CSI new trouble shooter guide for the field

Headset problems:

HME:

1 No headsets work and red lights on coms are flashing. flashing red lights mean that coms don't see base. Check that base has power and that headsets are programmed to base. Breakers tripped, power strip turned off or transformer unplugged are common causes.

2 headsets talk to each other but no detection, inbound, or outbound. When audio is in store only, it usually means that speed team is turned on. Speed team disables the speaker post portion of the headsets so that coms are all headset to headset only. Turn speed team off in programming or by switch depending on model. Also make sure that all of the connectors inside the base are plugged in well. If the vehicle detector board is indicating an open loop then all the wires out to the post may be cut. Meter the loop wires to see if there is a good loop and work your way to the base with readings till you find an open reading.

3 cannot hear customers/ no inbound. Check volume for inbound, listen to hear if there is no inbound at all, very low inbound, or buzzing. Buzzing usually indicates a short in the wires somewhere, low inbound could be a bad mic. Put a new mic on base to determine if the base is good or if the issue is wire or mic. If the base is good volume, then try a mic at the post (note the ground wires must be connected for dm5 mic to work). If you get the problem at the post after determining the base is good then, try a new pair of wires to see if the issue persists. Run new wire if needed.

4 customers cannot hear/ low outbound. Check volume for outbound on base and listen at post to hear if the volume is low, not there, or popping/ distorted. Popping or distorted could indicate a blown speaker or bad mic on headsets. Make sure that the employees can hear from headset to headset okay. Put a speaker on the base to see if the volume out is good at base. If the volume is good at the base then replace the speaker at the post. Ohming out a speaker is another test but not full proof (8ohm speakers).

5 constantly shows car at menu. Check system to make sure override is turned off. Look at vehicle detector board and see if it shows a car at the post as well as the base. If the vdb does not show a car then check that the vdb cable is plugged in correctly. If the cable is rotated on the white end it will show car on the base but not the vdb. If the system does not have a vdb in it, then find out where the external detector is and check the detector for signal. Most external detectors have a closure signal as default if the detector is unplugged. If no lights on detector are present, reset the detector and see if it has power. If it doesn't show power then trace the source and check outlet/power strip. Reset should trigger detection briefly. If power is present and detector has a constant signal out, replace the detector. If the reset doesn't work and programming does not indicate the override is on then check to see that an external detector is not also wired in. Remove the wires from all outside sources leaving power on, and check if signal is still shown. If the signal goes away than reconnect each outside source (timer, greeter, phone interface) till the signal returns. Correct the wiring of the source if it is an issue or replace the failing equipment. If the store has an external detector than locate and reset the detector. If the

detector unit shows a fault or flashing lights than it is showing an open loop and the loop or extending wire must be corrected. Default for most external detectors is a closed loop like override. Unplugging or fault will trigger the detector to think that a car is at the loop.

3M/Panasonic/Other

1 Headsets have static only. Usually all headsets getting static indicates that they are not connected to the base. Check that the base has power and if it does than make sure the headsets are programmed to the base (1060 frequency indicated by number on base 1-8, all digital bases do not show the channel).

2 Cannot hear customers/ no inbound. Check volume for inbound, listen to hear if there is no inbound at all, very low inbound, or buzzing. Buzzing usually indicates a short in the wires somewhere, low inbound could be a bad mic. Put a new mic on base to determine if the base is good or if the issue is wire or mic. If the base is good volume, then try a mic at the post. If you get the problem at the post after determining the base is good then, try a new pair of wires to see if the issue persists. Run new wire if needed.

4 Customers cannot hear/ low outbound. Check volume for outbound on base and listen at post to hear if the volume is low, not there, or popping/ distorted. Popping or distorted could indicate a blown speaker or bad mic on headsets. Make sure that the employees can hear from headset to headset okay. Put a speaker on the base to see if the volume out is good at base. If the volume is good at the base then replace the speaker at the post. Ohming out a speaker is another test but not full proof (8ohm speakers).

5 Constantly shows car at menu post. All Panasonic systems and most of the older 3M systems did not incorporate an internal vehicle detector board. Each store will be a case by case situation. Check to see if the store has an internal vehicle detector. If it does, then reset the detector or pull power to the board to see if the signal goes away. If not check the programming to see if some sort of override is on (different systems call it different things). If the reset doesn't work and programming does not indicated the override is on then check to see that an external detector is not also wired in. Remove the wires from all outside sources leaving power on, and check if signal is still shown. If the signal goes away than reconnect each outside source (timer, greeter, phone interface) till the signal returns. Correct the wiring of the source if it is an issue or replace the failing equipment. If the store has an external detector than locate and reset the detector. If the detector unit shows a fault or flashing lights than it is showing an open loop and the loop or extending wire must be corrected. Default for most external detectors is a closed loop like override. Unplugging or fault will trigger the detector to think that a car is at the loop.

