# M2-4-16Hx SERIES HOW TO ORDER 



SWITCH AND TEXT POSITIONS


EXAMPLE EMAIL
YOUR PART NUMBER
PN: M2-4-16H2111-RWWW-RBYY-RBBB
YOUR REQUESTED UPPER SYMBOLS OR TEXT
UPPER:
: (1) G2 (2) E10
(3) E17 (4)
(4) E9 *symbols are requested as codes from our symbol sheet and can be used in upper or lower positions.

Your requested lower symbols or text
LOWER:
(1) START
(2) IGNITION
(3) FUEL PUMP (4) FAN

NOTES: If you have any questions, want a custom symbol, wiring, etc., please let us know here
To test out text on your own computer screen, follow the guidelines below to make sure the text will fit.

## please note:

Text on the M2 series can be made with one or two lines. We match text size for all switch positions unless otherwise noted. This means that if position 1 has a single line that could fit . 125 " tall text, but position 2 has two lines of .080 " tall text, we will make all text 0.080 " tall for a uniform look. At the time of creation we do manipulate text for best fitment. This is just a guide to get started. We have many adjustments that we can make to fit text and stay legible.

- Choose a standard font like Arial or Square721 font in BOLD uppercase
- Single line text size: 12px or 9pt or .125 " up to 10 character spaces
- Two line text size: 8px or 6 pt or $.080^{\prime \prime}$ up to 12 character spaces per line

Examples:

FUEL PUMP | CARGO |
| :---: |
| LAMPS |

Font: Arial BOLD size: 12px/9pt/.125"

Font: Arial BOLD
size: $8 \mathrm{px} / 6 \mathrm{pt} / .080^{\prime \prime}$

## HYDRAULIC

Font:Square721 BOLD size: 12px/9pt/.125"

## TRACTION

Font: Square721 BOLD
size: $8 \mathrm{px} / 6 \mathrm{pt} / .080^{\prime \prime}$

## M2-4-16Hx SERIES DIMENSIONS OVERLAY MOUNTING



## PANEL OPENING DIMENSIONS



HOLE DIAMETER

## M2-4-16Hx SERIES DIMENSIONS REAR MOUNTING



## PANEL OPENING DIMENSIONS



## M2-4-16Hx SERIES ELECTRICAL

## WIRE DIAGRAM \& SPECIFICATIONS



## PANEL ILLUMINATION

- WORKING VOLTAGE: $9 \mathrm{~V}-15 \mathrm{~V}$ This unit is designed for 12 V automotive applications with a 14 V system voltage with engine running
- CURRENT DRAW UPPER INDEPENDENT: +/- 2ma 13ma @ 9.6V 17ma @ 12V 21ma @ 14V
- CURRENT DRAW LOWER GROUP: +/- 2ma 40ma @ 9.6V 64ma @ 12V 84ma @ 14V
- REVERSE POLARITY: 15V max intermittent


## $\triangle$ <br> DO NOT POWER UP THE PANEL ILLUMINATION WITH REVERSE POLARITY

## SWITCH ILLUMINATION

- WORKING VOLTAGE: 5-7V DC / 9-15V DC - with inline resistor (resistors will be supplied)
- CURRENT DRAW: +/- 2ma 7ma @ 9.6V 10ma @ 12V 12ma @ 14V
- REVERSE POLARITY: 5V max intermittent


DO NOT POWER UP THE SWITCH ILLUMINATION WITH REVERSE POLARITY

## SWITCH CONTACT RATING

- WORKING VOLTAGE: 24V
- CURRENT: 1amp @ 12 V - suitable for automotive relay triggering and switching of low current loads such as LED lighting


## PANEL ASSEMBLY:

- WORKING TEMPERATURE: $-20^{\circ}$ to $120^{\circ} \mathrm{F}$ Tested stable at $150^{\circ} \mathrm{F}$ intermittent. Panel face may become discolored at temperatures of $150^{\circ} \mathrm{F}$ and above. Tests show this discoloration to diminish as temperatures fall below $150^{\circ} \mathrm{F}$
- PANEL FACE: UV stabilized. Clean with non-solvent cleaners such as soapy water or a quality plastic cleaner such as Novus 1 with a clean micro-fiber cloth.


## 12 VOLT CONNECTION

## CUSTOM SWITCH PANELS

12VC switch panels are tested to ensure all switches, illumination, and circuitry are in working order before being shipped to the customer. The switches installed in the panel may have AC or DC or both AC/DC current ratings from their manufacturer. In the case where the switch is supplied with only an AC rating, we may provide in our specifications sheet a DC rating. This DC rating is a recommendation and we shall not guarantee the life expectancy of the switch at these ratings. The end user must determine if these ratings are adequate for the applications. 12VC always recommends the switches be used for relay trigger applications where the current load on the switch is 150 ma or less. If the switch panel has power rated switches installed, this will be noted in the electrical specifications sheet. Unless specifically noted, all of the automotive mini relays on our website draw less than 150 ma to trigger.

It is the responsibility of the installer to determine the correct use and installation of this product. 12 Volt Connection will not be held liable for any damages caused by this product due to poor installation quality. In no event shall 12 Volt Connection be liable for any direct, indirect, punitive, incidental, special consequential damages, to property or life, whatsoever, arising out of the use, or mis-use of this product. It is highly important to attach the switch panel with the appropriate sized wire based on amperage draw, and wire length. No part if this assembly should be subject to more than $120^{\circ} \mathrm{F}$ continuous. Under the correct load capabilities, no part of this assembly should have a temperature rise at normal operating current of more than $50^{\circ} \mathrm{F}$ over ambient temperature. If such is the case, current draw is too high for the circuit and will void any and all warranties.

12 Volt Connection offers a 3 warranty on the assembly of the product as supplied to the original purchaser. Any defect in wiring or construction of the unit as performed by 12 Volt connection will be covered by repair or replacement of the assembly. Warranty does not cover material or labor.

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CAUTION: An experienced technician familiar with the installation of automotive electrical systems should install this system. If you have any doubt about your skills this product should be taken to a qualified shop for installation. If you have decided to do the install yourself please read and understand all of these instructions before you start. Some of these instructions may or may not apply to your vehicle, if you have any questions please contact us by email.

# * Voltage drop calculator can be found on our website on the main page by clicking on calculators 

Thank you for purchasing from 12 Volt Connection!

