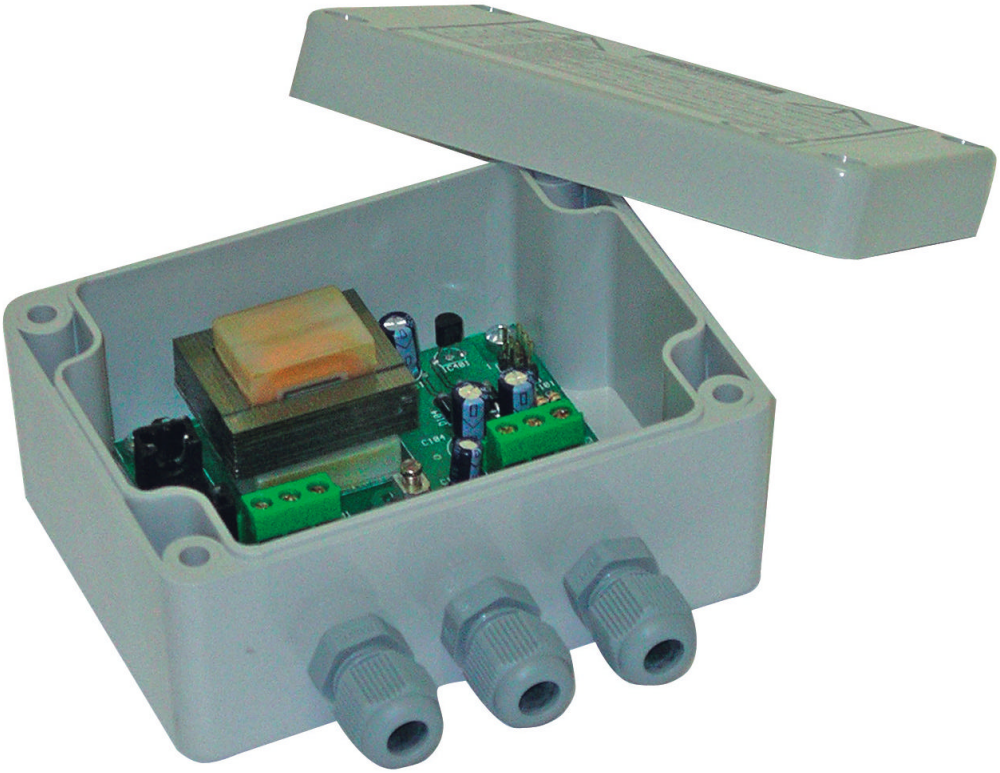
ASTEL CCTV



# TTP 101

## VIDEO TWISTED-PAIR TRANSMITTER

OPERATING INSTRUCTIONS *v1.0*

# CONTENTS

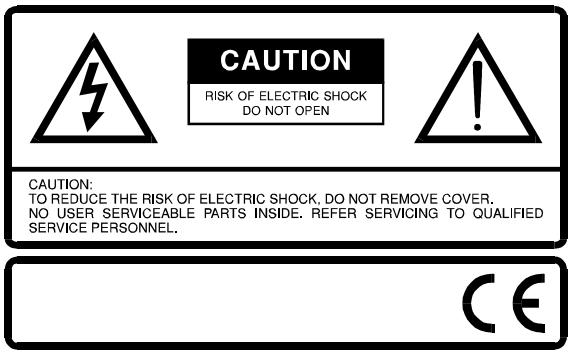


# SAFETY PRECAUTIONS

In order to prevent any fatal accidents caused by misoperation or mishandling of the video twisted-pair transmitter, be fully aware of all the following precautions.

**WARNING:**
**THIS APPARATUS MUST BE EARTHED**

This unit is produced to comply with Directives 93/68/EEC (IEC Publ.65) and 89/336/EEC.




The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be sufficient magnitude to constitute a risk of electirc 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) instruction in the literature accompanying the product.

## PREFACE

The video twisted-pair transmitter TTP 101 is a correction amplifier with the standard asymmetrical video input and symmetrical output which is adjusted to connect the twisted-pair cable. It is mounted in ABS casing. The choice of output impedance allows the use of different kinds of cables. Pre-emphasis selection enables better video transmission through the long distances.

