## **Owner's Manual**

# M2+ Table Internet Radio

### WiFi/DLNA/Spotify/Internet Radio/ DAB/DAB+/FM/AUX/Bluetooth

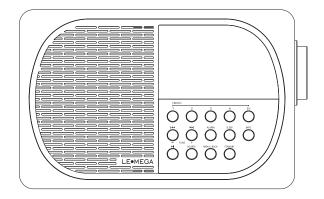


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1. Safety

#### 1.1 Safety Instructions

Please store this instruction manual for future reference.

• WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.

• WARNING: The direct plug-in adapter is used as disconnect device, the disconnect device shall remain readily operable.



• This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

• Warning: To reduce the risk of electric shock, do not remove cover(or back) as there are no user-serviceable parts inside. Refer servicing to qualified personnel.

• The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

• Correct Disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

• No naked flame sources, such as lighted candles, should not be placed on the apparatus.

- Do not use this product near water or moisture.
- Clean only with a dry cloth.
- Unplug this product from the wall outlet before cleaning.
- Place th unit on a solid surface.

- Do not put it in a closed bookcase or a cabinet that may keep air from flowing through its ventilation openings.
- Do not install near any heat sources, such as radiators, heat registers, stoves or other appliances that produce heat.
- Protect the power cord from being walked on or pinched, particularly at plugs and the point where they exit from the product.
- Servicing is required when the product has been damaged. Do not attempt to service this product yourself. Opening or removing covers may expose you to dangerous voltages or other hazards. Please contact the manufacturer to be referred to an authorized service center near you.
- To prevent risk of fire or electric shock, avoid over loading wall outlets, extension cords, or integral convenience receptacles.
- Do not let objects or liquids enter the product.

• Use proper power sources. Plug the product into a proper power source, As described in the operating instructions or as marked on the product.

#### **1.2 Features**

This manual describes how to use the M2+, an advanced but easy-to-use Wi-Fi connected audio system with the following modes:

• Internet Radio with access to over 20,000 stations by wifi streaming or Wired Ethernet connected, 'Listen again' broadcasts and podcasts.

• **Spotify** acting as wireless speakers controlled by the Spotify App available for iOS/Android smart devices and a desktop client for PCs.

• **Music player** allowing easy navigation and playback through a USB or network-stored library of music files including AAC+, MP3, WMA, WAV, and FLAC. Play To feature allowing media to be pushed from a PC running Windows 7 to M2+.

• **DAB/DAB+digital radio** with a wide choice of channels and digital quality sound broadcast free-to-air.

- FM with RDS (Radio Data System).
- **Bluetooth:** streaming music and control from smart device.
- **USB port:** to play the MP3 music from USB stick storage device.
- Aux in or external MP3 music sources from iPod/iPad or other Mp3 players

#### M2+ also provides the following features:

• Large TFT color display for easy control and clear information display.

• Remote control from an Android or iOS Smart Device, using Spotify App or UNDOK the Frontier Silicon Remote Control App to control the playback.

• Clock with auto-update capability and dual independent alarms Sleep/snooze.

- Multiple network profiles for easy setup and portability.
- Multiple languages.

#### **1.3 Carton contents**

After you unpack the box, you will find the following items

- 1 M2+ unit
- 1 DC14V 1.5A power adapter
- 1 owner's manual
- 1 gloves

#### 1.4 External resources

To operate M2+, the following external resources are needed:

- A power source (100-240 V mains supply)
- A wireless (Wi-Fi) network (provided through a router) with Appropriate permissions and password if necessary (for Internet radio and Network Music player modes)

• Broadband Internet access (for Internet radio mode and Spotify mode and Internet Software Update)

• A music library stored on the network or on a USB mass storage device (for Music player modes),

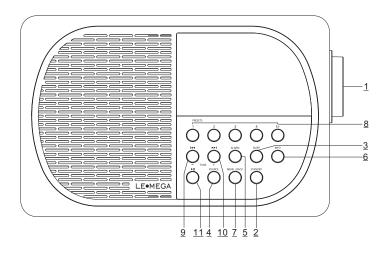
- An iOS or Android device (for using control apps).
- An external audio source (for Aux in mode)

#### 1.5 Conventions used in this manual

- Button (press) Physical button on the keypad
- Option (select) Menu option shown on the display
- Name Menu, screen or other name

#### 2. Controls, connectors and display

#### 2.1 Main controls



#### 1. SELECT/ VOLUME/MUTE/SNOOZE:

a. SELECT: Turn to scroll through a menu or station list. The chosen option is highlighted), Press to the button to select.

b. VOLUME: Turn to the button to adjust the volume up or down when playback.

c. MUTE: Press to the button to mute the music when playing.

d. SNOOZE: Press the button to snooze a set time when alarm sounding.

e. FULL SIDESHOW: Long press the button to switch normal playing screen image to full screen slide show image.

