Media Library Box

What is a Media Library Box?

The Media Library Box is a self-contained, self-powered WiFi based portable media distribution system. It allows users to create a full featured 'digital library' from which Gospel/Educational media (text, video, audio, applications) can be shared on mobile phones, tablets, laptops, desktops in an off-the grid environment without depending on access to the internet or electricity. Any device with WiFi capability can wirelessly connect to the Media Library Box and access/download content with a simple web browser. The Media Library Box will support over 30 simultaneous browsing/download sessions from different devices. The Media Library Box also supports DLNA services for streaming Audio and Video to playback devices.

Where would the Media Library Box be used?

Media Library Box acts as a hyperlocal digital access point that isn't capable of being restricted in traditional way's, allowing information to penetrate areas that would otherwise be unreachable. From educational, book study, language learning, audio programs, video content, text materials and applications can be delivered regardless of local connectivity or regional/national censorship. If you can provide power occasionally, the Media Library Box can provide the digital resources for learners. While internet access in many communities is questionable or unaffordable you can deliver important educational, healthcare and community resources without users incurring additional costs using the devices they already have.

What is it made of?

Media Library boxes use off the shelf commercial router hardware, a USB flash drive and software that when combined give you a small low powered webserver. The webserver acts like a captive portal, and delivers files that are stored on the USB flash drive. It is based on freely available open source software that was developed by a number of different individuals and/or teams of people. It is available with build, connection and configuration, customization instructions for creating and customizing your very own Media Library Box. It runs a small Linux operating system on the hardware that can be tuned with added features and functions.

So how much does it cost?

The amazing thing about the Media Library Box is that it can be built between $40 and $100 in hardware cost depending on the size of the storage space desired. Anywhere from 4GB to 128GB of storage space can be provided. With 64GB of storage space holding some 2,100 hours of audio or 270 hours of 3gp video or 96 hours of mp4 video content.

So what's so unique about the Media Library Box?

The media library box has the following unique distinctions:

> ➢ Battery Powered – no need for AC mains, power adapters, external batteries. Its self-contained.
> ➢ Its main menus are multi-lingual and will adapt to the language of the device attached based on the Web browser language preference. It will support multiple device languages being used at the same time. Current interface languages include: en, es, fr, de, he, hr, it, id, nl, no, pt-br, sv, ko, sw, zh-cn, zh-tw
> ➢ It has large storage capacity limited only by the size of flash drive attached. Up to 128GB of flash storage has been used.
> ➢ No internet service is required.
> ➢ No wires – it is based on creating a WiFi hotspot
> ➢ It fits in your shirt pocket
> ➢ No special applications are required on the devices connecting to it. Any device with WiFi and a built in web browser will work.
> ➢ The user Interface dynamically scales to the screen size of the device attached.
> ➢ To administrate the Media Library Box any PC, Mac, Mobile device that can read/write USB flash drives can be used to add/remove media content. No special applications or tools are required.
> ➢ You can share any type of file easily
> ➢ Supports DLNA media streaming to other devices
> ➢ Streams/downloads movies, music, audio files, photos, text files and device applications
> ➢ Built in statistics for users who have accessed the device and files downloaded/viewed
> ➢ Can be mesh linked to other Media Library Boxes for media content updates (mesh-network)
> ➢ Can be plugged into a wired network to enable use over 10/100 Mb Ethernet

- ➢ Can be recharged by added external solar panels
- ➢ It can be branded to your own organizations liking

So how do I get one?

Media Library Boxes can be built by you or one of your team members who have some minimal skills on computers and can follow simple instructions. Alternatively, you may be able to purchase a finished unit. If your interested contact medialibrarybox@gmail.com

Other resources:

Mobile Ministry Made Easy Handbook: https://tinyurl.com/nf4sr44

Your Phone – God's Glory: https://tinyurl.com/pxpufy9

Mobile Ministry Course: https://tinyurl.com/njcq8rm

Media Library Box Specifications:

Storage:	USB flash memory up to 128GB (USB 3.0 flash used for speed)
LED's:	Power, WLAN, Ethernet, File access
Buttons:	Power, Reset, Mode Switch (must be in WISP mode – often glued in place)
Power:	Internal 2000mAh Rechargeable 3.7 V Li-Ion Battery (TBL-68A2000)
	5VDC/1.0A external micro-USB connection
Usable Battery Life:	4-5 hours on a full charge (~400 ma/H or ~1.48 W/H)
Charging Time:	3 hours' maximum from empty
Dimensions:	3.9 x 2.4 x 0.6 in (100 x 62 x 16 mm)
Weight	3.3 ounce (94g) without USB memory
Wireless Standards:	IEEE 802.b, IEEE 802.11g, IEEE 802.11n (b/g/n)
Frequency	2.4-2.4835 GHz
	Support 64/128 bit WEP, WPA-PSK/WPA2-PSK
Max EIRP	20dBm
Range	Typically 50m (160') line-of-sight
Signal Rate	Up to 150 Mbps
DHCP:	DHCP server – 192.168.1.2 – 192.168.1.254
Certification	CE, FCC, RoHs
Operating:	Temp 15C - ~40C, Humidity 0% ~75% non-condensing
Storage :	Temp -20C - ~50C, Humidity 0%~75% non-condensing

Typical Storage Media Usage (depending on encoding & resolution):

3GP format videos	(176x144 pixel)	~500 kb/s
MP4 format videos	(adaptable)	~1.4 Mb/s
MP3 Audio format		~64 Kb/s
1-5 page optimized PDF		~ 200 KB / PDF
E book		~ 1 – 5 MB / book
Photo		~ 3.2 MB/ photo
MP3 Song		~3.5 MB / song
5-min Web video		~20 - 30 MB / video
5-min HD video		~300 MB / video