

Standard Keypad that works with AIM RS3 PDM

These are 12 button or 8 button keypads.

All 12 button keypads are addressed as 0X19 when they are dispatched unless otherwise requested on the order.

All 8 button keypads are addressed as 0x15 unless otherwise requested on the order.

They can be programmed by using the can keypad tab in the PDM configuration on Race Studio 3.

You may use can2 stream to send can data into the PDM from a device, but you cannot use can2 stream to output to a device with this keypad.

Pro Keypad

The Pro Keypad can work with the pdm and many of our other dashes.

They can be 4,6,8,10,12, or 15 button keypads.

They require a Can2 Protocol to work which can be downloaded from Aimshop pro keypad downloads area.

The protocol can be combined with other device protocols that we sell so that you can have multiple devices on the same can2 stream.

You can output keypad button illumination and colours by using the can output/ can 2 stream as well as communicating with the other devices if needed.

Can keypad, tpms, wireless keypad could all be on the same can 2 stream if required.

It is also possible to have multiple keypads with different addresses on the same can stream.

The possible combinations will require a custom protocol and that can be obtained from support@aimtechnologies.com . The information to change the addresses can also be obtained in the same way.

To set up a Pro Keypad

First you need to download the correct protocol for your keypad.

Install the protocol in the custom protocols area of RS3

Press the    key



The press the import key then select the protocol you downloaded from aimshop.



Go to configurations

Then in your configuration go to the can 2 stream.

In there, select AimTech and the protocol you imported.

You now can see the data that represents the button presses from the keypad.

Mom Momentary, will be on while pressed only

Tog Toggle, will turn on at first press and turn off at second press

012 Will output 0 until pressed, then 1 after first press, then 2 after second press, a third press will return to 0.

0123 Will output 0 until pressed, then 1 after first press, 2 after 2nd press, 4 after third press and return to 0 after fourth press.

You can change the names of the buttons to the function you want them to perform if you click on the line in the can 2 stream.

CC19	<input type="checkbox"/>	K5 012	Number	#	10 Hz
CC20	<input type="checkbox"/>	K5 0123	Number	#	10 Hz
CC21	<input checked="" type="checkbox"/>	K6 Horn	Number	#	50 Hz
CC22	<input type="checkbox"/>	K6 Tog	Number	#	10 Hz

For example, k4 012 could be changed to K4 Sides/Dips if that was the function you were using.

To output button colours to the keypad

you need to use the Can Output stream/Can2 and this is an example using the 12-button keypad.

12 Key Keypad LED & Backlight Setup

The screenshot shows a software interface for configuring a 12-key keypad. It includes several dialog boxes and a main configuration window.

Set CAN Payload Details (Top): This dialog box has three radio buttons: "Use channel" (selected), "Use static value", and "Use counter". The "Use channel" option is selected, and the "Num Bytes" is set to 1 byte.

Color table: A table mapping CAN codes to colors:

Code	Color
00h	OFF
01h	Red
02h	Green
03h	Blue
04h	Yellow
05h	Cyan
06h	Violet
07h	White/light blue
08h	Amber/orange
09h	Yellow/green

Backlight Brightness (0 - 63): A label pointing to the "CAN Output" table.

Set CAN Payload Details (Bottom): This dialog box has three radio buttons: "Use channel" (selected), "Use static value", and "Use counter". The "Use channel" option is selected, and the "Num Bytes" is set to 1 byte. The "Multiplier (x)" is set to 1 and the "Offset (s)" is set to 0.

CAN Output Table: A table with 8 columns (Byte 0-7) and 3 rows. The first two rows are for CAN IDs 0x180 and 0x190. The third row is for "NO OUTPUT".

CAN ID (hex)	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
0x180	K1 Tog	K2 Tog	K3 Tog	K4 Tog	K5 Tog	K6 0123	STATIC VALUE: '1'	STATIC VALUE: '0'
0x190	K7 Tog	K8 Tog	K9 Tog	K10 Tog	K11 Tog	K12 012	STATIC VALUE: '0'	NO OUTPUT

Make the number of multiplier and offset equal the required colour.

Example to make a button red when off and green when on then the offset is 1(red) and the multiplier is 1 (+1 =2= green).

From off to green the multiplier is 2 and the offset is 0.

A status variable with multiple outputs each with its own condition could be used to make a specific sequence of colours and that would have a multiplier of 1 also.