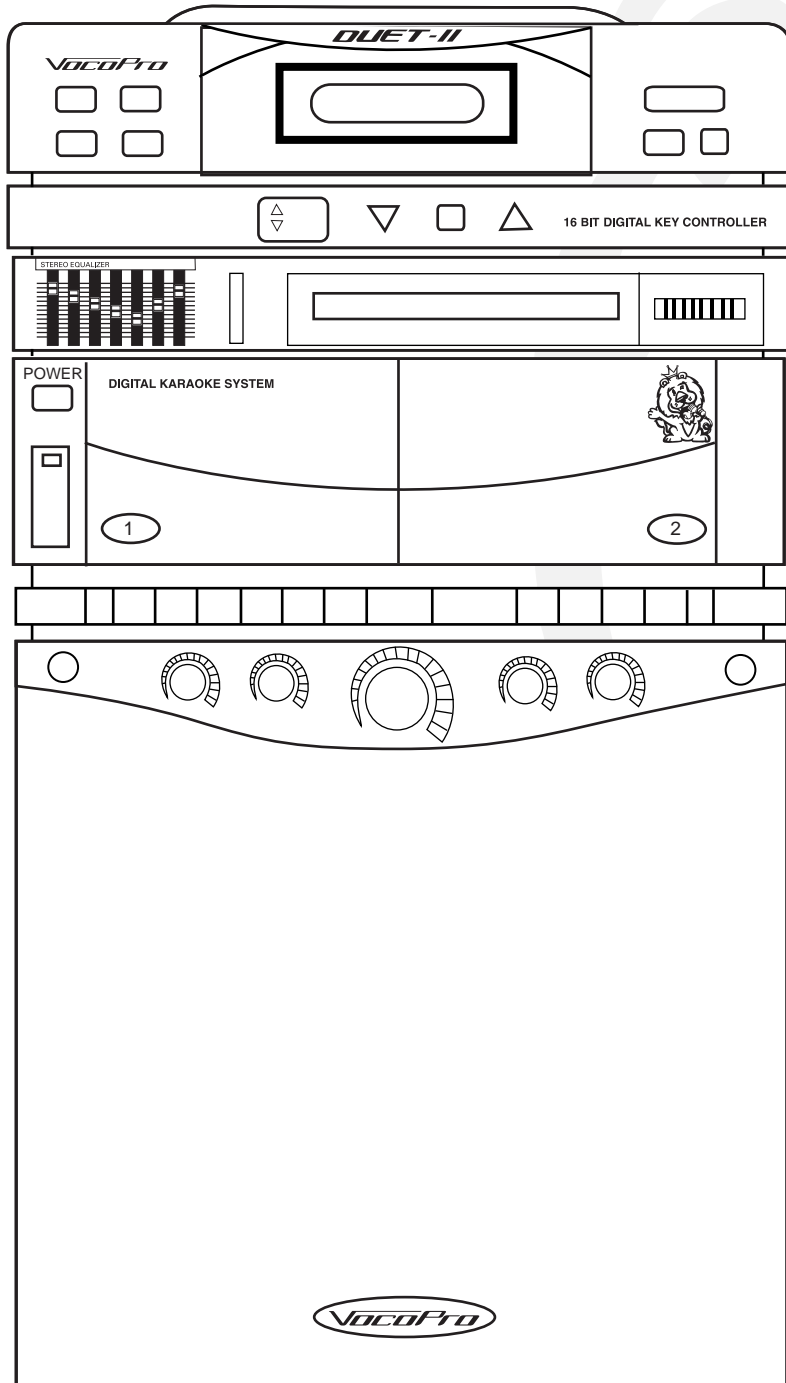


# VocoPro

ULTIMATE CHOICE OF KARAOKE ENTERTAINMENT



o w n e r ' s m a n u a l

## DUET-II

Digital Key Control CD/CDG Dual Cassette Karaoke System

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Digital Key Control CD/CDG Dual Cassette Karaoke System

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## Contents


Cautions and Warnings .....	1-2
Welcome .....	3
Listening for a Lifetime .....	4
Before Getting Started .....	5
Features and Specifications .....	6
Front Panel Descriptions .....	7-8
Rear/Top Panel Descriptions .....	9
CD Player Operations .....	10
Preparations .....	10
Getting Connected .....	11
Audio Controls .....	12
Cassette Deck Operations .....	13
Cassette Tape/Deck Maintenance .....	14
Troubleshooting .....	15

# Safety Instructions



## CAUTION

### RISK OF SHOCK



CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Only refer servicing to qualified service personnel.

## Explanation of Graphical Symbols



The lightning flash & arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of danger.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and servicing instructions.

## WARNING

To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.

**1. Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.

**2. Retain Instructions** - The safety and operating instructions should be retained for future reference.

**3. Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.

**4. Follow Instructions** - All operating and use instructions should be followed.

**5. Attachments** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.

**6. Water and Moisture** - Do not use this unit near water. For example, near a bathtub or in a wet basement and the like.

**7. Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.

**7 A.** An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause an overturn.



**8. Ventilation** - The appliance should be situated so its location does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation slots.

**9. Heat** - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

**10. Power Sources** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

**11. Grounding or Polarization** - Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

**12. Power-Cord Protection** - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

**13. Cleaning** - Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

**14. Power lines** - An outdoor antenna should be located away from power lines.

**15. Nonuse Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

**16. Object and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

**17. Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:

- A. The power supply cord or plug has been damaged; or
- B. Objects have fallen into the appliance; or
- C. The appliance has been exposed to rain; or
- D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
- E. The appliance has been dropped, or the enclosure damaged.

**18. Servicing** - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

## NOTE:

To CATV system installer's (U.S.A.): This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected as close to the point of cable entry as practical.

# CAUTION: Read this before operating your unit

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## CAUTION

The apparatus is not disconnected from the AC power source so long as it is connected to the wall outlet, even if the apparatus itself is turned off. To fully insure that the apparatus is indeed fully void of residual power, leave unit disconnected from the AC outlet for at least fifteen seconds.

