DZ’s Nexus 7 Install Guide.

First off, you are doing this at your own risk.  
  
Secondly, just some background info on the install.  
I did this install along with a friend of mine.  
There are many different methods to installing the Nexus 7.  
For optimum car installation you will want to have your nexus 7 rooted with Timurs Rom.  
I haven’t looked it up yet but at the time i started the install timurs rom was only available to 2012 Nexus 7’s with the 2013 Nexus 7 Rom being built.  
  
There are guides all over the internet for this. What Timurs Rom does is make the Tablet Car friendly.  
Volume Buttons become available on the screen as you won’t have access to them once installed, the tablet will go into a deep sleep when it loses power (car off) so the battery lasts longer and also wakes up when receiving power (car on). I’m not sure if this is still the case, but originally Timurs rom wasn’t released for 2nd generation tablets and you had to sponser by donating to join the beta. I ended up getting a 1st Generation.  
  
You can Start your research here  
Nexus 7” 1st Generation http://mehrvarz.github.io/nexus-7-usbrom/  
Nexus 7” 2nd Generation https://timur.mobi/timurs-kernel-n7-2013/  
Or Here https://www.google.com.au/

My method of install got rid of the head unit and only has the tablet. There are many guides where other people have put an aftermarket head unit behind the nexus so the nexus just connects to that via AUX. My nexus will be connected to a digital processor for optimum sound quality. Using the DAC I have provided in the link gives my the ability to have the audio signal travel from the tablet to the speakers in digital format without the need for it to convert to analog for premium sound quality. Otherwise you can do this install relatively cheaply.

However, I’ll run through the different methods.

What you Need:

Nexus 7 rooted with Timurs Rom $  
  
USB OTG Y Cable $3(plug USB’s into Nexus aswell as charge )  
 <http://www.ebay.com.au/itm/USB-Type-A-Female-to-Micro-USB-Male-Host-OTG-with-Micro-USB-Female-Y-Cable-E0Xc-/161078442170?pt=AU_MobilePhoneAccessories&hash=item258105f8ba&_uhb=1>  
  
USB Hub $4.50  
<http://www.ebay.com.au/itm/4-Port-USB-2-0-with-ON-OFF-Switch-Slim-COMPACT-USB-MULTI-HUB-EXPANSION-SPLITTER-/171217661487?pt=AU_Laptop_Accessories&hash=item27dd5e2e2f&_uhb=1>  
  
USB DAC $30  
<http://www.ebay.com.au/itm/281174803776?ssPageName=STRK:MEWNX:IT&_trksid=p3984.m1497.l2649>  
   
USB Cable Male to female $3  
<http://www.ebay.com.au/itm/330756479293?ssPageName=STRK:MEWNX:IT&_trksid=p3984.m1497.l2649>  
  
USB 12v Car Charger $3.50  
<http://www.ebay.com.au/itm/3-1A-Dual-USB-2-Port-In-Car-Socket-Charger-for-iPhone-Samsung-HTC-IPAD-NOKIA-12v-/111354703974?pt=AU_MobilePhoneAccessories&hash=item19ed41f066&_uhb=1>  
  
Double Din Trim $12  
<http://www.ebay.com.au/itm/TOYOTA-CAR-STEREO-DOUBLE-DIN-SIDE-TRIM-BRACKETS-FACIA-FASCIA-RADIO-SPACERS-2DIN-/180962568860?pt=AU_Car_Parts_Accessories&hash=item2a2235aa9c&_uhb=1>  
  
Optical Cable $15   
<http://www.ebay.com.au/itm/3M-New-Ultra-Premium-Toslink-Optical-Fibre-Cable-Gold-Plated-5-1-Digital-Audio-/321018995656?pt=AU_Television_Accessories&hash=item4abe3923c8&_uhb=1>

Audison Bit Ten D $750 or Bit One Processor $1000 (optional, ring your local audio store for prices)  
<http://www.audison.eu/index.php?page=product&id=41>

Total: $71 plus the cost of the tablet, I bought mine second hand (1st generation) for $120  
+optional processor

Setting Up Your Nexus 7 Before Install

Settings:  
Once you have your Nexus 7 rooted with Timur’s Rom your good to go.  
On your tablet open up Settings > About and scroll down to ‘Build Number’.  
Tap on ‘Build Number’ 7 times to unlock a secret menu ‘Developer Settings’.  
Here you can check a box for the Tablet to ‘stay awake’ whilst charging and also enable USB Debugging for connecting it to the computer for file transfer (I think you need to install a driver from somewhere).  
  
