

# T-170V

The Crown® T-170V is an autoformer that provides impedance matching between an amplifier output and “constant voltage” loudspeakers. It allows amplifiers without direct 70V or 100V output capability to drive distributed speaker systems designed to operate at those voltages.

For more details about the Crown T-170V, contact Crown Customer Service at 800-342-6939 or 574-294-8200. Also, visit the Crown Audio website at [www.crownaudio.com](http://www.crownaudio.com).

## Specifications

### Wires:

Black: To amplifier negative (–) output and speaker negative (–) terminal.

Yellow: To amplifier 40V positive (+) output.

Violet: To 70V speaker positive (+) terminal or to amplifier 70V positive (+) output for 100V speaker applications.

Blue: To amplifier 50V positive (+) output.

White: To 100V speaker positive (+) terminal.

**Frequency Response:** +/- 0.5 dB (20 Hz to 20 kHz).

**Insertion (Core) Loss:** 0.41 dB max (70VAC @ 50 Hz).

### Dimensions:

4.10 in (10.4 cm) diameter

1.30 in (3.3 cm) deep.

**Weight:** 2.2 lbs (1 kg).

**Accessories:** 5 wire nuts included.

## Installing the T-170V

**CAUTION:** Before you begin, make sure your amplifier is disconnected from the power source, with the power switch in the “off” position and all level controls turned completely down (counterclockwise).

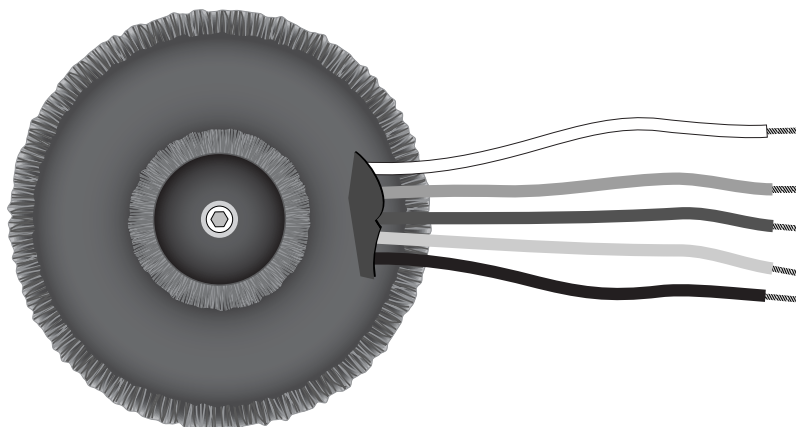
### Choose Output Wire and Connectors

Crown recommends using professionally constructed, high quality, two- or four-conductor, heavy gauge speaker wire and connectors. You may use #10 AWG terminal forks or bare wire to connect to CTs amplifier output connectors.

### Wire Your System

Refer to the chart in Figure 1 to determine the proper transformer tap to use, based on the rated output power of your amplifier and the desired constant-voltage of your system. Then wire the connections as shown in the corresponding wiring diagram in Figs. 2 through 4.

## CONSTANT-VOLTAGE TRANSFORMER



## Features

- Autoformer provides impedance matching for Constant-Voltage operation
- Provides 100V output in Dual mode when used with CTs 600, CTs 1200, CTs 4200 and CTs 8200 amplifiers
- Allows amplifiers without direct Constant-Voltage capability to be easily integrated into distributed systems

**CAUTION:** Never use shielded cable for output wiring.



The T-170V autoformer should be mounted and enclosed in a rack or metal box for safety. Put insulation between the autoformer and the box.



Class 1 Output Wiring required.



Amplifier Rated Power (8-Ohms)	INPUT			OUTPUT		Wiring Diagram
	40V	50V	70V	70V	100V	
100W	X			X		Figure 2
150W	X			X		Figure 2
200W	X			X		Figure 2
250W	X			X		Figure 2
300W		X		X		Figure 3
350W		X		X		Figure 3
400W		X		X		Figure 3
450W		X		X		Figure 3
500W		X		X		Figure 3
550W		X		X		Figure 3
600W at 70V	TRANSFORMER INPUT			TRANSFORMER OUTPUT		Wiring Diagram
	40V	50V	70V	70V	100V	
			X		X	Figure 4

Figure 1. Voltage In / Voltage Out Chart



INSTALLED



CINEMA

# T-170V

**IMPORTANT! CUT UNUSED WIRES AND ADD THE SUPPLIED WIRE NUTS TO EACH WIRE. ALL TERMINATIONS SHOULD BE INSULATED.**



### 40V Input, 70V Output (Figure 2)

1. Connect transformer black wire to amplifier negative (-) output and speaker negative (-) terminal.
2. Connect transformer yellow wire to amplifier positive (+) output.
3. Connect transformer violet wire to positive (+) speaker terminal.

