



With all the different switches and switch panels out there, I could never find the level of OEM style or lighting I was looking for. In this article I am going to tell you about how the 12VC switch panels became an important product to offer and some of the unique things we can do with them.

If you have modified or repaired vehicles and equipment to any extent, you have probably noticed the many types of switches the factory installs. I always took note of my favorite styles of instrument panels, but the switches that always caught my eye the most were the aftermarket AUX or upfitter switches. This was because they were usually unmarked, didn't match, or even worse, did not tell the user what the actual control was. This sparked my interest over 20 years ago. Have you ever had to feel around in the dark for a gang of switches and try to remember what it does? THIS is what sparked the development of 12VC illuminated switch panels.

Born out of the necessity for nighttime illumination, and most importantly, identifying the function of the switch, I started crafting one-off switch panels on as needed basis. As I acquired more tools and developed a system to build panels with better quality, the moment finally arrived where I could offer them at an affordable price. They were not just for the high budget custom car builds. For a long time I used the Carling switches and looked for a rocker cap with the symbols I needed. There wasn't always a readily available rocker cap that described the switch function. So, I started engraving the rocker caps myself. These looked nice, and solved many of the requirements I thought were necessary. I still wanted to go more in depth. I wanted better illumination, a more factory look, and there are many other switches I wanted to use that do not have an option for engraving. At least 9 out of 10 times, I use switches to trigger relays that only draw 150ma. There was no need to use 20amp full size rocker switches to trigger relays. The 12VC switch panels tap into dozens of other switches that are low current rated, half the size, and have illumination options.



*I have run into the label maker approach many times. Mostly on heavy trucks and equipment. This always failed. In the dark, you needed the dome light to identify the switch.*



*A laser etched Carling rocker. Notice the uneven illumination. This is unavoidable with this style switch. Great illumination was one of the top factors in the design process of 12VC switch panels.*

Starting simple was my first priority. This is how I designed the M1 series of switch panels. It's compact, offers customizable text, accepts a bunch of different switches, and has fantastic illumination. It took many prototypes to be able to make a model where I could take a customer's order and create it in a timely manner with repeatable results.

Major factors that contribute to the quality and customizable options for 12VC switch panels is the use of name brand components. We use American made circuit board blanks. We produce the circuit boards in-house, and solder quality surface mount LED's and resistors. We use Molex connectors on our circuit boards. These connector have a long history of reliability in the electronics industry. The panel face is also made in America. This material goes through a multi-step process to produce the desired effects.



*Light "leaking" around the switches. Another major goal was to eliminate the glow around the switches themselves. If the switches were different colors this would cause an undesired mixing effect. I wanted light to only project from the lense that it was intended to.*



*The third variation of a prototype switch panel. Much time was spent to get the lighting to produce minimal glare, and this was not it. There were a half dozen variations after this.*

After many prototypes and adjustments, the M1 series switch panel became the benchmark for the 12VC customizable switch panel line. Each model after will build upon the previous in terms of lighting, switch options, symbols, and mounting styles. But, it does not stop there. 12VC can create switch and indicator panels in any shape within a 12" x 8" area. This is not limited to just flat panels. We are also working on indicator only panels, some specialty model specific panels, and gauges as well. As the models are made available, I will post a Quick Read about them for an overview of options.