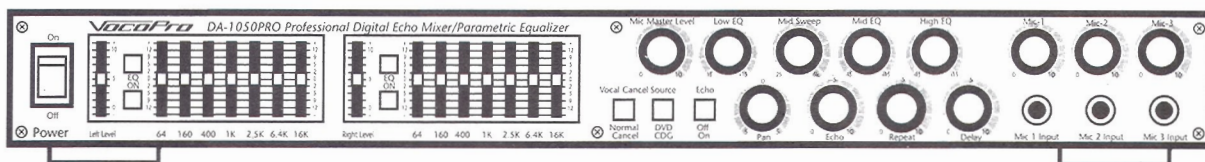


VocoPro

OWNER'S MANUAL



DA-1050PRO

PROFESSIONAL DIGITAL ECHO MIXER / PARAMETRIC EQUALIZER

EXCELLENT FEATURES:

- 3 DUAL-INPUT MIC PREAMPLIFIERS ACCOMMODATE A TOTAL OF 6 MICROPHONES (3 FRONT, 3 REAR)
- 3-BAND PARAMETRIC EQUALIZER FOR MICROPHONES, FEATURES SWEEP-MIDRANGE CONTROL TO LIFT PARTICULAR CHARACTERISTICS OF THE VOCAL OR SUPPRESSED FOR FEED BACK ELIMINATION
- DIGITAL ECHO WITH REPEAT AND DELAY CONTROLS HELPS SINGER SOUND GREAT!
- DUAL 7 BAND STEREO EQUALIZER FOR PRECISE ROOM TUNING
- DUAL-SOURCE AUDIO/VIDEO INPUT CONNECTS TO DVD, CDG OR CASSETTE PLAYERS
- VOCAL CANCEL FEATURE ELIMINATES GUIDE VOCAL ON MULTIPLES CD OR CASSETTE TAPES
- COMPACT 1-SPACE DESIGN SAVES VALUABLE RACK SPACE
- 110/220V AC MAINS SWITCHABLE POWER
- PERFECT ADD ON FOR CDG AND DVD PLAYERS

CAUTION:
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

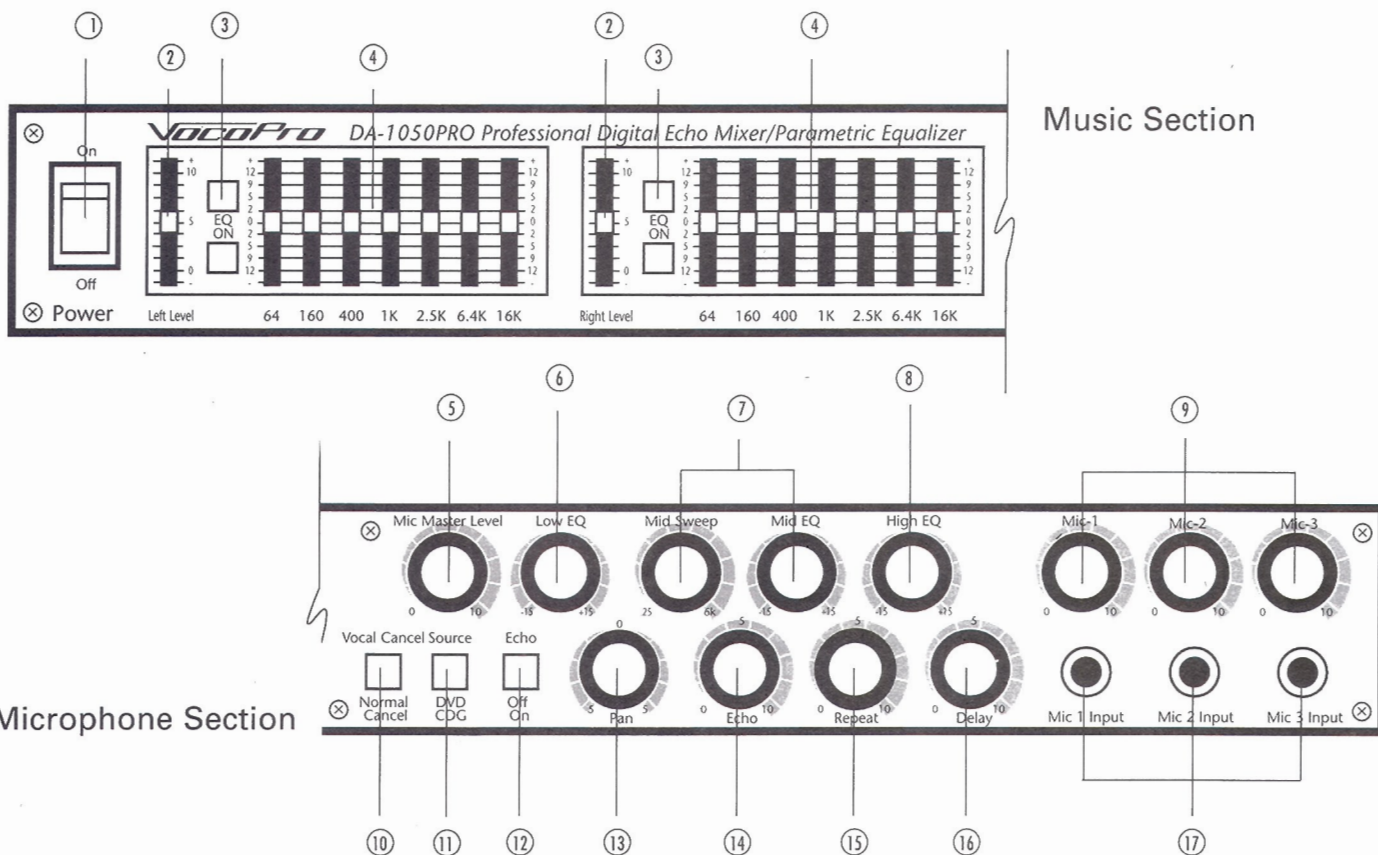
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD. RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