HME:

SYS 30 timer:

Number 9 button	Left arrow button	Number 0 button	Right arrow button
Schedule reports	Setup dayparts/ shifts	Remote displays/ goals	Store/ installer setup
Turn off/ on reports	Set daypart time	Set master goals for every event	Store setup for current time, date, hours, store number, passwords.
Month, week, day, daypart, hour, everycar, year to date	Each daypart time should be for the end of the daypart.	Set daypart goals for every event. Allows different goals for different times of day.	Installer sets parameter for the timer (lanes, assign locations, delays
	Shifts have only 3 slots	Program what remote displays say (event, flash, beeps, color)	Diagnostics for remote (lets you know what remotes are set to)
		Standby display (no car in lane).	All other system tests

Common issues sys30:

Printer is not printing: unplug ribbon cable from printer board to system board and replace without powering down the timer. Printer should start moving as soon as ribbon is plugged in. printer test is in the diagnostics menu of the timer. Then run a day report to see if the printer functions. Some times the system 30 gets locked up and the printer is the part that is affected. If resetting the printer board does not work, reset the power on the system 30 timer by pulling power for at least 30 seconds.

No detection for menu: Looking at the opening screen on the system 30 you will see arrows(triangles) at the top next to the current time. When the triangles point down, they are not detecting a car at any point. When the triangles point up, they are detecting a car at the point that is corresponding in the program. If the store has a cash and pickup window (two windows) then arrow 1

would be the menu point, the G is greet (greeting the customer with headsets), the second arrow is the cashier window, while the third arrow is the pickup window.

detection for the menu on timer comes from the headset base/ intercom. Check all connections are plugged in well and no wires are loose. Position 1 is signal wire and 2 is ground. Make sure they are not flipped as they are polar. Check that the signal from the base is closing when a car arrives by using a meter on the signal and ground wire at the timer to see if it closes when the base shows a car. If there is no closure when a car arrives check the connections in the base and use a short cable on the base to see if wire is the issue. If no closure with the short wire than base output is the issue. If closure happens with short cable but not with original cable to timer than wire is bad.

No detection for window(s): the detection for the window(s) come from vdb(s) in the timer itself. The vdbs start with vehicle detection point 3 and follow 4 5 6 depending on how many windows or detection points. Vehicle 2 is skipped for the greet signal. First thing is look inside the sys 30 to see if any vdbs are flashing or not plugged in. if there is a flashing vdb count the flashes and see if it is an open loop or short and search the wires to the corresponding window for and issues. If you get good loop readings and the wires that connect to the vdb is getting a good reading, then replace the vdb to see if you get the same result.

If there are no flashing detector boards, then make sure that the wires from the detector boards are connected. Unplug the white connector and plug it back in to see if the board lights up for 2 seconds. If it does and still no detection make sure that the phoenix connector is plugged in all the way on both ends or replace the phoenix connector. If a light on the detector board comes on when a car is at the corresponding point but the arrow on the front does not light up, then replace board and test. If you still do not see a good signal on the front, then the timer is bad. The default settings for the vdb board switches are all up (on) except 2,3, and 5.

Constant detection at detection point(s): first thing to do is check that the arrow(s) on the first screen are up and for what points. Second would be to unplug the large phoenix connector for the detection inputs and see if the arrow(s) go down. If the arrows don't go down when it is unplugged, then the timer is locked up. If it does go down, then check the polarity of the wires connected and make sure both ends are wired right. Ohm out the wires also to make sure that the wires are not pinched somewhere. Double check that the vdb is not plugged in upside down. Lastly, if everything looks right change the phoenix connector.

Remote display programming: There are 2 types of remote display versions. Version 1.** is different than version 2.**. Version 1.** timers have no color change option and the remote display is set by switches on the top of the remote housing. Version 2.** has the same switches but the switches

control what number the display is. Typically all sys 30s out there will be version 2.** but you must still pay attention to make sure. The first 6 switches correspond to remote number or event type depending on version. To simplify we will discuss version 2.** or higher.

R30 1 inch, r30s, r31s are 3 standard single sided displays hence the s. There are rare double sided r30d, r31d but not many. R30's are single color displays and only have a few options. R31's are color change and have toggle modes. R30 1 inch does not have a beeper imbedded in the display.

Remote displays, upon power up, will show version 1.13 not a time. After the startup it will go to an event time, goal average, or blinking dot typically depending on what is going on in the drive through. The first two are simple enough to tell at a glance but the blinking dot has some trouble shooting to do. A blinking dot means that the display is getting power but no data. If only a blinking dot is present, either the programming in the system 30 is telling it be disabled or the remote does not see data due to a data wire not connected. Resetting the sys 30 can sometimes fix the issue but the first thing to do would be run a diagnostic test on the remote display to see if the display reacts. If it doesn't then the wires generally have a problem or the remote is bad. Rarely is the remote bad. On the remote connector wires 1 and 4 are power while 2 and 3 are data.

The Remote displays R30 and R31 also have a reset button on the bottom of the case next to a volume pot for the beeper. If you cannot get the remote to beep on diagnostic mode, check that the volume is turned up on the remote. If that doesn't work then the remote display should be sent in.