	LSx1002	LSx1202	LSx1202A	LSx1202M	LSx1202MA
System Type:	10-inch 2-Way, bass-reflex	12-inch 2-Way, bass-reflex	Active Bi-amp system	12-inch 2-Way, bass-reflex	Active Bi-amp system
Frequency Response:	72 Hz – 20 kHz (-10DB)	70 Hz – 20 kHz (-10DB)		70 Hz – 20 kHz (-10DB)	
Coverage Pattern:	85 Hz – 18 kHz (-3 dB) 60 degree round	76 Hz – 18 kHz (-3 dB) 90H x 60V		76 Hz – 18 kHz (-3 dB) 90H x 60V	
Crossover:	2-Way	2-Way with Speaker Guard™ HF	Active LF / HF Limiters	2-Way with Speaker Guard™ HF	Active LF / HF Limiters
Crossover Frequency:	3.5 k Hz	2.5 k Hz	2.5 k Hz	2.5 k Hz	2.5 k Hz
Sensitivity (1w @ 1m)/ Max SPL:	98dB /121dB	97dB /122dB	127dB	97dB / 122dB	127dB
LF Driver:	10-inch woofer	12-inch woofer		12-inch woofer	
HF Driver: Power:	1-inch titanium Continuous / Program / Peak	1-inch titanium Continuous / Program / Peak	Continuous / Peak	1-inch titanium Continuous / Program / Peak	Continuous / Peak
Nominal Impedance full range:	8 ohms 200w /400w /800	8 ohms 300w /600w /1200	350W / 700W	8 ohms 300w /600w /1200	350W / 700W
Bi-amp LF:		8 ohms 300w /600w /1200w	8 ohms 300w / 600w	8 ohms 300w /600w /1200w	8 ohms 300w / 600w
Bi-amp HF:		8 ohms 50w /100w /200w	8 ohms 50w / 100w	8 ohms 50w /100w /200w	8 ohms 50w / 100w
Suspension/Mounting:	1-3/8-inch pole mount cup	1-3/8-inch pole mount cup		none	
Connectors:	Two NL-4 Neutrik Speakon's Two ¼ TS phone jacks	Two NL-4 Neutrik Speakon's Two ¼ TS phone jacks	Two Bal. XLR One Bal. 1/4 TRS phone jack	Two NL-4 Neutrik Speakon's Two ¼ phone jacks	Two Bal. XLR One Bal. 1/4 TRS phone jack
Dimensions (H x W x D):	18 in x 12.5 in x 11.5 in	23 in x 15.5 in x 11.75 in	One Bai. 1/4 TKS phone jack	22.75 in x 15.5 in x 14.75 in	one bai. 1/4 TKS phone jack
	480 mm x 320 mm x 295 mm	585 mm x 395 mm x 300 mm		580 mm x 395 mm x 375 mm	
Net Wt:	21 lb (10 kg)	33 lb (15 kg)	37 lb (17 kg)	33 lb (15 kg)	37 lb (17 kg)
Optional Accessories:	CVS1002A cover	CVS1202B cover		CVS1202MA cover	
	1.0.4500	1.0.45004	1.0.450014	1.0.4500144	-
	LSx1502	LSx1502A	LSx1502M	LSx1502MA	
System Type:	15-inch 2-Way, bass-reflex	Active Bi-amp system	15-inch 2-Way, bass-reflex	Active Bi-amp system	
Frequency Response:	47 Hz – 20 kHz (-10DB) 53 Hz – 18 kHz (-3 dB)		47 Hz – 20 kHz (-10DB) 53 Hz – 18 kHz (-3 dB)		
Coverage Pattern:	90H x 60V		90H x 60V		
Crossover:	2-Way with Speaker Guard™ HF	Active LF / HF Limiters	2-Way with Speaker Guard™ HF	Active LF / HF Limiters	
Crossover Frequency:	2.5 k Hz	2.5 k Hz	2.5 k Hz	2.5 k Hz	
Sensitivity (1w @ 1m)/ Max SPL:	100dB / 129dB	127dB	100dB / 129dB	127dB	
LF Driver: HF Driver:	15-inch woofer 1-inch titanium		15-inch woofer 1-inch titanium		
Power:	Continuous / Program / Peak	Continuous / Peak	Continuous / Program / Peak	Continuous / Peak	
Nominal Impedance full range:	8 ohms 400w /800w /1600w	350W / 700W	8 ohms 400w /800w /1600w	350W / 700W	
Bi-amp LF:	8 ohms 400w /800w /1600w	8 ohms 300w / 600w	8 ohms 400w /800w /1600w	8 ohms 300w / 600w	
Bi-amp HF:	8 ohms 50w /100w /200w	8 ohms 50w / 100w	8 ohms 50w /100w /200w	8 ohms 50w / 100w	
Suspension/Mounting: Connectors:	1-3/8-inch pole mount cup Two NL-4 Neutrik Speakon's	Two Bal. XLR	none Two NL-4 Neutrik Speakon's	Two Bal. XLR	
connectors.	Two ¼ TS phone jacks	One Bal. 1/4 TRS phone jack	Two ¼ TS phone jacks	One Bal. 1/4 TRS phone jack	
Dimensions (H x W x D):	25.75 in x 18.5 in x 11.75 in	, ,	25.75 in x 18.5 in x 15.75 in	, ,	
	655 mm x 470 mm x 300 mm		655 mm x 470 mm x 400 mm		
Net Wt:	44 lb (20 kg)	49 lb (22.5 kg)	44 lb (20 kg)	49 lb (22.5 kg)	
Optional Accessories:	CVS1502B cover		CVS1502MB cover		-
	LSx1503	LSx1503A	LSx2153	LSx1523	LSx1523A
System Type:	15-inch 3-Way, bass-reflex	Active Tri-amp system	Dual 15-inch 3-Way, bass-reflex	Dual 15-inch 3-Way, bass-reflex	Active Tri-amp system
