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.

<table>
<thead>
<tr>
<th>Do This</th>
<th>This Is The Display You Should See</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. From any display press to access the page header menu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Press or to select ‘OEM SECURITY’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Press to display the list of sub-headers</td>
<td>Passcode</td>
<td>In a new instrument the password defaults to 0. Any parameter can be selected in this state</td>
</tr>
<tr>
<td>4. Press to select ‘Change Pass’</td>
<td>Change Pass</td>
<td>The parameter ‘New Passcode’ is added to the display</td>
</tr>
<tr>
<td>5. Press to edit ‘Change Pass’</td>
<td>Analog Opers</td>
<td></td>
</tr>
<tr>
<td>6. Press or to ‘Yes’</td>
<td>Logic Opers</td>
<td>The display changes back to that shown above but with the new passcodes showing. The parameter ‘Change Pass’ can now be turned to ‘No’ again to enable the OEM Security feature.</td>
</tr>
<tr>
<td>7. Press and together to scroll back to ‘New Passcode’</td>
<td>User Val</td>
<td></td>
</tr>
<tr>
<td>8. Press or to enter the new numeric code</td>
<td>SP Prog</td>
<td></td>
</tr>
<tr>
<td>9. Press to scroll to ‘Passcode’</td>
<td>Passcode</td>
<td></td>
</tr>
<tr>
<td>10. Press or to enter the correct passcode</td>
<td>Passcode</td>
<td></td>
</tr>
</tbody>
</table>
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.

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</table>
| 11. From the previous display press [C] or [C] to select a page to be secured | New Passcode 0 | Other areas which can be set in the same way are:-
| | Passcode 0 | Logic Operators
| | Change Pass Yes | User Values
| | Analog Ops On | Setpoint Programmer
| | Logic Ops Off | Digital Programmer |
| | User Val Off | |
| | SP Prog Off | |

12. Press [▲] or [▼] to select ‘On’

13. To secure a range of parameters, press [C] or [C] to select ‘User 1 High’

14. Press [▲] or [▼] to choose the modbus address of the highest parameter in a range

15. Then press [C] to select ‘User 1 Low’

16. Press [▲] or [▼] to choose the modbus address of the lowest parameter in a range

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

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.

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

3.3 Other areas which can be set in the same way are:
- Logic Operators
- User Values
- Setpoint Programmer
- Digital Programmer

You may select the Modbus address using the numerical address or by pressing [C] again to select the address by parameter name. The parameter names are listed in the Engineering Manual Appendix D for the 2604 or 2704.

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.

Note: the parameters can be read through the controller display

In this example parameters DI01 to DI07 cannot be cloned or read over digital communications.

You may select the Modbus address using the numerical address or by pressing [C] again to select the address by parameter name. The parameter names are listed in the Engineering Manual Appendix D for the 2604 or 2704.

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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