



# QUICK START GUIDE

## Overview

The High End Systems® HandShake™ controller for Palm OS® hand-helds provides show creation and playback along with DMX diagnostics and remote communication to fixtures supporting TalkBack™ protocol.

The HandShake™ controller utilizes the Palm™ handheld as its user interface. The HandShake application will run on Palm OS versions 3.3 and later. The HandShake module is meant to connect directly to the Palm™ III series and Palm™ VII series of Palm handheld computer family. Form elements such as pick lists, scrollbars, menus, and direction arrows follow the Palm desktop conventions.

The HandShake controller implements the Flying Pig Systems™ fixture library as a series of Palm OS databases, one database for each of 39 supported manufacturers.

### This guide shows you:

- How to set up the HandShake controller

- How to configure fixtures for show creation and control

- The purpose and actions available for each of the major forms in the HandShake interface

- How to access fixtures from High End Systems that support TalkBack protocol for remote bidirectional communication and programming

- How to conserve battery power

## Getting Help

Refer to the documentation for your Palm™ organizer for questions related to the Palm desktop or Palm OS interface.

Refer to the CD shipped with your HandShake controller for release notes.

**Online Help** is available on most forms and dialog boxes. Tap on  to access help for that form. Use the direction arrow(s) to scroll one line of text. Hold stylus down on arrow to scroll through the text continuously. Tap on  to return to the form.

**Customer Service and Updates** are available from High End Systems by calling 800.890.8989 or on the web at [www.highend.com](http://www.highend.com)



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# Getting Started

## Installing Software

Before installing the HandShake application and fixture libraries on the handheld, perform a HotSync operation to backup all important files.

On the Palm Desktop, select the Install tool.

Select the appropriate user in the User popup.

Click on the Add button and use the Open dialog to browse to the disk and directory containing the HandShake.prc resource file.

Select the HandShake.prc file and tap the Open button. The HandShake.prc file will appear in the Install Tool.

Click on the Add button again. Use the Open dialog to browse to the disk and directory where the fixture libraries are located.

Click on a manufacturer's database file that is to be installed. To install all databases, strike Ctrl-A on the keyboard. To install selected files, hold down the Ctrl keyboard button and use the mouse to select the appropriate files.

Now tap the Open button on the Open dialog. All selected files appear in the Install tool.

Tap the Done button on the Install Tool. The Install tool responds that the files will be installed on the handheld during the next HotSync. Tap Ok.

After you perform a HotSync operation, the HandShake application and fixture databases appear on the handheld.

## Setup HandShake Module

Slide battery door [a] open and install the 2 AAA batteries shipped with your HandShake controller.

Attach power cord connector [b] (optional) and data cable [c].

Attach Data connector [d] to fixture or DMX link.

Plug HandShake into the Palm handheld.

Slide HandShake power switch [e] left to turn on.

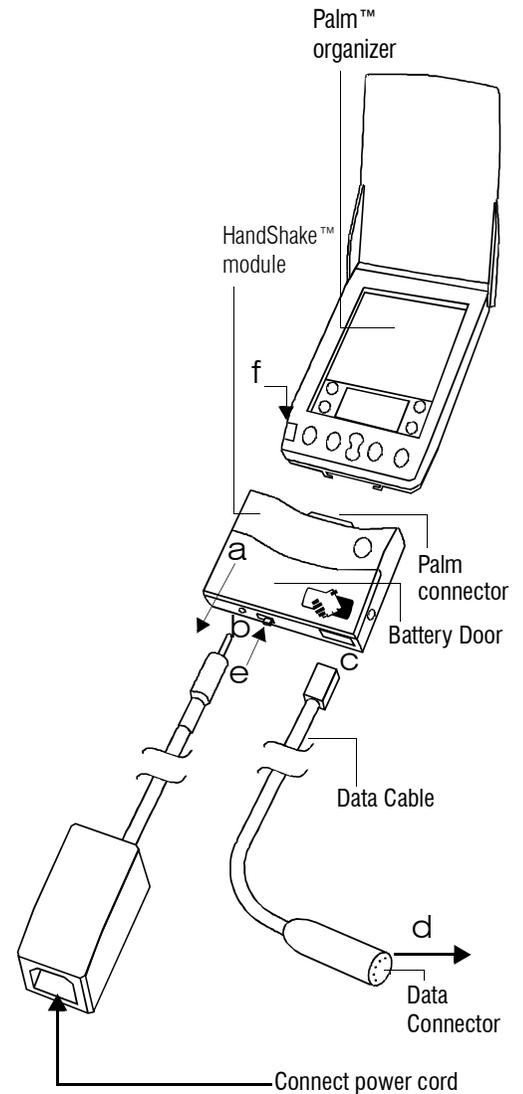
## Start HandShake

Turn on Palm handheld and tap Applications icon.

