

## **Dual Camera Interface for 4-inch "My Ford" factory display (Part # 9002-2780 v2)**

**Please read thoroughly before starting installation  
and check that kit contents are complete.**

### **Items Included in the Kit:**

2780 v2 interface module  
USB cable (for updates)  
RCA input cable  
Plug & Play T-harness

### **Tools & Supplies Required:**

7mm socket  
Multi-meter or computer safe test light  
Wire Ties or Electrical Tape  
Plastic Trim Removal Tool  
Vehicle service manual (If needed)



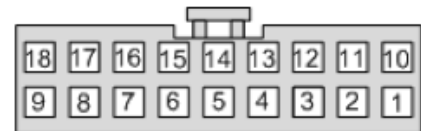
### **Safety Precautions:**

- Work in a well-ventilated area that is clear of obstructions.
- Secure vehicle with tire chucks in both front and rear of tires.
- Turn vehicle accessories OFF and ensure ignition key is in OFF position.
- Wear safety goggles and snug fitting clothes.
- Use tools only for their intended purpose and which are in good repair.
- Only perform this task if confidence, skill, and physical ability permit.

**NOTE: We strive to provide accurate and up-to-date installation instructions.  
For the latest full color instructions please visit [www.brandmotion.com](http://www.brandmotion.com)**

**2780 v2 pin out:**

PIN #	Description	Color
1	12v (+) constant input	Yellow
2	Input 1: <b>Force RVC</b>	Red
3	Input 2: <b>Force FVC/AUX VID</b>	Blue
4	Input 3: <b>--Not Used--</b>	Pink
6	VIDEO OUT RCA	Orange/White
7	RCA Shield	Orange
8	CAN HI (Radio Side)	White/Blue
9	CAN HI (Car Side)	Brown/Black
10	Ground (-)	Black
11	Output 1: <b>ACC (+)</b>	White/Red
12	Output 2: <b>Reverse (+)</b>	White/Blue
13	Output 3: <b>Front CAM power</b>	White/Purple
15	Front RCA Video IN	White
16	Rear RCA Video IN	Yellow
17	CAN LO (Radio Side)	Blue
18	CAN LO (Car Side)	Brown



**Wire side**

***Any additional wires not mentioned here are not used for this install.***

**SCREEN REMOVAL AND MODULE INSTALLATION:**

1. Remove the 4" media screen from the dashboard, above the CD player.
2. Connect the provided Plug & Play T-Harness to the OEM ford 12-pin plug previously connected to the radio.
3. After installing and running your reverse camera to the dash opening, connect your RVC signal to the Yellow RCA found on the Plug & Play T-Harness. Power your camera with an ACC source (OUTPUT 1 provides 12v ACC @ 1 amp MAX).
4. Connect the 2780 v2 module to the 18-pin harness on the Plug & Play T-Harness.
5. Connect the male end of the Plug & Play T-Harness to the screen and proceed to the next section.



## 2780 v2 PROGRAMMING AND TESTING:

Programming for the 9002-2780 v2 is automatic. After all connections are properly made and the module is connected, turn the car on to **IGNITION**, wait for the radio to fully boot and settle before testing functionality.

