

# ***ACC-101***

Wireless Remote Control Pendant

## **System Guide**

Rev. 1.5

System Installation  
Pocket PC Configuration Editor  
LDS-Dactron Client

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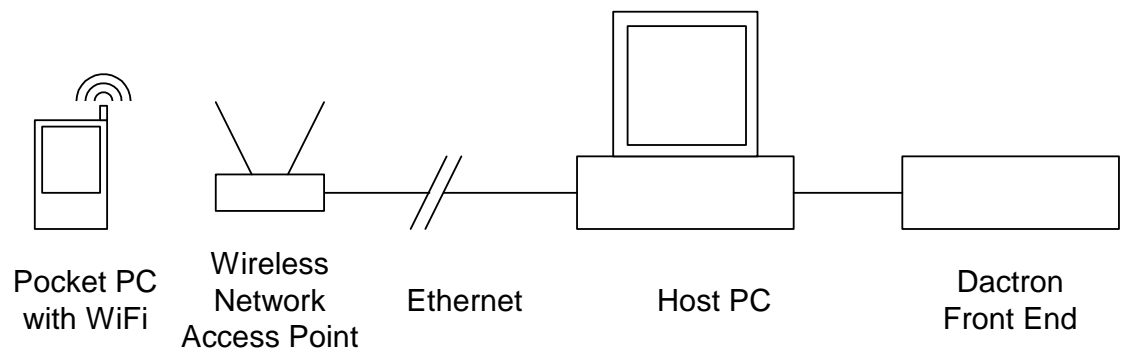
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# 1 Introduction

The LDS-Dactron Pocket PC (PPC) provides remote status and control of the LDS-Dactron hardware using a Pocket PC device. It can be used with LDS-Dactron Shaker Control applications. The PPC communicates with the Host PC via a wireless network or a USB cable connected to the Host PC. Wireless operation requires a wireless network access point that must be installed on the Ethernet network with the Host PC. The Pocket PC uses a Wi-Fi (IEEE 802.11b) WLAN Adaptor (Wi-Fi) to establish an Ethernet link via the wireless network access point, to the Host PC. The USB connection uses a USB cable between the PPC and the Host PC. Real-time, two-way communication is established with either connection options. The Host PC must be connected to the LDS-Dactron Front End and running the LDS-Dactron software.



Other sections of this manual cover:

- Power and environmental requirements
- Safety
- Installation
- Pocket PC Configuration Editor
- LDS-Dactron Client

## 2 Safety and Equipment Protection

### Safety Summary

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**The following general safety precautions must be observed during all phases of operation, and maintenance of this system. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards and/or design, manufacture, and intended use of this system. Additional safety precautions or specific warnings applying to the PPC and/or the Wireless Network Access Point are noted in their respective User's Guide. LDS-Dactron assumes no liability for the customer's failure to comply with these requirements.**

#### **Do Not Operate In an Explosive Atmosphere**

Do not operate the system in the presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

#### **Keep Away From Live Circuits**

Operating personnel must not remove the system covers from the PPC or the Wireless Network Access Point. Qualified service personnel must make component replacement and internal adjustments. Do not replace components with power cable connected. Under certain conditions, dangerous voltages may exist even with the power cable removed. To avoid injuries, always disconnect power and discharge circuits before touching them.

#### **Do Not Substitute Parts or Modify the System**

Because of the danger of introducing additional hazards, do not install substitute parts or perform any unauthorized modification to the system. Return the system to the original manufacturer for service and repair to ensure that safety features are maintained.



## Danger Warnings

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The warning messages below, and throughout this guide, are important notices regarding safe system operation and system protection. Instructions given by these warnings must be followed to ensure safety for both personnel and equipment.

**Warning**

*Use the same care as you would for any electronic equipment when handling or maintaining this system.*

**Warning**

*To prevent potential fire or shock hazard, do not expose the system to rain or moisture.*

**Warning**

*Specific warning messages are referenced specific to the PPC and/or the Wireless Network Access Point in their respective User's Guide.*

## 3 Power and Environmental Requirements

### Power Requirements

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#### PPC

For specific power requirements, reference original manufacturer's User's Guide.

#### Wireless Network Access Point

For specific power requirements, reference original manufacturer's User's Guide.

### Environmental Requirements

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#### Operation

For specific operational details, reference original manufacturer's User's Guide.