1. To ensure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.
2. Install your unit in a cool, dry, clean place – away from windows, heat sources, and too much vibration, dust, moisture or cold. Avoid sources of hum (transformers, motors). To prevent fire or electrical shock, do not expose to rain and water.
3. Do not operate the unit upside-down.
4. Never open the cabinet. If a foreign object drops into the set, contact your dealer.
5. Place the unit in a location with adequate air circulation. Do not interfere with its proper ventilation; this will cause the internal temperature to rise and may result in a failure.
6. Do not use force on switches, knobs or cords. When moving the unit, first turn the unit off. Then gently disconnect the power plug and the cords connecting to other equipment. Never pull the cord itself.
7. Do not attempt to clean the unit with chemical solvents: this might damage the finish. Use a clean, dry cloth.
8. Be sure to read the “Troubleshooting” section on common operating errors before concluding that your unit is faulty.
9. This unit consumes a fair amount of power even when the power switch is turned off. We recommend that you unplug the power cord from the wall outlet if the unit is not going to be used for a long time. This will save electricity and help prevent fire hazards. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
10. To prevent lightning damage, pull out the power cord and remove the antenna cable during an electrical storm.
11. The general digital signals may interfere with other equipment such as tuners or receivers. Move the system farther away from such equipment if interference is observed.
12. When positioning your equipment, especially regarding speakers or other accessories, avoid positioning them over areas where they can fall and cause injury to yourself and others.

## NOTE:

Please check the copyright laws in your country before recording from records, compact discs, radio, etc. Recording of copyrighted material may infringe copyright laws.



## Welcome....

Thank you for purchasing the **DUET-II** from VocoPro, your ultimate choice in Karaoke entertainment! With years of experience in the music entertainment business,

VocoPro is a leading manufacturer of Karaoke equipment, and has been providing patrons of bars, churches, schools, clubs and individual consumers the opportunity to sound like a star with full-scale club models, in-home systems and mobile units. All our products offer solid performance and sound reliability, and to further strengthen our commitment to customer satisfaction, we have customer service and technical support professionals ready to assist you with your needs. We have provided some contact information for you below.

**VocoPro**

1728 Curtiss Court  
La Verne, CA 91750

**Toll Free: 800-678-5348**

TEL: 909-593-8893

FAX: 909-593-8890

**VocoPro Company Email Directory**

**Customer Service & General Information**

info@vocopro.com

**Tech Support**

techsupport@vocopro.com

**Remember Our Website**

Be sure to visit the VocoPro website [www.vocopro.com](http://www.vocopro.com) for the latest information on new products, packages and promo's. And while you're there don't forget to check out our Club VocoPro for Karaoke news and events, chat rooms, club directories and even a Service directory!

We look forward to hearing you sound like a PRO, with VocoPro, your ultimate choice in Karaoke entertainment.

**FOR YOUR RECORDS**

Please record the model number and serial number below, for easy reference, in case of loss or theft. These numbers are located on the rear panel of the unit. Space is also provided for other relevant information

**Model Number** \_\_\_\_\_

**Serial Number** \_\_\_\_\_

**Date of Purchase** \_\_\_\_\_

**Place of Purchase** \_\_\_\_\_

# Listening For A Lifetime

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Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. VocoPro and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to a higher volume of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

## To establish a safe level

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

## Once you have established a comfortable sound level

- Set the dial and leave it there.
- Pay attention to the different levels in various recordings.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

### Some common decibel ranges:

Level	Example
<b>30</b>	Quiet library, Soft whispers
<b>40</b>	Living room, Refrigerator, Bedroom away from traffic
<b>50</b>	Light traffic, Normal Conversation
<b>60</b>	Air Conditioner at 20 ft., Sewing machine
<b>70</b>	Vacuum cleaner, Hair dryer, Noisy Restaurant
<b>80</b>	Average city traffic, Garbage disposals, Alarm clock at 2 ft.

### The following noises can be dangerous under constant exposure:

Level	Example
<b>90</b>	Subway, Motorcycle, Truck traffic, Lawn Mower
<b>100</b>	Garbage truck, Chainsaw, Pneumatics drill
<b>120</b>	Rock band concert in front of speakers
<b>140</b>	Gunshot blast, Jet plane
<b>180</b>	Rocket launching pad

## Before Getting Started: Things to Consider

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It is very important to read the following instructions prior to starting any installation procedures. Doing so will ensure a correct installation and may save you some time as well.

### Protect Against Power Surges

- Connect all external components before you plug any of their power cords into the wall outlet.
- Turn off the DUET-II before you connect or disconnect any cables.
- Make sure all cables are properly grounded.

### Protect Components from Overheating

- Don't block ventilation holes. Arrange any components so that air can circulate freely.
- Don't stack components.
- If you place the DUET-II on a stand, make sure you allow adequate ventilation.

### Position Cables Properly to Avoid Audio Interference

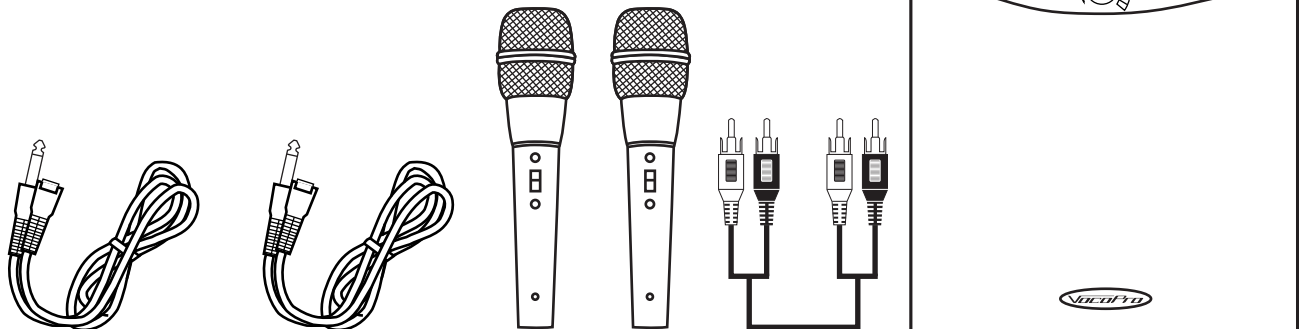
- Insert each cable firmly into the designated jack.
- If you place components above the DUET-II, route all cables down the side of the back of the DUET-II instead of straight down the middle of the back of the DUET-II.

### Important Stand and Base Safety Information

Choose the location for your DUET-II carefully. If the DUET-II is placed on a stand or base, ensure that it is of adequate size and strength to prevent it from being accidentally tipped over, pushed off, or pulled off. This could cause personal injury and/or damage to the DUET-II.

