



CONNECTIVITY IN



ML22T Pro covers your professional presentation requirements and complex needs with its complete solutions. Sliding top panel both protects your touch display and becomes a platform for your documents, laptop.

Multi-purpose complete connector pannels give ability to access to power, external protector and display decives, Speakers can convey their voice through meetings rooms, and lecture halls It is equipped with personal computer with the ML22T Pro which has a wide body large enough to be able to harbor all types of sound and imaging devices and a frond and back services cover, you can gather all your conference devices into one place without needing an external space

ML22T Pro

	ML22T Pro
Multi touch speaker screen	22"
Player PC : Intel 4, I0 GHz CPU, I20 GB SSD, Windows I0 Pro	✓
Switcher & Scalar (HDMI & VGA in)	✓
Microphone	✓
Creapen Annotation Software	✓
3.5" Digital Touch Timer	✓
7" Controller Tablet	✓
Amplifier	Optional
Speakers	Optional



1. INTRODUCTION

This HDMI/DP/HDBaseT to HDMI/HDBaseT Scaler supports five inputs including HDMI, VGA, and DisplayPort. Any selected source will be scaled to your preferred resolution for output over HDMI and HDBaseT. HD resolutions up to 1080p@60Hz are supported. This unit also provides audio application flexibility by including multiple unbalanced audio inputs, a 1/4" mic input (with support for optional 48V phantom power) and one line out port. This unit contains an audio DSP engine with auto-mixer and auto-gain functionality, allowing for the mic source to be mixed with the audio from one of the video sources while reducing the background audio in order to enhance the primary audio source. The HDBaseT output provides 24V PoC (Power over Cable) allowing compatible PoC powered HDBaseT Receivers to operate without needing a local power connection. This unit can be easily controlled and configured through the front panel with OSD, IR remote control, RS-232, Telnet, or WebGUI. This unit is an ideal solution for presentations in classrooms and conference rooms.

2. APPLICATIONS

- Analog and digital source integration
- Upscaling standard definition video for high-definition displays
- Conference centers
- Lecture halls
- Schools and universities

4. SYSTEM REQUIREMENTS

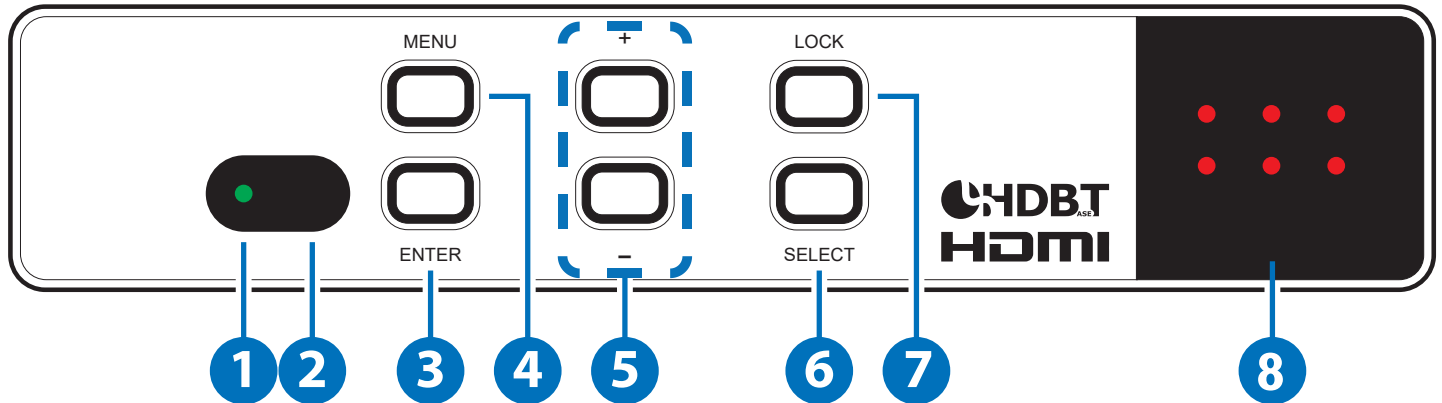
- Source equipment such as media players, video game consoles, PCs, or set-top boxes.
- HDMI receiving equipment such as HDTVs, monitors or audio amplifiers and/or a compatible HDBaseT Receiver with 24V PoC support.
- The use of industry standard Cat.6, Cat.6a or Cat.7 cable is highly recommended.
- The use of "Premium High Speed HDMI" cables is highly recommended