Frequency Response:	46 Hz – 20 kHz (-10DB)	Active manip system	45 Hz – 20 kHz (-10DB)	43 Hz – 20 kHz (-10DB)	Active m-and system
	52 Hz – 18 kHz (-3 dB)		51 Hz – 18 kHz (-3 dB)	49 Hz – 18 kHz (-3 dB)	
Coverage Pattern:	90H x 60V		90H x 60V	90H x 60V	
Crossover:	3-Way with Speaker Guard™ HF		3-Way with Speaker Guard™ HF	3-Way with Speaker Guard™ HF	Active LF/MF/HF Limiter
Crossover Frequency: Sensitivity (1w @ 1m)/ Max SPL:	500Hz & 3.3 k Hz 101dB / 130dB	500 Hz & 3.3 kHz 128 dB	350Hz, 2.5 k Hz 101dB / 130dB	500 Hz, 2.5 kHz 101dB / 130dB	500Hz & 3.3 k Hz 128dB
LF Driver:	15-inch woofer		15-inch woofer	Dual 15-inch woofer	12000
MF Driver:	6-inch woofer		15-inch Woofer	Dual 16-inch woofer	
HF Driver:	1-inch titanium		1-inch 1.5" Dia. titanium	1-inch (1.5-inch Dia.) titanium	
Power:	Continuous / Program / Peak	Continuous / Peak	Continuous / Program / Peak	Continuous / Program / Peak	Continuous / Peak
Nominal Impedance full range: Bi-amp LF: Active Tri-amp LF	8 ohms 400w /800w /1600w 8 ohms 400w /800w /1600w	425w / 850w 8 ohms 300w / 600w	4 ohms 800w /1600w /3200 4 ohms 800w /1600w /3200	4 ohms 800w /1600w /3200 4 ohms 800w /1600w /3200	900W / 1800W 4 ohms 700w / 1400w
Active Tri-amp MF	5 0mms 400w /000w /1000w	8 ohms 75w / 150w	4 011115 000 0 1000 0 13200	4 ohms 150w /300w /600w	4 ohms 120w / 260w
Bi-amp MF/HF: Active Tri-amp HF	8 ohms 200w /400w /800w	8 ohms 50w / 100w	8 ohms 50w / 100w	8 ohms 50w / 100w	8 ohms 80w / 160w
Suspension/Mounting:	1-3/8-inch pole mount cup		none	none	
Connectors:	Two NL-4 Neutrik Speakon's	Two Bal. XLR	Two NL-4 Neutrik Speakon's	Two NL-4 Neutrik Speakon's	Two Bal. XLR
Dimensions (H x W x D):	Two ¼ phone jacks 28.75 in x 18.75 in x 15 in	One Bal. 1/4 TRS phone jack	Two ¼ TS phone jacks 43.75 in x 16.5 in x 15 in	Two ¼ TS phone jacks 46.75 in x 22.5 in x 15 in	One Bal. 1/4 TRS phone jack
	730 mm x 480 mm x 380 mm		1110 mm x 420 mm x 380 mm	1190 mm x 570 mm x 380 mm	
Net Wt:	58 lb (26.4 kg)	63 lb (28 kg)	73 lb (33 kg)	98 lb (45 kg)	106 lb (48 kg)
Optional Accessories:	CVS1503A cover		CVS2153A cover	CVS1523A cover	
					-
	LSx1501	LSx1801	LSx1801A	LSx1802	
System Type:	15-inch Sub, bass-reflex	18-inch Sub, bass-reflex	Active SubWoofer system	Dual 18-inch Sub, bass-reflex	
Frequency Response:	37 Hz – 265 Hz (-10DB) 45 Hz – 150 Hz (-3 dB)	29 Hz – 265 Hz (-10DB) 35 Hz – 150 Hz (-3 dB)		24 Hz – 265 Hz (-10DB) 30 Hz – 150 Hz (-3 dB)	
Active Protection	45 Hz = 150 Hz (-5 dB)	35 Hz = 150 Hz (-5 dB)	Active Sub Limiter	30 Hz = 130 Hz (-5 dB)	
Crossover:	Low Pass	Low Pass	Low Pass with High Pass Line Out	Low Pass	
Crossover Frequency:	150 Hz	150 Hz	80 Hz or 120 Hz switchable	150 Hz	
Sensitivity (1w @ 1m):	97dB / 123dB	98dB / 127dB	128dB	102dB / 134dB	
LF Driver:	15-inch woofer	18-inch woofer	Continuous / Beak	Dual 18-inch woofer	
Power: Nominal Impedance full range:	Continuous / Program / Peak 8 ohms 400w /800w /1600w	Continuous / Program / Peak 4 ohms 800w /1600w /3200	Continuous / Peak 700W / 1400W	Continuous / Program / Peak 4 ohms 1600w /3200w / 6400w	
Suspension/Mounting:	Top: 1-3/8-inch Pole Mount Cup	Top: 1-3/8-inch Pole Mount Cup		none	
Connectors:	Two NL-4 Neutrik Speakon	Two NL-4 Neutrik Speakon's	Two Bal. XLR	Two NL-4 Neutrik Speakon's	
	Two ¼ TS phone jacks	Two ¼ TS phone jacks	One Bal. 1/4 TRS phone jack	Two ¼ TS phone jacks	
Dimensions (H x W x D):	23.5 in x 19.75 in x 22.75 in	23.5 in x 19.75 in x 22.75 in		23.5 in x 40 in x 22.75 in	1
	600 mm x 505 mm x 580 mm	600 mm x 505 mm x 580 mm	77 lb (35 kg)	600 mm x 1020 mm x 580 mm	
Net Wt: Optional Accessories:			77 lb (35 kg)	600 mm x 1020 mm x 580 mm 122 lb (55 kg) CVS1802A cover	