<b>Warning</b>
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*To prevent potential fire or shock hazard, do not expose the system to rain or moisture.*

#### Storage and Shipment

Store in a clean, dry environment.

The system should also be protected against temperature extremes that would cause condensation within the system.

For specific environmental limitations, reference original manufacturer's User's Guide.

### Packaging for Shipment

#### Original Packaging

Use the original factory packaging containers to return ship the system to the original manufacturer for service. Contact the original manufacturer for a return merchandise authorization (RMA) number.

If the system is being returned to LDS-Dactron, attach a tag indicating the return merchandise authorization (RMA) number provided by LDS-Dactron customer support, type of service required, return address, system model name, and serial number.

The following general instructions should be used for repackaging with commercially available materials:

1. Wrap the system with heavy paper or plastic.
2. Use a strong shipping container. A double wall carton made of 350-pound test material is adequate.
3. Use a layer of shock absorbing material 70 to 100 mm (3 to 4 inches) thick around all sides of the system to provide firm cushioning and prevent movement inside of the container. Protect the control panel with cardboard.

#### Caution

*Styrene pellets in any shape should never be used as packing material. The pellets do not adequately cushion or prevent the system from shifting in the carton. The pellets also create static electricity that can damage electronic components.*

4. Seal the shipping container securely.
5. Mark the shipping container FRAGILE to ensure careful handling.
6. In any correspondence, refer to the system by model name and serial number.

## 4 System Installation

### Step 1: PPC

Using the instructions provided by the PPC manufacturer, install the PPC hardware and synchronization software. This allows the PPC to be synchronized with the Host PC. This enables access to configuration files located on the Host PC which may be downloaded for use by the LDS-Dactron Pocket PC Configuration Editor.

**For safety and security considerations, WEP (Wired Equivalent Privacy) is to be enabled. A static IP address to the Wireless Access Point is also to be assigned under the same considerations.**

**For safety considerations, DISABLE the following:**

- 1. Automatic Suspend (i.e. when operating PPC under battery or external power, Automatic Suspend turns the PPC off if not used for “x” minutes). Tap Start > Settings > System > Power > Advanced. Next, uncheck the Turn off device if not used for box.**

### Step 2: Wireless Network Access Point

Using the instructions provided by the manufacturer, install the Wireless Network Access Point onto an Ethernet network that contains the Host PC. The Wireless Network Access Point must be assigned an IP address. It is strongly recommended that an experienced Network Administrator perform this installation. If the USB cable option is selected, then instead of the Wireless Network Access Point, the USB cable must be connected between the PPC and the Host PC.

**For safety and security considerations, WEP (Wired Equivalent Privacy) should be enabled.**

### **Step 3: Pocket PC Configuration Editor**

1. Turn on the Host PC and launch Windows. Your Host PC must use either a Windows 2000 or XP operating system. If you are using Windows 2000, you must be logged on with administrator privileges to install the Pocket PC Configuration Editor.
2. Place the Install CD into the CD drive of the Host PC. Select PPC-ConfigEdit.exe from the CD and proceed according to the instructions on the screen. Your software License Key will be required during the installation and can be found on your packing slip.

### **Step 4: LDS-Dactron Client**

1. Turn on the Host PC and launch Windows. Your Host PC must use either a Windows 2000 or XP operating system. If you are using Windows 2000 you must be logged on with administrator privileges to install a new driver.
2. To install the LDS-Dactron Client, connect the PPC to the Host PC via the docking cradle. Place the Install CD into the CD drive of the Host PC. Select PPC-Client.exe from the CD and proceed according to the instructions on the screen. Your software License Key will be required during the installation and can be found on your packing slip.

### **Uninstall**

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#### **Pocket PC Configuration Editor**

1. Turn on the Host PC and launch Windows. Your Host PC must use either a Windows 2000 or XP operating system. If you are using Windows 2000, you must be logged on with administrator privileges to install the Pocket PC Configuration Editor.
2. Place the Install CD into the CD drive of the Host PC. Select PPC-ConfigEdit.exe from the CD and proceed according to the instructions on the screen.

