Pocket·tek®

Palm OS™ based spa service technician digital assistant by Gecko Alliance.

User's Manual

now with ServSoft version 2

Spa info •
Current states •
Spa setup •
Troubleshooting •
Advanced tools •
Documentation •
and much more •

Important

You should register your Pocket-tek to access all features and possibilities of ServSoft version 2.

Being a registered user will also enlist you to receive expert technical support, eNewsletters, special offers, and early notification of software upgrades.

Fast, easy, efficient ... that's Pocket-tek!

For information on how to register Pocket-tek and how to download software updates from Pocket-tek.com to your computer — and then hotsync to your pda — read through the pages of this manual and the Owner's Manual of your pda or consult our online manual.

Your ServSoft will also perform automatic spa updates. It will warn you if there is a potential problem with a specific part number or software. If such thing occurs, the ServSoft will suggest you a solution to solve the problem.

We recommend that you take the time to carefully read over this manual, in which we have attempted to present as clearly as possible everything you need to know to use ServSoft.

However, if you need more information or further clarification about anything please feel free to email us at info@geckoal.com or you can call us (Technical Support) at 1.800.78.GECKO.

Depending on the spa model you are using, some information given in this manual may differ.

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Getting started

The very first thing to do when you open up your new Pocket-tek kit is to carefully read and follow the instructions included in Chapter 1 of Palm User's Manual — Getting Started Handheld Series.

This will provide you with the basic steps to get started including how to: install batteries, set up your handheld Palm, install Palm Desktop software (on a Macintosh or Windows system), connect the HotSync cable and perform your first HotSync Operation.

HotSync is a very handy function that allows you to synchronize (that is exchange and update) the data stored in your Palm handheld with the data stored in your Palm Desktop software on your computer.

Supported PDAs & Packs!

Please note that ServSoft v2.0 cannot run on PDAs with less than 2 meg of RAM (8 meg recommended). Also, ADIR-I is not compatible with all Palms using the OMAP processor such as: Zire 21, Zire 71, Tungsten T, Tungsten T2 & Tungsten E. This is why the use of our new generation ADIR-II is strongly recommended!

Pocket-tek now supports most of Gecko Alliances' spa packs such as MSPA-MP metapacks as well as the new in.pac products. Furthermore, Pocket-tek also provides support for Geckos' M-CLASS series of spa systems. More information on these packs can be found on respective manufacturer web sites.

To get more info on Gecko's MC-MP spa controls, go to: http://www.geckoalliance.com/class

To get more info on Gecko's in.series products, go to: http://www.geckoalliance.com/aeware

How to download software updates

The ability to download ServSoft updates directly from our web site to your computer — and then to your pda is one of the most interesting features of Pocket-tek.

The **Download Center** is the easiest and quickest way for you to keep up to date on all the latest software upgrades and database developments. Fast, direct access to all software upgrades as they become available for the MSPA-MP and MC-MP.

Follow these simple steps:

- Get the update and save it on your computer.
- Double click on the downloaded file
- Hot sync into your Palm.

And its done! — Fast, easy, efficient ... that's Pocket-tek!

Next time the ServSoft application will launch, the up-dated version installed will run. If it's the first time you do the installation, click on the application's ServSoft logo named "Setup".

Direct Download
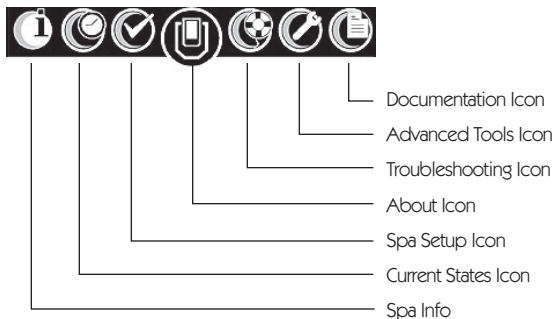The new ServSoft version (ServSoft_v2_x_x-DBx_xx.prc) offers more possibilities with its complete list of new features. It ensures tighter, more reliable integration of Gecko's MSPA-MP spa packs as well as M-CLASS softwares all while improving performance.

For information on how to register Pocket-tek and how to download software updates from Pocket-tek.com to your computer — and then hotsync to your pda — consult our online manual at: http://www.pocket-tek.com.

Using the menu bar

The menu bar gives you access to valuable tools and it's accessible in all views.

