



Air Band Transceiver

VXA-220

Service Manual

© 2006 VERTEX STANDARD CO., LTD.

(EC072N90A)

VERTEX STANDARD CO., LTD.

4-8-8 Nakameguro, Meguro-Ku, Tokyo 153-8644, Japan

VERTEX STANDARD

US Headquarters

10900 Walker Street, Cypress, CA 90630, U.S.A.

YAESU EUROPE B.V.

P.O. Box 75525, 1118 ZN Schiphol, The Netherlands

YAESU UK LTD.

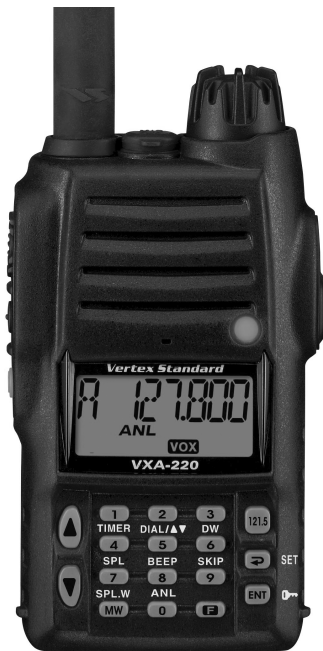
Unit 12, Sun Valley Business Park, Winnall Close
Winchester, Hampshire, SO23 0LB, U.K.

VERTEX STANDARD HK LTD.

Unit 5, 20/F., Seaview Centre, 139-141 Hoi Bun Road,
Kwun Tong, Kowloon, Hong Kong

VERTEX STANDARD (AUSTRALIA) PTY., LTD.

Normanby Business Park, Unit 14/45 Normanby Road
Notting Hill 3168, Victoria, Australia



Introduction

This manual provides technical information necessary for servicing the **VXA-220** Air Band Transceiver.

Servicing this equipment requires expertise in handling surface-mount chip components. Attempts by non-qualified persons to service this equipment may result in permanent damage not covered by the warranty, and may be illegal in some countries.

Two PCB layout diagrams are provided for each double-sided circuit board in the transceiver. Each side of the board is referred to by the type of the majority of components installed on that side ("lead" or "chip-only"). In most cases one side has only chip components, and the other has either a mixture of both chip and lead components (trimmers, coils, electrolytic capacitors, ICs, etc.), or lead components only.

While we believe the technical information in this manual to be correct, Vertex Standard assumes no liability for damage that may occur as a result of typographical or other errors that may be present. Your cooperation in pointing out any inconsistencies in the technical information would be appreciated.

Important Note

This transceiver was assembled using Pb (lead) free solder, based on the RoHS specification.

Only lead-free solder (Alloy Composition: Sn-3.0Ag-0.5Cu) should be used for repairs performed on this apparatus. The solder stated above utilizes the alloy composition required for compliance with the lead-free specification, and any solder with the above alloy composition may be used.

Contents

Specifications	2
Exploded View & Miscellaneous Parts	3
Block Diagram	5
Circuit Description	7
Alignment	9
MAIN Unit Circuit Diagram	13
MAIN Unit Parts Layout	15
MAIN Unit Parts List	17

Specifications

General

Frequency Range:	TX: 118.000 - 136.975 MHz, RX: 108.000 - 136.975 MHz, Weather Channels (WX-01 - WX-10: USA version only)
Channel Spacing:	25 kHz
Emission Type:	TX: AM, RX: AM & FM (FM: for receiving the Weather Channels, USA version only)
Supply Voltage:	6.0 - 15.0 VDC
Current Consumption (approx.):	250 μ A (power off), 35 mA (battery saver on, saver ratio 1:5) 60 mA (squelch on), 200 mA (receive), 850 mA (transmit 1.5 W Carrier)
Temperature Range:	+14 °F to +140 °F (−10 °C to +60 °C)
Case Size (WxHxD):	2.36 x 4.09 x 1.2 inches (60 x 104 x 30.5 mm) w/o knob & antenna
Weight (approx.):	12.7 oz (360 grams) with FNB-83, antenna, and belt clip

Receiver

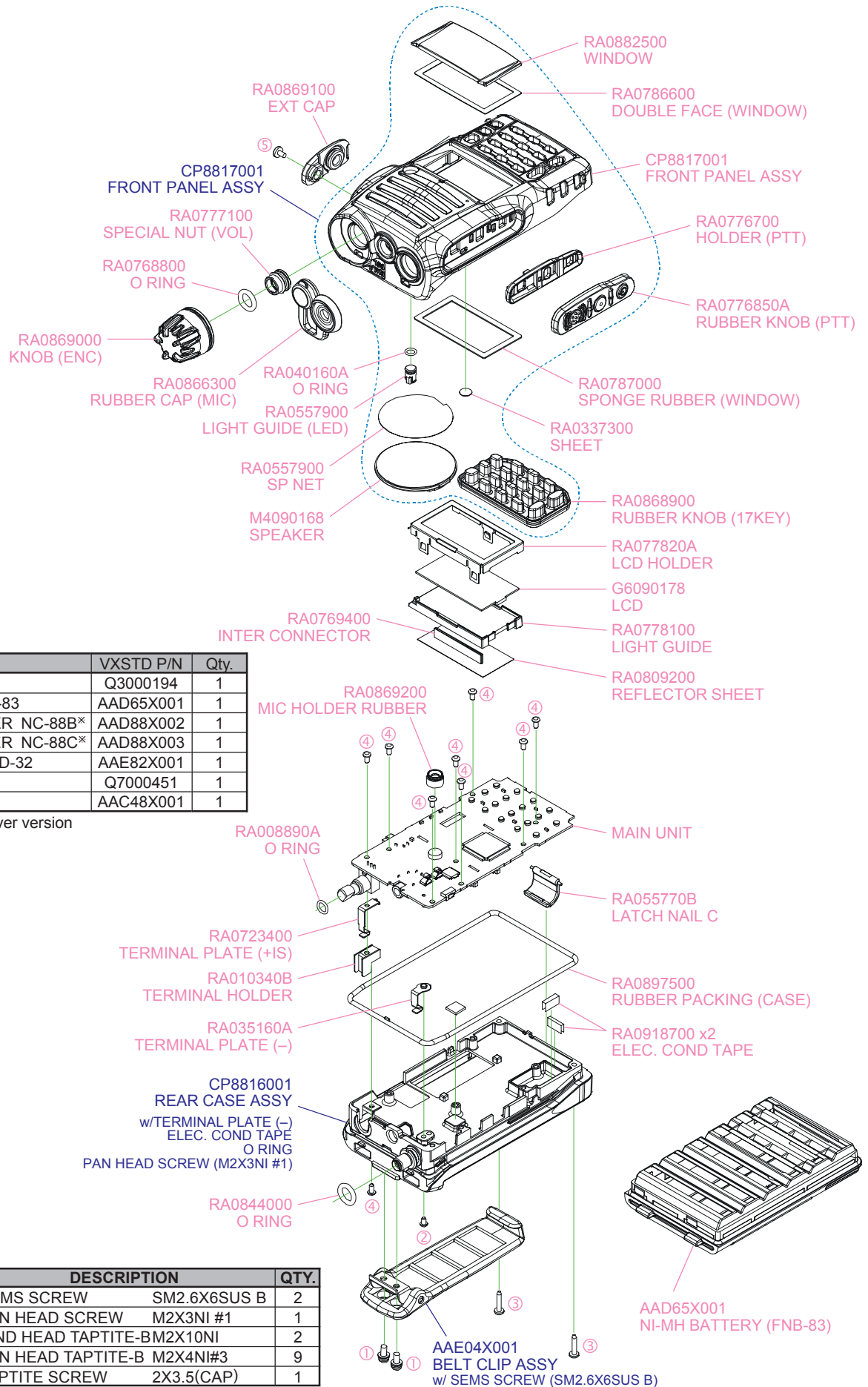
Circuit Type:	Double-conversion superheterodyne
IFs:	47.25 MHz & 450 kHz
Sensitivity:	AM: Better than 0.8 μ V (for 6 dB S/N with 1 kHz, 30 % modulation) FM: Better than 0.4 μ V (for 12 dB SINAD)
Selectivity:	More than 8 kHz/−6 dB
Adjacent CH. Selectivity:	Less than 25 kHz/−60 dB
AF Output (Internal speaker):	0.7 W @ 16 Ohms, 10 % THD

Transmitter

Power Output (@ 7.2 V):	5 W (PEP), 1.5 W (Carrier Power)
Frequency Stability:	Better than ± 10 ppm (+14 °F to +140 °F [−10 °C to +60 °C])
Modulation System:	Low Level Amplitude Modulation
Spurious Emission:	>60 dB below carrier
Int. Microphone Type:	Condenser
Ext. Mic. Impedance:	150 Ohms

Specifications are subject to change without notice or obligation.

Exploded View & Miscellaneous Parts



Description	VXSTD P/N	Qty.
ANTENNA ATV-10	Q3000194	1
NI-MH BATTERY FNB-83	AAD65X001	1
OVERNIGHT CHARGER NC-88B*	AAD88X002	1
OVERNIGHT CHARGER NC-88C*	AAD88X003	1
CHARGER CRADLE CD-32	AAE82X001	1
CABLE CT-96	Q7000451	1
BELT CLIP (ASSY)	AAC48X001	1

※: Depends on transceiver version

REF.	VXSTD P/N	DESCRIPTION	QTY.
①	U02206027	SEMS SCREW SM2.6X6SUS B	2
②	U07230102	PAN HEAD SCREW M2X3NI #1	1
③	U24110002	BIND HEAD TAPTITE-BM2X10NI	2
④	U9900068	PAN HEAD TAPTITE-B M2X4NI#3	9
⑤	U9900181	TAPTITE SCREW 2X3.5(CAP)	1

Exploded View & Miscellaneous Parts

Block Diagram

Note

Receive Signal Path

Incoming RF from the antenna jack is passed through a low-pass filter and high-pass filter consisting of coils L1024, L1027, L1028, L1029, L1030 & L1031, capacitors C1213, C1218, C1219, C1222, C1223, C1224, C1226, C1227, C1228, C1229, C1230, & C1234 and antenna switching diodes **D1038** and **D1040** (both **RLS135**) to the receiver front end section.