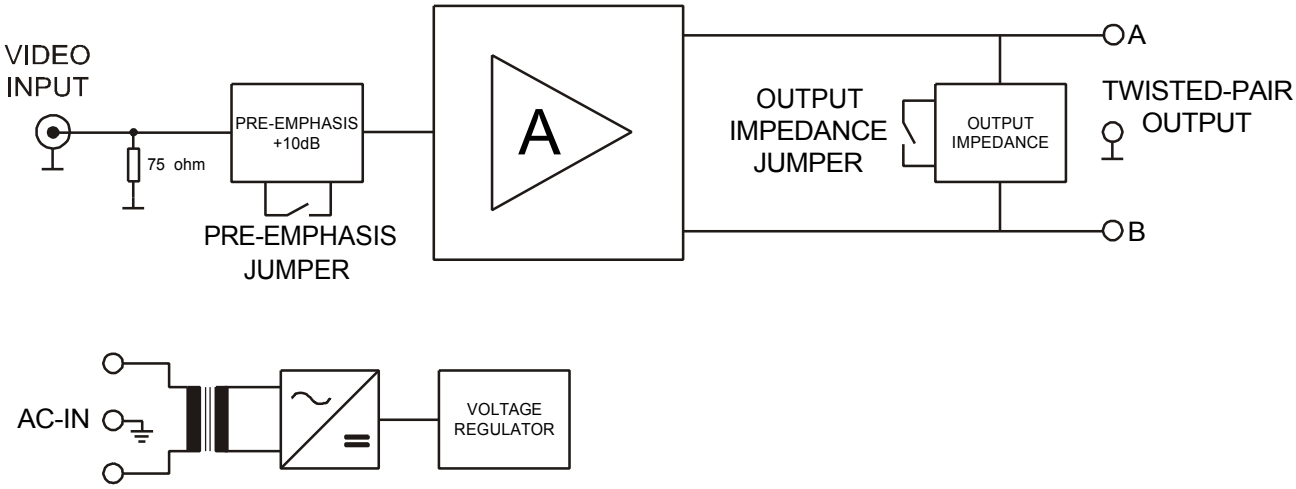
## FEATURES

- small dimensions
- simple connecting
- low power consumption
- over-voltage protection
- dual output impedance
- pre-emphasis +10 dB / 5 MHz

## PRECAUTIONS

- Use only the power source specified on the rating label located on the casing.
- When not using this unit for a long period of time, or when cleaning it, be sure to disconnect the power plug from the AC outlet.
- Avoid using this unit under the following conditions:
  -in extremely hot or cold places,
  -near appliances generating strong magnetic fields, and
  -in places subject to direct sunlight
- Unplug this unit from the AC outlet and refer servicing to qualified service personnel under the following conditions:
  -when the power cord is frayed or plug is damaged
  -if the unit does not operate normally following the operating instructions
  -if the unit has been dropped or the cabinet has been damaged
  -when the unit exhibits a distinct change in performance.

## BLOCK DIAGRAM

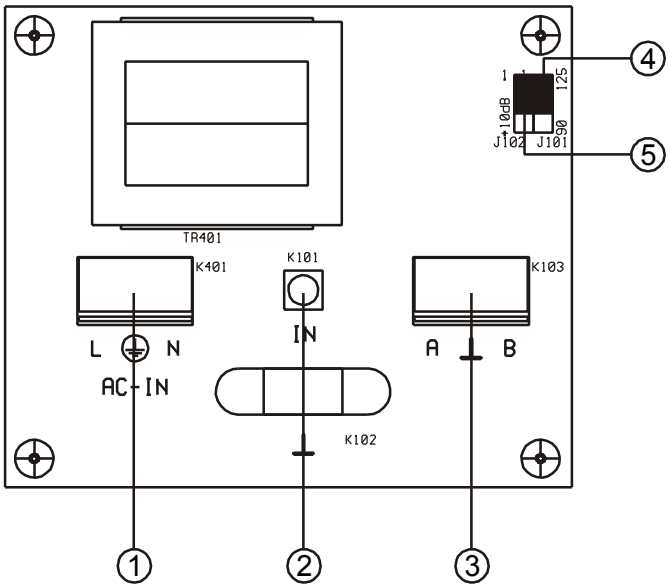



## PRINCIPLE OF OPERATION

The input is closed with the impedance of 75 Ω. Then follows the stage which defines the pre-emphasis. By means of the amplifier stage two signals separated by 180° appear on the output A and B.

The output impedance jumper enables a choice of output impedance - 125 Ω or 90 Ω.
The power is supplied by connecting to the 230VAC outlet.

