

# Fast Track 2+2/386 Troubleshooting Guide



## Beginning Steps before starting any troubleshooting

1. Determine what type of customer your are dealing with. (Burger King, McDonald's, Wendy's etc).
2. Verify Serial# of Timer.
3. Verify Model of Timer you are working with & make sure it is correct for the cust you have.  
(WDS2002FT or (WDS2002CT - Version 1.92C & above) for a Wendy's 1 Window drive-thru. MCD2003FT for McDonald's 2 Window drive-thru, etc).
4. Verify Version of Firmware.

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### MENU DETECTION PROBLEMS:

**Note: Always print a Fast Track Daily Report vs. POS for comparison before starting any troubleshooting. This can sometimes help identify the problem right away.**

Problem	Probable Causes	Troubleshooting Steps	Solution
No Menu, Greet, Queue(if applicable) or Total Times.	Menu Board detection completely failed.	Ask customer if intercom/headset still beeps for <b>EVERY</b> new car that arrives @ menu board.	If <b>Yes</b> , proceed to next <b>Probable Cause</b> . If <b>No</b> , refer to intercom/headset dealer to restore menu board detection to Fast Track & intercom.
Menu time continuously runs.	Incorrect Interfacing from Timer to Detector and/or Intercom.(Paralleled, Polarity wrong).	Check & <b>DIAGRAM</b> wiring to J5 of Interface Board vs. type of intercom & detector being used. <b>Note:</b> See Installation Manual for correct Interface Methods.	Rewire interfacing correctly. (This usually will require a technician).
	Bad Connection on Interface Board or @ Intercom and/or Loop Detector.	Check Connections - J5, J2, J6, J3, A1, A2. Check Connections @ Intercom or Loop Detector.	Reconnect/reseat any loose connections after unplugging power first.
	Bad Interface Board.	<b>Important:</b> Verify that the R4 pot is @ the midway setting, then test J5 with jumper, verify that all correct LEDs light & Line time starts.(Bin, Bout & the correct L light come on when jumper is in place).	Replace Interface Board if this doesn't work.
	Photo-Couple has fallen off of detect LED.	Locate Loop Detector & Photocouple	Secure Photo-Couple to detect LED.
	Photo-Couple on LED that is not RED or not bright enough RED. Detect LED burnt out & not coming on @ all.	Find RED or brighter RED detect LED.	Replace LED with Brighter RED or Install Fan Out Box or use a Multiple Output Loop Detector.
	Bad Photo-Couple.	Test Photo-Couple with flashlight.	Replace if this doesn't work.

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### GREET CANCELLATION PROBLEMS:

**Note: Always print a Fast Track Daily Report vs. POS for comparison before starting any troubleshooting. This can sometimes help identify the problem right away.**

Problem	Probable Causes	Troubleshooting Steps	Solution
<p><b>Greet Average same as Menu.</b></p> <p><b>Greet Time continues to run even though customer has been greeted several times.</b></p>	<p>Level of outbound audio from intercom not high enough to trigger Greet cancellation signal.</p> <p><b>Important:</b> The following adjustment only applies when outbound audio is being paralleled from intercom to timer.</p>	<p>Does the correct L light come on when employee speaks on intercom.</p>	<p>If <b><u>NO</u></b>, adjust R2 Pot on Interface Board to complete counterclockwise position. Verify that Ain &amp; Aout on Interface Board along with L2 on the Main Unit all light when employee greets customer. Move to the next troubleshooting step if this doesn't work.</p> <p><b>Note:</b> Tell customer to be sure to NOT adjust the R4 pot on Interface Board. This pot must remain @ the factory setting.</p>
	<p>Wired incorrectly.</p>	<p>Verify that wiring to/from Interface Board is correct for intercom being used.</p> <p><b>Note:</b> See Installation Manual for correct Interface Methods.</p>	<p>If <b><u>NO</u></b>, refer customer to call dealer &amp; have a technician come to site &amp; correct wire interfacing.</p> <p>If <b><u>YES</u></b>, verify that all wire connections are secure &amp; if they are, move on to the next problem.</p>
	<p>Bad Interface Board.</p>	<p><b>Important:</b> Verify that the R2 pot is at the midway or higher setting(set @ 3 o'clock or later) &amp; remove wires from J2 if audio is being paralleled. Test J2 with jumper(s), verify that Ain, &amp; Aout on Interface Board light &amp; the appropriate L light on front of Main Unit comes on as well.</p>	<p>If <b><u>NO</u></b>, Interface Board is bad &amp; needs to be replaced.</p>

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### WINDOW DETECTION PROBLEMS:

**Note:** Always print a Fast Track Daily Report vs. POS for comparison before troubleshooting any Menu or Window detection problems. This can sometimes help identify the problem right away.