USB Host Settings:   
Here you can enable features like fast charging, landscape mode and deep sleep.  
Make sure you enable the landscape mode, doing this also gives you extra control buttons at the bottom of the screen for Volume as you cannot access your physical volume buttons.  
  
Personalization:  
Here is where you can set your home screen however you like it.  
Download and choose what apps you want to have easy access to or display widgets of some kind whether it be a simple clock, weather, emails or music player.  
Other apps I have on my home screens are Pandora, facebook, youtube, google chrome, Torque, Emulators, MX Video player, settings toggles (Bluetooth, wifi, brightness, volume etc)  
  
Music Player:  
Personally I use ‘poweramp’ as my music player, I think it works great and I paid for the full version, only a couple dollars. If you don’t like the widgets that come with it you can always download different ones. I definitely suggest this music player, it is easy to use and looks nice but there are plenty of options out there.  
  
From memory I believe to connect a USB/thumb drive to the tablet you need to install an app called Stickmount. I have found that sometimes it doesn’t read the usb straight away but this hasn’t bothered me too much.

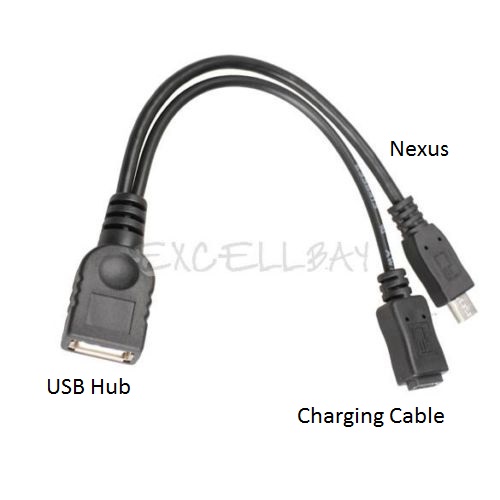
Emulators: (playstation 1 games and Super Nintendo Games)   
For playstation 1 games I use the paid version of epsxe and for Snes I use ‘SNES9X’. I have also connected my spare ps3 controllers to the Nexus 7 via Bluetooth to play these games.   
Here is how:

**1.** Download the Sixaxis controller app by dancing pixel studios  
(the free app tests compatibility, the paid one actually does the work)   
**2.** Open the app and it will give you the bluetooth adress of your nexus 7.  
**3.** Visit this link and run the installer  
http://www.dancingpixelstudios.com/sixaxiscontroller/tool.html  
**4.** Once the program is running, plug your controller into the computer.  
**5.** It will state the current Bluetooth address of your controller. Type in the bluetooth address given to you by the sixaxis app (the same as your nexus) and click update.  
**6.** Now that your controller(s) are on the same signal as your nexus, go back to that app and click the start button. The app will start listening for the controllers so press the button on the controller(s) to start searching for the Nexus.   
**7.** When successfully paired, click ‘Change IME’ in the sixaxis app and change the setting to 'dualshock'  
you'll notice you can control the screen with the controller now wink.gif  
**8**. Open epsxe. If you click run game it will scan and tell you that you need a particular file and the game roms of course. Download the file from here  
<http://romcollector.com/emulators.html>  
"SCPH1001.BIN BIOS - DOWNLOAD (512kb) " under Playstation.  
**9.** Copy that file into the SD card folder on your nexus  
**10**. Create a folder in the SD card folder called PS1 Roms and place whatever PS1 roms you have in this folder. I used the doperoms website to download the roms that i already own.  
**11.** Under nexus 7 settings go to ‘language and input’ and enable sixaxis controller and then click its settings.  
general settings: i checked auto start and enable vibration  
gamepad settings: i checked enable gamepad  
**12**. In epsxe go to preferences > input preferences > player 1   
change settings to Pad type psx : dualshock  
select game pad: select the ps3 controller  
do this for every controller you’re going to connect.  
**13.** With the roms transferred over to your device in a specified folder, click run game and navigate to that folder. For the game to work it should be uncompressed and have two files .cue and also .bin  
Click on the .bin file to start the game.  
**14.** Be sure to open the sixaxis app after and close the connection to turn off the controller. Otherwise the battery will drain quick smart. Alternatively, the app comes with a widget to toggle this on/off.  
Note: with the controllers connected other Bluetooth channels will not work.

