



TECH TIP

MC521 Controller Firmware Revision M

Prepared by: Jeff Bonas

Engineer: Andrew Dierks

Tech Tip: TT070917

PCN: 07-90

RDW: _____

Reference Tech Tip: _____

Engineering Document Number: _____

Summary Information

Product Information

- Bifold
- Slide
- Swing
- Class 2
- Accessories
- Controls
- Operators / Drives
- Panels / Hardware
- Sensors

Tech Tip Classification

- Adjustment
- Installation
- Customer Complaints
- Clarifications
- FAQs
- Service
- Retrofit/Upgrade Instructions
- Design Change Description

Release Action

- Level 1 - Does not impact maintenance or operation of door. (Only Safety/Liability and Engineering need to sign.)
- Level 2 - Full sign off required.

Release Information (initial and date)

Safety/Liability _____

Engineering _____

Technical Support _____

Field Operations _____

Quality _____

If you have any questions concerning this procedure, contact Access Technologies Technical Support, at 1-800-422-6489 Option 3.



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Action Required

- Replacement Required
- None, Information Only
- Inspection Required
- Where Symptom Exists
- New Installation Only
- Inspect During Maintenance

This Tech Tip is to announce the release of the latest version firmware for the MC521 controller. This new firmware is a Palm database file that is used by the MC521ToolBox software on the Palm device to update the MC521 controller firmware to the latest version 6.11 (Rev. M).

New features added in this release are:

- Operate Delay for swing doors. This feature allows a single MC521 controller to operate a pair of swing doors with auto flush bolts installed on them (*See instructions below).
- Improved synchronization of swing door pairs.
- B1 encoder error on power up has been resolved.
- Firmware version of controller can be checked using on board push buttons (*See instructions below).

Update Procedure:

The following file '713996M(MC521Firmware_v06.11).pdb' is required for this procedure. These instructions will guide you through the installation of this file onto your Palm device. It will also cover how to update the MC521 controller firmware to the latest version. This file should be installed on the SD/MMC memory card of all Palm devices with the exception of Treo smartphones (***Note: if using a Treo the file should be installed to the device**).

There are three ways to get the file:

- Download the file from the following site on the Stanley intranet: <http://swkteamservices/divisions/sss/sat/> (Select Software from the Quick Launch column on the left side of page. Connection to the Stanley intranet is required for this option).
- Download the file from the Stanley Distributor site on the internet: <http://www.stanleydistributor.com> (Select Product Data > Product Software from the menu. Registration is required for this option).
- Request the file by email from Stanley and receive it as an attachment.

Needed to complete this operation:

- Palm handheld computer (*see list of compatible models at the end of this document).
- Palm Desktop software installed on PC and first HotSync completed (consult the Palm documentation and software included with handheld).
- Either of the following cables:
 - For older model Palm devices (*see list of compatible models):
 - Black Palm Interface Cable (available at <http://www.it.pcconnection.com/stanley>).

If you have any questions concerning this procedure, contact
Access Technologies Technical Support, at 1-800-422-6489 Option 3.

For new model Palm devices (*see list of compatible models):
Yellow Palm Interface Cable (available at
<http://www.it.pcconnection.com/stanley>).

- File '713996M(MC521Firmware_v06.11).pdb'.

To install the file on the card or device, first save the file '713996M(MC521Firmware_v06.11).pdb' to the hard drive.

Removing older versions:

Before installing the new file, remove any older versions that may be on the card or the device.

Follow these steps:

- On the Palm device tap on the menu button.
- Select 'Delete' from the 'App' menu.
- Select 'Device' from list at top of page to delete file on the device, and select 'Card' from list at top of page to delete file on the card.
- Scroll through the list and delete the following file from both if present:
 - o 'MC521UPDATE'.

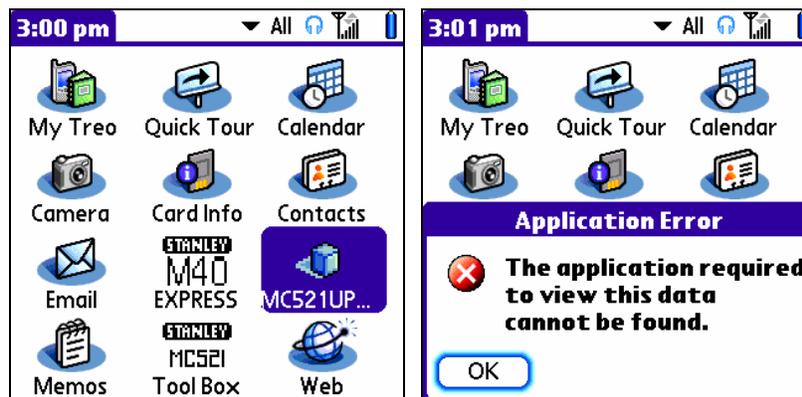
Follow these steps to transfer the file to the card using HotSync (*Note: if using a Treo the file should be installed to the device):

- Find and double click on the file that was just saved.
- Add the file to the memory card (this will differ depending on the Palm Desktop Software version; consult the documentation that comes with the Palm).
- Begin HotSync to transfer file to card.

Follow these steps to transfer the file to the card using a SD/MMC card reader (*Note: if using a Treo the file should be installed to the device):

- Find the file that was just saved.
- Add the file to the memory card in the \Palm\Launcher\ folder.

*Note: The firmware will show on the Palm screen as an icon labeled 'MC521UP...' which is not an executable program and will display an error message if tapped (see below).

