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## **Clone File Management Instructions**



# For use with *HyPer-Drive X1* ™ and *HyPer-Drive X144* ™ Controller/Inverters



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### When is Clone File Management Necessary?

- During the pre-startup steps of a *HyPer* User Manual, for initial startup of a *HyPer-Drive X1™ or X144™* controller.
- When updating *HyPer-Drive* Controller Firmware to a different version.
- When asking your Authorized Dealer to change parameters in *HyPer-Drive* controller programming.
- When you need additional support to solve Diagnostic Codes or abnormal behavior of the vehicle.

## If you are requesting parameter changes or troubleshooting support, you must provide the supporting party with:

- 1. **<u>Product Code</u>** of the Controller.
- 2. <u>Clone</u> file from the Controller.
- 3. Screenshots of the <u>About</u> Page in the Home Menu.
- 4. Screenshots of the <u>Active Faults</u> Tab in **Diagnose**
- 5. Screenshots of the Faults History Tab in Diagnose



## **Important Notes on Calibration!**

#### **Important Note on Motor Calibration!**

Your clone file must be calibrated to your motor before use. Please follow the Pre-Startup steps in your System's User Manual to commission the spin sensor. When you commission a sensor, you are calibrating the clone file for the individual motor it is controlling. This calibration is only stored within the clone file. If your clone file is being modified, you must adhere to one of the following options:

1. Modify the clone file that has already been commissioned to the motor.

2. Copy all parameters from the commissioned clone file's **Spin Sensor** tab into the generic clone you are installing.

3. Commission the sensor after installing a different clone file.

Installing a clone file without calibration to the specific motor may produce dangerous motor behavior upon throttle request.

#### **Important Note on Throttle Calibration!**

Please disconnect throttle or Motor Phase Cables before installing a clone that has not already been mapped to your throttle. Please follow the Pre-Startup steps in your System's User Manual to Map your Throttle. Installing a clone file with torque request at your resting throttle output may cause motor to produce unwanted torque upon completion of Cloning Load.



## **Uploading and Saving a Clone from HyPer-Drive Controllers**

**Home – Manage:** After establishing a connection between your controller and personal computer (PC), click **Manage** on the **Home** screen of SmartView.



**Manage – Clone:** To upload a Clone file that is on your Controller, click the icon with an arrow pointing to the Archive File Folder.

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F.	Mana	ige		and the		Sync		R	P
Restore	Clone	Protection	Firmware Update						
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	Path Location	i				_			



**Manage – Clone – To File Folder:** To save a Clone file to your PC, choose a file path that you will know how to access. An easily accessible option is the Desktop Icon, which will save the clone file to the desktop of your PC. Create a Filename including your motor serial#, today's date, followed by REV00 (for first revision). Then click OK.

Example Filename: H9HV000001\_09022020\_REV00.





### **Requesting Clone Modifications or Troubleshooting Help**

If you are e-mailing your Clone file to NetGain Motors, Inc. or an Authorized Dealer, the e-mail must also include a screenshot of the **About** page in SmartView. Please be sure the spin sensor has been commissioned in your new clone file before use (see Important Note on Motor Calibration!)

**Home** – **About:** After establishing a connection between your controller and Personal Computer (PC), click **About** on the **Home** screen of SmartView.

SME - SYSTEM SYNC	<i></i>	VIII Sync	) (
Connection          Image: About         Image: Contact	Monitor         .Real-Time Data         .Wirings         .Data Logging         Operation         Whorrand Control         .System         .Wator and Control         .Taction/Purport	Manage Restore / Clone Firmware Update	
tor Sync OEM SmartView All rights reserved by ave		in Pressouri	

About – About: Take a screenshot or photo of this page and e-mail it with your clone file.

Controller     Firmware       Board Type     ACX1       Nominal Votage     Firmware Family       100     V       Maximum Currents     Firmware Release       Inverter 1     750       750     Arms
Board Type       ACX1       Nominal Voltage       100       V       Maximum Currents       Inverter 1       750       Arms
ACX1 Nomial Voltage Inverter 1 750 Arms
Maximum Currents 2BD.002 Inverter 1 750 Arms 001
750 Arms Parblock Version 001
About SmartView PC Interface
65535 0020 Rel. 1.1
Product Site Date
Italy February 4th 2020



## **Installing a New Clone File on HyPer-Drive Controllers**

Please be sure the spin sensor has been commissioned in your new clone file before use (see Important Note on Motor Calibration!)

**Home** – **Manage:** After establishing a connection between your controller and Personal Computer (PC), click **Manage** on the **Home** screen of SmartView.



**Manage** – **Clone:** To overwrite the existing Clone file that is on your Controller, click the icon with an arrow pointing to the PC and Controller. It is best to <u>upload and save</u> the existing file before you overwrite it.





**Manage – Clone – To Controller:** To load a Clone file to your computer, navigate to the file that you saved on your computer. Saving a clone on your desktop is an easily accessible option, then you can click the Desktop Icon to access .clon type files saved on your desktop. Select the clone file you wish to install on your controller. Then click OK.

