This Application Note applies to the Unidrive M700 Drive Series

Saving and Restoring Unidrive M700 drive parameters

This application note will describe how to save and then restore parameters to a Unidrive M700 using the NV Media Card. The NV Media Card is made up of two individual parts fitted together: the SD-CARD-ADAPTOR and a SD memory card. Control Techniques sells the CTSDG8GB SD card and the SD-CARD ADAPTOR. Below are pictures of an actual SD-CARD-ADAPTOR fitted with the CTSDG8GB SD card. For all references to NV Media Card following in this document it will be assumed the NV Media Card will consist of both the SD-CARD-ADAPTOR and SD memory card in order to save and restore any drive parameters. Before performing any of the parameter restoration operations below make sure the drive is not enabled and there is no voltage applied to control terminal 31.

Saving Unidrive M700 drive parameters using the NV Media Card:

The following steps are needed to program a new NV Media Card or anytime the user wishes to save a new backup project to the NV Media Card residing in the working drive. In order to gain access to the drive NV Media Card the drive keypad will need to be removed as shown in Figure 1. The drive keypad can be installed or removed while drive is powered on.

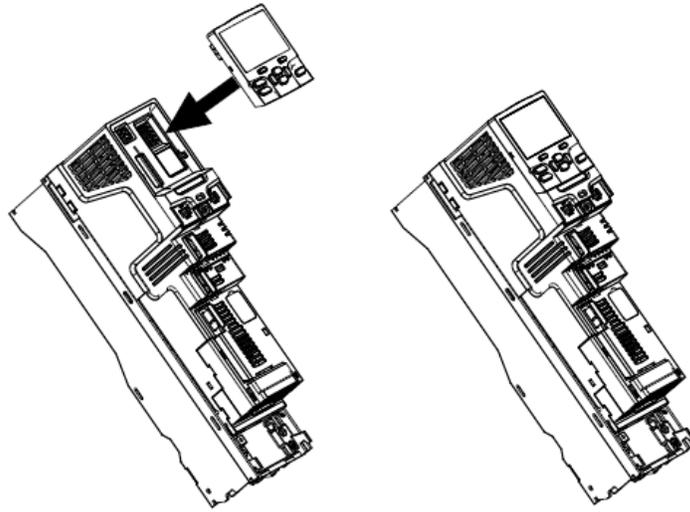**Warning:** Be aware of possible live terminals when installing the keypad with power on.

Figure 1

To install, align the keypad and press gently in the direction shown in Figure 1 until it clicks into position. To remove, reverse the installation instructions.

Once the keypad has been removed the NV Media Card can be installed into the drive as shown in Figure 2. The NV Media Card can also be installed with drive power on, but make sure the drive is disabled and there in no voltage applied to control terminal 31.

Installing the NV Media Card:

The NV Media Card is located at the top of the module under the drive display (if installed) on the left-hand side. Ensure the NV Media Card isinserted with the contacts facing the left hand side of the drive as seen in Figure 2 (1).The NV Media card installed into the drive in Figure 2 (2) below.The drive only communicates with the NV Media Card when commanded to read or write, meaning the card may be "hot swapped", however, do not remove the NV Media Card until the Read or Write operation has completed.
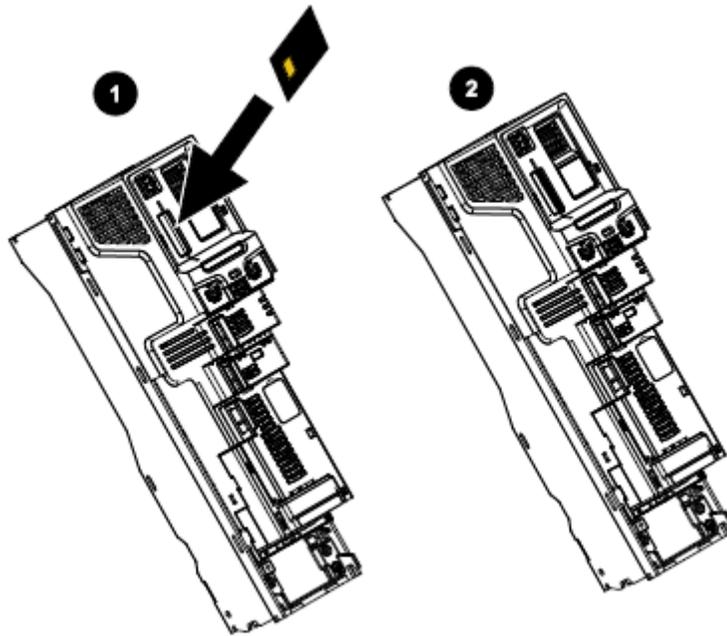
Figure 2

Once the NV Media card has been installed into the drive as shown in Figure 2 (2) the drive keypad will need to be replaced and drive powered on in order to program the NV Media card. Using the drive keypad scroll up or down to drive parameter 00.030. Press the keypad 'M' so that 'None' is flashing and then using the up arrow change to 'Program' and press the Red Reset button.

Programs all drive parameters to the NV Media Card

NOTE

Overwrites any data already in data block 1

Pr **00.030** = Program + ⊘

 A small flashing period will flash next to left hand side of '00.030' during the programming of the NV Media card. Parameter 00.030 will change back to 'None' once the programming is complete. The NV Media card now has a backup set of drive parameters that can be used to restore parameters in this drive or any replacement drive of the same size and voltage ratings.

<u>Restoring Unidrive M700 drive parameters using the NV Media Card:</u>

The following steps are needed to program a new out of the box M700 drive or replacement M700 drive that has an incorrect set of drive parameters.

Remove the drive keypad and install the NV Media card that has the backup drive parameters stored on it as shown in Figure 1 and Figure 2 and apply power to the drive. Make sure the drive is not enabled and there is no voltage applied to control terminal 31. Using the drive keypad scroll up or down to drive parameter 00.030. Press the keypad 'M' so that 'None' is flashing and then using the up arrow change to 'Read' and press the Red Reset button.

Drive reads all parameters from the NV Media Card

Pr **00.030** = Read + ⊘

A small flashing period will flash next to left hand side of '00.030' during the programming of the M700 drive. Parameter 00.030 will change back to 'None' once the programming is complete. Cycle power to the drive and the newly programmed M700 drive is now ready for use.

<u>Resources</u>
Unidrive M700 User Guide
Unidrive M700 Parameter Reference Guide
Guides, can be found on our website: www.emersonindustrial.com/en-US/controltechniques
You can email to techsupport.cta@emerson.com
You can call Technical Support at 952-995-8000, 24/7/365