INFINITYBOX, LLC
6460 West Cortland Street
Chicago, Illinois 60707
www.infinitybox.com

The MASTERCELL NGX inSIGHT Screen

A Complete Guide to the Setup and Diagnostic Features of Your Infinitybox IPM1 Kit

Table of Contents

Revision 26070901

About This Guide

The inSIGHT LCD screen on your MASTERCELL NGX is your window into your Infinitybox system. With a few simple button presses, it lets you set up your IPM1 Kit and gives you a powerful set of diagnostic tools that need no laptop, no meter and no additional equipment. This guide brings together everything you need to know about the inSIGHT screen, from the hardware under the cover to each menu function and diagnostic feature.

This guide covers the MASTERCELL NGX in the Next Generation IPM1 Kit. These inSIGHT diagnostic tools are specific to the Next Generation hardware. If you have a Legacy 3-Cell Kit or 20-Circuit Kit, the diagnostic tools that came with those systems are covered separately in the Infinitybox blog archives.

Throughout this guide, your configuration sheet is the single source of truth for input numbers, output numbers and wire colors. The examples here use the standard configuration, but always confirm the specifics against the configuration sheet that came with your kit.

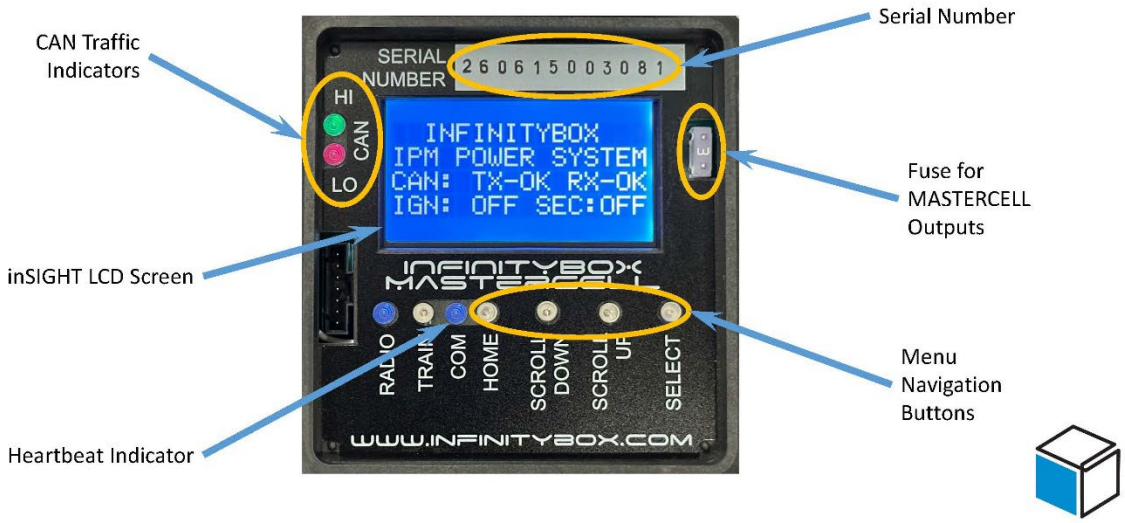
1. Under the Cover of the MASTERCELL NGX

The MASTERCELL NGX represents the latest generation of technology for the Infinitybox system. It builds on almost 20 years of history, experience and lessons learned from our customers. Before we walk through the screen and its menus, it helps to understand the key features under the cover of the MASTERCELL NGX.

Think of the MASTERCELL as the brain of the system. It connects to the switches in your car and sends commands to the POWERCELLs, inMOTION NGX Cells, inVIEW Cells and any other peripheral in your Infinitybox network. It also includes simple but powerful diagnostic tools that help you troubleshoot issues in your car's electrical system quickly, with no additional tools.

INFINITYBOX, LLC
6460 West Cortland Street
Chicago, Illinois 60707
www.infinitybox.com

MASTERCELL NGX Anatomy



The inSIGHT LCD Screen

The most prominent feature under the cover of the MASTERCELL is the inSIGHT LCD screen. This is your window into your Infinitybox system. It allows you to see how the system is operating, check system status, troubleshoot, diagnose and set up key features. The inSIGHT screen has a bright backlight that lets you read it in any lighting condition. This backlight automatically turns off to minimize the amount of current the system draws from the battery.

Menu Navigation Buttons

Below the inSIGHT screen are the Menu Navigation Buttons. These let you access and navigate through the menus on the inSIGHT screen. The HOME button takes you to the HOME screen. The SCROLL UP and SCROLL DOWN buttons let you navigate through the menu options. The SELECT button picks the specific option that you want.

The Heartbeat and CAN Traffic Lights

The next important feature under the cover of the MASTERCELL NGX is the blue COM light. This is the heartbeat of the system. It should flash about once per second to indicate that the MASTERCELL is awake and is sending commands out on the Infinitybox network.

Related to the heartbeat light, there are two indicators that show that there is traffic on the CAN network. These are the red CAN LO and green CAN HI lights. They will flash periodically.

Note that the CAN LO LED is red and it will flash. This does not mean that there are problems with the system. It indicates that the network is active.

There is another LED labeled Radio and a button labeled TRAIN. These are for future functions and are not presently used.