Documentation Icon

Advanced Tools Icon

Troubleshooting Icon

About Icon

Spa Setup Icon

Current States Icon

Spa Info

Spa Info	Select to view pack's software version info
Current States Icon	Select to view current spa pack status
Spa Setup Icon	Select to change basic spa pack features
About Icon	Select to display Servsoft version
Advanced Tools Icon	Select to view and perfom advance functions such as: Output testing page, Error log page and General statistics page
Documentation Icon	Select to access information on how to operate spa pack and change its low level programming.

Application controls

The ServSoft includes many features that makes it easy to use. Among them are the common elements that appear on the screen in each of the applications. Once you learn how to use them in one application you can easily use them in all the others.

◀▶	Use these arrows to navigate between the last selected and next page within the same menu.
☑	The checkbox is a tool to select items. Use when you need to choose from the available choices on screen.
°F	A variable surrounded by a dashed box indicates that its value can be changed by clicking on it.
▲▼	Use the Up/Down arrows to increase or decrease the value of a given variable.
(Function)	The action indicated by the text within a solid box icon, will take effect by simply clicking on it.

Customized interface

Each spa pack has its own configuration. So, it is not possible to use the same interface information for all spa models. ServSoft must know the system configuration and customize the interface. The central link to get all required information is the spa pack's software number and revision. From the software number and revision, the system reads a database of pack software configurations.

Because of this, it's necessary to establish IR communication first, in order to get access to all functions.

In few exceptions, the software number is not enough to display the information. In this case, the software displays a message to select manually the right configuration.

Note: Some spa softwares (older versions) will not support all the features included in this manual.

Without IR link

If you are not connected yet to the spa pack you want to troubleshoot, the possibilities will be reduced. Only the documentation menu will be accessible.
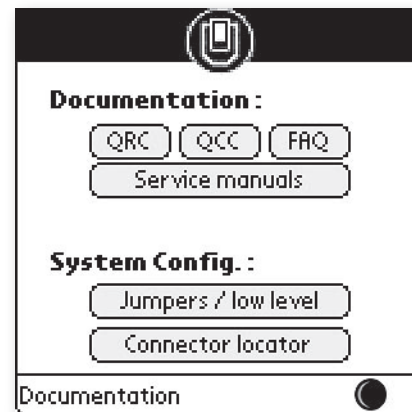
With IR link

On start-up, the system automatically tries to establish an IR communication. When no device is detected, the program opens up in the **Documentation** page (see illustration, page 9).

Otherwise, the **Spa info** page is used as your home page. When a device is detected, the pictogram on the right of the status bar changes. If no refresh is made with the Palm (by tapping the pictogram) after about a minute, the pictogram changes to indicate that values are not up to date.

Note: it's possible to try a connection or status update by tapping on the pictogram.

The following table shows the different pictograms in function of the communication channel status.

State	Pictogram
No device detected or no up to date data	●
Scanning a device	ᐳ ᐳ) ᐳ))
Device detected, no communication in progress	◉
Communication in progress	◉ᐳ ◉ᐳ) ◉ᐳ))

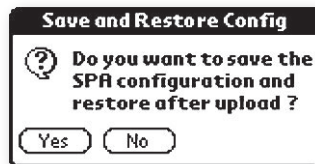*** When tapping the pictogram, the Palm updates or detects all data from spa pack.**

Automatic update

Upon synchronization of the ServSoft, the system verifies the software version. When a Firmware update is needed, a series of screens appears to inform you of the changes about to take effect. Answer **Yes** to accept changes.

Firmware Update

(?) The spa needs a firmware update, do you want to proceed now ?

[Yes] [No]

When saving existing low level configuration is desirable, answer **Yes** to the following prompt screen.

Save and Restore Config

(?) Do you want to save the SPA configuration and restore after upload ?

[Yes] [No]

In some instances, when major software modifications are required the system will do a complete rewrite of all parameter configurations. Furthermore, the bootloader may also need to be updated, in this case the bootloader will be transferred to the pack first, then the ServSoft automatically proceeds to do a spa pack update.

The following screen prompts you to update the bootloader.