### NOTES:

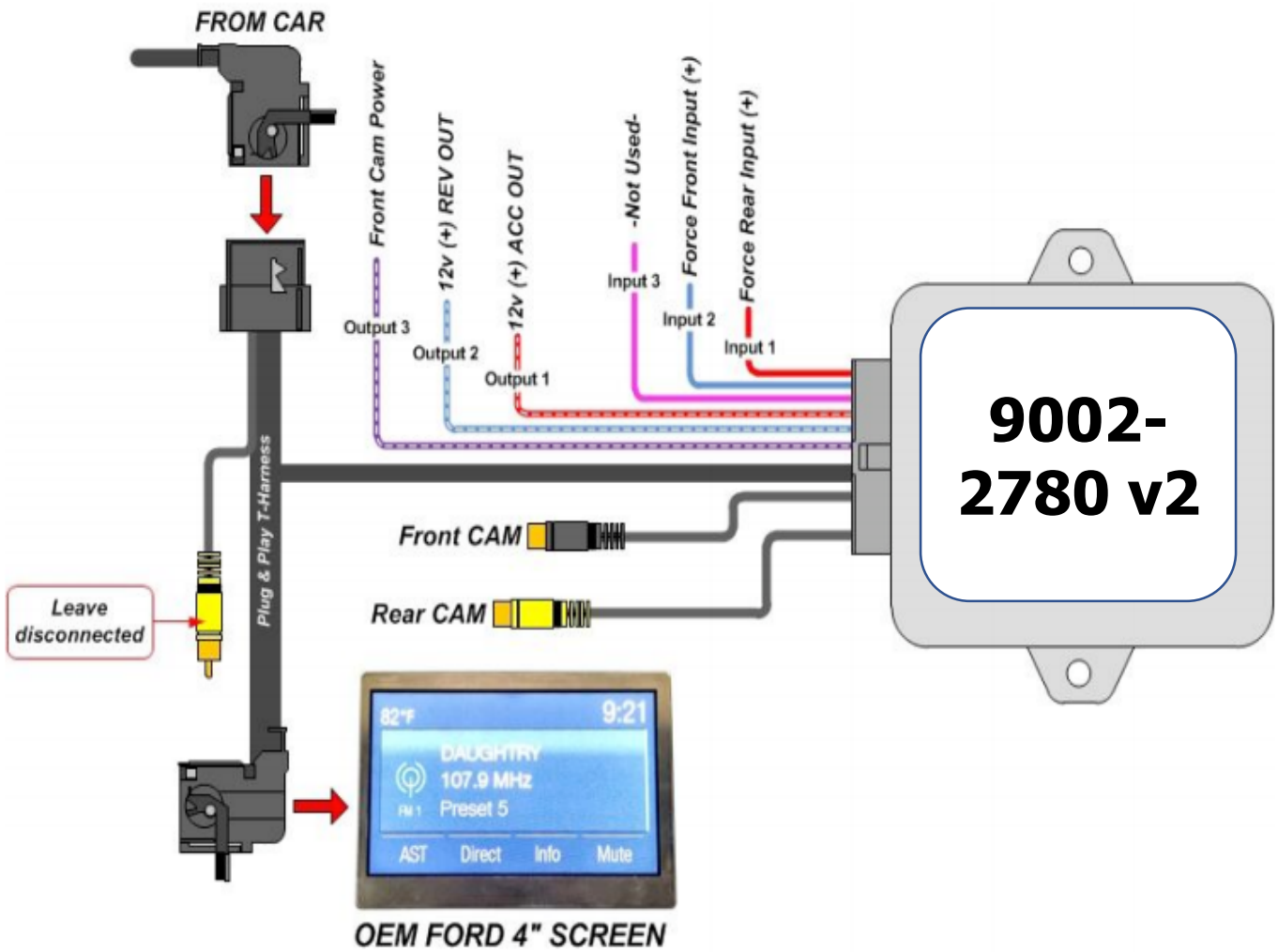
- The radio may or may not visually reboot with a 'Diagnosis' message. It may appear that the radio just boots slowly (only the first time, in which case it took programming before the display appeared).
- Place the car into reverse, the screen should automatically display the connected reverse image (or a warning screen if you have no camera connected).
- ***This module VIN-LOCKS to the vehicle it is connected to and cannot be used on any other vehicle once installed.***
- This module will **NOT** de-program rear camera, once this modification is made to the system, it will remain forever!

***While programming, refer to the chart below for LED flash representation.***

LED Response	Description
1 flash	<b><i>Waiting for Ignition...</i></b> (Turn ignition to ON)
2 flashes	<b><i>Waiting for Vehicle VIN...</i></b>
3 flashes	<b><i>Query Vehicle</i></b> (Reading/decoding the VIN and vehicle components)
4 flashes	<b><i>Programming...</i></b>
5 flashes	<b><i>Programming Complete</i></b>
6 flashes	<b><i>No Programming Needed</i></b> (Already programmed)
7 flashes	<b><i>Radio Not Supported</i></b>
8 flashes	<b><i>Out of Licenses</i></b> (Contact NAV-TV to purchase more licenses)

- After all connections are made and programming is complete, placing the vehicle in reverse will automatically display the connected rear camera's image.
- If forced rear camera is desired, connect input 1 (red) to 12v (+) through a toggle (not included) and the rear image will show whenever activated.
- If a front camera was added, force this camera by connecting input 2 (blue) to 12v (+) through a toggle (not included).

