

BRYSTON
TF-2 Phono Step-Up Transformer

Owner's Manual



Important Safety Instructions



The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of un-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.
12.  Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13.  Any terminals marked with the preceding symbol are HAZARDOUS LIVE and any wiring connected to these terminals must be installed by an INSTRUCTED PERSON or with ready-made leads or cords.
14. Unplug this apparatus during lightning storms or when unused for long periods of time.
15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ARE PLACED ON THE EQUIPMENT. TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE. THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.

BRYSTON LIMITED WARRANTY

Bryston analog audio products are warranted to be free from manufacturing defects for twenty (20) years from the original date of manufacture. The warranty includes parts and labour. Bryston digital products and cables are warranted for five years from the original date of manufacture. The warranty includes parts and labour.

Bryston products having motorized moving parts, excluding motorized volume controls, are warranted for three years from the original date of manufacture. The warranty includes parts and labour.

Bryston will remedy the problem by repair or replacement, as we deem necessary, to restore the product to full performance. Bryston will pay return shipping only for the full length of the specific product’s warranty.

In the event of a defect or malfunction, contact Bryston’s repair centers for return authorization. Products must be returned using original packaging material only. Packing material may be purchased from Bryston if necessary. This warranty is considered void if the defect, malfunction or failure of the product or any component part was caused by damage (not resulting from a defect or malfunction) or abuse while in the possession of the customer. Tampering by persons other than factory authorized service personnel or failure to fully comply with Bryston operating instructions voids the warranty. This warranty gives you specific legal rights and you may also have other rights which may vary from province to province and country to country. As of 2006-02-22 Bryston will only warranty Bryston products purchased through authorized Bryston dealers. Bryston products with a date code of 0608 or higher (date code format is “yyww”, where “yy” is the two least significant digits of the year and “ww” is the week of the year) must be accompanied by a copy of the bill-of-sale from a Bryston authorized dealer to qualify for warranty service. The warranty is transferable from the original owner to a subsequent owner as long as a copy of the bill-of-sale from the original authorized Bryston dealer accompanies the re-sale. The copy of the bill of sale to any subsequent owner need ONLY include the Name of the Bryston Authorized Dealer and the Model and Serial number of the Bryston product. The warranty will only be honored in the country of the original purchase unless otherwise pre-authorized by Bryston.

BRYSTON SERVICE in CANADA:

Postal address: P.O. BOX 2170, Stn. Main
PETERBOROUGH, ONTARIO
CANADA K9J 7Y4

Courier address: 677 NEAL DRIVE
PETERBOROUGH, ONTARIO
CANADA K9J 6X7

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BRYSTON SERVICE in the USA:

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NEWPORT, VERMONT
U.S.A. 05855-2100

PHONE: 802-334-1201
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E-mail: usaser@bryston.com

BRYSTON SERVICE outside Canada and the USA:

contact your local distributor or

CHECK OUR WEB SITE: www.bryston.com
E-MAIL BRYSTON DIRECTLY: cdnser@bryston.com
FAX BRYSTON DIRECTLY: 01-705-742-0882
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Table of Contents

General.....	3
Welcome	3
Description	3
Features	3
Shipping Box and Packing Material.....	3
Installation and Usage	3
Placement.....	3
Connecting to Turntable.....	3
Connecting to Audio System	4
Cartridge Matching.....	4
Specifications	4
Dimensions	4

General

Welcome

Thank you for your purchase of a Bryston TF-2 step-up transformer. The TF-2 is a very high quality passive step-up that can be used with the Bryston BP-2 MM or other RIAA phono gain stage when extra gain is needed to reach line level yet preserves a great deal of detail and tonal neutrality. Our customers are a valuable resource to whom we turn for a measure of success. We welcome your comments on the Bryston TF-2.

Description

The Bryston TF-2 is a passive step-up transformer designed to amplify signals from a low output moving coil phono cartridge by either 20dB or 30dB prior to further amplification and RIAA equalization by an active gain stage. The 20dB (TF-2 20) gain version is compatible with cartridges rated between 0.3mV and 0.5mV output. The 31dB (TF-2 30) version should generally be used with cartridges rated less than 0.3mV output. The TF-2 features two double-steel shielded transformers (one for each channel) and is further protected from noise by the full steel chassis of the product. It requires no power supply to operate.

Features

Bryston TF-2 includes the following features:

- Available in 20dB or 30dB gain versions
- Wide bandwidth, very low phase shift

- 47k Ω loading at input
- High common mode rejection of 120dB at 60Hz
- Compatible with Bryston BP-2 MM and other active gain stages
- All steel chassis and top cover

Shipping Box and Packing Material

Please keep the original shipping box and all packing material. This will ensure the TF-2 is protected in future transport. In the unlikely event you have a problem and must return it for service, you must use the proper packing material. Ship the unit only in the original packing material, as the unit is not insurable by carriers otherwise. Replacement packing materials consisting of a shipping carton with plastic foam inserts is available from Bryston for a small fee.

Installation and Usage

Placement

The TF-2 is a cool-running step-up and can be placed in the position most convenient to your circumstance. The nature of the product is to amplify very low level signals, so some care in placement is worth while to maximize performance. Do not place the unit next to electronics known to radiate a high amount of noise.

Connecting to Turntable

Connect your turntable output cables to the TF-2 input pair using high quality interconnects that are

as short as possible or use the interconnects built into your turntable. Connect the output of the TF-2 to the input of your active gain stage. All cables should be terminated with RCA plugs. Connection to the BP-2 MM is illustrated below.

Connecting to Audio System

Your phono preamplifier should accept RCA input from the TF-2 and send output to the main stereo preamplifier.

If your turntable has a ground screw, connect a wire from this to the ground screw of the TF-2 to eliminate humming due to ground loops.

Note that any power supply unit should be located remotely from the TF-2 and phono preamplifier to mitigate the risk of inducing noise. When possible, avoid stacking phono preamplifiers and step-up transformers on top of or underneath power supply units.

Cartridge Matching

The TF-2 provides standard 47kΩ loading to the moving coil cartridge. No further loading adjustment is provided or required.

The TF2-20 is suited for MC cartridges up to 45Ω (typically 25Ω). The TF2-30 is well suited for cartridges up to 5Ω (typically 3Ω).

Specifications

Frequency Response	-0.5dB @ 20Hz -40dBu, 20Hz -20kHz
Gain	TF-2 20: 20dB TF-2 30: 31dB
Sensitivity	TF2-20 0.5 mV TF2-30 0.1 mV
THD	<0.001% @1kHz, -60dBu
Common Mode Noise Rejection	>120dB @ 60Hz
Output Impedance	TF-2 20: 4.71kΩ TF-2 30: 4.85kΩ

Dimensions

