Top: Main, Bottom: Guard).
3. **MAIN** Multi-function rotary encoder (default: Main volume, **press for ON, press & hold for OFF**).
4. **GUARD** Multi-function rotary encoder (default: Guard volume, **press for Squelch defeat**).
5. Data port – for use with KVL 3000+ keyloader or TDP-136 Programming software. Need USB Driver.
6. **MN/GD** (Toggle Switch) – Selects active channel (main or guard), **for transmit and memory edit**.
7. **G1/G2** (Toggle Switch) – Selects guard memory (GD1 or GD2), for transmit and edit.
8. **HI/LO** (Toggle Switch) – Selects transmit power, high (10W) or low (1W).
9. **KEYPAD** (12 Keys) – Control radio functions, 3 command levels as shown below.

Basic functions on L1 Command Level 1: press the desired "Cmnd" key				
Cmnd	Function	Edit Keys	OK	Exit
[1 CHAN]	SELECT CHANNEL MEMORY	[0 PROG] TO [9 SQL] ENTER THREE DIGIT CHANNEL NUMBER INTO MEMORY (001 to 230)	[# ENTER]	[* ESC]
[2↑]	DISPLAY BRIGHTER			
[3 MODE]	EDIT OPERATING MODE	[3 MODE] [2↑] [8↓] STEP UP/DOWN THROUGH OPERATING MODES (" n " or " D ")	[# ENTER]	[* ESC]
* [4←]	SCROLL CHANNEL DOWN	SCROLL DOWN THROUGH PROGRAMMED/ACTIVE MEMORY CHANNELS		
[5 SCAN]	SCAN ON/OFF	[5 SCAN] OR [* ESC] STOP SCAN		
* [6→]	SCROLL CHANNEL UP	SCROLL UP THROUGH PROGRAMMED/ACTIVE MEMORY CHANNELS		
* [7 FREQ]	EDIT FREQUENCY	[0 PROG] TO [9 SQL] SELECT Rx FREQUENCY THEN [# ENTER] REPEAT FOR Tx FREQUENCY	[# ENTER]	[* ESC]
[8↓]	DISPLAY DIMMER			
* [9 SQL]	EDIT TONE or CODE	[9 SQL] [2↑] [8↓] STEP UP/DOWN THROUGH SQUELCH MODES. Tx FOLLOWS Rx.	[# ENTER]	[* ESC]
	Tone: x - Off m - Monitor (i.e. x) t - On n - NAC only c - Code g - TGID + NAC	[2↑] [8↓] STEP UP/ DOWN THROUGH: TONES , CODES, TGID & NAC (\$ = HEX) [0 PROG] TO [9 SQL] DECIMAL EDIT FOR NOISE SQL VALUE (00 TO 15)	[# ENTER]	[* ESC]
[0 PROG]	GO TO NEXT LEVEL	GO TO THE NEXT HIGHER COMMAND LEVEL		
* [# ENTER]	TOGGLE HOME/CURRENT	TOGGLE BETWEEN 'HOME' CHANNEL AND CURRENTLY DISPLAYED CHANNEL.		
[* ESC]	TOGGLE TALK AROUND	FOR DUPLEX CHANNELS: RADIO USES Rx INFORMATION FOR Tx. "UP" ARROW.		

Press  to get to Command Level 2, then press the "Cmnd" key				
Cmnd	Function	Edit Keys	OK	Exit
* 	CREATE or EDIT CHANNEL	 TO  SELECT CHANNEL MEMORY TO EDIT THEN EDIT: SCAN LIST (L2-5), TEXT DESCRIPTION (L2-6) OPERATING MODE (L1-3), FREQUENCY (L1-7), & SQUELCH (L1-9)		
	COPY GUARD TO MAIN	COPY CHANNEL INFORMATION FROM GUARD TO MAIN (default disabled)		
* 	LOCK KEYPAD	PRESS & HOLD  TO UNLOCK KEYPAD		
	n/u			
	EDIT SCAN LISTS	   STEP UP/DOWN THROUGH AVAILABLE SCAN LISTS  TOGGLE ENABLE/DISABLE FOR SCAN (BAR OVER DIGIT = DISABLED)		
* 	EDIT CHANNEL TEXT	 STEP THROUGH THE FOUR CHARACTER GROUPS (AZ, az, 09, "BLANK"/)   SCROLL UP & DOWN THROUGH CHARACTERS IN SELECTED GROUP   MOVE CURSOR LEFT & RIGHT		
	CREATE SHADOW	 TO  SELECT CHANNEL MEMORY TO EDIT THEN EDIT: TEXT (L2-6), MODE (L1-4), SQUELCH (L1-9)		
	COPY MAIN TO GUARD	COPY CHANNEL INFORMATION FROM MAIN TO GUARD (default disabled)		
	TOGGLE ENCRYPTION	TOGGLE ENCRYPTION ON/OFF (ONLY FOR MEMORIES WITH KEY ASSIGNED)		
	GO TO NEXT LEVEL	GO TO THE NEXT HIGHER COMMAND LEVEL		
	SET HOME CHANNEL	SET THE "HOME" CHANNEL INTO MEMORY (FOR MAIN RADIO ONLY)		
	GO TO PREVIOUS LEVEL	GO TO THE PREVIOUS COMMAND LEVEL		

Press  +  to get to Command Level 3, then the desired "Cmnd" key				
Cmnd	Function	Edit Keys	OK	Exit
	SET BOOT CHANNEL	   STEP UP/DOWN THROUGH BOOT MEMORY OPTIONS		
	ASSIGN KEY BY KEYTAG	  PICK MEMORY,   PICK KEY,   PICK DECRYPT OPTION		
* 	SET P25 MODE	   TOGGLE P25 HEX/DECIMAL EDIT MODE (FOR TGID & NAC CODES)		
	DISPLAY FIRMWARE REV.	   STEP THROUGH RADIO MAIN & BOOT FIRMWARE VERSIONS		
	SET SCAN PARAMETERS	   SELECT REVERT MODE THEN  TO  SET TIMERS (REPLY, MONITOR, DELAY)		
	SET PTT TIMER	   STEP UP/DOWN THROUGH TIMER VALUES (30, 60, 90 SEC)		
* 	SET SIDETONE AUDIO	 TO  SET SIDETONE LEVEL (00 TO 255) (TDFM-136B = 44)		
	PC COMMUNICATION	MUST BE CONNECTED TO A PC OPERATING TDP-136 SOFTWARE		
* 	SHOW TONES/CODES	   TOGGLE Rx/Tx SQUELCH PARAMETER DISPLAY (Check Tones)		
	GO TO NEXT LEVEL	GO TO THE NEXT HIGHER COMMAND LEVEL (L4 PASSWORD PROTECTED)		
	n/u			
	GO TO PREVIOUS LEVEL	GO TO THE PREVIOUS COMMAND LEVEL		

NOTES:

- The channel being edited is determined by the position of the front panel switches MN/GD and G1/G2.
- Current command level is shown at 4th character on bottom row (between GD2 and text).
- Levels 2 & 3 time out. The radio will return to Level 1 if a "Cmnd" key is not entered within 5 seconds.**
- Download this Quick Reference Guide @ www.nifc.gov/NIICD/documents.html