



M1 User Level Security Configuration

Version 1.0 Published: January 2017



TABLE OF CONTENTS

	Overview2
▶	Password Or Key File?2
►	Setting a Security User3
►	Password on Offline Packages7
►	Using a Key File5
►	Removing a Security User7



OVERVIEW

It is often necessary to add a Password to an M1 ECU to protect the calibration from being changed by unauthorised people. This document describes adding a single user Password or key to an M1 package. This document does not cover the full use of the M1 security system(s).

PASSWORD OR KEY FILE?

A Password is the simplest form of security as it simply needs the password to be used from the memory of the tuner. The downside of a Password is that it can be forgotten or accidentally passed on but it is the simplest way of keeping the ECU secure.

A Key file is an actual data file that must be available on the laptop to be able to unlock the ECU. This key file is a much higher level of security. The downside of a Key file is that as a data file it can be accidentally deleted and is not something that an individual can commit to their own memory.

Keys also need to be made available to M1 Tune through a locally accessible directory or drive on the laptop that is used to connect to the M1, this can restrict their usage when used for remote tuning and support as it opens the key file up to being copied by the end user. Passwords can be entered over a remote connection, but are also at risk of being captured by keystroke capture utilities running on the local laptop.

In either case the type of security must be looked after responsibly.

NOTE: Once a package is locked with a Password or Key File it is locked on the laptop as well as in the ECU hardware. Simply put you will not be able to open the package offline on the laptop without the password or Key File. There is NO POSSIBILITY of retrieving a laptop saved package or ECU access to a package if the Password is forgotten or the Key File is lost. MoTeC have made it so no backdoor access exists.



SETTING A SECURITY USER

As delivered all MoTeC M1 packages have a Guest user which allows anyone to connect to a package without the need for any security access. When adding a password, the tuner is effectively taking all access away from the Guest user and transferring it to themselves with the addition of security in the form of a Password of Key File.

🖁 Guest 🤗	Permissions Mode :	Show Effect	ive User Permis	sions as used	by M1Tune (includ	les Guest)	Add
	General						Remove
	Administrator	Yes					
	Allow Send Firmware	Yes					Edit
	Allow Change Password Allow Change Workbooks	Yes					
	Allow Change Vehicle ID	Yes					
	Group	Tune				^	i
	Engine Normal	Adjust					
	Engine Normal Input	Adjust					
	Engine Normal Output	Adjust					
	Engine Diagnostic Engine Diagnostic Input	Adjust					
	Engine Diagnostic Output	Adjust					
	Engine Advanced	Adjust					
	Engine Advanced Input Engine Advanced Output	Adjust					
	Engine Pin	Adjust					
	Engine Pin Input	Adjust				~	
	Data Logging System	Tupe	Retrieve	Convert	Fraee		1
	Normal	Adjust	Yes	Yes	Yes		
	Unused 2	Adjust	Yes	Yes	Yes		
	Unused 3	Adjust	Yes	Yes	Yes		
	Unused 4	Adjust	Yes	Yes	Yes		
	Unused 6	Adjust	Yes	Yes	Yes		
	Unused 7	Adjust	Yes	Yes	Yes		
	Unused 8	Adjust	Yes	Yes	Yes		
						OK	C
						UN	Carlot
Add Hear						V	
Add osci						^	
General Tuning	Data Logging						
Identity							
						_	
Name : Iuner							
/ du renucadul I						_	
Login Type :) Guest 💿 Pa	ssword	⊖ Key		Configure		
	2010						
Manage other U	3013						
- Manage other U)Yes ONo						
Manage other Us Administrator : ()Yes ONo)					
Manage other U Administrator : (Send Firmware) Yes 🔿 No)					
Manage other U Administrator : Send Firmware Yes	No	Upgrade	Only .				
Manage other U Administrator : Send Firmware Yes Permissions) Yes O No	Upgrade	Only .				
Manage other U: Administrator : Send Firmware Yes Permissions Allow Change	No Password	Upgrade	Only .				
Manage other U: Administrator : Send Firmware - Yes Permissions Allow Change	Yes No No Password Tune Workbooks	Upgrade	Only _				
 Manage other U: Administrator : Send Firmware - Yes Permissions Allow Change Allow Change 	Yes No Password Tune Workbooks	Upgrade	Only .				
Manage other U Administrator : Send Firmware Yes Permissions Allow Change Allow Change	Yes No No Password Tune Workbooks Vehicle ID	Upgrade	Only .				
Manage other U Administrator : Send Firmware Yes Permissions Allow Change Allow Change Allow Change	Yes No No Password Tune Workbooks Vehicle ID	Upgrade	Only .				

Open the ECU in M1 Tune and go to Online – Edit Security Permissions and click Add on the right-hand side.

