HercuLinkTM User Manual

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About This Document

Abstract

This manual describes the installation, set up, and operation of HercuLink PDA software for use with Honeywell actuators.

References

The following list identifies all documents that may be sources of reference for material discussed in this publication.

Document Title	Doc ID
HercuLine 2000 Series Actuator Specification	61-86-03-14
HercuLine 2000 Series Actuator Model Selection Guide	62-86-16-21
Modbus [®] RTU Serial Communications User Manual	51-52-25-66
Modbus [®] RTU Serial Communications User Manual Configuration/Remote Calibration Interfaces for HercuLine Actuators	51-52-25-103
HercuLine 2000 Series Actuator Installation, Operation and Maintenance Manual	62-86-25-10
10260S HercuLine [®] Smart Actuator Installation, Operation and Maintenance Manual	62-86-25-08
11280S HercuLine [®] Smart Actuator Installation, Operation and Maintenance Manual	61-86-25-09

Contacts

World Wide Web

The following lists Honeywell's World Wide Web sites that will be of interest to our customers.

Honeywell Organization	WWW Address (URL)	
Corporate	http://www.honeywell.com	
Industrial Measurement and Control	http://www.honeywell.com/imc	

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Contact us by telephone at the numbers listed below.

		Organization	Phone I	Number
United States and Canada	Honeywell	1-800-4 1-888-4 1-800-5	23-9883 23-9883	Tech. Support Q&A Faxback (TACFAQS) Service
		1-000-0	20-1400	OCIVICC

Symbol Definitions

The following table lists those symbols that may be used in this document to denote certain conditions.

Symbol	Definition
A DANGER	This DANGER symbol indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury .
A WARNING	This WARNING symbol indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury .
A CAUTION	This CAUTION symbol may be present on Control Product instrumentation and literature. If present on a product, the user must consult the appropriate part of the accompanying product literature for more information.
CAUTION	This CAUTION symbol indicates a potentially hazardous situation, which, if not avoided, may result in property damage .
4	WARNING PERSONAL INJURY: Risk of electrical shock. This symbol warns the user of a potential shock hazard where HAZARDOUS LIVE voltages greater than 30 Vrms, 42.4 Vpeak, or 60 Vdc may be accessible. Failure to comply with these instructions could result in death or serious injury.
	ATTENTION, Electrostatic Discharge (ESD) hazards. Observe precautions for handling electrostatic sensitive devices
	Protective Earth (PE) terminal. Provided for connection of the protective earth (green or green/yellow) supply system conductor.
$\bar{\Box}$	Functional earth terminal. Used for non-safety purposes such as noise immunity improvement. NOTE: This connection shall be bonded to protective earth at the source of supply in accordance with national local electrical code requirements.
<u> </u>	Earth Ground. Functional earth connection. NOTE: This connection shall be bonded to Protective earth at the source of supply in accordance with national and local electrical code requirements.
\rightarrow	Chassis Ground. Identifies a connection to the chassis or frame of the equipment shall be bonded to Protective Earth at the source of supply in accordance with national and local electrical code requirements.

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Figure 1 PDA connection to actuator

HercuLink

Overview

Why use a PDA?

You can operate your actuator remotely with an approved PDA running HercuLink software. Advantages:

- Upload/download configurations from/to the actuator to the PDA. If configuring multiple actuators similarly, configure one and re-use it in the others.
- Upload performance/maintenance data to your PC to track and schedule maintenance.

Preparation

Perform these steps to use a PDA with your acuator.

Step	Action			
1	Install PDA desktop software on your PC.			
	Your PDA came with software to be installed on your PC. Ensure that it is installed on your PC.			
2	Install HercuLink software on your PC			
3	Run HercuLink Install program (on CD).			
4	Hot sync PC and PDA to download HercuLink to PDA.			
5	At the actuator disconnect all wires going to any active master Modbus device.			
	Communication problems will occur if the actuator is simultaneously connected to any active master Modbus device and the PDA. To locate your actuator's Modbus terminals, see your actuator manual's wiring section.			
6	Connect PDA to actuator			
	Starting at the PDA and working toward the actuator, connect as follows:			
	1. Serial interface cable			
	 B & B Electronics RS-422/485 to Palm converter (model 485BAT3). Set DIP switches to 485 and Echo OFF. 			
	3. Turck cable (part # RK4T)			

- See Figure 1.
- 7 Configure Communications. See page 4.