MSPA Firmware:

233_3_00

Update information

(i) The bootloader must be updated, press OK when ready to begin transmission

[OK]
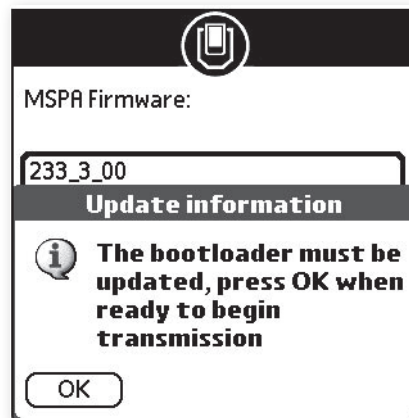
Interface information

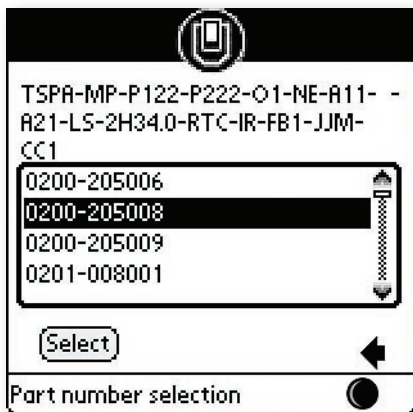If it is not possible to communicate with the spa pack and ServSoft desired function needs the pack software number, a part number selection window will open up and ask you to select the pack's product part number.

and warn you. It will ask you to select one to use. By default, the most recent one is selected.

From this number, the ServSoft gets the software number and revision. ServSoft may have to choose between many software revisions. Every time there are many possibilities, a revision selection window will open up
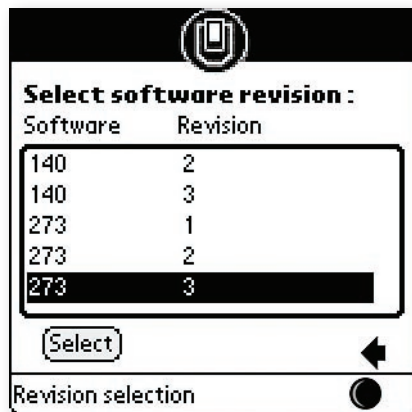
When selecting a product part number, its description is displayed on the first line.

When this menu is selected, the **Up** or **Down** key can also be used to scroll the list (not seen here).

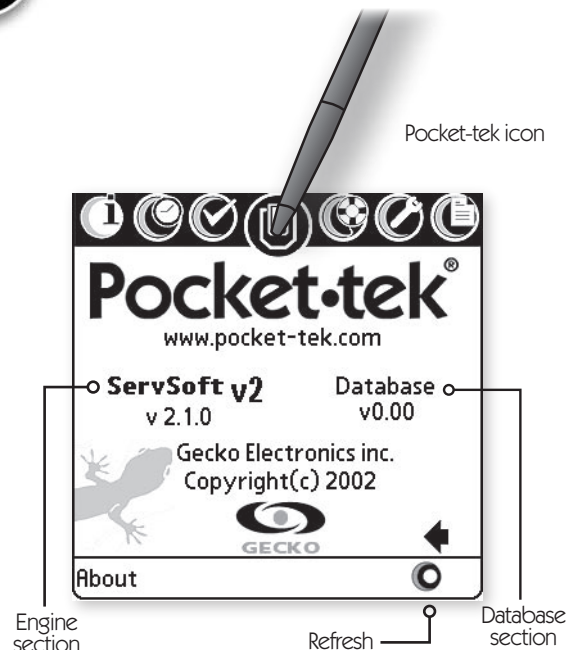### About

This page is displayed when you tap the **Pocket-tek** icon. There is a link to the pocket-tek web site and the software revision is also displayed.

Use **Refresh** to connect to the spa pack you are troubleshooting or if you are already connected, to refresh all ServSoft data from spa pack. Database revision now appears on the display in the About menu!

New ServSoft version offers more possibilities with its complete list of new features. It ensures tighter, more reliable integration of Gecko's MSPA-MP and the In.series spa controls as well as Geckos' M-CLASS softwares all while improving performance.

Engine version section shows actual ServSoft program version while the Database section indicates actual ServSoft's data version.

Because all info on every new spa pack version is logged into the Database, its revision changes routinely about once a month. Therefore, it needs to be kept regularly updated in order to support all spa packs compatibilities. Also, the engine version changes when a new functionality or feature arises or when a bug has been corrected.

Pocket-tek icon

Pocket·tek®
www.pocket-tek.com

ServSoft v2
v 2.1.0

Database
v0.00

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GECKO

About

Engine section

Refresh

Database section

Home page

To access this page, simply tap **Spa Info** icon.

This page gives you the spa soft revision and information about the device you are connected to.