The Fuse for the MASTERCELL Outputs

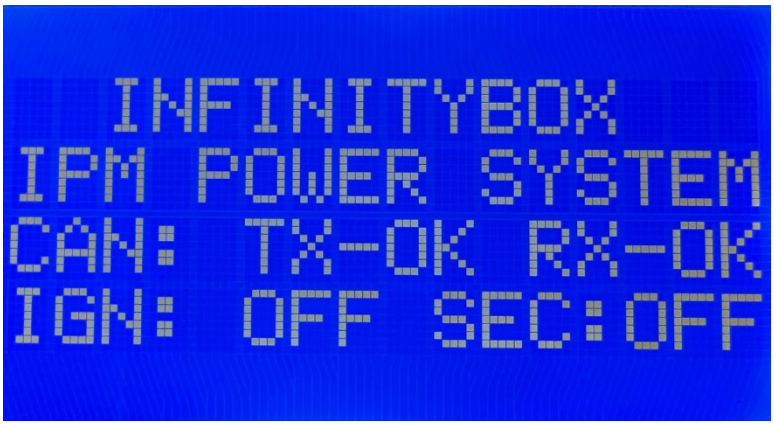
The MASTERCELL NGX has 6 low-current outputs that are used to power indicator lights on your dashboard. For safety, these outputs are fused. There is a 3-amp MINI fuse located under the cover of the MASTERCELL. If you have problems with your indicator outputs, check this fuse. You should never put a fuse in the MASTERCELL with a rating higher than 3 amps.

The Serial Number

Each MASTERCELL has a unique serial number. If you are ever calling our team for help, please have this serial number available. We carefully track each system by its serial number so we know its history and software changes.

2. The Main Screen

After your IPM1 Kit powers up, the MASTERCELL NGX shows its main status screen. This screen gives you a quick snapshot of the health of your network, the state of ignition and the state of security.



The backlight on the screen remains on for 5 to 10 seconds and then turns off to reduce the power drawn from the battery. To return to this screen at any time, press and release the HOME button.

CAN Status

Your Infinitybox system is connected together using a J1939 CAN network. This is a simple two-wire system that connects your MASTERCELL to your POWERCELLs, your inMOTION NGX Cells, your inVIEW and any other devices connected in your car. The main screen shows you the status of the CAN network. It shows the status of the transmit circuit (TX) and the receive circuit (RX). You will see OK for both TX and RX when the system is communicating correctly.

If you see ERR for either TX or RX, check your CAN cables to make sure they are connected correctly. Also make sure the terminator resistor that came with your IPM1 Kit is correctly plugged into your system. Your IPM1 manual has more details on the termination resistor.

Ignition State

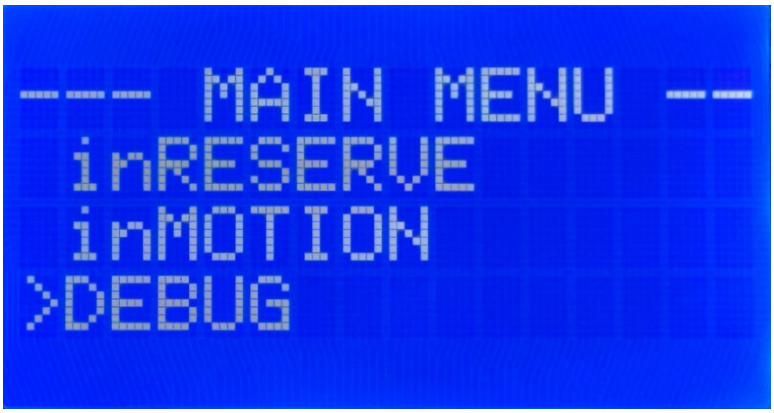
The next important thing the main screen displays is the state of ignition. When the ignition is on, you will see IGN: ON. When the ignition is off, you will see IGN: OFF. This monitors ignition from the switched ignition input, the one-button start input or ignition control from inTOUCH. Specific functions in the system can be controlled by ignition. The most common example is turn signals. Out of the box, the system is set so that your turn signal inputs only work when the ignition is on. Using the inCODE NGX tool, you can set other functions to depend on the state of ignition.

Security State

The last important piece of information on the main screen is the state of security. You will see SEC: OFF when security is disabled and SEC: ON when security is enabled. Security can be enabled and disabled from the inLINK Key Fobs and from the inTOUCH feature on inLINK. Out of the box, the system blocks the ignition, starter and fuel pump when security is enabled. This is a powerful immobilizer for your car, built into your IPM1 Kit with inLINK NGX. Using the inCODE NGX software tool, you can set other functions to be disabled when security is enabled. The main screen gives you a quick and simple way to check whether security is on or off.

3. The Main Menu

From the main menu, you can set up key features and access a powerful set of diagnostic tools with a few simple button presses. To get to the main menu, press and release the HOME button on your MASTERCELL NGX. The main menu has six options. Use the SCROLL UP and SCROLL DOWN buttons to move the cursor through the list and the SELECT button to open the option the cursor is pointing to. Because the menu is longer than the screen, you scroll through two views to see all six options.



The six options are Switch States, System Inv, System Info, inRESERVE, inMOTION and DEBUG. The rest of this guide takes a deeper look at each one. Here is a brief overview of what each does.