The HandShake will look for a data-connection upon loading.

Choose HandShake from the application menu.

Select the major form you want from the Main form.



## Conserving Battery Power

Set the following values on the DMX Options form:

Break time 88  $\mu$ sec, Mark after break time 8  $\mu$ sec, and Mark between bytes at 0  $\mu$ sec.

Tristate on (turns on the DMX transmitter only when transmitting data and off during the time between data packets).

Frames/sec value should be the lowest number that delivers acceptable fixture movement.

Transmit only DMX channels required by the current fixture configuration.

## Configuring Fixtures for the HandShake™ Controller

**Select a Manufacturer**  
from the manufacturer pick list

**Select a Fixture**  
from the fixture pick list

**Add the fixture**  
to the list. After the first fixture, you have the option to add Before or After (before or after the selected fixture or to the beginning or the end of the list).

HandShake adds the fixture to the List Select and Plot Select forms and assigns a Start Channel based on the next valid channel value available.

### Set Swap and Invert by checking boxes

PTS = Pan Tilt Swap

I = Pan invert

TI = Tilt invert

Tap on the box to select

### Select one or more fixtures

Tap on fixture number to select

### Delete a Fixture

Tap Delete to delete a selected fixture from the list

#	Name	PTS	PI	TI	Ch
1	Studio Spot 250	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
2	Studio Color 250	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	19
3	Color Pro FX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	34
4	Technobeam Iris	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	43
5	Desk channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	61
6	Desk channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	62

### Modify a channel assignment

Tap the current start channel number to bring up the system keyboard. Enter a new number and tap Done to return to the Fixture Setup Form.

# FORMS FUNCTION Actions

**Fixture Setup** configures fixtures on a DMX link for HandShake control

- Select fixtures from fixture library
- Add selected fixtures to the beginning or end of list
- Set DMX Start channel automatically or manually
- Delete a fixture from a list
- Swap or invert Pan and/or Tilt on applicable fixtures

**Uploads** carries out uploading from HandShake application to High End Systems fixtures on the link that support TalkBack protocol

- View fixture upload databases installed on handheld
- Find HES fixtures on the datalink
- Select the fixture family to upload
- Execute uploads and monitor progress or errors

**TalkBack** protocol allows remote access to High End Systems fixtures' menu systems

- Identify and retrieve the unique number of any fixtures on the link
- Retrieve (Get) information and parameter and operation settings from selected fixtures
- Edit (Set) parameters and fixture operations such as boot copy or self tests
- View a list (Details) of all possible information and parameter values of a selected fixture
- Retrieve and clear errors on fixtures

**Presets** allows programming and playback in High End Systems fixtures supporting stand-alone presets

- Program stand-alone presets
- Retrieve presets from the fixtures for archival purposes.
- Start and stop preset playback

**DMX Options** controls timing values associated with the transmission of DMX data.

- Control frame rate, break time, mark-after-break time and mark-between-bytes time
- Set Tristate powersave option
- Set number of frames/second

**DMX Oscilloscope** indicates activity for the data on the DMX link.

- Display Channel values graphically
- Adjust horizontal resolution
- Scroll through the DMX channels

## Fixture Configuration, Utilities and DMX Control/ Diagnostics

**Main** accesses all major forms

- Exit HandShake
- Go directly to any major form
- Access info and preferences options from menus in title bar

## Show Creation and Control

**Show** stores and retrieves show databases

- Store a show externally
- Retrieve an externally stored show
- Attach a note up to 59 characters to a show
- View statistics for an internally stored show
- Delete internally stored show databases

**Cue List** combines a series of Chases and assigns a start and stop time for each Chase

- Set the order in which Chases will be played
- Assign a start time and a stop time to the Chases
- Play the show or selected Cue List entries

**Chases** define a list of cues to perform in sequence and assigns delay and crossfade times

- Set the order in which Cues will be played
- Set crossfade and delay times for each Chase step
- Control the Chase playback

