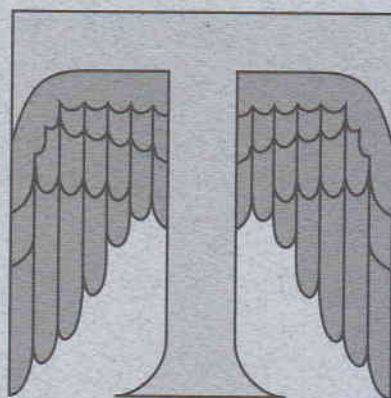


THETA DIGITAL

C O R P O R A T I O N



DS Pro basic III

Owners Manual

Digital Done Right

TM

CONGRATULATIONS

You have acquired the most advanced component for the playback of digitally encoded sound ever to have been developed.

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.

* * *

In order to achieve the fullest flexibility and enjoyment from your DS Pro basic 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 Libya, Laos, North Korea, Cambodia or Cuba unless otherwise authorized by the United States.

* * *

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 receiver into an outlet on a circuit different from that which the Theta basic III is connected to.

DS Pro basic III IDENTIFICATION RECORD

This information is for your records and for future identification of the basic III.

SERIAL NUMBER _____

DATE PURCHASED _____

DEALER'S NAME _____

DEALER'S ADDRESS _____

OPERATIONAL SAFETY PRECAUTIONS

CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE ANY OF THE COVER PANELS.

NO USER-SERVICEABLE PARTS INSIDE, REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT ALLOW LIQUIDS TO ENTER THE UNIT'S VENTILATION HOLES.

WHEN MAKING ANY CONNECTIONS TO THE BASIC III, REMOVE THE AC POWER BEFORE DOING SO.

WHEN PLACING THE BASIC III IN YOUR SYSTEM, MAKE CERTAIN TO ALLOW A MINIMUM OF ½ INCH OF VENTILATION ON EACH SIDE OF THE UNIT. ALSO ALLOW AT LEAST ½ INCH OF VENTILATION ABOVE THE UNIT.

TO PREVENT DAMAGE TO THE ANALOG OUTPUT SECTION, BE CERTAIN NOT TO SHORT THE OUTPUT CONNECTIONS TO GROUND.

IF REPLACEMENT OF THE AC LINE FUSE BECOMES NECESSARY, REPLACE ONLY WITH THE SAME VALUE AND TYPE OF FUSE. NEVER BYPASS THIS FUSE.

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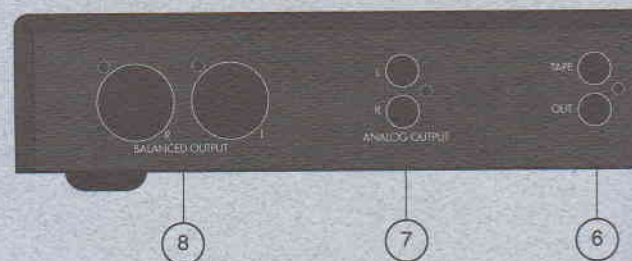
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Section A Important Notice

- I. Due to computer based circuitry used in Theta digital to analog converters, it is imperative that your Basic III be connected to a ground via its three wire AC power cord. It is important that the AC power outlet which the Theta is plugged into is actually grounded. Failure to do so will severely compromise both the performance, reliability and safety of use of the unit.
- II. It is also important to prevent contact with static electricity when connecting other components and cables to the Theta. When connecting cables, simply place one hand on the top of the Theta and then grasp the metal "barrel" of the cable with the other hand and plug the cable into the appropriate jack on the Theta.
- III. At times a squeaking or buzzing sound may occur and/or one or both channels will lose output. This is NOT A MALFUNCTION of the unit. This is normally caused by exposure to static electricity and can be cured by simply selecting a different input or turning off your power amplifier(s) and then turn off/on the Theta.
- IV. Ventilation is also an important issue to bear in mind when placing the Theta in your system. Make certain that the Theta is placed in a well ventilated area or rack unit.
- V. Please take note that some powerline conditioners defeat the AC power ground on their outlets. If you are going to plug the Theta into a line conditioner, check with your dealer to make certain that the particular conditioner the you are going to use DOES NOT DEFEAT THE AC GROUND on it's AC outlet(s).
- VI. **DO NOT** remove the top/bottom covers from the unit as there are no user serviceable components inside. Refer service to qualified personnel only.



