

Palm Routes A Checkpoint Route System.

Application Description and Product Information

Palm Routes is a software application built for Palm Handhelds that allows a user to document each step in a Security route, Maintenance workflow, or any other application where sequential or consecutive events need to be documented for process verification/validation.

The application is used with unique serial number iButtons that can be installed along a path or round. A predetermined route is set up and the application guides the user through the process of visiting and checking in with each route stop/iButton location. It allows for the documentation of the route/process using the iButton's unique serial number. As each point in the route is reached, the application records the serial number of the iButton and the day, date, and time of the visit to that location. All the information recorded on the Palm is synchronized back to the base computer when the route is completed.

How the application, handheld and iButton solution works:

Setup your own checkpoints with iButtons to define a route for security, task management, maintenance, delivery, etc.

- Locate iButtons at each checkpoint and describe your checkpoints in the pRoute application using the Palm touch screen.
- Palm **stores** your descriptions of the checkpoint and **associates** them with iButton unique IDs.
- **Organize** checkpoints to define routes and **store** in Palm's Route database.
- **List** routes from the database on the Palm screen and **Select** a route to begin.
- **Read** the iButton's unique ID at each checkpoint to capture and time, date and location ID.
- **Collect** other data at the checkpoint.
- **Log** the checkpoint as *completed* in Palm Database and display.
- **Display** the remaining *incomplete* checkpoints on the route with the descriptions you enter.
- When a route is completed, **store** it in Palm's Finished Route Database.
- **Transfer** finished routes with date and time data to PC via Hot-Synch.
- **View** or **print** finished routes on PC with Microsoft Excel or other programs which accept tab-delimited data.
- **Save** finished route data on PC for later use, reporting or transmission to other systems.

Palm Routes Features include:

- Multiple Routes
- No limit to Checkpoints on a Route
- Date and Time Stamp Checkpoints along the Route
- Checkpoints may be repeated on different Routes
- Download completed Route and Checkpoint data to a PC Easy spreadsheet import to Excel via supplied macro
- Supports multiple Palms with the same or different routes and checkpoints
- Any iButton can be used as a Checkpoint

Checkpoint/Route System for Palm and iButton

Operation Instructions for Palm Routes - Working A Route

Home Screen is displayed when Palm Routes starts.

- The Rounds button is for working a route, visiting checkpoints and logging date, time and data at the checkpoints.
- Setup lets you can enter new routes, add checkpoints to routes or edit existing checkpoints and routes.
- Reader Check performs a test to make sure that the system is working properly.
- Review allows Finished Routes and Checkpoints to be viewed before sending them to PC via Hot-Sync.



This page takes you through working a Route, verifying checkpoints and collecting data.

Tap **Rounds** to start working a route.

Active routes are displayed along with their status. If routes have started, the date and time of the start will be displayed. If some routes have already been started they will be listed as Underway. You can access a route simply by tapping on it.



Select a route by tapping on it.

Information about the route will be displayed:

- Route ID
- Name
- Number of checkpoints on the route
- When it was started (if it is underway)

Tap **Start** to begin the round. Palm Routes initializes all the checkpoints on the route and logs the date and time you started.

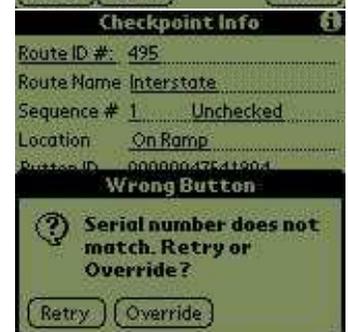
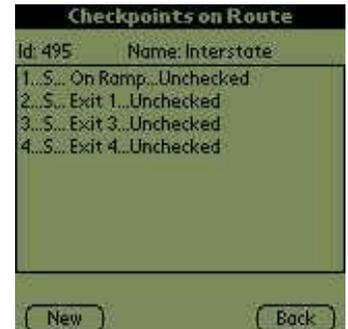
Tap the **Chkpts** button to list the checkpoints on the route.