**2. STANDBY**: Turn on or back to standby mode (showing clock and date) or cancel sleep or cancel alarm function.

**3. SLEEP:** When playing, press Sleep, M2+ will back to set sleep time. When playing, opens the sleep menu to set the time interval before the unit is set to Standby mode. When alarm is sounding, allows you to set the snooze interval.

**4. SOURCE**: Press to Source to select different modes internet radio, Spotify, My music, DAB, FM, Bluetooth and Aux.

**5. ALARM:** Press to Alarm, the screen will display Alarm 1 and Alarm 2; then Rotate and press the SELECT button to select alarm 1 or alarm 2 to set up.

**6. INFO:** View more information about the station or track playing. Press again to cycle through further information screens then return to the normal Now playing screen.

#### 7. BACK/MENU:

a. BACK: press the BACK to return to the previous screen.

b. MENU: press the MENU to show the MENU for the current mode. Press again to show now playing screen.

**8. PRESET:** Long press 1,2,3,4,5+ to preset and save the favorite stations (save 20 favorite stations); Short Press to 1,2,3,4,5+ to select the favorite station or Preset recall. You can preset 20 stations by press 5+ and by scroll the preset list to achieve.

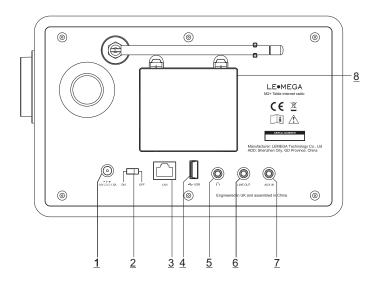
**9. TUNE-/I** I : Previous: Press to select the previous track under FM/DAB / Bluetooth mode; Press and hold the Tune- button 2 seconds to auto-scan the stations under the FM mode.

**10. TUNE+/**►►**I**: Next: Press to select the next track under FM/DAB/ Bluetooth mode; Press and hold the Tune+ button 2 seconds to auto-scan the stations under the FM mode.

**11.** ► II: Press to select Play/Pause under internet radio, Spotify, My music and BT mode. In Fmmode, press to do auto scan the stations.

#### 2.2 Connectors

As shown below has connectors (from left to right) for the followings:



1.DC power in (14V)

2.Power switch (ON/OFF)

3.LAN for Ethernet connect

4.USB socket for USB stick with MP3 music playback (not for charging).

5.Headphones out.

6.Line out (to connect to an external amplifier)

7.Aux in (to connect external media like iPod)

8.Battery compartment: open compartment to find the Battery.

#### 2.3 Screens

• The screen shows various menus, dialogues and displays as described below. There are basically six types of screens:

- Standby (clock)
- Splash (mode)
- Now playing
- Dialogue
- Error/Information
- Menu

Where there is more text than can be fitted onto a screen, the text automatically scrolls right to left after a brief pause.

The Standby screen shows the time, date and any active alarm times.



A **splash screen** is displayed for each mode. Press source to cycle through the listening modes.



**Now playing screens** show information about the audio source and track now playing, where available.



**Dialogue screens** are shown to allow the user to change settings. They vary in complexity from simple Yes/No options up to the scrollable network passphrase input screen.



The selected option is highlighted with a yellow background. Dialogue screens mark the currently saved setting with an asterisk (\*).

**Error/Information screens** give specific messages for a few seconds, then change automatically to the next screen.



Menu Screens - for details of menu screens see Section 2.5 Menu.

#### 2.4 Operation

After the initial setup, M2+ is ready for operating in most Modes.

To select a Mode, press source until the required Mode splash screen is displayed. After a brief moment M2+ switches to that mode. The last station or track previously used in that mode is selected. If this is not possible, M2+ scans for relevant stations, networks, or prompts the user for appropriate

input. See the relevant Mode section for details of how to use each listening mode.

