



# Optidrive Applications Support Library

<b>Application Note</b>	<b>AN-ODE-3-004</b>
<b>Title</b>	<b>Locking Parameters to Prevent Changes</b>
<b>Related Products</b>	<b>Optidrive E3</b>
<b>Level</b> <b>1</b>	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

The Optidrive E3 parameter set is divided into 5 groups, with access controlled as follows :-

Group Name	Parameters	Access when...
Basic	P-01 – P-14	Any setting of P-14
Extended	P-15 – P-50	P-14 = P-37 (default : 101)
Advanced	P-51 – P-60	P-14 = P-37 + 100 (default : 201)
Basic Monitoring	P00-01 – P00-30	P-14 = P-37 (default : 101)
Extended Monitoring	P00-31 – P00-50	P-14 = P-37 + 100 (default : 201)

In order to prevent unauthorised parameter changes, it is possible to

- Lock all parameters values to their present settings, with changes disabled
- Define a new access code

## Parameters

### P-14 Parameter Access Code

This parameter controls access to the various parameter groups as shown in the above table. In combination with P-38, this allows full control of user parameter access to be defined.

### P-37 Access Code Definition

Parameter P-37 defines the access code that must be entered into P-14 to allow access to extended and advanced parameters. The default setting is 101. This setting may be changed to any value between 0 and 9999.

On changing this value, extended and advanced parameter access will be disabled until P-14 is again adjusted to match.

### P-38 Parameter Access Lock

P-38 allows all parameters to be locked to prevent changes. P-38 is part of the extended parameter access group, hence to change this parameter, extended parameter access is required, by setting P-14 = P-37 (default 101).

The default setting of P-38 is zero, which allows all parameter values to be edited. Note that some parameters, such as motor nameplate information may not be adjusted whilst the drive is operating.

When P-38 is set to 1, all user adjustable parameter values are now locked, and may not be adjusted, except

- P-38 may be reset back to zero
- P-14 may be changed
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By combining the above parameters, it is possible to define a unique code and prevent access by any operators who do not have the relevant code as follows :-

- Enable extended parameter access by setting P-14 = 101 (factory default setting)
- Define the new access code in P-37, between 0 and 9999
- Enter this access code into P-14
- Set P-38 = 1 to lock the parameters
- Changed P-14 <> P-37

Following this, the user may read parameters P-01 = P-14, but may not adjust their values. In order to make any adjustment to the parameter values, the user must

- Set P-14 = P-37
- Set P-38 = 0

All parameter values may now be adjusted.

### Viewing Locked Parameters

Whilst the parameters are locked, it is possible to view the values of P-01 to P-14, however the values may not be adjusted. If an attempt is made to change the value, the display will show “L” on the left hand side, indicating the parameter is locked. This also applies if parameters are unlocked, and an attempt is made to change a parameter such as motor rated current whilst the drive is operation.

## Appendix

Revision History			
Issue	Comments	Author	Date
01	Document Creation	KB	07/09/15