# CARVIN ENGINEERING DATA



<u>ζ</u>

LSx2153



LSx1202/LSx1202A

<u>45</u>



LSx1202M/LSx1202MA







LSx1523/LSx1523A





LSx1802

76-15230C 0508

# LSx (LIVE SOUND) LOUDSPEAKERS



LSx1502/LSx1502A



Carvin's new LSx (Live Sound) Series loudspeakers give new meaning to high performance loudspeaker systems for today's club scene. Building upon the company's long-standing reputation for state-of-theart systems offering great sonic performance coupled with proven reliability and solid value, the new LSx Series loudspeakers deliver all the features musicians and mobile DJs demand.

Consisting of ten models encompassing five 2-way systems, three 3-way systems, and two subwoofer systems, the LSx Series is ideally suited to address a wide range of sound reinforcement system requirements-from intimate clubs to large scale, high impact music venues. With key features like steel grills to protect the drivers, recessed steel handles for easy transport, high order – low loss biampable crossovers that ensure high intelligibility of spoken word and accurate reproduction of music sources, plus Neutrik Speakon<sup>™</sup> and quarter-inch connectors across all models, Carvin's new LSx Series loudspeakers are just what your audience has been waiting for!

Going one step further, all LSx Series loudspeaker enclosures utilize multi-layered, cross grain laminated plywood construction. Why is this important? Unlike other materials, plywood construction results in rigid enclosure walls that reduce flex and sonic coloration caused by cabinet resonance, with the added benefit of a structurally more robust enclosure designed to handle the rigors of the road. Finished with great-looking, rugged Duratex™ sprayed on coverings, Carvin's new LSx Series loudspeakers look every bit as compelling as they sound!

