

# DESCEND

Owner's Manual

DN8 and DN10 Subwoofers

#### Welcome

Thank you for choosing a Definitive Technology Descend subwoofer. To ensure that you experience the finest performance possible, we encourage you to take a moment to fully read this owner's manual and familiarize yourself with the proper installation and setup procedures for your speaker. Enjoy!

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# Safety Precautions



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

- CAUTION: To reduce the risk of electric shock, do not remove cover (or back), as there are no user-serviceable parts inside. Refer servicing to qualified personnel.
- The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

2. Correct disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collecti Guarde todas las cajas y el material de embalaje en caso de que se mude o necesite enviar su sistema. on systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

3. CAUTION: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.

4. WARNING: The battery (battery or batteries or battery pack) shall not be exposed to excessive heat such as sunshine, fire or the like.

- 5. Read these instructions.
- 6. Keep these instructions.
- 7. Heed all warnings.
- 8. Follow all instructions.
- 9. Do not use this apparatus near water.
- 10. Clean only with a dry cloth.

11. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

12. Do not install near any heat sources such as

Please see additional safety precautions on the following page.

# Safety Precautions (continued)

radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

13. No naked flame sources, such as lighted candles, should be placed on the apparatus.

14. Class 1 construction should be connected to a mains socket outlet with a protective earthing connection.

15. Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

16. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles and at the point where they exit from the apparatus.

17. Use only attachments/accessories specified by the manufacturer.

18. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart or rack is used, use caution when moving the cart/apparatus combination



when moving the cart/apparatus combination to avoid injury from tip-over.

19. Unplug the apparatus during lightning storms or when unused for long periods of time.

20. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as when power supply cord or plug is damaged, when liquid has been spilled or objects have fallen into the apparatus, when the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

21. WARNING: The mains plug/appliance coupler is used as the disconnect device. The disconnect device shall remain readily operable.

22. CAUTION: To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet. The mains plug is used to completely interrupt the power supply to the unit and must be within easy access by the user.

#### FCC Information (For US Customers)

#### 1. Compliance Information

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this product may not cause harmful interference, and (2) this product must accept any interference received, including interference that may cause undesired operation.

Please see additional Safety Precautions on the following page.

# Safety Precautions (continued)

#### 2. Important Notice: Do Not Modify This Product.

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modification not expressly approved by Sound United may void your authority, granted by the FCC, to use the product.

#### 3. Notes

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FFC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.

• Consult the local retailer authorized to distribute this type of product or an experienced radio/TV technician for help.

#### Notes on Use

- Avoid high temperatures.
- All for sufficient heat dispersion when installed in a rack.
- Handle the power cord carefully.
- Hold the plug when unplugging the cord.
- Keep the unit free from moisture, water and dust.
- Unplug the power cord when not using the unit for long periods of time.
- Do not obstruct the ventilation holes.
- Do not let foreign objects into the unit.
- Do not let insecticides, benzene and thinner come in contact with the unit.
- Never disassemble or modify the unit in any way.
- Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, tablecloths or curtains.
- Naked flame sources such as lit candles should not be placed on the unit.
- Observe and follow local regulations regarding battery disposal.
- Do not expose the unit to dripping or splashing fluids.

Please see additional Safety Precautions on the following page.

# Safety Precautions (continued)

- Do not place objects filled with liquids, such as vases, on the unit.
- Do not handle the mains cord with wet hands.
- When the switch is in the OFF (STANDBY) position, the equipment is not completed switched off from MAINS.
- The equipment shall be installed near the power supply so that the power supply is easily accessible.
- Do not keep the battery in a place exposed to direct sunlight or in places with extremely high temperatures, such as near a heater.
- Do not bend forcedly the plug on the equipment for the connection between the connector and micro USB/USB cable.
- CAUTION (For Amplifier): HOT SURFACE. DO NOT TOUCH.

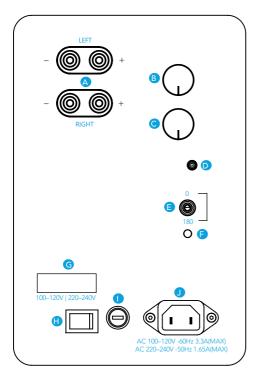


The top surface over the internal heat sink may become hot when operating this product continuously. Do not touch hot areas, especially around the "Hot surface mark" and the top panel. Each subwoofer leaves our plant in perfect condition. Any visible or concealed damage most likely occurred in handling after it left our plant and should be reported at once to your Definitive Technology retailer where you purchased your product. Please unpack your system carefully. Save all cartons and packing material in case you move or need to ship your system.