Signals within the frequency range of the transceiver is applied to the receiver front end which contains RF amplifier **Q1049** (**3SK318**) and varactor-tuned band-pass filter consisting of coils L1014, L1015, L1018, L1021, L1025, & L1026, capacitors C1180, C1182, C1184, C1185, C1186, C1189, C1190, C1193, C1194, C1197, C1207, C1215, & C1216, and diodes D1035, D1036, **D1037**, & **D1039** (all **HVC350B**), then applied to the 1st mixer **Q1043** (**3SK318**).

Buffered output from the VCO is amplified by **Q1032** (**2SC5555ZD**) to provide a pure 1st local signal between 155.25 and 184.25 MHz for injection to the 1st mixer. The 47.25 MHz 1st mixer product then passes through monolithic crystal filter XF1001 (7.5 kHz BW) which strips away all but the desired signal, which is then amplified by mixer post-amp **Q1042** (**2SC4915**).

The amplified 1st IF signal is applied to the AM/FM IF subsystem IC **Q1039** (**TK10931**), which contains the 2nd mixer, 2nd local oscillator, limiter amplifier, noise amplifier and AM/FM detector.

A 2nd local signal is generated by PLL IC **Q1025** (**MB15A01PFV1**) from the 11.7 MHz crystal X1002. The 11.7 MHz signal is quadrupled by **Q1037** (**2SC4915**) to produce the 450 kHz 2nd IF when mixed with the 1st IF signal within **Q1039** (**TK10931**). The 2nd IF then passes through the ceramic filter CF1001 to strip away unwanted mixer products.

In the FM mode, a 2nd IF signal from the ceramic filter CF1001 applied to the limiter amplifier section of **Q1039** (**TK10931**), which removes amplitude variations in the 450 kHz IF before detection of the speech by the ceramic discriminator CD1001. Detected audio from **Q1039** (**TK10931**) is passed through the de-emphasis, consisting of the resistors R1082, R1087, R1089, & R1090, capacitors C1069, C1070, C1073, & C1081, and **Q1019-2** (**LM2902PWR**).

In the AM mode, detected audio from **Q1039** (**TK10931**) is passed through the audio amplifier **Q1019-1** (**LM2902PWR**) and ANL circuit, then applied to the AF amplifier **Q1019-2** (**LM2902PWR**). When impulse noise received, a portion of the AM detector output signal from the AM/FM IF subsystem **Q1039** (**TK10931**), including pulse noise is rectified by **D1019** (**1SS400**). The resulting

DC is applied to the ANL MUTE gate **Q1022** (**UMG2N**), thus reducing the pulse noises.

The processed audio signal from **Q1019-1** (**LM2902PWR**) is passed through the amplifier **Q1019-2** (**LM2902PWR**) to the volume control IC **Q1029** (**M62364FP**). The audio signal is passed through the volume control IC to the audio power amplifier **Q1003** (**TDA2822**), providing up to 0.7 Watts to 16 Ohm loudspeaker.

A portion of the AF signal from the AM/FM IF subsystem **Q1039** (**TK10931VTL**) converted into DC voltage within the IC, and provide to the inversion amplifiers **Q1048** and **Q1050** (both **2SC4617**). These amplifiers reduce the amplifier gain of the RF amplifier **Q1049** (**3SK318**) while receiving a strong signal.

Squelch Control

When signal is received, the DC squelch control voltage appears at pin 15 of AM/FM IF subsystem **Q1039** (**TK10931**) according to the receiving signal strength. This DC is applied to pin 16 of microprocessor **Q1015** (**LC87F7C8A**).

The DC squelch control voltage is compared with the SQL threshold level by the microprocessor **Q1015** (**LC87F7C8A**). If the DC squelch control voltage is lower, the microprocessor **Q1015** (**LC87F7C8A**) control pin 14 of volume control IC **Q1029** (**M62364FP**) goes "LOW," thus disabling the AF audio. Also, the microprocessor stops scanning, if active, and allows audio to pass through the volume control IC **Q1029** (**M62364FP**).

Transmit Signal Path

Speech input from the microphone is passed through the microphone amplifier **Q1011-1** (**LM2902PWR**), then applied to the ALC amplifier **Q1013** (**AN6123MS**). The amplified speech signal is passed through the high-pass filter **Q1011-4** (**LM2902PWR**) and low-pass filter **Q1011-3** (**LM2902PWR**), which adjusts the modulation level, then fed to the AM modulator **Q1045** (**RD07MVS1A**).

When using the optional headset, pin 10 of microprocessor **Q1015** (**LC87F7C8A**) goes "HIGH." This signal is applied to pin 15 of volume control IC **Q1029** (**M62364FP**) which allows amplified speech signals by the AF power amplifier **Q1001** (**DTC144EE**) as a monitor signal.

The carrier signal from the VCO **Q1028** (**2SC5231**) passes through the buffer amplifier **Q1032** (**2SC5555**) and TX/RX switch **D1026** (**DAN222**).

The signal from **D1026** (**DAN222**) is amplified by **Q1040** (**2SC5226**) and **Q1044** (**RD01MUS1**), and ultimately applied to the final amplifier **Q1045** (**RD07MVS1A**) which increases the signal level up to 5 watts output power. The

Circuit Description

transmit signal then passes through the antenna switch **D1038 (RLS135)**, and is low-pass filtered to suppress away harmonic spurious radiation before delivery to the antenna.

Automatic Transmit Power Control

RF power output from the final amplifier is sampled by C1217/C1221 and is rectified by **D1041 (HSM88WA)**. The resulting DC is fed through the Automatic Power Controller **Q1047 (LMV321IDCKR)**, thus allowing control of the power output.

Transmit Inhibit

When the transmit PLL is unlocked, pin 7 of PLL chip **Q1025 (MB15A01PFV1)** goes to a logic “LOW.” The resulting DC “Unlock” control voltage is switches off TX inhibit switches **Q1035 (UMD5N)**, to disable the supply voltage to transmitter RF amplifiers **Q1040 (2SC5226)**, disabling the transmitter.

Spurious Suppression

Generation of spurious products by the transmitter is minimized by the fundamental carrier frequency being equal to the final transmitting frequency. Additional harmonic suppression is provided by a low-pass filter consisting of L1027, L1029, & L1031, and C1213, C1222, C1224, C1227, C1229, & C1234, resulting in more than 60 dB of harmonic suppression prior to delivery of the RF signal to the antenna.

PLL Frequency Synthesizer

PLL circuitry consists of VCO **Q1028 (2SC5231)**, VCO buffer **Q1032 & Q1034 (both 2SC5555)**, and PLL subsystem IC **Q1025 (MB15A01PFV1)**, which contains a reference divider, serial-to-parallel data latch, programmable divider, phase comparator and charge pump.

Stability is maintained by a regulated 3.5 V supply via **Q1033 (S-812C35AU)** and 5V supply via **Q1031 (CHP6102)** which feeds the PLL reference oscillator **Q1025 (MB15A01PFV1)**, as well as capacitors associated with the 11.7 MHz frequency reference crystal X1002.

In the receive mode, VCO **Q1028 (2SC5231)** oscillates between 155.25 and 184.25 MHz. The VCO output is buffered by **Q1032 & Q1034 (both 2SC5555)**, and applied to the prescaler section of **Q1025 (MB15A01PFV1)**. There the VCO signal is divided by 64 or 65, according to a control signal from the data latch section of **Q1025 (MB15A01PFV1)**, before being applied to the programmable divider section of **Q1025 (MB15A01PFV1)**. The data latch section of **Q1025 (MB15A01PFV1)** also receives

serial dividing data from the microprocessor **Q1015 (LC87F7BC8A)**, which causes the pre-divided VCO signal to be further divided in the programmable divider section, depending upon the desired receive frequency, so as to produce a 5 kHz derivative of the current VCO frequency.

Meanwhile, the reference divider section of **Q1025 (MB15A01PFV1)** divides the 11.7 MHz crystal reference from the reference oscillator section by 2340 to produce the 5 kHz loop reference. The 5 kHz signal from the programmable divider (derived from the VCO) and that derived from the reference oscillator are applied to the phase detector section of **Q1025 (MB15A01PFV1)**, which produces a pulsed output with pulse duration depending on the phase difference between the input signals. This pulse train is filtered to DC and returned to the varactor **D1013 (HVC350B)**.

Changes in the level of the DC voltage applied to the varactors affect the reactance in the tank circuit of the VCO, changing the oscillating frequency of the VCO according to the phase difference between the signals derived from the VCO and the crystal reference oscillator. The VCO is thus phase-locked to the crystal reference oscillator.

The output of the VCO **Q1028 (2SC5231)** is buffered by **Q1032 (2SC5555)** before application to the 1st mixer, as described previously.

For transmission, the VCO **Q1028 (2SC5231)** oscillates between 118 and 137 MHz. The remainder of the PLL circuitry is shared with the receiver. However, the dividing data from the microprocessor is such that the VCO frequency is at the actual transmit frequency (rather than offset for IFs, as in the receiving case).

Receive and transmit buses select which VCO is made active by **Q1023 (DTC144EE)**.

When the power saving feature is active, the microprocessor periodically signals to the PLL IC **Q1025 (MB15A01PFV1)** to conserve power, and to shorten lock-up time.

Push-To-Talk Transmit Activation

The PTT switch on the microphone is the control to pin 22 of microprocessor **Q1015 (LC87F7BC8A)**, so that when the PTT switch is closed, pin 31 of **Q1015 (LC87F7BC8A)** goes “HIGH.” This signal cuts off the receiver by disabling the 5 V supply bus at **Q1018 (DTA143EE)** which feeds the front-end, FM IF subsystem IC **Q1039 (TK10931VTL)**, and receiver VCO circuitry. At the same time, **Q1035 (UMD5N)** activates the transmit 5 V supply line to enable the transmitter.

Introduction

The **VXA-220** is carefully aligned at the factory for the specified performance across the Aircraft and Weather bands. Realignment should therefore not be necessary except in the event of a component failure.

The following procedures cover the adjustments that are not normally required once the transceiver has left the factory. However, if damage occurs and some parts subsequently are replaced, realignment may be required. If a sudden problem occurs during normal operation, it is likely due to component failure; realignment should not be done until after the faulty component has been replaced.