*LSx1502M/LSx1502MA* 

## **RECEIVING INSPECTION**

INSPECT YOUR LOUDSPEAKER FOR DAMAGE which may have occurred during shipping. If damage is found, please notify the shipping company & CARVIN.

SAVE THE CARTON & ALL PACKING MATERIALS. In the event you have to re-ship your unit, always use the original carton and packing material. CARVIN and the shipping company are not liable for any damage caused by improper packing. SAVE YOUR INVOICE. It will be required for warranty service if needed in the future.

SHIPMENT SHORTAGE. If you find items missing, they may have been shipped separately. Please allow several days for the rest of your order to arrive before inquiring.

RECORD THE SERIAL NUMBER on the enclosed warranty card for your records. Return the warranty card with your name and comments to us, or register online at:

USA customers register online at: www.carvin.com/registration

All other countries register online at: www.carvinworld.com/registration

#### LIMITED WARRANTY

Parts and labor are covered for 3 years on manufacturer's defects. Warranty does not cover burned out drivers caused by excessive power or distortion, or physical damage caused by general use, moisture or dust. CAUTION: Square wave distortion from power amps can destroy drivers much faster than clean RMS power. The power generated by the APS internal power amps has the capacity to damage the drivers, in which case they would not be covered under warranty.

#### SERVICE

In the USA, please call 800-854-2235 for a RMA number (return authorization number). Write this number on the box and enclose a description of the problem. Prepay to Carvin 12340 World Trade Drive, SD, CA 92128

Outside the USA, contact your dealer or go to http://www.carvinworld. com for your nearest service center. Include a written description of the problem with serial number and date of purchase.



# **Powered Speakers**



Carvin's APS (Active Powered Systems) amplification packs take the guesswork out of selecting the ideal power source to drive your loudspeakers. With bi-amped and tri-amped models designed to handle the most demanding applications, the APS amplifiers are perfectly mated with-the LSx1502A, LSx1503A, and LSx1523A-creating optimally designed powered loudspeaker systems that are ready for anything you throw at them. There's even one APS power pack created specifically to generate the bone crushing impact of our LSx1801A subwoofer. APS-based LS loudspeaker systems make setup and operation easier as well, with less gear to haul. Feed your mixer's output directly to these loudspeaker systems, and you're ready to rock!

#### APS POWER AMP SPECS:

2-WAY BI-AMPED - LSx1502A/LSx1502MA-LSx1202A/LSx1202MA 350w Continuous/700w Peak RMS (Hi Freg: 50w @ 16 ohms, Lo Freg. 300w @ 8 ohms)

#### 3-WAY TRI-AMPED - LSx1503A

425w Continuous/850w Peak RMS (Hi Freq: 50w @ 16ohms, Mid Freq: 75w @ 16 ohms, Lo Freq. 300w @ 8 ohms)

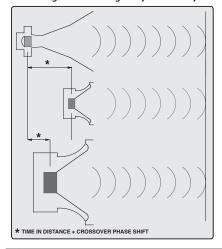
#### 3-WAY TRI-AMPED - LSx1523A

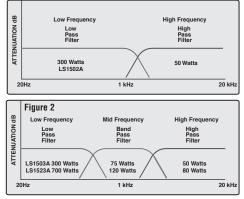
900w Continuous/1800w Peak RMS (Hi Freq: 80w @ 16 ohms, Mid Freq: 120w @ 8 ohms, Lo Freq. 700w @ 4 ohms)

SUB WOOFER - LSx1801A 700w Continuous/1400w Peak RMS @ 4 ohms

ALL MODELS: FREQ. RESPONSE: 20 to 20kHz, THD less than .05% @ 90%, .1% at full power, SLEW RATE: 50V/µs, ACTIVE EQ: ± 6 dB @ 100 Hz, 100 Hz to 5 kHz mid sweep, 10kHz, EQ bypass switch, (SUB WOOFER: 24dB/Octave @ 80 & 120 Hz) • Relay muting and Speaker Guard™ protection, Peak and protection & power on indicators, On-Off power switch, Power Reg. 120VAC 60 Hz . 240 AC/50Hz model available