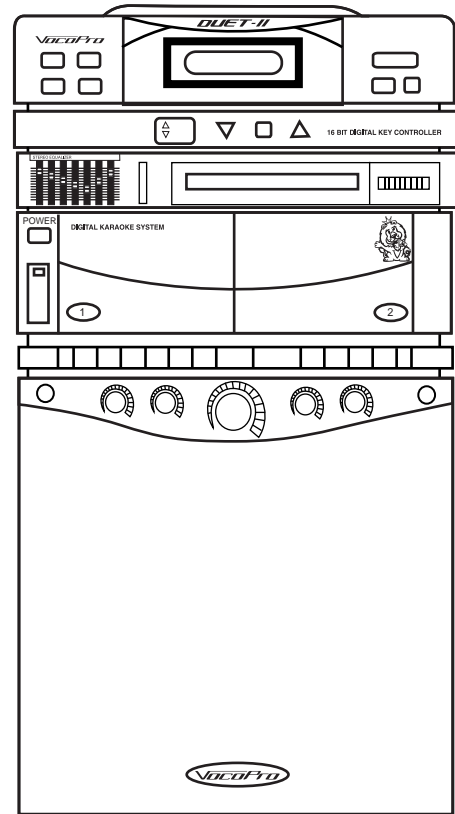
You should have received the following items:

ITEMS:	QUANTITY:
DUET-II	(1)
SEMI-PRO Microphones	(2)
Microphone Cables	(2)
RCA Patch cable	(1)



# DUET-II Features

- 40W + 40W Maximum Power Output
- Top Loading Digital Shock Resistant CD/CDG Player
- Dual Cassette Decks to Play and Record Live Performance  
Mixes from CD or Cassette
- AM/FM Stereo Tuner
- 12-Step Digital Key Controller (half-steps)
- Professional Digital Echo
- Two Microphone Inputs with Individual Volume Controls
- 5-Band Graphic Equalizer
- Stereo 4-Speaker System
- PAL/NTSC Switchable
- +/- Pitch Control for Customizing CD+G and Tape Playback  
Speeds, Allowing You to Perform at Your Own Pace



# DUET-II Specifications

## Radio Section

Frequency Range AM: ..... 530 – 1710 KHz  
 Frequency Range FM: ..... 87.5 – 108 MHz

## Audio Section

Output Power (THD 10%): ..... 40W+40W MAX  
 ..... 20W+20W RMS  
 Output impedance: ..... 8 Ohms  
 Graphic Equalizer controls: ..... ±10dB

## Cassette Section

Frequency response: ..... 125 Hz – 8 KHz  
 Wow and Flutter: ..... 0.35%  
 Tape speed: ..... 4.75 cm/sec  
 AC Input Power..... AC 120 - 240V 60Hz

## CD Player Section

Frequency response: 20Hz – 20KHz (± 3dB)  
 Signal to Noise Ratio: 65 dB  
 Wow and Flutter: ..... Immeasurable  
 D/A Conversion: ..... 16-Bit linear  
 Number of programs: 20 Step Random Access programming  
 Sampling system: ..... 2 Times Over sampling

**Digital key control section:** 12 steps in half – step increment.

**Speakers Section:** Stereo two way four speaker system with two 4" woofers and two 1/4" tweeters.

# Front Panel Descriptions

1. **POWER** - Press to turn the system ON, press again and release to turn the system OFF.

## 2. CASSETTE CONTROLS.

**RECORD** - Press to RECORD. Refer to "Recording Cassettes".

**Play** - Press to PLAY tape. Refer to "Playing Cassettes".

**REW/REV** - Press to REWIND tape.

**FF/CUE** - Press to rapidly ADVANCE tape.

**STOP/EJECT** - Press to STOP cassette. (Cancels any depressed cassette button except PAUSE). Press again to OPEN cassette door.

**PAUSE** - Press to temporarily PAUSE the tape movement in PLAY or RECORD MODE. Press and release to start the tape moving again.

3. **GRAPHIC EQUALIZER** - Adjust these controls to provide the sound quality that you prefer. Refer to "Audio Controls".

4. **FUNCTION SELECTIONS** - Select the INPUT source by sliding knob to choose the desired function.

**AM** - for AM reception.

**FM** - for FM reception.

**TAPE** - for cassette operation.

**CD/CDG** - for CD operation.

5. **TUNING** - Turn the knob to choose the AM or FM station you want.

6. **MIC 1** - Connect MICROPHONE for singing.

7. **CD/TAPE PITCH** - Adjust the TEMPO of music played from the CD and TAPE decks. TEMPO can be adjusted 10% faster/slower. (Turn clockwise from middle position to increase pitch and counter-clockwise to decrease pitch.)

8. **MIC 1-2 VOL** - Adjust the VOLUME levels for MIC 1-2 channels separately. Outer control for MIC-1 and inner control for MIC-2. (Turn clockwise to increase volume control and counter-clockwise to decrease.)

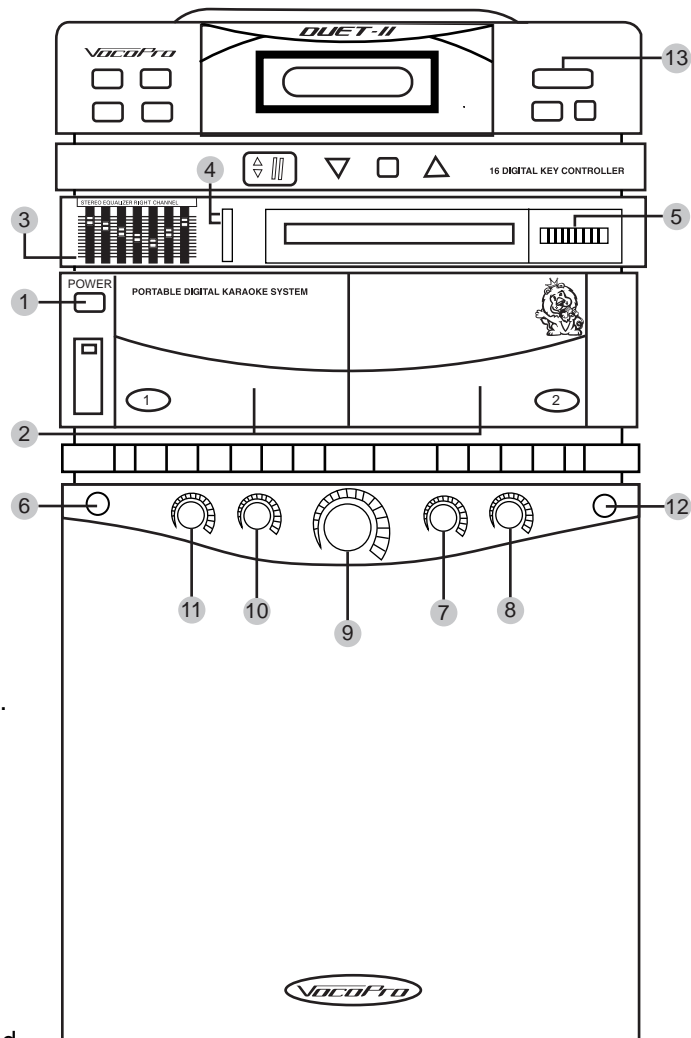
9. **VOLUME** - Adjust the control for desired VOLUME level. (Turn clockwise to increase and counter-clockwise to decrease.)

