This Application Note is pertinent to the Unidrive SP and Commander GP20 Family

Unidrive SP and Commander GP20 Security Code

For some new User's of Unidrive SP's and Commander GP20's, the parameter security system is sometimes found to be a rather mysterious subject. This article will attempt to unveil those mysteries.

Security Basics

The "as shipped" security level for the Unidrive SP is L1 or Level 1. Without changing the basic security level, Level 1 access will only allow you to view or modify Menu 0 parameters. Menu 0 parameters consist of certain key setup parameters that Control Techniques believes you will most likely need to set up the drive in the most basic of situations. Often you need to access parameters outside of Menu 0 to activate some of the more advanced drive features. To accomplish this you would need to change the access level to Level 2.

Level 2 Access

To change the access level you would:

- Depress the M button
- Maneuver to parameter #00.49 by depressing the Down Arrow
- When at parameter #00.49 depress the M button again which will allow you to change the Access Level.
- Depress the Up Arrow to obtain Level 2
- Depress the M button again to leave the edit mode

You should now have access to all drive parameters. To verify this you should be able to depress the Right Arrow and the display will go to Menu 1.00.

Once this level is entered, you will be able to maneuver throughout the Unidrive SP menu structure freely to view parameters.

This access level will remain in effect until power is removed from the drive or if you wish to re-establish this security, you can set #00.49 (or #11.44) to L1.

If you wish this access level to remain, you could perform a Store by going to #00.00, entering 1000 and depressing the RED Stop/Reset button.
If you attempt to modify a parameter value or setting and the display indicates \textit{CodE}, someone has entered a security code into this drive. You will be able to view any parameter using Level 2 access but you will not be able to change parameters (including those in Menu 0) unless you enter the User assigned Security Code.

When \textit{CodE} appears you would depress one of the directional arrows and make the assigned Security Code appear and depress the M button. This will satisfy Security. You may need to change to L2 access to gain full access from this point.

\textbf{User Security Code Assignment}

Users can assign their own 3 digit security code within the range of 1-999 by placing it into parameter \#0.34 (or parameter \#11.30).

From this point forth, modification of parameters will require that code to be entered before write access will be granted- (except for parameter \#0.49).

After a User Security Code has been set, parameter \#0.34 (or parameter \#11.30) will indicate 0. In this manner, the User Security code will not be visible.

These security methods do not affect serial communications. Security affects only access to parameters when using our SM-Keypad (LED version) or SM-Keypad Plus (LCD version).

\textbf{Security Bypass}

During initial start-up of the drive, having to enter the security code after each power-up can become a nuisance and slow down the start-up process. To bypass or eliminate the need to enter a security code, one can accomplish this by placing a 0 into parameter \#11.30.
Forgotten Security Codes

People often forget their security codes. A User assigned security code is not visible at #11.30. To retrieve the forgotten security code, you must go in through the “back door”.

“The Back Door”

To obtain the forgotten security code, you can DEPRESS and HOLD the Blue key, and DOWN Arrow key then APPLY POWER to the drive. The User security code number should appear on the data display at parameter #0.34 (or #11.30).

**Note:** Defaulting the drive parameters (using 1244 or 1254) does not reset the User security code. A previously assigned code by the User will remain in effect even after defaulting parameters.

Questions ?? Ask the Author:

**Author:** Ray McGranor  
(716)-774-0093  
email: [mailto:ray.mcgranor@emersonct.com](mailto:ray.mcgranor@emersonct.com)