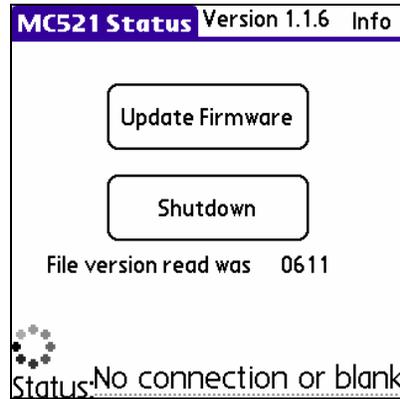


If you have any questions concerning this procedure, contact
Access Technologies Technical Support, at 1-800-422-6489 Option 3.

To verify that the latest version software and firmware is on the device:

With the cable not connected to the Palm device tap on the 'MC521 Tool Box' icon.

The following screen will be displayed:



Version 1.1.6 at the top of the screen is the latest Palm software (Rev. H) and version 0611 below the Shutdown button is the latest firmware (Rev. M) on the card.

To use the program to setup the MC521 controller:

Refer to MC521 manual 204003 for slide doors, MC521 manual 204027 for swing and Bifold doors, and manual 204020 for Cart Door.

To use the program to update MC521 controller firmware:

Note: This procedure will only work on controllers with Revision C, Version 05.18 firmware or higher (to identify version, connect Palm to MC521 controller and run the MC521 ToolBox program, the firmware version will be listed on the screen). Updating the firmware to the latest version whenever service is performed on controllers having older firmware on them is strongly recommended.

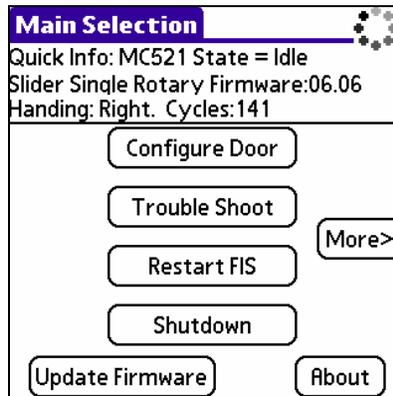
***Very Important: If the MC521 Controller being updated has Revision C, Version 05.18 through Revision J, Version 06.06 firmware installed, there is the small possibility that the firmware update may fail and leave the controller unusable and will need to be sent to the factory for reprogramming. This problem should only affect a small number of the controllers in the field. When doing this update in the field, an extra controller with revision K firmware or greater should be brought to the site so that if the update procedure fails, the new controller can be used in its place. If the update succeeds, the controller will not need to be replaced and will function normally (this includes future updates).**

Turn the power to the door 'ON' and set the door function switch to 'Close' or 'Closed/Locked'. The door will need to be closed to start this procedure. If the door needs to be open due to traffic, it may be opened manually once the MC521 controller displays 'P'.

Connect the Palm to the MC521 Controller.

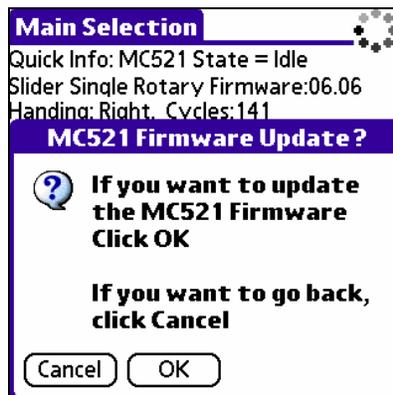
On the Palm screen tap on the 'MC521 Tool Box' icon.

The following screen will be displayed (note the firmware shown on this screen will indicate which version is currently installed on the MC521 controller):



Tap on the 'Update Firmware' button.

The following screen will be displayed:



Tap on the 'OK' button.

The following series of screens will be displayed:

- 1.
- 2.
- 3.
- 4.

When this is complete, tap the 'Continue' button. If the check sum was not displayed correctly as shown on screen 4, recycle the power and the main screen will be displayed. Perform an FIS to set the MC521 controller to the proper application. Use the appropriate MC521 manual as a guide.

To check firmware version on the MC521 controller using on board pushbuttons:

Index	Description
97	Firmware - Entering '01' will display 'FE' followed by two pairs of digits followed by 'FE'. For example, if the firmware was 0609 the controller will display 'FE' '06' '09' 'FE'.



To set up operate delay for swing doors:

The values for each operator are independent and can each be set to meet the requirements of the application. The values will need to be set using the on board pushbuttons and the table below (*Note: these functions will be available on the Palm MC521ToolBox software when the next version is released).

Index	Min. Value	Max. Value	Description	Defaults	
				Low Energy	Full Energy
Motor 1					
16	00	50	Delay before door motion. (0.1 sec. increments: 5.0 sec. max.)	00	00
Motor 2					
36	00	50	Delay before door motion. (0.1 sec. increments: 5.0 sec. max.)	00	00

***Compatible Palm Models:**

For these old models use Black Palm Interface Cable (415044 available from Stanley)

- M Series: m125, m130, m500, m505, and m515.
- I Series: i705.
- Zire Series: Zire71.
- Tungsten Series: Tungsten C, Tungsten T2, and Tungsten W.

For these new models use Yellow Palm Interface Cable (516864 available from Stanley)

- Tungsten Series: Tungsten E2 and Tungsten TX.
- Treo Series: Treo 650, 700p, and 755p.
- Life Drive Series: Life Drive.