5. FEATURES

- HDMI, DVI and DisplayPort compliant
- HDCP 1.4 compliant
- Multiple video and audio inputs: 2xHDMI, 2xVGA, 1xDisplayPort, 3xUnbalanced audio, 1xMic audio (w/ 48V phantom power option)
- HDMI and HDBaseT outputs (mirrored)
- Inputs support HD resolutions up to 1080p@60Hz and PC resolutions from VGA to WUXGA
- Outputs support resolutions up to 1080p@60Hz
- Supports pass-through of LPCM 2.0 audio
- Audio DSP with auto mixer and gain control for mixing audio and reducing background audio
- HDBaseT feature support: High-Definition video and audio, 24V PoC (Power over Cable) and control (Bi-directional IR & RS-232 pass through)
- HDBaseT output provides 24V PoC to power to compatible HDBaseT Receivers
- EDID management support

Switch & Scaler

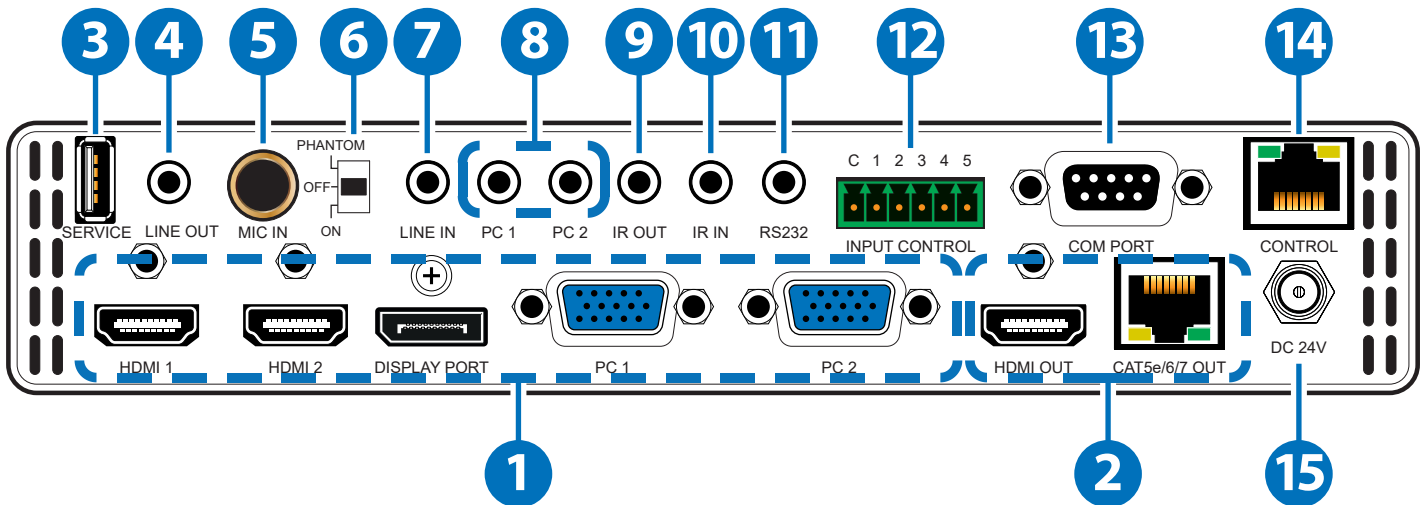
Geratech EGE-SCA-HDB-HVGDP



- 1 POWER LED:** This LED will illuminate to indicate the unit is on and receiving power.
- 2 IR WINDOW:** Accepts IR signals from the included IR remote for control of this unit only.
- 3 ENTER:** Press to confirm a selection within the OSD or to go deeper into a menu item.
- 4 MENU:** Press to enter the OSD menu, or to back out from menu items.
- 5 +/- (MINUS/PLUS):** Press to move up and down or adjust selections within OSD menus.
- 6 SELECT:** Press this button to sequentially switch through the available inputs.
- 7 LOCK:** Press to lock all button functions on the front panel. Press again to release the lock function. The "LOCK" LED will be lit when the front panel is in the locked state.
- 8 LEDs:** These LEDs indicate the currently selected source as well as the current frontV

Switch & Scaler

Geratech EGE-SCA-HDB-HVGDP



1 HDMI IN 1~2: Connect to HDMI source equipment such as a media players, game consoles or set-top boxes.

DisplayPort IN: Connect to DisplayPort source equipment such as a PC or laptop.

