

# **Analogue Audio**



**The Manual** 



# **by CTP Systems**



## Introduction

The audio Testa is an analogue test tool designed specifically for sound engineers. It has a powerful digital signal processor and a separate co-processor providing multiple audio monitoring and test signal generators. These include line level monitoring, microphone level monitoring with or without phantom power, tone generation, noise generation, phantom voltage check, a four-wire box facility, two wire monitoring, audio test tone loop and XLR cable test. The unit includes a balanced combo XLR/Jack input and an XLR balanced output, two headphone sockets (6.35mm and 3.15mm) and a torch LED. It includes a built in microphone and speaker and is supplied with a belt clip. The unit uses a standard nine volt battery or may be powered from its micro USB socket. The USB socket may also be used to update the Testa's firmware. All settings are retained in non-volatile memory. Operation of the device has been made as simple as possible using three push buttons and a 128\*32 OLED white on black display which includes a level meter with PPM or VU style scale and ballistics. The unit includes an auto power off function.

## Power

The Testa may be powered using a nine volt battery or via the micro USB port. The power switch only operates when on battery power. Plugging in a micro USB cable will automatically switch the unit on.

When on battery power a battery symbol appears for three seconds on the top left of the display when switching between modes providing an indication of battery life. A solid block is a full battery. Bear in mind some functions may use more power, particularly generating 48 volt phantom power, a big ask for a nine volt battery. The unit may be made to automatically switch off if no button is pressed for a selectable period between 1 and 127 minutes. The Testa automatically switches off battery power when the micro USB is plugged in.

## Using the menu system

When the unit is switched on it will be on the top level menu. Press the left and right 'ADJ' buttons to switch through the various functions. The function will be shown in large text at the top of the screen along with the meter if applicable. Adjustable parameters will be shown in small text at the bottom of the screen. To adjust these parameters first press the 'SEL' button. If the function has only one parameter (eg. Line in gain) then the unit will switch directly to adjustment mode of that function. If there is more than one parameter, the first press of the 'SEL' button will highlight the first of the parameters. Now use the adjust buttons to highlight the required parameter. Then press 'SEL' again. The parameter will be shown in large text as will its current setting. Press the adjust buttons as required to set to the required value.



Now press the 'SEL' button again and the display will return back to the top level. It really is easier to use than it is to describe.

All settings are stored in non-volatile memory and these settings will be retained until adjusted again. The Testa will always power up using the function that was in use when it was switched off.

## Audio inputs and outputs

Audio inputs are on the female combo connector that accepts either a standard three pin XLR or a TRS balanced jack. Line level audio outputs are available on the male three pin XLR. A useful extra is that when the unit is monitoring/metering an input then that input is available on the XLR output in its amplified form. For example, it means that the unit may be used as a microphone amplifier. There are both 6.35 and 3.15mm jacks for headphone monitoring. Inserting either will cut the internal loudspeaker.

## Metering

In the settings menu the meter may be set to PPM or VU style ballistics and levels. In PPM mode the wider pip is PPM '0" (0.775 volts into 600 ohms). In VU mode the wider pip equates to VU '0' (1.23 volts into 600 ohms). The other pips on the meter are at intervals of 4dB.

## LED light

Press and hold the PTT/Light button for half a second and the LED will illuminate, press it again and it will extinguish. This will operate in all functions apart from in the four-wire menu where it is used as a 'Talk' button. Take care not to look directly at the LED when switching it on, it's quite bright.

## **Testa Functions**

#### Line Input

Plug into the XLR or TRS jack input. Line level inputs may be monitored on the loudspeaker or using headphones and metered on the display. Input gain is adjustable from -12dB to +12dB in 1dB steps. The signal is available on the XLR output.



#### Microphone Input

Plug into the XLR or TRS jack input. Microphone level inputs may be amplified from 0 to +70dB in 1dB steps and monitored on the loudspeaker or headphones and metered. 48 volt phantom power may be switch on or off. This input is available on the XLR output.

#### **Tone Generator**

The tone generator outputs sine wave frequencies from 50Hz to 20kHz in third octave steps.

The tone is available on the XLR output and the output level may be monitored and metered. Level may be set from -60dB to +12dB in 1dB steps.

#### **Noise Generator**

Pink noise and white noise are available on the XLR output at levels from -60dB to +12dB. The output may be monitored and metered.

#### Phantom check

Phantom power voltage on pins 2 and 3 of the male XLR may be measured. Tolerance is +- 1 volt.

#### 4Wire Box

The Testa may be used as a four wire box using the built in mic. Press the PTT (push to talk) button to talk. Speaker level will be dimmed when talking to prevent howl round. Headphones will not be dimmed. The display shows 'TALK' when the button is pressed. Internal microphone gain may be adjusted form 0 to +70dB. The meter may be set to show input or output levels in the Setup menu.

#### 2wire Mon

2 wire audio may be monitored and metered on pin 2, pin 3 or both pins simultaneously. 2wire monitoring is not suitable for use with Clearcom beltpacks due to the way the calling system operates.

#### **Tone Loop**

This is useful for testing external equipment. Plug the XLR output into the equipment under test. Plug the equipment output back into the Testa. Alter the levels or frequency as required. This facility may be set to monitor input or output levels using the settings menu.



#### XLR test

Connect your XLR (or jack to XLR) cable between input and output. All three XLR pins are shown. A good connection will have a tick next to it, a bad connection a cross. A live/neutral crossed connection will show a circle with a line through it (phase symbol).

#### Settings

Auto Off – May be set from Off to 127 minutes. When the unit is not used (no buttons pressed) for the set time the unit will automatically go into a very low power mode (effectively off). To switch back on select the power switch to off then on again.

4wBox – Set to meter input or output of the four wire box.

Toneloop – Set to meter input or output of the tone loop.

Meter – Set for PPM or VU style levels and ballistics.

## Updating

The Testa may be updated using its micro USB port. New software and firmware will be available on the support page of ctpsystems.co.uk/support when available.

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#### **Product warranty**

Your Testa is guaranteed for a period of one year from dispatch. This guarantee is a return to base warranty. In the unlikely event of a fault the Testa should be returned to CTP Systems (if you are in the UK) or your local dealer.

This equipment is CE marked and conforms to the following directives:

Emissions: EN55032: 2015 Immunity: EN55035: 2017

WEEE

CTP Systems are registered for Business to Business sales of WEEE in the UK. Our registration number is WEE/DF0509VR.

RoHS

The product conforms to the RoHS2 Directive 2011/65/EC for restriction of the use of hazardous substances in electrical and electronic equipment.

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