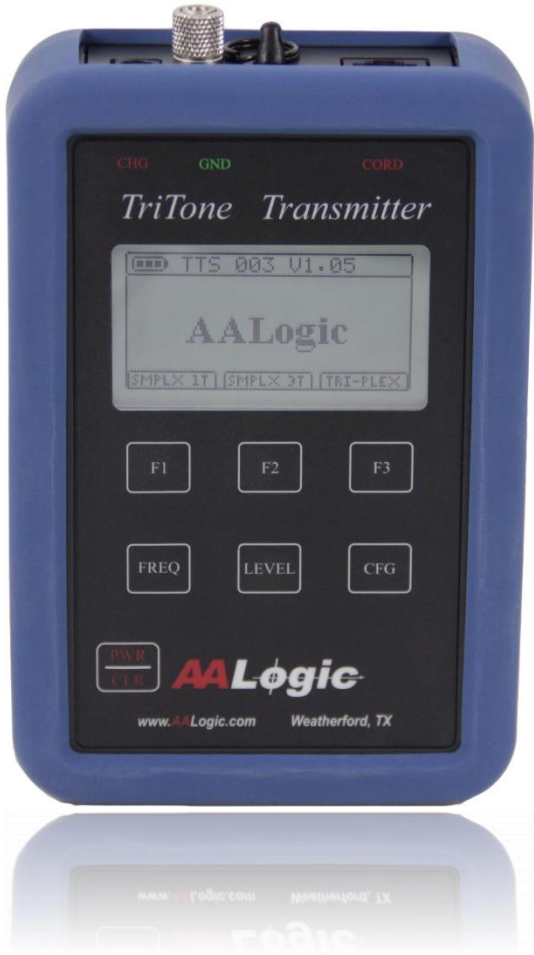




TRITONE TRANSMITTER 3

User Guide Version 1.3



OVERVIEW

TriTone Transmitter 3 is designed for identifying cables and cable pairs by generating identification tone at 577.5Hz or 987Hz at one of three amplitudes; Normal, High, and Maximum. TriTone 3 provides Simplex and Triplex tone modes allowing the user to select the best mode for the application.

The TriTone Transmitter 3 is used with existing amplifier probes; filtered, tunable, or unfiltered; aerial coils; and hand coils that are compatible with 577.5 Hz or 987 Hz. The AALogic DAP-125 is ideal when identifying pairs using the TRI-PLEX mode.

The TriTone Transmitter 3 includes automatic visual and audible short indications to assist in confirming the correct pair is identified.

CONNECTIONS

The TriTone Transmitter 3 has a Pair Cord, with Red and Black needle clips, and a Ground Cord. Connect the Pair Cord assembly and the Ground Cord to the jacks located on the top of the TriTone Transmitter 3.



The clips and ground should be connected to the pair and shield of the cable as needed.

Pair Identification, SMPLX 1T, SMPLX 3T, and TRI- PLEX	Black clip to Tip, Red clip to Ring, and Ground clip to shield/ground
Pair Identification, Metallic	Ground clip to Tip and Red Clip to Ring

OPERATION

The following information describes the operation of the controls on the TriTone Transmitter 3.

POWER

The PWR/CLR key used to turn the unit on and off.

- Press and hold the key for 1 to 2 seconds to turn the unit on.
- Press and hold the key for approximately 3 seconds to turn the unit off. A tone sequence will be heard.

BATTERY LEVEL

A battery level indicator is displayed in the top, left corner of the display. The batteries are rechargeable by plugging the supplied charger into the connector on the top of the unit.

When only one bar is shown in the battery indicator, the unit should be charged as soon as practical.

The unit may be used while power is supplied to the charge connector if power is available.

TONE SELECTION

The TriTone Transmitter 3 generates 577.5 Hz or 987 Hz tone. The TriTone Transmitter 3 retains the previous selection when the power is turned on. The frequency can be set from the main screen or any operating screen.

Press the **FREQ** key, use the **[F2]** or **[F3]** keys to select the desired frequency, and press **[F1] SET**.

LEVEL SELECTION

The TriTone Transmitter 3 offers output at Normal, High, and Maximum. The lowest level that allows identification of the cable pairs should normally be used. Higher levels can increase inductive coupling to adjacent pairs and may make it more difficult to identify the correct pair.

Higher levels aid in the location of cables. The higher levels provide more signal outside the cable for the pickup probe and amplifier.

The TriTone Generator3 tone level voltages are:

- NORM – 5V ac peak-to-peak
- HI – 10Vac peak-to-peak
- MAX – 20Vac peak-to-peak

The TriTone Transmitter 3 retains the previous selection when the power is turned on. The level can be set from the main screen or any operating screen.

Press the LEVEL, use the [F2] or [F3] to select the desired level, and press [F1] SET.

