OEM Security Supplement

1. WHAT IS OEM SECURITY

OEM Security is an orderable option which allows an OEM to develop an application in the 2704 controller then apply security codes to prevent that application from being copied or cloned. This particular feature is normally applicable to OEMs who wish to develop a controller specific to their machine or process.

The security is applied to certain areas only of the instrument. These areas are:-

- Analogue Operators Page
- Digital Operators Page
- Setpoint Programmer Page
- Digital Programmer Page
- User Values Page
- Up to three user configurable areas defined between high and low modbus address limits

The parameters for OEM Security are found in configuration level immediately following the INSTRUMENT page, but only appear if the option has been ordered.





2. TO SET OEM SECURITY PASSCODE

The procedure in this section is written for a new instrument where the OEM password defaults to 0.

	Do This	This Is The Display You Should See	Additional Notes	
	From any display press as many times as necessary to access the page header menu Press or v to select	INSTRUMENT OEM SECURITY PROGRAM RUN PROGRAM EDIT DIGITAL PROG VACUUM		
	'OEM SECURITY'	ALARMS V		
3.	Press to display the list of sub-headers	Passcode 0 Change Pass № Analog Opers Off	In a new instrument the	
	Press v to select 'Change Pass'	Logic Opers Off User Val Off SP Prog Off Dig Prog Off	password defaults to 0. Any parameter can be selected in this state	
5.	Press to edit 'Change Pass'			
-	Press or to 'Yes' Press and together to scroll back to 'New Passcode'	New Passcode 0 Passcode 0 Change Pass Yes Analog Opers Off Logic Opers Off	The parameter 'New Passcode' is added to the display	
8.	Press or vo enter the new numeric code	User Val Off SP Prog Off		
9.	Press of to scroll to 'Passcode'	New Passcode 1 A Passcode 0	The display chages back to that shown above but with the new passcodes showing.	
10.	Press or T to enter the correct passcode		The parameter 'Change Pass' can now be turned to 'No' again to enable the OEM Security feature. Press followed by	
			or V	

3. TO SET THE SECURE AREAS

It is now possible to choose pages and groups of parameters which you do not wish to be available over digital communications.

Do This	This Is The Display You Should See	Additional Notes
 11. From the previous display press to select a page to be secured 12. Press or to select 'On' 	New Passcode0Passcode0Change PassYesAnalog OpersOnLogic OpersOffUser ValOffSP ProgOff	Other areas which can be set in the same way are:- Logic Operators User Values Setpoint Programmer Digital Programmer
 13. To secure a range of parameters, press to select 'User 1 High' 14. Press or to choose the modbus address of the highest parameter in a range 	User Val Off SP Prog Off Dig Prog Off User1 High 03461 <u>Clin3.OP</u> User1 Low 00000 User2 High 00000	You may select the Modbus address using the numerical address or by pressing \fbox again to select the address by parameter name. The parameter names are listed in the Engineering Manual Appendix D for the 2604 or 2704
 15. Then press to select 'User 1 Low' 16. Press or to choose the modbus address of the lowest parameter in a range 	User Val Off SP Prog Off Dig Prog Off User1 High 03461 Clin3.OP User1 Low 03365 <u>Clin1.OP</u> User2 High 00000 User2 Low 00000	In this example the parameters defined by the modbus addresses 03365 to 03461 (ie the range of parameters Clin1.OP to Clin3.OP) cannot be cloned or read over digital communications.
17. The above two steps can be repeated for two more ranges defined by User 2 High and Low and User 3 High and Low	User Val Off SP Prog Off Dig Prog Off User1 High 03461 Clin3.OP User1 Low 03365 Clin1.OP User2 High 05690 DI07.Val User2 Low 05402 <u>DI01.Val</u>	In this example parameters DI01 to DI07 cannot be cloned or read over digital communications. Note: the parameters can be read through the controller display

When the instrument is power cycled it will always start up with the passcode defaulted to 0. The passcode, therefore, must be entered if access to the OEM Security feature is required.

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Note: If an incorrect security code is entered more than five times the OEM Security feature is disabled. Contact your supplier .

4. CLONING AN OEM SECURE INSTRUMENT

The OEM will wish to clone the instrument which has been generated. This may be done by first entering configuration level, as described in the 2604 and 2704 Engineering Handbook, then entering the correct OEM secure passcode.

At this point all parameters are available over digital communications and via the user interface.

5. FURTHER ADDITIONS TO INSTRUMENT SECURITY

The Inst_mode parameter may be accessed over digital communications. Writing to this parameter puts the instrument into configuration mode. When OEM security is enabled this parameter will now be secure.

In addition the access level passcodes are available over digital communications. These parameters will also be secure when OEM security is enabled.

6. RELATED HANDBOOKS

- 2604 Engineering Handbook Part Number HA026761
- 2704 Engineering Handbook Part Number HA026933