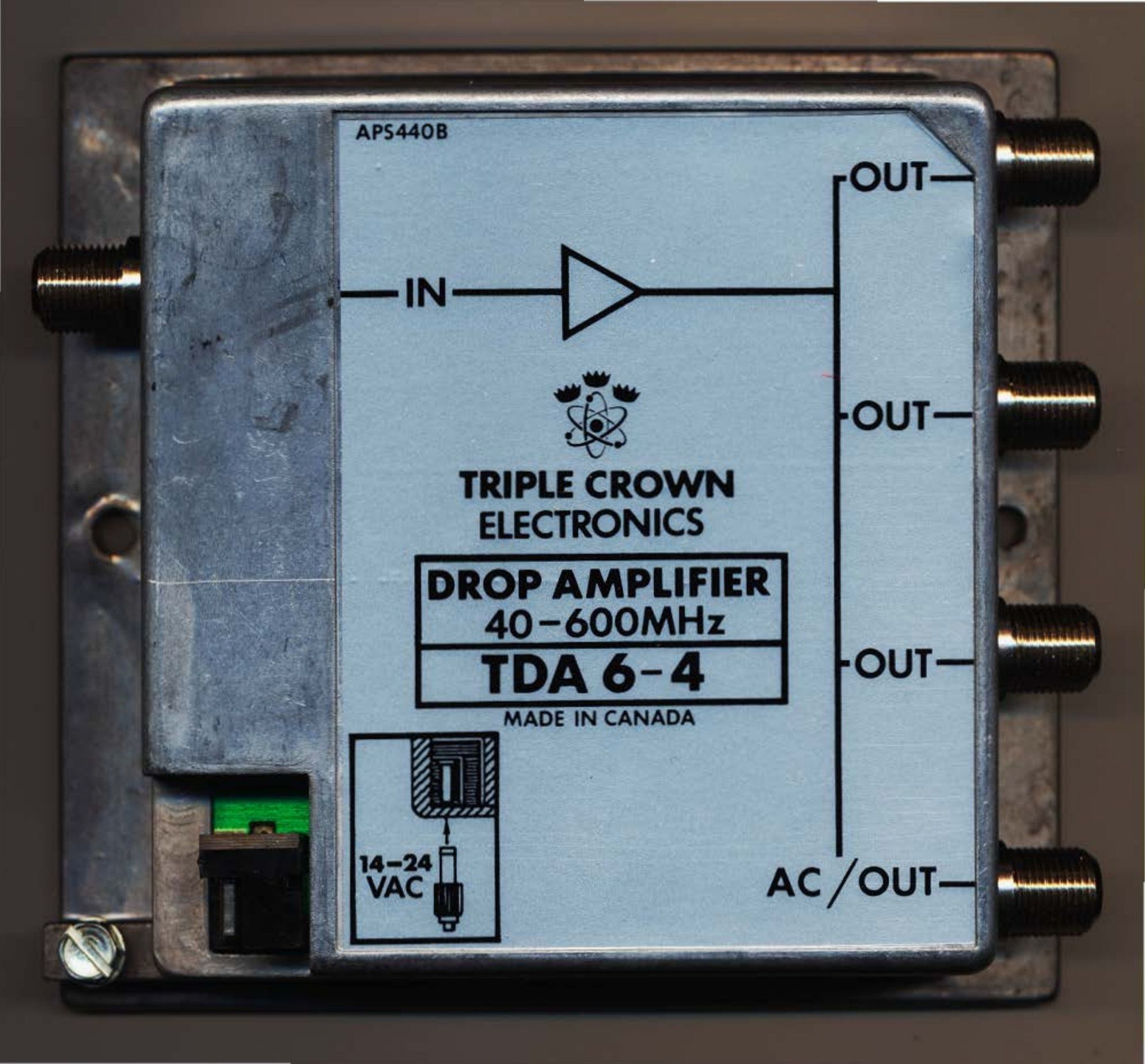

APS440B
OUT
IN
OUT
TRIPLE CROWN
ELECTRONICS
DROP AMPLIFIER
40-600MHz
TDA 6-4
MADE IN CANADA
OUT
14-24
VAC
AC/OUT

TRIPLE CROWN ELECTRONICS

TRIPLE CROWN DROP AMPLIFIER SERIES TDA

The TDA Series Drop Amplifiers present a new approach to the problem of in-home distribution level management for CATV subscribers. Based on a high performance push-pull design, they offer the signal handling capability necessary in order to elevate drop levels with minimal signal degradation.

