# HERMES LITE 2 QUICK INSTALL

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# 1. PURPOSE

The purpose of this document is to provide a short guideline to install and configure an Hermes Lite 2 (HL2) SDR under windows with SDR-Console. It is basically considered that people are aware of the information's provided by the Hermes Lite 2 wiki pages: <a href="https://github.com/softerhardware/Hermes-Lite2/wiki">https://github.com/softerhardware/Hermes-Lite2/wiki</a>

## 2. HARDWARE WIRING

Two hardware network wiring configurations will be considered within this document:

- Standard Setup
- Standalone Setup

# 2.1 Standard Setup

The standard setup consists in wiring the HL2 in the local network



As the default gateware behavior is to look for a DHCP server, an IP address like 192.168.1.x will automatically be assigned to the HL2

# 2.2 Standalone Setup

The standalone setup consists in wiring the HL2 directly to the computer



As the default gateware behavior is to look for a DHCP server, and that when no response is received, a local IP address like 169.254.x.x is assigned

### **3. SOFTWARE INSTALLATION**

Latest installation (32 or 64 bits version based on your computer) shall be taken from : <u>https://www.sdr-radio.com/download</u>



The installation is than started as administrator and follow the typical Next / I agree process:





During the installation process, additional C++ libraries that are required for the SDR Console software will be downloaded and installed

	👹 Microsoft Visual C++ 2013 Redistributable (x64) - 12.0.305 — 🛛 🗙
	Microsoft Visual C++ 2013 Redistributable (x64) - 12.0.30501
	Setup Progress
💮 SDR-Radio V3.0.22, 64-bit Setup 🛛 🗙	Processing: Initializing
The Microsoft Visual C++ 2010 SP1 Redistributable Package is required by this software and will now be installed.	
ОК	Cancel
💮 SDR-Radio V3.0.22, 64-bit Setup — 🗆	
Installation Complete Setup was completed successfully. Completed Show details	Completing SDR-Radio V3.0.22, d-bit Setup SDR-Radio V3.0.22, d-bit Setup. SDR-Radio V3.0.22, d-bit Setup. SDR-Radio V3.0.22, d-bit Setup.
< <u>B</u> ack <u>Next</u> > Ca	ncel < <u>B</u> ack Einish Cancel

The installation is terminated and SDR Console can be started

#### 4. SOFTWARE CONFIGURATION

#### 4.1 IP address identification

Preliminary to use the SDR Console software, the IP address of the HL2 shall be known.

• In the standard configuration

Within the command line, the IP Table can be displayed by the command: arp -a

With a minimal knowledge of the existing network, HL2 can be easily identified.

192.168.1.40 00-1c-c0-a2-13-dd dynamique

• In the standalone configuration

Within the command line, the IP Table can be displayed by the command: arp -a -v

The HL2 IP address will can be easily identified as it starts with 169.254.x.x

Interface : 169.254.40	0.85 0xc	
Adresse Internet	Adresse physique	Туре
169.254.255.255	ff-ff-ff-ff-ff-ff	statique
224.0.0.22	01-00-5e-00-00-16	statique
224.0.0.251	01-00-5e-00-00-fb	statique
224.0.0.252	01-00-5e-00-00-fc	statique
239.255.255.250	01-00-5e-7f-ff-fa	statique
255.255.255.255	ff-ff-ff-ff-ff-ff	statique

## 4.2 HL2 definition in SDR-Console

The HL2 SDR device shall be configured in SDR-Console software preliminary to its use.