Figure 1 PDA connection to actuator

The actuator can be configured and calibrated remotely with a PDA running the HercuLink application.

HercuLink Main Menu

To access the HercuLink main menu, select the HercuLink icon on your PDA. The following menu appears.

HercuLink				
Communication				
Configuration				
Calibration				
Upload				
Download				
Maintenance				
Manual Position				

Main menu items are explained in the sections that follow.

Prompt	For details see page
Communication	4
Configuration	5
Calibration	8
Upload	21
Download	24
Maintenance	26
Manual Position	27

Communication

PDA Comm Set Up				
Target Address: 2				
Baud Re	ite:			
2400	4800	9600	19200	
Query Result Type:				
Name:				
OK (ancel) (Query) ?				

Be sure to set up Communications before operating the actuator with the PDA. Settings must match those of the actuator. Once settings match you can change them.

Prompt	Selections or Range of Setting	Parameter Definition
Target Address	1-99	Address of the actuator
Baud Rate	2400 4800 9600 19200	Baud rate of the actuator
Query		After selecting Target Address and Baud Rate, select Query to verify communications are functioning. Result of query is shown under Query Result.
Query Result Type: Name:		If the query fails, the result will say "No Response" indicating the PDA is not communicating with the actuator. Check for matching address and baud rate between the PDA and actuator.
		If the query succeeds, the result will show:
		Device type (e.g. SA2001)
		Software version (e.g. 1.0)
		Tag Name of the device (e.g. SA2000)
		You are now ready to operate the actuator with the PDA.

Configuration

input Chavastovizov	
Churucterizer Polav 1 Alavros	
Neluy Friuritis Polav 2 Alavros	
Neluy 2 Higros	
Relay o Harris Relay d Alarros	
Current Output	
Communications	
Digital Input	
Display	
Lockout	
Read Status	
Drive Data	
Maintenance	



ATTENTION

Your actual menu may be different depending on how the actuator is configured and what hardware options are present in the actuator.

The HercuLink prompts are unabbreviated versions of the abbreviated prompts on the actuator. (The actuator display has 10 characters maximum.) For Configuration Set Up Group prompt choices and descriptions, see the Set Up Groups in your actuator manual (see Table 1).

Set Up Group	For details see the corresponding Set Up Group
Input	section of your actuator manual.
Characterizer	
Relay1-4 Alarms	
Current Output	
Communications	
Digital Input	
Display	
Lockout	
Read Status	
Drive Data	
Maintenance	

Table 1 Configuration Set Up Group details

How to configure your actuator

To make a change or view any function within any set up group, do the following:

- 1. Select the function prompt within the group to be changed. This will display either an enumerated list or a numerical value.
- 2. Make a selection from a presented list, or enter a numeric value. *Note:* Not Valid with Read Only Parameters.
- 3. Select the Write button. *Note:* Not Valid with Read Only Parameters.

See the configuration examples below.

Configuration Examples: Input Group

Selecting the Input prompt from the Setup Group list will display a list of the input functions.

Input Type	
Input Hi	
Input Lo	
Filter Type	
Filter Value	
Direction	
DeadBand	
FailSafe Type	
FailSafe Value	
Characterizer	

(Home) (Set Up Groups)

Example 1: Change the Input type

Select the Input Type prompt from the function list. This will display the screen below.

Parameter	
Name:	Input Type
Value:	0-20
(Write	4-20
	10-20
	1-5V
	0-57
	0-10
	R_SP
Status	Connected
Group	(<) > (?)

Since this parameter is an enumeration type, it shows a list of possible selections to choose from. Highlight a selection and click the *Write* button. The value displayed should change to the selection that was made.

Example 2: Change the Input Hi value.

Select the Input Hi prompt from the function list. This will display the screen below.

Parameter	
Name:	Input Hi
Value:	100.0
(Write)	

Status:	Connected
(Group)	<

Since this parameter is a numeric type, it expects a numeric value to be entered on the dotted line. Once the value is entered, click the Write button. The value displayed should change to the value that was just entered.