Problem	Probable Causes	Troubleshooting Steps	Solution
<p><b>Window Detection not working: (Applies for Loops Only).</b></p> <p><b>Locked on constantly.</b></p> <p><b>Not coming on @ all.</b></p>	<p>False signal locked on window VDB. L light for that detection point locked on without a vehicle present. VDB locked on with no fault light.</p> <p><b>NOTE: Applies for Ground Loops Only</b></p>	<p>Use the Reset Loop feature for the appropriate window.</p>	<p>If appropriate L light <b>DOES</b> go off, monitor no less than 5 cars to verify that the detector goes on/off correctly without locking back on.</p> <p>If appropriate L light <b>DOES NOT</b> go off, proceed to next <b>Probable Cause</b>.</p>
<p><b>Intermittent.</b></p> <p><b>Locked in Fault Mode (Winky Blink)</b></p> <p><b>Sonar Detection</b></p>	<p>L light &amp; VDB Presence light locked on, No Fault light on VDB.</p> <p><b>NOTE: Applies for Ground Loops Only</b></p>	<p>Unplug Loop Cable from VDB. If VDB does <b>NOT</b> go into Fault Mode, power unit down, reconnect loop cable, unplug VDB from current I/O Port (IO3, IO4), plug into any other I/O Port &amp; power unit back on. If VDB works this indicates that the U202 Chip(74HC574) has failed.</p>	<p>Replace U202 Chip. <b>Note:</b> The U202 Chip is located underneath the Engine Board so this will require removal and reinstallation of the Engine Board. Determine the capability of the customer during the first call before mentioning sending them the part directly. If you don't feel that they are capable of installing themselves, they will need to have a technician do this.</p>
	<p>Bad Connection where Striped Loop Cable connects to VDB causing detector to lock on. VDB has Winky Blink / Fault Light.</p> <p><b>NOTE: Applies for Ground Loops Only</b></p>	<p>Reseat Striped Loop Cable connection on VDB. Reset VDB with sensitivity dial.</p>	<p>Make sure that Fault Mode/Winky Blink clears. Monitor no less than 5 cars to verify that fault doesn't return &amp; detection works correctly.</p> <p>If Fault Mode doesn't clear or returns, proceed to next <b>Probable Cause</b>.</p>
	<p>Bad Connection where Striped Loop Cable connects to inbound loop wires @ Window.</p> <p><b>NOTE: Applies for Ground Loops Only</b></p>	<p>Attempt to locate where connection was made. (In area where it can be stepped on, bumped repeatedly or get wet).</p> <p>Verify how connection was made.(Soldered, Wire Nuts, Crimp Connectors).</p>	<p>Cabling needs to be secured so that it can't be stepped on, bumped or get wet.</p> <p>Repair Connection. Connection <b>MUST BE SOLDERED</b>. (This usually needs to be done by a technician). <b>DO NOT USE WIRE NUTS OR CRIMP CONNECTORS.</b></p>
<p>Window detection is not working &amp; they are using Sonar.</p>		<p>Check wiring to/from Wilson Sonar Board. Verify that wiring from Sonar goes into Pins 1 &amp; 2 of J3 on Wilson Sonar Board.</p> <p>Verify that Wilson Sonar Board has power(CR1 &amp; CR2 should remain lit @ all times).</p> <p>Test Wilson Sonar Board by placing a jumper across Pins 1 &amp; 2 of J3. SigIn, SigOut &amp; appropriate L Light should all come on while jumper is in place.</p> <p>Have customer attempt to verify if Sonar Detector is plugged in. (Usually a power pack plugged in under the counter next to the appropriate Window).</p> <p>Have customer examine Sonar Detector. Is it damaged in any way, is there anything blocking the front of it such as gum, napkins, etc or is it completely knocked off of the wall?</p>	<p>If all of Customer Service testing proves that the timer itself is fine, refer customer to dealer to have Sonar detector repaired/replaced.</p> <p><b>Note:</b> Explain to customer that Phase Research does <b>NOT</b> support the use of Sonar Detectors &amp; that Ground Loops are by far the most reliable method of detection &amp; have the fewest problems.</p>

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### RUN ON PROBLEMS:

**Note: Always print a Fast Track Daily Report vs. POS for comparison before starting any troubleshooting. This can sometimes help identify the problem right away.**