#### **LDS-Dactron Client**

1. Turn on the Host PC and launch Windows. Your Host PC must use either a Windows 2000 or XP operating system. If you are using

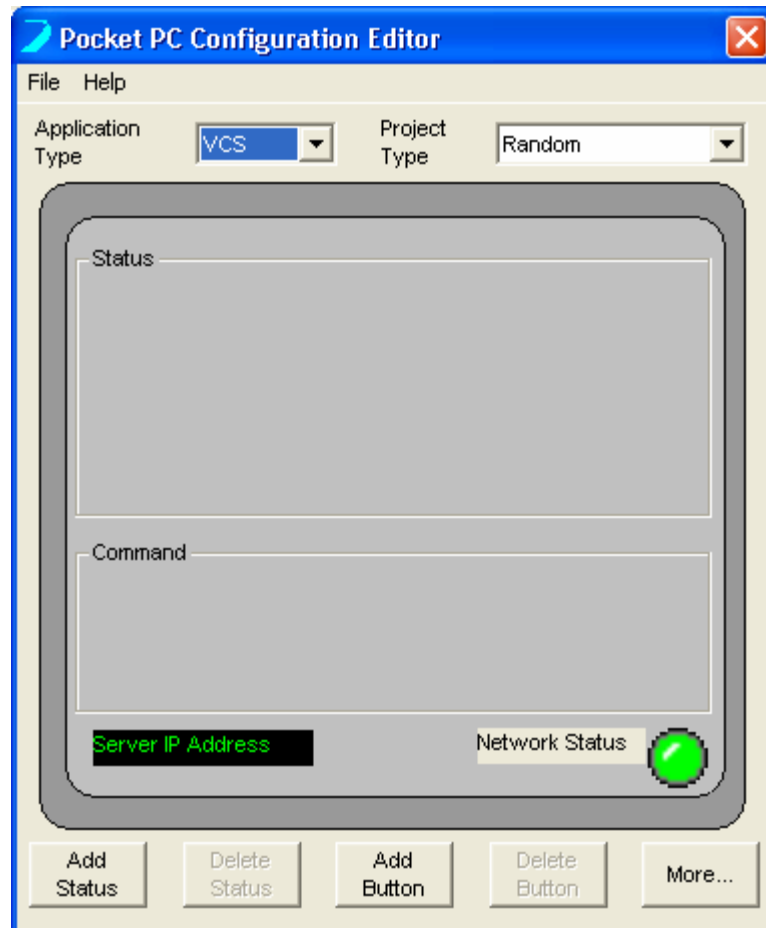
Windows 2000 you must be logged on with administrator privileges to install a new driver.

2. To uninstall the LDS-Dactron Client, connect the PPC to the Host PC via the docking cradle. Place the Install CD into the CD drive of the Host PC. Select PPC-Client.exe from the CD and proceed according to the instructions on the screen.

## 5 Pocket PC Configuration Editor

Before the PPC can be used to control the LDS-Dactron application software (Shaker Control), a **Pocket PC Configuration File** must be defined. This configuration file is defined using the **Pocket PC Configuration Editor**. The configuration consists of defining the interface appearance on the PPC, including Status Displays and Control Buttons. The configuration must be performed with the PPC connected to the Host PC via the docking cradle included with the PPC.

Launch the LDS-Dactron Pocket PC Configuration Editor on the Host PC with the PPC connected via the docking cradle. This will open the Editor dialog.

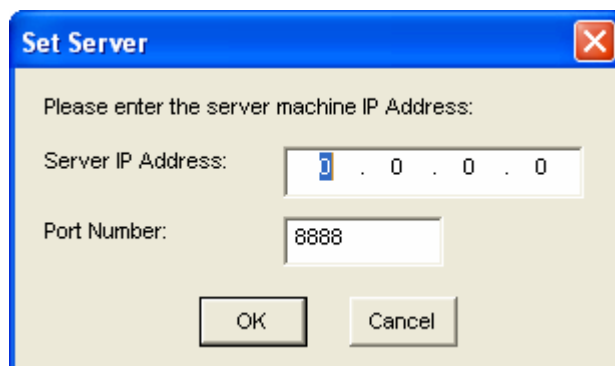


Application Type specifies the software application that the PPC will be used to control. The default is VCS for Shaker Control Software.

Project Type specifies the project type that will be controlled by the PPC, for example Random, Swept Sine, or Random on Random, etc... in

**Shaker Control.** A separate configuration file must be defined for each different project type that will be controlled. For example, if a Shaker Control Sine and a Shaker Control Random project are to be controlled via the PPC, then two separate configuration files must be defined and saved to the PPC.

**Server IP Address** displays the IP address of the Host PC. **The IP address must be entered for the PPC to communicate with the Host PC.** Click on this text box to open the Set Server IP Address dialog.