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NAME OF PARTS AND THEIR FUNCTIONS

Front panel



1 POWER SWITCH:

Press the switch to turn on or off the power.

2 MUSIC LEVEL CONTROL:

Slide down to turn down or turn off the source music. Slide up to turn up the source music.

3 GRAPHICS EQ. ON/OFF SWITCH AND INDICATOR:

Press the switch to turn on or off the Graphics Equalizer for the source music.

4 SEVEN BAND GRAPHICS EQUALIZER:

Turn on the equalizer, adjust the sound by moving the 7 EQ. Slide up or down, this will gain or cut the 7 different frequencies from 64 Hz (Lower Frequencies) to 16 Hz (Higher Frequencies), to make precise room tuning of the source music.

5 MICROPHONE MASTER LEVEL CONTROL:

Use this control to adjust the overall volume of all the microphones.

6 MICROPHONE LOW FREQUENCY EQ.:

Use this control to boost or cut the lower frequency (Bass) of the microphones by up or down 15 dB. Turning to the right provides boost, adding warmth to vocals, and turning to the left will reduce bass rumble.

7 MICROPHONE MID-SWEEP AND MID-FREQUENCY EQ. CONTROLS:

Use the Mid-EQ. to boost or cut Mid-Frequency of the microphone by +/-15dB. Use the Mid-Sweep (Frequency) control to determine which frequency to boost or cut. Since the frequency ranges from the Mid-Sweep are from 250HZ to 6KHZ, this is particularly versatile for vocals, and enabling particular characteristics of the singer to be lifted or suppressed.

8 MICROPHONE HIGH FREQUENCY EQ. CONTROLS:

Use this to boost or cut the High Frequency (Treble) of the microphone by +/-15dB. Turning to the right provides boost, and adding crispness to vocal. Turning to left will reduce or hiss or distorted consonants and controls the feedback from the microphone.

9 MICROPHONE LEVEL CONTROLS:

Use these controls to adjust the microphone input levels from the microphone input jacks.

Microphone level 1 controls microphone Jack 1 (Front) and microphone Jack A (Back).

Microphone level 2 controls microphone Jack 2 (Front) and Microphone Jack B (Back).

Microphone level 3 controls microphone Jack 3 (Front) and microphone Jack C (Back).

- ⑩ **VOCAL CANCEL SWITCH:**
Press this to cancel the guide vocal of special multiplex karaoke discs or tapes.
- ⑪ **INPUT SOURCE SELECTOR:**
Press this to select both audio and video between the two input sources you wish to play. (DVD, CDG, LD...)
- ⑫ **ECHO ON / OFF SWITCH:**
Press this to turn on or off the microphones echo effect.
- ⑬ **MICROPHONE PAN CONTROL:**
Use this control to balance the microphone output between the right and left channels.
- ⑭ **MICROPHONE ECHO LEVEL CONTROL:**
Controls the digital echo effect levels for microphones 1 to 6, turn to the right will increase the echo effect and turn to

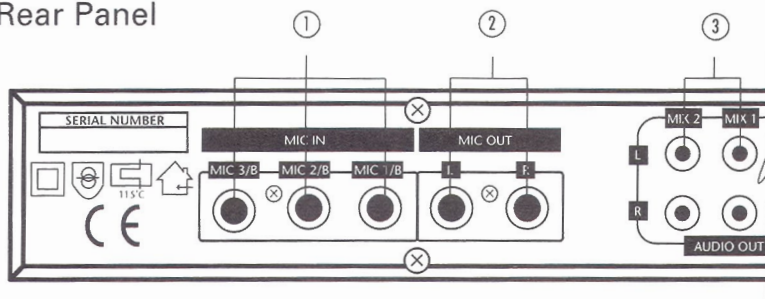
the left will decrease the echo effect.