10. **ECHO** - Adjust the control for desired ECHO volume level. (Turn clockwise to increase and counter-clockwise to decrease.)

11. **BALANCE** - Adjust the control for desired MUSIC and song balance level. (Turn clockwise to increase and counter-clockwise to decrease.)

12. **MIC 2** - Connect the MICROPHONE for singing.

13. **PLAY/PAUSE** - Press and release the PLAY/PAUSE button to start a CD playing from track number 1. The LCD track indicator will display "1" and the elapsed time indicating that track number 1 is playing. Press PLAY/PAUSE button to stop for a moment during play, the LCD display "PAUSE". To resume playing the CD, press the PLAY/PAUSE button again.



# Front Panel Descriptions

**14. STOP** – To stop playing the CD, press the STOP button once. The LCD will display total number of tracks and playing time of the CD

**15. F.F. ►►** - To advance the CD to the beginning of the next track, press and release this button. Continue to hold down this button to fast forward at a fast rate. **F.F. ►►** - To FAST FORWARD the CD while playing, press and hold this button. Sound can be heard at a reduced level in this mode.  
NOTE: Avoid track searching during a CD+G track, as this will cause the lyrics to scramble and become unreadable

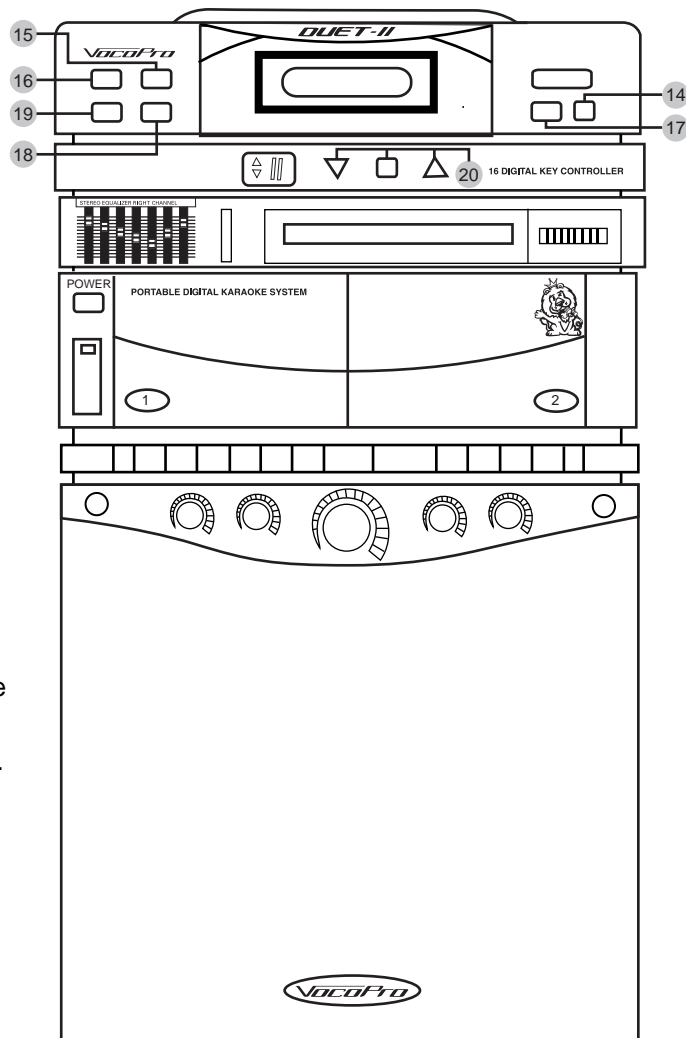
**16. REW ◀◀** - To reverse the CD to the beginning of the last track, press and release the button, the player will skip back to the beginning of the track. **REW ◀◀** - To quickly REVIEW the CD in the reverse direction while playing, press and hold this button. Sound can be heard at a reduced level in this mode.  
NOTE: Avoid track searching during a CD+G track, as this will cause the lyrics to scramble and become unreadable

**17. REPEAT** – Press the REPEAT button once and the word "REPEAT ONE" will appear on the CD display. The CD player will repeat the track currently playing until the STOP button is pressed. Press the REPEAT button twice and the word "REPEAT ALL" will light on the display. The CD player will repeat playing the disc continuously until the STOP button is pressed.

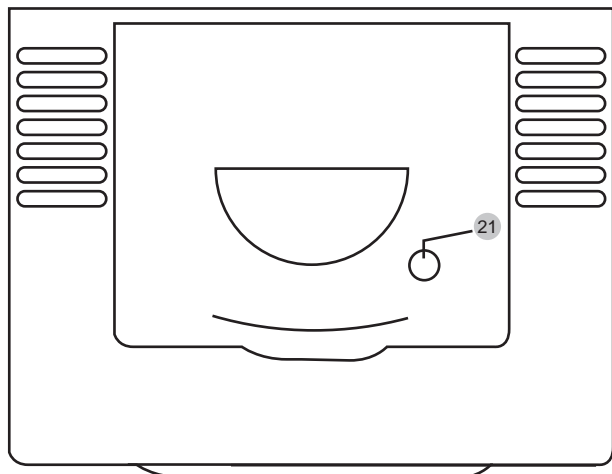
**18. PROGRAM** – Use this button to PROGRAM the CD player to play back songs in a preselected order. Programming should be done in the STOP mode. (the LCD will display "P 01"), the press **SKIP ►►** or **SKIP ◀◀** button to select desired track and push PROGRAM button again to confirm programming. Repeat same steps for as many tracks up to a total of 20.

**19. DISPLAY** – Press DISPLAY button to display the track number that is playing, elapsed time, number of remaining tracks, and duration of disc that is being played.

**20. DIGITAL KEY CONTROLLER** – Raises or lowers the key of the music in half-step increments without changing the tempo. Operate by pushing the desired UP or DOWN indicator button while disk is playing, until the desired key is achieved. **NOTE** : Key Controller is inoperable when AM/FM is selected.



# Rear / Top Panel Descriptions



**21. OPEN/CLOSE** – Press the OPEN/CLOSE point to open the CD compartment. Close CD compartment by pressing this button again.

**22. FM ANT TERMINAL** – Connect the FM ANTENNA wire for optimal reception.

**23. VIDEO OUTPUT** – Connect jack to VIDEO IN of TV (See Figure 1).

**NOTE:** Some TV's may not have a VIDEO input jack in this case, use a RF modulator (sold separately) to connect to your TV.