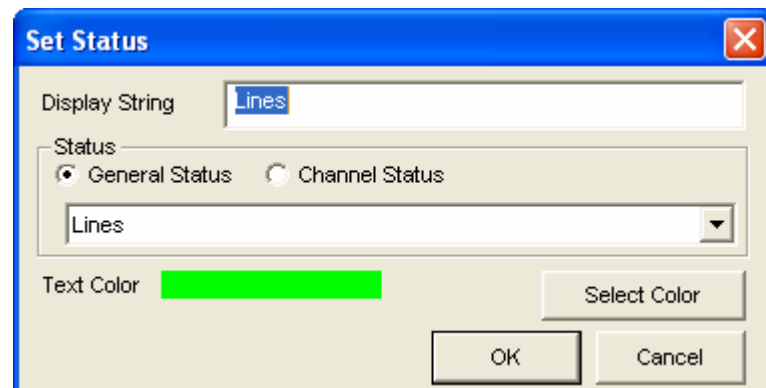


Enter the **Server IP Address** or machine name and the **Port Number**. Click OK.

**Network Status** indicates that the PPC is connected to the Ethernet network. A green LED indicates communication and a red LED indicates no communication. If the PPC is carried out of range of the Wireless Network Access Point, then the LED will turn red and a warning message will be displayed.

**Add Status** adds a Status display to the Status display area. Up to 4 different Status displays can be added. To configure the Status Display click on the Status String to open the Edit Status dialog.





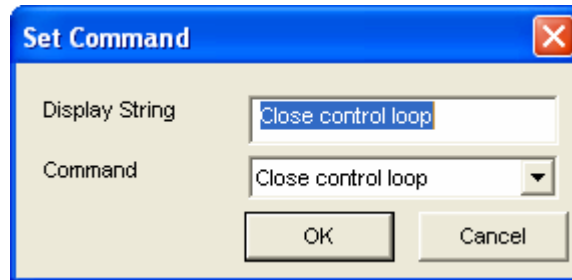
Display String allows the user to define the display name for the status display. Status includes a selection for General Status and Channel Status.

**General Status** displays status of the software running on the Host PC such as Level, Profile RMS, Total elapse time, etc. Select the Status variable to display from the pull down menu.

**Channel Status** displays the level of an input channel on the front end. The user can specify RMS, Mean, Peak, etc.

**Delete Status** removes the last Status Display from the display area.

**Add Button** adds a new button to the Command area. Up to 4 Command Buttons can be added to the display. After a button is added it must be configured. Click on the button to open the Edit Button dialog.

