APPLICATION NOTE

APP104

Revision History

Date	Author	Revision	Description
07-23-2015	Emmanuel Castillo	1.0	Created Initial Version
03-22-17	DEW	1.1	Edits to file, update to Firmware Touchscreen 3.3.0
03-28-17	DEW	1.1	Edits from Chris
03-30-17	DEW	1.1	Edits from Ray - minor type edits

Changing Linux Startup File

MCS-TOUCH-7

MCS-TOUCH-15.4
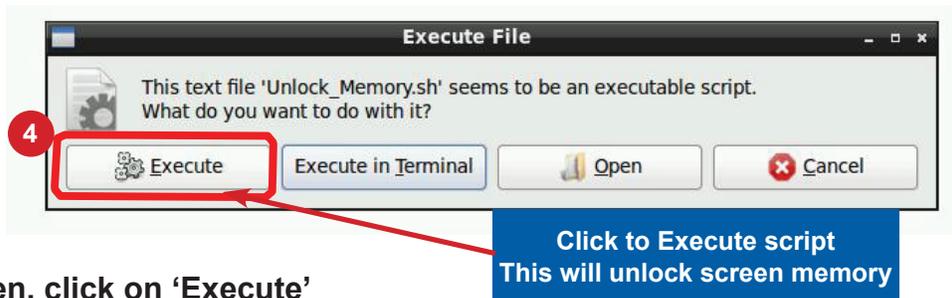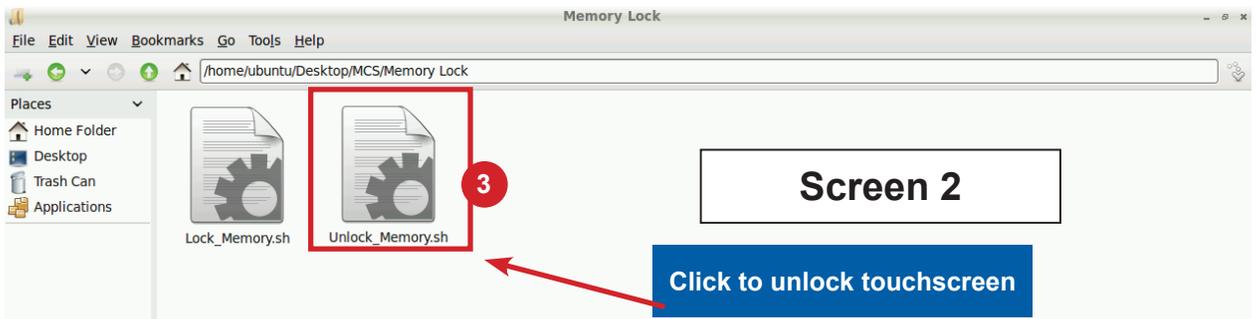
Firmware Ver. 3.00E and newer

Unlocking MCS-TOUCH 7 AND 15.4

Start by Unlocking the Touchscreen.

1. **Click on the 'MCS TOOLS' folder on the desktop, 'MEMORY LOCK' sub folder will appear when this file is opened..**

Screen 1

2. **Double click on the 'Memory lock' folder**
3. **Double click on the 'Unlock Memory' icon**

Screen 2

Click to unlock touchscreen

Click to Execute script
This will unlock screen memory

4. **Next screen, click on 'Execute'**
5. **Touchscreen will perform a restart**
6. **Check on desktop screen to make sure the touchscreen shows 'UNLOCKED'**

LXDE 3.00 F
UNLOCKED

Changing Linux Startup File - MCS-TOUCH

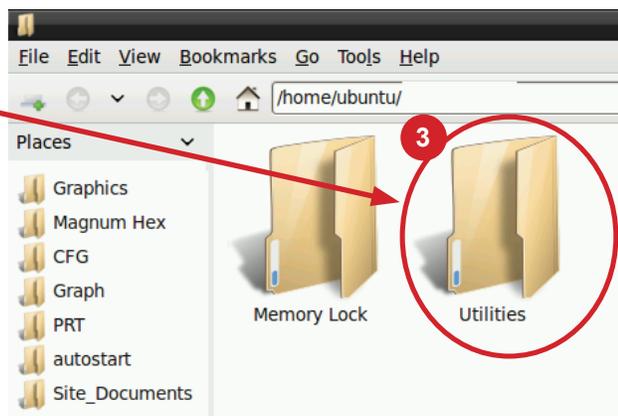## Open 'On Screen Keypad' and MCS TOOLS

1. **Navigate to the 'On Screen Keypad' on your desktop as shown below**
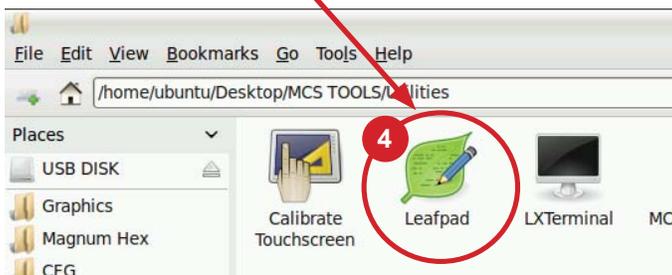   **Click with stylus to open.**