Calibration

Input Calibration

 Prepare for calibration by performing the steps shown in your actuator maual's calibra section, then return here. From the Home page, select the Calibration prompt. Colibration Input Motor Output NCS Home Select the input type to be calibrated. This calibration procedure can be used for each type. Note: "Input" does not appear if input type is RSP (remote setpoint). Connect a variable DC voltage source to the input terminals. Select the Input prompt. The functionality of each button is described below:
 From the Home page, select the Calibration prompt. Calibration Input Motor Output NCS Home Select the input type to be calibrated. This calibration procedure can be used for each type. Note: "Input" does not appear if input type is RSP (remote setpoint). Connect a variable DC voltage source to the input terminals. Select the Input prompt. The functionality of each button is described below: Input
 Home 3 Select the input type to be calibrated. This calibration procedure can be used for each type. Note: "Input" does not appear if input type is RSP (remote setpoint). 4 Connect a variable DC voltage source to the input terminals. 5 Select the Input prompt. The functionality of each button is described below: Input Input
 Select the input type to be calibrated. This calibration procedure can be used for each type. Note: "Input" does not appear if input type is RSP (remote setpoint). Connect a variable DC voltage source to the input terminals. Select the Input prompt. The functionality of each button is described below:
 4 Connect a variable DC voltage source to the input terminals. 5 Select the Input prompt. The functionality of each button is described below:
5 Select the Input prompt. The functionality of each button is described below:
Calibrate Input Setup Function Auto/Man Display Increment Decrement Close Setup – Has no functionality in the input calibration procedure. Function – Sequences you through the calibration states. Auto /Man - Has no functionality in the input calibration procedure. Display - Has no functionality in the input calibration procedure. Display - Has no functionality in the input calibration procedure. Display - Has no functionality in the input calibration procedure.

Step	Action
6	Click the <i>Function</i> button to access the Calibration Disabled state. Notice the only change in the screen information is the upper and lower display lines. This lets you know what step of the calibration process you're currently on.
	Input
	Calibration
	Disabled
	Setup Function
	Auto/Man Display
7	Click the Function button to access the Begin Calibration state.
	Input
	Begin
	Calibration
	Setup Function
	Ruto/Man Display
8	Click the Function button to access the Apply Input Zero calibration state.
	Input
	<u>Apply</u>
	Input Zero
	Setup Function
	Auto/Man Display
9	Set the external DC voltage source to the low limit for the input type being calibrated.
	<u>Note:</u> If at any time question marks (?) are observed in both the upper and lower displays, this is an indication that communications between the PDA and the unit have been lost. To check communications, see Preparation on page 1.

Step	Action
10	Click the <i>Function</i> button to access the Apply Input Span calibration state.
	Apply
	Input Span
	Setup Function
	Auto/Man Display
11	Set the external DC voltage source to the high limit for the input type being calibrated.
	<u>Note:</u> If at any time question marks (?) are observed in both the upper and lower displays, this is an indication that communications between the PDA and the unit have been lost. To check communications, see Preparation on page 1.
12	Click the Function button to access the Calibration Complete state and to save the calibration. If the unit was in AUTO mode before calibration was started, it will be placed back into AUTO mode. If the unit was in MAN mode it will stay in MAN mode.
	Input
	Calibration
	Setup Function
	Auto/Man Display
	Increment Decrement
	Close
13	Click the <i>Close</i> button to exit the Input Calibration procedure. This will return you to the Home page.
	ATTENTION: If you click Close button without clicking the Function button (see previous step), the unit will remain in MAN mode. To change to AUTO mode, go to Main menu, Configuration, Lockout, then select MODE CHG.
	Lockout
	Lock Type A/M Enable Mode Chg
	(Home) (Set Up Groups)

