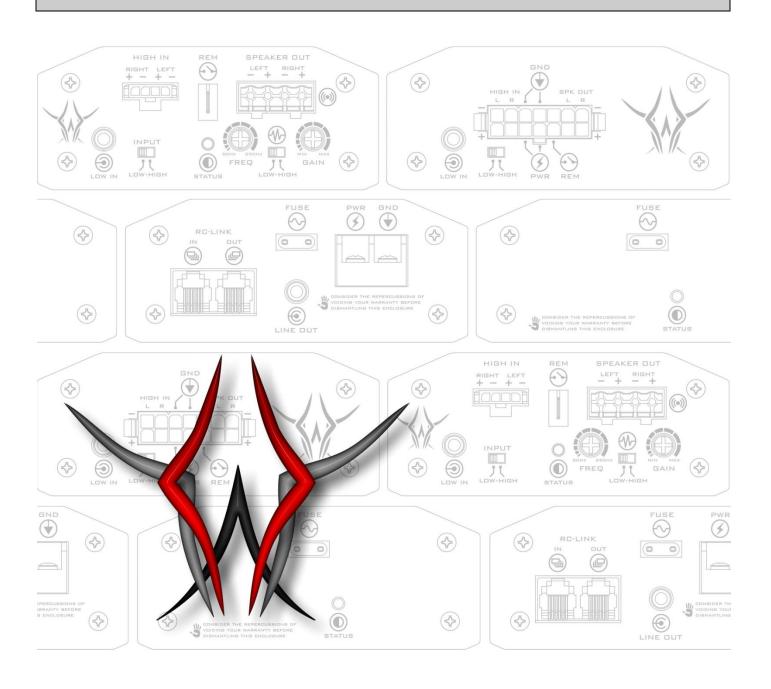
# HAWG WIRED

# DCS 1 20 AMPLIFIER SYSTEMS



# INSTALLATION GUIDE

## INTRODUCTION

CONGRATULATIONS! YOU'VE JUST PURCHASED WHAT WE CONSIDER TO BE THE FINEST MOTORCYCLE AUDIO EQUIPMENT AVAILABLE. WE TAKE PRIDE IN THE FACT THAT YOU'VE CHOSEN HAWG WIRED PRODUCTS, AND WELCOME YOU TO OUR FAMILY OF AUDIOPHILE ENTHUSIASTS. OUR GOAL HERE IS SIMPLE - TO BRING HIGH PERFORMANCE AUDIO FIDELITY TO YOU, THE RIDER, WITHOUT COMPROMISING YOUR BIKE'S ELECTRICAL SYSTEM OR STORAGE SPACE. SOME SIDE EFFECTS MAY OCCUR HOWEVER, INCLUDING BUT NOT LIMITED TO; PUZZLED LOOKS FROM OTHER MOTORISTS, OCCASIONAL SHOUTS FROM YOUR NEIGHBORS, AND THE ENVY OF YOUR FRIENDS. AFTER YEARS OF DESIGN AND ENGINEERING, CUSTOM CRAFTSMANSHIP, AND A CRAVE FOR CLEAN, CLEAR, LOUD MUSIC, WE BELIEVE WE'VE NAILED THIS STUFF DOWN RIGHT.

THANK YOU FOR YOUR SUPPORT THE HAWG WIRED TEAM

# SERIAL NUMBER

PLEASE RECORD THE MODEL AND SERIAL NUMBER[S] OF YOUR EQUIPMENT IN THE SPACE PROVIDED BELOW AS YOUR PERMANENT RECORD. THESE NUMBERS CAN BE FOUND ON THE FRONT AND/OR BOTTOM OF EACH COMPONENT. THIS WILL ASSIST US WITH YOUR FACTORY WARRANTY COVERAGE, AND MAY BE USEFUL TO YOU IN THE UNFORTUNATE EVENT THAT IT'S STOLEN.