The Common local controls for sound volume, Mute and Play/Pause are available in all listening modes.

#### 2.5 Menu navigation

The primary control for moving through menus and options is the Select Control. Rotate the control to move up or down a menu. Once the required option or value is highlighted press the Select Control. All menus and lists act as loops such that turning the control to go beyond the first or last entry in a menu or list takes you to the opposite end of the menu or list. So going up from the first entry in a menu will take you to the last option in the menu, etc.

To enter the menu tree in a particular mode press Menu. To move back a menu level press Back . To exit the menu system, press Menu again. Each mode has a Mode menu, with options specific to that mode.

For example, the FM mode menu has two mode specific options: Scan setting and Audio setting.



In addition, each mode menu has two final options: System settings > and Main menu >. The ">" indicates options leading to further menus.

The System settings menu presents system setting functions to allow the user to setup how the unit behaves. This includes Equalizer, network ,time/date, language, factory reset and software update.

The **Main menu** presents an alternative method for selecting listening modes plus sleep and alarm functions.

🗉 Main menu	
Internet radio	
SPotify Connect	
Music player	
DAB	
FM	

#### 3. Started and setup

M2+ is easy to use. To play DAB or FM radio, all you need is a power source (a 100-240 V mains supply); For Music Player mode, you need a wired/wireless Ethernet network and a UPnP music server (e.g. a PC). For Internet

-connected modes such as Internet radio, you also need a broadband Internet connection.



#### 3.1 Setup wizard

When M2+ is started for the first time, it runs through a setup wizard to configure settings for date/time and network. Once this has finished, the system is ready to use in most modes.

Note: To change these settings later, select Menu > System settings >.

To run the setup wizard again, select Menu > System settings > Setup wizard. Select Yes to start the setup wizard.

If you choose No, the next screen asks if you would like to run the wizard next time M2+ is started. The system then starts without configuring time/date and network settings and enters the Main Menu.

Note: If power is removed while the wizard is in progress, the wizard will run again next time M2+ is started.

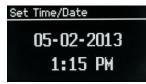
#### 3.1.1 12/24 hour display

To change between 12 and 24 hour display, select Set 12/24 hour and then select your preference.

#### 3.1.2 Set Time/Date (wizard)

The date and time are displayed as dd-mm-yyyy and hh:mm AM/PM with the first value, dd, active (flashing).

Adjust each value with the Select control. As each value is set by pressing the Select control, the next value becomes active ready for adjustment.



#### Auto-update

Auto-update works with data sent over DAB, FM or the Internet. The clock is only updated when in a corresponding mode, so it is best to select a mode you

use regularly.

#### (Ⅲ) Auto update Update from DAB Update from FM Update from Network No update

**DAB** and FM use time signals broadcast with radio transmissions.

**Network** uses a time signal sent from the Internet radio portal when in any network-connected mode.

1.Select Update from DAB, Update from FM, Update from Network or No update.

2. If you are updating from the network, set your time zone.

3. If your country uses daylight saving, the automatically updated time from the network may be wrong by one hour. When daylight savings are in effect (during the winter), turn on the Daylight savings option to rectify this.

Note that if you are updating the time from DAB or FM, the Daylight savings option has no effect on the clock's time.

M2+ will auto-update from the selected source when time information is available.

#### Manual set

If you set No update, the wizard now prompts you to set the time and date manually.

The date and time are displayed as dd-mm-yyyy and hh:mm AM/PM with the first value, dd, active (flashing).

Adjust each value with the **Select** control.

As each value is set, the next value becomes active and flashes.

#### 3.1.3 Network

M2+ is compatible with all common network protocols and encryption methods, including Wi-Fi Protected Setup (WPS).

To connect M2+ to your network, you need a Wi-Fi wireless router, together with password key if set Select WLAN region/country >Wi-Fi network (SSID), and then select a network from the list.



If the network is open (non-encrypted), M2+ connects and no further details are required; see Completion below.

Standard encrypted network

To enter the network's key (password), use the Select control to highlight the next relevant character and press to select each character in turn. As each character is selected, the key is built up near the top of the display.

The three options – Backspace, OK and Cancel are included in the selection loop.

