GENERAL INFORMATION

General Information in accordance with the Federal Communications Commission Rules and Regulations, Volume II, Part 2.

(1) Applicant:

Uniden America Corporation
216 John Street, P.O. Box 580
Lake City, South Carolina 29560
Mr. James R. Haynes, Vice President

(2) FCC Identifier: FCC ID: AMWUB305
MODEL NO.: BC780XLT

(3) Instruction Manual: Refer to User Manual

(4) Circuit Description: Refer to Operational Description

(5) Circuit & Block Diagrams: Refer to Schematics & Block diagrams

(6) Measurement Data: Refer to Test Report

Standard Test Conditions:
The following conditions and procedures were followed during testing of the equipment.

Room Temperature: 23 - 27 Degrees Celsius
Room Humidity: 40 - 60 %

Note 1: This equipment is intended to use with AC adapter.

Note 2: Prior to testing, the unit is tuned-up according to the manufacturer's alignment procedure.

All presented data will represent the "worst case" parameter being measured.

(7) Photographs & Equipment Identification:

Refer to ID Label/Location Info & External Photos

(8) Peripheral or Accessory Device: Not used

(9) Transition provisions in section 15.37 Rules:

This equipment complies with the new Part 15 of FCC rules and is not affected by section 15.37.

(10) Decoding the Emergency Broadcast System Attention Signal:

Not Applicable

(11) Direct Sequence Spread Spectrum Transmitter:

Not Applicable

(12) Compliance to Cellular Band Exclusion:

Pursuant to the requirements contained in Part 15.121 of the Commission's Rules, this scanning receiver does not have the capability of tuning the frequencies assigned to the Domestic Public Cellular Radio Telecommunications Service.

In this circuitry, this device is not readily alterable to restore the cellular band coverage because the inventory of frequencies contained within this band are not available in the microprocessor. Also, the microprocessor is fixed soldered and not easily removable.

In addition, the critical circuitry is "hardened" with a black epoxy that covers the area of the circuitry that might be modified to circumvent the design efforts referenced above.

Therefore, since the clipping of leads; or the installation of a simple component such as a diode, resistor, or a jumper wire; or the reprogramming of any semiconductor device contained within this unit cannot be accomplished using a special access code or a personal computer; This is to certify that the conditions mandated in part 15.121 have been met.

CIRCUIT DESCRIPTION

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UB305Z

1. Tuning Range (MHz)

25.0000	-	27.9950
28.0000	-	53.9950
54.0000	-	71.9950
72.0000	-	75.9950
76.0000	-	87.9950
88.0000	-	107.9950
108.0000	-	136.9950
137.0000	-	173.9950
174.0000	-	215.9950
216.0000	-	224.9950
225.0000	-	399.9950
400.0000	-	512.0000
806.0000	-	823.9875
849.0125	-	868.9875
894.0125	-	956.0000
1240.0000	-	1300.0000

2. Frequency Range of the Local Oscillators

1st Local Oscillation Frequencies:

405.7 MHz	-	596.6 MHz
555.0 MHz	-	755.9 MHz
859.3 MHz	-	919.3 MHz

2nd Local Oscillation Frequency:

254.6500 MHz	-	254.7000 MHz
288.9050 MHz	-	289.0000 MHz
335.6050 MHz	-	335.7950 MHz
369.9500 MHz	-	370.0000 MHz

3rd Local Oscillation Frequency:

44.5500 MHz

3. Intermediate Frequencies

1st IF:

25.0000	-	310.9950 MHz	IF: 380.6050	-	380.7000 MHz
311.0000	-	512.0000 MHz	IF: 243.9050	-	244.0000 MHz
806.0000	-	1300.0000 MHz	IF: 380.7000	-	380.7950 MHz

2nd IF:

WFM Mode	IF: 10.7000 MHz
FM/NFM/AM Mode	IF: 45.0000 MHz

3rd IF:

FM/AM Mode	IF: 450 kHz (BW:±10kHz)
NFM Mode	IF: 450 kHz (BW:±6kHz)

CIRCUIT DESCRIPTION

1. ANT. Filter and RF Amp. Stage

Incoming RF signal is selected by specified filter (VLO～1300). Filtered signal is amplified by wide band amplifier, Q4 and Q5.

2. First Mixer and PLL Circuit Stage

Amplified RF signal is converted into the first IF signal at the first Mixer stage (First IF : Around 380.7MHz or 244.0MHz). This first local oscillator signal(vco1,vco2 or vco3) is delivered from PLL synthesizer(IC10).