Overview of the Six Options

Switch States gives you a real-time view of every switch input on your MASTERCELL NGX, so you can confirm your switches are wired correctly.

System Inv is your system inventory screen. It lists every peripheral connected to your MASTERCELL NGX so you can confirm the system sees everything on your network.

System Info shows the software revision loaded onto your system and the configuration that is loaded.

inRESERVE lets you set up the inRESERVE Active Battery Management accessory.

inMOTION walks you through setting up your inMOTION NGX door modules and assigning each one its address.

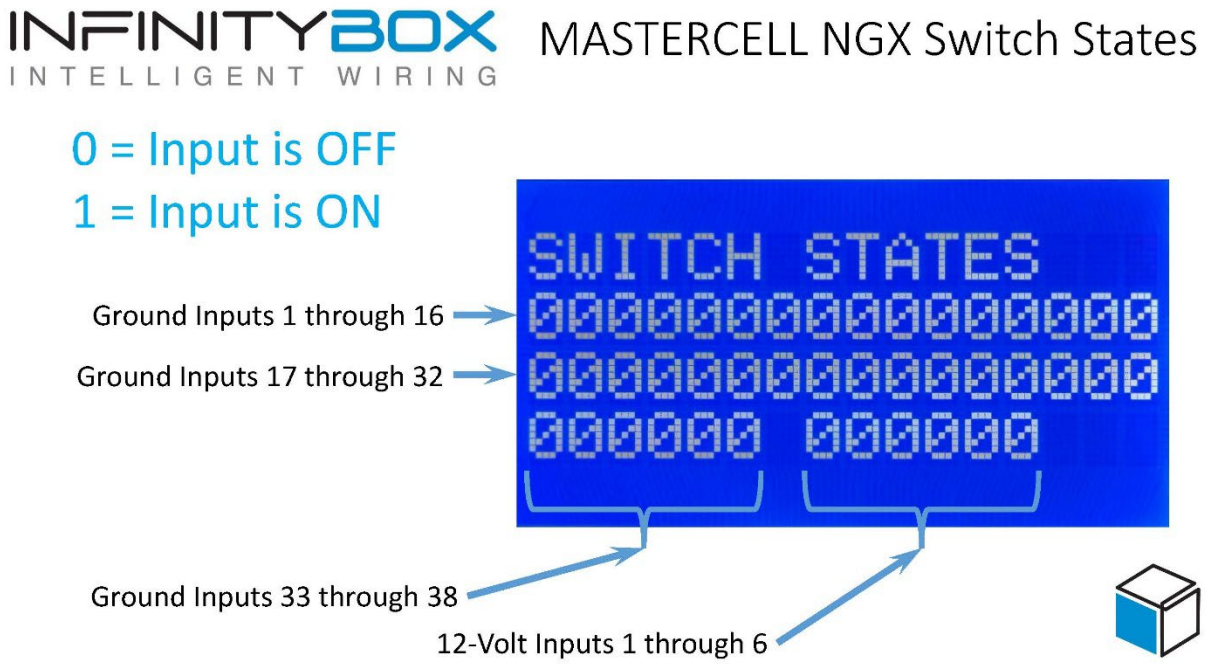
DEBUG puts the MASTERCELL NGX into Messaging Mode, the deepest diagnostic tool on the inSIGHT screen.

4. Switch States

The Switch States screen is one of the most powerful diagnostic tools in your IPM1 Kit. It gives you a real-time view of every switch input on your MASTERCELL NGX, so you can confirm your switches are wired correctly and quickly track down problems.

How to Read the Switch States Screen

To get to the Switch States screen, press the HOME button to bring up the main menu, use the SCROLL UP and SCROLL DOWN buttons to move the cursor to Switch States and press SELECT. When the screen opens, you will see a series of digits arranged across four rows. Each digit represents one switch input on your MASTERCELL NGX. The rule is simple: a 0 means that input is off, and a 1 means that input is on.



The MASTERCELL NGX has 38 ground-switched inputs and 6 high-side switched inputs. The digits are laid out so you can find any input quickly:

- The top row shows ground-switched inputs 1 through 16.
- The next row shows ground-switched inputs 17 through 32.
- The bottom row shows ground-switched inputs 33 through 38 on the left.

- After a gap, the right side of the bottom row shows the 6 high-side switched inputs, 1 through 6.

A quick note on terminology. We label the high-side switched inputs as 12-volt inputs on the screen and on your configuration sheet. Customers use the terms “high-side switched input” and “12-volt input” interchangeably. They mean the same thing: an input that turns on when it sees 12 volts, rather than a ground. We will use 12-volt inputs through the rest of this section to match what you see on your screen.

When you are in Switch States mode, the backlight on the inSIGHT screen remains on. When you are done monitoring, press and release the HOME button to get back to normal operation.

Ground-Switched and 12-Volt Inputs

The MASTERCELL NGX reads two kinds of switch inputs, and the Switch States screen shows you both.

A ground-switched input turns on when it is connected to ground. This is how most of the switches in your car work with the Infinitybox system. When you flip a headlight switch, you connect the MASTERCELL NGX input to ground and the input turns on.