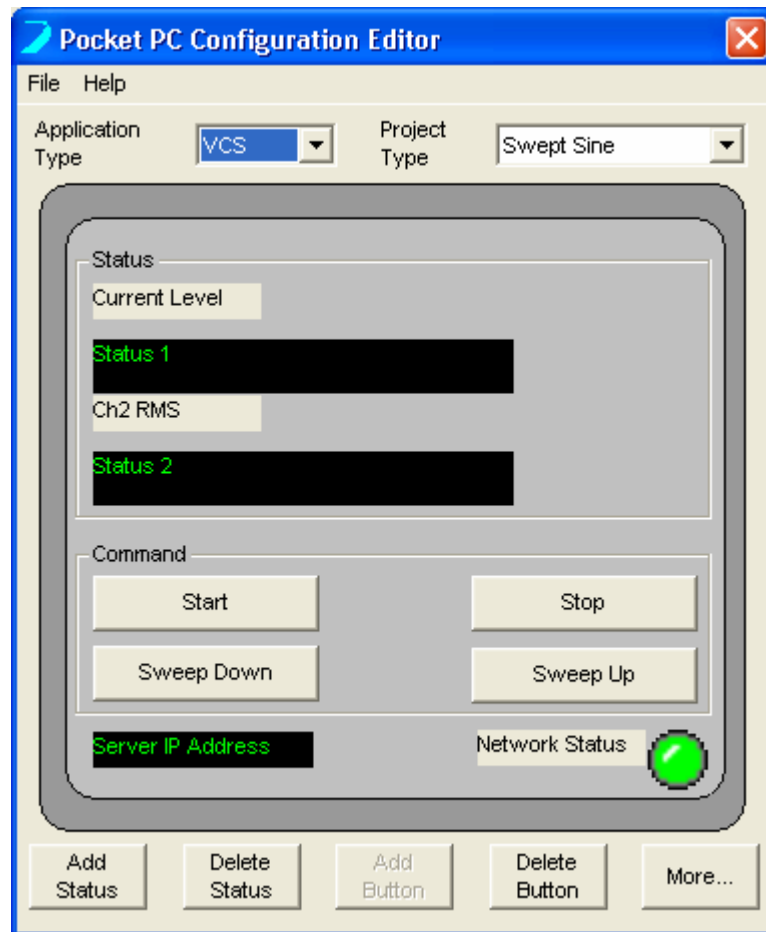


**Display String** allows the user to define the name of the button.

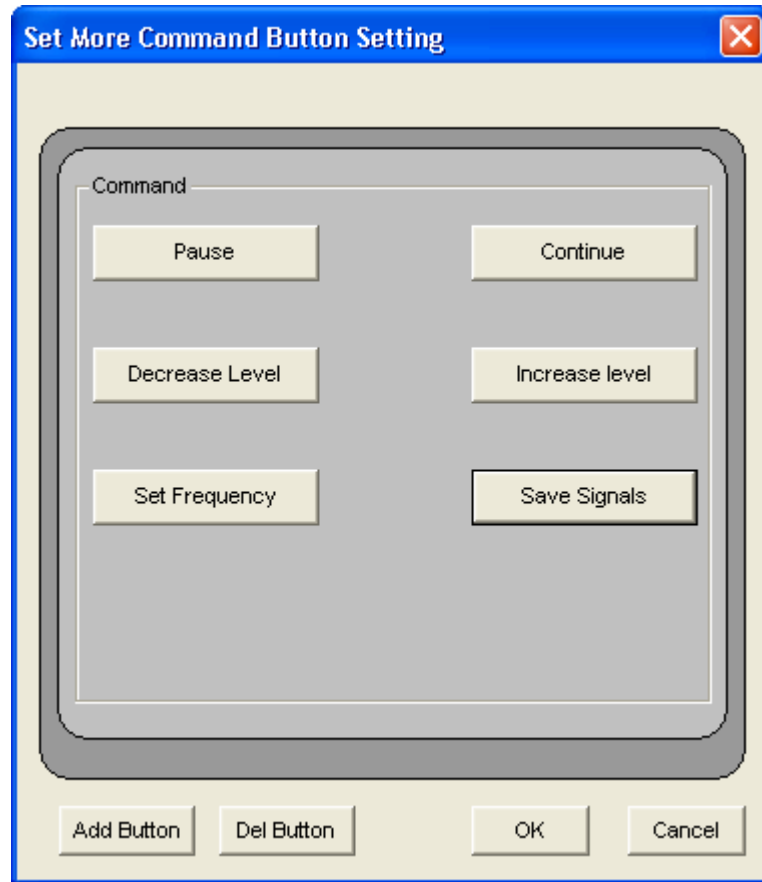
**Command** is a pull down list of all available commands. Select the desired command and click OK.

**Delete Button** deletes the last button from the Command area.

The image below shows a typical display with 2 status and 4 command buttons defined.



**More** allows the user to define up to 8 additional Command Buttons to send commands to the Host PC. These buttons will be displayed on a separate tab on the PPC software. Click **More** to open the **Set More Command Button Setting** dialog.



**Add Button** adds a new button to the Command area. Up to 8 buttons can be added.

**Del Button** deletes the last button from the Command area.

Click on each button to edit the function as described above.

Click OK after all buttons have been defined.

After the **Application Type**, **Project Type**, **Status**, **Command Buttons** and **IP Address** are all defined then the configuration file must be saved. Go to the **File** menu to save the configuration file.

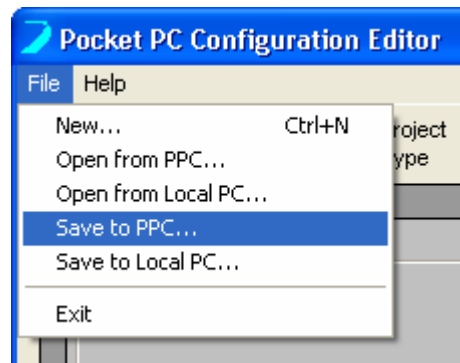
**Save to Local PC** saves the configuration file to the Host PC, not the PPC. Note that the configuration file must be saved to the PPC to be used.