PC IN 1~2: Connect to VGA source equipment such as a PC or laptop. YUV sources, such as DVD players, are also supported with the use of a 15-pin to 3-RCA adapter when the port has the "COMP IN" mode turned on in the OSD.

2 HDMI OUT: Connect to an HDMI TV, monitor or amplifier for digital video and audio output.

CAT5e/6/7 OUT: Connect to a compatible, 24V PoC supporting, HDBaseT Receiver for remote video and audio output.

3 SERVICE: This slot is reserved for firmware update use only.

4 LINE OUT: Connect to powered speakers or an amplifier for stereo analog audio output.

5 MIC IN: Connect a microphone for direct audio input. Phantom power mics are supported.

6 PHANTOM/OFF/ON: Set the switch to "ON" for condenser mics (5V) or "PHANTOM" for professional 48V phantom power mics. When the switch is set to "OFF" the MIC input will be muted.

7 LINE IN: Connect to the stereo analog output of a device such as a CD player or PC. This audio will be used in place of the HDMI/DP audio when "external" audio is selected in the OSD menu.

8 PC 1~2: Connect to the stereo analog output of the device connected to the associated VGA input port.

9 IR OUT: Connect to the provided IR Blaster to transmit IR signals to devices within direct line-of-sight of the IR Blaster.

10 IR IN: Connect to the provided IR Extender to extend the IR control range of remotely located devices. Ensure that the remote being used is within direct line-of-sight of the IR Extender.

11 RS-232: Connect to a PC, laptop or other serial control device for the extension of RS-232 signals to the connected HDBaseT Receiver.

12 INPUT CONTROL: This terminal block is used for direct source input selection. Short the ground pin (marked as "C") with any one of the following pins to make an individual source selection (Pin 1=HDMI IN 1, Pin 2=HDMI IN 2, Pin 3= DisplayPort IN, Pin 4=PC 1, and Pin 5= PC 2).

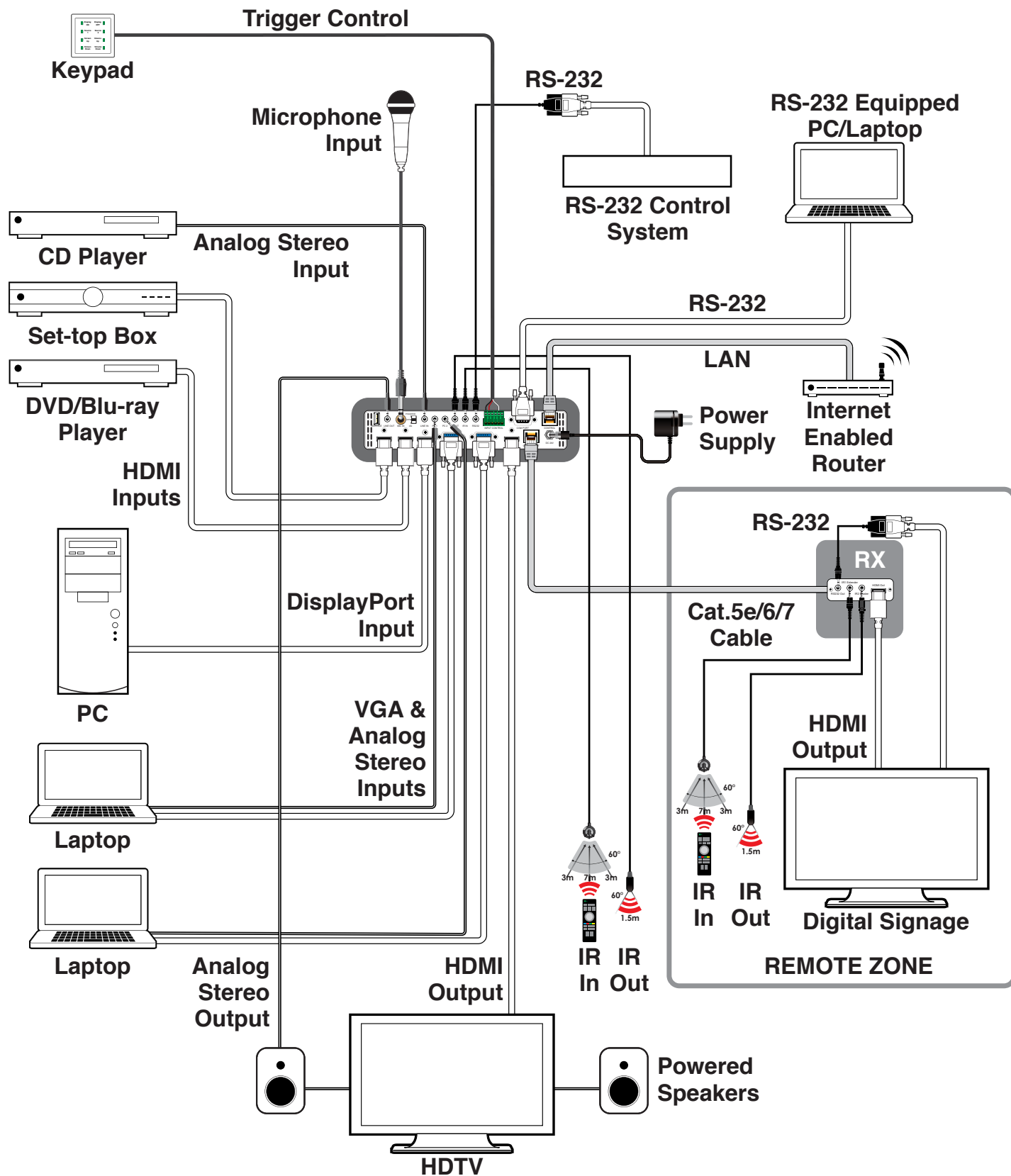
13 COM PORT: Connect directly to a PC, laptop or other serial control device to send RS-232 commands to control the unit.