The TDA Series Amplifiers are packaged in an RFI Sealed Die Cast Aluminum Housing, thus eliminating the additional CLI contribution often resulting from improperly designed customer equipment.

TDA Amplifiers provide sloped gain over the frequency band. The basic unit is a one-way device, with an add on diplex package available for passive return operation.

Power is provided from a wall plug transformer package, and can be delivered either directly to the AC terminal on the amplifier, or injected into the output coaxial cable from a remote downstream location. Local or output powering is automatically selected by connection of the transformer to the appropriate connector.

The amplifier circuitry is gas discharge tube surge protected, and as well, the casting incorporates a ground boss which accepts solid or stranded ground wire size 14 to 10 gauge.

TDA Series Performance Specifications

Four models of VHF TDA amplifier are available:

TDA-4-1 47-450MHz Single Output

TDA-4-4 47-450MHz Four Output

TDA-6-1 47-600MHz Single Output

TDA-6-4 47-600MHz Four Output

Specifications:	TDA-4-1	TDA-4-4	TDA-6-1	TDA-6-4
RETURN LOSS (Input & Output)	12dB (all)			
GAIN at 47MHz	8dB	1dB	7dB	0dB
GAIN at 450MHz	14dB	7dB	10dB	3dB
GAIN at 600MHz	-	-	12dB	5dB
FLATNESS (Basic slope extracted)	+/- 1dB (all)			
OUTPUT CAPABILITY FOR -57dB CTB				
450MHz 61 Channel Loading	+36dBmV	+29dBmV		
600MHz 86 Channel Loading			+35dBmV	+28dBmV
NOISE FIGURE (max)	8dB	8dB	10dB	10dB
POWER REQUIREMENT	14-24VAC, or 24VDC @ 120mA (all)			
DIMENSIONS	10.9cm x 9.7cm x 3.1cm (approx.) (all) 4.2" x 3.8" x 1.2" (approx.) (all)			
WEIGHT	.29kg or 10oz. (all)			

Specifications subject to change without notice.

TRIPLE CROWN ELECTRONICS

TDA SERIES SUBSCRIBER DROP AMPLIFIERS
INSTALLATION AND OPERATING INSTRUCTIONS

TDA Series Amplifiers are Fixed Gain devices with NO user controls or adjustments. The unit is not customer repairable, and defective units should be returned to Triple Crown for repair or replacement.

INSTALLATION:

Determine from the model number that the appropriate TDA amplifier for the application has been selected. In the model number TDA-X-X, the first digit signifies the bandwidth, and the second signifies the number of output ports. TDA-4 amplifiers operate from 47-450MHz. TDA-6 amplifiers operate from 47 to 600MHz. TDA-8 amplifiers from 47-862MHz.

1) Carefully unpack the TDA and inspect for damage or loose internal parts.

NOTE: THE TDA AMPLIFIERS ARE NOT WATERPROOF, AND MUST BE INSTALLED IN AN AREA FREE OF DIRECT MOISTURE CONTACT.

CAUTION:

IN ORDER TO COMPLY WITH MOST ELECTRICAL CODES, THE TDA MUST BE INSTALLED IN THE DROP DOWNSTREAM FROM THE DROP GROUND POINT.

THE GROUND BOSS ON THE TDA IS INTENDED AS AN AUXILIARY GROUND ONLY, AND MUST NOT BE USED AS THE PRIMARY DROP GROUND.

2) Install the TDA on a flat surface by means of two screw fasteners. Connect the incoming drop cable to the amplifier input. Connect the required output cable(s), splitters etc. to the output port(s).

3) If possible, install a grounding wire from the TDA ground boss to the Drop Ground point. While this is not necessary for operation, it does provide extra protection to the amplifier from lightning and power transients (See installation diagram overleaf).