**24. AC CORD** – Plug AC power cord into compatible AC wall outlet.

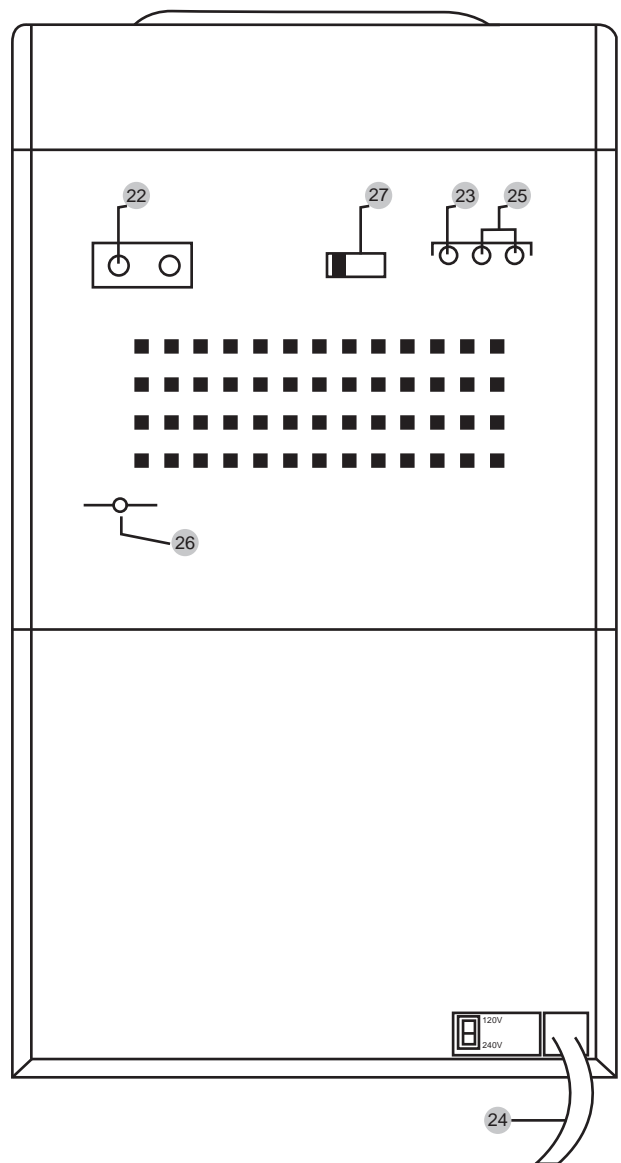
**WARNING: PLUGGING THIS UNIT INTO AN AC OUTLET WITH A POWER RATING DIFFERENT FROM THAT SELECTED ON THE VOLTAGE SELECTOR CAN SEVERELY DAMAGE THE UNIT, AND MAY VOID YOUR PRODUCT WARRANTY. (See # 28 Voltage Selector)**

**25. AUDIO OUTPUT** – Connect this jack to the AUX input or CD input of your home audio system. The Duet-II can be listened to through your own stereo system.

**26. DC 12V INPUT JACK** – Use this jack only when AC power is not available. Be sure to use a UL or CE approved car adapter or a UL or CE approval AC/DC adapter.

**27. NTSC/PAL** – NTSC/PAL system select switch. Switch to NTSC for U.S. TV systems. Switch to PAL for European TV systems.

**28. VOLTAGE SELECTOR**– Selects between 120V-240V power settings. **Ensure that the Voltage Selector is set to match the power rating of your AC outlet before powering on the unit. Select 120V for North American-based power settings and 240V for European-based power settings.**



# CD Player Operations

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## NOTES:

- Do not touch the disc tray while player is operating.
  - Never place anything except a compact disc in the disc tray. Foreign objects can damage the unit.
  - Do not apply excessive force to the disc tray.
  - Discs must be placed in the disc tray one at a time.
1. Press the POWER switch to ON.
  2. Slide the FUNCTION SELECTOR button to CD.
  3. Press the OPEN/CLOSE recess (on CD door) to open the CD compartment.
  4. Place a disc in the compartment with the printed side facing up.
  5. Press the OPEN/CLOSE recess (for CD door), again to close the CD compartment tray. The LCD will display total number of tracks and playing time of the CD.
  6. Press the PLAY/PAUSE button to initiate CD playback from track number 1. The LCD will display "1" and elapsed time of the track.
  7. Adjust the VOLUME, BALANCE and EQ controls for the best sound.
  8. Press STOP at any time to end playback.
  9. Press the OPEN/CLOSE recess (on CD door) to open the compartment and retrieve disc.

## Temporarily stopping play

Press PLAY/PAUSE in the course of play to PAUSE playback. Press once again to RESUME playback.

## FF./REW

Press the SKIP button to select your desired track to play.

Press the PLAY/PAUSE button to start playing. While pressing and holding the FF./REW buttons, the system will search at high speed in the forward or reverse directions. When the button is released, normal play will continue. (Avoid track searching during a CD+G track, as this will cause the lyrics to scramble and become unreadable.) Press FF./REW buttons once to skip to either the next or previous track.

## Repeat play

To repeat the track currently playing, press the REPEAT button ONCE. To repeat all of the tracks, press the REPEAT button twice and the word "REPEAT ALL" will appear in the LCD window.

# Preparations

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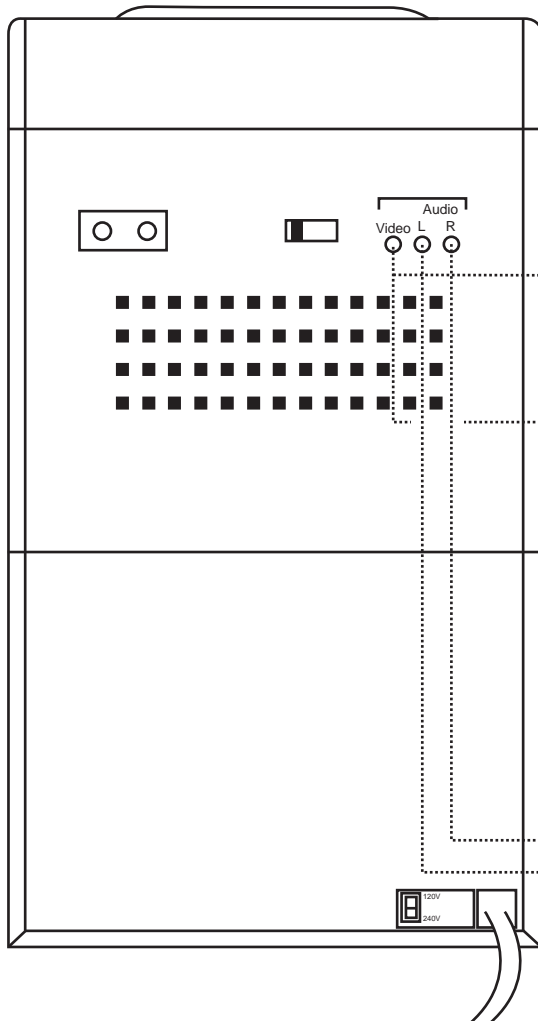
- This unit is designed to play CD's bearing the COMPACT DISC identification logo. If any CDs do not bear the COMPACT DISC logo, they may not play properly.
- Fingerprints and dust should be carefully wiped off with a soft cloth. Wipe in a straight motion from the center to the outside of the disc.
- Never use chemicals such as record cleaning sprays, anti-static sprays or fluids, benzene or thinner to clean compact disc. These chemicals will permanently damage the plastic surface of the disc.
- Always place the compact disc on the disc tray with the label facing upward. Compact discs can be played on only one side.
- To remove a disc from its storage case, press down the center of the case and lift the disc out holding it carefully by the edges.
- Discs should be returned to their cases after use to protect them from dust and scratches.
- To prevent warping the disc, do not expose it to direct sunlight, high humidity, or high temperatures for extended periods of time.
- Do not apply paper or write anything on either side of the disc. Sharp writing instruments, or the inks used in some felt-pens, may damage the surfaces of the disc.