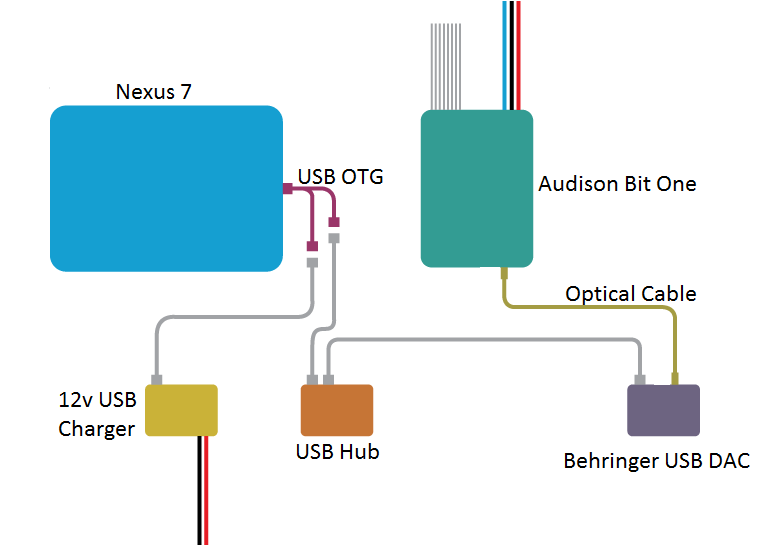
Nexus 7 Install with Audio Processor

With your Nexus 7 all set up its time to get it in the car.  
Start By getting your Double Din side piece and trimming it so it can sit flat. What this does is fills the gap on the edge of the Tablet because it sits behind the trim piece, you will see when you test fit it.  
Next you will want to fill it. I wrapped mine in a matte black wrap.  
These were then just Hot Glued into Place.  
  




  
  
To make the Nexus fit more snug to the dash surround, most of the other guides on the internet say to dremel some of the bottom of the trim surrounding which Im sure could work.  
  
like this: (This isn’t my photo)  
  
  
 In my case however we decided to cut the inside head unit area, there is a plastic bit where the middle clip on the head unit surround clips to underneath the AC vents. We cut that right out along with that middle clip. Theres still plenty of other clips to hold it in place.  
With the Nexus Fitted to the surround nicely we hot glued the Nexus in place.   
We did it this way because it is strong enough to hold it but if ever need be, the glue can easily be undone.  
Now it should but in looking pretty, just not wired up.  
  
Wiring  
Im going to explain the basics of this because well, I only know the basics.  
The Nexus is connected to the OTG Cable which splits and goes to a power source and the usb end to the USB Dac which then goes to the processor via optical cord and onwards to the amplifier.  
  
  
  
Plug the Male Micro USB end of the OTG cable into the nexus  
The Female one connects to the Nexus charging cable which goes to a cigarette powered usb charger. There is a cigarette lighter port inside the glove box which it can connect to conveniently.  
Connect the USB Hub to the Female USB on OTG cord.  
 Connect the Behringer DAC to the USB Hub. The audio from the nexus will now go through usb to this unit.  
Connect the optical cable from the optical out on the Behringer unit to the Audison Bit Ten D or Bit One optical input.  
From there you run RCA’s from your Processor to your amplifiers as if you would any other car audio system.  
Tape up your connections so they cannot come loose.  
Because the Nexus can support more than one USB Slave, run the male/female usb cord you bought from the usb hub into the glove box so you can plug thumb drives with music/videos into your nexus.