14 CONTROL: Connect directly, or through a network switch, to your PC/laptop to control the unit via Telnet/WebGUI.

15 DC 24V: Plug the 24V DC power adapter into this port and connect it to an AC wall outlet for power.

Switch & Scaler

Connection



Application

7" Controller Tablet Specifications

Specifications	
Layout size	181mm(L)×108mm(W)×9.3mm(H)
Active Area (A.A.)	164.90mm(L)×100.00mm(W)
Visual Area (V.A.)	154.08mm(L)×85.92mm(W)
Resolution	800×480 pixel Also can be set as 480×800
Touch type	Capacitive
Touches	1 million
Backlight	LED
Backlight lifetime (Average)	30,000 Hours
Brightness	300nit 0% to 100%, the interval of adjustment is 1%

Interfaces Performance	Test Conditions	Min	Typical	Max	Unit
Serial Port Baudrate	Standard	2400	9600	921600	bps
Output High Voltage (TXD)	IOH=1mA	3.0	5.0	Vin	V
Output Low Voltage(TXD)	IOH=1mA		0.1	0.2	V
Input High Voltage(RXD)		3.0	5.0	Vin	V
Input Low Voltage(RXD)		-0.7	0.0	1.3	V

Memory Features	Test Conditions	Min	Typical	Max	Unit
FLASH Memory	Store fonts and images			120	MB
User Storage	EEPROM			1024	BYTE
RAM Memory	Store variables			512	KB
Instruction Buffer	Instruction Buffer			1024	BYTE

Speaker Screen

■ iiyama Prolite T22

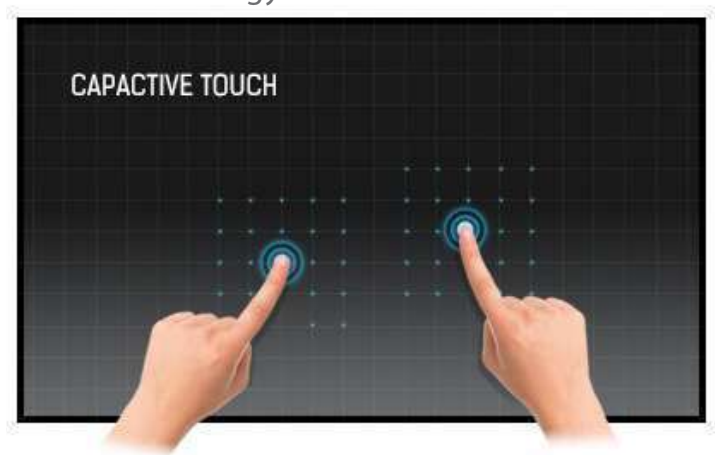


22" 10 point touch monitor with edge-to-edge glass and AMVA panel

With its Full HD (1920x1080) resolution and accurate Projective Capacitive 10 point touch technology, the ProLite T22 delivers seamless and accurate touch response.