**Save to PPC** saves the file to the PPC. Note that the PPC must be connected to the Host PC via the docking cradle.

**Open from PPC** opens an existing configuration file from the Pocket PC.

**Open from Local PC** opens an existing configuration file from the Local PC.

Exit quits the Pocket PC Configuration Editor software.



## List of Status and Commands

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The following list details all status variables that can be displayed and all commands that can be assigned to buttons for Random, Sine and Shock project types in the Shaker Control software. Note that these status variables and commands generally apply to all sub-family application software (eg Random has the following sub-family application software Sine On Random, Random on Random, Sine Random on Random). The exception to this general list is the Sine On Random software, where new commands for Single Sine Tone Control have been added in the Version 1.5 release (see table below).

### Shaker Control

#### Random

Status
Lines
Total time in schedule
Level
Profile RMS
Drive Peak Volt
Drive RMS Volt
Control RMS
Time at abort
Level at abort
Elastice time at full level
Total elastice time
Total time in all schedule

Command
Close control loop
Continue Schedule
Continue test
Decrease level
Disable abort
Enable abort
Increase level
On-line save signals now
Open control loop
Pause Schedule
Pause test
Reset average
Restore to schedule level
Run next profile
Run next schedule entry
Save Hinverse
Set target level
Start preview
Start test
Stop preview
Stop test

## Sine On Random

Status
Lines
Total time in schedule
Level
Profile RMS
Drive Peak Volt
Drive RMS Volt
Control RMS
Time at abort
Level at abort
Elapse time at full level
Total elapse time
Total time in all schedule

Command
Close control loop
Continue Schedule
Continue test
Decrease level
Disable abort
Enable abort
Increase level
On-line save signals now
Open control loop
Pause Schedule
Pause test
Reset average
Restore to schedule level
Run next profile
Run next schedule entry
Save Hinverse
Set target level
ST Sweep Down
ST Sweep Hold
ST Sweep Release
ST Sweep Up
Start preview
Start test
Stop preview
Stop test

## Swept Sine

Status
Sweeping direction
Elapsed sweeps
Elapsed time in schedule
Total time in schedule
Current level
Profile(Peak)
Drive volt(Peak)
Control(Peak)
Sweep frequency
Low bound(Hz)
High bound(Hz)
Time at abort
Level at abort
Current profile stroke
Current profile velocity
Elapse time at full level
Total elapsed time

Command
Close control loop
Continue Schedule
Continue test
Decrease frequency
Decrease level
Disable abort
Enable abort
Hold sweep
Increase frequency
Increase level
On-line save signals now
Open control loop
Pause Schedule
Pause test
Release sweep
Restore to schedule level
Run next profile
Run next schedule entry
Save Hinverse
Set frequency
Set target level
Start preview
Start test
Stop preview
Stop test
Sweep down
Sweep up



## Shock

Status
Total elapsed frames in schedule
Total frames
Frame size
Elapsed frames at full level
Total elapsed frames
Level
Target peak value(EU)
Drive volt
Control peak(EU)



Command
Close control loop
Continue Schedule
Continue test
Decrease level
Disable abort
Enable abort
Increase level
On-line save signals now
Open control loop
Output one pulse
Pause schedule
Pause test
Restore to schedule level
Run next schedule entry
Save Hinverse
Set target level
Start test
Stop test
Toggle sweep direction

## 6 LDS-Dactron Client

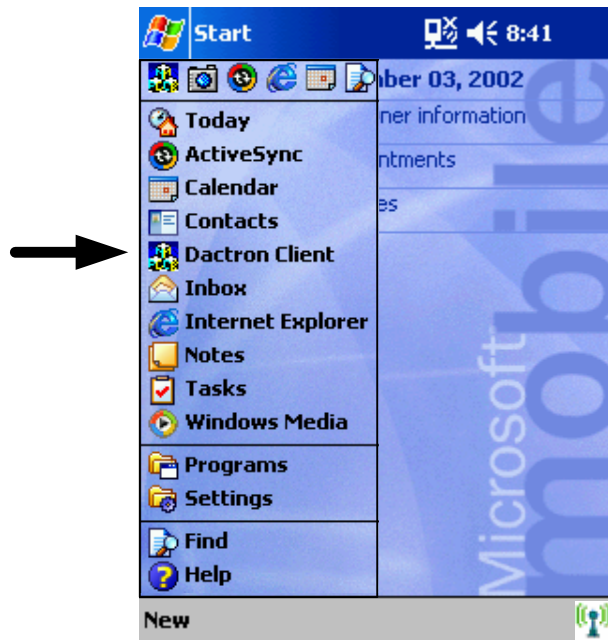
Launch the LDS-Dactron Client on the PPC by clicking on the Start button and selecting LDS-Dactron Client from the menu. However, before launching the LDS-Dactron Client on the PPC, the LDS-Dactron application software must be launched on the Host PC. If this is not performed in this sequence, the LDS-Dactron Client will not launch correctly. The LDS-Dactron Client must, then, be restarted after the LDS-Dactron application software has been launched on the Host PC.