A 12-volt input turns on when it sees 12 volts. These are useful for connecting to devices that put out a 12-volt signal, like the fuel pump or cooling fan trigger from an EFI system. With our legacy MASTERCELL, you needed an external inVERT Mini to flip a 12-volt signal into a ground before the MASTERCELL could read it. The MASTERCELL NGX reads these 12-volt signals directly, so the inVERT Mini is no longer needed for these inputs. The Switch States screen shows the state of both your ground-switched and 12-volt inputs in one place.

Watching the Screen in Real Time

The real power of the Switch States screen is that it updates live. As a switch turns on or off, you will see its digit change on the screen. There can be a lag of up to one second between flipping a switch and seeing the digit change, so give it a moment. When all of your switches are off, every digit on the screen reads 0.

Now turn on one switch. In this example, we turned on the switch wired to ground-switched input 5. Watch the fifth digit in the top row. It changes from a 0 to a 1, while every other digit stays at 0.

To know which function each numbered input controls, refer to your configuration sheet. The configuration sheet is the single source of truth for which switch connects to which input on your MASTERCELL NGX. For example, on the standard front-engine configuration, input 5 is your headlights and input 6 is your parking lights. Always check the configuration sheet that came with your kit, since your assignments may be different if you have a custom configuration.

Wire and Test Your Switches Before Connecting Your Loads

One of the most useful things about the Switch States screen is that it lets you wire and test every switch in your car without connecting anything to a POWERCELL. Because the MASTERCELL NGX reads your inputs directly, you can work through your entire car one switch at a time. Wire a switch, flip it, and watch the screen confirm that the MASTERCELL NGX sees it turn on and off. You can verify your entire switch harness is correct before you ever power up a load. This lets you break your wiring project into smaller, more manageable steps and confirm each one as you go.

Track Down Problems with Switch States

The Switch States screen is also a powerful diagnostic tool when something in your car is not working the way you expect. A question we hear often is, “Why are my parking lights on?” The Switch States screen answers this quickly. Open the screen and look at the digit for your parking light input. If that digit reads 1 when the parking light switch is off, then the MASTERCELL NGX is seeing that input turn on for some reason.

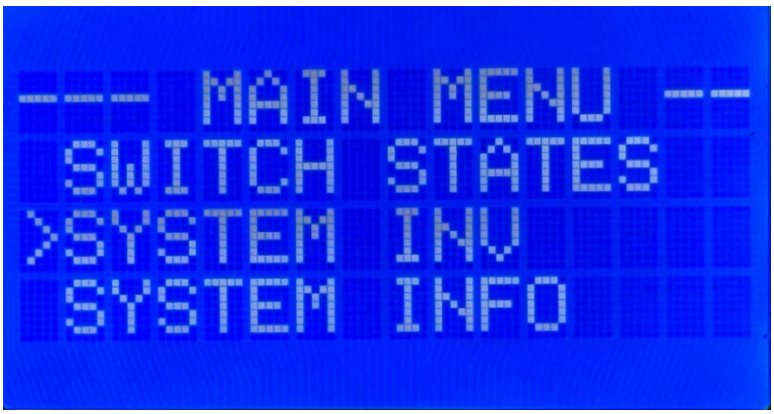
In most cases, this points to one of two things. Either the switch is wired incorrectly, or the input wire is shorted to ground somewhere in your car. Because a ground-switched input turns on when it sees ground, a wire that is accidentally pinched, chafed or shorted to ground will turn that input on just as if you had flipped the switch. The Switch States screen lets you see exactly what the MASTERCELL NGX sees, so you can focus your troubleshooting on the input that is misbehaving instead of guessing.

5. System Inventory

The System Inventory screen gives you a list of every device connected on your Infinitybox network. It is a simple but powerful tool that confirms your POWERCELLs, inMOTION Cells and other peripherals are connected, communicating and addressed correctly.

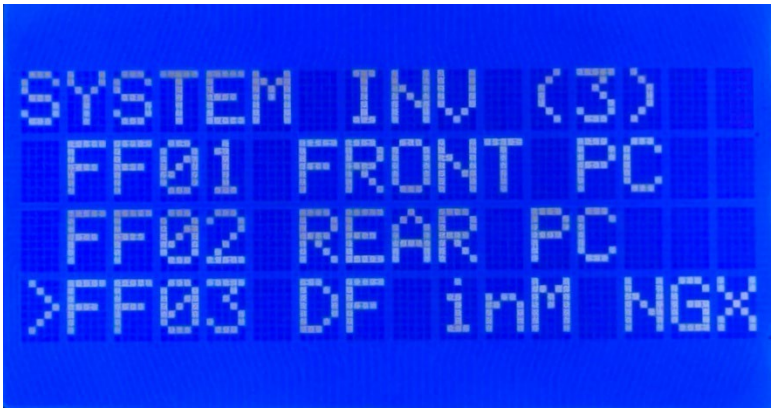
How to Read the System Inventory Screen

To get to the System Inventory screen, press the HOME button to bring up the main menu, use the SCROLL UP and SCROLL DOWN buttons to move the cursor to System Inv and press SELECT.



When the screen opens, you will see a list of every device the MASTERCELL NGX finds on your network. The header at the top reads SYSTEM INV followed by a number in parentheses. That number tells you how many devices are on the network and changes with the number of

devices connected. In the example below, the header reads SYSTEM INV (3), so there are three devices on the network.