Motor Calibration

Step	Action
1	From the Home page, select the Calibration prompt. Select the Motor prompt from the list of calibration functions. Calibration Input Motor Output NCS Home
2	Below is a picture of the Motor Calibration screen. Motor Calibrate Mator Setup Function Incr +10% Decr -10% Increment Decrement Close Setup – Has no functionality in the motor calibration procedure. Function – Sequences you through the calibration states. Incr + 10% - Causes the motor to move 10% or 15 degrees up from its current position. Decr – 10% - Causes the motor to move 10% or 1 degree up from its current position. Increment - Causes the motor to move 1% or 1 degree down from its current position. Decrement - Causes the motor to move 1% or 1 degree down from its current position. Decrement - Causes the motor to move 1% or 1 degree down from its current position. Decrement - Causes the motor to move 1% or 1 degree down from its current position. Decrement - Causes the motor to move 1% or 1 degree down from its current position.
3	Click the Function button to access the Calibration Disabled state. Notice the only change in the screen information shown below is the upper and lower display lines. This lets you know what step of the calibration process you are currently on. Notor Calibration Disabled Setup Function Incr +10% Decr -10% Close

Step	Action
4	Click the Function button to access the Begin Calibration state.
	Motor
	Begin
	Setup Function
	Incr +10% Decr -10%
	Close
5	Click the Function button to access the Apply Motor Lo Calibration state.
	Motor
	.0
	Motor LO
	Setup Function
	Incr +10% Decr -10%
	Increment Decrement
	The motor can be positioned to its low limit by using the Decr - 10% as a coarse adjust. Click it several times to get close to the actual position desired. Then click the Decrement button to fine-tune the final low calibration point. The motor can also be positioned with the optional auto/manual switch on the side of the unit, or with the optional handwheel.
	<u>Note:</u> If at any time question marks (?) are observed in both the upper and lower displays, this is an indication that communications between the PDA and the unit have been lost. To check communications, see Preparation on page 1.

Step	Action
6	Click the Function button to access the Apply Motor Hi Calibration state.
	Motor
	100
	Decr -10%
	Close
	The motor can be positioned to its high limit by using the Incr + 10% as a coarse adjust. Click it several times to get as close to the actual position desired. Then click the Increment button to fine-tune the final high calibration point. The motor can also be positioned with the optional auto/manual switch on the side of the unit, or with the optional handwheel.
	<u>Note:</u> If at any time question marks (?) are observed in both the upper and lower displays, this is an indication that communications between the PDA and the unit have been lost. To check communications, see Preparation on page 1.
7	Click the Function button to access the Calibration Complete state and to save the calibration. If the unit was in AUTO mode before calibration was started, it will be placed back into AUTO mode. If the unit was in MAN mode it will stay in MAN mode. Click Close button to return to Home page.
	Calibration
	Complete
	Setup Function
	Incr +10% Decr -10%
	Close

Step	Action
8	Click the Close button to exit the Motor Calibration procedure. This will return you to the Home page.
	ATTENTION: If you click Close button without clicking the Function button (see previous step), the unit will remain in MAN mode. To change to AUTO mode, go to Main menu, Configuration, Lockout, then select MODE CHG.
	Lock Code Lock Type A/M Enable Mode Chg
	(Home) (Set Up Groups)

Current Output Calibration

Step	Action
1	Prepare for calibration by performing the steps shown in your actuator manual's calibration section, then return here.
2	From the Home page, select the Calibration prompt. Select the Output prompt from the list of calibration functions. Colibration Input Motor Output NCS Home
3	Select the Output prompt from the list of calibration functions. Output Calibrate Current Output Setup Function Incr +10% Decr -10% Increment Decrement Close Close The functionality of each button is described below: Setup – Has no functionality in the output calibration procedure. Function – Sequences you through the calibration states. Incr + 10% - Causes the output count value to increase 10% up from its current count value. Decr – 10% - Causes the output count value to decrease 10% down from its current count value. Decr – 10% - Causes the output count value to increase by 1 from its current count value. Close – Exits from the output calibration.

Step	Action
4	Click the Function button to access the Calibration Disabled state.
	Notice the only change in the screen information shown below is the upper and lower display lines. This lets you know what step of the calibration process you're currently on.
	Output
	Calibration
	Seturn Function
	Lindr +10% Decr -10%
5	Click the Function button to access the Begin Calibration state.
	Output
	Calibration
	Setup Function
	Incr +10%
6	Click the <i>Function</i> button to access the Apply Zero Count Calibration state.
	Output
	381
	Zero Count
	Setup Function
	Incr +10%
	Increment Decrement
	Close
	The output voltage can be adjusted up or down by clicking the <i>Incr</i> + 10%, <i>Decr</i> – 10%, <i>Increment</i> and <i>Decrement</i> buttons. Click any button as many times as necessary to get to the output voltage level desired. Typically 1.00vdc for 4_20mA and 0.0vdc for 0_20mA.
	<u>Note:</u> If at any time question marks (?) are observed in both the upper and lower displays, this is an indication that communications between the PDA and the unit have been lost. To check communications, see Preparation on page 1.