Problem(s)	Probable Causes	Troubleshooting Steps	Solution
Timer continues to run with no cars in the drive-thru:	Menu Board Detection malfunctioning. False Detections. (Also see Menu Detection in troubleshooting chart).	Print a FT Daily Report vs. POS Count for drive-thru only. Compare number of cars counted @ each detection point with number of transactions rung up for drive-thru only.  Does Intercom/Headset alert for presence with no car @ menu board.	Refer Customer to Dealer to have Menu Board Detection problem resolved.
	Non drive-thru cars triggering menu board detection starting false timers.	Ask customer if drive-thru can be triggered by non drive-thru vehicles due to way menu board is situated. (Does Intercom Beep as cars just pass by).	Put a 1-4sec delay on Menu in Drive-Thru Config. (BE CAREFUL, TOO HIGH A DELAY CAN CAUSE OTHER PROBLEMS, START LOW & MONITOR, INCREASE IF NECESSARY).
An actual drive-off occurs in a store that is using a 1 Window Timer in 2 Window Open Lane Drive-Thru. (Drive-Off time usually set no less than 90sec).		Recommend to customer that they upgrade timer & explain how this setup can negatively effect their drive-thru times.	Refer customer to dealer to upgrade timer & have the drive-off time set back to 30sec.
Customers being served @ Win1/Cashier Window & allowed to leave open drive-thru without going to & stopping @ Win2/Pickup Window.		Inform customer of how this will negatively effect their times. Try to convince them to not operate with this method in the future & explain. that if they do, it will only cause problems with the timer & there is nothing we can do to troubleshoot or resolve.	Stop serving cars @ Win1/Cashier Window. Make sure all vehicles stop @ Win2/Pickup Window.  Use the Remove Car from Line feature if/when this is done. (Doing this on a regular or consistent basis will NOT ALLOW the timer to give accurate times).
Win2/Pickup Window Detection Problem.		See "Window Detection" in troubleshooting chart.	Resolve Win2/Pickup Window detection problem.
Old Version of Firmware w/problems.		Check Version of Firmware.	Upgrade any version that is 1.76S or below. This is a upgrade is billable.
Pickup Window Loop Placement incorrect.		Leading edge of loop should be two feet ahead of center of window. In other words, the traffic loop should be right under the engine of the vehicle when it is stopped @ the window. If the loop is not far of the pickup window, car gap problems can occur. This is where one car leaves & if a car directly behind it immediately pulls onto the loop, they may both be over the loop @ the same time & the detector will assume that it is the same vehicle. If this occurs, the timer will not clear & reset for the next car in line. Once the drive-thru empties, the timer will still show that there is one more car in line & will continue to run until the car is manually removed or the Drive-Off feature kicks it out. <b>Note:</b> See Installation Manual for correct Sawcut or Pre-Fab Loop installation.	Go through ALL troubleshooting steps for Window detection up to & including replacing the VDB & Harness before recommending that customer have loop replaced.

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## PC SOFTWARE PROBLEMS/NO RESPONSE ERROR

Problem(s)	Probable Causes	Troubleshooting Steps	Solution
<b>No Response Error when trying to connect to Fast Track from the PC using Fast Track PC Software.</b>	RS232 Port on Fast Track Main Unit is not enabled.	Verify that customer is licensed to use software.	If <b>YES</b> , enable port.  If <b>NO</b> , refer customer to dealer to purchase Software License.
	Site was created in Fast Track PC Software without clicking the "NEW SITE" button first. <b>Note:</b> Versions 1.6 & below only	Close the Fast Track PC Software program. Locate the Site & Config folders in C:\Program Files\Fast Track Software Suite.  <b>Note:</b> The Site folder is the folder that was created in the Fast Track PC Software with the name given by the creator such as the store name and/or number.	Delete both the Site & Config folders leaving the Application & the Uninstall File.  Reopen Fast Track PC Software program. It should require that the Modem & Direct communications be configured as soon as the program is opened. Configure communications correctly depending on method being used. Create New Site & make sure to click the NEW SITE button first.
	Fast Track Main Unit Firmware and/or PC Software Versions not compatible.	Verify Firmware Version.  Verify PC Software Suite Version	Firmware Version 1.76S or below PC Software Version must be 1.6  Firmware Version 1.81 or above PC Software Version must be 2.11 or above

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### PC SOFTWARE PROBLEMS / COMMUNICATION / DOWNLOADING

Problem(s)	Probable Causes	Troubleshooting Steps	Solution
PC connects to Fast Track Main Unit but won't communicate.	RS232 Port on Fast Track Main Unit is not enabled.	Verify that customer is licensed to use software.	If <b>YES</b> , enable port.  If <b>NO</b> , refer customer to dealer to purchase Software License.
PC connects to Fast Track, Remote Control works fine but unable to download.	Invalid/Incorrect Access Code for that location programmed in PC Software under Site.	Verify at least one of the Access Codes programmed in Timer at that location.	Program a correct Access Code for timer at that location in PC Software under Site.
Multi-Site Downloading not downloading from all locations	Fast Track Main Unit Firmware and/or PC Software Versions not compatible.	Verify Firmware Version.  Verify PC Software Suite Version	Firmware Version 1.76S or below PC Software Version must be 1.6  Firmware Version 1.81 or above PC Software Version must be 2.11 or above
	Auto Poll is not checked for each store that is to be automatically downloaded. <b>Note:</b> Applies to Remote Downloading only.	Check each location under Site that should be automatically downloaded.	Make sure Auto Poll is checked for each of these locations under site.

### AUTHORIZED DEALER:



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