Checkpoints are listed in sequence with their location and status. You can start a route anywhere, but if you start at the first checkpoint in sequence, Palm Routes can guide you through the route by automatically taking you to the next checkpoint in the sequence. Tap the checkpoint where you want to start.

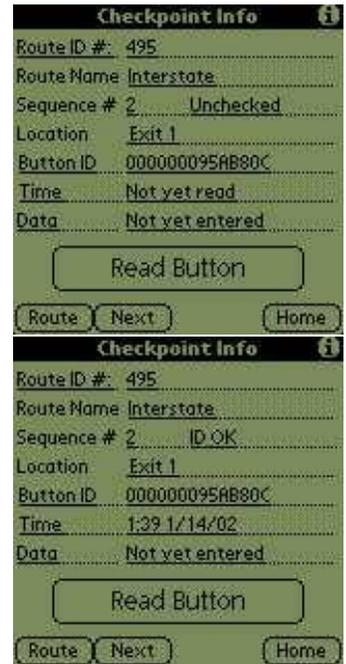
Checkpoint information is displayed. When you arrive at the checkpoint, read the iButton. Palm Routes compares the serial number with data in the Palm database for this checkpoint. It logs the date and time of the reading and updates the status on the Palm screen. If the serial number is correct and no further data is required, the status is complete.

However, if you are at the wrong checkpoint, the iButton serial number will not match the data in the Palm Database. Palm Routes will alert you that something is wrong. Check your situation. You may try to read the iButton again or override Palm Routes.

If the iButton serial number does match the data in the Palm Database, then the checkpoint is Complete.



The next checkpoint on this route has a data entry requirement. First read the iButton to make sure you are at the right checkpoint. Again Palm Routes reads the iButton serial number and compares it to data stored in the Palm Database.



The serial number matches the data in the Palm Database, but the data entry requirement is not yet satisfied. Palm Routes displays the status as ID OK. The checkpoint is not complete.

Enter data at the checkpoint either by using the Palm keyboard or graffiti entry. The screen to the right shows 2.3 in the **Data** field. Now the checkpoint is complete and you can move on to the next checkpoint with the **Next** button.



If you are not moving in sequence, you can use the **Route** button to list the checkpoints on the route and select the checkpoint you want to visit next.

You don't have to dedicate your Palm to working rounds. If you interrupt the sequence of checkpoints to use your Palm for something else - look up a phone number, check a schedule on your calendar, you can come right back to where you were on the route.

Let's jump ahead to the last checkpoint on the route. When that checkpoint is complete, Palm Routes determines that the route is complete and alerts you. Palm Routes moves the Finished route and its checkpoints to the Finished Palm Database. You can review finished routes with the **Review** button on the opening screen before sending them to PC.



Notice that many screens had a little **i** in the upper right corner. This is the information or help spot. Palm Routes has a help page for each screen. This handy information might help you out; its right there in your Palm at all times. This one describes what you can do from the Opening Screen.



Checkpoint/Route System for Palm and iButton

Operation Instructions for Palm Routes - Setting Up A Route

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This page takes you through Setting up a Route



Select **Setup** to Start. When you first install your application, there are no routes in the Palm Database. You will create routes and add checkpoints to them. We will show you how to create a route and add checkpoint to it. On your own, you can add more checkpoints, create more routes or edit what you have already entered.

This screen shows that the Palm Database has no routes. Select **New** to make a new route.



Palm Routes displays a blank route form for you to fill out. Enter a unique **Route ID** using the Palm Keyboard or grafitti. Then give the Route a recognizable **Name**.



On the sample screen we have entered A421 as the route ID. This will be used to associate all checkpoints on the route. The name, Library Building, will be displayed as the familiar name.

After making these entries **Save** the new route (very important!). The route is created when you save the data you have entered.