**Cues** sets up cues for editing

- Add a new Cue
- Edit a Cue name with up to 9 characters
- Select a Cue for editing by tapping its number
- Set DMX channels to Default values
- Copy the DMX values of one Cue to another cue
- Copy the DMX values of one Cue to all fixtures selected in the List or Plot Select forms

**Cue Edit** adjusts the parameters of selected cues

- Adjust Pan and Tilt with fine or course control
- Flip Pan and Tilt on applicable fixtures
- Select Parameters and adjust DMX values
- Access Grand Master to scale the values output on Intensity channels

**List Selection** lists fixtures by number and type to select for editing

- Select one or more fixtures of same type for editing
- Invert the current selection from the configured fixtures of the same type
- Select a range of fixtures
- Remove a fixture from a selected range of fixtures
- Select All the fixtures of a single type
- Copy and Paste cue parameters between fixtures

**Plot Selection** shows fixture numbers

- Move numbers on the screen to represent physical layout of fixtures
- Set Default position for a rectangular array
- Perform all fixture selection, copy and paste functions as List Select form

# TalkBack™ Protocol — remote access to fixture menus

TalkBack™ technology is a new feature that allows remote access to the menu system built into High End Systems fixtures. Any menu item available is accessible remotely with Talkback protocol.

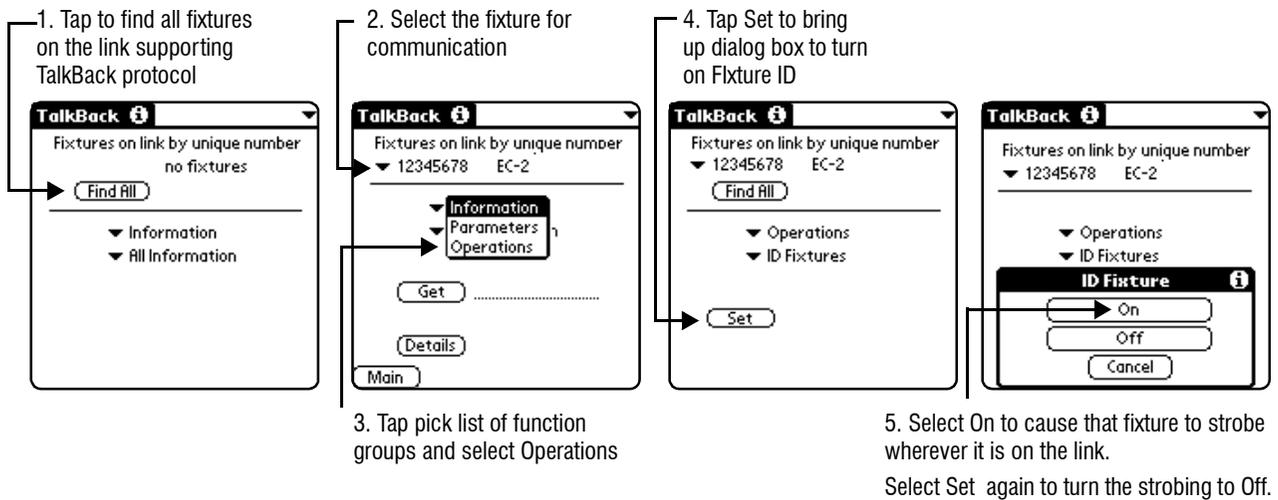
TalkBack protocol uses the normal DMX-512 connection for bi-directional communication with the fixture so you don't need physical access to perform operations like changing a DMX address or configuring preset programs. You can configure any fixture supporting TalkBack protocol on a DMX-512 link if you have access to the cable.

TalkBack protocol uses a discovery process to find the unique number that is embedded inside each fixture, similar to a serial number. The HandShake controller utilizes this discovery process to find all the fixture on the link supporting TalkBack protocol.

Once the fixtures have all been identified, the current fixture parameter settings and information can be discovered. Fixture discovery can happen at anytime, but the Talkback messages are only valid after the fixture starts homing.

TalkBack protocol utilizes the primary DMX link (pins 2-3) in a half-duplex communication mode. This means that it does not require pins 4-5 to be connected or used to receive TalkBack messages coming from the fixture.

## Identify Fixture



## Set Start Channel