Record the serial number found on the back of the subwoofer.

Serial Number: \_

### Getting To Know Your Subwoofer



#### Legend

А	HIGH LEVEL INPUT LEFT/RIGHT (SPEAKER LEVEL IN)
В	VOLUME UP/DOWN KNOB
С	LOW PASS FILTER UP/DOWN KNOB
D	LFE IN
Е	PHASE SWITCH (0 = DEFAULT)
F	STATUS LED
G	AC POWER VOLTAGE SELECTOR SWITCH
н	POWER ON/OFF SWITCH
I	FUSE ~100-120V T6.3AL/250V ~220240V T4AL/250V
J	AC POWER INLET

### **Getting Started**

1. Make sure the amplifier is set to the correct voltage designated for your country.

2. Plug in the subwoofer to the wall outlet and power up the subwoofer using the power switch on the amplifier panel.

3. Set the volume to the half-way (12:00) position.

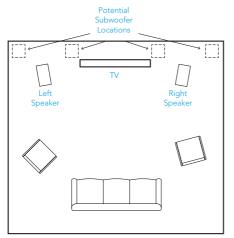
4. Set the low-pass control according to the chart on page 14 to start.

5. If you are using an audio processing unit that has a built-in room correction function, follow the instructions for that process.

6. If you are not using a piece of equipment that has built-in room correction, follow step 7 below using multiple media sources (music, movies, TV), and tune the volume of the subwoofer to match the volume of your set of speakers.

7. Tune the low-pass setting on your subwoofer according to the amount of "High-Bass" or "Low-Midrange" signal being produced by your system. If the media sounds "muddy", "chesty", or "boomy", turn down the low pass frequency until your system sounds even. If the media's low end sounds "thin", "detached", or "uneven", turn up the low pass frequency until your system sounds even.

#### Positioning the Subwoofer



Room Layout for Optimal Listening Experience

There are some general guidelines that you should bear in mind when locating your subwoofer:

1. For best results, place the subwoofer on the same side of the room as your front speakers.

2. Placement near walls and in a corner will increase the subwoofer's output, but the sound may be "muddy" or "boomy."

3. An acoustic effect called "standing waves" or "room modes" may cause uneven bass at various locations throughout the room. This phenomenon is a function of the dimensions of the room and not due to the design of the subwoofer. If there is less bass at the main listening position than at other areas of the room, move the subwoofer until you hear full bass at the main listening position.

4. Moving the subwoofer even a foot or two can dramatically change the bass output and quality. Experiment with subwoofer placement to achieve the highest performance.

5. The subwoofer may be placed inside a cabinet, provided there is a clearance of at least 2 inches (50 mm) around the front, back, sides and top of the subwoofer. The front of the cabinet should be completely open or covered with open mesh grille, screen, or cloth.

# AC Mains (Power) Connection

Note: Please ensure the voltage switch adheres to your regional guidelines.



#### 100–120V / 220–240V The appropriate voltage for your unit is indicated here

Before you plug in the Descend subwoofer, please make sure the voltage switch on the back of the subwoofer is set to your country's voltage output. The voltage switch typically will not need to be changed unless you purchased your product from a different region than where you will be using it. If necessary, adjust the switch now prior to plugging in the subwoofer.

The subwoofer has two Auto On/Off functions:

- Always on
- Auto on via signal (recommended)

Please note that if you hear a noise from the speaker when the amp powers up or down, this is normal.

The bi-color blue/red LED on the back panel will light up when a signal is detected and the amplifier turns on. The LED is red when in standby mode and no signal is detected. Please note that after the cessation of a signal, it may take up to an hour for the amplifier to actually turn off. This is nothing to be worried about, as the amp will be in low idle mode which uses very little power (less than 1/2 Watt). To prevent accidental damage to your subwoofer from overdriving the system, the subwoofer features an internal overload protection circuit, which will turn the subwoofer off or down when overdriven or overheated and will then resume normal operation after a few minutes.

### Connection and Setup

There are two options for connecting your subwoofer, LFE INPUT and SPEAKER LEVEL IN:





This method is recommended for home theater systems with receivers or audio processors with built-in bass management. Anything that is attached to a receiver with bass management should have the low-pass filter turned off on the subwoofer by setting it to LFE on the digital display.