In order to reduce connection time to a minimum, a new **Detect Accessories** button has been added to get external device information (simply tap on **Detect Accessories** button).

Spa info icon

MSPA-MP-C
Soft # : 9936-100291 Rev 09.00
Bootloader rev : 4

SpaWatch Version
9936-100250 Rev 01.01

Detect Accessories

Spa Info
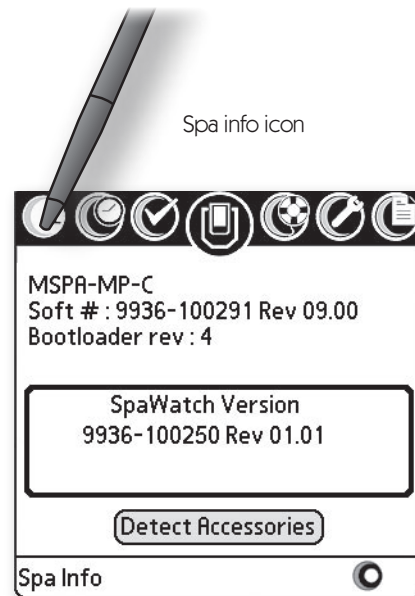
Spa pack current states

To access this page, simply tap **Current states** icon. This page is used to display the current state of the spa pack you are troubleshooting. The data is updated when you tap the pictogram on bottom right (**Refresh** button). Since many configurations are possible, the interface depends on the pack software detected. In this menu, the data can only be read but cannot be changed.

Parameters typically displayed:

Spa time: shows time of day (option available when RTC is installed)

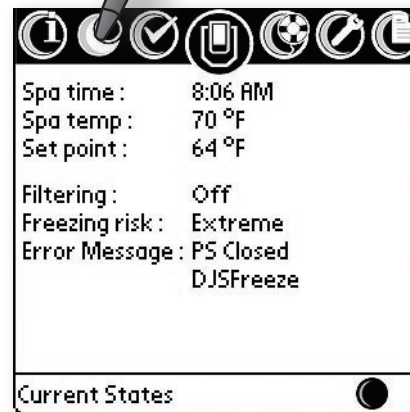Set point: shows desired spa water temperature

Temperature unit: displays desired temperature in either Fahrenheit (°F) or Celsius (°C)

Filtering: indicates filter cycle status (enabled/suspended)

Freezing risk: indicates Freeze protection status

Error message: shows present error condition

Current states icon

Spa time :	8:06 AM
Spa temp :	70 °F
Set point :	64 °F
Filtering :	Off
Freezing risk :	Extreme
Error Message :	PS Closed
	DJSFreeze

Current States

Spa setup

To access this page, simply tap **Spa setup** icon.

This is the page where you can setup the spa pack.
Spa time is optional (when RTC is installed).

Parameters typically displayed:

Spa time: sets the clock
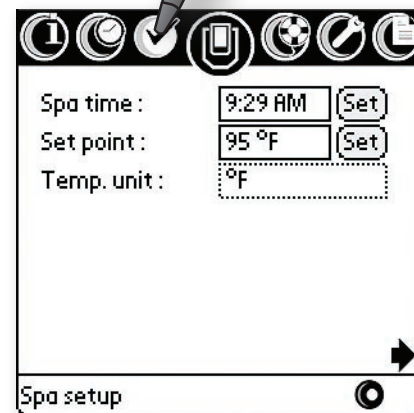
Set point: sets desired spa water temperature

Temperature unit: use to display temperature in either
                      Fahrenheit (°F) or Celsius (°C)

Filter cycle settings: sets start time, duration
                       and frequency

Purge cycle: sets purge settings

Spa setup icon

Spa time :	9:29 AM	Set
Set point :	95 °F	Set
Temp. unit :	°F	

Spa setup

Tap **Arrow**
to access
Filter or Purge
setting page

Troubleshooting Section

This section will be used to give additional information and to provide possible corrective actions to be taken when a problem is detected by the system.

Note that this feature is temporarily unavailable, check for it in the new upcoming ServSoft revision.

To access this page, tap **Advanced tools** icon.

Three different menus are displayed:

- Use **Test outputs** to access Output testing page and manually control each output.
- Use **View error log** to access Error log page. From Error log page, you will be able to access Error count page.
- Use **View statistics** to access General statistics page.

    From General statistics page, you will be able to access Accessories usage page and Temperature statistics page.