Each device shows up on its own row with two pieces of information. On the left is the PGN for that device. This is an internal identifier that the MASTERCELL NGX uses to validate the device on the network. You do not need to decode it. On the right is the human-readable name that tells you what the device is. This is the part you will use to confirm what is connected.

You can use the SCROLL UP and SCROLL DOWN buttons to move the cursor through the list of devices. Using the SELECT button, you can drill down into a specific device to see much more detail about it. That drill-down process, which we call polling, is covered in the next section. For now, we are focused on the inventory list itself.

What the Devices Look Like on the Network

Each type of device in the Infinitybox system shows up in inventory with its own name so you can identify it at a glance. Here is what the different devices look like on the network.

- POWERCELLs: Address 1 shows as the front POWERCELL (FRONT PC); Address 2 shows as the rear POWERCELL (REAR PC); additional POWERCELLs begin at FF07 and are labeled by number.
- inMOTION Cells (FF03 through FF06): Driver Front is DF inM NGX; Passenger Front is PF inM NGX; Driver Rear is DR inM NGX; Passenger Rear is PR inM NGX.
- inVIEW shows as inVIEW.
- inCONTROL shows as inCONTROL.

Confirm Your Devices Are Connected and Communicating

The first thing the System Inventory screen tells you is whether every device you installed is actually on the network. When a device is powered correctly and its CAN cables are connected correctly, it announces itself to the MASTERCELL NGX and shows up in inventory.

Start with the device count in the header. Compare the number in parentheses to the number of devices you installed in your car. If you installed three POWERCELLs but the header only shows two, then one of them is not communicating. The same is true for any device in your system. When a device is missing from inventory, it usually points to one of two things: either the device is not being powered correctly, or there is a problem with the CAN cable that connects it to the rest of the network. The System Inventory screen lets you confirm quickly that every device is present before you spend time chasing a problem somewhere else.

Confirm Your Devices Are Addressed Correctly

The second thing the System Inventory screen tells you is whether each device is addressed as the device you intended. This is a more subtle problem, and one that can be very hard to find any other way.

Every POWERCELL is set to a specific address with its address jumpers. The MASTERCELL NGX sends commands to each POWERCELL based on that address. If a POWERCELL is addressed incorrectly, the commands meant for it never reach it, even though everything is powered and communicating perfectly.

Here is a common example. A customer is having trouble getting the outputs on a POWERCELL to work. Everything is wired correctly and the cell is communicating, but the functions still do not work. After some troubleshooting, we find that the address jumpers were set to the wrong cell. Instead of being set to cell 1, the POWERCELL was set to cell 8. The System Inventory screen makes this easy to spot. The customer can look at inventory and see that a device is on the network, but it is not showing up as the cell they intended. That tells them the address is wrong. This is what makes the System Inventory screen so powerful: it takes an invisible problem, a device that is powered and communicating but addressed incorrectly, and makes it visible.

6. Polling Your Cells

Once you know a device is on the network, you can dig deeper into it to see how it is working. We call this polling. When you poll a cell, the MASTERCELL NGX shows you real-time information about that device right on the inSIGHT screen. There is much more information available on the Next Generation system than on the Legacy system.

How to Poll a Cell

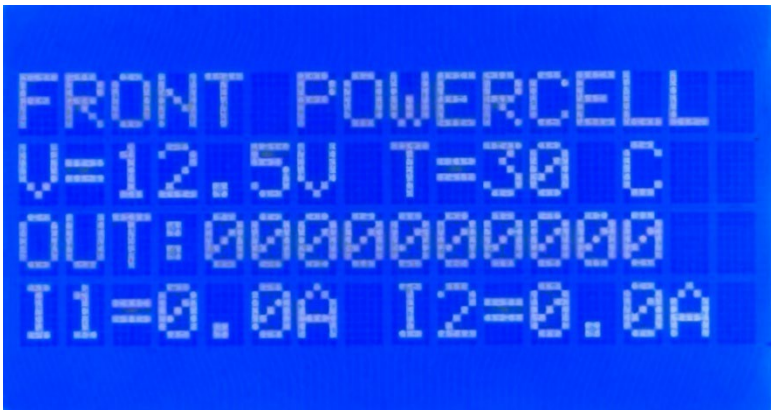
Start at the System Inventory screen. Use the SCROLL UP and SCROLL DOWN buttons to move the cursor to the device you want to poll, then press SELECT. The MASTERCELL NGX drills into

that device and shows you its details. What you see next depends on the type of device you selected.

Polling a POWERCELL

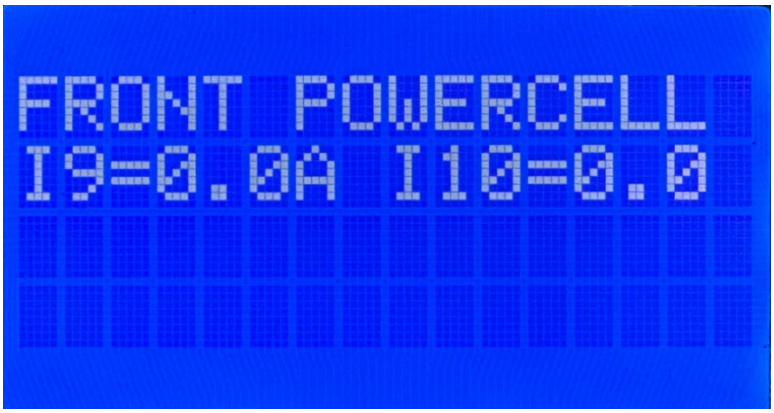
When you poll a POWERCELL, the first line of the screen tells you which POWERCELL you are looking at, such as FRONT POWERCELL or REAR POWERCELL. This confirms you are polling the cell you intended to.