# Getting Connected

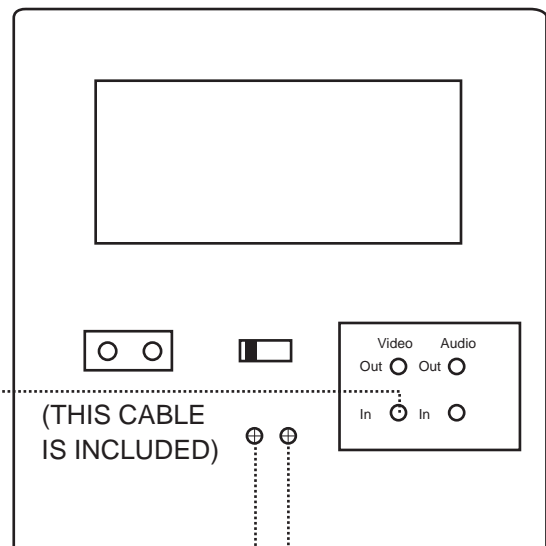
## Connecting Audio and Video to External Devices: (see figure below)

1. Connect yellow plug from the included A/V cable to the VIDEO OUTPUT jack on the back of your Duet-II karaoke system.
2. Connect the other yellow plug of the A/V cable to the VIDEO OUTPUT jack on your television.
3. On your television's remote control (or on the front panel of our TV), press the TV/Video button.
4. Set the FUNCTION SELECTOR switch to CD on the DUET-II.
5. Turn the POWER of the system to on.
6. Insert a CDG karaoke disc into the player.  
**NOTE:** Some TV may not have a VIDEO input jack. In this case, Use a RF, modulator (sold separately) to connect to your TV.
7. Connect the red and white plugs of the A/V cable to the AUDIO OUTPUT jacks on the back of your Duet-II.
8. Connect the other red and white plugs of the A/V cable to the AUDIO INPUT jacks on your external sound system (optional).
9. Press play and the music should begin with the lyrics on-screen.

REAR VIEW OF DUET-II



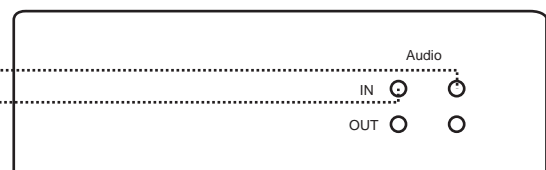
REAR VIEW OF TV



OR

RF MODULATOR

REAR VIEW OF AUDIO SYSTEM



# Audio Controls

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## Graphic EQ Settings

After choosing the program source you want; adjust the GRAPHIC EQUALIZER controls as follows:

1. Adjust the VOLUME control for the desired listening level.
2. Set the GRAPHIC EQUALIZER controls to match the sound characteristics of your listening room. With each of the five controls of the GRAPHIC EQUALIZER, it is possible to control a narrow, distinct section of the audio band by up to +/-10dB. The frequency bands controlled by the slide controls have been chosen to give you the best possible control action within the audio spectrum.

**100 Hz** -Is very useful for enhancing low bass notes (as in organ music, kick drum, etc.) or making corrections when a deficiency in bass exists. Or you can use this to reduce rumble, acoustic feed back, and other low frequency aberrations.

**300 Hz** -Will allow you to vary the upper bass frequencies. An over-accentuated, upper bass will give a muddy, boom quality to music while the system shy of upper bass will sound hollow and thin.

**1 kHz** - Lies in range of frequencies where the ear is most sensitive to tonal balance. This is often called "presence", since adjusting this control brings the vocalist out to the front or back into ensemble.

**3 kHz**-Speaker designers often boost output in this range to effect a quality of presence to the music. Too much energy on the other hand, sounds overbearingly harsh and stringent.

**10 kHz** -Adjustment affects the brilliance of music with too much boosts in high frequencies (can be an unpleasant and piercing quality). You may use this to add a little more dimension to the high-shelf sound or use it as a very high frequency noise filter.

## Using Your Radio

AM or FM - Press the POWER button ON. Slide the FUNCTION SELECTOR to AM or FM. Rotate the tuning knob to the desired listening station.

## Cassette Handling

### Operating Tips

1. High quality tapes will give you better recordings and more listening pleasure. Tapes of the following types are suggested: Low noise, high density, high output or extended range with a play or record time up to 90 minutes.

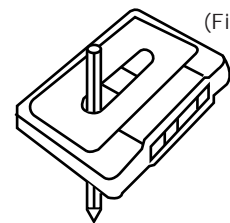


**NOTE:** Cassette with a time of 120 minutes (C120) are not recommended because they contain thinner and longer tapes which are more likely to jam or tangle in the player/recorder.

2. For best results in playing or recording, it is necessary for the head to be clean. Refer to cleaning instructions. Keep cassettes away from excessive heat or cold.

3. If the tape is loose in the cassette, tighten it before putting it in. To do so, put a pencil into the hub and turn it to the right (Shown in Fig. 1)

4. A leader tape begins each side of a cassette. You cannot play or record on this part of the tape. You have to let the tape run for about five seconds so this leader tape is past the heads.



(Fig. 1)



**NOTE:** When you start the tape, be sure the tape take-up reel is moving. If the reel is not moving stop the machine at once; if you don't the tape could become tangled in the player/recorder. If this does happen, carefully remove the cassette and correct it as shown above.

