

# **NNG-Toyota 5**

Navigation interface for select Toyota vehicles NTV-KIT597





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#### Overview

The NNG-Toyota 5 kit interfaces the widely-used **Nav N GO**<sup>©</sup> powered navigation system into select Toyota OEM media systems. Disassembly of the factory Toyota LCD is required and it is recommended that only a professional attempts this install. All factory Toyota touch functions are used for the navigation control. Additionally, this interface allows for a backup camera to be added with no additional parts.



# Dash Removal (Corolla)

1. Using a plastic tool, pry the dashboard surround beginning near the radio, it is held in with clips only.







2. Remove (4x) 10mm bolts securing the radio. Pop out the ABS light and reconnect to avoid tripping an AirBag Light.



# **Radio Modification**

Bring the radio to a work bench for disassembly. Make sure you're working in a clean area to avoid scratching the radio face (an ESD mat is preferred but even clean carpet would be better than nothing)

1. Remove any bracketry which secured the radio to the vehicle sub dash and set them aside.



2. On the bottom of the radio, remove (2x) Phillips head screws.



3. Remove (3x) screws, and the metal plate which will expose 2 FFC connectors.



4. Gently pry up the FFC connectors with a small flat heat or finger nail and remove the ribbons from 1 side (radio side). Using a small flat head, pry the clips up all the way around the radio. With the clips and ribbons free, the screen will detach from the rest of the radio.



5. Observe the area (on the screen) shown below. These 2 ribbons will need to be intercepted with the provided *Modification PCB*. With a small flathead, pry the connectors outwards (not upwards - towards the ribbons themselves) from the corners.



- Remove (2x) factory screws shown here:
- Replace the screw circled in yellow with the half-inch stand off (provided):



8. Grab the provided *Modification PCB*. Face the PCB like shown below and insert the wide brown ribbon (from the LCD panel) into the provided FFC connector. *Note: the FFC connector must be released (perpendicular to the PCB) in order for the ribbon to insert all the way. Be certain the ribbon is inserted fully and squarely, and clamp down the tab gently.* 



9. Once the Brown screen ribbon is connected, gently lay the *Modification PCB* down like shown below. *The metal tab from the radio must pass through the hole on the PCB (circled, yellow).* Use the provided screw to secure the PCB to the stand-off (from step 7, circled in white below) and the OEM screw for the other mounting location (circled, red).



10. Connect the OEM touch-ribbon to the provided *Modification PCB* like shown below (A). Then connect the smaller white ribbon to the OEM Toyota radio FFC connector as shown (B). Pins should face down on both.



11. Connect the provided screen ribbon from the *Modification PCB* to the OEM Toyota PCB. The connectors face each other, pins need to face *down* for both sides, you should see blue on both ends. Be certain the ribbon is inserted fully and squarely.



12. Using tin-snips, cut a 1" notch in the plate remove from step 3. Lay some cloth tape around any jagged edges for extra protection.



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13. If the provided LCD/TP Y-adapter was removed from the Modification PCB, reconnect it to the board now, metal pins must face *up towards you*. This connector is keyed and should only be connected in one orientation (note small square blocks on corners). The other end of this LCD/TP Y cable must run out through the radio chassis via the notch cut in the metal plate from step 12 (follows the ribbons).



14. If the metal tab circled below pushes on the Modification PCB while reconnecting the LCD to the radio, cut it off with tin snips for complete clearance:



15. Reconnect the ribbons previously removed in step 4.Place the notched-plate down and secure with the (3x) OEM screws. The TP and LCD cable should now be free outside of the radio like shown.

16. The Toyota 5 GPS interface can be secured with double-sided tape or Velcro to the bottom of the radio if desired. Adjust dip switches *before* this step, be sure to check for reverse camera functionality if added, or factory. See dip switch 1 settings.

- 17. Make all plug & play connections on the next page. Some notes:
  - a. All *T*-Harnesses connect at the radio.
  - b. Be certain *all connectors are connected the proper direction*. All connectors are keyed and only properly fit in one direction although they *can* be forced in the wrong direction, DO NOT force a plug into a connector, they should connect together easily.
  - c. 6 different connections must happen for *audio* from the NAV guidance to pass properly. Do not forget to connect the red & black 'speaker' connection from the *REAR LCD Harness (REAR LCD harness must connect to the GPS interface, even if the momentary button is not used).*
  - d. Refer to page 12 for DIP SWITCH settings.





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#### Toyota 5 Dip Switch Settings

REV CAM				Resolution				
Dip SW:	1	2	3	4	5	6	7	8
UP	Aftermarket	Х	Х	Х	Х	Х		Х
DOWN	OEM						Х	
FAO								

## Power

GPS Module has (2) LEDs as indicators when system is powered on. Both led lights should lit with good power. If either LED is dimmed or off, check for B+ and ACC power sources in main interface connector (red, yellow).

## Display

No Display

1. There are two led lights at the GPS module to indicate data and power. If led lights are OFF and radio is ON, check the power fuse inside the black box from the main harness

- 2. Check all wiring connectors for any loose connection
- 3. Check all wiring shielding for any damage during the installation process
- 4. Check all wiring for any type of damage
- 5. Check Modification PCB ribbon cables for loose, misalignment, or damage

#### No Touch Response

- 1. Check both Radio mode and NAV mode for touch responses
- 2. Check led lights for power and data indications
- 3. Check Y-Cable TP/LCD IN cable for any loose connection, or damage
- 4. Check PCB ribbon cables for loose, misalignment, or damage

No GPS software loaded, touch screen alignment screen occurred Check map SD card at GPS module, see any sign of missing, loose, pop-out, misalignment, or damage

#### Sound

- 1. Check all cable for connections to Audio Box for loose, or damage
- 2. Check software volume settings, ensure volume is not muted
- 3. Check connections at radio for loose, damaged wires

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