1. POWER INPUT

Insert the female end of the AC power cord into this socket. Plug the other end of the AC power cord into an **UNSWITCHED AC OUTLET**. Do not defeat the ground lug of the AC power cord, as the Theta DS Pro basic III is actually a high speed computer and requires a direct ground.

As with all solid state equipment, there is normally a warm up time involved and with the DS Pro basic III, this is approximately four days. It is at the end of these four days that the DS Pro basic III will reach its full sonic potential.

CAUTION

If you are plugging the unit into an AC line conditioner, make certain that the AC sockets on the conditioner are actually grounded. Some line conditioners defeat this ground.

If it becomes necessary to unplug your DS Pro basic III from the AC outlet, make certain to turn-off your power amplifier(s) first and then turn-off your pre-amplifier before removing the AC power from the DS Pro basic III.

2. AES/EBU INPUT

Plug a high-quality AES/EBU digital interconnect into this input and connect the remaining end of the interconnect into your CD transport's AES/EBU digital output.

3. TOSLINK OPTICAL INPUT

Connect a CD and/or Laser disc transport or DAT machine with a Toslink output to this input.

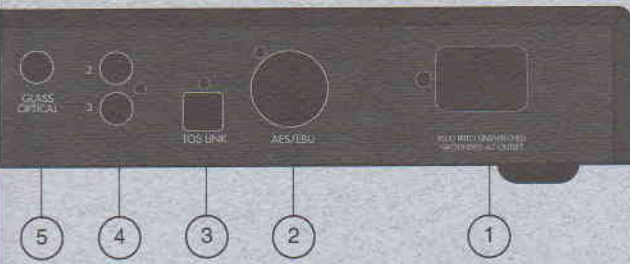
4. COAXIAL INPUTS #2 & #3

Connect the coaxial digital output of your CD and/or Laser disc transport or DAT machine to this input. Coaxial input #2 is located on the top RCA jack (white). Coaxial input #3 is the bottom RCA jack (red).

5. AT&T ST INPUT OR THETA'S LASERLINQUE SYSTEM (OPTIONAL)

If your DS Pro Basic III is configured with the optional AT&T glass fiber optic receiver, an ST connector is installed in this position. Simply connect the AT&T digital ST output from your CD and/or Laser disc transport to this input. Please note the small alignment knotch on the glass fiber optic cable when connecting the cable to the ST connector. If your DS Pro basic III is equipped with Theta's own Laserlinque optical interface, a special connector is installed in this position. Please observe the small knotch when connecting the Laserlinque fiber optic cable to this connector as well as the connector on your Theta transport.

Connections



6. TAPE IN & OUT

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

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

NOTE: TAPE COPYING IS A CONVENIENCE INTENDED FOR PERSONAL USE. IF YOU COPY COMMERCIALY PRODUCED RECORDINGS AND SELL OR GIVE AWAY COPIES, YOU MAY BE IN VIOLATION OF THE COPYRIGHT OR THE PROPERTY RIGHTS OF THE PRODUCER OF THE RECORDING.

7. SINGLE ENDED OUTPUT

Connect these outputs to the single ended RCA jack inputs on your preamplifier observing left and right channels respectively. These outputs can also be connected to an analog tape deck, electronic crossover or even a surround sound decoder.

NOTE: IF YOU ARE USING THE DS PRO BASIC III WITH A SURROUND SOUND PROCESSOR, SOMETIMES DISTORTION MAY RESULT. THIS IS NOT A MALFUNCTION OF THE DS PRO BASIC III OR YOUR SURROUND SOUND PROCESSOR. IT IS CAUSED BY THE BASIC III'S HIGH OUTPUT LEVEL WHICH CAUSES THE SURROUND SOUND PROCESSOR TO CLIP OR OVERLOAD. IF YOU ENCOUNTER THIS TYPE OF PROBLEM PLEASE CONSULT YOUR DEALER.