MODEL NUMBER[S]:	SERIAL NUMBER[S]:

## KIT CONTENTS

KIT ITEMS INCLUDED (BY QUANTITY):	WX120	DCS 1 20
2 CHANNEL 120 POWER AMPLIFIER		1
18" DIRECT CONNECT WIRING HARNESS	1	0
LOW LEVEL INPUT CABLE (L/R RCA TO 3.5MM)	1	0
LARGE VELCRO PAD	0	1
8" BLACK ZIP TIE	6	
DIELECTRIC GREASE PACKET	1	0

# BEFORE YOU BEGIN

THIS SECTION IS INTENDED TO BRING YOU UP TO SPEED WITH OUR DOCUMENTATION CONVENTIONS. WE RECOMMEND READING THIS MANUAL THOROUGHLY BEFORE BEGINNING YOUR INSTALLATION TO ACHIEVE A TROUBLE FREE, LONG LASTING OUTCOME.

#### TERMINOLOGY USED IN THIS MANUAL:

SOURCE UNIT	REFERS TO THE DEVICE THAT SUPPLIES THE AMPLIFIER WITH AUDIO INPUT, TYPICALLY YOUR RADIO, HEAD UNIT, MEDIA DEVICE, ETC.
POWER AMPLIFIER	DCS120, MASTER 2 CHANNEL AMPLIFIER THAT FUNCTIONS STANDALONE. THE GREY BOX IN THIS KIT.
DIRECT CONNECT HARNESS	USED TO CONNECT THE AMPLIFIER TO YOUR AUDIO SYSTEM. DESIGNED SPECIFICALLY FOR YEAR, MAKE, AND MODEL COMPATIBILITY.
LOW LEVEL INPUT CABLE	USED WHEN RCA CONNECTORS ARE THE SOURCE OF INPUT TO THE AMPLIFIER, TYPICALLY USED WITH AFTERMARKET SOURCE UNITS (PREFERRED METHOD).
BATWING FAIRING	HARLEY-DAVIDSON® TERM FOR THE FAIRINGS ON ELECTRA GLIDE MODELS, FORK MOUNTED, SINGLE HEADLIGHT STYLE.
SHARKNOSE FAIRING	HARLEY-DAVIDSON® TERM FOR THE FAIRINGS ON ROAD GLIDE MODELS, FRAME MOUNTED (FIXED), DUAL HEADLIGHT STYLE.
MANUFACTURER INSTRUCTIONS	REFERS TO ANY DOCUMENTATION PROVIDED BY A MANUFACTURER OTHER THAN HAWG WIRED (IE. HARLEY-DAVIDSON® SHOP REPAIR MANUAL, AFTERMARKET SOURCE UNIT OR SPEAKER MANUAL, ETC.).

#### QUICK CONNECT SYMBOLS:

KEEP AN EYE OUT FOR THE "QUICK CONNECT" SYMBOLS THROUGHOUT THIS MANUAL; THEY PROVIDE A VISUAL LINK BETWEEN INSTRUCTIONS, DIAGRAMS, AND THE SYSTEM COMPONENTS.

POWER	BATTERY POSITIVE (+12VDC)
GROUND	BATTERY NEGATIVE (-), CHASSIS GROUND
REMOTE	REMOTE TURN-ON LEAD ACTIVATED BY +12VDC
FUSE	ESSENTIAL PROTECTION FROM SHORTS
HARNESS	DIRECT CONNECT HARNESS CONNECTION
LINE-IN	SOURCE INPUT, LOW LEVEL OR HIGH LEVEL INPUT
SPEAKER	STOCK WIRING CONNECTIONS FOR SPEAKER OUTPUT

NOTE: IF ANYTHING ABOUT THE INSTRUCTION OR INFORMATION PROVIDED IN THIS MANUAL IS UNCLEAR, QUESTIONABLE, OR YOU THINK WE'RE DEAD WRONG ABOUT SOMETHING, PLEASE CONTACT US.

HAWG WIRED PAGE 3 FREMONT, CA

# INSTALLATION INSTRUCTIONS

#### INITIAL TEAR-DOWN & COMPONENT MOUNTING



USING VELCRO® AS A MOUNTING METHOD HAS THE FOLLOWING ADVANTAGES; IT HOLDS WELL UNDER EXTREME VIBRATION CONDITIONS, PROVIDES A MEASURE OF SHOCK ABSORPTION, AND ALLOWS FOR SIMPLE INSTALLATION, REMOVAL, AND ADJUSTMENT. HOWEVER, ONCE YOU STICK THOSE TWO SIDES TOGETHER WITH SOME PRESSURE, YOU'D DO WELL TO USE A PUTTY KNIFE SEPARATING THE TWO AGAIN. USING A PIECE OF PAPER OR THIN CARDBOARD BETWEEN THE 2 PIECES OF VELCRO WHEN TEST FITTING CAN MAKE THINGS A LOT EASIER.