If the Wi-Fi option is used, Wi-Fi must be enabled on the PPC before launching the LDS-Dactron Client. Click the Wi-Fi icon on the PPC screen. Click “On” to enable the wireless LAN connection.

The Wi-Fi icon should change to indicate that the Wi-Fi is enabled.

This icon indicates the Wi-Fi is enabled  whereas this icon indicates the Wi-Fi is not enabled .

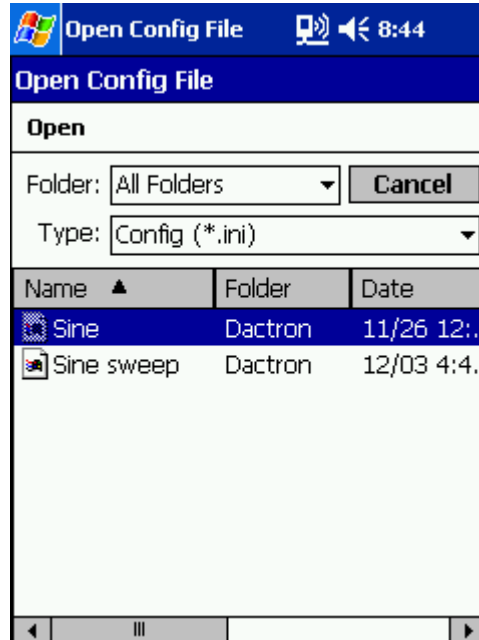
To verify that the Wi-Fi network connection is established use the DOS Ping command in a DOS window on the Host PC to ping the PPC.



The Open Config File dialog is then displayed. To select one of the configuration files, highlight the file and click Open.

Folder allows the user to browse for configuration files in different folders.

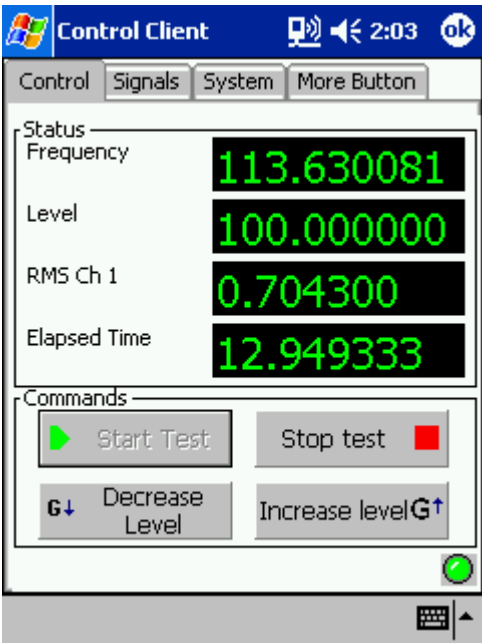
Type allows the user to select the file type. Config (\*.ini) is the default file type.



After opening a configuration file, the software will verify that a network connection exists between the PPC and the Host PC. The green LED indicator at the bottom of the Client display indicates the PPC is linked to the Host PC. A red LED indicates there is no network connection.

The Client display consists of 4 tabs: Control, Signals, System, and More Buttons.

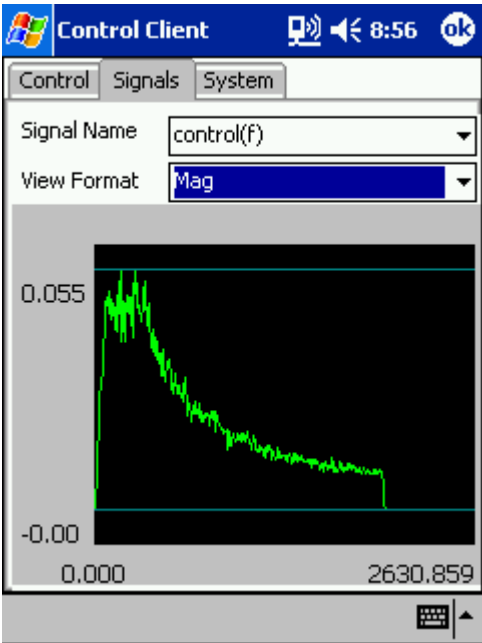
Control tab includes up to 4 numerical Status Indicators and up to 4 Command Buttons. These are programmed using the Pocket PC Configuration Editor described in the previous section. These status indicators will display the status after the **Start Test** command is issued. Some of the Command Buttons may be disabled prior to execution of the **Start Test** command. Access to these particular Command Buttons is enabled after issuance of the **Start Test** command.