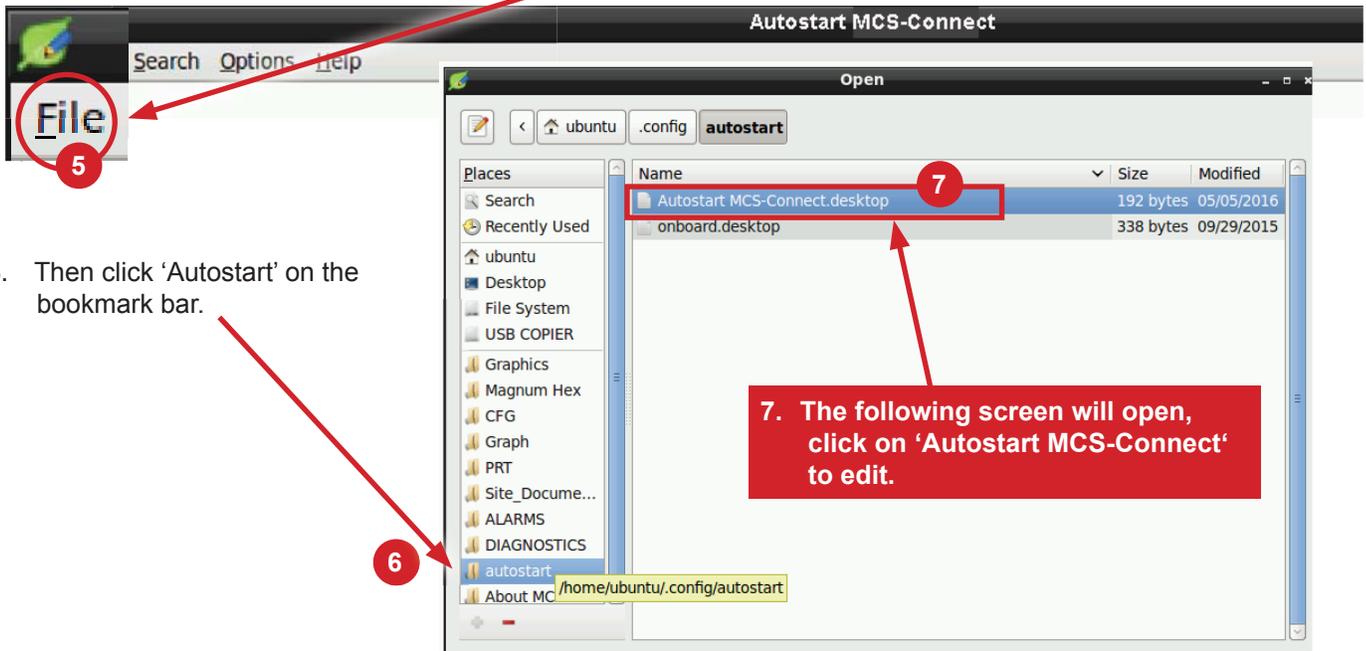2. **Click on the 'MCS TOOLS' on desktop**

3. Cick on **'Utilities'**

4. Click and select **'Leafpad'** to edit the startup file
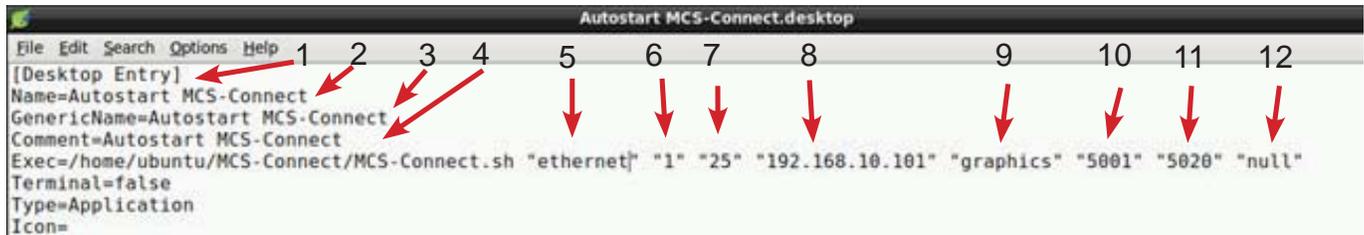
5. Once 'Leafpad' is open, click on the top, 'File' -Open,