The VCO frequency(vco1,vco2 or vco3) is divided by a programmable

counter which is preset from memory and compared to reference frequency. Any frequency or phase difference produces a correction signal to change the VCO tuning voltage. This tuning voltage then forces the VCO to oscillate at the frequency required for the counter to produce a output that is in phase with change the frequency. Thus, changing the modules of the counter will change the frequency of the VCO.

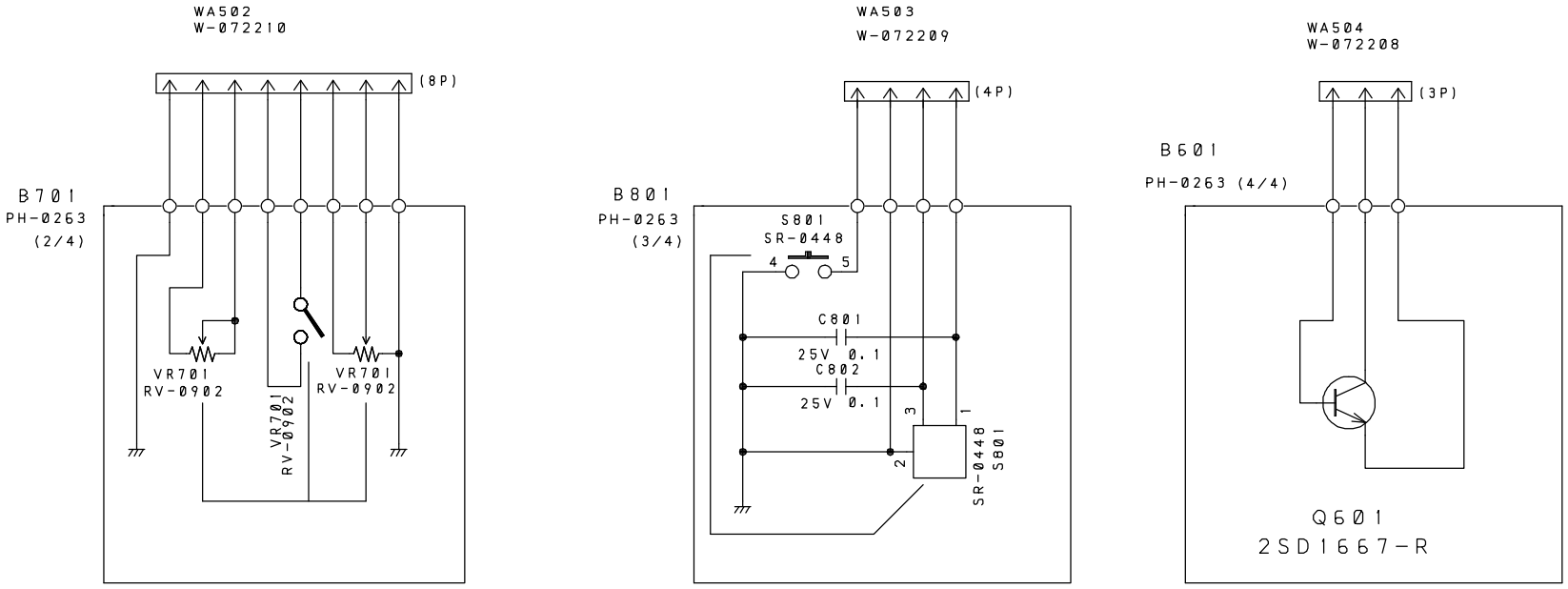
3. Second Mixer and WFM demodulator Stage

The first IF signal of each tuning range is mixed down with either the second local oscillator(vco4 or vco5) around 254.7MHz,289.0MHz,335.7MHz or 370.0MHz to obtain the common second IF signal of 45.0MHz or 10.7MHz. Second local signal(vco4 or vco5) is delivered from a PLL synthesizer(IC10). The second IF signal of 10.7MHz is delivered to WFM demodulated IC (IC1). The demodulated audio signal is delivered to audio AMP.(IC5)

4. Third Mixer and FM/NFM/AM demodulator Stage

The second IF signal of 45.0MHz is converted to the third IF signal of 450kHz at the inside of FM detector IC.(IC6). Also AM signal that divided from third IF signal is delivered to AM demodulated IC (IC8). The demodulated audio signal is delivered to audio AMP.(IC5)

The frequency program is entered from a decimal keyboard into a microprocessor(IC18) where it is multiplexed to driver the LCD display and decoded to enter the proper binary code in memory to control the PLL synthesizer.



DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
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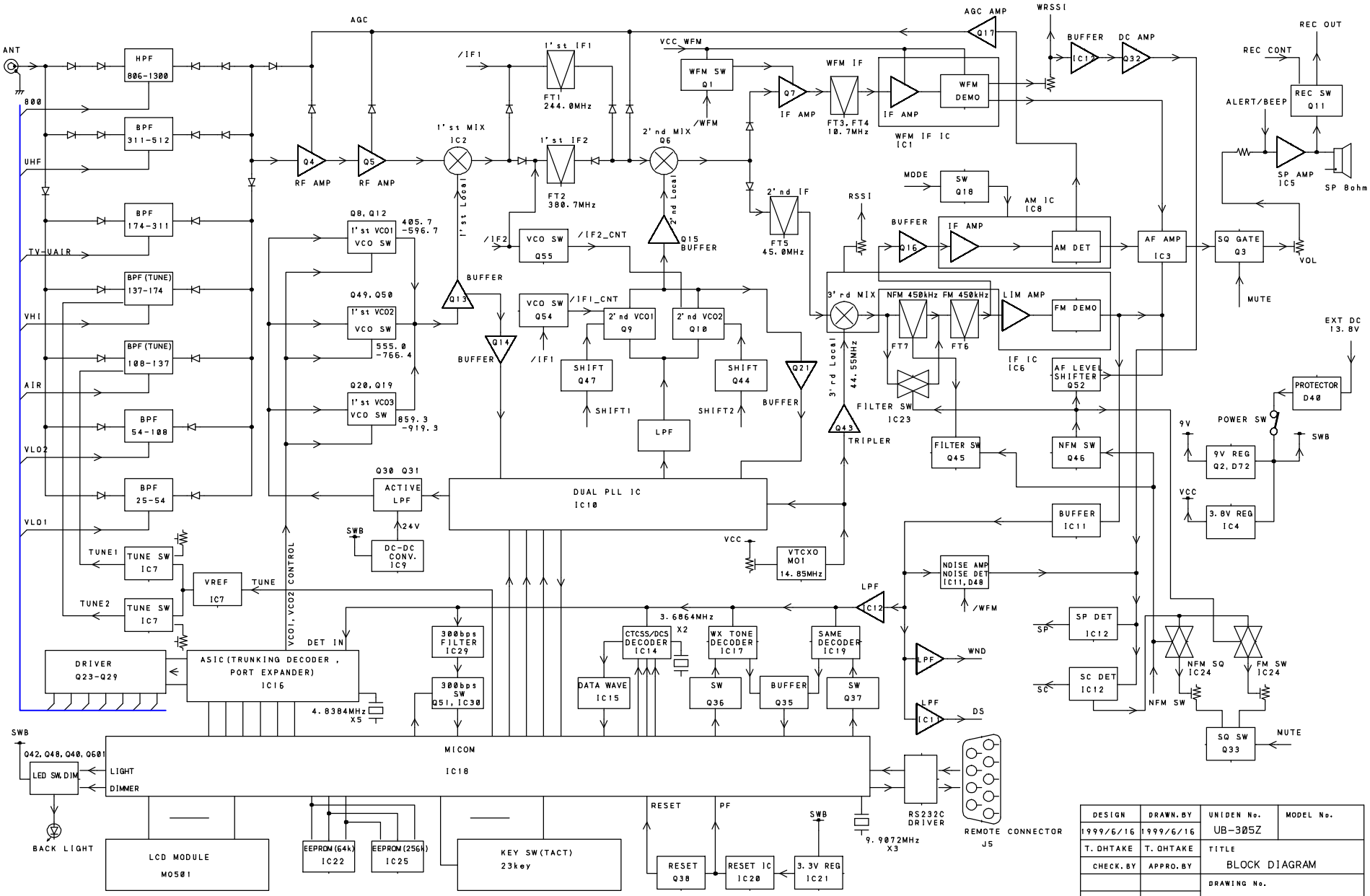
	Miyamoto	TITLE	
CHECK. BY	APPRO. BY	SCHEMATIC DIAGRAM	
		DRAWING No.	
REV. No		UNIDEN CORP.	



DESIGN	DRAWN.BY	UNIDEN No.	MODEL No.
1999/6/16	1999/6/16	UB-305Z	
T. OHTAKE	T. OHTAKE	TITLE	
CHECK.BY	APPRO.BY	BLOCK DIAGRAM	
		DRAWING No.	
REV.No		UNIDEN CORP.