NOTE: BE SURE TO CLEAN ALL MATING SURFACES WITH THE INCLUDED ALCOHOL PADS BEFORE ATTACHING THE ADHESIVE VELCRO® PATCHES. ONCE THE ADHESIVE SIDE IS APPLIED TO A CLEAN SURFACE, WORK OUT THE AIR POCKETS WITH YOUR FINGER TIPS FOR MAXIMUM HOLDING STRENGTH AND LONGEVITY.

- **①**
- 1. WITH THE IGNITION SWITCH OFF, CAREFULLY REMOVE THE FRONT FAIRING COVER, NOTING WHICH HOLE EACH SCREW COMES FROM, AS LENGTHS AND SIZES MAY DIFFER.

TIP: REFER TO MANUFACTURER INSTRUCTIONS IF NECESSARY, AND DON'T FORGET TO COVER YOUR FENDER.



- 2. DETERMINE THE MOUNTING LOCATION FOR THE AMPLIFIER BASED ON YOUR FAIRING:
  - 2.1. <u>FLHT/X (BATWING) FAIRINGS</u>

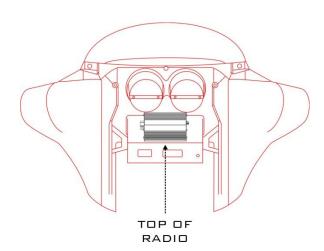
    MOUNT THE **AMPLIFIER** ON TOP OF THE

    SOURCE UNIT USING THE VELCRO® PATCH

    PROVIDED.

#### 2006 AND NEWER:

IF ONLY ONE FACTORY MODULE IS INSTALLED ABOVE THE SOURCE UNIT, INSTALL THE **HKA150** ADAPTER BRACKET (SOLD SEPARATELY) IN THE BLANK MODULE SLOT TO PROVIDE A LEVEL MOUNTING SURFACE.



#### 2.2. FLTR (SHARKNOSE) FAIRINGS

MOUNT THE **AMPLIFIER** ON THE FLAT INNER
FAIRING SURFACE BEHIND THE GLOVE BOX USING
THE VELCRO® PATCH PROVIDED.





2.3. <u>CUSTOM INSTALLS</u> - MOUNTING LOCATIONS CAN VARY, AND MUST BE TEST FIT ON A ONE-BY-ONE BASIS. THE WIRING HARNESS MAY REQUIRE CUTTING/SPLICING FOR INSTALLATIONS NOT UTILIZING A STOCK AUDIO HARNESS.



FOR ALL "TOP OF THE SOURCE UNIT" INSTALLATIONS, ENSURE THAT THE MAIN AMPLIFIER IS POSITIONED AS FAR BACK TOWARDS THE INNER FAIRING AS POSSIBLE, LEAVING JUST ENOUGH ROOM FOR THE SPEAKER WIRING AS NEEDED.

# INSTALLATION INSTRUCTIONS [CONTINUED]

#### WIRING THE AMPLIFIER



3. DISCONNECT THE MAIN RADIO HARNESS FROM THE BACK OF THE RADIO.

NOTE: FOR 2004-2005 HIGH OUTPUT (CVO) RADIOS ONLY, BE SURE TO DISCONNECT THE AUXILIARY HARNESS AT THE BACK OF THE RADIO (GREY CONNECTOR)!

TIP: CUTTING A FEW WIRE TIES AND PULLING BACK LOOM CAN MAKE YOUR HARNESS EASIER TO WORK WITH.



