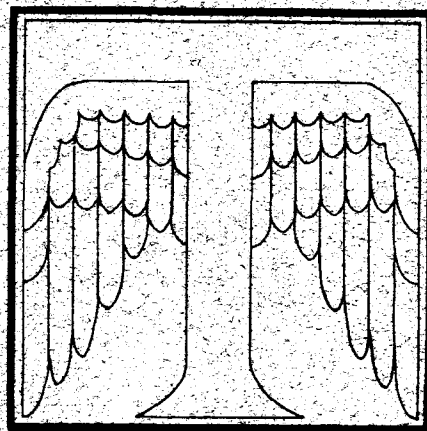


# THETA DIGITAL

C O R P O R A T I O N



THETA D S Pro Generation III

*Owners Manual*

***Digital Done Right***

TM

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## CONGRATULATIONS

You have acquired one of the most advanced components ever developed for the playback of digitally encoded sound.

## IMPORTANT

Save all packaging in a dry place away from fire hazards. Your Theta unit is a precision electronic instrument and should be properly cartoned any time shipment is made. In the unlikely event that you have to return your Theta to the factory for service, or if you send it to us for updating, the original packing will protect the unit from shipping damage.

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In order to achieve the fullest flexibility and enjoyment from your DS PRO GENERATION III we at Theta hope that you will read this manual in full before connecting the unit to your audio system.

## WARNING

United States law prohibits disposition of these commodities to the Soviet Block, Libya, Laos, The People's Republic of China, North Korea, Vietnam, Cambodia, or Cuba unless otherwise authorized by the United States.

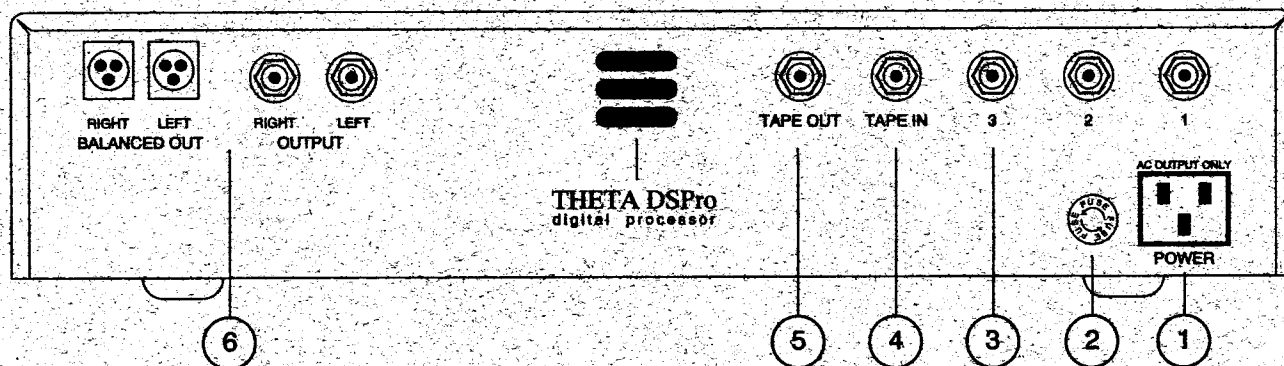
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## NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment 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 equipment does cause harmful interference to radio and television reception, which can be determined by turning the equipment 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 equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## -- A -- CONNECTIONS



### 1. POWER INPUT

Insert female end of detachable AC power cord (included in the box) into your DS PRO's power socket. Plug the three prong end into an unswitched AC outlet. Do not defeat the ground lug as the DS PRO contains a powerful computer which requires a direct ground. If after hook up, a ground loop (hum) appears, check the grounding of your other components. If in doubt, get the advice of your dealer.

Note that your DS PRO has no A/C on-off switch. For the best sound, leave the unit on all the time, except for an extended absence. When you plug in the DS PRO, or turn it on from a switched outlet, put your preamp in mute, or turn the volume down, or select an input other than that to which the DS PRO is connected. As with all solid state equipment, the sound will improve over a warm up period lasting approximately four days from turn on. Your DS PRO will reach its full sonic potential after four days operation.

### 2. FUSE

This holder houses a 1/2 AMP SLO-BLOW type fuse. If unit does not function always be sure to disconnect the AC power from unit and remove/check this fuse. If replacement of this fuse becomes necessary, be sure to replace ONLY with a fuse of the SAME TYPE.

### 3. DIGITAL INPUT

Connect the digital output of your THETA DATA CD player, DAT, or laser video player to the digital signal input 1, 2, or 3, using a coaxial, glass fiber optic, or TOSLINK optic cable, depending on how you ordered your DS PRO. Aside from the cable used, these inputs are interchangeable.

