

# TDFM-9000 SERIES

## QUICK FUNCTIONAL TEST

DOCUMENT NO: 146611  
REVISION: A  
DATE OF ISSUE: JULY 08, 2015



### **Technisonic Industries** **Limited**

240 Traders Boulevard, Mississauga, Ontario L4Z 1W7  
Tel: (905) 890-2113 Fax: (905) 890-5338  
[www.til.ca](http://www.til.ca)

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<b>REVISION HISTORY</b> [ 146611 ]				
REV	SECTION - PAGE -	DESCRIPTION	DATE	EDITED BY
A	3	Added reference to TDFM -9100	07/08/15	J R

## INTRODUCTION

This document describes how to perform a quick functional check of the TDFM-9000 or TDFM-9100 series radios. This test should be performed after a radio has been programmed or if the firmware has been upgraded in the field.

This test can be used to return a radio or RC back to service only after the unit has been programmed or firmware upgraded.

The purpose of this test is to verify that the radio transmits and receives correctly and that the controls are functioning properly.

If only a transceiver has been programmed, then perform the following tests from the front of the radio. If a RC unit has been upgraded, then connect the RC unit to a test radio and perform the following function test on the RC Unit.

If the radio has an RC connected, then test both the front panel and from the RC unit.

## TRANSCEIVER TEST

- 1) Connect power to the unit to be tested. Turn on the transceiver and RC remote controller (if applicable).
- 2) Verify on start up that the keyboard backlight LEDs illuminate.
- 3) Check that the unit recognizes all RF modules installed and displays the current firmware version.
- 4) Use the side keys to switch through all the bands on the display (TDFM/RC-9000, 9200, & 9300). Use the BAND key on TDFM-9100 and RC-9100.
- 5) On each band verify the channel selector mode on the knob and the [4/MUP] & [7/MDN] buttons change channels.
- 6) Verify the scroll keys [5/UP] & [8/DN] function.
- 7) Step through the knob modes by pressing the knobs several times.
- 8) Change mode to Volume. Verify the volume changes on all bands.
- 9) Check the display dimmer control by using the [9/DIM] and [6/BRT] keys.
- 10) Verify the operation of the [HOME], Soft Menu keys [ - ] (if programmed) and the four Function keys [1/F1], [2/F2], [3/F3] & [# /F4] (if programmed).
- 11) Toggle the [\* /TSW] and [0/ESW] keys and check to see if the display symbols change accordingly.
- 12) Connect a suitable backlight voltage the unit. Verify that the backlight dims the keypad.
- 13) Tune to a known conventional channel on each band. Connect a suitable load to the antenna ports. Verify that the unit will transmit and receive on the programmed channel. Note that when the unit is in transmit mode that the TX led illuminates and when the unit receives a signal that the RX led illuminates. For TDFM-9000 series the TX led is Red and the RX LED is green. For TDFM-9100 series the TX led is on the right side and the RX led is on the left.