- ⑮ **ECHO REPEAT LEVEL CONTROL:**
Use this control to adjust the timing of the digital echo effect.
- ⑯ **ECHO DELAY LEVEL CONTROL:**
Use this control to adjust the repetition interval of the digital echo effect.
- ⑰ **MICROPHONE INPUT JACKS 1, 2, AND 3:**
Six microphones can be connected at the same time with both the front and rear microphone input jacks.

NOTE: To protect the speakers and the amplifier from microphone feedback, turn down the microphones volume before connecting the microphone.

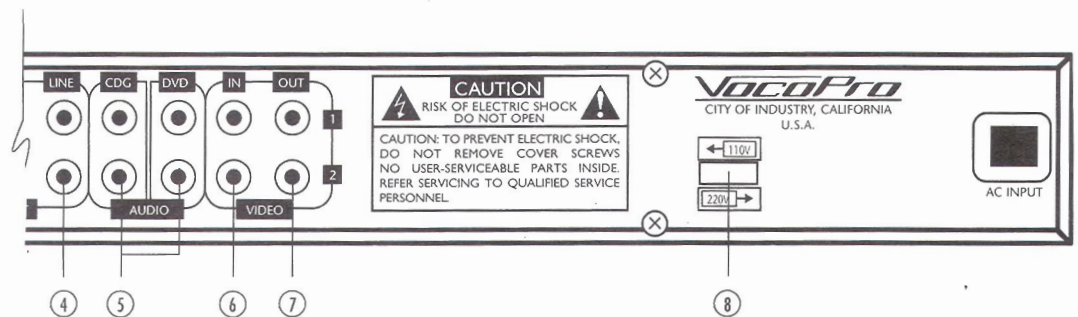
NAME OF PARTS AND THEIR FUNCTIONS

Rear Panel



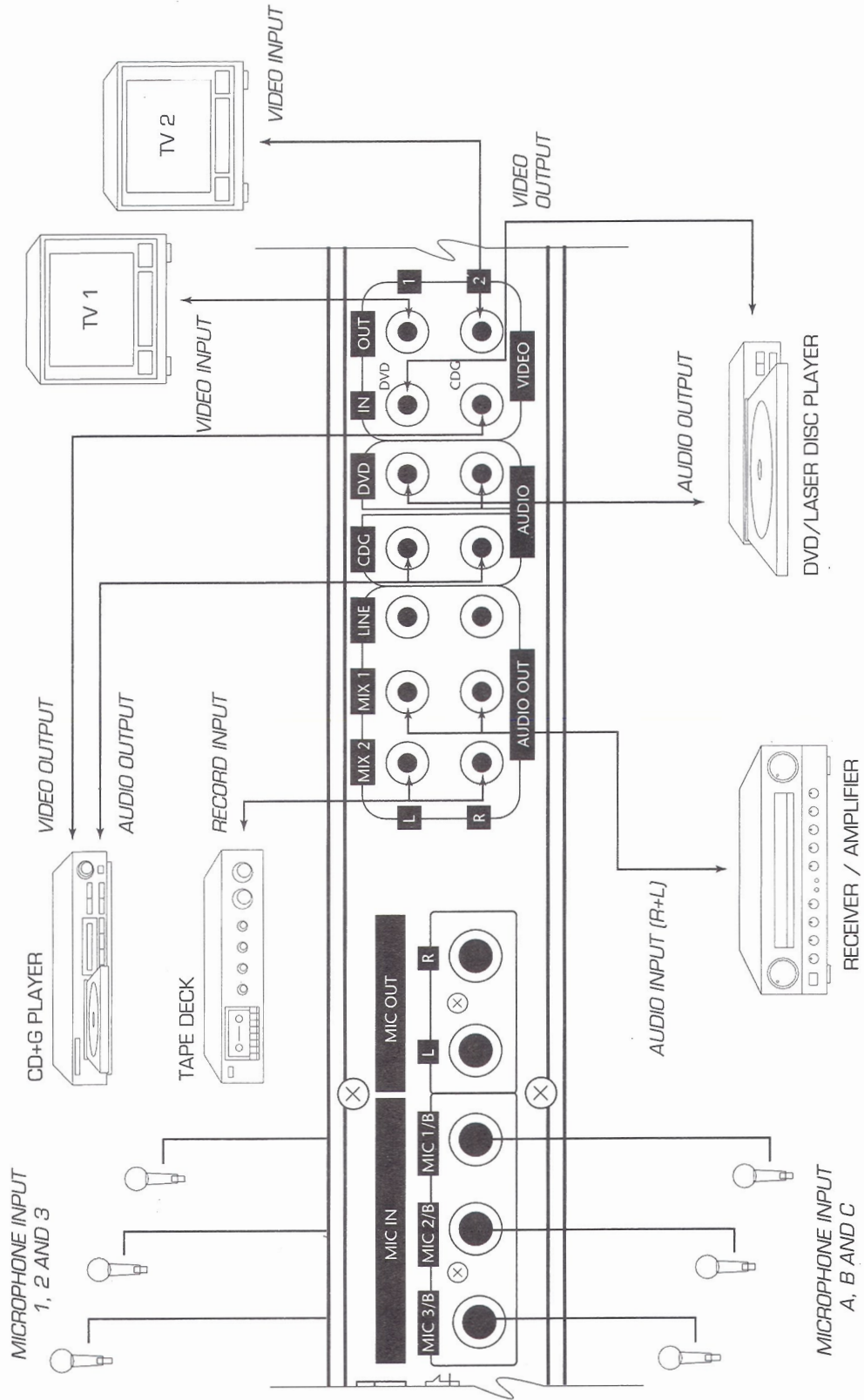
Microphone Section

Music Section



- ① **REAR MICROPHONE INPUT JACKS A, B AND C:**
Six microphones can be connected at the same time with both the front and rear microphone input jacks.
- ② **STEREO MICROPHONE ECHO EFFECT OUTPUT JACKS:**
Outputs the digital echo effects without mixing the music, so the unit can work as an independent digital echo processor when connected to another mixer or a laser karaoke player.