We recommend that servicing be performed only by authorized Vertex Standard service technicians who are experienced with the circuitry and fully equipped for repair and alignment. If a fault is suspected, contact the dealer from whom the transceiver was purchased for instructions regarding repair. Under no circumstances should any alignment be attempted unless the normal function and operation of the transceiver are clearly understood, the cause of the malfunction has been clearly pinpointed and any faulty components replaced, and realignment determined to be absolutely necessary. Problems caused by unauthorized attempts at realignment are not covered by the warranty policy.

Vertex Standard reserves the right to change circuits and alignment procedures, in the interest of improved performance, without notifying owners.

The following test equipment (and familiarity with its use) is necessary for complete realignment. While most steps do not require all of the equipment listed, the interactions of some adjustments may require that more complex adjustments be performed afterwards. Do not attempt to perform only a signal step unless it is clearly isolated electrically from all other steps. Have all test equipment ready before beginning, and follow all of the steps in a section in the order presented.

Correction of problems caused by misalignment resulting from use of improper test equipment is not covered under the warranty policy.

Required Test Equipment

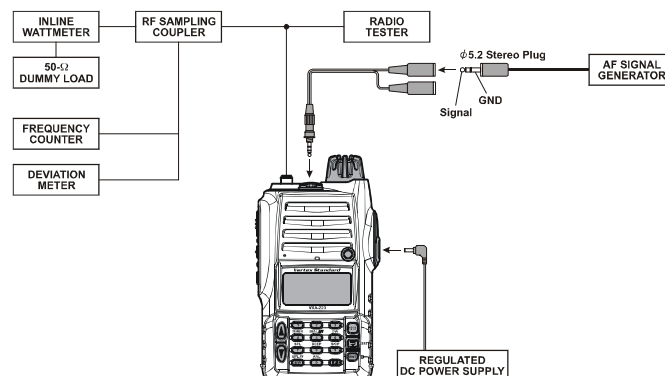
- ☐ Radio Tester with calibrated output level at 200 MHz
- ☐ In-line Wattmeter with 5 % accuracy at 200 MHz
- ☐ 50 Ohm, 10 W RF Dummy Load
- ☐ Regulated DC Power Supply adjustable from 3 to 15 VDC, 2 A
- ☐ Frequency Counter: ± 0.2 ppm accuracy at 200 MHz
- ☐ AF Signal Generator
- ☐ AC Voltmeter
- ☐ DC Voltmeter: high impedance
- ☐ VHF Sampling Coupler

Alignment Preparation & Precautions

A 50 Ohm RF load and in-line wattmeter must be connected to the main antenna jack in all procedures that call for transmission, except where specified otherwise. Correct alignment is not possible with an antenna. After completing one step, read the next step to see if the same test equipment is required. If not, remove the test equipment (except dummy load and wattmeter, if connected) before proceeding.

Correct alignment requires that the ambient temperature be the same as that of the transceiver and test equipment, and that this temperature be held constant between 20 - 30 °C (68 - 86 °F). When the transceiver is brought into the shop from hot or cold air, it should be allowed some time to come to room temperature before alignment. Whenever possible, alignments should be made with oscillator shields and circuit boards firmly affixed in place. Also, the test equipment must be thoroughly warmed up before beginning.

Set up the test equipment as shown below for transceiver alignment, apply 7.2 VDC power to the transceiver.



Notes: signal levels in dB referred to in alignment are based on 0 dB μ = 0.5 μ V (closed circuit).

Alignment

PLL Section

PLL Reference Frequency

- ☐ Connect the wattmeter, dummy load and frequency counter to the antenna jack, then set the transceiver to 128.000 MHz and turn the transceiver off.
- ☐ Press and hold in the **PTT** switch, **MONITOR** switch, and [ENT(🔊)] key while turning the transceiver on to enter the alignment mode.
- ☐ Rotate the **DIAL** selector knob to select "REF xxx."
- ☐ Press the **PTT** switch, confirm the frequency counter reading is 128.000 MHz.
- ☐ If not,
 1. press the [ENT(🔊)] key momentarily,
 2. rotate the **DIAL** selector knob clockwise (frequency up) or counter-clockwise (frequency down),
 3. press the [ENT(🔊)] key again,
 4. confirm the frequency counter reading.
- ☐ Repeat above steps 1 - 4, so that the counter reading is 128.000 MHz (± 100 Hz).
- ☐ Turn the transceiver off.

Resetting the CPU

If you are unable to gain control of the transceiver (or if you want to clear all memories and settings to their factory defaults), press and hold the **MONITOR** switch and [ENT(🔊)] key while turning the transceiver on.

Transmitter Section

AM TX Power Adjustment

- ☐ Connect the wattmeter and dummy load to the antenna jack, then set the transceiver to 128.000 MHz and turn the transceiver off.
- ☐ Press and hold in the **PTT** switch, **MONITOR** switch, and [ENT(🔊)] key while turning the transceiver on to enter the alignment mode.
- ☐ Rotate the **DIAL** selector knob to select "TX PO xxx."
- ☐ Press the **PTT** switch with no microphone input, confirm the RF output power is 1.5 Watts.
- ☐ If not,
 1. press the [ENT(🔊)] key momentarily,
 2. rotate the **DIAL** selector knob clockwise (increase the power) or counter-clockwise (decrease the power),
 3. press the [ENT(🔊)] key again,
 4. confirm the RF output power.
- ☐ Repeat above steps 1 - 4, so that the RF output power is 1.5 Watts.
- ☐ Turn the transceiver off.

TX AM Modulation Adjustment

- ☐ Connect the Radio Tester to the antenna jack, then adjust the AF generator output level for injection of 200 mV rms @ 1 kHz to the MIC jack.
- ☐ Set the transceiver to 127.500 MHz and turn the transceiver off.
- ☐ Press and hold in the **PTT** switch, **MONITOR** switch, and [ENT(🔊)] key while turning the transceiver on to enter the alignment mode.
- ☐ Rotate the **DIAL** selector knob to select "MDLV xxx."
- ☐ Press the **PTT** switch, confirm the modulation level is 85 % modulation (± 2 %).
- ☐ If not,
 1. press the [ENT(🔊)] key momentarily,
 2. rotate the **DIAL** selector knob clockwise (increase the MIC gain) or counter-clockwise (decrease the MIC gain),
 3. press the [ENT(🔊)] key again,
 4. confirm the modulation level.
- ☐ Repeat above steps 1 - 4, so that the modulation level is 85 % modulation (± 2 %).
- ☐ Turn the transceiver off.

Receiver Section

AM Squelch Hysteresis Adjustment

- ☐ Press and hold in the **PTT** switch, **MONITOR** switch, and **[ENT(🔊)]** key while turning the transceiver on to enter the alignment mode.
- ☐ Rotate the **DIAL** selector knob to select “**AMHS xxx.**”
- ☐ Press the **[ENT(🔊)]** key momentarily, then adjust the hysteresis level using the **DIAL** selector knob (Default Setting : 01).
- ☐ Press the **[ENT(🔊)]** key.
- ☐ Turn the transceiver off.

FM Squelch Hysteresis Adjustment

- ☐ Press and hold in the **PTT** switch, **MONITOR** switch, and **[ENT(🔊)]** key while turning the transceiver on to enter the alignment mode.
- ☐ Rotate the **DIAL** selector knob to select “**FMHS xx.**”
- ☐ Press the **[ENT(🔊)]** key momentarily, then adjust the hysteresis level using the **DIAL** selector knob (Default Setting : 01).
- ☐ Press the **[ENT(🔊)]** key.
- ☐ Turn the transceiver off.

AM Squelch Threshold Adjustment

- ☐ Connect the Radio Tester to the antenna jack, then adjust the output level to -9 dBμ (with a standard AM modulation: 30 % AM modulation @ 1 kHz) at 128.000 MHz.
- ☐ Set the transceiver to 128.000 MHz and turn the transceiver off.
- ☐ Press and hold in the **PTT** switch, **MONITOR** switch, and **[ENT(🔊)]** key while turning the transceiver on to enter the alignment mode.
- ☐ Rotate the **DIAL** selector knob to select “**AMTH xx.**”
- ☐ Press the **[ENT(🔊)]** key twice.
- ☐ Turn the transceiver off.

FM Squelch Threshold Adjustment

- ☐ Connect the Radio Tester to the antenna jack, then adjust the output level to -11 dBμ (with a standard FM modulation: ±3kHz deviation @ 1 kHz) at 163.275 MHz.
- ☐ Set the transceiver to 163.275 MHz and turn the transceiver off.
- ☐ Press and hold in the **PTT** switch, **MONITOR** switch, and **[ENT(🔊)]** key while turning the transceiver on to enter the alignment mode.
- ☐ Rotate the **DIAL** selector knob to select “**FMTH xx.**”
- ☐ Press the **[ENT(🔊)]** key twice.
- ☐ Turn the transceiver off.

AM Squelch Tight Adjustment

- ☐ Connect the Radio Tester to the antenna jack, then adjust the output level to +10 dBμ (with a standard AM modulation: 30 % AM modulation @ 1 kHz) at 128.000 MHz.
- ☐ Set the transceiver to 128.000 MHz and turn the transceiver off.
- ☐ Press and hold in the **PTT** switch, **MONITOR** switch, and **[ENT(🔊)]** key while turning the transceiver on to enter the alignment mode.
- ☐ Rotate the **DIAL** selector knob to select “**AMTI xxx.**”
- ☐ Press the **[ENT(🔊)]** key twice.
- ☐ Turn the transceiver off.

FM Squelch Tight Adjustment

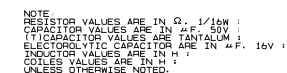
- ☐ Connect the Radio Tester to the antenna jack, then adjust the output level to +10 dBμ (with a standard FM modulation: ±3kHz deviation @ 1 kHz) at 163.275 MHz.
- ☐ Store Weather Channel “**WX-010**” into a “regular” memory channel, per the instructions in the box to the bottom.
- ☐ Recall the memory channel into which you just stored Weather Channel “**WX-010**” in the previous step, then turn the radio off.
- ☐ Press and hold in the **PTT** switch, **MONITOR** switch, and **[ENT(🔊)]** key while turning the transceiver on to enter the alignment mode.
- ☐ Rotate the **DIAL** selector knob to select “**FMTI xxx.**”
- ☐ Press the **[ENT(🔊)]** key twice.
- ☐ Turn the transceiver off.