These can be accessed just using the Select control, or, a short cut Is available, pressing the Info key, which moves the selection highlight to the Back Space option.

Key:	
D1234567890, abcdefghijƙlmn opgrstuvwxyzABC DEFGHIJKLMNOPQR	BKSP
abcdetghijkimn	ОК
DEFGHIJKLMNOPAR	CANCEL

#### WPS setup

WPS encrypted networks are identified by '[WPS]' at the start of the network name, and have two methods of connection. Select one and follow the prompts. When using the network wizard an additional option to Skip WPS is available.

Select one and follow the prompts:



#### **Push Button**

M2+ prompts you to press the connect button on the router. It then press the select control.

#### • Pin > (code number)

M2+ generates an 8-digit code number which you enter into the wireless router, access point.

#### Skip WPS >

Enter key as for a standard encrypted network, above. For more information on setting up a WPS encrypted network, see your WPS router's instructions.

#### **On completion**

M2+ connects to the selected network.

If connecting fails, M2+ returns to a previous screen to try again. To exit the process use the Back/Menu button.



#### 3.2 Other settings

Sections for those modes. Common settings are covered below.

#### 3.2.1 Equalizer

Several preset EQ modes are available; also a user-defined setting (My EQ).

To choose an EQ setting, select Menu >System settings > Equalizer. You can

then choose from a variety of preset modes and My EQ

The last option 'My EQ profile setup' allows you to define your own settings for the 'My EQ' option, with custom bass, and treble settings.

🗉 Equaliser	🗉 My EQ profile setup	🗉 Bass
Normal Flat	Bass: 0 Treble: 0	Bass odB
Jazz Rock Movie		

#### 3.2.2 Network

M2+ remembers the last four wireless networks it has connected to, and automatically tries to connect to whichever one of them it can find. You can see the list of registered networks through Menu > System settings >Network > Network profile >From here you can delete unwanted networks by turning and pressing Select then confirming delete Yes.

There are also other options for viewing and manually altering network settings from Menu > System settings > Network > (for example setting up a wired network).

Users experienced with networking may find these options useful for diagnosing and fixing network problems.

#### 3.2.3 Language

The default language is English. To change, select **Menu > System settings** > Language > then select your language.

#### 3.2.4 Connection your smartphone with the radio via UNDOK APP

To connect your Smartphone with M2+ you need to download the free app "UNDOK" from Apple Store or Google Play Store. IMPORTANT: The phone must be in the same wireless network as the music system.

- Download the app and open it.
- The app automatically searches for available devices. Select "LEMEGA M2+" from the list.
- Open SOURCE to choose between different input signals.
- Open BROWSE to get a list of available stations. Select the desired station.
- Open NOW PLAYING to get more information about the channel.
- Open the settings to adjust the equalizer, set sleep timer and other functions easily.

#### 3.3 Internet radio portal registration

M2+ uses the Frontier Silicon Internet radio portal website that allows you to organize your favorite's lists and also listen to Internet radio on a computer.

FRONTIER SILLCON Radio Portal Search Stations • Podcasts Browse Stations By Consting	Access global stations Personalise favourit Search. Browse. Fin	es Playing Radio M. 128 K Segavib	
By genre By language New stations Most popular	Mark's radio	Location Genre	Stream
Browse Podcasts By location By genre	2 Ten FM	Reading United Kingdom Electronica	WMA 128K
	BBC Radio 2 Capital Radio Virgin Radio	London United Kingdom Variety London United Kingdom Top 40 London United Kingdom Pop	RealPlayer 44K WMA 128K MP3 128K
	On Air Power     On Air Power     On Air Power	Internet Only World Asia Catania Italy Dance	
	BBC Radio 1	London United Kingdom Top 40/Dance/R Internet Only World Mide East	
		United Kingdom Electronica Nairobi Kenya Pop	MP3 256K WMA 20K
About us Contact us Logout © Frontier Silicon 2008   Legal	BBC R5LiveSportX International	London United Kingdom Sports London United Kingdom Classical	WMA 48K WMA 128K

To register your M2+ with the portal, switch to Internet radio mode and then obtain your radio's unique portal access code by selecting Menu >Station list > Help > Get access code >Write down the access code.

