



Optidrive Applications Support Library

Application Note	AN-ODE-2-004
Title	Locking Parameters to Prevent Changes
Related Products	Optidrive E2
Level 1	1 – Fundamental - No previous experience necessary 2 – Basic – Some Basic drives knowledge recommended 3 – Advanced – Some Basic drives knowledge required 4 – Expert – Good experience in topic of subject matter recommended

Overview

Optidrive E2 incorporates a feature that, when activated, effectively “locks” the settings of the drive. Parameters within the drive can then only be viewed but not changed. This is useful in cases where the commissioning engineer wishes to ensure that unauthorised changes are prevented.

For complete security, this function can also be used in conjunction with the parameter access code to prevent unauthorised access to the locking parameter (unauthorised unlocking of the drive parameters).



Procedure

Entering the access code for Extended Parameter Access:

Parameter for entering access code: P-14

The access code in Optidrive E2 is a pre-defined number between 1 and 30,000 that has to be entered into the access parameter before access to ‘extended’ parameters is permitted.

By default, the standard access code for the all Optidrive E2 is 101.

To gain access to extended parameters, this value (101) must be entered into the access parameter P1-14. The user can change the access code to any desired value between 1 and 9,999 by setting the Extended Menu Access code

Changing the access code for Extended Parameter Access:

Extended Menu Access code is set in parameter P-37

Access to extended parameters will only be permitted if the value in P-14 equals the value set in P-37.

	<p>NOTE: When the extended menu access code is changed then it must be retained in a safe location for further reference to allow further configuration or service.</p> <p>Forgotten access codes can be cleared by returning the drive back to default settings. A default is performed by pressing STOP, UP and DOWN buttons simultaneously for more than 2 seconds. This will clear all drive parameters, including the security codes back to default values.</p>
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Write protecting the parameters

Parameter for setting the 'Parameter Access Lock' is P-38

By default the Parameter Access Lock parameter is set to 0. This means that parameters can be changed, and they are automatically saved on exit. The Parameter Access Lock parameter can be set to the following values:

0 – Parameters can be changed, they are saved on parameter exit (default state).

1 – Parameters values are locked and can be viewed but cannot be changed.

Example 1: Preventing access to extended menus

Assuming that the drive is in factory default settings:-

Change the value of P-14 to 101; the extended parameter group access is now available.

Change the value of P-37 from 101 to 1234, the "Access Code" is now 1234.

Now if the user wants to access the extended parameter groups then value 1234 must be entered into parameter P-14

The only way to reset the access code defined in P-37 without knowing the correct value and entering it into P-14 is to carry out a default operation.

Example 2: Locking parameters to prevent editing

Enter to parameter access code into parameter P-14 to access extended parameters (default – 101)

Change P-38 to 1, so that all the parameters are locked (except P-14).

Change P-14 to 0 so that all parameters except the basic parameters (P-01 thru P-14) cannot be accessed.

The parameters of the drive are now locked, and cannot be unlocked without changing P-38 to 0. If P-37 has also been changed to the user's preferred access code then parameter access can only be unlocked if the extended menu access code is known (which allows access to P-38).

Note

If there is a Remote keypad module connected with the drive, setting P-38 to 1 prevents all parameter access through the remote keypad. To allow parameter access via the keypad, set P-38 back to zero using the drive keypad.

Appendix

Revision History			
Issue	Comments	Author	Date
01	Document Creation	JP	09/02/12
02	Revised to new format	KB	24/04/14