MODE SELECTION

TriTone Transmitter 3 provides three tone mode options; SMPLX 1T, SMPLX 3T, and TRI-PLEX. The mode is selected by selecting the Function key, [F1], [F2], or [F3] as shown on the display.

SMPLX 1T

SMPLX 1T applies tone on the Tip to Ground and the Ring to Ground at the same time. The tone is balanced on the Tip and Ring and provides little or no audible tone between the Tip and Ring. The amount of tone heard Tip to Ring (metallic) will vary depending on the balance of the pair and the tone voltage. The tone heard increases on unbalanced pairs as the tone level is increased.

Simplex tone is commonly used to locate cable pairs. The tone depends on a good ground to conduct the tone efficiently. Missing or poor bonds and grounds can significantly reduce the amount of tone on the pair and make it more difficult to locate pairs.

Since Simplex tone is applied to both the Tip to Ground and Ring to Ground simultaneously, tone can be heard even if one side is open.

SMPLX 1T mode displays an analog meter of the voltage between the Black clip and the Red clip (Tip and Ring). The indicated voltage will decrease if a short is applied to the pair at the far-end to confirm the pair identity. Audible beeps are heard if the voltage drop indicates a short.

In the case of a pair with one side open, the good side of the pair can be grounded and the TriTone Transmitter 3 will provide an audible confirmation.



SMPLX 3T

SMPLX 3T applies tone in the same manner as the SMPLX 1T mode.

This mode includes a digital meter that displays the DC voltage between the TIP and RING as well as the AC voltages between the TIP and Ground and the RING and Ground.

The voltage, T-R, will decrease if a short is applied to the pair at the far-end to confirm the pair identity. Audible beeps are heard and a visual indication is displayed between **T** and **R** if the voltage drop indicates a short or ground on one side.

In the case of a pair with one side open, the good side of the pair can be grounded and the TriTone Transmitter 3 will provide a visual and audible confirmation.



TRI-PLEX

Triplex tone is a unique tone mode that minimizes cross-coupled tone to adjacent pairs. Triplex mode applies tone to the pair Tip to Ground, Ring to Ground, and Tip to Ring simultaneously. This tone mode can be heard even with one side open or when there are missing bonds or grounds. This tone mode is useful any time high-levels of tone is coupled to adjacent pairs, including wet sections.

Begin by using either of the SMPLX modes to identify the most likely pairs. Then use the TRI-PLEX mode to identify and confirm the actual pair.

Since cross-coupling is minimized, the amplifier probe must be very close or touching the pair to hear the tone. To confirm the correct pair is found, place the probe tip between the Tip and Ring wires. There should be a significant increase in tone on only the correct pair.

AALogic manufactures a DAP-125 probe compatible with the D-105 Cable Test Set and other AALogic products. This probe is a differential probe and is especially designed to enhance pair location when using TRI-PLEX tone.



METALIC TONE

Metallic tone may be applied between the Ground cord and Red clips of the TriTone Transmitter 3. This allows the user to apply tone for a variety of applications.

PAIR IDENTIFICATION

This mode is not dependent on the condition of the grounds or bonds but tone will not be heard if one side of the pair is open.

Metallic tone can also be used to send tone on one side of a pair. Connect one clip to the shield/ground and the other clip to the Tip or Ring. This allows the user to identify a pair with one side open. Using SMPLX 1T, SMPLX 3T, or Triplex makes this unnecessary.

CABLE IDENTIFICATION

Tone can be used to locate cables. Connect the Ground clip to the shield/ground and the Red clip to a vacant cable pair, both the Tip and the Ring. A hand-coil probe and amplifier can be used to pick up the tone in the cable.

SPECIFICATIONS

- Dimensions: 6.25"x4"x1.5", excluding carry bag
- Weight: Approx. 1lb.
- Power: Rechargeable
- Operating Temperature: -20° to 50° C, non-condensing
- Tone Frequencies: 577.5 Hz, 987 Hz
- Output Voltage Levels:

Level	Voltage RG - TG	TRI-PLEX R -> T
Normal	5 Vpp	10 Vpp
High	10 Vpp	20 Vpp
Maximum	20 Vpp	40 Vpp

*TriPlex applies Tone TR, TG, and RG. The TG and RG voltages are the same for TriPlex and Simplex.

WARRANTY

The TriTone Transmitter 3 is warranted against defects in materials and workmanship for a period of one year from the date of purchase. Contact your local sales representative or the manufacturer for a Return Authorization (RA) number and instructions on returning the product for service. Products cannot be processed unless accompanied by an RA number.

The user is responsible for determining the applicability of the product for any application. The manufacturer is not responsible for any damages, direct or consequential, resulting from the use of its products. Users are required to follow all work safety procedures when using this product.

Damages due to impact, battery failure, flooding, or normal wear are excluded.

The manufacturer will determine, exclusively at its own discretion, whether repairs or replacement of the product is required for any warranty claim. In no case will the liability of the manufacturer exceed the original purchase price of the product.

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