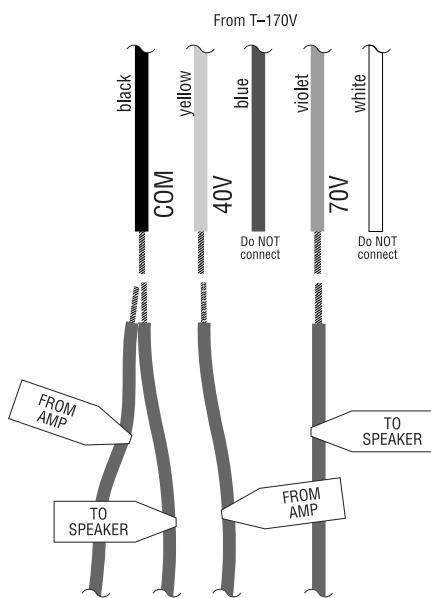


Figure 2. 40V Input, 70V Output

### 50V Input, 70V Output (Figure 3)

1. Connect transformer black wire to amplifier negative (-) output and speaker negative (-) terminal.
2. Connect transformer blue wire to amplifier positive (+) output.
3. Connect transformer violet wire to positive (+) speaker terminal.

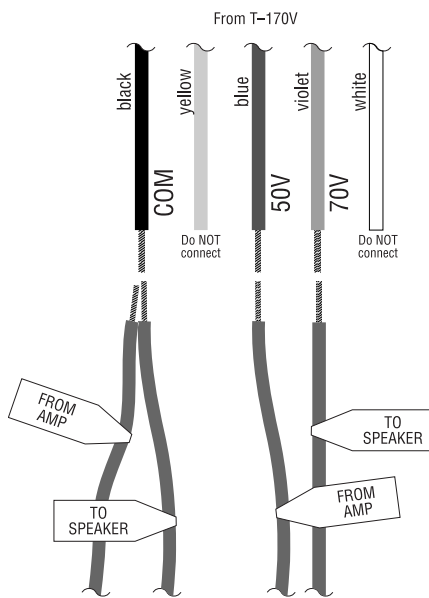


Figure 3. 50V Input, 70V Output

### 70V Input, 100V Output (Figure 4)

1. Connect transformer black wire to amplifier negative (-) output and speaker negative (-) terminal.
2. Connect transformer violet wire to amplifier positive (+) output.
3. Connect transformer white wire to positive (+) speaker terminal.

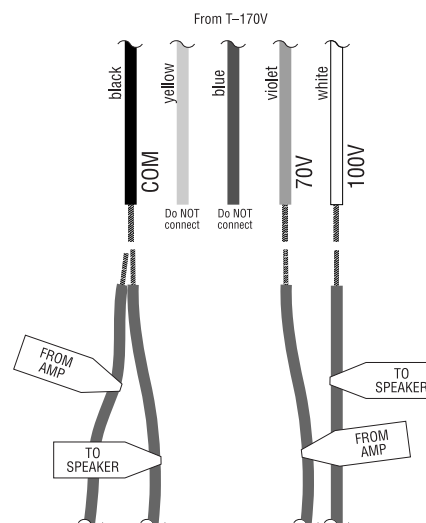


Figure 4. 70V Input, 100V Output

### Crown's Three-Year, No-Fault, Fully Transferable Warranty

Crown offers a Three-Year, No-Fault, Fully Transferable Warranty for every new Crown amplifier product—an unsurpassed industry standard. With this unprecedented No-Fault protection, your new Crown amplifier product is warranted to meet or exceed original specifications for the first three years of ownership. During this time, if your unit fails, or does not perform to original specifications, it will be repaired or replaced at our expense. About the only things not covered by this warranty are those losses normally covered by insurance and those caused by intentional abuse. And the coverage is transferable, should you sell your unit.

See your authorized Crown dealer for full warranty disclosure and details. For customers outside of the USA, please contact your authorized Crown distributor for warranty information or call 574-294-8200.



# CROWN

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