    Note: Depending on the spa manufacturer, additional functions may be available.
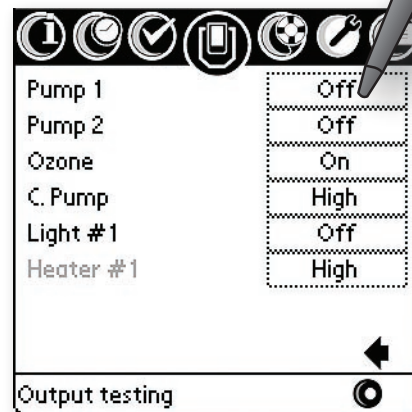
Advanced tools icon
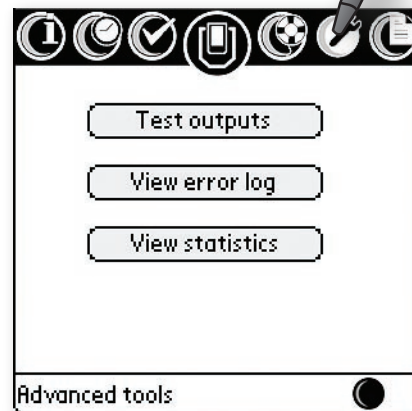
Output testing

All outputs present on your pack will appear on this page. Tap in the corresponding box to change status of the output.

For safety reasons, you cannot change the status of the heater.

Use **Refresh** button to refresh all ServSoft data from the spa pack you are troubleshooting.

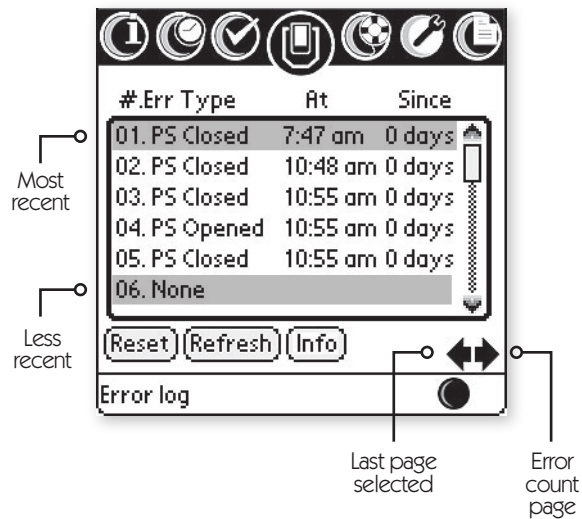|	
Pump 1	Off
Pump 2	Off
Ozone	On
C. Pump	High
Light #1	Off
Heater #1	High

Output testing

Error log

You can access this page by tapping **Advanced tools** icon. Then, use **View error log** button.

This page indicates the last 25 errors that occurred on the spa pack.

Use **Reset** to clear all data on the display and **Refresh** to see if a new error has not occurred since the last time you refreshed the data.

Use **Info** to retrieve additional data on the error code selected.

#.Err Type	At	Since
01. PS Closed	7:47 am	0 days
02. PS Closed	10:48 am	0 days
03. PS Closed	10:55 am	0 days
04. PS Opened	10:55 am	0 days
05. PS Closed	10:55 am	0 days
06. None		

Most recent

Less recent

Reset Refresh Info

Error log

Last page selected

Error count page

Error count

This page is accessible through the Error log page.

Displayed are statistics from all the errors that occurred on the spa pack you are troubleshooting.

Use **Reset** to clear all data and **Refresh** to see if an error has not occurred since the last time.

Note that for the in.pac series, error data list will be displayed by categories:

- Remote heater
- Spa pack
- P2
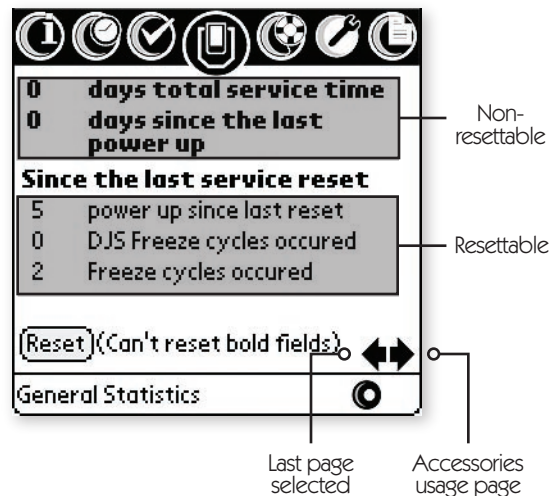- 02
- Oz

General statistics

To access this page, tap **Advanced tools** icon and then, tap **View statistics** button.