D = G	et access c	ode
Acces	is code	
FYXT8	PP	

Note: The displayed access code is only valid for a few minutes. If you fail to register your radio within the time window you will need to repeat the above step to get a new access code and try again. Do not confuse the portal access code with the Radio ID (from **Menu > System settings > Info**.)

Visit the portal website at www.wifiradio-frontier.com.

If this is your first visit to the portal, register for a new account, entering the following information:

- access code,
- your e-mail address,
- passphrase,
- radio model (M2+).

If you already have an account and wish to add an additional radio, log in to your account and select **My preferences > Add another Wi-Fi radio**.

Once your radio is registered with the portal, you can immediately use the Internet radio favorites and added stations features.

#### 3.4 Setting up a music server

In order for M2+ to play music files from a computer, the computer must be set up to share files or media.

UPnP media sharing allows devices like M2+ to play music from a shared media library navigating through tag menus such as Artist, Album or Genre. If you are running a suitable server system such as a PC with Windows Media Player 10 or later (WMP), and your music library is well-tagged, then it is recommended to use media sharing. Only the UPnP server needs to be set up.

**Notice:** iTunes does not currently work as a UPnP media server, but there are add-ons available to work with an iTunes library.

#### 3.5 Sharing media with Windows Media Player

The most common UPnP server is Windows Media Player (10 or later).

Alternatively, other UPnP platforms and servers may be used. To set up WMP for media sharing, perform the following steps:

1. Ensure that the PC is connected to the network.

2.Ensure that the radio is powered on and connected to the same network.

3.In WMP, add to the media library the audio files and folders you want to

share with M2+ (Library > Add to Library)

4.In WMP, enable media sharing (Library > Media sharing).

Notice: setup can differ depending on which version of WMP you have.

**Notice**: it may show; M2+, "Unknown device", "Frontier Silicon" or the Jupiter logo as shown below.

Media S	naring	X
2	Share music, pictures, and video on your network. Learn more about sharing.	
	are my media to: S <u>e</u> ttings	)
	er 6.2 - 61000	
	Allow Deny Customize	
How do	es sharing change firewall settings? OK Cancel Apply	)

Make sure that the radio has access to the shared media by selecting it and clicking Allow.

You can also set a name for the shared media in Settings... Click OK to close the dialogue boxes.

The PC is now ready to stream the music to the radio. The WMP UPnP service runs in the background; there is no need to start WMP explicitly.

**3.6 Setting up M2+** for "**Play To**" Windows 7 streaming media feature.

To set-up M2+ to be controlled and to stream music via Windows Media Player 12 (Windows 7 only), perform the following steps:

1. Ensure that the PC is connected to the network.

2. Ensure that M2+ is powered on and connected to the same network.

Note: M2+ must be in an Internet radio mode to be detected

3. From the Windows 7 main screen, select Start > Devices and Printers.

4. Select the Add a device tab in the top left of the Devices and Printers window and follow the instruction prompts given by the wizard.

In the Devices and Printers window a icon \*) will appear and you are now ready to stream your Windows media music files to M2+.

\*) To change the name of your device, right click on icon and choose properties. Then choose UPnP and click on "device webpage".

#### 4. Internet radio mode

M2+ can play thousands of radio stations and podcasts from around the world though a broadband Internet connection.

When you select Internet radio mode, M2+ contacts the Frontier Silicon Internet radio portal to get a list of stations, organized into different categories like Country, Most popular and Genre.

Once you select a station, M2+ connects directly to that station.



The portal also enables multiple lists of favourite stations that you can personalise, for example Andy's stations, Jo's favourites, Talkshows. To use the favourites feature, register your radio with the portal website. If you have several Frontier Silicon radios, you can register them all on the same account so that each radio has access to your favourite's lists. It is possible to add favourites either directly through M2+ or through any computer with a web browser.

To enter Internet Radio mode, either press Mode until the display shows Internet Radio or select Menu >Main menu > Internet Radio.

Note: The station list menu is provided from the Internet radio portal, so it is only accessible when M2+ is connected to the Internet. Station lists and submenus may change from time to time.

There are several ways of selecting stations.

Directly from the radio:

- · Last listened
- Presets

From the portal through the **Menu > Station list> menu**:

- Favourites lists
- Browse by Country, Genre, Most popular, Newest
- Search by keyword
- My added stations