The device can be simply automatically detected on the network:

Click on Home / Select Radio



In the following popup click on Definitions

Radio
2020-05-26

N R820T F	lodel RTL Dongle - R820T	Frequency 50 - 2000 MHz	Serial 00000001	Address Realtek::RTL2838UH
R820T F	RTL Dongle - R820T	50 - 2000 MHz	00000001	Realtek::RTL2838UH
				>
	~			
	~			
		~	~ ~	

Within the radio definitions popup, drop down the search menu and select Hermes Lite

	Radio Definitions					×
Q	Search 👻 Add	Edit	Delete		Tex	<u>t viewer</u>
ſ	Afedri 🕨	Model		Frequency	Serial	Addres:
	Airspy •	RTL Dongle -	R820T	50 - 2000 MHz	00000001	Realtel
	ANAN (OpenHPSDR)	· ·				
	bladeRF •					
	ELAD •					
	Ettus Research					
	FUNcube Dongles					
	HackRF					>
	Hermes-Lite					
	ICOM IC-R8600					
	LimeSDR	li+	Autostar	rt options		
	Perseus		Online h	elp		
	PlutoSDR			-		
	RFspace +					
	RTL Dongle					
	SDR MK1.5 Andrus					
	SDRplay •					
	SoftRock					
	WINRADIO +					
	ル V3 Server					

The device is found and can be added to the list:



IP address of the device is the one preliminary identified:

Radio	Definitions				×
Q Sea	rch 👻 Add	Edit Delete		Text viewer	
Enable	Name	Model	Frequency	Serial	Address
	Hermes-Lite	Hermes-Lite	0 - 38 MHz	00-1C-C0-A2-13-DD	192.168.1.40
	RTL Dongle - R820T	RTL Dongle - R820T	50 - 2000 MHz	0000001	Realtek::RTL2838UHIDIR::0000001-1
<					>
Show the Con	nese options nverter selection Er vert spectrum	dit <u>Autosta</u> Online h	rt options elp		
Sa	ve Cancel			$\square$	

#### **5. SOFTWARE TEST**

Select the HL2 radio:



#### And start the reception

Select	Radio						×
All	Local	🚜 Server					
Name		Model		Frequency	Serial		Address
Hermes-Lit	te	Hermes-Lite		0 - 50 MHz	00-1C-C0-A2-	13-DD	192, 168, 1,
RTL Dongle	e - R820T	RTL Dongle - Ri	820T	50 - 2000 MHz	00000001		Realtek::RT
<							>
Converter: Bandwidth:	384 kHz	· · ·	~	,			
► Sta	art					Defir	nitions

📀 н	elp ••• Optio	ons
RX Gain:		
LNA:	<	> -12dB
Visual:	<	> 29dB
25.5℃	Gateware 70	TX FIFO:

In the HL2 Panel select options and enable the N2ADR band filters if you have them

Hermes-Lite

Output Pins	Output	pins									
TX Options	Enab	ole filter board set N2A	DR <u>View</u>	<u>i as text</u>							
	Band	Low	High	0	1	2	3	4	5	6	7
	160m	1.8 MHz	2 MHz	[X]	[]	[]	[]	[]	[]	[]	[]
	80m	3.5 MHz	4 MHz	[]	[X]	[]	[]	[]	[]	[X]	[]
	60m	5.25 MHz	5.45 MHz	[]	[]	[X]	[]	[]	[]	[X]	[]
	40m	7 MHZ	7.3 MHz	[]	[]	[X]	[]	[]	[]	[X]	[]
	30m	10.1 MHz	10.15 MHz	[]	[]	[]	[X]	[]	[]	[X]	[]
N	20m	14 MHz	14.35 MHz	[]	[]	[]	[X]	[]	[]	[X]	[]
13	17m	18.068 MHz	18.168 MHz	[]	[]	[]	[]	[X]	[]	[X]	[]
	15m	21 MHz	21.45 MHz	[]	[]	[]	[]	[X]	[]	[X]	[]
	12m	24.89 MHz	24.99 MHz	[]	[]	[]	[]	[]	[X]	[X]	[]
	10m	28 MHz	30 MHZ	[]	[]	[]	[]	[]	[X]	[X]	[]
	Other	-	-	[]	[]	[]	[]	[]	[]	[]	[]
	<										2

Enjoy listening...

×