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Alltrax XCT Function Knob Controls: FN-DM-K1 (Dash Mount) For SR Series Motor Controllers

File: DOC113-023-B_FN-DM-K1-SR_Operators-Manual.pdf, Released Rev B, EC-022020 SR Models: ALLTRAX PN: FN-DM-K1, DASH mount panel ALLTRAX PN: FN-K1, SURFACE mount box

The FN-K1 and FN-DM-K1 operate identically. The **SR** motor controllers have one "User Input" commonly called Personality Switch that allow for "user setting profiles" and interactive adjustments of Speed while driving. The SR Motor Controllers use color coded inputs with a label showing the connections.

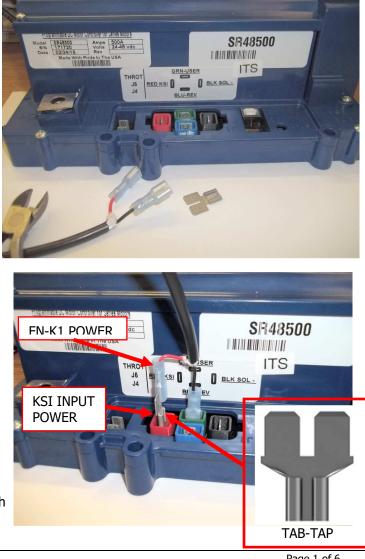
- 1. RED = KSI
- 2. BLACK = SOLENOID COIL NEGATIVE
- 3. BLUE: REVERSE
- 4. GREEN: USER FN Box input



FN-K1 (Surface Mount) ONE Potentiometer for SPEED (Shown for reference only)



The FN Function box & DM requires KSI voltage Input using the supplied TAB-TAP to connect both Key Switch Input and the FN power.





INSTALLATION:

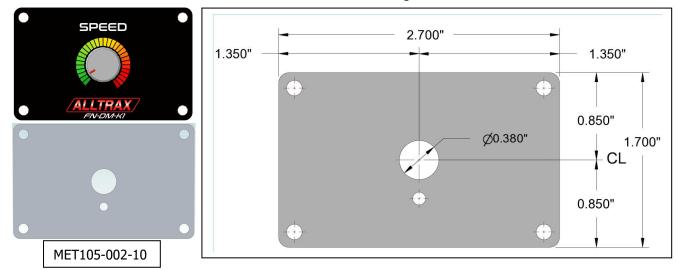
READ ALL INSTRUCTIONS FIRST – save yourself the frustration!

Unpack your kit, 4 screws, FN-DM-K1, Instructions manual, zip ties.

Hold the panel in a flat location you want, and mark an edge, OR use the 1:1 template included, more detail in the coming steps.



Notice the panel switches are centered but a visual illusion makes you think it is off center. We will use a 1'' diameter hole saw to drill clearance holes in the dash or flat mounting surface.



Check behind the panel to ensure you won't drill into wiring or other critical things. Measure twice – drill once!

Measure to ensure panel location





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>> Please wear eye protection! <<

Careful of WIRES behind panel

Using a 1-3/8" hole saw, drill ONE hole center. Use a file to clean up any edges.



EC-022020 REV B – Use larger drill from 1" to 1-3/8" diameter

Trial fit the **FN-DM-K1** panel and check for clearances, file or trim as necessary.

Install panel using the provided 4 plastic tap screws.

Picture shows FN-DM-KEY but mounting is the same for all Dash Mount DM panels.





SOFTWARE

Download the latest Alltrax TOOLKIT Version 3.0 (or above) from the Alltrax web site: <u>www.alltraxinc.com</u>.

Using toolkit, the function knob pertains to the control slider bar in software. You can set the Minimum full-left = FCCW (Full Counter Clock Wise) and maximum full right = FCW (Full Clock Wise) values that correlate to knobs rotation and position.

Click the Analog Input radio button to activate the FN controllers.

Alltrax Toolkit V2.1.8.11		
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Software Rev: V0.16	Under Voltage:	
SPM Info	· · · · · · · · · · · · · · · · · · ·	20.0 Volts
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Setting Functions	Digital Switch Analog Input	
Set	SPEED	
Refresh		
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	Max Battery Amps:	500.0 Amps
Throttle rate in	Max Forward Motor	50.0
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this example is	Max Reverse Motor Speed:	50.0 %
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affected much by	Throttle Rate:	9.5 13.0 [%]
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	SPEED SPEED	
FN-DM-K1		
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With the "SPEED" and "Throttle Rate tied together in software, you can adjust both sliders for "mild to wild" so when the Speed pot is full left minimum, the throttle rate AND the speed are soft and slow. When the knob is at full right (Clock wise) is fast and wild. You can tune these two parameters for driving style.

With the knob to full left FCCW, you save power and reduce battery draw, at full right FCW (in this example) is full power *Performance Mode*.

Alltrax Toolkit V2.1.8.11		
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	Throttle Rate:	9.5
		54.5 %
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	FN-DM-KI	DM-KI



When the kids come over, set the box for mild mode. Then they can't get into too much trouble. However – if the **FN-DM-K1** is unplugged, the controller defaults to the minimum speed set in software as a failsafe (I.E. smarts kids try to unplug the box...)

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	Speed:	60.0 % 33.0 % 9.5
	Speed: Max Reverse Motor Speed: Throttle Rate:	60.0 % 33.0 % 9.5
	Speed: Max Reverse Motor Speed: Throttle Rate:	60.0 % 33.0 % 9.5
	Speed: Max Reverse Motor Speed: Throttle Rate:	60.0 % 33.0 % 9.5
Button	Speed: Max Reverse Motor Speed: Throttle Rate: Peak Am Mode	60.0 % 33.0 % 9.5 10.0 %
	Speed: Max Reverse Motor Speed: Throttle Rate: Peak Am Mode	60.0 % 33.0 % 9.5

Once you have your settings configured – **PRESS SET** to program the controller and you're all done!

If you have any feedback or comments for these instructions, please email <u>info@alltraxinc.com</u> as we value our customers input, we make feature rich performance products based on our customers input.

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