

Chinese Handie Talkies An Overview

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Topics We'll Cover

- Models
- Architecture
- Quality
- Programming
- Accessories
- Where to Buy?
- More Information (Links)

Models I Own

- Baofeng
 - UV-3A (\$30)
 - UV-5R and variants (\$34)
 - UV-B5 (\$35)
 - UV-82 (\$35)
- Wouxun
 - KG-UVD1P (\$120, from China)

Other Brands You Might Run Into

- NKT
- Puxing
- Quansheng
- QYT
- TYT
- Wacom
- Weierwei

Architecture

- Chinese Handie Talkies are true SDR's
- Microprocessor
- VHF/UHF radio on a chip
- FM radio on a chip
- Discrete components for PA and Input/Output Filtering

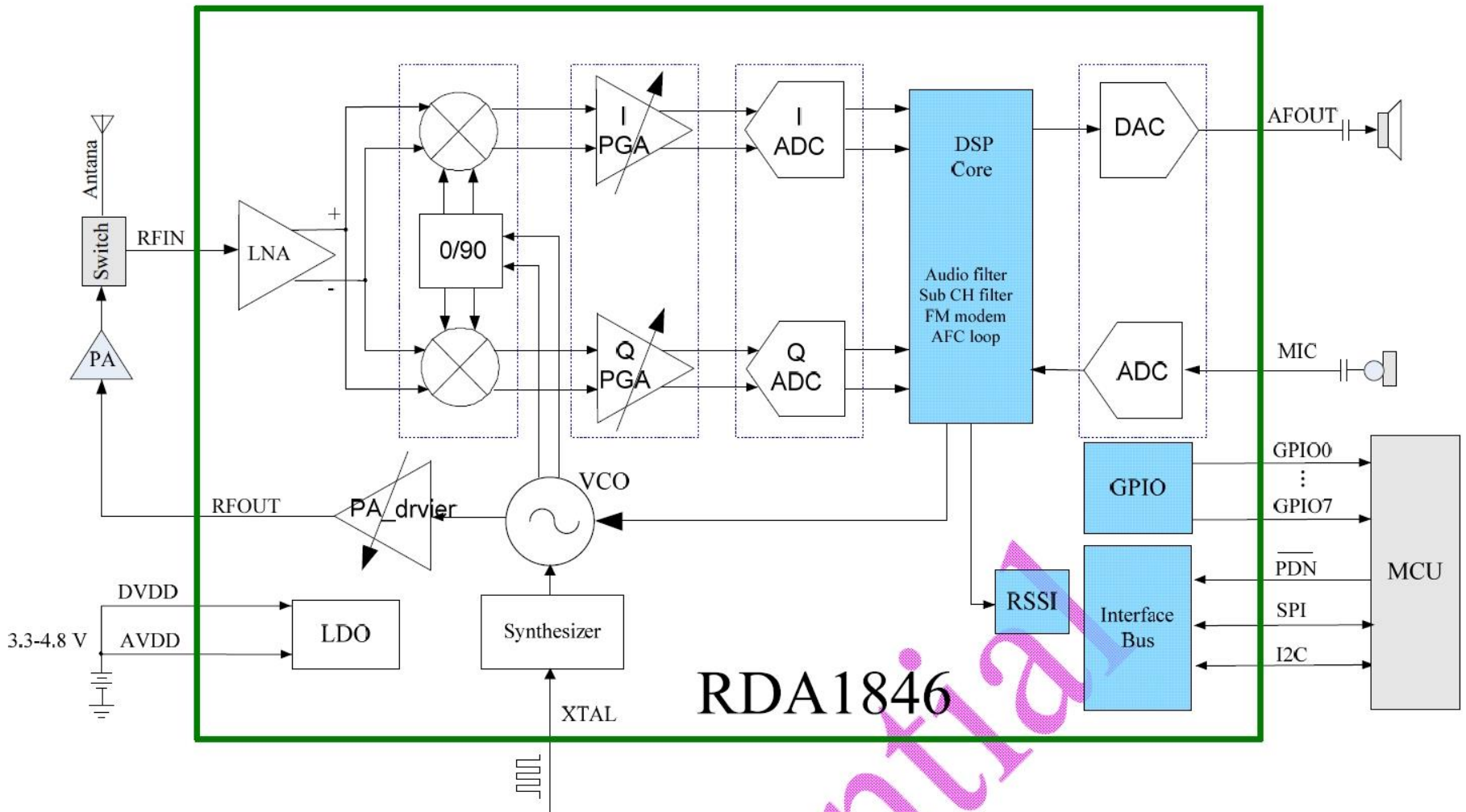
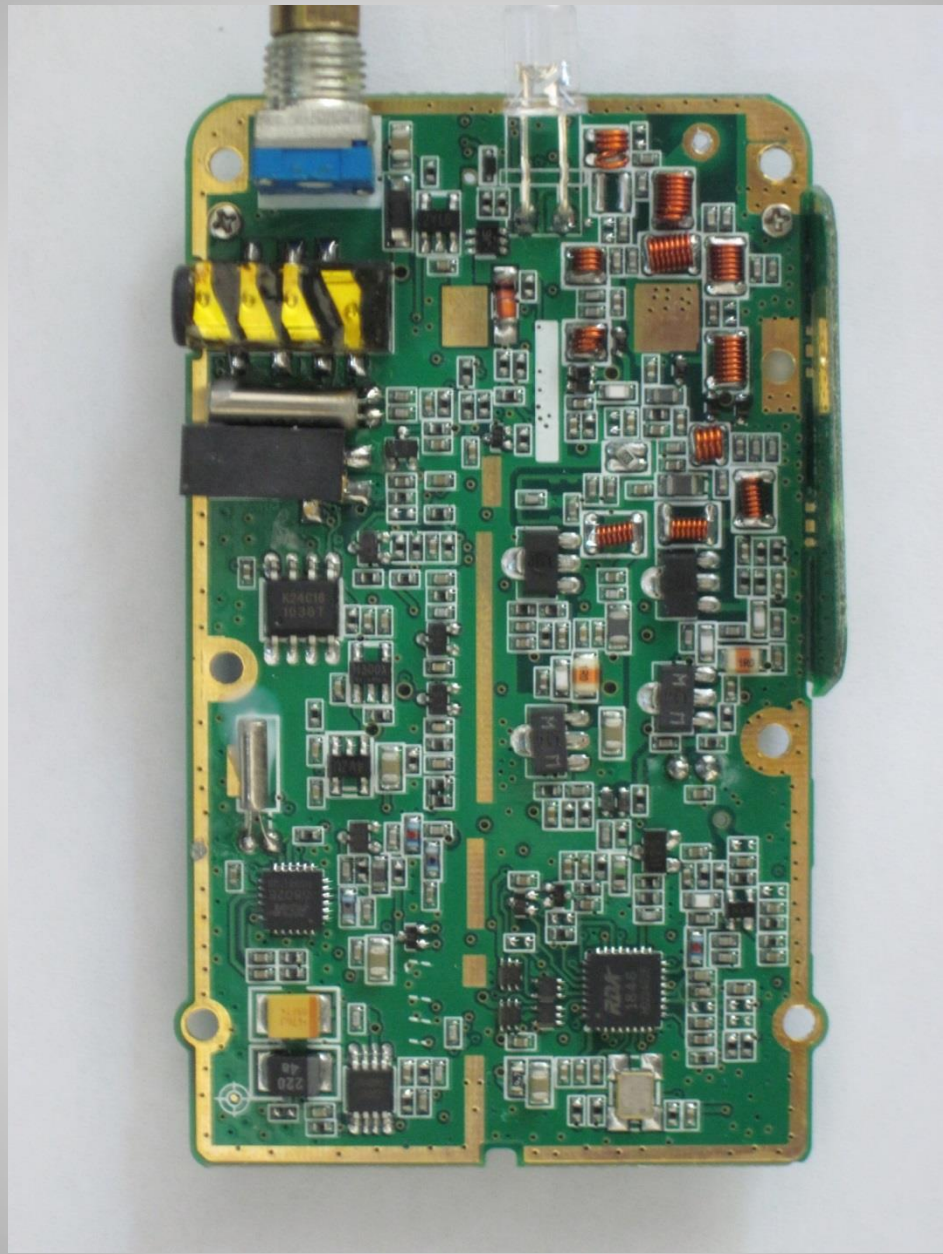