1. Power-off the amplifier/receiver and disconnect the subwoofer from the AC socket.

2. Connect a standard RCA cable from the subwoofer/LFE output of your receiver to the LFE input of the subwoofer.

3. Connect the subwoofer to an AC power source and turn it on (see page 10).

4. Start with the default volume, adjusting if needed.

5. Increase the Low Pass filter setting on the subwoofer to the maximum setting.

6. Turn on the receiver's power and access the "speaker setup" or "speaker configuration" menu.

7. Set the subwoofer to "Yes" or "On".

8. Set the main, center, and surround speakers' lowpass filters to an appropriate frequency (see page 14 for a guide).

9. For further setup, follow the instructions of the audio processing unit, or run an automatic bass management setup on the audio processor.

2 SPEAKER LEVEL IN SETUP (best for amps/ receivers with no LFE/subwoofer or pre-out jacks).

Note: Speaker Level In is labeled High Level Input on the back panel of the subwoofer.

1. Power-off the amplifier/receiver and disconnect the subwoofer from the AC socket.

 Connect standard speaker cables from the speaker output terminals of the amplifier/receiver. Most amplifiers and receiver speaker terminals allow two sets of wires to be connected to one terminal set (one for the main speaker and one for the subwoofer).



### Connection and Setup (continued)

IMPORTANT NOTE: One terminal on each channel input is marked with a red band (+) and the other is marked with a black band (-). Make certain that you connect the wire from the red (+) terminal of your amplifier or receiver to the red (+) terminal of the subwoofer and the wire from the black (-) terminal of your amplifier or receiver to the black (-) terminal of the subwoofer. It is essential to connect all speakers in the system to the amplifier in the same way (to the correct polarity.) If you experience poor bass, one or more of the channels may be connected to the incorrect polarity and may need to be rewired. Pay close attention and connect positive to positive and negative to negative on all channels.

3. Connect the subwoofer to an AC power source and turn it on (see page 10).

4. Start with the default volume and adjust as needed.

5. If the system is 2-channel, skip to step 9 below.

6. If the receiver is a multi-channel device, turn on the receiver's power and access the "speaker setup" or "speaker configuration" menu.

7. Set the subwoofer to "None" or "Off".

8. Set front left and right speakers to "Large".

9. Proceed to page 13 for subwoofer adjustment and system tweaking.

# Using and Adjusting the Descend Subwoofer

#### **Amplifier Controls**

Use the volume, phase and low-pass controls on the amplifier panel to optimize your sound experience.

1. Volume up/down control knobs: Increase/ decrease the subwoofer's loudness.

2. Phase switch: Adjusts the relative phase of the output signal. Phase can be switched to either 0 or 180 degrees.

3. Low-pass filter up/down control knobs: The adjustable low-pass filter can be adjusted from 40 to 140 Hz.

#### Adjusting the Sound

1. Sit in your favorite listening position.

2. Play a piece of music you are very familiar with that has good deep bass content.

3. Adjust the Volume up or down to taste. The bass should have impact without sounding too "heavy."

4. Using the Subwoofer Low-Pass Filter Guide on page 14 as a starting point, adjust the LP up or down until there is a smooth transition between the main speaker and subwoofer. Play a recording with male vocals and string bass. Turn down the LP filter frequency until the vocals sound rich but not "thick" or "chesty." Turn it up if the vocals sound "thin" or lacking in body. 5. Flip the phase switch to either 0 or 180 degrees. Then listen to how well the subwoofer blends with your speaker system by how little you can tell the difference in sound coming from your speakers and subwoofer. This may also fix some unevenness in the frequency response of your system. If you can't hear a difference between settings, it is recommended that you leave the setting on 0 degrees.

In an ideal audio system the subwoofer works "invisibly," simply adding deep, loud bass without calling attention to itself and blending seamlessly with the main speakers so it appears that the main speakers are making all the sound. The key to seamless main speaker subblending is finding the perfect crossover frequency and phase settings for your system, and the best place to make those "set and forget" adjustments is from your listening chair. If your receiver has built-in Audyssey or a similar auto setup/room correction function, run that first. In most cases that is all the adjustment you'll need.

Note: Auto setup functions work best when the subwoofer is connected to the LFE/subwoofer output.