- 4. ROUTE AND MAKE THE 3 CONNECTIONS OF THE DIRECT CONNECT WIRING HARNESS.
  - 4.1. CONNECT THE AMPLIFIER HARNESS TO THE STOCK RADIO HARNESS
    - 4.2. CONNECT THE AMPLIFIER HARNESS TO THE BACK OF THE STOCK RADIO
    - 4.3. CONNECT THE AMPLIFIER HARNEES TO THE FRONT OF THE AMPLIFIER

NOTE: BE SURE THAT THE LOCATION OF THE HARNESS AND ITS CONNECTORS WILL NOT INTERFERE WITH THE



5. (AFTERMARKET SOURCE UNIT ONLY) CONNECT YOUR SOURCE UNITS OUTPUT RCA CONNECTORS
TO THE AMPLIFIER LOW-LEVE INPUT CONNECTOR.

NOTE: USE THE LOW-LEVEL RCA CABLE SUPPLIED WHEN CONNECTING TO AN AFTERMARKET SOURCE UNIT.



WARNING: NEVER CONNECT OR DISCONNECT THE DIRECT CONNECT HARNESS WHILE THE MAIN AMPLIFIER IS POWERED ON. THIS CAN DAMAGE THE AMPLIFIER, AND WILL VOID YOUR WARRANTY AS WELL!

#### REPLACING THE SPEAKERS



6. REPLACE THE FACTORY SPEAKERS WITH 4 OHM AFTERMARKET SPEAKERS (IF APPLICABLE).
RECONNECT THE NEW SPEAKERS TO THE STOCK SPEAKER WIRES WITH POSITIVE (+) AND
NEGATIVE (-) PROPERLY MATCHED.

**NOTE**: KEEP THE POLARITIES (+/-) OF EACH WIRE PAIR PROPERLY MATCHED TO THE SPEAKERS. IF YOU ARE INSTALLING HAWG WIRED SPEAKERS, REFER TO THE INSTALLATION INSTRUCTIONS THAT CAME WITH THEM. IF INSTALLING ANOTHER BRAND OF SPEAKERS, REFER TO THOSE SPECIFIC MANUFACTURER INSTRUCTIONS IF NECESSARY.

	H-D® SPEAKER WIRE COLORS			
SPEAKER TERMINAL	1998-2005 8 OHM	1998-20XX CVO <sup>1</sup>	2006-20XX 2 OHM	
FRONT LEFT +	WHT/ORG	WHT/ORG	WHT/ORG	
FRONT LEFT -	L.GRN/WHT	L.GRN/WHT	L.GRN/WHT	
FRONT RIGHT +	GRY/RED	GRY/RED	GRY/RED	
FRONT RIGHT -	L.GRN/BLK	L.GRN/BLK	L.GRN/BLK	

NOTE<sup>1</sup>: CVO BIKES MAY BE EQUIPPED WITH A HIGH-OUTPUT SOURCE UNIT; **DO NOT USE THE FOLLOWING WIRE COLORS:**WHT/PNK, PNK, WHT/GRY, GRY. THESE OUTPUTS CAN DAMAGE THE AMPLIFIERS INPUTS.

# INSTALLATION INSTRUCTIONS [CONTINUED]

## TESTING AND TUNING THE SYSTEM



7. PERFORM A BASIC SYSTEM TEST. TURN THE KEY TO THE ACCESSORY POSITION AND VERIFY
THAT THE AMPLIFIER POWERS UP (LED SHOULD LIGHT) AND THAT THE SPEAKERS FUNCTION
PROPERLY. IF NOT, PROCEED DIRECTLY TO "TROUBLESHOOTING" IN THE USER GUIDE SECTION.

### WRAPPING IT UP



- B. WITH THE IGNITION OFF, CAREFULLY INSTALL THE FAIRING COVER, ENSURING THAT EACH ATTACHING SCREW GOES BACK INTO THE HOLE IT CAME OUT OF. ONCE YOU HAVE EVERYTHING LINED UP AND ALL SCREWS LOOSELY INSTALLED, TIGHTEN EACH SCREW IN AN EVEN PATTERN TO AVOID BINDING.
  - WARNING: AVOID OVER-TIGHTENING; PLASTIC THREADS HAVE A TENDENCY TO PULL OUT EASILY. REFER TO MANUFACTURER INSTRUCTIONS IF NECESSARY.