6. Then click 'Autostart' on the bookmark bar.

7. The following screen will open, click on 'Autostart MCS-Connect' to edit.

Descriptions of Arguments that can be changed in the Autostart file:


```
[Desktop Entry]
Name=Autostart MCS-Connect
GenericName=Autostart MCS-Connect
Comment=Autostart MCS-Connect
Exec=/home/ubuntu/MCS-Connect/MCS-Connect.sh "ethernet" "1" "25" "192.168.10.101" "graphics" "5001" "5020" "null"
Terminal=false
Type=Application
Icon=
```

Editing the 'AUTOSTART MCS-CONNECT' file (see corresponding numbers above).

1. **(Desktop Entry)** = '.desktop' - *File Type*
2. **Name = '**Autostart MCS-Connect' - *Name of the File*
3. **Generic Name** = '**Autostart MCS-Connect' - *Name of the File*
4. **Comment** = 'Autostart MCS-Connect' - *Description*

These file names should not be changed

5. **ETHERNET** = This argument can be set to "ethernet", "serial", "remote" or "lantronix" depending on the type of connection used to connect to the Magnum.
6. **'1'** = This argument is the number (1-60) of Magnums MCS-Connect is to look for on the network.
7. **'25'** = This argument is the time in seconds MCS-Connect waits while searching for the number of Magnums specified in argument 6 before creating an error popup message.
8. **192.168.0.254** = This argument is the address of the Magnum that you want to connect to upon auto start. If argument 1 is set to "ethernet" then enter the IP address of the Magnum. Otherwise if argument 1 is set to "serial" then enter the Magnum RS485 address.
9. **GRAPHICS** = This argument determines which screen MCS-Connect will load on auto-start. There are 3 options: "graphics", "status" or "transmit".

APP 126 is available at **http://www.mcscontrols.com/appNotes.html** to set the Graphics Lock feature which ensures that unauthorized users cannot navigate out of the Graphics screen.

10. **5001** = If argument #5 is "transmit", this argument is used for the file path of the configuration to transmit. Otherwise, if argument #1 is "remote" or "lantronix" this argument is used to pass in the starting port for these connection types.

11. **5020** =This argument is only used when argument #1 is "remote" to pass in the ending port for a remote connection.

12. **NULL** = This argument allows the user to pass in a keyword that starts MCS-Connect with a preset Authorization Level

13. **TERMINAL** = FALSE - leave false here to prevent command prompt from opening.

14. **TYPE** = Application.

15. **ICON** = Leave blank, there is no icon.

Command Line Arguments Explanation

Argument #1	Argument #2	Argument #3	Argument #4
"serial"	# of controllers to look for	# seconds to search	MCS address of controller to connect to
"ethernet"	# of controllers to look for	# seconds to search	IP address of controller to connect to
"remote"	# of controllers to look for	# seconds to search	IP address of controller to connect to
"lantronix"	# of controllers to look for	# seconds to search	IP address of controller to connect to

Argument #5	Argument #6	Argument #7	Argument #8
"graphics"/"status"/"transmit"	null/null/cfg file address	null	Desired Auth Level code word
"graphics"/"status"/"transmit"	null/null/cfg file address	null	Desired Auth Level code word
"graphics"/"status"	starting port	ending port	Desired Auth Level code word
"graphics"/"status"	starting port	null	Desired Auth Level code word

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Autostart MCS-Connect.desktop

File Edit Search Options Help

```
[Desktop Entry]
Name=Autostart MCS-Connect
GenericName=Autostart MCS-Connect
Comment=Autostart MCS-Connect
Exec=/home/ubuntu/MCS-Connect/MCS-Connect.sh "ethernet" "1" "25" "192.168.10.101" "graphics" "5001" "5020" "null"
Terminal=false
Type=Application
```

Click file 'Save' if you made any changes to the file

NEXT STEP - RE LOCK TOUCHSCREEN - SEE NEXT PAGE

Locking MCS-TOUCH

Re-Locking Touchscreen (follow the 4 steps below)

1. Double click the '**MCS TOOLS'** Icon on the Desktop.

2. Double click **'Memory Lock'** sub directory.

3. Double click **'Lock Memory'**.

4. Click **'EXECUTE'.** The touchscreen will reboot.

**Click to LOCK touchscreen
Click to Execute**