

# mods4cars

## OPERATION AND PROGRAMMING

### smartTOP



## STHFMA2

Comfort Roof Control Module designed for

- Mazda MX-5 RF

Firmware v1.00 and up

Further information and manuals for all products can be found on our web site

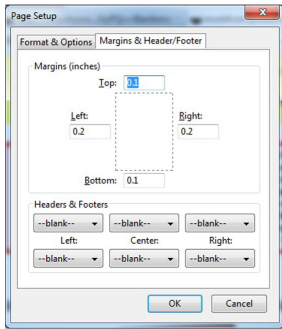
**www.mods4cars.com**

**PLEASE READ THE COMPLETE MANUAL CAREFULLY BEFORE USING THIS PRODUCT.**

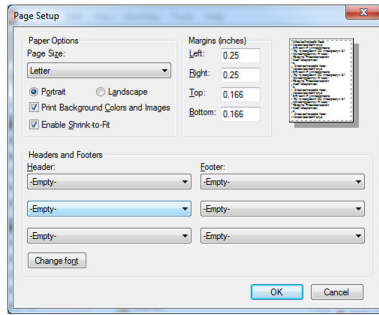
We explicitly point out that all functions of this control unit should be used only while exercising caution and responsibility. We can NOT be held liable for any damage or injury caused by installing or using this product. Operation must be supervised and paid attention to in order to ensure that there are no objects or persons in range of moving parts due to the fact that top mechanics do not have pinch protection. Please study and be aware of the procedures to interrupt an ongoing operation in an emergency.

## Important Information. READ BEFORE USING!

### Firefox



### Internet Explorer



### PRINTING THIS MANUAL

This manual is designed to produce completely filled pages. In order to get best print results, simply set the borders to minimum settings in the browser's page setup menu and disable headers and footers.

Activate the print preview and if necessary decrease the zoom level until all pages are shown correctly.

**ALL IMAGES CAN BE CLICKED FOR FULL SIZE in the browser.**



### TROUBLE SHOOTING - NEED TO CONTACT US?

If you run into any problems after installing the module, please go over the manual again in great detail, clicking every photo for full size!

We now have a full **Knowledge Base with Support Ticket system** available online at [www.mods4cars.com/support](http://www.mods4cars.com/support)

If you need to contact us, the best and fastest way to do so is by [opening a support ticket there](#)



**This module comes with our USB Field Upgrade and Configuration Port!** We recommend connecting it to a computer **BEFORE YOU INSTALL** and using our support app "m4connect" to do a quick firmware update check. M4connect as well as all other information regarding USB update and configuration can be found at [www.mods4cars.com/usb](http://www.mods4cars.com/usb). You can even configure and activate your favorite module functions and settings on screen before the module is installed in the car! It is a good idea to permanently install the USB cable with the module in the car, leaving the computer plug in an easily accessible spot for later use with a Wifi/3G/4G connected laptop.

## Detailed function description (Factory setting underlined)

### Function 1 - MODULE MODE + MASTER SWITCH ( 0=OFF / 1=ON )

The module can quickly and easily be enabled and disabled using this function. It acts like a master switch. When disabled, the module becomes completely inactive and behaves as if it was not installed while keeping all other function settings intact for when it is re-enabled later.

- Setting 1 activates the module.

**EXTREMELY IMPORTANT: In order to avoid problems with diagnostic tools and to avoid confusion or risk of injury by unexpected top movement, we urge you to ALWAYS DISABLE the module before taking the car in for routine maintenance or lending it to a third person! In case of any top malfunction NEVER take the car with the module still installed to an unsuspecting dealer! In such cases ALWAYS contact Mods4Cars for support first at [www.mods4cars.com](http://www.mods4cars.com) or completely uninstall the module before a dealer visit.**

### Function 2 - Console Switch One-Touch ( 0=OFF / 1=ON )

This function allows full automatic top operation using the console switch.

#### Top operation with the console switch:

- Holding down the switch (longer than 1 sec) in either direction will operate the top in manual mode for as long as the switch is held.
- Tap open briefly: Open the top.
- Tap close briefly: Close the top.

**To interrupt an ongoing operation: Tap the console switch in any direction at any time.**

### Function 3 - Console Switch Invert ( 0=OFF / 1=ON )

This function allows reversing the direction of the console switch.

- Setting 1 activates reversed direction operation.