The next line shows two values. The first is the battery voltage measured locally at the POWERCELL, shown as V=12.5V. This is useful for confirming the POWERCELL is getting good power. The second value is the temperature of the POWERCELL in degrees Celsius, shown as T=30 C.



The next line shows the state of all 10 outputs on the POWERCELL. There are 10 digits on this line. Reading from left to right, they correspond to outputs 1 through 10. If a digit is a zero, that output is off. If it is a one, that output is on. This lets you see at a glance which outputs the POWERCELL is commanding on and which are off.

Below the output states, the screen shows the current draw for each output. Each value is displayed as IX=Y.YA, where X is the output number and Y.Y is the current flowing through that output in amps. These current values update in real time. Because a POWERCELL has 10 outputs, the current values run across three screens. Use the SCROLL UP and SCROLL DOWN buttons to move through them. The first screen shows the current for outputs 1 and 2. The second screen shows outputs 3 through 8. The third screen shows outputs 9 and 10.



Using the POWERCELL Poll to Troubleshoot

The real power of polling a POWERCELL comes from reading the output states and the current draw together. The output state tells you what the POWERCELL is commanding. The current draw tells you what is actually happening on the wire. When those two disagree, you have found a problem.

Here is the case to watch for. You command an output on and its digit on the output line reads one, but the current for that output reads 0.0A. The POWERCELL is doing its job and switching the output on, but no current is flowing. That points you to a break somewhere in that circuit. The most common causes are a blown fuse, a broken wire, a bad ground or a burned-out bulb. Any one of these breaks the path that current needs to flow through, so the output turns on but nothing draws power.

The healthy case is just as useful. When you command an output on and the current reading matches the load you expect for that circuit, you have confirmed the whole circuit is good from the POWERCELL all the way through to the load and back to ground. Being able to see that real current in real time takes the guesswork out of troubleshooting and points you straight at the circuit that needs attention.

Polling an inMOTION Cell

When you poll an inMOTION Cell, the first line of the screen tells you which inMOTION Cell you are looking at. The MASTERCELL NGX identifies it by its door position, such as DF for Driver Front, PF for Passenger Front, DR for Driver Rear or PR for Passenger Rear.

The inMOTION Cell has two rows of output states. The RLY line shows the state of the four relay outputs. These come from the two H-bridge relays inside the inMOTION Cell that drive functions like your power windows and power door locks. The OUT line shows the state of the four MOSFET outputs. As with the POWERCELL, a zero means that output is off and a one means it is on. To see how the outputs on your inMOTION Cell are mapped to the functions in your car, check the configuration sheet that came with your IPM1 Kit.

Polling inVIEW and inCONTROL

Your inVIEW and inCONTROL peripherals will appear in the System Inventory list along with your POWERCELLs and inMOTION Cells. This confirms that they are connected and communicating on your network. In the current version of our software, polling an inVIEW or an inCONTROL does not display any information. They show up in inventory, but there is no detail screen to drill into.

7. System Info

The System Info option lets you see the software revision of the code loaded onto your system. It also shows you the configuration that is loaded.

The IPM1 Kit has options for a front-engine configuration and a rear-engine configuration, along with the option for a Custom configuration. If your system shows a Custom configuration and you have questions about it, contact our technical support team for more information.

When you call our team for help, the software revision and loaded configuration are two of the details we may ask about, along with your serial number. Knowing where to find them on the System Info screen makes that conversation faster.

8. inRESERVE

The inRESERVE option lets you set up the inRESERVE Active Battery Management accessory. inRESERVE connects a POWERCELL output to a special latching solenoid and monitors your battery voltage. When the ignition is off and the voltage drops below a set threshold for a period of time, the POWERCELL pulses the solenoid and disconnects power to the system. This proactively eliminates drain from your battery.

Every IPM1 Kit ships without inRESERVE set up. If you purchase the inRESERVE option, this menu lets you enable the feature, pick the POWERCELL and output that control the solenoid, and choose the timing and voltage threshold. A dedicated blog post walks through this whole setup process in detail.

9. inMOTION

The inMOTION option walks you through the process of setting up your inMOTION NGX door modules. inMOTION NGX installs in the door, and each module must be set with its proper address so it knows which commands to obey. The default locations are Driver Front, Passenger Front, Driver Rear and Passenger Rear.

You order as many inMOTION NGX modules as you need for your build, two for a two-door car or four for a four-door car. We ship them set up generically, so you run this process once to tell each module where it is installed in the car. A dedicated blog post walks through how to configure your inMOTION NGX door modules step by step.

10. Messaging Mode (DEBUG)

The DEBUG option puts the MASTERCELL NGX into what we call Messaging Mode. It is the deepest diagnostic tool built into the inSIGHT screen. Where the Switch States screen shows you whether an input is on or off, Messaging Mode goes a step further. It shows you what the MASTERCELL NGX does in response to that input, in real time, right on the screen.