Step	Action
7	Click the Function button to access the Apply Span Count Calibration state.
	Output 1888
	Span Count
	Setup Function
	The output voltage can be adjusted up or down by clicking the <i>Incr</i> + 10%, <i>Decr</i> – 10%, <i>Increment</i> and <i>Decrement</i> buttons. Click any button as many times as necessary to get to the output voltage level desired. Typically 5.00Vdc for 4_20mA and 0_20mA.
	<u>Note:</u> If at any time question marks (?) are observed in both the upper and lower displays, this is an indication that communications between the PDA and the unit have been lost. To check communications, see Preparation on page 1.
8	Click the Function button to access the Calibration Complete state and to save the calibration. If the unit was in AUTO mode before calibration was started, it will be placed back into AUTO mode. If the unit was in MAN mode it will stay in MAN mode. Click Close button to return to Home page.
	Output
	Calibration
	Decr -10%
	Increment Decrement
	Close
9	Click the <i>Close</i> button to exit the Output Calibration procedure. This will return you to the Home page.
	ATTENTION: If you click Close button without clicking the Function button (see previous step), the unit will remain in MAN mode. To change to AUTO mode, go to Main menu, Configuration, Lockout, then select MODE CHG.
	Lock Code Lock Type R/M Enable Mode Chg
	(Home) (Set Up Groups)

Position Sensor Calibration

Step	Action
1	Prepare for calibration by performing the steps shown in your actuator manual's calibration section, then return here.
2	From the Home page, select the Calibration prompt. Select the NCS prompt from the list of calibration functions. Colibration Input Motor Output NCS Home
3	Select the NCS prompt from the list of calibration functions. NCS Calibrate Non Setup Function Setup Function Muto/Man Display Increment Decrement Close Close The functionality of each button is described below. Setup – Has no functionality in the NCS calibration procedure. Function – Sequences you through the calibration states. Auto/Man - Has no functionality in the NCS calibration procedure. Display - Has no functionality in the NCS calibration procedure. Display - Has no functionality in the NCS calibration procedure. Display - Has no functionality in the NCS calibration procedure. Display - Has no functionality in the NCS calibration procedure. Display - Has no functionality in the NCS calibration procedure. Increment - Has no functionality in the NCS calibration procedure. Decrement - Has no functionality in the NCS calibration procedure. Decrement - Has no functionality in the NCS calibration procedure. Decrement - Has no functionality in the NCS calibration procedure. Decrement - Has no functionality in the NCS calibration procedure. Decrement - Has no functionality in the NCS calibration procedure. Decrement - Has no functionality in the NCS calibration procedure.<

Step	Action
4	Click the Function button to access the Calibration Disabled state.
	Notice the only change in the screen information shown below is the upper and lower display lines. This lets you know what step of the calibration process your currently on.
	NCS Calibration
	Setup Function
	Auto/Man Display
	Decrement
5	Click the <i>Function</i> button to access the Begin Calibration state.
	NCS
	Calibration
	Setup Function
	Auto/Man Display
	Close
6	Click the Function button to access the POS Output Value Calibration state.
	NCS
	2.500
	The output value can now be viewed as the sensor adjustment is made. Typical output value = 2.500Vdc when motor position = 50%.
	<u>Note:</u> If at any time question marks (?) are observed in both the upper and lower displays, this is an indication that communications between the PDA and the unit have been lost. To check communications, see Preparation on page 1.

<i>Function</i> button to access the Calibration Complete state. If the next state can not be
I, then the POS output is not calibrated correctly.
e Function Man Display nent Decrement
Close button to exit the NCS Calibration procedure. This will return you to the Home ON: After you click Close button the unit will remain in MAN mode, whether or not you e Function button. To change to AUTO mode, go to Main menu, Configuration, then select MODE CHG.
) ,

Upload

Upload lets you copy the actuator's configuration to the PDA. You can then download that configuration to other actuators.