#### NOTE:

**IN ORDER TO COMPLY WITH PART 15 OF THE FCC RULES, WE RECOMMEND USING THE THETA DIGITAL LINK CABLE. DO NOT USE AUDIO INTERCONNECT CABLE FOR ANY DIGITAL CONNECTION. AUDIO CABLE IS DESIGNED FOR INFORMATION IN THE DC 20-KHz REGION. DIGITAL DATA IS TRANSFERRED AT 2.8-3.05 MHz.**

### 4. TAPE IN

This input is for a digital tape deck such as an R-DAT machine. However, this input will accept any digital source.

### 5. TAPE OUT

This digital output carries the selected digital input signal. This output should be connected to the digital input of an R-DAT machine.

Alternatively, "this digital tape loop" can be used for a second CD player or digital equalizer. Unlike analog equalizers, which usually destroy the imaging capability and harmonic integrity of a reference quality playback system through phase and time distortions inherent in their design, digital equalization can be accomplished without affecting phase or time.

#### NOTICE:

Tape copying is a convenience intended for personal use. If you copy commercially produced recordings and sell or give away copies, you may be violating the copyright or the property rights of the producer of the recording.

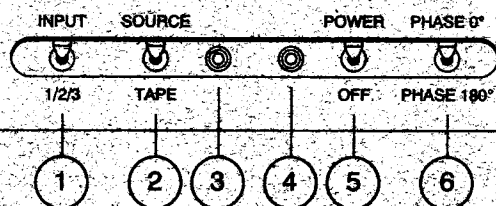
### 6. ANALOG OUTPUT

Connect the DS PRO analog output to any high level input of your preamp using the best interconnect available. Ask your dealer to recommend those whose characteristics best match your system. The covers to the left of the RCA analog output jacks are for the addition of balanced output circuitry. If you have a balanced unit, the covers are replaced by Cannon XLR connectors; the RCA outputs are still functional.

## FRONT PANEL CONTROLS AND INDICATORS



THETA D S Pro  
Generation III  
digital signal processor



**1. INPUT 1/2/3**

The three position switch allows you to choose among digital sources. You may connect as many as three digital sources. Setting the switch to the upper position, selects input #1, in the center, selects input #2 and in the down position selects input #3.

**2. SOURCE/TAPE**

This switch allows you to select between the three digital inputs (source) or the digital tape input.

**3. DIGITAL LOCK LIGHT**

Will actuate when there is digital signal of 32KHz, 44.1KHz, or 48KHz (SPDIF standard) at the selected input. With an eye to the future, Theta's engineers designed the DS PRO's proprietary input to lock onto and decode any sampling frequency likely to be developed.

**4. POWER LIGHT**

Indicates the DS PRO is on.

**5. POWER SWITCH**

Turns on/off the power to the DS Pro Generation III's digital section. Power to the analog section remains on at all times while the unit is plugged into an AC socket.

**6. PHASE 0°/PHASE 180° SWITCH**

Allows you to reverse the absolute phase of the stereo signal 180 degrees. The function is accomplished in the digital domain.

It is unfortunate that many recording companies pay no attention to absolute phase. A little experimentation will show you the gains to be had from proper phase orientation. The better defined, more energetic bass, and more stable imaging will be obvious.

— C —  
**ROM REPLACEMENT**

The computer section of the DS Pro Generation III is directed by a complex program encoded on ROM (read only memory) chips that give it precise instructions on processing the signal. This software, containing tens of millions of computations, has been painstakingly worked out by an eminent mathematician, ensuring that the algorithms controlling the digital conversion are precise in each of the many parameters that affect sound.

We realize, however, that variations in individual systems may call for subtle variations from what we regard as standard. Just as the "best" phono cartridge in the world is one that most enhances your system, and there is no final consensus on which high end components are most nearly perfect, there is room for personal opinion and taste on the software.

Taking into account the possibility of future improvements as well as changes in your system, we have made it as convenient and inexpensive as possible to change, compare and upgrade ROM chips.

**As there are potentially lethal voltages inside the Theta's chassis, we strongly advise you to have your dealer perform the operation for you.**

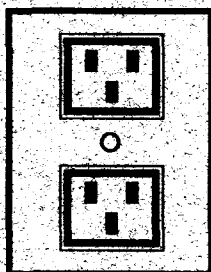
**IMPORTANT**

The high speed computing components inside the Theta are ~~extremely~~ static sensitive. Any static related damage to any part of the unit is not covered by the warranty. In the event of malfunction, consult your Theta dealer.