### All loudspeaker components are Time-Aligned for greater intelligibility and clarity





Bi amped or Tri amped – active crossovers and power amps

## **APS HOOK-UP**

**1. INPUT/THRU OUTPUT** Use the balanced XLR or 1/4" connectors featured on the rear control panel. Using a balanced source will reduce noise which may be picked up by the cable. You may DAISY-CHAIN as many APS systems as you wish. All connectors are wired in parallel

2. EQUALIZATION The APS powered loudspeakers offer a by passable 3band mid sweep equalizer for custom tuning to the acoustical environment. The EQ system is engineered specifically for the APS, featuring a boost and cut range of ±6dB to prevent radical adjustments that could otherwise compromise the sound of the system. The Mid-band sweep is particularly useful for enhancing critical mid range frequencies for stage monitoring or for cutting certain frequencies to compensate for room resonances. Press the "EQ IN" switch to activate the equalizer. The BLUE LED displays when the FQ is active

3. **LEVEL CONTROL** The LEVEL control adjusts the output volume of the APS. Start by setting the LEVEL at "0". Weak input signals can be boosted by setting the LEVEL at "+6". Strong signals can be reduced by turning the LEVEL toward "-12". The RED LED will flash if the internal power amps start to clip. Turn the LEVEL control down to avoid clipping. Damage to the drivers can result from operating at a level where the RED CLIP LED is constantly illuminated.

4. POWER/PROTECT/CLIP INDICATOR Power up your audio source first, then turn on the APS with the power switch. When the system is active, the LED will indicate GREEN. When shutting down turn off the APS first, then turn off the mixer. If any of the power amps are clipping, the LED will indicate RED and you should reduce the output level. If the system should go into protect mode, the LED will indicate YELLOW and the power amps will shut off. This may occur if; a) the system is overheated due to clipping the power amps for an extended period of time, b) one of the internal drivers developed a short or c) the power amps require service.

5. **POWER** Push this switch to the UP position to apply power to the unit. The POWER LED will light to show the system is on.

6. AC POWER Use a standard grounded AC cord. Whenever possible, use dedicated circuits for powered speakers. The powered speakers are available in either 120V or 240V models