- ③ **MIXED PRE-OUT JACKS 1 AND 2:**
Outputs (Pre-out) the mixed sound between the microphone and the music.
- ④ **GRAPHICS EQ. LINE LEVEL OUTPUT JACKS:**
Outputs the graphic EQ. effects (music only) at line level, the volume control and the microphone inputs are both bypassed so the unit can work as an independent graphics equalizer.
- ⑤ **AUDIO INPUT JACKS:**
Connect these jacks to the audio output jacks of up to two source player(s). (DVD player, CD+G player, Cassette player...)
- ⑥ **VIDEO INPUT JACKS:**
Connect these jacks to the video output jacks of up to two source player(s). (DVD player, CD+G player...)
- ⑦ **VIDEO OUTPUT JACKS:**
Connect these jacks to the video input jacks of up to two TV monitors.
- ⑧ **VOLTAGE SELECTOR:**
Use these selectors to select between different input voltage.
110V - For U.S. Systems
220V - For European Systems

BASIC CONNECTIONS:

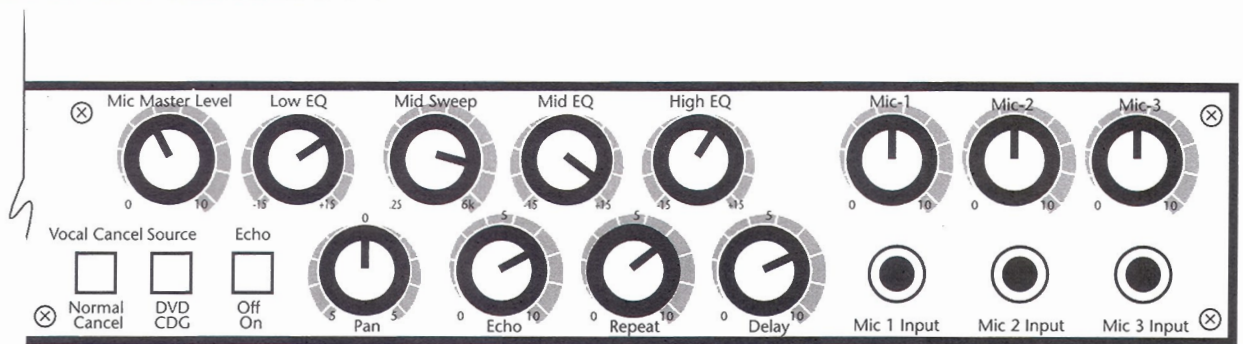


TROUBLESHOOTING:

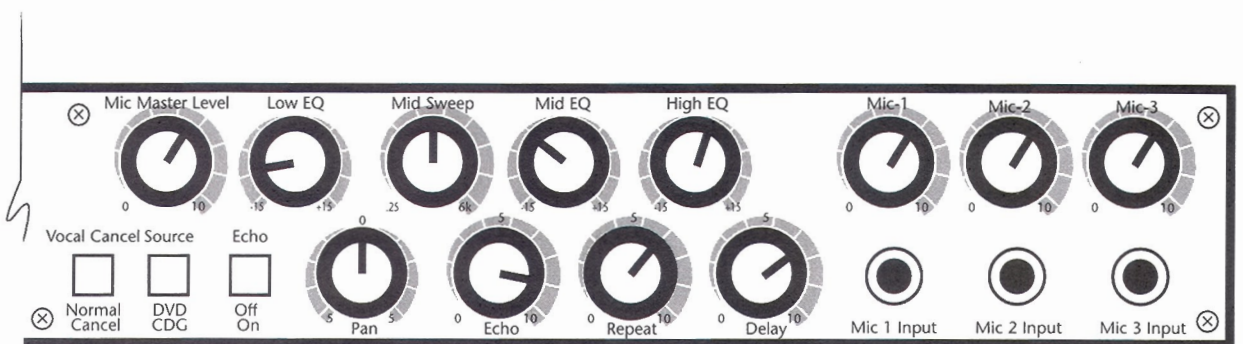
PROBLEM	CAUSE	SOLUTION
1. No sound.	<ul style="list-style-type: none">* No power.* Music or microphone level is set too low.* Input source not switched correctly.* Receiver / AMP. not switched correctly.* Improperly connected.	<ul style="list-style-type: none">* Connect the power cord and turn on the power.* Turn up the music volume for both the right and left channel (see 2 of page 2 of the manual) or turn up the master microphone volume (see 5 of page 2 of the manual) or turn up the individual microphone level controls (see 9 of page 2 of the manual).* Select to the proper input from the input sources selector (see 11 of page 2 of the manual).* Check the receiver's input switch and make sure is switched properly. Then turn up the volume of the receiver.* Check the connections page of the manual, make sure that all the inputs and outputs are properly connected.
2. Vocal sound distorted.	<ul style="list-style-type: none">* The microphone's parametric equalizer is not properly adjusted.	<ul style="list-style-type: none">* Set the microphones High and Low EQ. at middle, and turn the Mid-EQ. to max. Then sing into the microphone, and adjust the Mid-sweep until the desire frequency of the vocal is found. Turn down the Mid-EQ., sing into the microphone again, and turn up or down the High and Low EQ. until the desire vocal sound is found.
3. Music sound distorted.	<ul style="list-style-type: none">* The setting on the 7 Band Graphics EQ. is at too high or too low.	<ul style="list-style-type: none">* Readjust the Graphic EQ. properly by resetting the EQ. slides to the center. Then move the slide up or down to get precise sound turning.
4. Music can only be heard from one side of the speaker.	<ul style="list-style-type: none">* One side of the music level is not turn on.	<ul style="list-style-type: none">* Turn on both sides of the music volume by sliding both music level controls up.
5. Vocal can only be heard from one side of the speaker.	<ul style="list-style-type: none">* The microphone pan control is set to one side.	<ul style="list-style-type: none">* Turn the microphone pan control to center.
6. No echo.	<ul style="list-style-type: none">* Echo on/off button is at off position.	<ul style="list-style-type: none">* Turn on the echo on/off button.
7. The guided vocal can not be canceled.	<ul style="list-style-type: none">* The CD or tape is not a karaoke multiplex disc or tape.	<ul style="list-style-type: none">* Check and make sure is a karaoke disc or tape.

SETTINGS FOR KARAOKE:

A. TYPICAL CUT SETTINGS FOR KARAOKE



B. TYPICAL GAIN SETTINGS FOR KARAOKE



SPECIFICATIONS:

Graphic Equalizer Section:

Connector	RAC / Unbalanced
Input Impedance	47k Ω
Bands	1 $\frac{1}{3}$ ISO Spacing
Range	+/-15dB
T.H.D.	<0.01%
Frequency Response	20Hz~20KHz 0.5dB
Noise Ratio	>90dB

Mic Section

Connector	1/4" TRS / Unbalanced
Input Impedance	1.5k Ω
T.H.D.	<0.1%
Frequency Response	20Hz~15KHz -3dB
Noise Ratio	>60dB
High	+/-15dB
Mid	+/-15dB
Mid Freq.	250Hz~6KHz
Low	+/-15dB
Digital Echo	Up to 300mS