# CONTROLS AND CONNECTORS




**(1) AC - IN**
230VAC power supply terminal block connector.

**(2)** VIDEO **IN**
Video input terminal block connector.

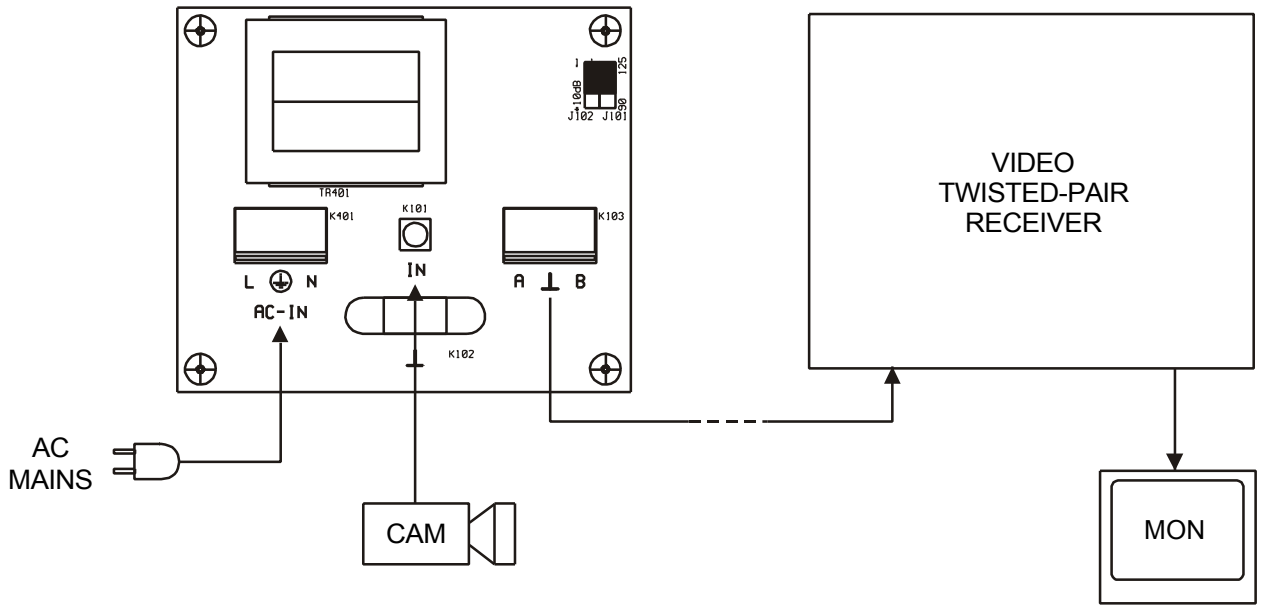
**(3) TWISTED-PAIR OUTPUT**
Twisted-pair terminal block connector.

**(4) J101**
Output impedance jumper.

**(5) J102**
Pre-emphasis jumper.

## CONNECTIONS

- Be sure to disconnect the unit from the AC outlet before connecting to other equipment.
- Also refer to the instruction manual of the equipment to be connected.




## INSTALLATION

(1) Set the jumper **J102** to 0 dB.

(2) Set the jumper **J101** to correct position. (125 ohm for PE or PAPER, 90 ohm for PVC cable insulation)

(3) Connect the video test generator (1 Vpp / 75 Ω) to the **K101**.

(4) Connect the 230VAC power supply to the **K401**.

(5) Switch-on the video test generator.

(6) Check the positive video output signal between **A** and ⊥.

(7) Check the negative video output signal between **B** and ⊥.

(8) Disonnect the 230VAC power supply.

(9) Switch-off the video test generator.

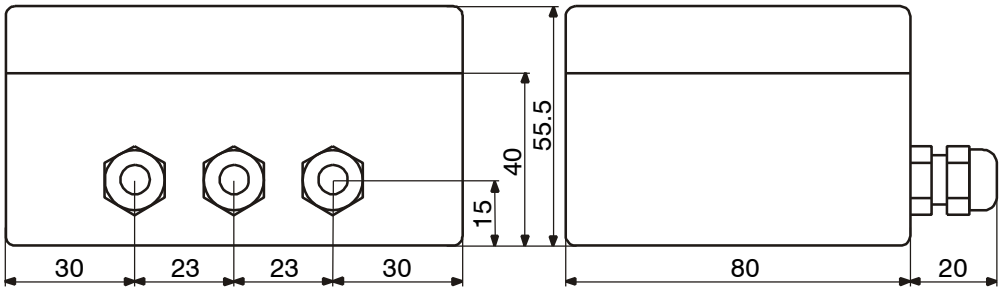
(10) Disconnect the video test generator.

(11) Connect the twisted-pair cable to the **K103**.

(12) Connect the video source (video camera) to the **K101**.

(13) Connect the 230VAC power supply to the **K401**.

## APPEARANCE




## SPECIFICATIONS

| | |
|---|---|
| Video input | 1 Vpp, 75 Ω |
| Video output | 2 x 2 Vpp |
| Output impedance | 125 Ω / 90 Ω (**J101**) |
| Freq. response | 30 Hz - 5 MHz (–0.5 dB) |
| Pre-emphasis | +10 dB, 5 MHz (**J102**) |
| Output protection | signal diodes |
| Power requirement | 230V, 50/60Hz |
| Power consumption | 1W max. |
| Casing | ABS |
| Protection | IP - 65 (VDE) |
| Dimensions | 106(W) x 55.5(H) x 100(D) mm |
| Weight | 0.5 kg |

**ASTEL d.o.o., Dutovlje 138, 6221 Dutovlje, Slovenia**
**Tel: +386 5 7310771, +386 5 7310772**
**Fax:+386 5 7310789**
**E-mail: sales@astel-cctv.com**
**Web: www.astel-cctv.com**