These statistics will help you identify rapidly any wrong or improper use of the spa pack you are troubleshooting.

Use **Reset** if you want to clear all data of the "resettable" section, from the number of resets at power up to the number of freeze cycles occurred.

The "non-resettable" section keeps track of the service time rendered by the pack at this point as well as the number of days since last power up.

Use right **Arrow** if you want to access Accessories usage page (see next page of this manual).

0	**days total service time**
0	**days since the last power up**

— Non-resettable

Since the last service reset

5	power up since last reset
0	DJS Freeze cycles occured
2	Freeze cycles occured

— Resettable

(Reset) (Can't reset bold fields)

General Statistics

Last page selected

Accessories usage page

Accessories usage

This page is accessible through the General statistics page.

This page tells you how many hours the outputs have been activated. If you want to reset these data, check mark the outputs you want to reset and then tap **Reset selected**.

Use **Refresh** button to refresh all ServSoft data from the spa pack you are troubleshooting.

Note that some outputs displayed in the opposite illustration are optional.

Use right **Arrow** to go to next page (available to manufacturers only).

Last page selected

Page only accessible to manufacturers!
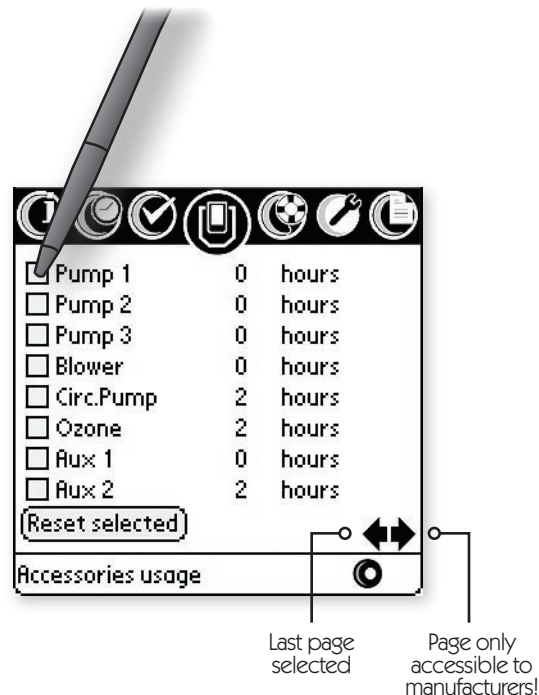
Documentation & system configuration

To access this page, tap **Documentation** icon.

This page gives you all the information you need to know on how to operate a spa pack. PDF files of Service Manuals, Quick Reference Cards, Quick Configuration Cards and Frequently Asked Questions are accessible from your Palm. Simply tap the button of your choice to have access to the PDF file.

You can even change low level settings or view jumper positions of your spa pack by tapping **Jumpers/low level** button.

You can locate output "P" connectors (wiring diagram) by tapping **Connector locator** button.
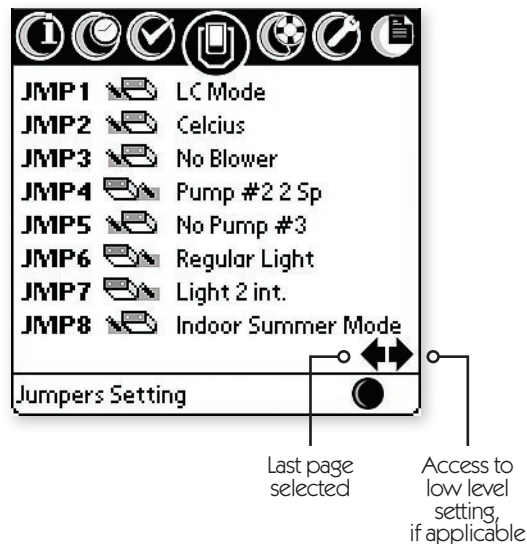
Documentation icon
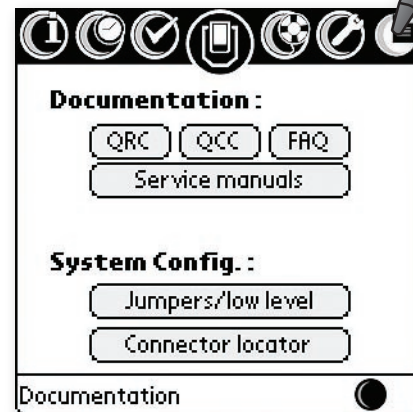
Jumpers settings

To access this page, tap **Documentation** icon, then tap **Jumpers/low level** button.