9. PERFORM A FINAL SYSTEM TEST. TURN THE KEY TO THE ACCESSORY POSITION AND VERIFY THAT ALL COMPONENTS FUNCTION PROPERLY.

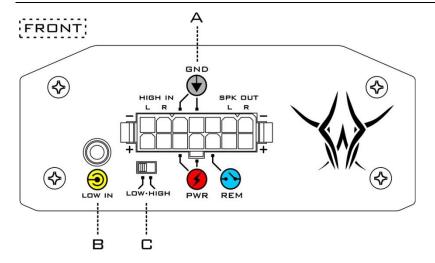


10. PERFORM A TEST RIDE AND AGAIN VERIFY THAT THE SYSTEM IS OK, AND THAT YOUR FRIENDS ARE SUFFICIENTLY JEALOUS.

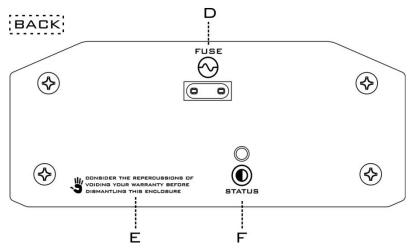
TIP: JUSTIN WOULD LIKE TO REMIND YOU TO CHECK YOUR TIRE PRESSURE, AND FROM THE ENTIRE HAWG WIRED TEAM, THANKS FOR MAKING THIS POSSIBLE, KEEP THE RUBBER SIDE DOWN, AND CRANK IT!

# **USER GUIDE**

#### CONNECTORS AND CONTROLS



PLANNING YOUR SYSTEM
CONFIGURATION IS THE FIRST
STEP TOWARDS HI-FI
HAPPINESS, SO IT'S TIME YOU
GET FAMILIAR WITH ALL THE
BELLS AND WHISTLES YOUR
NEW SYSTEM HAS TO OFFER.
THE TABLE BELOW LISTS THE
CONTROLS AND CONNECTORS
OF THE AMPLIFIER MODULE FOR
REFERENCE.



Α	DIRECT CONNECT HARNESS	С	HIGH/LOW LEVEL INPUT SWITCH	Е	GOOD ADVICE
В	LOW LEVEL INPUT	D	AMPLIFIER PROTECTION FUSE	F	AMPLIFIER STATUS LED

HAWG WIRED PAGE 7 FREMONT, CA

## USER GUIDE [CONTINUED]

#### CONNECTORS DEFINED



#### LOW LEVEL INPUT CONNECTOR:

THIS CONNECTOR ALLOWS THE AMPLIFIER TO USE INDUSTRY STANDARD RCA OUTPUTS FROM AN AFTERMARKET SOURCE UNIT AS INPUTS TO THE AMPLIFIER. THIS IS THE PREFERRED METHOD WHEN RCA OUTPUTS ARE AVAILABLE.

NOTE: WE USE INDUSTRY STANDARD 3.5MM HEADPHONE STYLE JACKS ON THE AMPLIFIER DUE TO THE SPACE CONSTRAINTS. ALTHOUGH WE HIGHLY RECOMMEND USING THE LOW LEVEL INPUT CABLES WE SUPPLY WITH THE KIT, YOU SHOULD BE ABLE TO UTILIZE ANY STANDARD RCA TO PHONO ADAPTER CABLE FOUND AT YOUR LOCAL ELECTRONIC STORE TO MAKE THESE CONNECTIONS.



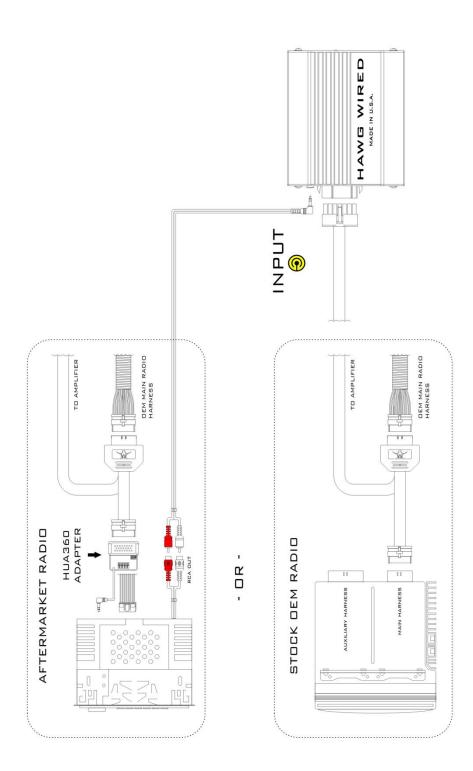
### DIRECT CONNECT INTERFACE CONNECTOR:

THIS IS THE PIN CONFIGURATION OF THE 14 PIN AMPLIFIER CONNECTOR. THIS IS FOR REFERENCE ONLY. ADDITIONAL WIRING IS ONLY REQUIRED FOR CUSTOM APPLICATIONS.