# Cassette Deck Operation

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Follow the steps below for any tape deck operations:

1. Press the POWER switch ON.
2. Slide the FUNCTION SELECTOR to TAPE.
3. Press the STOP/EJECT button, the cassette door will open.
4. Put the cassette into the holder, open end down, and gently close the cassette door.
5. Press the PLAY button. The system will play the cassette till the end of that side is reached. To play the other side, hit the STOP/EJECT button and remove the cassette, turn it around and put it back in, close the door and press the PLAY button.

## Extended play

Extended listening is possible by using the two cassette decks as follows:

1. Press the POWER switch ON.
2. Slide the FUNCTION knob to TAPE.
3. Load a cassette into both decks.
4. First, press the PLAY button on the Deck 2, and then press the PAUSE and PLAY buttons on Deck 1 (in that order). Deck 2 will play its cassette first and stop at its end, at that time, Deck 1 will automatically begin playback.

## Recording Cassettes

1. Press the POWER button ON.
2. Select your master source signal to be recorded by sliding the FUNCTION SELECTOR control to AM, FM CD or TAPE. You will (through internal connections) record the source you are listening to. The recording level is not affected by the master volume control.
3. Press the STOP/EJECT button on the Deck 1; the cassette door will open.
4. Put the cassette into the holder open the end down and gently close the cassette door.
5. With a partially recorded tape, use the FAST FORWARD and REWIND controls to find your starting point.
6. Remember to advance past the leader when using a new tape.
7. Press the PAUSE button.
8. Press the RECORD button firmly.
9. When you are ready to start your recording, press and release the PAUSE button.
10. The system will record the entire cassette and shut off unless you desire to stop it by pressing the STOP/EJECT or PAUSE button.
11. Press the PAUSE button to stop the tape for a time while you change your recording selection, cue a record or retune a radio station. Press and then release PAUSE when you are ready to continue recording.
12. While you are recording, you may monitor the program by listening to the speakers. Adjust the VOLUME control for your best listening level. It will not affect the record level.

## Sync Dubbing

1. Press the POWER button ON.
2. Press the STOP/EJECT button; the cassette door will open.
3. Load a blank tape into Deck 1. Gently close the cassette door. First press PAUSE, and then press RECORD.
4. Load the tape to be copied into Deck 2. Gently close the cassette door.
5. Press the PLAY button on Deck 2. The PAUSE button on Deck 1 will release and recording will begin.

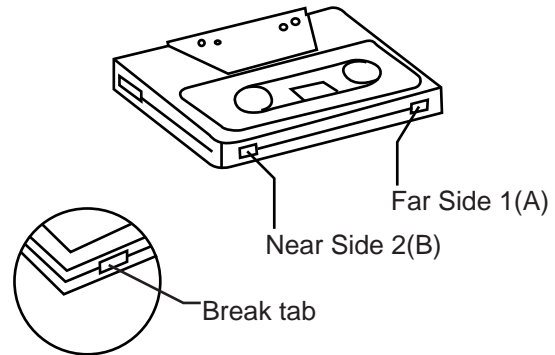
## Adjusting CD/Tape Playback Speeds

If you desire to either slow down or speed up playback of a track on a CD or cassette, you simply need to adjust the CD/TAPE PITCH control. To slow down playback, turn the control counter-clockwise towards SLOW. To speed up playback, turn the control clockwise towards FAST.

# Cassette Tape / Deck Maintenance

## Erase Protection

Every cassette can be protected against accidental erasing of pre-recorded material. On the back of a cassette are two breakout tabs. These must be in place before the RECORD button will depress. If these tabs have been removed, such as on pre-recorded cassette you buy, the RECORD button will not depress. To record using a cassette which has the breakout tabs removed, place a piece of tape over the exposed holes, this will allow the interlocking device to engage



Once you have made a recording, you can prevent an accidental erasing by breaking out and removing the tabs. With side 1(A) facing you, erasing is prevented by breaking out the tab on the right, and side 2(B) by the tab on the left (see drawing).

## Cleaning



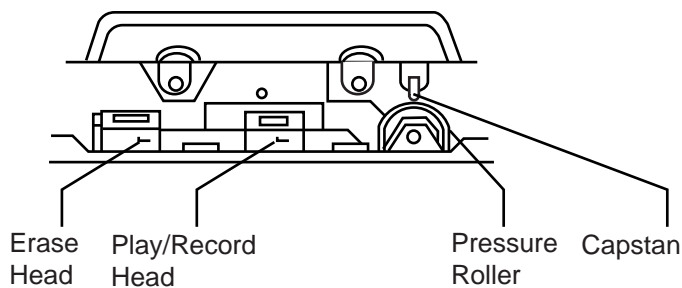
To prevent fire or shock hazard, disconnect your stereo system from the AC power plug when cleaning.

- The finish on our stereo may be cleaned with a dust cloth and cared for as other furniture. Be careful when cleaning and wiping the plastic parts. Mild cleaners, such as dishwashing detergent, with dampened (not wet) cloth may be used on the front panel.

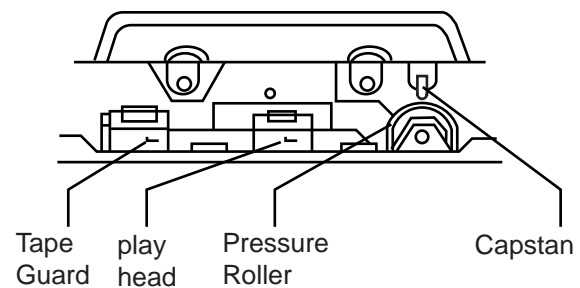
## Tape Deck Cleaning

- To get the best sound from your tapes, the pressure roller, capstan, play/record and erase heads should be cleaned regularly. The build up of iron oxide particles is often severe with inferior tapes and will reduce the performance of the system. After every 100 hours of use, or more often if playback has become poor, clean the play/record and erase heads, capstan and pressure roller. To clean them, wipe dry with a soft, clean cloth.

Cassette Record/Playback



Cassette Playback



NOTE: Never use any metal objects on or near the tape head. Do not allow any cleaning material to fall into tape assembly. Do not use carbon tetrachloride as a cleaning agent..

# Troubleshooting

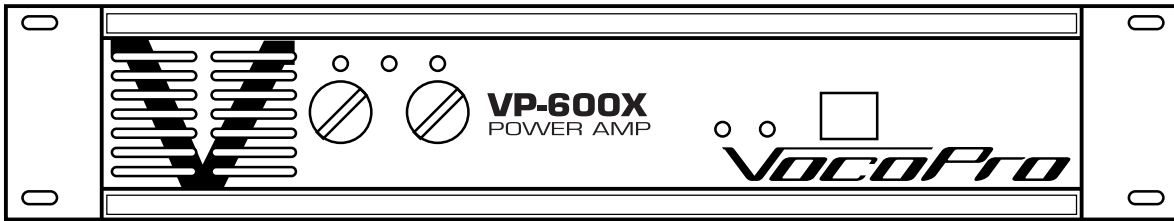
If your stereo system fails to operate, carefully read these instructions. Many problem situations are caused by improper use. Listed below are the most common ones.