**2780 v2 INSTALLATION DIAGRAM:**



**NOTES:**

- Any wires not shown here are not needed for this installation.
- Not all wires shown here will be used for every installation.

The reverse image will have rounded edges and the OEM radio screen showing behind the reverse image is OEM Ford operation and is normal.

Some vehicles may retain the reverse image while in drive until ~5 mph, this is also normal Ford operation.

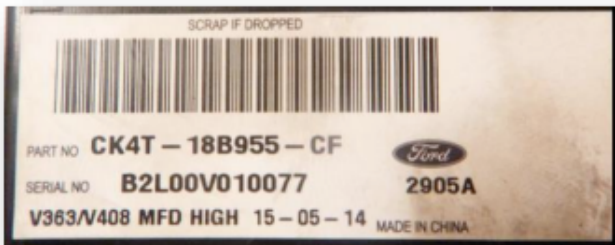


**FORD 4-INCH SCREEN COMPATIBILITY LIST:**

Due to the large variety of different 4" screen part numbers, it is strongly advised to verify the screen compatibility by removing the screen and measuring a 75-ohm termination across pins 6 and 12. Brandmotion cannot assure compatibility unless this step has been taken.

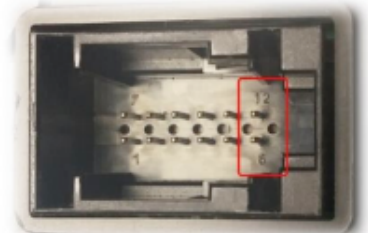
Incompatible Display PART #'s		
EM5T-18B955-CB	CM5T-18B99-AD	CJ5T-18B955-GF
EM5T-18B955-CA	CM5T-18B955-GF	CJ5T-18B955-GE
EJ5T-18B955-GB	CM5T-18B955-CE	CJ5T-18B955-GC
DM5T-18B955-CD	CM5T-18B955-AD	CE8T-18B955-AD
DA6T-18B955-BE	CM5T-18B955-AB	CE8T-18B955-AA
D2BT-18B955-BE		BB5T-19C116-CJ

Compatible Display PART #'s				
FG1T-18B955-CA	EJ5T-18B955-GA	DT4T-19C116-GB	DL3T-18B955-CC	CM5T-18B955-GB
FB5T-19C116-GA	EJ5T-18B955-CC	DT4T-19C116-CD	DG1T-18B955-CD	CM5T-18B955-CF
FB5T-19C116-CA	EG1T-18B955-CD	DT4T-19C116-CC	DB5T-19C116-GB	CK4T-18B955-CD
ET4T-19C116-GG	EG1T-18B955-CA	DT4T-19C116-CB	DB5T-19C116-GA	CK4T-18B955-CF
ET4T-18B955-CC	EB5T-19C116-CD	DT4T-19C116-CA	DB5T-19C116-CBT	CB5T-19C116-GD
ES7T-18B955-CB	EB5T-19C116-CA	DS7T-18B955-CF	DB5T-19C116-CA	CB5T-19C116-GC
ES7T-18B955-CA	EB5T-18B955-GC	DS7T-18B955-CE	DA8T-18B955-CF	CB5T-19C116-CD
EM5T-18B955-JB	EB5T-18B955-GA	DL3T-18B955-CG	DA8T-18B955-CD	CB5T-19C116-CC
EM5T-18B955-CE	EA8T-18B955-CB	DL3T-18B955-CF	CM5T-18B99-GG	BT4T-19C116-CP
EL3T-18B955-CE	DT4T-19C116-GD	DL3T-18B955-CD	CM5T-18B955-GE	BB5T-19C116-CK
			CM5T-18B955-GD	BT4T-19C116-CN



*Find the PART number on the back of the main 4" media screen.*

*Verify 75ohms on pins 6 & 12 on the back of the main 4" media screen.*



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