How Cases Work

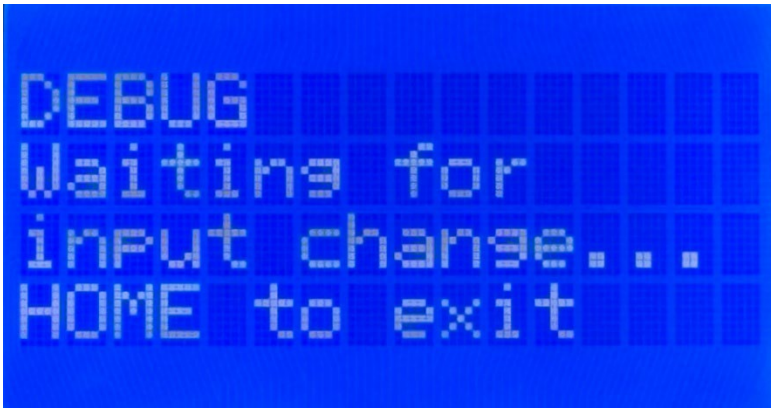
To understand what Messaging Mode is showing you, it helps to understand cases. Every input on your MASTERCELL NGX has cases assigned to it. These cases tell the MASTERCELL NGX what messages to send out across the Infinitybox network when that input changes state.

Cases are split into two groups: cases for when a switch turns on and cases for when a switch turns off. The number of cases varies from one input to the next. Some inputs have a single ON case and no OFF cases. Others have a single ON case and a single OFF case. Others have multiple ON cases and multiple OFF cases. This is what lets a single switch control multiple outputs across your network at the same time. A simple input like your horn has one ON case that controls one output. A more involved input like your ignition can carry several ON cases and several OFF cases, so turning the key can power your EFI system, bring up accessories in the back of the car and more, all at once.

You can view and modify the cases assigned to each input using the inCODE NGX programming tool. How to create and change cases is covered in a separate blog post and video series dedicated to inCODE NGX. For this guide, all you need to know is that cases exist, that they are split into ON and OFF cases, and that the number of cases depends on the input. That is what Messaging Mode puts on the screen.

Entering Messaging Mode

To enter Messaging Mode, press the HOME button to bring up the main menu, scroll to DEBUG and press SELECT. You will see a screen telling you the MASTERCELL NGX is waiting for an input to change.



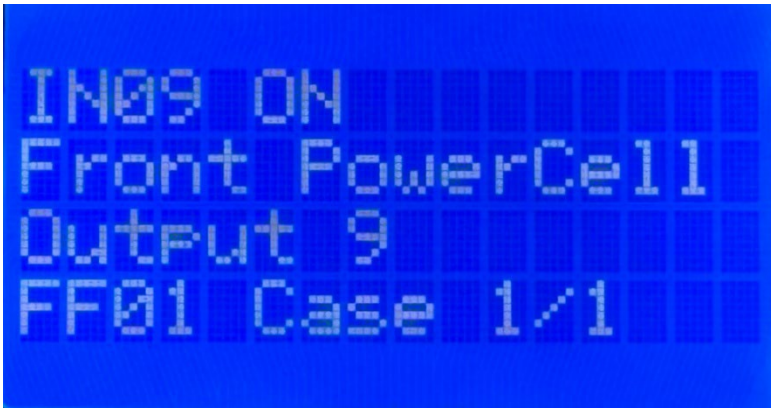
The MASTERCELL NGX stays in Messaging Mode until you press the HOME button, which takes you back to the main menu. While the MASTERCELL NGX is in Messaging Mode, the backlight stays on. This is different from normal operation, where the screen and the backlight both turn

off to minimize battery draw. If the backlight is on, you know the MASTERCELL NGX is still in Messaging Mode.

Watching a Single-Case Input

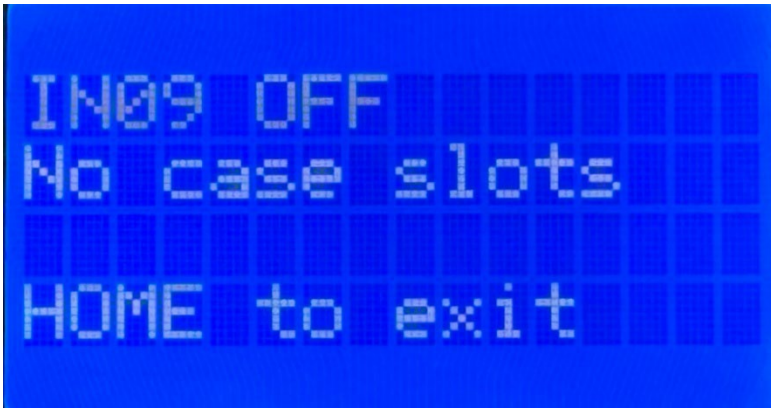
Let's start with a simple input. On a standard system, your horn is input 9. Always check the configuration sheet that came with your kit to confirm the input and output numbers for your build, because your configuration sheet is the single point of truth for input numbers, output numbers and wire colors.

With the MASTERCELL NGX in Messaging Mode, press the horn button. The screen shows you what the MASTERCELL NGX saw and what it did in response.