Step	Action
1	From the Home page, select the Upload prompt. Below is a picture of the Upload screen page which will appear.
	Upload
	Description SA2001 0.21 Bruce1
	Address: 2
	Device Type: 5H2001 0.21 Tag Name: Bruce1
	Status Modify description or Start
	Start Cancel
	From the display above the description name can be altered from the default description of unit type and its current software version number, to anything you wish it to be.
	To exit the upload function, click the Cancel button.
	To perform an Upload, click the Start button.
2	When the Start button is clicked, the configuration data is uploaded from the actuator to the PDA in 6 different packets. You can watch the Status line for messages reflecting which packet is currently being uploaded. The packets should have names associated to them like Config and Config5. Each packet also has a byte size associated with it.
	See picture below indicating currently uploading Config Data5 packet.
	Upload
	Description SA2001 0.21 Bruce1
	Address: 2
	Device Type: 5H2001 0.21 Tag Name: Bruce1
	Status Config Data5 332 of 386 bytes
	Start Cancel

Step	Action
3	After all 6 packets have been uploaded successfully, the following message should appear. Upload Description SR2001_0.21 Bruce1 Rddress: 2 Device Type: SR2001_0.21 Tag Name: Bruce1 Done Upload completed successfully. OK
4	When the OK button is clicked in the display above, the following display below should appear. Stored Set Ups Sh2001 0.21 Bruce1 Done Details Done Details Done Details The above display shows a list of saved files. To exit, click the Done button. To perform a Download of the saved file, click the Download button. To view the details of the saved file, click the Details button.
5	When the Details button is clicked, the below display screen appears. Stored Set Ups SA2001 0.21 Bruce1 Record Details Date: 3/4/02 Time: 3:02 pm Type: SA2001 0.21 Done Delete To exit, click the Done button.

Step	Action
6	To delete the viewed file, click the Delete button and the below display screen appears.
	Stored Set Ups
	SA2001 0.21 Bruce1
	Delete Record
	Delete Current record?
	☑ Save archive copy on PC
	Click OK to delete the file.
	To exit, click the Done button.

Download

Step	Action
1	From the Home page, select the Download prompt. Below is a picture of the Download screen.
	Stored Set Ups
	SA2001 0.21 Bruce1
	Done Details Download)
	The display above shows the name(s) of the uploaded file(s) already stored.
	To exit, click the Done button.
	To view the details of a file, click the Details button.
2	To perform a Download, place the cursor on the file to be downloaded; then click the Download button.
	The following display screen will appear.
	Download
	Description SA2001 0.21 Bruce1
	Address: 2
	Device Type: SA2001 0.21 Taa Name: Bruce1
	Status Press Start to begin
	Start Cancel

Download lets you download a configuration from the PDA to the actuator.

Step	Action
3	To perform a download, click the Start button.
	When the Start button is clicked the configuration data is downloaded in 6 different packets to the unit. You can watch the Status line for messages reflecting which packet is currently being downloaded. The packets should have names associated to them like Config and Config5. Each packet also has a byte size associated with it. See picture below indicating currently downloading Config Data4 packet.
	Download
	Description SA2001 0.21 Bruce1
	Address: 2 Device Type: SA2001 0.21 Tag Name: Bruce1
	Status Config Data4 274 of 386 bytes
4	After all 6 packets have been downloaded successfully, the following message should appear.
	Download Description SA2001 0.21 Bruce1
	Address: 2 Device Type: 5A2001 0.21
	Tan Name: Bruce1 Done
	Download completed successfully. OK
5	When the OK button is clicked in the display above, the following display below should appear.
	SR2001 0.21 Bruce1 Done Details
	The display above shows the name of the downloaded file.
	To exit, click the Done button.
	To view the details of a file, click the Details button.

Maintenance

Step	Action
Step 1	Action From the Home page, select the Maintenance prompt. The Maintenance screen appears. Mointenance Topological appears Region 1 Cnts Region 1 Cnts Region 3 Cnts
2	operation. Clicking on any parameter in the list will result in a parameter value display as shown below. Parameter Name: Total Degrees Value: 226. Status: Connected Group < > ?