How to Store Weather Channel “WX-010” into a Regular Memory Channel

- ☐ Press the **[ENT(🔊)]** key (repeatedly, if necessary) to select the Weather channel mode. The **VXA-220** will scan quickly through the Weather channels.
- ☐ Press the **MONITOR** switch momentarily to stop the scanning, then rotate the **DIAL** knob to select the channel “**WX-010.**”
- ☐ Press and hold in the **[MW(SPL-W)]** key for 2 second, then rotate the **DIAL** knob to select the memory channel number for storage.
- ☐ Now, press and hold in the **[MW(SPL-W)]** key for 2 second to save the entry and exit.

Alignment

Circuit Diagram

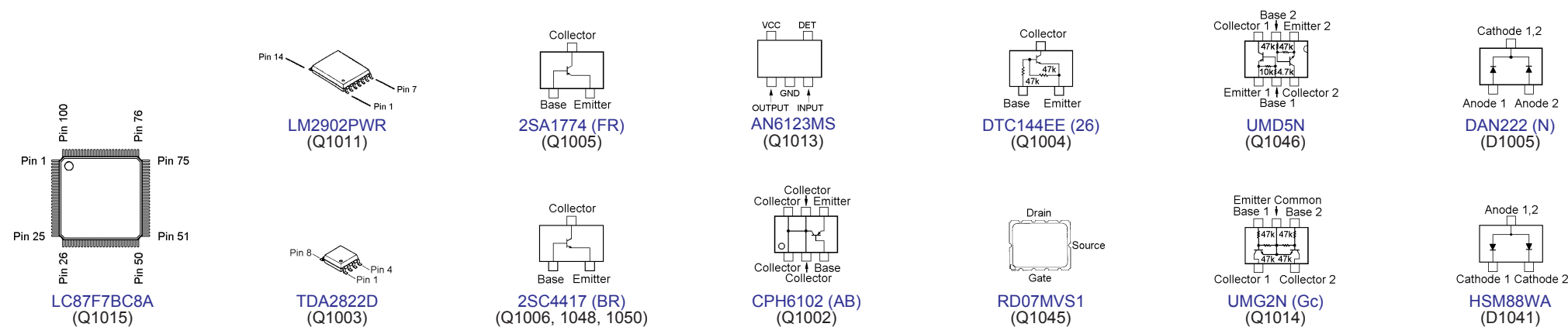
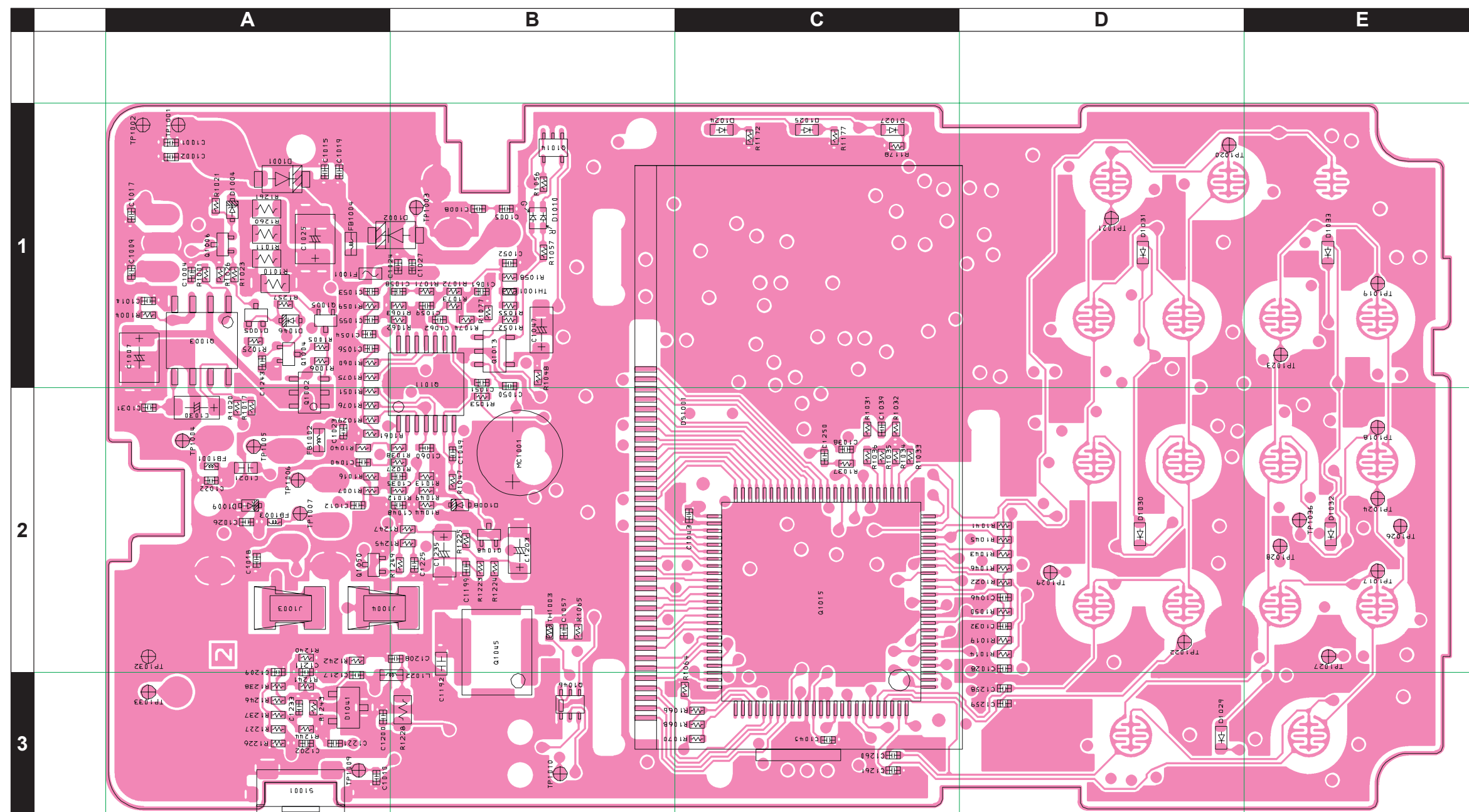


MAIN Unit

Note

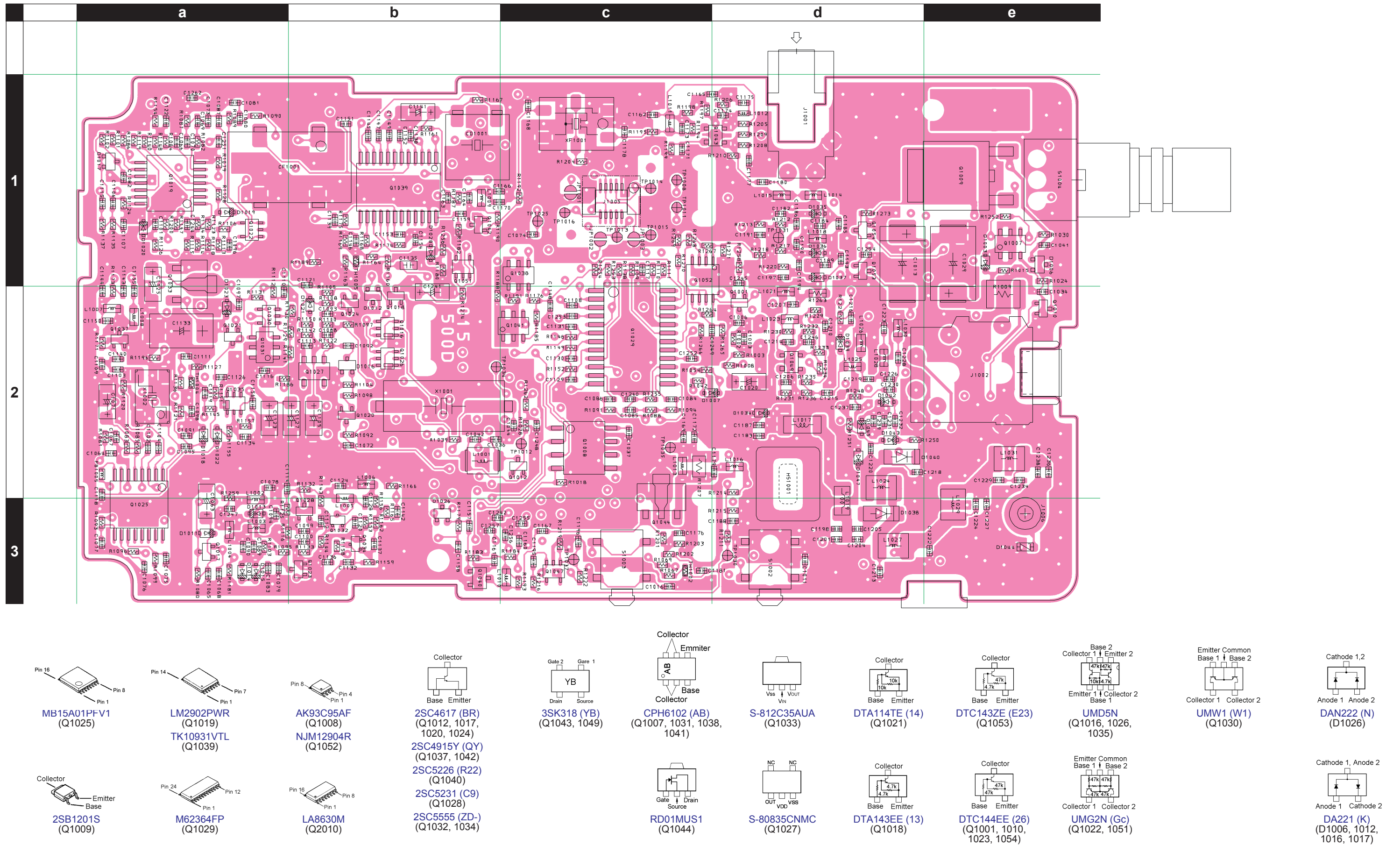
MAIN Unit

Parts Layout (Side A)



MAIN Unit

Parts Layout (Side B)



REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
PCB with Components						CB3729001 CB3729002	DST: VTX DST: EXP			
Printed Circuit Board						FR0155000			1-	
C 1001	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A1
C 1002	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A1
C 1003	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1004	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	A1
C 1005	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B1
C 1006	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1007	CHIP TA.CAP.	33uF	10V		TEMSVB21A336M-8R	K78100047		1-	A	A1
C 1008	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B1
C 1009	CHIP CAP.	0.0022uF	50V	B	GRM155B11H222KA01D	K22178813		1-	A	A1
C 1010	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A3
C 1011	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d3
C 1012	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	A2
C 1013	CHIP TA.CAP.	100uF	16V		TEMSVD1C107M-12R	K78120059		1-	B	d1
C 1014	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	A1
C 1015	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A1
C 1016	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c3
C 1017	CHIP CAP.	0.0022uF	50V	B	GRM155B11H222KA01D	K22178813		1-	A	A1
C 1018	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A2
C 1019	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A1
C 1020	CHIP TA.CAP.	22uF	6.3V		TEMSVA0J226M-8R	K78080047		1-	B	d2
C 1021	CHIP CAP.	0.1uF	16V	B	GRM188B11C104KA01D	K22124805		1-	A	A2
C 1022	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A2
C 1023	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	A2
C 1024	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B1
C 1025	CHIP TA.CAP.	33uF	10V		TEMSVB21A336M-8R	K78100047		1-	A	A1
C 1026	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	A	A2
C 1027	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B1
C 1028	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	D2
C 1029	CHIP TA.CAP.	100uF	16V		TEMSVD1C107M-12R	K78120059		1-	B	e1
C 1030	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	A	A2
C 1031	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A2
C 1032	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	D2
C 1034	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e2
C 1035	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	B2
C 1036	CHIP CAP.	22pF	50V	CH	GRM1552C1H220JZ01D	K22178220		1-	B	b2
C 1037	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1038	CHIP CAP.	0.022uF	16V	B	GRM36B223K16PT	K22128806		1-	A	C2
C 1039	CHIP CAP.	0.022uF	16V	B	GRM36B223K16PT	K22128806		1-	A	C2
C 1040	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A2
C 1041	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e1
C 1042	CHIP CAP.	1pF	50V	CK	GRM1554C1H1R0CZ01D	K22178202		1-	B	b2
C 1043	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	C2
C 1044	CHIP CAP.	22pF	50V	CH	GRM1552C1H220JZ01D	K22178220		1-	B	c2
C 1045	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	C3
C 1046	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	D2
C 1047	CHIP TA.CAP.	4.7uF	16V		TEMSVA1C475M-8R	K78120031		1-	A	B1
C 1048	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	B2
C 1049	CHIP CAP.	560pF	50V	B	GRM36B561K50PT	K22178806		1-	A	B2
C 1050	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	B1
C 1051	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B1
C 1052	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B1
C 1053	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A1
C 1054	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	A1
C 1055	CHIP CAP.	0.0022uF	50V	B	GRM155B11H222KA01D	K22178813		1-	A	A1
C 1056	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	A	A1
C 1057	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B2
C 1058	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	B1
C 1059	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B1
C 1060	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B2
C 1061	CHIP CAP.	0.0022uF	50V	B	GRM155B11H222KA01D	K22178813		1-	A	B1
C 1062	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	A	B1
C 1063	CHIP TA.CAP.	22uF	6.3V		TEMSVA0J226M-8R	K78080047		1-	B	a3
C 1065	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a3
C 1066	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a1
C 1067	CHIP CAP.	0.047uF	10V	B	GRM36B473K10PT	K22108801		1-	B	a2
C 1068	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a3
C 1069	CHIP CAP.	0.0015uF	50V	B	GRM155B11H152KA01D	K22178811		1-	B	a1
C 1070	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a1
C 1071	CHIP TA.CAP.	4.7uF	16V		TEMSVA1C475M-8R	K78120031		1-	B	a2
C 1072	CHIP CAP.	0.22uF	10V	B	GRM155B31A224KE18D	K22108808		1-	B	b2

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1073	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a1
C 1074	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c1
C 1078	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a2
C 1079	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	a3
C 1080	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a1
C 1081	CHIP CAP.	0.0033uF	50V	B	GRM155B11H332KA01D	K22178815		1-	B	a1
C 1082	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	a1
C 1083	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a3
C 1084	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1085	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1086	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1087	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	a1
C 1088	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b2
C 1089	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a3
C 1090	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a3
C 1091	CHIP CAP.	7pF	50V	CH	GRM1552C1H7R0DZ01D	K22178209		1-	B	a2
C 1092	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	b2
C 1093	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b2
C 1094	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	a3
C 1095	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	a2
C 1096	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	a1
C 1097	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a2
C 1098	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	a2
C 1099	CHIP CAP.	33pF	50V	CH	GRM1552C1H330JZ01D	K22178224		1-	B	b3
C 1100	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	b3
C 1101	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	a1
C 1102	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	a2
C 1103	CHIP CAP.	47pF	50V	CH	GRM1552C1H470JZ01D	K22178228		1-	B	a2
C 1104	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a2
C 1106	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	a1
C 1107	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	a1
C 1108	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1109	CHIP CAP.	47pF	50V	CH	GRM1552C1H470JZ01D	K22178228		1-	B	a2
C 1110	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	a2
C 1111	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a2
C 1112	CHIP CAP.	3pF	50V	CJ	GRP1553C1H3R0CZ01E	K22178205		1-	B	b3
C 1113	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b2
C 1114	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a2
C 1115	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	a1
C 1116	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a2
C 1118	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	a2
C 1119	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	a2
C 1120	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b3
C 1121	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	B	b1
C 1122	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	a1
C 1123	CHIP TA.CAP.	22uF	6.3V		TEMSVA0J226M-8R	K78080047		1-	B	a2
C 1124	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b2
C 1125	CHIP TA.CAP.	4.7uF	20V		TEMSVA1D475M-8R	K78130048		1-	B	a1
C 1126	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	a2
C 1128	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	B	b3
C 1132	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	B	b3
C 1133	CHIP TA.CAP.	150uF	4V		TEMSVC0G157M12R	K78060034		1-	B	a2
C 1134	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	a2
C 1135	CHIP CAP.	2.2uF	10V	B	GRM188B31A225KE18D	K22104805		1-	B	b1
C 1136	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b3
C 1137	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	B	b3
C 1138	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b1
C 1139	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	b1
C 1140	CHIP CAP.	27pF	50V	CH	GRM1552C1H270JZ01D	K22178222		1-	B	a2
C 1141	CHIP TA.CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-	B	b1
C 1142	CHIP CAP.	10pF	50V	CH	GRM1552C1H100JZ01D	K22178212		1-	B	b3
C 1144	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	a2
C 1145	CHIP CAP.	120pF	50V	CH	GRM1552C1H121JA01D	K22178238		1-	B	b1
C 1146	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	b1
C 1147	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	b1
C 1149	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	b1
C 1151	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	b1
C 1152	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	b1
C 1153	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	b1
C 1154	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	b1
C 1155	CHIP CAP.	2pF	50V	CK	GRM1554C1H2R0CZ01D	K22178204		1-	B	a2
C 1156	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	a2
C 1157	CHIP CAP.	12pF	50V	CH	GRM1552C1H120JZ01D	K22178214		1-	B	b3

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1158	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b3
C 1159	CHIP CAP.	39pF	50V	CH	GRM1552C1H390JZ01D	K22178226		1-	B	b1
C 1160	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c3
C 1161	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	b3
C 1162	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c1
C 1163	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b1
C 1164	CHIP CAP.	18pF	50V	CH	GRM1552C1H180JZ01D	K22178218		1-	B	b1
C 1165	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c1
C 1166	CHIP CAP.	0.0047uF	25V	B	GRM36B472K25PT	K22148830		1-	B	b1
C 1167	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	c3
C 1169	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c2
C 1170	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b1
C 1171	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c1
C 1172	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c2
C 1173	CHIP CAP.	22pF	50V	CH	GRM1552C1H220JZ01D	K22178220		1-	B	c1
C 1174	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d1
C 1175	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d1
C 1176	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c3
C 1179	CHIP CAP.	39pF	50V	CH	GRM1552C1H390JZ01D	K22178226		1-	B	d2
C 1180	CHIP CAP.	68pF	50V	CH	GRM1552C1H680JZ01D	K22178232		1-	B	d1
C 1181	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	c3
C 1182	CHIP CAP.	470pF	50V	B	GRM155B11H471KA01D	K22178805		1-	B	d1
C 1183	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d2
C 1185	CHIP CAP.	1.5pF	50V	CK	GRM1554C1H1R5CZ01D	K22178203		1-	B	d1
C 1186	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	B	d1
C 1187	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1188	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d3
C 1189	CHIP CAP.	1pF	50V	CK	GRM1554C1H1R0CZ01D	K22178202		1-	B	d1
C 1190	CHIP CAP.	470pF	50V	B	GRM155B11H471KA01D	K22178805		1-	B	d1
C 1191	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	d1
C 1193	CHIP CAP.	1.5pF	50V	CK	GRM1554C1H1R5CZ01D	K22178203		1-	B	d1
C 1194	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	B	d1
C 1195	CHIP CAP.	0.22uF	10V	B	GRM155B31A224KE18D	K22108808		1-	B	c3
C 1196	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c3
C 1197	CHIP CAP.	470pF	50V	B	GRM155B11H471KA01D	K22178805		1-	B	d1
C 1198	CHIP CAP.	47pF	50V	CH	GRM1552C1H470JZ01D	K22178228		1-	B	d3
C 1199	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B2
C 1200	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A3
C 1201	CHIP CAP.	12pF	50V	CH	GRM1552C1H120JZ01D	K22178214		1-	B	d3
C 1202	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A3
C 1203	CHIP TA.CAP.	3.3uF	16V		TEMSVA1C335M-8R	K78120021		1-	A	B2
C 1204	CHIP CAP.	47pF	50V	CH	GRM1552C1H470JZ01D	K22178228		1-	B	d3
C 1205	CHIP CAP.	8pF	50V	CH	GRM1552C1H8R0DZ01D	K22178210		1-	B	d3
C 1206	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1207	CHIP CAP.	33pF	50V	CH	GRM1552C1H330JZ01D	K22178224		1-	B	d2
C 1208	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	B2
C 1209	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	A	A2
C 1210	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1211	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	A2
C 1213	CHIP CAP.	39pF	50V	CH	GRM1552C1H390JZ01D	K22178226		1-	B	d3
C 1214	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1215	CHIP CAP.	100pF	50V	CH	GRM1552C1H101JD01D	K22178236		1-	B	d2
C 1216	CHIP CAP.	39pF	50V	CH	GRM1552C1H390JZ01D	K22178226		1-	B	d2
C 1217	CHIP CAP.	0.5pF	50V	CK	GRP1554C1HR50CZ01E	K22178201		1-	A	A3
C 1218	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	d2
C 1219	CHIP CAP.	150pF	50V	CH	GRM1552C1H151JA01D	K22178240		1-	B	d2
C 1220	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1221	CHIP CAP.	0.5pF	50V	CK	GRP1554C1HR50CZ01E	K22178201		1-	A	A3
C 1222	CHIP CAP.	33pF	50V	CH	GRM1552C1H330JZ01D	K22178224		1-	B	e3
C 1223	CHIP CAP.	220pF	25V	CH	GRM36CH221J25PT	K22148203		1-	B	d2
C 1224	CHIP CAP.	5pF	50V	CH	GRM1552C1H5R0CZ01D	K22178207		1-	B	e3
C 1225	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	A	B2
C 1226	CHIP CAP.	18pF	50V	CH	GRM1552C1H180JZ01D	K22178218		1-	B	d2
C 1227	CHIP CAP.	27pF	50V	CH	GRM1552C1H270JZ01D	K22178222		1-	B	e3
C 1228	CHIP CAP.	68pF	50V	CH	GRM1552C1H680JZ01D	K22178232		1-	B	d2
C 1229	CHIP CAP.	5pF	50V	CH	GRM1552C1H5R0CZ01D	K22178207		1-	B	e2
C 1230	CHIP CAP.	33pF	50V	CH	GRM1552C1H330JZ01D	K22178224		1-	B	d2
C 1231	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1232	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1233	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	A3
C 1234	CHIP CAP.	15pF	50V	CH	GRM1552C1H150JZ01D	K22178216		1-	B	e2
C 1235	CHIP TA.CAP.	3.3uF	16V		TEMSVA1C335M-8R	K78120021		1-	A	B2
C 1236	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	e2