**NOTICE:**  
**Theta assumes no responsibility for user incurred damage to your unit.**



-- D --



### IMPORTANT NOTICE

1. Due to computer based circuitry used in THETA digital to analog converters, it is imperative that it be connected to a ground via its three wire A/C power cord. It has come to our attention that some power line conditioners interrupt the third ground wire. If the ground wire is interrupted, the performance and reliability of the THETA D/A CONVERTER will be severely compromised. If you have a power conditioner which interrupts the ground to the THETA AC power cord, you must plug the THETA into a standard A/C wall socket. (That is a socket which has ground connection). Failure to do so will degrade performance and reliability, and will void your warranty.
2. Also, it is important to prevent contact with static electricity when connecting other components and cables to the THETA unit. When connecting a digital link coax cable from the transport to the THETA, place one hand on top of the THETA, then with the other hand grasp the "barrel" of the digital link cable and plug it into the appropriate input on the THETA. Then plug the remaining end of the digital link cable into the output of the transport in the same manner.
3. At times, a squeaking or buzzing sound may occur, and one channel or both channels will lose output. This is not a malfunction of the THETA D/A CONVERTER. To correct this static induced situation, simply select a different input by flipping the input select switch on the THETA, then flip the switch back to original position. If it does not correct the problem, first make certain to turn preamp volume all the way down, and/or engage the mute switch, then turn power switch on the Theta off then back on, or unplug the THETA's power cord and wait three seconds and plug the THETA back in.

**90 DAY LIMITED WARRANTY TERMS AND CONDITIONS**  
**(3 Year optional extended service contract)**

1. Theta Digital Corporation, henceforth referred to as Theta, Warrants the product designated herein to be free of manufacturing defects in material and workmanship, subject to the conditions herein set forth, for a period of three (3) years from the date of purchase by the original purchaser or no later than five (5) years from the date of shipment to the authorized Theta dealer, whichever comes first.
2. **CONDITIONS**  
This Warranty is subject to the following conditions and limitations. The Warranty is void and inapplicable if the product has been used or handled other than in accordance with the instructions in the owner's manual, abused or misused, damaged by accident or neglect or in being transported, or the defect is due to the product being repaired or tampered with or modified by anyone other than Theta or an authorized Theta repair center by the customer at his or her solo expense. Theta will pay return freight of its choice. A returned product must be accompanied by a written description of the defect and a photocopy of the original purchase receipt. This receipt must clearly list model and serial number, the date of purchase, the name and address of the purchaser and authorized dealer and the purchase price. Theta reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products and to change the prices or specifications of any product without notice or obligation to any person.
3. **REMEDY**  
In the event the above product fails to meet the Warranty, and the above conditions have been met, the purchaser's sole remedy under the Limited Warranty shall be to return the product to Theta or an authorized Theta repair center where the defect will be rectified without charge for parts or labor.
4. **LIMITED TO ORIGINAL PURCHASER**  
This Warranty is for the sole benefit of the original purchaser of the covered product and shall not be transferred to a subsequent purchaser of the product.
5. **DURATION OF WARRANTY**  
This Warranty expires on the third anniversary of the date of purchase or no later than the fifth anniversary of the date of shipment to the authorized Theta dealer, whichever comes first.
6. **MISCELLANEOUS**  
**ANY IMPLIED WARRANTIES RELATING TO THE ABOVE PRODUCT SHALL BE LIMITED TO THE DURATION OF THIS WARRANTY. THE WARRANTY DOES NOT EXTEND TO ANY INCIDENTAL OR CONSEQUENTIAL COSTS OR DAMAGES TO THE PURCHASER.** Some states do not allow limitations on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions 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.
7. **WARRANTOR**  
Inquiries regarding the above limited Warranty may be sent to the following address:

THETA DIGITAL CORPORATION  
5330 DERRY AVENUE, SUITE "R"  
AGOURA HILLS, CA 91301

**WARRANTY OUTSIDE THE USA**

Theta has formal distribution in many of the countries of the free world, in each country the Theta Importer has contractually accepted the responsibility for product warranty. Warranty should normally be obtained from the Importing dealer or distributor from whom you obtain your product.

**WARNINGS**

1. To prevent fire or shock hazard, do not expose your Theta product to rain or moisture.
2. This unit contains voltages which can cause serious injury or death. Do not operate with covers removed. Refer all servicing to your authorized Theta dealer.
3. For continued protection against fire hazard, replace fuses only with the same type and rating of fuses as specified.