PIN NUMBER	FUNCTION	PIN NUMBER	FUNCTION
1	LEFT - INPUT	8	LEFT + INPUT
2	RIGHT - INPUT	9	RIGHT + INPUT
3	GROUND	1 🗆	+12V POWER (BATTERY)
4	GROUND	1 1	+12V POWER (BATTERY)
5		12	+12V REMOTE ON
6	LEFT - OUTPUT	13	LEFT + OUTPUT
7	RIGHT - OUTPUT	1 4	RIGHT + OUTPUT

NOTE: CVO BIKES MAY BE EQUIPPED WITH A HIGH-OUTPUT SOURCE UNIT; DO NOT USE THE FOLLOWING WIRE COLORS: WHT/PNK, PNK, WHT/GRY, GRY. THESE OUTPUTS CAN DAMAGE THE AMPLIFIERS INPUTS.

# SYSTEM DIAGRAMS



SOURCE INPUT AUX LINE DUT SPEAKER OUT

RC-LINK PORTS 

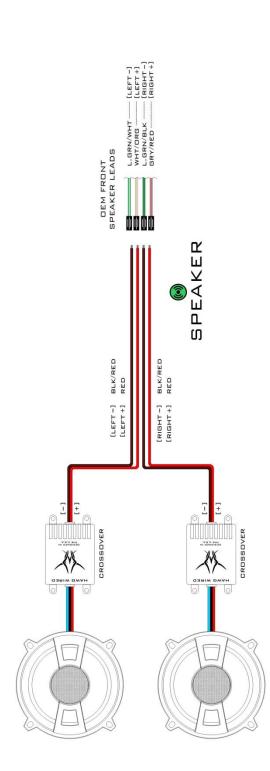
+12v [BATTERY POSITIVE]

GROUND [CHASSIS] **(2) (2)** 

+12V IGNITION TURN-ON MASTER FUSE

> SERIES - INPUT WIRING DCS

# SYSTEM DIAGRAMS [CONTINUED]



RC-LINK PORTS SOURCE INPUT AUX LINE DUT

SPEAKER OUT

+12v [BATTERY POSITIVE] GROUND [CHASSIS]

+12V IGNITION TURN-ON **⊕ ♦ ♦** 

MASTER FUSE

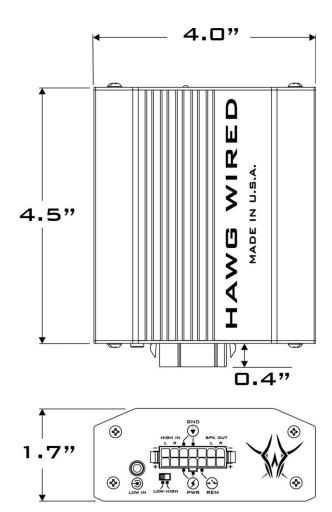
SERIES - OUTPUT WIRING DCS

# **SPECIFICATIONS**

#### DCS1202

#### SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

INPUT CHANNELS:	2 HIGH LEVEL / 2 LOW LEVEL
OUTPUT CHANNELS:	2 CHANNELS
FREQUENCY RESPONSE:	125HZ-50KHZ
LOW LEVEL (RCA LINE-IN) SENSITIVITY:	200MV - 6\
HIGH LEVEL (SPEAKER-IN) SENSITIVITY:	400MV - 12\
INPUT IMPEDANCE:	33К ОНМЯ
NOMINAL OUTPUT IMPEDANCE:	40
NOMINAL POWER OUTPUT (WATTS RMS @ 0.01% THD):	60 WATTS X2
ENGLOCUEE DIMENCIONS.	4 00" W Y 4 E0" I Y 1 70" I