4) Determine whether the TDA is to be powered locally, or remotely via the output. Where possible, local application of power directly to the TDA is preferred, as this eliminates power on the drop cable (See powering diagram overleaf).

THE TDA IS DELIVERED COMPLETE WITH A LOW VOLTAGE TRANSFORMER EQUIPPED WITH A 2.5mm DC CONNECTOR. THE POWER SUPPLY PROVIDES ISOLATED, NON-POLARIZED LOW VOLTAGE AND IS EQUIPPED WITH A THERMAL PROTECTOR. THE SUPPLY CAN WITHSTAND A TEMPORARY SHORT CIRCUIT, BUT A SHORT LASTING LONGER THAN SEVERAL MINUTES WILL OPEN THE THERMAL PROTECTOR AND RENDER THE SUPPLY PERMANENTLY INOPERATIVE.

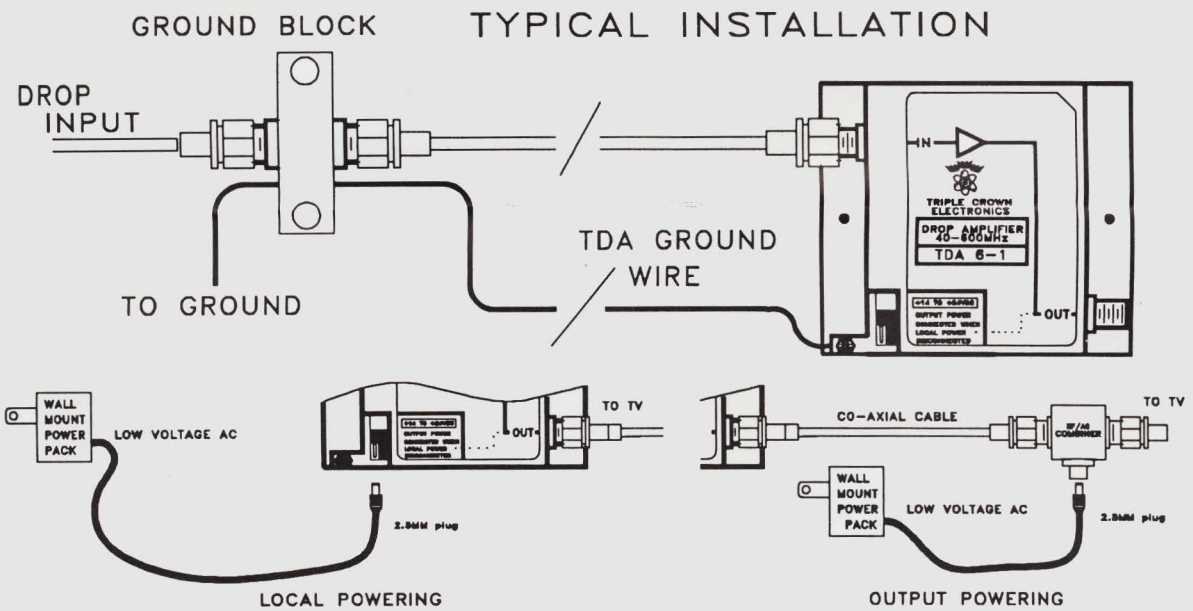
FOR LOCAL POWERING:

Connect the 2.5mm connector of the power supply directly to the TDA Amplifier. Plug the power supply into any electrical outlet. Due to the low voltage, and isolated nature of the supply, the wires may be extended (cut and splice) with similar sized insulated wire up to 10m (30').

FOR REMOTE (OUTPUT) POWERING:

Output powering is employed where the TDA is to be installed out of reach of an electrical outlet. An optional RF/AC combiner, Model TDA-INS is required. The combiner is installed in the TDA output cable at a location where an electrical outlet is available, such as behind the TV set. The cable used to power the amplifier must be the one connected to the TDA output port shown as "AC FROM OUTPUT".

There must be only direct cable between this port and the combiner - no splitters or other devices may be in this line. Plug the power supply 2.5mm connector into the combiner. Connect the cable from the TDA to the connector marked "AMP". Connect the port marked "TV" to the TV set or splitters as required.



Feb/93