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
C 1237	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1238	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	e2
C 1239	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	d2
C 1240	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c2
C 1241	CHIP TA.CAP.	22uF	6.3V		TEMSVA0J226M-8R	K78080047		1-	B	b2
C 1242	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	b3
C 1243	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	A	A1
C 1244	CHIP CAP.	330pF	50V	B	GRM155B11H331KA01D	K22178803		1-	B	a1
C 1245	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	d1
C 1246	CHIP CAP.	0.001uF	50V	B	GRM155B11H102KA01D	K22178809		1-	B	d2
C 1247	CHIP CAP.	0.047uF	10V	B	GRM36B473K10PT	K22108801		1-	B	a3
C 1249	CHIP CAP.	1uF	6.3V	B	GRM155B30J105KE18D	K22088803		1-	B	c2
C 1250	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	A	C2
C 1251	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	a1
C 1252	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1253	CHIP CAP.	0.1uF	10V	B	GRM36B104K10PT	K22108802		1-	B	c2
C 1255	CHIP CAP.	0.01uF	16V	B	GRM36B103K16PT	K22128804		1-	B	c3
CD1001	CERAMIC DISC				JTBM450CX7	H7901520		1-	B	b1
CF1001	CERAMIC FILTER				LTWC450F	H3900563		1-	B	a1
D 1001	DIODE				M1FM3-5063	G2071090		1-	A	A1
D 1002	DIODE				M1FM3-5063	G2071090		1-	A	B1
D 1003	DIODE				1SS400 TE61	G2070634		1-	B	e1
D 1004	DIODE				EDZ TE-61 5.1B	G2070998		1-	A	A1
D 1005	DIODE				DAN222 TL	G2070174		1-	A	A1
D 1006	DIODE				DA221 TL	G2070178		1-	B	e1
D 1007	DIODE				RB751S-40TE61	G2070850		1-	B	c2
D 1008	DIODE				HSC277TRF-E	G2070584		1-	A	B2
D 1009	DIODE				EDZ TE-61 5.1B	G2070998		1-	A	A2
D 1010	LED				CL-165HR/YG-D-T	G2070860		1-	A	B1
D 1011	DIODE				1SS400 TE61	G2070634		1-	B	a3
D 1012	DIODE				DA221 TL	G2070178		1-	B	b2
D 1013	DIODE				HVC350B-TRF-E	G2070596		1-	B	a3
D 1014	DIODE				HSC277TRF-E	G2070584		1-	B	a3
D 1015	DIODE				HSC277TRF-E	G2070584		1-	B	a3
D 1016	DIODE				DA221 TL	G2070178		1-	B	b2
D 1017	DIODE				DA221 TL	G2070178		1-	B	a1
D 1018	DIODE				1SV325(TPH3.F)	G2070848		1-	B	a2
D 1019	DIODE				1SS400 TE61	G2070634		1-	B	a1
D 1020	DIODE				1SS400 TE61	G2070634		1-	B	a1
D 1021	DIODE				1SS400 TE61	G2070634		1-	B	b2
D 1022	DIODE				1SS400 TE61	G2070634		1-	B	a2
D 1024	LED				SML-512DWT86	G2071116		1-	A	C1
D 1025	LED				SML-512DWT86	G2071116		1-	A	C1
D 1026	DIODE				DAN222 TL	G2070174		1-	B	b3
D 1027	LED				SML-512DWT86	G2071116		1-	A	C1
D 1028	DIODE				1SS400 TE61	G2070634		1-	B	b1
D 1029	LED				SML-512DWT86	G2071116		1-	A	D3
D 1030	LED				SML-512DWT86	G2071116		1-	A	D2
D 1031	LED				SML-512DWT86	G2071116		1-	A	D1
D 1032	LED				SML-512DWT86	G2071116		1-	A	E2
D 1033	LED				SML-512DWT86	G2071116		1-	A	E1
D 1034	DIODE				1SS400 TE61	G2070634		1-	B	d2
D 1035	DIODE				HVC350B-TRF-E	G2070596		1-	B	d1
D 1036	DIODE				HVC350B-TRF-E	G2070596		1-	B	d1
D 1037	DIODE				HVC350B-TRF-E	G2070596		1-	B	d1
D 1038	DIODE				RLS135 TE-11	G2070128		1-	B	d3
D 1039	DIODE				HVC350B-TRF-E	G2070596		1-	B	d2
D 1040	DIODE				RLS135 TE-11	G2070128		1-	B	d2
D 1041	DIODE				HSM88WA TR	G2070168		1-	A	A3
D 1042	DIODE				HSC277TRF-E	G2070584		1-	B	d2
D 1043	DIODE				HSC277TRF-E	G2070584		1-	B	d2
D 1044	SURGE ABSORBER				TVSF0603	Q9000847		1-	B	e3
D 1045	DIODE				HSC277TRF-E	G2070584		1-	B	d2
D 1046	DIODE				1SS400 TE61	G2070634		1-	A	A1
D 1047	DIODE				1SS400 TE61	G2070634		1-	B	d2
DS1001	LCD				AC072N	G6090178		1-	A	C2
F 1001	CHIP FUSE	2A			FSC16202ABTP	Q0000133		1-	A	A1
FB1001	FERRITE BEADS				BLM15BD102SN1D	L9190133		1-	A	A2
FB1002	CHIP COI				BLM18PG600SN1D	L1690601		1-	A	A2
FB1003	FERRITE BEADS				BLM15BD102SN1D	L9190133		1-	A	A2
FB1004	FERRITE BEADS				BLM18PG330SN1	L9190141		1-	A	A1
FB1005	FERRITE BEADS				BK1005LL680-T	L9190127		1-	B	a2
HS1001	HEATSINK PLATE				(FET)	RA0778800		1-	B	d2