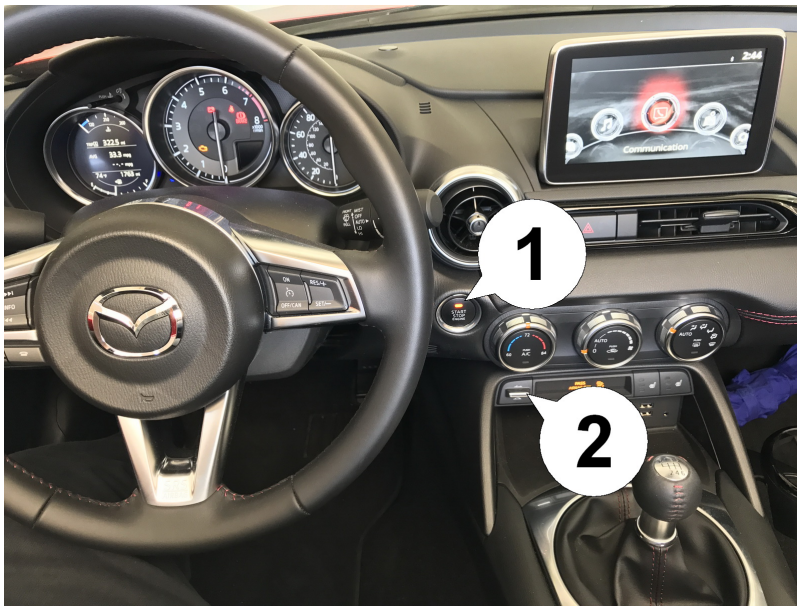
### Function 4 - Maximum Speed ( 0=0 km/h / 1=10 km/h / 2=20 km/h / 3=30 km/h / 4=40 km/h / 5=50 km/h )

This function determines the desired speed limit for top operation via console switch.

- Setting 0 only allows roof operation while halted.
- Setting 1 and up increase the speed for top operation in steps of 10km/h (~7mph).

**We recommend to keep the speed as low as possible and only operate the top on even and smooth street surfaces! Once the top is started within the programmed speed limit, it will continue running, even if the speed later exceeds the limit during the top operation!**

## Programming



This module offers several different functions, each with several settings. All functions and settings are described in detail above and a quick reference table (matrix) can be found at the end of this manual. We recommend printing the matrix and storing it in the glove box!

To activate the programming mode, turn the ignition (1) fully ON (no need to start the engine), then hold down the convertible top switch (2) in the direction the top is already in (open when the top is open, close when the top is closed) until the cluster emits a signal beep. Now let go.

The module outputs the current function number and setting level via the cluster buzzer. As an example, the buzzer sounds once, brief pause, then sounds twice: Function 1 is currently set to setting 2.



To **select the function**, tap the top switch briefly. To **change the setting** of the selected function, hold the switch for about 1 sec. A brief tap on the top open switch advances to the next function, a brief tap on the top close switch returns to the last one. After listening to the buzzer signals, a long tap on the top open switch increases the setting while a long tap on the top close switch decreases it.

To end programming mode, either turn the ignition off or hold down the top switch in either direction for a longer time (about 5 sec) until the cluster beeps again.

Programming mode also terminates automatically after 60 sec. of inactivity.

## Function/Setting Matrix (green fields are defaults)

**Product: STHFMA2 - SmartTOP for Mazda MX-5 RF**  
**Firmware: v1.00 and up**

 	SETTING 0	SETTING 1	SETTING 2	SETTING 3	SETTING 4	SETTING 5
<b>Function 1</b> MODULE MODE + MASTER SWITCH	<b>OFF</b> Module Disabled	<b><u>ON</u></b> Module Enabled				
<b>Function 2</b> Console Switch One-Touch	<b>OFF</b> Factory behavior	<b><u>ON</u></b> One-Touch operation				
<b>Function 3</b> Console Switch Invert	<b><u>OFF</u></b> Factory Behavior	<b>ON</b> Switch inverted				
<b>Function 4</b> Maximum Speed	<b><u>0 km/h</u></b> Only while halted	<b>10 km/h</b> 10 km/h (~7mph)	<b>20 km/h</b> 20 km/h (~13mph)	<b>30 km/h</b> 30 km/h (~19mph)	<b>40 km/h</b> 40 km/h (~25mph)	<b>50 km/h</b> 50 km/h (~32mph)