Step	Action
3	You can also archive these data values to a PC. This can be accomplished by clicking the <i>Read and Save All</i> button. When the button is clicked the following screen appears.
	Store Maintanance Description
	Biddress: 2
	Device Type: SA2001 0.21 Tag Name: Devel0
	Status Modify description or Start
	Start Cancel
	The file will be saved under the current tag name unless you wish to change it to something else. When the name is correct, click the start button to begin the uploading of the data.
4	While the data is uploading you can monitor the status line which reflects the current parameter being accessed as in the screen shown below.
	Store Maintanance
	Description Devel0
	Address: 2
	Device Type: 5A2001 0.21 Tag Name: Devel0
	Status
	Keading Cycle Counts
	Start Cancel
5	When all the data has been uploaded the following display screen will appear.
	Store Maintanance
	Description Develo
	Address: 2
	Surceedet Imaintenance records will transfer to desktop upon next HotSync. OK
	Clicking the <i>OK</i> button will return you to the parameter list screen. Clicking the <i>Home</i> button will return you to the Home page.

The grayed configuration maintenance group functions are protected from inadvertant access by a required password. Even if there is no password configured in the LOCKOUT group, you must select PassWord and enter 0000 to be able to access most of these special functions. See the picture below for the list of functions.

Maintenance	
Save Data PassWord Data ResetType Cal Restore Config Restore	

(Home) (Set Up Groups)

The SaveData function access is not restricted, it is always accessible. The Data Reset Type, Cal Restore, Config Restore and the System Reset functions have access restrictions. This means if an active password is in effect, you must enter that password before access to these functions is granted. If no active password is in effect, you must enter 0000 to gain access to these functions. If a password is not entered the following message will appear when one of the prompts in the list is selected.

Rejected by Device	
A This operation is prohibited.	
ОК	

Note: The System Reset function is only visible in the list when the Data Reset Type has been set to SYST. See picture below.

Parameter	
Name:	Data ResetType
Value:	SYST
(Write)	REL2 REL3 REL4 ALL SYST
Status:	Connected
Group	<>?

When you set the Data Reset Type to SYST, a new function list appears as shown below.

Maintenance	
Sove Doto PassWord Data ResetType Cal Restore Config Restore System Reset	
(Home) (Set Up Groups)	

The active password or 0000 must be entered again to gain access to any of the functions.

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Manual Position

Step	Action
1	From the Home page, select the Manual Position prompt. <u>Note:</u> If the message " Operation Is Prohibited " gets displayed, exit the manual positioning routine to return to the Home page Main Menu. Select Configuration, Lockout and then select MAENAB. Set the MAENAB function to ENAB. Return to the Home page Main Menu and select the Manual Position prompt again. When entering into the manual positioning procedure, if the unit is currently in AUTO mode, it will be placed into MANUAL mode.
	Manual Position 40
	Motor Position Setup Function
	Incr +10% Decr -10% Increment Decrement
	Close
	 Setup – Has no functionality in the manual positioning procedure. Function – Sequences you through the manual positioning states. Incr + 10% - Causes the motor to move 10% or 15 degrees up from its current position. Decr – 10% - Causes the motor to move 10% or 15 degrees down from its current position. Increment - Causes the motor to move 1% or 1 degree up from its current position. Decrement - Causes the motor to move 1% or 1 degree down from its current position. Close – Exits from the manual positioning procedure.
	<u>Note:</u> If at any time question marks (?) are observed in both the upper and lower displays, this is an indication that communications between the PDA and the unit have been lost. To check communications, see Preparation on page 1.
2	The value shown on the top line is the current motor position. To move it in either direction click one of the Inc / Dec buttons.
	When the motor positioning has been completed, click the Function button. If the unit was in AUTO mode before manual positioning was started, it will be placed back into AUTO mode. If the unit was in MAN mode it will stay in MAN mode. Click Close button to return to Home page.
	ATTENTION: If you click Close button without clicking the Function button, the unit will remain in MAN mode. To change to AUTO mode, go to Main menu, Configuration, Lockout, then select MODE CHG.
	Lockout Lock Code Lock Type A/M Enable Mode Chg
	(Home) (Set Up Groups)

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