The position of jumpers used on the spa pack you are troubleshooting will appear on this page. Of course, you cannot change here the jumper positions since it has to be done manually. However if you click on a jumper icon, its position moves temporarily, the time to show the configuration changes available, if the user were to physically change that jumper of position.

Please note that this option may not be available depending on ServSoft configuration.

Use right **Arrow** to access Low level setting page (if applicable, depending on system configuration) or left **Arrow** to go back to last page displayed.

JMP1   LC Mode
JMP2   Celcius
JMP3   No Blower
JMP4   Pump #2 2 Sp
JMP5   No Pump #3
JMP6   Regular Light
JMP7   Light 2 int.
JMP8   Indoor Summer Mode

Jumpers Setting

Last page selected

Access to low level setting, if applicable

Low level setting

You can change low level setting by tapping in the box of the output you want to modify. Please note that this option may not be available depending on ServSoft configuration.

Use **Send** button when you are done with all changes to make them effective. Remember that **Send** button will not appear on the display until you have done at least one modification in the low level setting.

Get button is used to retrieve all data of spa pack (if you haven't used the **Send** button before).

Use **Load/Save** button to save changes into the PDA's memory.

Note: In this page, refresh sequence cannot be performed even if you tap **Refresh** button.

Light switch config :
2 intensities (02)

Aux I/O config :
Not installed (00)

External I/O #1 :
Not installed (00)

Load/Save   Get   Send

Low Level Setting

Saving low level setting

When you are done with all the changes, you can save low level setting. Use **Save** button to save the parameter configuration into the Palm's memory.

You'll be prompted to enter a configuration description then to save it with its respective software number. Note that you may change file name suggested by the ServSoft for your own description name.

Use **Load** button to recuperate stored low level setting.

Use **Delete** button to erase the selected file.
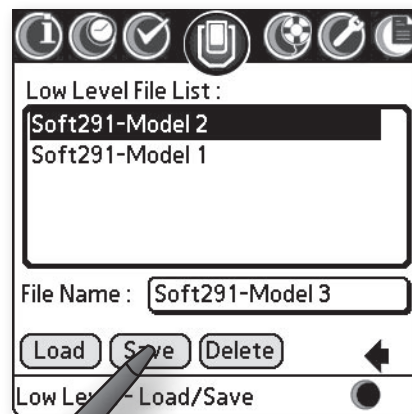
Connector locator

To access this page, tap **Documentation** icon, then tap **Connector locator** button.

In this page, tap the output of your choice and you will view "P" connectors on board of the spa pack you are troubleshooting.

Pump 1	120V	240V
Green / Ground	P69	P69
White / Com	P48	P57
Red / Low Sp	P37	P37
Black / High Sp	P64	P64

Pump 1 | Pump 2 | Blower
Ozone | Light #1 | Accessory

Connector locator

How to install the Pocket-tek ADIR-l communication cartridge into an MC-MP spa pack

Pocket-tek's *ADIR-1* is the small plastic cartridge that allows your Palm m100 (or m105) to communicate with an MC-MP spa pack, when making service calls, thanks to IR (infrared) technology. Below are the basic steps to follow to install the cartridge in an MC-MP:

• It is preferable to turn off power to the MC-MP while installing the ADIR-1 cartridge. "Hot-connecting" is not a problem, but the MC-MP board may reset if done this way.

• Remove the MC-MP cover (you will need a Phillips screwdriver to remove the four screws).

• Locate the slot designated to accommodate the cartridge on the lower right side of the MC-MP board.

• Locate the two extensions sticking out from each side of the cartridge. Notice that one is slightly wider than the other. Hold the cartridge so that the slightly wider side is toward the top and the IR detector/transmitter and gray 4-pin connector are facing away from the spa pack. The side with the extensions is the one you must insert into the slot provided in the lower right hand corner of the spa board.