DIMENSIONS IN INCHES

# WARRANTY INFORMATION

HAWG WIRED OFFERS A LIMITED WARRANTY OF OUR PRODUCTS ON THE FOLLOWING TERMS:

#### LENGTH OF WARRANTY

1 YEAR ON AUDIO SYSTEMS, ELECTRONICS, SPEAKERS, AND ACCESSORIES (RECEIPT REQUIRED).

#### • COVERAGE

THIS WARRANTY COVERS ONLY THE ORIGINAL PURCHASER OF A HAWG WIRED PRODUCT PURCHASED FROM AN AUTHORIZED HAWG WIRED DEALER IN THE UNITED STATES. IN ORDER TO RECEIVE SERVICE, THE PURCHASER MUST PROVIDE HAWG WIRED WITH A COPY OF THE RECEIPT STATING THE CUSTOMER NAME, DEALER NAME, PRODUCT PURCHASED AND DATE OF PURCHASE.

#### DEFECTIVE PRODUCTS

PRODUCTS FOUND TO BE DEFECTIVE DURING THE WARRANTY PERIOD WILL BE REPAIRED OR REPLACED (WITH A PRODUCT DEEMED TO BE EQUIVALENT) AT HAWG WIRED'S DISCRETION.

#### • WHAT IS NOT COVERED

DAMAGE CAUSED BY ACCIDENT, ABUSE, IMPROPER OPERATIONS, WATER, THEFT ANY COST OR EXPENSE RELATED TO THE REMOVAL OR REINSTALLATION OF PRODUCT SERVICE PERFORMED BY ANYONE OTHER THAN AN AUTHORIZED HAWG WIRED SERVICE CENTER ANY PRODUCT WITH THE SERIAL NUMBER OR TAMPER LABELS DEFACED, ALTERED, OR REMOVED SUBSEQUENT DAMAGE TO OTHER COMPONENTS ANY PRODUCT PURCHASED OUTSIDE THE U.S. ANY PRODUCT NOT PURCHASED FROM AN AUTHORIZED HAWG WIRED DEALER

#### LIMIT ON IMPLIED WARRANTIES

ANY IMPLIED WARRANTIES INCLUDING WARRANTIES OF FITNESS FOR USE AND MERCHANTABILITY ARE LIMITED IN DURATION TO THE PERIOD OF THE EXPRESS WARRANTY SET FORTH ABOVE. SOME STATES DO NOT ALLOW LIMITATIONS ON THE LENGTH OF AN IMPLIED WARRANTY, SO THIS LIMITATION MAY NOT APPLY. NO PERSON IS AUTHORIZED TO ASSUME FOR HAWG WIRED ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF THE PRODUCT.

#### • HOW TO OBTAIN SERVICE

PLEASE CALL 510.656.2999 FOR HAWG WIRED CUSTOMER SERVICE. YOU MUST OBTAIN A RETURN MATERIAL AUTHORIZATION NUMBER (RMA) TO RETURN ANY PRODUCT TO HAWG WIRED. YOU ARE RESPONSIBLE FOR SHIPPING CHARGES OF RETURNED PRODUCTS TO HAWG WIRED.

#### MADE IN THE USA

OUR PRODUCTS ARE PROUDLY DESIGNED, DEVELOPED AND BUILT IN THE USA\*. THE MAJORITY OF THE COMPONENTS USED IN THE CONSTRUCTION OF OUR PRODUCTS ARE PRODUCED BY AMERICAN COMPANIES. HOWEVER, DUE TO THE GLOBAL NATURE OF MODERN MANUFACTURING AND THE ELECTRONICS INDUSTRY IN GENERAL, SOME PARTS MAY BE MANUFACTURED IN OTHER COUNTRIES.

\*OUR SPEAKERS ARE PROUDLY DESIGNED AND DEVELOPED IN THE USA. HOWEVER, DUE TO THE GLOBAL NATURE OF LOUDSPEAKER MANUFACTURING, OUR SPEAKERS ARE MANUFACTURED IN OTHER COUNTRIES.

# HAWG WIRED, INC.

#### CONTACT US BY EMAIL

#### CONTACT US BY PHONE

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