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
J 1001	CONNECTOR				HEC3604-010110	P0091263		1-	B	d1
J 1002	CONNECTOR				HSJ1594-010015	P1091022		1-	B	e2
J 1003	CONTACT				OG-503040	S5000243		1-	A	A2
J 1004	CONTACT				OG-503040	S5000243		1-	A	A2
J 1005	CONNECTOR				AXK6F10345YP	P0091378		1-	B	c1
J 1006	SPRING CONNECTOR					R0152490		1-	B	e3
L 1001	M.RFC	27uH			FLC32T-270J	L1690220		1-	B	b2
L 1002	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	B	a3
L 1003	CHIP COIL	0.039uH			LQW18AN39NJ00D	L1691262		1-	B	a3
L 1004	CHIP COIL	0.033uH			LQW18AN33NJ00D	L1691261		1-	B	a3
L 1005	M.RFC	0.1uH			HK1608 R10J-T	L1690528		1-	B	b2
L 1006	M.RFC	0.1uH			HK1608 R10J-T	L1690528		1-	B	b2
L 1007	M.RFC	0.47uH			LK1608 R47K-T	L1690414		1-	B	a2
L 1008	M.RFC	3.3uH			LK1608 3R3K-T	L1690686		1-	B	a2
L 1009	M.RFC	0.47uH			LK1608 R47K-T	L1690414		1-	B	b1
L 1010	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	B	c3
L 1011	M.RFC	0.47uH			LK1608 R47K-T	L1690414		1-	B	c1
L 1012	M.RFC	0.039uH			HK1005 39NJ-T	L1691384		1-	B	d1
L 1013	M.RFC	0.082uH			HK1608 82NJ-T	L1690527		1-	B	c2
L 1015	CHIP COIL	0.082uH			LQW18AN82NJ00D	L1691266		1-	B	d1
L 1016	M.RFC	0.022uH			HK1608 22NJ-T	L1690520		1-	B	d2
L 1017	COIL				E2 0.28-1.0-11TR	L0022426		1-	B	d2
L 1018	CHIP COIL	0.082uH			LQW18AN82NJ00D	L1691266		1-	B	d1
L 1019	COIL				E2 0.3-0.9-7T-R	L0022371		1-	B	d3
L 1021	CHIP COIL	0.082uH			LQW18AN82NJ00D	L1691266		1-	B	d2
L 1022	M.RFC	0.47uH			LK1608 R47K-T	L1690414		1-	A	B3
L 1023	M.RFC	4.7uH			LK1608 4R7K-T	L1690688		1-	B	d2
L 1024	COIL				E2 0.3-1.7-8T-L	L0022376		1-	B	d2
L 1025	CHIP COIL	0.082uH			LQW18AN82NJ00D	L1691266		1-	B	d2
L 1026	CHIP COIL	0.068uH			LQW18AN68NJ00D	L1691265		1-	B	d2
L 1027	COIL				E2 0.3-1.7-8T-L	L0022376		1-	B	d3
L 1028	CHIP COIL	0.068uH			LQW18AN68NJ00D	L1691265		1-	B	d2
L 1029	COIL				E2 0.3-1.7-8T-L	L0022376		1-	B	e3
L 1030	CHIP COIL	0.068uH			LQW18AN68NJ00D	L1691265		1-	B	d2
L 1031	COIL				E2 0.3-1.7-8T-L	L0022376		1-	B	e2
MC1001	MICROPHONE ELEMENT				CZ034HP363	M3290044		1-	A	B2
Q 1001	TRANSISTOR				DTC144EE TL	G3070075		1-	B	d2
Q 1002	TRANSISTOR				CPH6102-TL	G3070223		1-	A	A2
Q 1003	IC				TDA2822D013TR	G1091542		1-	A	A1
Q 1004	TRANSISTOR				DTC144EE TL	G3070075		1-	A	A1
Q 1005	TRANSISTOR				2SA1774 TL R	G3117748R		1-	A	A1
Q 1006	TRANSISTOR				2SC4617 TL R	G3346178R		1-	A	A1
Q 1007	TRANSISTOR				CPH6102-TL	G3070223		1-	B	e1
Q 1008	IC				AK93C95AF E-1	G1092838		1-	B	c2
Q 1009	TRANSISTOR				2SB1201S-TL	G3070195		1-	B	e1
Q 1010	TRANSISTOR				DTC144EE TL	G3070075		1-	B	e2
Q 1011	IC				LM2902PWR	G1094009		1-	A	B1
Q 1012	TRANSISTOR				2SC4617 TL R	G3346178R		1-	B	c2
Q 1013	IC				AN6123MS-TXL	G1093114		1-	A	B1
Q 1014	TRANSISTOR				UMG2N TR	G3070088		1-	A	B1
Q 1015	IC				LC87F7BC8A-F56G2-E	✖		1-	A	C2
Q 1016	TRANSISTOR				UMD5N TR	G3070343		1-	B	b2
Q 1017	TRANSISTOR				2SC4617 TL R	G3346178R		1-	B	a3
Q 1018	TRANSISTOR				DTA143EE TL	G3070252		1-	B	b2
Q 1019	IC				LM2902PWR	G1094009		1-	B	a1
Q 1020	TRANSISTOR				2SC4617 TL R	G3346178R		1-	B	b2
Q 1021	TRANSISTOR				DTA114TE TL	G3070264		1-	B	a2
Q 1022	TRANSISTOR				UMG2N TR	G3070088		1-	B	a1
Q 1023	TRANSISTOR				DTC144EE TL	G3070075		1-	B	b3
Q 1024	TRANSISTOR				2SC4617 TL R	G3346178R		1-	B	b2
Q 1025	IC				MB15A01PFV1-G-BND-EFE1	G1092545		1-	B	a3
Q 1026	TRANSISTOR				UMD5N TR	G3070343		1-	B	b2
Q 1027	IC				S-80835CNMC-B8U-T2-G	G1093606		1-	B	b2
Q 1028	TRANSISTOR				2SC5231C8-TL	G3352318H		1-	B	b3
Q 1029	IC				M62364FP 600D	G1093033		1-	B	c2
Q 1030	TRANSISTOR				UMW1 TR	G3070078		1-	B	a2
Q 1031	TRANSISTOR				CPH6102-TL	G3070223		1-	B	a2
Q 1032	TRANSISTOR				2SC5555ZD-TR	G3355557		1-	B	b3
Q 1033	IC				S-812C35AUA-C2P-T2G	G1093672		1-	B	a1
Q 1034	TRANSISTOR				2SC5555ZD-TR	G3355557		1-	B	b3
Q 1035	TRANSISTOR				UMD5N TR	G3070343		1-	B	a2
Q 1037	TRANSISTOR				2SC4915-O(TE85L.F)	G3349158O		1-	B	a2
Q 1038	TRANSISTOR				CPH6202-TL	G3070265		1-	B	c1

✖: Please contact Vertex Standard

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
Q 1039	IC				TK10931VTL-G	G1093013		1-	B	b1
Q 1040	TRANSISTOR				2SC5226-5-TL	G3352268E		1-	B	b3
Q 1041	TRANSISTOR				CPH6202-TL	G3070265		1-	B	c2
Q 1042	TRANSISTOR				2SC4915-O(TE85L.F)	G3349158O		1-	B	b1
Q 1043	FET				3SK318 TL	G4803188		1-	B	d1
Q 1044	FET				RD01MUS1(TAPE)	G3070321		1-	B	c2
Q 1045	FET				RD07MVS1A-T12	G3070352		1-	A	B2
Q 1046	TRANSISTOR				UMD5N TR	G3070343		1-	A	B3
Q 1047	IC				LMV321IDCKR	G1093969		1-	B	c3
Q 1048	TRANSISTOR				2SC4617 TL R	G3346178R		1-	A	B2
Q 1049	FET				3SK318 TL	G4803188		1-	B	d2
Q 1050	TRANSISTOR				2SC4617 TL R	G3346178R		1-	A	A2
Q 1051	TRANSISTOR				UMG2N TR	G3070088		1-	B	b1
Q 1052	IC				NJM12904R-TE1	G1093337		1-	B	c1
Q 1053	TRANSISTOR				DTC143ZE TL	G3070102		1-	B	d1
Q 1054	TRANSISTOR				DTC144EE TL	G3070075		1-	B	d1
R 1001	CHIP RES.	4.7	1/16W	5%	RMC1/16S 4R7JTH	J24189066		1-	A	A1
R 1002	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	d2
R 1003	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	d2
R 1004	CHIP RES.	4.7	1/16W	5%	RMC1/16S 4R7JTH	J24189066		1-	A	A1
R 1005	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A1
R 1006	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	A1
R 1007	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	A2
R 1008	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	d2
R 1009	CHIP RES.	150	1/4W	5%	RMC1/4 151JATP	J24245151		1-	B	e2
R 1010	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	A	A1
R 1011	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	A	A1
R 1012	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	B2
R 1013	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B2
R 1014	CHIP RES.	330k	1/16W	0.5%	MCR01MZPD3303	J24189330		1-	A	D2
R 1015	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	e1
R 1016	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	A2
R 1017	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	A2
R 1018	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c2
R 1019	CHIP RES.	82k	1/16W	0.5%	MCR01MZPD8202	J24189385		1-	A	D2
R 1020	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	A	A2
R 1021	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	A	A1
R 1022	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	D2
R 1023	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	A	A1
R 1024	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	e1
R 1025	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	A1
R 1026	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	A1
R 1027	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	B2
R 1028	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	c2
R 1029	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	A2
R 1030	CHIP RES.	18	1/16W	5%	RMC1/16S 180JTH	J24189004		1-	B	e1
R 1031	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	A	C2
R 1032	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	A	C2
R 1033	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	A	C2
R 1034	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	C2
R 1035	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	C2
R 1036	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C2
R 1037	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	A	C2
R 1038	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	B2
R 1039	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	B	b2
R 1040	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	A2
R 1041	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	D2
R 1042	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c2
R 1043	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	D2
R 1044	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	A	B2
R 1045	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	D2
R 1046	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	D2
R 1047	CHIP RES.	120k	1/16W	5%	RMC1/16S 124JTH	J24189050		1-	A	B2
R 1048	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	A	B1
R 1049	CHIP RES.	2.2M	1/16W	5%	RMC1/16S 225JTH	J24189065		1-	A	B2
R 1050	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	A	D2
R 1051	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	A2
R 1052	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	A	B1
R 1053	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B2
R 1054	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	c2
R 1055	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B1
R 1056	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	A	B1
R 1057	CHIP RES.	330	1/16W	5%	RMC1/16S 331JTH	J24189019		1-	A	B1

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1058	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B1
R 1059	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	A1
R 1060	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	A1
R 1061	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	A2
R 1062	CHIP RES.	390k	1/16W	5%	RMC1/16S 394JTH	J24189056		1-	A	B1
R 1063	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B1
R 1064	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C3
R 1065	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	A	B2
R 1066	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C3
R 1067	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	c3
R 1068	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	C3
R 1069	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	c3
R 1070	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	A	C3
R 1071	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B1
R 1072	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B1
R 1073	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	B1
R 1074	CHIP RES.	120k	1/16W	5%	RMC1/16S 124JTH	J24189050		1-	A	B1
R 1075	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	A	A1
R 1076	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	A	A2
R 1077	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	B1
R 1079	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a1
R 1080	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a3
R 1081	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	a2
R 1082	CHIP RES.	470k	1/16W	5%	RMC1/16S 474JTH	J24189057		1-	B	a1
R 1083	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	a2
R 1084	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 1085	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	a2
R 1086	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a1
R 1087	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	a1
R 1088	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	c2
R 1089	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a1
R 1090	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	a1
R 1091	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c2
R 1092	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	b2
R 1093	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	a3
R 1094	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c2
R 1095	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	a3
R 1096	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	a3
R 1097	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	b2
R 1098	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	b2
R 1099	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	a3
R 1100	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	b2
R 1101	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a1
R 1102	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	B	a1
R 1103	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	a3
R 1104	CHIP RES.	180k	1/16W	5%	RMC1/16S 184JTH	J24189052		1-	B	b2
R 1105	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	b2
R 1106	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	a1
R 1108	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	b2
R 1109	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c1
R 1110	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c1
R 1111	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c1
R 1112	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a2
R 1113	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	a1
R 1114	CHIP RES.	27k	1/16W	5%	RMC1/16S 273JTH	J24189042		1-	B	a1
R 1115	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a1
R 1116	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a3
R 1118	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	a1
R 1119	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 1120	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	a2
R 1121	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a2
R 1122	CHIP RES.	270k	1/16W	5%	RMC1/16S 274JTH	J24189054		1-	B	b2
R 1123	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	a1
R 1124	CHIP RES.	1M	1/16W	5%	RMC1/16S 105JTH	J24189061		1-	B	a1
R 1125	CHIP RES.	1.8k	1/16W	5%	RMC1/16S 182JTH	J24189028		1-	B	a3
R 1126	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 1128	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a1
R 1129	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	B	b2
R 1130	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b2
R 1131	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	a2
R 1132	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	B	b2
R 1133	CHIP RES.	680	1/16W	5%	RMC1/16S 681JTH	J24189023		1-	B	b3
R 1134	CHIP RES.	150k	1/16W	5%	RMC1/16S 154JTH	J24189051		1-	B	a1