• Now slide the cartridge into the slot provided on the MC-MP PC board. It should slide into position fairly easily. If you are having problems, check to make sure you are holding the cartridge with the wider extension arm at the top.
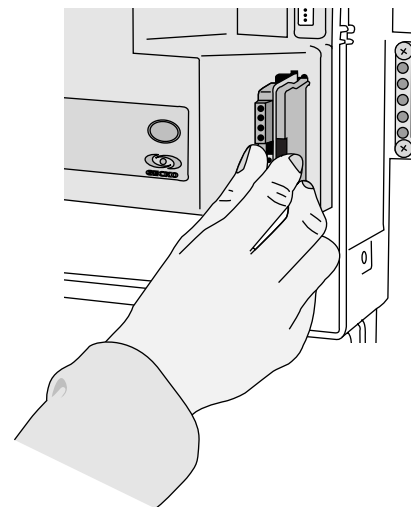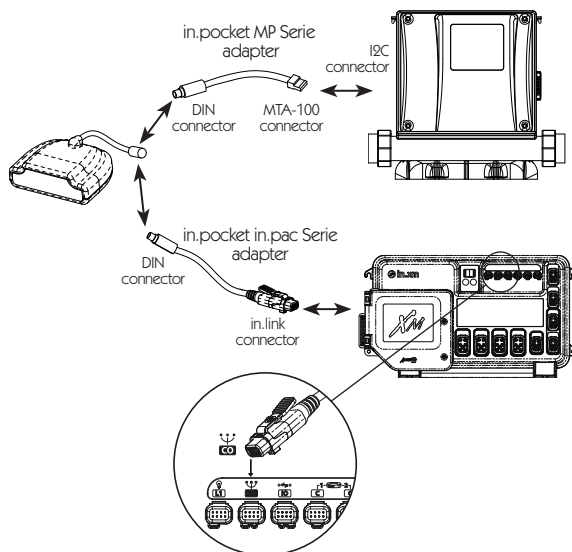
- Once the cartridge is fully inserted, you can turn the power to the MC-MP back on. Line up the IR portal located at the top of your Palm m100 (or m105) with the IR detector/transmitter on the cartridge and you are ready to exchange data with the spa. Now you can query the spa, download software, troubleshoot, etc., which is all explained in detail further on in the present document. For best results, you should be within 1 meter (3 ft) of the spa.

- Before leaving, don't forget to remove the ADIR-1 cartridge from the MC-MP spa pack, and to reattach the spa pack cover.
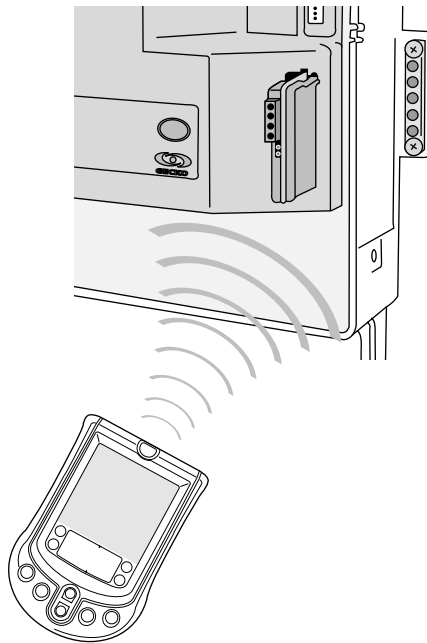
How to install the in.Pocket ADIR-II into an MC-MP or in.series spa pack

In.Pocket ADIR-II is the new and improved communication interface that allows your PDA to communicate with the MC-MP or in.series spa pack.

in.pocket MP Serie adapter

I2C connector

DIN connector

MTA-100 connector

in.pocket in.pac Serie adapter

DIN connector

in.link connector

Communication with MC-MP pack is possible through an in.pocket series cable adapter (arranged with a DIN connector and a MTA-100 on each end). The DIN end connects to the ADIR-II and the MTA-100 end connects to the I2C connector on the MC-MP pack (P4). Although the Pocket-tek's *ADIR-II* is still using the infrared technology, it's now equipped with a 6 ft cable adapter that allows you to troubleshoot the equipment from a more comfortable position.

Furthermore, in order to establish communication with an in.series pack the use of an in.pocket-in.pac cable adapter is needed. Its DIN connector is connected to the *ADIR-II* and the in.link connector is connected to the low voltage connector identified ⊻CO on the spa control.

It's important to note that Pocket-tek's *ADIR-II* should be installed in a dry well ventilated area while troubleshooting a spa pack and it should not be installed permanently.

GECKO