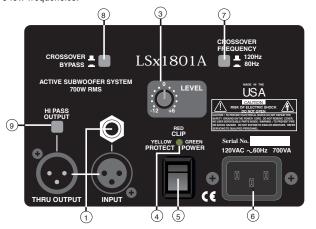
### **APS BI-AMP/TRI-AMP REAR PANEL:**

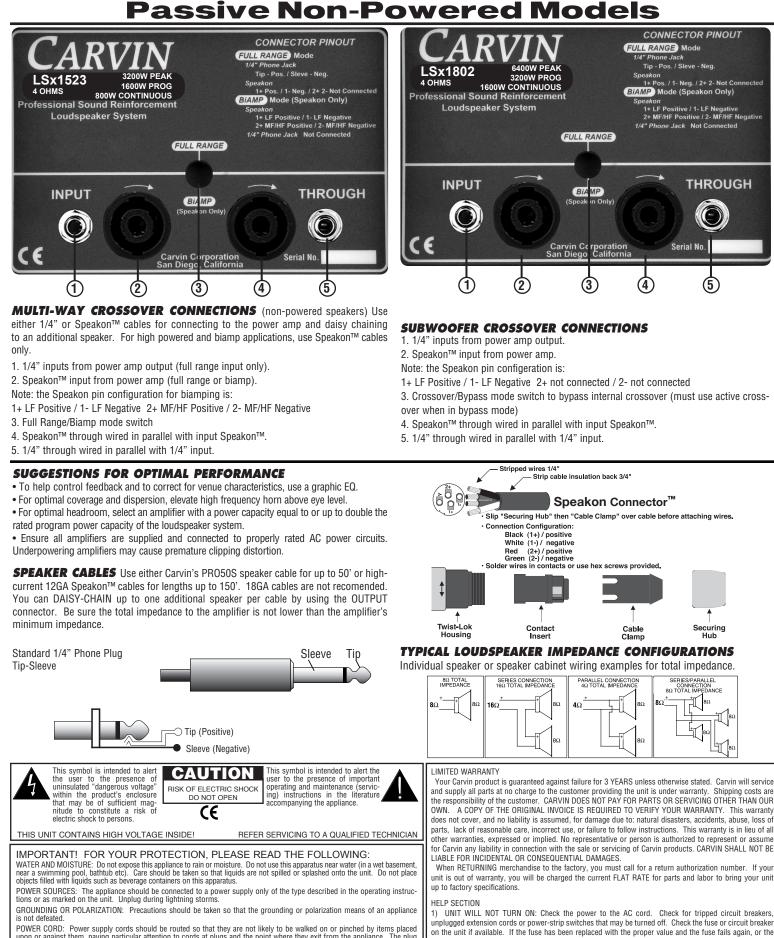


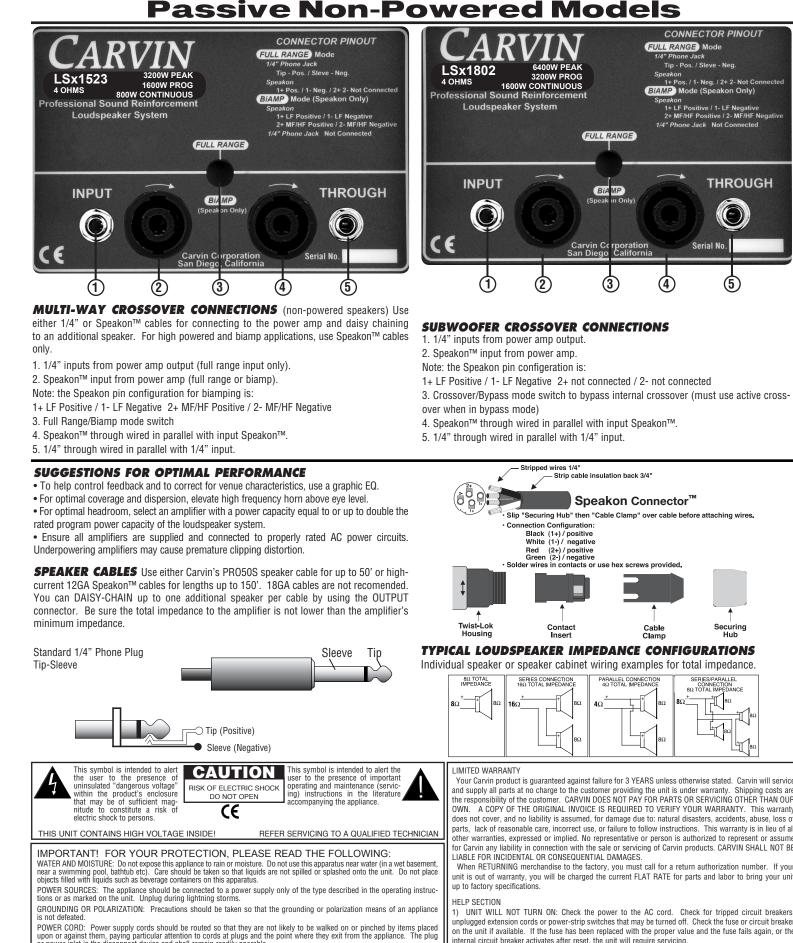


7. CROSSOVER FREQUENCY SWITCH The CROSSOVER FREQUENCY switch selects the crossover point for the APS. The 120Hz out setting is generally used with small to mid sized speakers in your setup. Almost all 12" and 15" woofers will benefit from the 120Hz setting. The 80Hz (switch in) setting is generally used with larger 18" woofers. 8. CROSSOVER BYPASS SWITCH The crossover bypass switch bypasses the internal active crossover allowing the use of an outboard active crossover.

9. HI PASS OUTPUT SWITCH The hi pass output switch changed the output of the XLR thru output from a parallel of the Input XLR to a hi pass (all frequencies above) the crossover switch setting. This is good for going to a top cabinet that can not handle the sub's low frequencies.







or power inlet is the disconnect device and shall remain readily operable. PLACEMENT: Do not block ventilation openings. Do not install near heat sources such as radiators, stoves or other products

that produce heat. Do not install in a confined area. Use only mounting hardware such as brackets and tripods rec SERVICING: The user should not attempt to service the unit. All servicing should be referred to qualified service personnel.

FUSING: If your unit is equipped with a fuse receptacle, replace only with the same type fuse. Refer to replacement text or the unit for correct fuse type.

2) NO OUTPUT with POWER light ON: Shipping damage will be the primary reason for your product to not unction properly. Please give us a call to help you determine the problem

3) KEEP YOUR UNIT LOOKING NEW: Use only a dry cloth to wipe the control and venting areas. Surfaces without openings may be cleaned with a damp cloth.