### Subwoofer Low-Pass Filter Guide

MAIN FRONT SPEAKER TYPE	SUGGESTED SETTINGS
LARGE, FULL-RANGE FLOORSTANDING	40-80 HZ
SMALL FLOORSTANDING AND LARGE BOOKSHELF	60–100 HZ
SMALL BOOKSHELF/MINI-MONITORS/LARGE SATELLITES	80–120 HZ
SMALL SATELLITES	100–140 HZ
USING LFE FROM A RECEIVER OR PRE-AMP WITH INTERNAL BASS MANAGEMENT	150 HZ

### Specifications

MODEL	DN8	DN10
DIMENSIONS (W × D × H) (CABINET ONLY, NO BASE)	12.8 X 12.0 X 13.1 IN (324.8 X 305.8 X 331.6 MM)	16.8 X 16.0 X 17.1 IN (425.4 X 407.4 X 433.2 MM)
PRODUCT WEIGHT	27.3 LBS (12.4 KG)	45.6 LBS (20.7 KG)
DRIVER COMPLEMENT	8 IN WOOFER WITH 2 X 8 IN BASS RADIATOR	10 IN WOOFER WITH 2 X 10 IN BASS RADIATOR
FREQUENCY RESPONSE	24–200 HZ	22–200 HZ

#### Service

Service and warranty work on your Definitive Technology loudspeaker will normally be performed by the Definitive Technology dealer or importer. If, however, you wish to return the speaker to us, please contact us first, describing the problem and requesting proper authorization.

Note: Definitive phone and email technical support is only offered in English.

#### **Product Servicing**

Under no circumstances should loudspeakers be shipped to our offices or returned without contacting us first and obtaining return authorization.

#### **Technical Assistance**

If you have any questions, please contact the Definitive Technology dealer or importer where you purchased your product. If they are unable to help you, please contact us directly.

www.Definitive.CustHelp.com email: info@DefinitiveTechnology.com 1-800-228-7148 Please refer to our website for hours of operation.

#### Limited Warranty

5-Years for Drivers and Cabinets, 3-Years for Electronic Components DEI Sales, Inc., dba Definitive Technology (herein "Definitive"), warrants to the original retail purchaser only that this Definitive loudspeaker product (the "Product") will be free from defects in material and workmanship for a period of five (5) years covering the drivers and cabinets and three (3) years for the electronic components from the date of the original purchase from a Definitive Authorized Dealer. If the drivers, cabinets, or electronic components of the Product have a defect in material or workmanship. Definitive or its Authorized Dealer will, at its option. repair or replace the warranted piece for the limited period of time provided in this warranty at no additional charge, except as set forth below. All replaced parts and Product(s) become the property of Definitive. Product that is repaired or replaced under this warranty will be returned to you, within a reasonable time, freight collect. This warranty is non-transferrable and is automatically void if the original purchaser sells or otherwise transfers the Product to any other party. This Warranty does not include service or parts to repair damage caused by accident. misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage in excess of the rated maximum of the unit, cosmetic appearance of cabinetry not directly attributable to defects in material or workmanship. This warranty does not cover the elimination of externally generated static or noise, or the correction of antenna problems or weak reception. This warranty does not cover labor costs or damage to the Product caused by installation or removal of the Product. Definitive Technology makes no warranty with respect to its products purchased from dealers or outlets other than Definitive Technology Authorized Dealer. The warranty is automatically void if: 1) The product has been damaged, altered in any way. mishandled during transportation, or tampered with. 2) The product is damaged due to accident, fire, flood, unreasonable use, misuse, abuse, customer applied cleaners, failure to observe manufacturers warnings, neglect or related events. 3) Repair or modification of the Product has not been made or authorized by Definitive Technology. 4) The product has been improperly installed or used. Product must be returned (insured and prepaid), together with the original dated proof of purchase to the Authorized Dealer from whom the Product was purchased, or to the nearest Definitive factory service center. Product must be shipped in the original shipping container or

its equivalent. Definitive is not responsible or liable for loss or damage to Product in transit. This limited warranty is the only express warranty that applies to your product. Definitive neither assumes nor authorizes any person or entity to assume for it any other obligation or liability in connection with your product or this warranty. All other warranties, including but not limited to express, implied, warranty of merchantability or fitness for a particular purpose, are expressly excluded and disclaimed to the maximum extent allowed by law. All implied warranties on product are limited to the duration of this expressed warranty. Definitive has no liability for acts of third parties. Definitive's liability, whether based on contract, tort, strict liability, or any other theory, shall not exceed the purchase price of the product for which a claim has been made. Under no circumstance will Definitive bear any liability. for incidental, consequential or special damages. The consumer agrees and consents that all disputes between the consumer and Definitive shall be resolved in accordance with California laws in San Diego County, California. Definitive reserves the right to modify this warranty statement at any time. Some states do not allow the exclusion or limitation of consequential or incidental damages, or implied warranties, so the above limitations may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

#### DN8/DN10 Manual version 1

This product complies with the essential requirements of the EMC directive 89/336/EEC.

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