8. BALANCED OUTPUT

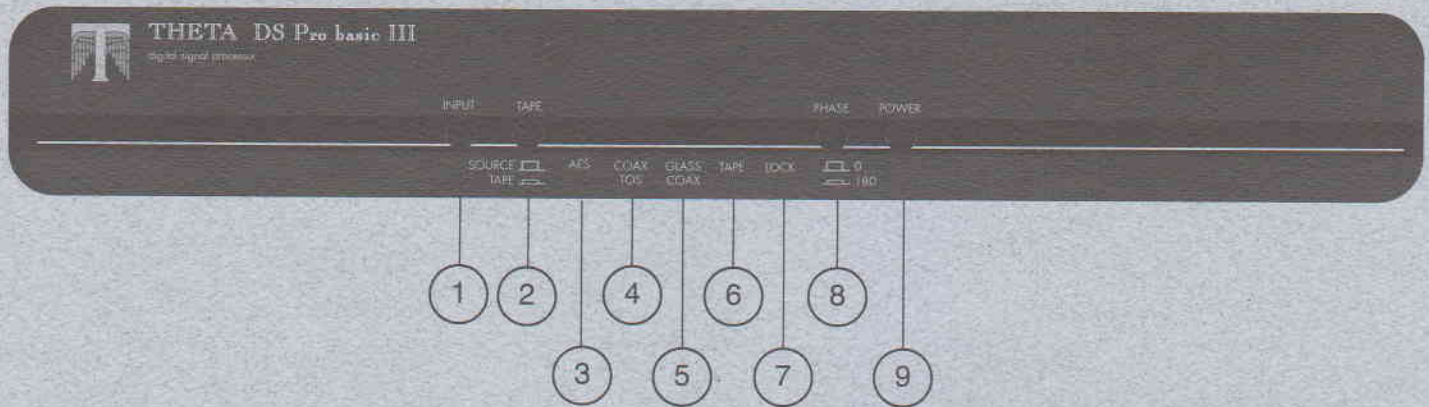
Connect these outputs to your preamplifier's balanced XLR inputs using high quality balanced interconnects. Be sure to observe the left and right channels respectively. The pin configuration of the XLR is as follows:

Pin #1 = Ground

Pin #2 = Positive(+) phase

Pin #3 = Negative(-) phase

FRONT PANEL AND INDICATORS



1. INPUT SWITCH

Depress this switch to toggle between the three(3) digital source inputs. This switch selects between the AES/EBU, Toslink, coaxial and the optional Laserlinque or AT&T fiber optic interfaces.

If input #2 is selected and both the toslink and coaxial inputs are connected to digital sources, the source connected to the toslink input will be selected. To select the source which is connected to coaxial input #2, simply power off the source which is connected to the toslink input. The same is true for coaxial input #3 and the optional AT&T or Laserlinque interface. If digital sources are connected to both of these inputs, the fiber optic input will be selected. To select coaxial input #3, simply power off the source connected to the fiber optic input.

2. TAPE / SOURCE SWITCH

Depress this switch to toggle between the selected digital source input and the digital tape input.

3. AES INDICATOR

This blue led will glow when the AES/EBU input is selected.

4. TOSLINK & COAXIAL 2 INDICATOR

This blue led will glow when the toslink/coaxial #2 input is selected.

5. GLASS & COAX #3 INDICATOR

This blue led will glow when the glass fiber optic/coaxial #3 input is selected.

6. TAPE INDICATOR

This blue led will glow when the tape input is selected.

7. LOCK INDICATOR

This blue led will glow when the DS Pro basic III is "locked" on to a suitable digital signal.

If this led does NOT light when the desired input is selected, check the digital source for proper operation and connection.