Reading this screen from the top: the first line, IN09 ON, tells you the MASTERCELL NGX saw input 9 turn on. The second line, Front PowerCell, tells you which cell it is commanding. The third line, Output 9, tells you which output on that cell. The fourth line, FF01 Case 1/1, tells you two things. FF01 is the internal address we use for the Front POWERCELL. Case 1/1 tells you this is case 1 of 1, meaning this input has a single case assigned to its ON state.

Now release the horn button. The screen updates to confirm the input turned off.



The first line, IN09 OFF, confirms the MASTERCELL NGX saw input 9 turn off. This is useful on its own, because it confirms the switch released cleanly and is not hung on. The second line reads No case slots. This tells you the horn input has no case slots available for its OFF state. There is nothing for the MASTERCELL NGX to command when the horn turns off, which is exactly how the horn is designed to work.

Watching a Multi-Case Input

Now let's look at a more involved input. On a standard system, your ignition is input 1. Again, confirm this against your own configuration sheet. With the MASTERCELL NGX in Messaging Mode, turn the ignition on. The screen shows the first case.

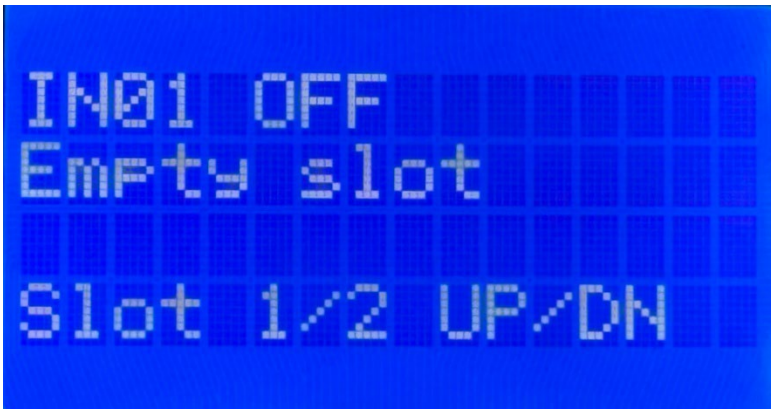
This screen reads much like the horn did. Input 1 turned on, and the MASTERCELL NGX is commanding output 3 on the Front POWERCELL. The difference is on the fourth line. FF01 1/4 tells you this is case 1 of 4, so this input has four cases assigned to its ON state. The UP/DN prompt tells you to use the SCROLL UP and SCROLL DOWN buttons to step through the rest of the cases. This prompt takes the place of the HOME to exit line, but the HOME button still exits Messaging Mode.

Scroll down to see the next case.

This screen shows an empty slot. The default ignition configuration uses only the first ON case, but there are four slots available. The second line reads Empty slot, meaning this slot is available but has nothing assigned to it. Notice the fourth line reads Slot 2/4 instead of leading with an address like FF01. That is because an empty slot has no cell or output assigned to it, so there is no internal address to display.

This is worth pausing on, because it is a different situation from the horn. When the horn turned off, the screen read No case slots, meaning no slots exist for that state at all. Here the screen reads Empty slot, meaning the slot exists and is available, it just has not been programmed. You would keep scrolling to view the remaining slots for this input.

When you turn the ignition off, Messaging Mode confirms the input turned off and shows you the cases assigned to its OFF state.



The first line confirms input 1 turned off. The fourth line shows this input has two cases available for its OFF state, with the UP/DN prompt to scroll through them. OFF cases are what let your system do something when a switch turns off, such as running a cooling fan for a set period of time after you shut off the ignition.

What This Tells You

Messaging Mode is one of the most powerful troubleshooting tools in your Infinitybox system because it confirms the whole chain from your switch to your output. Say your horn is not working. Put the MASTERCELL NGX into Messaging Mode and press the horn button. Watching the screen tells you three things at once.

First, it confirms your switch is working. If IN09 ON appears when you press the button, the switch is doing its job and the MASTERCELL NGX is seeing it. If nothing appears, the problem is upstream at the switch or its wiring, not in the rest of the system.

Second, it confirms you have the correct MASTERCELL NGX input wire connected to your switch. If you press the horn button and the screen shows a different input number, you know the wrong input wire is landed on that switch, and you can correct it.

Third, it confirms the correct cell and output are being commanded. The screen shows you exactly which POWERCELL and which output the MASTERCELL NGX is telling to turn on, so you can confirm the command is going where you expect and check your configuration sheet against what you see.

Working through your car this way takes the guesswork out of troubleshooting. Instead of chasing a problem blind, you can watch the MASTERCELL NGX see your switch and command your output, and pinpoint exactly where the chain breaks down.

Questions?

The inSIGHT screen on your MASTERCELL NGX gives you a real-time window into your entire Infinitybox system, from the health of your network to exactly what each switch is doing and how the system responds. Paired with your configuration sheet, these tools are among the fastest ways to wire, understand and troubleshoot your car with confidence.

If you have any questions about the inSIGHT screen or any other part of your Infinitybox system, contact our technical support team through our contact form at infinitybox.com/contact or give us a call at (847) 232-1991.

Contact Information

The INFINITYBOX™ Intelligent Power Management System

is a product of

Infinitybox, LLC
6460 West Cortland Street
Chicago, Illinois 60707

(847) 232-1991

sales@infinitybox.com
www.infinitybox.com