COOKING WITH TEAM 279

CONNECTING TO NEXDOCK

The information below can be found at:

http://nexdock.com/support-raspberry-pi/

OVERVIEW

The NexDock is a HDMI screen, speakers, mic, battery, with Bluetooth Keyboard/Mouse

The Raspberry Pi 3 has Bluetooth capabilities. However, it needs a couple pre-requites in place to automatically connect each time. Thus a regular keyboard/mouse will be required to connect the NexDock the first time.

Some users may wish to use the screen from the NexDock and use a regular wireless keyboard/mouse.

CLASSROOM ENVIRONMENT NOTES

If you are in a classroom, where there are multiple NexDocks in use, keep in mind the following:

1. Only one student should pair a device at a time to prevent confusion (all NexDocks simply show up in the Bluetooth menu as NexDock Keyboard
2. Each student will likely want to use the same NexDock each class to allow autobinding, and avoid needing an external keyoard/mouse to attach

QUICK SETUP

1. Use the mini-HDMI to HDMI cable for display (note the nextdock comes with a female to femail HDMI adapter if you need a longer cord)
2. Connect the USB power to the Raspberry Pi
   a. If you are using just the Pi, you can use the NexDock's USB connection
   b. If you are working with external circuits, it's recommended to use the normal external USB power adapter for the Pi
3. Press and hold power button on NexDock.
4. Once Raspbian is loaded "Caps Lock" led on NexDock will start blinking showing that bluetooth keyboard & touchpad are in pairing mode.
5. If you have the latest update of Raspbian, you should see bluetooth icon on desktop.
   a. If the Bluetooth icon is not on your desktop, then you need to update your Raspbian install (Further Down)
6. Using a wired/wireless mouse click on Bluetooth icon/Add Device and search for "NexDock Keyboard".
7. Once found click on "Pair"; pairing code is not required.
8. Enjoy NexDock powered by your Raspbery Pi!

CONNECT AUTOMATICALLY AFTER REBOOT

Note: This will require you to use the SAME NEXDOCK each time!

The keyboard and touchpad can only be connected over Bluetooth and the Pi is not setup to auto-connect to on boot. After doing the initial pairing you can setup a simple cron task to automate this by following the steps below:

1. From command line type "bluetoothctl" and make a note of NexDock keyboard MAC address (you can select it with the mouse in the terminal window, and right click copy).
2. From a terminal, run crontab with the -e flag to edit the cron table:

   `crontab -e`

   a. The first time you run crontab you'll be prompted to select an editor; if you are not sure which one to use, choose "nano" by pressing Enter.
3. Use the arrow keys to move to the end of the file and add the following line:

   `@reboot echo "connect MACADDRESSOFNEXDOCK" | bluetoothctl`

4. Change MACADDRESSOFNEXDOCK with the real MAC address of NexDock you noted Step 1.
5. Save and Exit crontab.
   a. If you are in nano, do the following:
   b. Hit CTRL-X to exit
   c. Hit Y to save
   d. Hit enter to select to the default file name
   e. The editor will then exit and update the crontab file

You should now be able to auto-connect to NexDock keyboard after reboot without a need of a wired/wireless mouse.

UPDATE RASPBIAN

The Bluetooth desktop icon is loaded with the latest version of Raspbian. Execute these commands to update

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1. Ensure you are connected to the internet

2. Execute the following commands in a terminal

     a. sudo apt-get update

     b. sudo apt-get upgrade -y

     c. sudo apt-get dist-upgrade -y

     d. sudo rpi-update

3. Reboot via the desktop menu or the "reboot" command in the terminal
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