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1135	CHIP RES.	1.2k	1/16W	5%	RMC1/16S 122JTH	J24189026		1-	B	a1
R 1136	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	a2
R 1137	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	B	a1
R 1138	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c1
R 1140	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 1141	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b2
R 1142	CHIP RES.	330k	1/16W	5%	RMC1/16S 334JTH	J24189055		1-	B	b2
R 1143	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b3
R 1144	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b3
R 1145	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	a2
R 1146	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c2
R 1147	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a1
R 1148	CHIP RES.	56k	1/16W	5%	RMC1/16S 563JTH	J24189046		1-	B	a1
R 1149	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c2
R 1150	CHIP RES.	82k	1/16W	5%	RMC1/16S 823JTH	J24189048		1-	B	b2
R 1151	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	a2
R 1152	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c2
R 1153	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	B	b3
R 1154	CHIP RES.	39k	1/16W	5%	RMC1/16S 393JTH	J24189044		1-	B	a1
R 1155	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	a2
R 1156	CHIP RES.	18	1/16W	5%	RMC1/16S 180JTH	J24189004		1-	B	b3
R 1157	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	a2
R 1158	CHIP RES.	680	1/16W	5%	RMC1/16S 681JTH	J24189023		1-	B	b3
R 1159	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	b3
R 1160	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b1
R 1161	CHIP RES.	22	1/16W	5%	RMC1/16S 220JTH	J24189005		1-	B	b1
R 1162	CHIP RES.	18	1/16W	5%	RMC1/16S 180JTH	J24189004		1-	B	b3
R 1163	CHIP RES.	18k	1/16W	5%	RMC1/16S 183JTH	J24189040		1-	B	b1
R 1164	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	b1
R 1165	CHIP RES.	18	1/16W	5%	RMC1/16S 180JTH	J24189004		1-	B	b3
R 1166	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	b2
R 1167	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	b1
R 1168	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b1
R 1169	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	b1
R 1171	CHIP RES.	1.5M	1/16W	5%	RMC1/16S 155JTH	J24189063		1-	B	a2
R 1172	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	A	C1
R 1173	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a2
R 1174	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b1
R 1175	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	b1
R 1176	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	c2
R 1177	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	A	C1
R 1178	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	A	C1
R 1179	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	b3
R 1180	CHIP RES.	12k	1/16W	5%	RMC1/16S 123JTH	J24189038		1-	B	b1
R 1181	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a3
R 1183	CHIP RES.	27k	1/16W	5%	RMC1/16S 273JTH	J24189042		1-	B	b3
R 1184	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c3
R 1185	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	c2
R 1186	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a2
R 1187	CHIP RES.	470	1/16W	5%	RMC1/16S 471JTH	J24189021		1-	B	b1
R 1188	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	B	b2
R 1189	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	b1
R 1190	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	b1
R 1191	CHIP RES.	68	1/16W	5%	RMC1/16S 680JTH	J24189011		1-	B	c2
R 1192	CHIP RES.	560	1/16W	5%	RMC1/16S 561JTH	J24189022		1-	B	c1
R 1193	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c3
R 1194	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c1
R 1195	CHIP RES.	220	1/16W	5%	RMC1/16S 221JTH	J24189017		1-	B	c1
R 1196	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a2
R 1197	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	c1
R 1198	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c1
R 1199	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	c1
R 1200	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	a1
R 1201	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	c3
R 1202	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	c3
R 1203	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c3
R 1204	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	c1
R 1205	CHIP RES.	100k	1/16W	0.5%	MCR01MZPD1003	J24189386		1-	B	d1
R 1206	CHIP RES.	120k	1/16W	0.5%	MCR01MZPD1203	J24189387		1-	B	d1
R 1207	CHIP RES.	47	1/10W	5%	RMC1/10T 470J	J24205470		1-	B	c2
R 1209	CHIP RES.	100k	1/16W	0.5%	MCR01MZPD1003	J24189386		1-	B	d1
R 1210	CHIP RES.	100k	1/16W	0.5%	MCR01MZPD1003	J24189386		1-	B	d1
R 1211	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	d3

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
R 1212	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d1
R 1214	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	d2
R 1215	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	d3
R 1216	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	c3
R 1217	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d1
R 1218	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	d1
R 1219	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c3
R 1220	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d1
R 1221	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	d2
R 1222	CHIP RES.	15k	1/16W	5%	RMC1/16S 153JTH	J24189039		1-	B	c3
R 1223	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	B2
R 1224	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	A	B2
R 1225	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	B2
R 1226	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	A	A3
R 1227	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	A3
R 1228	CHIP RES.	220	1/10W	5%	RMC1/10T 221J	J24205221		1-	A	B3
R 1229	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	d2
R 1230	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	d2
R 1231	CHIP RES.	100	1/16W	5%	RMC1/16S 101JTH	J24189013		1-	B	d2
R 1232	CHIP RES.	120k	1/16W	0.5%	MCR01MZPD1203	J24189387		1-	B	d2
R 1233	CHIP RES.	100k	1/16W	0.5%	MCR01MZPD1003	J24189386		1-	B	d2
R 1234	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d2
R 1235	CHIP RES.	180k	1/16W	0.5%	MCR01MZPD1803	J24189388		1-	B	d2
R 1236	CHIP RES.	100k	1/16W	0.5%	MCR01MZPD1003	J24189386		1-	B	d2
R 1237	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	A3
R 1238	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	A3
R 1240	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	A2
R 1241	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	A3
R 1242	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	A2
R 1243	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	A	A3
R 1244	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	A3
R 1245	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	B2
R 1246	CHIP RES.	33k	1/16W	5%	RMC1/16S 333JTH	J24189043		1-	A	A3
R 1247	CHIP RES.	68k	1/16W	5%	RMC1/16S 683JTH	J24189047		1-	A	B2
R 1248	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	d2
R 1249	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	A	B2
R 1250	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	d2
R 1251	CHIP RES.	2.2k	1/16W	5%	RMC1/16S 222JTH	J24189029		1-	B	d2
R 1252	CHIP RES.	1k	1/16W	5%	RMC1/16S 102JTH	J24189025		1-	B	e1
R 1253	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	c1
R 1254	CHIP RES.	3.3k	1/16W	5%	RMC1/16S 332JTH	J24189031		1-	B	c1
R 1255	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	c2
R 1256	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	b1
R 1257	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	A	A1
R 1258	CHIP RES.	22k	1/16W	5%	RMC1/16S 223JTH	J24189041		1-	B	d1
R 1259	CHIP RES.	6.8k	1/16W	5%	RMC1/16S 682JTH	J24189035		1-	B	a2
R 1260	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	A	A1
R 1261	CHIP RES.	4.7	1/10W	5%	RMC1/10T 4R7J	J24205479		1-	A	A1
R 1262	CHIP RES.	0	1/16W	5%	RMC1/16S JPTH	J24189070		1-	B	c2
R 1263	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-	B	d2
R 1264	CHIP RES.	390k	1/16W	5%	RMC1/16S 394JTH	J24189056		1-	B	c2
R 1265	CHIP RES.	220k	1/16W	5%	RMC1/16S 224JTH	J24189053		1-	B	d2
R 1266	CHIP RES.	10k	1/16W	5%	RMC1/16S 103JTH	J24189037		1-	B	c2
R 1267	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c1
R 1268	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c1
R 1269	CHIP RES.	100k	1/16W	5%	RMC1/16S 104JTH	J24189049		1-	B	c1
R 1270	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	c1
R 1273	CHIP RES.	4.7k	1/16W	5%	RMC1/16S 472JTH	J24189033		1-	B	d1
R 1274	CHIP RES.	47k	1/16W	5%	RMC1/16S 473JTH	J24189045		1-	B	b2
R 1275	CHIP RES.	0	1/16W	5%	RMC1/16 000JATP	J24185000		1-		
S 1001	TACT SWITCH				EVQP4403M	N5090132		1-	A	A3
S 1002	TACT SWITCH				PT-035-C2-T 08-035-160	N5090099A		1-	B	d3
S 1003	TACT SWITCH				PT-035-C2-T 08-035-160	N5090099A		1-	B	c3
S 1004	ROTARY ENCODER				TP70N17E20 RY-8228	Q9000866		1-	B	e1
TH1001	THERMISTOR				ERTJ0ER103J	G9090119		1-	A	B1
TH1002	THERMISTOR				ERTJ0EV473J	G9090120		1-	B	c3
TH1003	THERMISTOR				ERTJ0EV473J	G9090120		1-	A	B2
TH1005	THERMISTOR				ERTJ0EV473J	G9090120		1-	B	b1
X 1001	XTAL U3B	7.3728MHz			7.3728MHZ	H0103280		1-	B	b2
X 1002	XTAL XVNBAL	11.7MHz			11.7MHZ	H0103311		1-	B	a2
XF1001	XTAL FILTER				SF-2118 47213A	H1102397		1-	B	c1
	REFLECTOR SHEET					RA0809200		1-		
	INTER CONNECTOR					RA0769400		1-		

MAIN Unit

Parts List

REF	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	VXSTD P/N	VERS.	LOT	SIDE	LAY ADR
	LIGHT GUIDE				(LCD)	RA0778100		1-		
	LCD HOLDER					RA077820A		1-		
	TERMINAL HOLDER					RA010340B		1-		
	TERMINAL PLATE				(+IS)	RA0723400		1-		
	PORON SHEET					RA0844200		1-		



Copyright 2006
VERTEX STANDARD CO., LTD.
All rights reserved

No portion of this manual
may be reproduced without
the permission of
VERTEX STANDARD CO., LTD.