

This Application Note applies to M100 through M400 series

SD Card and AI-BACKUP-ADAPTER

This document provides information on how to use the AI-BACKUP-ADAPTER with SD card, to clone and backup parameters.

Installing the AI-BACKUP-ADAPTER

It is important to note that when the SD card is inserted into the AI-BACKUP-ADAPTER that the module is never hot swapped from one drive to another, this can damage the SD card. Turn off the 24 Vdc to the module or shut off power to the drive before inserting or removing the backup module.

Make sure the drive display is completely blank and there are no characters illuminated. Place the SD card into the AI-BACKUP-ADAPTER module and then insert the module into the drive. When it is fully installed then apply power to the drive or the 24 Vdc connector of the module.

Saving Parameters to the SD Card

Once drive parameters have been entered and saved in the drive then they can be copied to the SD card. There are several methods to accomplish this and make sure the drive is not in the run mode, the drive should be in either the Ready (rdy) or Inhibit (inh) modes..

A basic method to program is to go to parameter #00.028 and change the setting from “NonE” to “ProG”. Then press the red stop/reset button once. The copying process will show by a series of flashing dashes abover the word “ProG” and then the display will return to “NonE”. The SD card now has drive data in block 001.

There are two alternative methods to saving and can be done in parameter #00.000 (or any menu number #mm.000) by saving the setting from “NonE” to “SAVE.1” and pressing the red stop/reset button once. The setting should return to “NonE” when complete.

The final method is still at parameter #00.000, scroll through the options until you get to past the setting of “rSt.oPt” where you will get a number (which varies on the drive). Increase this value to “4001” and then press the red stop/reset button once, the setting will return to “NonE” again.

Saving Parameters to a SD Card Block Location

The basic saving process always writes to block 1 of the SD card. If there are multiple drives with different ratings and motor nameplate it would be best to save the parameter to a different block number (002-999).

This is accomplished at parameter #00.000, scroll through the options until you get to past the setting of “rSt.oPt” where you will get a number (which varies on the drive). Increase this value to “4xxx” (the xxx would represent the block number from 002-999) and then press the red stop/reset button once, the setting will return to “NonE” again.

Loading Parameters from the SD Card

This is the same method as the Saving process, but with different setting and the drive needs to be in the Ready (rdy) or Inhibit (inh) modes for this to work properly.

A basic method to program is to go to parameter #00.028 and change the setting from “NonE” to “rEAd”. Then press the red stop/reset button once. The copying process will show by a series of flashing dashes above the word “ProG” and then the display will return to “NonE”. The SD card now has copied drive data in block 1 to the drive.

There are two alternative methods to loading parameters from the SD card and can be done in parameter #00.000 (or any menu number #mm.000) by saving the setting from “NonE” to “LOAD.1” and pressing the red stop/reset button once. The setting should return to “NonE” when complete.

The final method is still at parameter #00.000, scroll through the options until you get to past the setting of “rSt.oPt” where you will get a number (which varies on the drive). Increase this value to “6001” and then press the red stop/reset button once, the setting will return to “NonE” again.

Loading Parameters from a SD Card Block Location

The basic loading process always reads from block 001 of the SD card. The SD card may have a block location (2-999) set aside for a given drive with specific motor nameplate information and setup configuration.

This is accomplished at parameter #00.000 (or any menu number #mm.000), scroll through the options until you get to past the setting of “rSt.oPt” where you will get a number (which varies on the drive). Increase this value to “6xxx” (the xxx would represent the block number 002-999) and then press the red stop/reset button once, the setting will return to “NonE” again. If the block number used does not match the drive then it can result with a fault code.

Resources: can be found on our website: www.controltechniques.com
For help contact techsupport.cta@mail.nidec.com, or
call Technical Support at 952-995-8000, 24/7/365