Now Palm Routes shows that there is a route in the Palm Database. Tap on it to read it from the database and display it on the screen. Then select **Chkpts** to display checkpoints on the route.

Palm Routes shows that there are no checkpoints on the route. You have not made any yet. Select **New** to display a checkpoint entry form.

This form displays information about the checkpoint. It shows that it is associated with Route ID A421, Library Building.



To create this checkpoint, you must enter four items.

- Enter a sequence number which Palm Routes will use to guide the user on the route. The sequence number always starts at "1", but you should edit it to make the sequence you want.
- Enter a location - a recognizable name where you will place the iButton.
- Read the iButton associated with that location. Palm Routes will save it so that it can compare the iButton serial number when it is read on the route.
- Select the Action you want Palm Routes to take at the checkpoint by tapping in the Action field.



The Location has been entered: Lower Level - Circulation. The name should be selected so it is recognizable by the individual who will be working the route.

Next read the iButton Serial Number by tapping **Read Button**. We made this Palm button BIG so that it would indicate the action which must be taken at every checkpoint.



The iButton assigned to this checkpoint has been read and is displayed. This serial number will be stored in the Palm database with other checkpoint information. When the iButton is read on a route, it will be compared to this data to be sure that the individual is at the correct location.

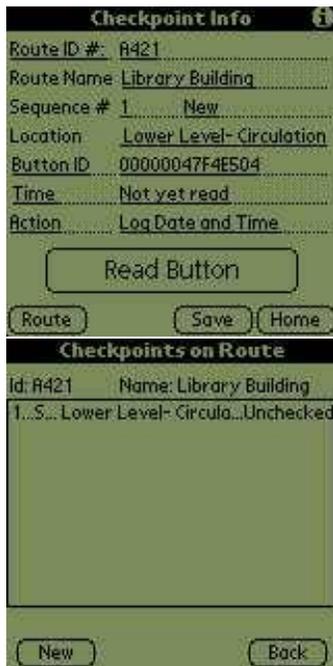
Finally select the Action to be taken at this checkpoint by tapping in the action field.

Palm Routes then displays a small form to allow you to select the action. You have three choices.



- Automatically record the date and time that the iButton was read at the checkpoint on the route.
- In addition to the date and time, read information stored in the iButton memory. This information (up to 32 characters) might be special instructions for the user, information about the checkpoint, or any other information which can be stored in the iButton. Information is read from the first memory location in the iButton and displayed on the Palm screen below the date and time of reading. Information must be stored in the iButton before dispatching the user. You may use Scanning Devices iButton Palm Application which is distributed with Palm Routes to write information into iButton memory.
- In addition to the date and time, prompt the user to enter information on the Palm screen either by the Palm keyboard or grafitti. If this Action is selected, tapping in the data field will automatically open the Palm keyboard, prompting the user to enter information at the checkpoint.

Select your choice with the checkbox.



After making the Action selection, all information for the checkpoint has been entered. Tap **SAVE** to store this checkpoint in the Palm Database (very important!). Saving the checkpoint information creates the checkpoint and associates it with the route by the Route ID.

After saving, the new checkpoint is included on the list of checkpoints for the Library Building Route, Route ID A421.

You have now made a new route and added the first checkpoint to it. You can now add a **New** checkpoint (don't forget to set the sequence to 2!), edit the one you just made, or go **Back** to the list of routes

Try a demo?

Request a demo version of the Palm Routes Palm OS Application and we will send you (by email) Palm Routes Demo which you can run on any Palm. Without an iConnection, Palm Routes Demo can't read iButtons, but it generates a "Simulated Read" message when you try. Palm Routes Demo shows you everything else: setup up routes and checkpoints, store routes in the Palm database, retrieve routes to work, review finished routes.

E-mail your [request to: mail@scanningdevices.com](mailto:mail@scanningdevices.com) with **request Palm Routes Demo** in the subject field. We will send you a demo which you can load into any Palm so you can see for yourself.