Figure 3.1 RDA1846 Block Diagram



Quality

- Quality Issues
 - Wouxun
 - Loses memories, EEPROM's fail
 - Baofeng
 - LCD's on two of my Baofeng's have problems
 - Charging stand problems reported on UV-82
 - UV-5R antenna – replacements are cheap
 - Harmonic suppression on UV-3R
 - Squelch and S meter

Programming

CHIRP

Chirp can upload and download from most HT's so it's simply a matter of making one master file with all wanted frequencies and then uploading it to each of your HT's. Chirp will convert it to the correct file type for your HT. This makes it easy for friends and club members to share their favorite frequencies.

[Chirp beginners guide.](#)

For Wouxun owners there is KG-UV Commander and KG-UV6 Commander.

Accessories

- Programming software
- Programming cable
- Extra batteries
- Better antennas
- Car adapters
- Antenna adapters



Certain Models Not Mentioned as they are Reproductions or Clones (Like the UV-82L / UV-89)



We Are BaoFeng's Official Trusted USA Dealer!

Best in Class

Best Overall UV-82 OR UV-82X



Picked because it is the heaviest-duty BaoFeng
 Picked because it has the highest quality PCB Board
 Picked because of the more ergonomic case and keypad
 Picked because of the LOUD 1 Watt speaker
 Picked because it's PCB causes better RX/TX than the other radios

Best UV-5R BF-F8+



Picked because it uses the 2nd Gen PCB UV-5R Board
 Picked because it is compatible with ALL UV-5R accessories
 Picked because of the expanded frequency range

The 2nd UV-5R GEN PCB (Printed Circuit Board) has been updated with newer components including:

- Radio Frequency IC
- Power Amplifier IC
- Frequency Modulated Receiver Chip
- and LED Flashlight

Notes:

There are certain models not mentioned because some vendors have paid to reproduce radios and not add any differences except misleading and deceptive labels for marketing purposes

Some examples are the UV-89 and UV-82L, which have no differences except labeling when compared to the UV-82. We recommend avoiding these dishonest vendors who use gimmicks in marketing. Their policies regarding warranties and refunds - follow the same suit with disregard when it comes to the customer being first

Model	UV-5R	UV-5RA	UV-5R+	BF-F8+	GT-3	A-52	UV-82	UV-82X	UV-85	UV-86
Alias		UV-5RC	UV-5RE			B-580T				
Radio Class	UV-5R	UV-5R	UV-5R	UV-5R	UV-5R	UV-5R	UV-82	UV-82	UV-B	UV-B
Generation	1st Gen	1st Gen	1st Gen	2nd Gen	2nd Gen	2nd Gen				
PCB (Printed Circuit Board)										
UV-5R 1st Generation Board	✓	✓	✓							
UV-5R 2nd Generation Board				✓	✓	✓				
UV-82 Board							✓	✓		
UV-B Board									✓	✓
LED Light										
1st Generation	✓	✓	✓							
2nd Generation				✓	✓	✓	✓	✓		✓
No Light - Secondary Switch									✓	
Speaker										
700mw	✓	✓	✓	✓	✓	✓			✓	✓
1 Watt							✓	✓		
Compared to the UV-5R										
No Changes - Purely Cosmetic	✓	✓	✓							
Minor Changes				✓	✓	✓				
A Completely Different Radio							✓	✓	✓	✓
Frequency Mode										
400-480 Mhz	✓	✓	✓							
400-520 MHz				✓	✓	✓	✓		✓	✓
220-260 Mhz								✓		
Case Quality										
Rugged	✓	✓	✓	✓	✓	✓			✓	✓
Commercial							✓	✓		
Companding Function										
Does Not Have	✓	✓	✓	✓	✓	✓	✓	✓		
Has Funtion									✓	✓
Works with all UV-5R Accessories										
Yes	✓			✓						
No		✓	✓		✓	✓	✓	✓	✓	✓
Display										
Normal	✓	✓	✓				✓	✓	✓	✓
Inverted				✓	✓	✓				
Channel to Frequency Mode										
Via VFO Button	✓	✓	✓	✓	✓	✓			✓	✓
Via Holding Menu and Powering On							✓	✓		
Push-to-Talk Switch										
Single - Alternate Channels Via A/B Button	✓	✓	✓	✓	✓	✓			✓	✓
Dual - Alternate Channels Via PTT Switch							✓	✓		

Recommendations

- Wouxun is the highest quality but about three times the price
- UV-B5 & B6 – The best of the Baofengs
- UV-82 – Dual PTT buttons, switching from memory mode to vfo mode requires turning the radio off
- UV-5R and variants – Most common of the Baofengs, replace antenna for better performance
- UV-3R – Small and low powered but it works, \$3.00 NP60 batteries

Where to Buy?

- [Amazon](#) – consistently the least expensive and fastest shipping
- [409 Shop](#) – my second favorite place to shop, ships free from China
- [AliExpress](#) – cheapest if you want to buy in volume but some sellers are iffy
- [eBay](#) – my least favorite place to buy, in the past they were the best place to buy but not anymore
- Local –
 - [Main Trading Company](#) in Paris, TX
 - [Hamcom](#)

More Information

- Hans', PD0AC, Ham Radio Blog – hamgear.wordpress.com
- Miklor – www.miklor.com
- Brick O' Lore – www.brickolore.com
- Comparison of Baofeng models
www.baofengtech.com/compare
- Chirp – chirp.danplanet.com
- Yahoo Groups – several groups for different Baofeng and Wouxun radios – groups.yahoo.com

More Links

- Amazon – www.amazon.com
- 409 Shop - www.409shop.com
- AliExpress - www.aliexpress.com
- Main Trading Company – www.mtcradio.com
- Eham reviews – www.eham.net/reviews/
- \$4.99 antenna - <http://www.ebay.com/itm/310726384346>

Questions?