The AMVA panel technology guarantees high performance with excellent colour reproduction and high contrast, making it an excellent choice for a vast array of demanding interactive applications.

Touch Technology



This technology uses a sensor-grid of micro-fine wires integrated into the glass that covers the screen. Touch is detected because electrical characteristics of the sensor grid change when human finger is placed on the glass. Thanks to the glass overlay this technology is highly durable, and the touch function remains unaffected even if the glass is scratched.

It offers perfect picture performance and will work with human finger (also latex gloved) and stylus-pen.

Specifications	
Diagonal	21.5"; 55cm
Aspect Ratio	16 : 9
Panel Amva	LED
Native Resolution	Full HD 1080p, 1920 x 1080 (2.1 megapixel)
Brightness	250 cd/m² typical
Brightness	215 cd/m² with touch panel
Advanced Contrast	12 000 000 : 1 ACR
Static Contrast	3 000 : 1 with touch panel
Response Time	8 ms
Viewing Zone	horizontal/vertical: 178°/ 178°; right/left: 89°/ 89°; up/down: 89°/ 89°
Display Colour	16.7 million
Blue Light Reducer	yes
Touch Technology	projective capacitive
Touch Points	10
Glass Hardness	7H minimum
Light Transmittance	85%
Display Area	H X W 268.1 x 476.6 mm; 10.6" x 18.8 "
Pixel Pitch	H X V 0.248 x 0.248 mm
Horizontal Sync	30 - 80 KHz
Vertical Sync	56 - 75 Hz
Synchronization	Separate Sync
INTERFACES / CONNECTORS / CONTROLLERS	
Analog Input Connector	VGA
Digital Input Connector	DVI, HDMI
USB HUB	UP 1 x USB 3.0 / DOWN 4 x USB 3.0
Controls	USB (touch), USB 3.0



Front Panel



Rear Panel



Specifications	
Operating System	Windows 10 Pro
Processor	Intel 4,10 GHz CPU
Chipset	Intel H310 Express chipset
Ram	4GB
Video	HDMI x1 + DisplayPort x1 Supported double screens , 4K Play
Storage	120 GB SSD
Audio	2 Channels
Network	2 x 10/100/1000 Gigabit LAN (Intel Chipset), WIFI (Optional)
Ports	4 x USB3.0 - 2 x USB2.0 - 1 x HDMI - 1 x Display Port - 1 x eSATA+USB2.0 COM port 2 x RJ45
Case	Ultra Mini ITX
Power	90W 19V Adapter





Microphone

Shure I8 CVGI8S-B Microphone

Designed with dual gooseneck sections for full articulation, the CVGI8 provide scalable, best-in-class performance in a wide variety of locations.