PROBLEMS	SOLUTIONS	
Power switched on, but no sound and no light on the POWER LED.	Poor AC power plug connection to wall outlet.	Connect AC correctly. Old wall-outlets sometimes cause power loss Plug must fit snugly in outlet.
The POWER LED system is on but no sound	VOLUME control is at "0 "position.	Adjust the VOLUME control to a proper sound level.
Poor FM reception	Antenna not placed for best reception.	Move antenna wire around to obtain best reception.
System turned on and PLAY pressed, but no sound from TAPE.	FUNCTION SELECTOR set improperly for tape playback.	Slide FUNCTION SELECTOR to TAPE.
	PAUSE button pressed in.	Press and release the PAUSE button.
	Unrecorded tape inserted.	Insert recorded tape.
Poor playback sound.	Dirty heads.	Clean heads. See TAPE DECK Cleaning.
	Cassette tape is badly stretched.	Replace the cassette.
	Heads have become magnetized.	Degauss the play and record head with a tape head demagnetizer every 100 hours of use.
RECORD button cannot be pressed in.	Cassette without erase protection tabs is inserted.	Try another cassette, or place a piece of tape over the breakout tab holes.
Poor recording.	Dirty heads.	Clean heads. See Tape Deck Cleaning.
	Heads have become magnetized.	Degauss the play and record head with a tape head demagnetizer every 100 hours of use.
	Microphone defective Microphone cable broken or intermittent.	Replace microphone or microphone cord.
Tape speed is erratic.	Dirty capstan and/or pressure roller.	Clean the capstan and pressure roller.
Cannot copy from DECK 2 to DECK 1.	Unrecorded tape inserted into DECK 2.	Insert recorded tape.
	PLAY/RECORD function selector is in wrong position.	Set to the proper position.
CD Player does not work properly.	Disc is inserted upside down.	Insert disc correctly.
	Disc is dirty.	Wide clean with soft cloth.
	Disc is scratched.	Use a new disc.
	Disc seriously warped.	Use a new disc.
	A nonstandard disc is inserted.	Use only brand name disc.
	Moisture has formed inside the CD deck.	Wait about 20 to 30 minutes to let it dry.
NO song lyrics Appear on screen.	Video cable is not connected properly to the TV.	Connect the video cable to the Duet-II VIDEO OUT and to the TV VIDEO IN.
	Source selector on TV is not set to VIDEO.	Using your TV Remote to select VIDEO or AUX input.
	TV does not have video line input.	Connect from VIDEO OUT of the Duet-II to the AUX IN of your VCR of Connect to an RF Modulator and then to the TV cable input.

# Recommended VocoPro Gear

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## VP-600X



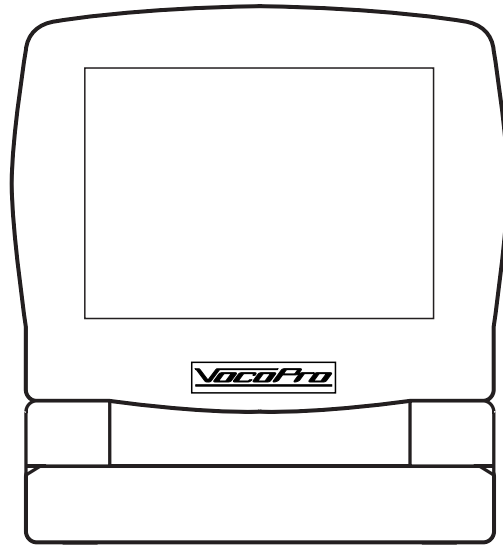
### 2 Space 600W Professional Power Amplifier

- 300W + 300W RMS
- 600W + 600W Max
  - THD: 0.05%
- Frequency Response: 20HZ-20KHZ Signal to Noise
  - 1/4" or XLR Inputs
- Input Ratio: Less than 100DB
  - Input Sensitivity: 1.23V
- Dimension: W x D x H (19" x 13" x 1.5")
  - Shipping Weight: 47 Lbs

## Recommended VocoPro Gear

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### LCD-V5



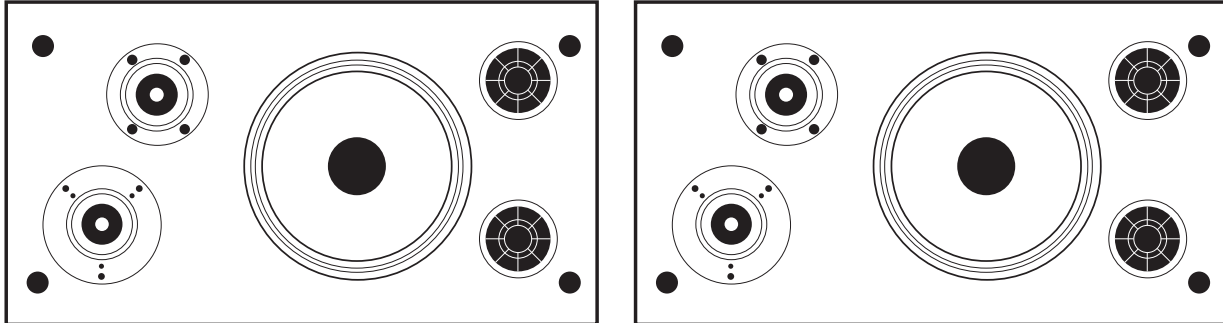
#### 5" TFT LCD Color Monitor

- TFT LCD Color Monitor
  - Audio/Video Input
  - 3 Watts Stereo Speakers
- Headphone Output With Volume Control
  - Color/Brightness Adjustment
- Reversible Screen Control For Both Table Top Or Auto Roof Mounting
  - 12v Dc Adapter Included

# Recommended VocoPro Gear

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## SV-420



### Professional 8" 3 Way Vocal Speakers

- 3 Way 8" Karaoke Vocal Speakers (Sold in Pair)
- Designed for Karaoke Studio and Singer Monitor applications
  - Power Rating: 180 Watts Peak / 90 Watts RMS
    - Metal Grill
    - Impedance: 8 OHM
    - Sensitivity: 92 dB
  - Frequency Response: 20HZ-20KHZ
- Dimensions H x W x D: 19" x 12" x 11.25" (each)
  - Shipping Weight: 50 Lbs. (pair)
- (Dimensional Weight: 60 Lbs. Due to Oversize)