Signals tab displays a graphical image of any available signal.

Signal Name is a pull down menu that allows the user to select from all available signals.

View Format allows the user to select the format from: dBMag, Mag, LogMag...



System tab displays System Information described below.

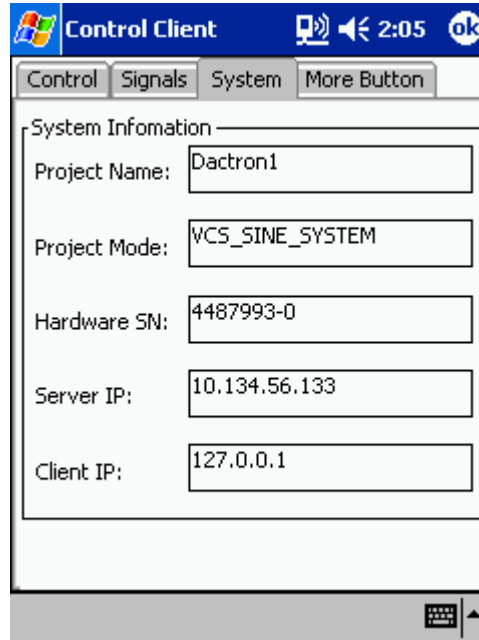
Project Name is the name of the project file opened on the Host PC.

Project Mode indicates the project type opened on the Host PC.

Hardware SN displays the serial number of the LDS-Dactron front-end hardware.

Server IP displays the IP address of the Host PC.

Client IP displays the IP address of the PPC.



More Buttons tab contains up to 8 additional Command Buttons defined by the Pocket PC Configuration Editor.



## 7 Limited Warranty Statement

LDS warrants to you, the Buyer, that LDS hardware, accessories and supplies will be free from defects in material and workmanship, for a period of one year from date of shipment. If LDS receives notice of such defects during the warranty period, LDS will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.

LDS warrants to you that LDS software will not fail to execute its programming instructions, for a period of one year from date of shipment, due to defects in material and workmanship when properly installed. If LDS receives notice of such defects during the warranty period, LDS will, at its option, either repair or replace software media which does not execute its programming instructions due to such defects.

LDS does not warrant that the operation of LDS products will be uninterrupted or error free.

LDS products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by LDS, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

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THE REMEDIES IN THIS WARRANTY STATEMENT ARE BUYER'S SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL LDS OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHER LEGAL THEORY.

### **ASSISTANCE**

If you are unable to solve a problem with your LDS-Dactron product, contact your LDS Representative. To locate the LDS Representative in your area refer to LDS web site [www.lds-group.com](http://www.lds-group.com). You can also contact LDS-Dactron directly at using the contact information on the cover page.

### **TO RECEIVE WARRANTY REPAIR SERVICE**

To obtain warranty service or repair, LDS-Dactron products must be returned to a service facility designated by LDS. Buyer shall prepay shipping charges to LDS and LDS shall pay shipping charges to return the product to Buyer. However, Buyer shall pay all shipping charges, duties, and taxes for products returned to LDS from countries and locations outside of the United States.

## 8 Manual Revision History

<b>Date</b>	<b>Manual Version</b>	<b>Software Version</b>	<b>Contents added into the Manual in this version</b>
8 JAN 2003	1.00, 28 pages	1.0	Initial Product Release
15 JAN 2003	1.1, 29 pages	1.1	Added additional safety considerations for system installation, PPC.
18AUG 2005	1.2, 26 pages	1.1	Changed PPC to iPAQ description
1 JUN 2007	1.5, 27 pages	1.5	Updated Manual Version, Technical Support Email address and PPC Configuration Editor *.exe reference. Added Single Sine Tone Control commands for SOR projects.



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