The tuner can add a relevant name to the "Name" box. Under Authentication the user can decide to use a simple Password or a Key File. It is recommended to use the Password option to start with until the user is familiar with the security system.



As this security user is the first one to be added they **must** be set as an "Administrator" under the Manager Other Users heading. This will automatically give the new security user complete control of access to the ECU and package.

Next click "OK" and the Change User Password box will appear. The new Password will need to be entered twice.

Change User Password						
New Password :						
Confirm Password ;						
C	Cancel					

The new security user will now appear in the list with the relevant accesses shown in the middle boxes. As an Administrator, all items should be set to "Yes" or "Adjust". This will be done by default when the user is created with Administrator rights.

Security Permissions							×
Users Data Logging Systems							
Name Type	Permissions Mode :	Show Effective	ve User Permis	sions as used b	y M1Tune (includes Gues	t) ~	Add
Cuest	General Administrator Allow Send Firmware Allow Change Password Allow Change Workbooks Allow Change Vehicle ID Group Engine Normal	Yes Yes Yes Yes Yes Tune Adjust				^	Remove Edit
	Engine Normal Input Engine Normal Output Engine Diagnostic Input Engine Diagnostic Output Engine Advanced Output Engine Advanced Output Engine Advanced Output Engine Pin Engine Pin Input Engine Pin Output	Adjust Adjust Adjust Adjust Adjust Adjust Adjust Adjust Adjust Adjust Adjust				~	
	Data Logging System Normal Unused 2 Unused 3 Unused 4 Unused 5 Unused 6 Unused 7 Unused 8	Tune Adjust Adjust Adjust Adjust Adjust Adjust Adjust	Retrieve Yes Yes Yes Yes Yes Yes Yes Yes	Convert Yes Yes Yes Yes Yes Yes Yes Yes	Erase Yes Yes Yes Yes Yes Yes Yes Yes		
					[ОК	Cancel

Click "OK"

The next time the user tries to open the ECU the Access Control dialogue will appear and the users' security name will appear in the drop-down list.



Access Control			×				
	Mair	n Package					
Please provide a password (case-sensitive) or a key to access: GPR (M150) [01.07.0002, February 2016] test DBW Base Mikuni 54LA 10S16 1450 00248 Mc							
User Name:	Guest		~				
Password	mark Guest						
🔾 Кеу							
		ОК	Cancel				

The password will need to be entered to gain access to the ECU.

NOTE: At this point the Guest user will still be available but there will be no access to any part of the package either when online to the ECU or trying to open the package offline.

USING A KEY FILE

The adding of a new security user is the same as for a password but when the user chooses the Key File option.

ser 'mark'			2
General Tuning Data Logging	9		
Identity			
Name : mark			
Authentication			
Login Type : OGuest	O Password	Key	Configure
Manage other Users			
Administrator :	⊖ No		
Send Firmware			
● Yes ○ No	🔿 Upgrade	Only	
Permissions			
Allow Change Password			
Allow Change Tune Workbo	ooks		
Allow Change Vehicle ID			
		ОК	Cancel

Click "OK" and the Key File configuration dialogue will appear.



Change User Key	×
Please ensure any key files you have are kept secure.	
Create Key]
OK Canc	el

Click Create Key and a Windows browser box will appear with the ability to save the Key File to a location and with a specified name.

🌌 Save a Key F	ile			×
Save in:	: <mark></mark> M1) 📂 🛄 🔻	
Quick access Desktop Libraries This PC	Name Build Packages Sensor Cals		×	
Network	<			>
	File name:	Tuner 1	~	Save
	Save as type:	Key Files (*.key)	\sim	Cancel

The next time the user wants to open the ECU or the package offline they will need to choose the Key option on the security Access Control dialogue and click the Browse button on the right of this.

	Main Package	
	Please provide a password (case-s	ensitive) or a key to access:
	GPR (M150) [01.07.0002,	February 2016]
	DBW Base Mikuni 54LA 1	0S16 1450 00248 Mc
User Name:	mark	~
obor Nume.		
O Password	••••	
obor Namo.		

The user will need to locate the Key File on the laptop.



📓 Select a Key	File				×
Look in:	M1		~ G	🦻 📂 🖽 -	
Quick access Desktop Libraries This PC	Name Build Packages Sensor Cals			^	
Network	<				>
	File name:			~	Open
	Files of type:	Key Files (*.key)		\sim	Cancel

Then Click "Open" and then "OK" on the Access Control.

PASSWORD ON OFFLINE PACKAGES

It must be remembered that because the package itself is now behind a password even if the package is emailed to someone else it cannot be viewed or sent to an ECU without the password.

REMOVING A SECURITY USER

The user will need to log on to the ECU and select Edit Security Permissions in the Online menu.

Click on the security user that is to be deleted and click "Remove" and "OK". The ECU will reset and the security will have been removed.