8. PHASE SWITCH

This switch selects between the signal being in-phase or 180 degrees out of phase. Leaving this switch out allows correct phase of the signal. Depressing this switch allows reverse phase of the signal.

It is an interesting note that recording companies sometimes do not pay attention to absolute phase. A little experimentation with this switch will show you the gains to be had with proper phase orientation. You can easily discover the proper phase orientation by a more precisely located vocal, more energetic bass and more stable image.

9. POWER SWITCH

Turns on/off the power to the DS Pro basic III's digital section. Power to the analog section remains on at all times while the unit is plugged into an **active** AC outlet. Depressing this switch will turn on the power to the digital section. Leaving this switch out will turn off the power to the digital section.

When the power switch is depressed the selected input led will light.

– D –

Future Improvements and Upgrades

As we all know, technology progresses forward and we at Theta Digital are conducting ongoing research and development into new technologies. We are always in the pursuit of new and better designs and as a result we have designed the DS Pro basic III to be easily updateable as these better technologies and designs, either hardware or software, become available.

While we cannot promise to offer every future improvement to existing units, our past record and ongoing dedication to research should assure you of many years of enjoyment from your processor.

IMPORTANT

As there are potentially lethal voltages inside the DS Pro basic III's chassis, we strongly advise you to have your dealer perform any updates or servicing for you.

The high-speed computing components inside the DS Pro basic III 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.

Theta Digital assumes no responsibility for user incurred damage to your unit or other system components.

DS Pro basic III Specifications

DIGITAL SECTION

Digital input format @ (32, 44.1 and 48 KHz)
Digital input configuration:

Digital output:
Oversampling rate:
DSP microprocessor:
Computing power:
Mathematical resolution:
Resolution:
Linearity:

S/PDIF Standard
3 Coaxial on RCA jack
Toslink
AT&T (optional)
1 Coaxial on RCA jack
8X oversampling
56001 x2
86 effective MIPS
56 Bits
20 Bits
20 Bits

ANALOG SECTION

Frequency response:
S/N Ratio:
THD @ full output level:
Output level:(ref: OdB)
Output impedance: (Balanced outputs)
(Single ended outputs)

DC - 21 KHz
>108 dB
<0.002%
4.2V rms
120 Ohms
60 Ohms

GENERAL

Power requirements:
Weight:
Dimensions:(in inches)

110 Volts, 60 Hz
240 Volts, 50-60 Hz
19 Lbs
19W x 2.25H x 13D

**Designs and/or specifications subject to change without notification.
Designed and manufactured with pride in the USA.**

TROUBLESHOOTING GUIDE

If the DS Pro basic III should function abnormally during operation, please check the following items. If the unit continues to function abnormally, contact your dealer for service.

SYMPTOM	POSSIBLE CAUSE	REMEDY
*No power or front panel lights and no sound	*No AC power *Blown fuse	*Plug unit into active AC outlet *Replace fuse
*No "LOCK" light	*No digital signal	*Check input switch *Check for proper digital connection *Check for bad digital interconnect *Check digital source for proper operation
*Strange or squeaking noise from one or both channels	*Digital signal interruption	*Press input switch through one cycle *Turn off power amp(s) and then turn off/on the basic III
*The basic III has both power and lock lights on, but has no sound from one or both channels	*Preamp off or volume down *No analog connection(s)	*Check preamp controls *Check audio interconnect(s)

90 DAY LIMITED WARRANTY TERMS AND CONDITIONS (10 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 90 days from the date of purchase by the original purchaser. If the purchaser registers the unit with Theta by mailing in the warranty card, together with a copy of the bill of sale, within 14 days of the date of purchase, said purchaser will be registered for an extended service contract. The extended service contract extends the 90 days to a period of 10 years from the date of purchase by the original purchaser or no later than 12 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. The product must be packed and returned to Theta or an authorized Theta repair center by the customer at his or her sole 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 90 days after the date of original purchase. If Theta receives the warranty registration card, this period is extended to the tenth anniversary of the date of purchase or no later than the twelfth anniversary of the 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.