Here is the wiring diagram.  
(I found this picture on the internet and edited the text, so the prettiness isn’t my doing)



Hopefully in the future I will be adding an Airport Express to the System.  
What this will do is create a Wi-Fi network in the car so passengers can connect to the Wi-Fi and stream their music from their phone to the speakers via the Wi-Fi.

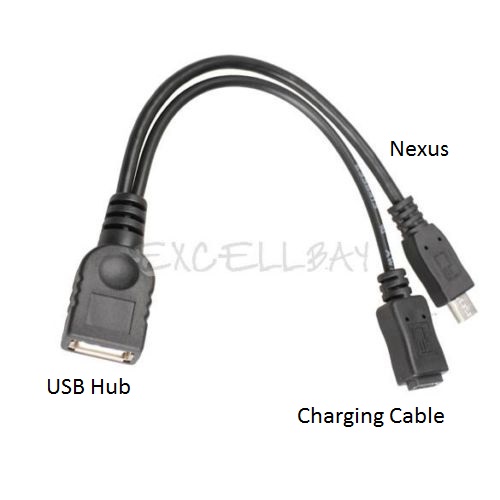
Nexus 7 Install WITHOUT Audio Processor  
Note: I have not tested this process

With your Nexus 7 all set up, it’s time to get it in the car.  
Start By getting your Double Din side piece and trimming it so it can sit flat. What this does is fills the gap on the edge of the Tablet because it sits behind the trim piece, you will see when you test fit it.  
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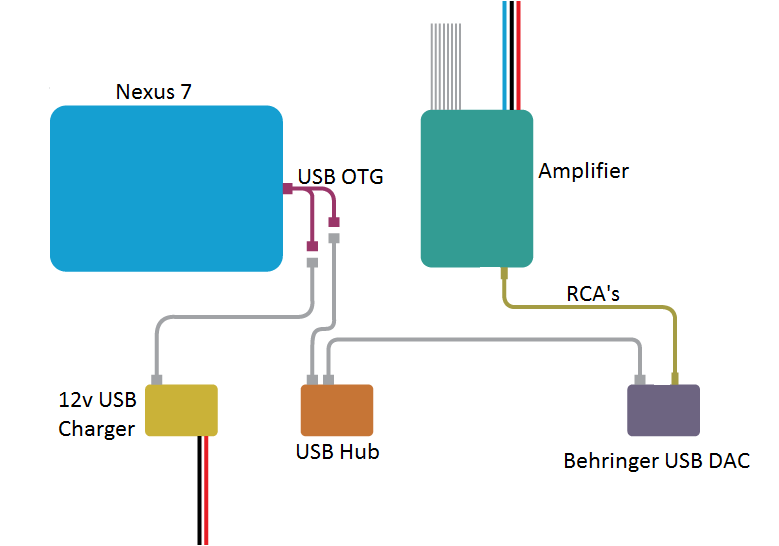


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Plug the Male Micro USB end of the OTG cable into the nexus  
The Female one connects to the Nexus charging cable which goes to a cigarette powered usb charger. There is a cigarette lighter port inside the glove box which it can connect to conveniently.  
Connect the USB Hub to the Female USB on OTG cord.

Connect the Behringer DAC to the USB Hub. The audio from the nexus will now go through usb to this unit.  
Connect RCA’s from the audio output on the Behringer DAC to your cars amplifier.  
Now you can connect your amplifiers to your speakers as you would in any other setup.  
Tape up your connections so they cannot come loose.  
Because the Nexus can support more than one USB Slave, run the male/female usb cord you bought from the usb hub into the glove box so you can plug thumb drives with music/videos into your nexus.

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