Features

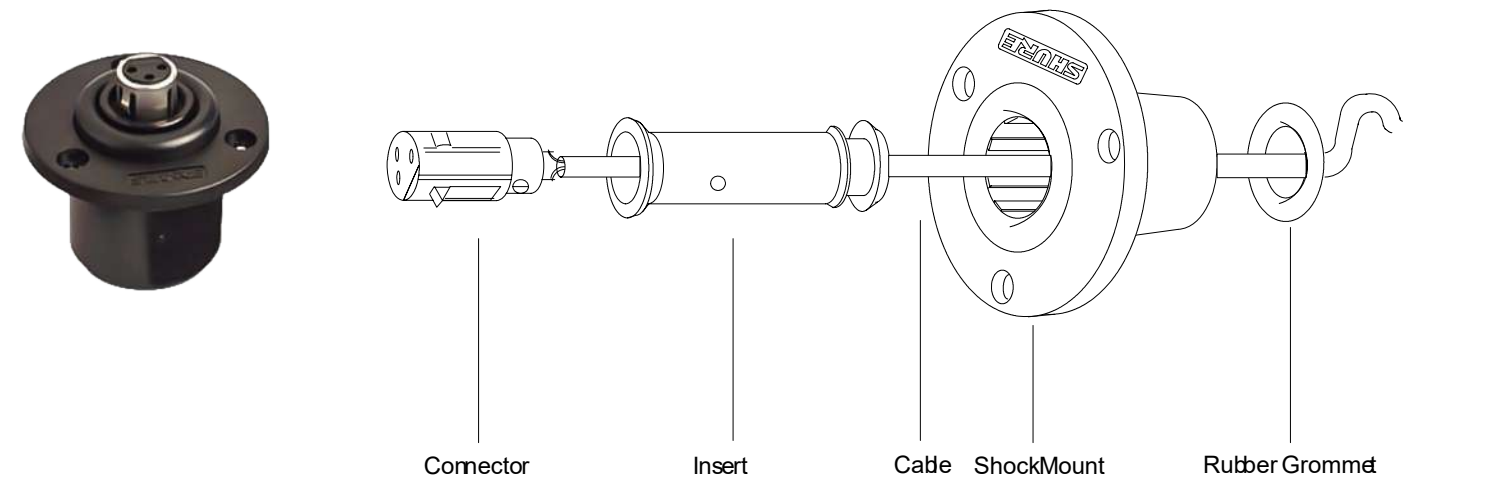
- Cardioid polar pattern with tailored response for speech
- Dual-section gooseneck enables ease of positioning and placement options
- Included Flange Mount and available snap-fit windscreens (ACVG4WS-B – 4 pack)
- With Mute switch/LED,
- Guards against unwanted RF Interference from portable wireless devices gh resistance to intense nearby radio signals
- Superior Shure design and rugged, dependable construction
- Noise by up to 20 dB.

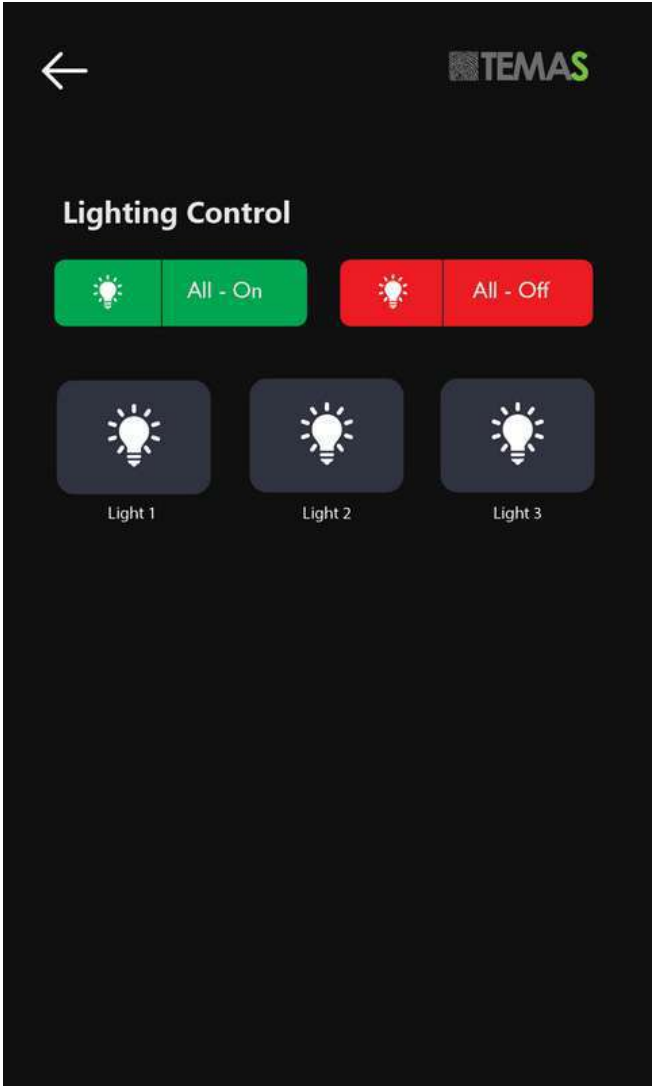
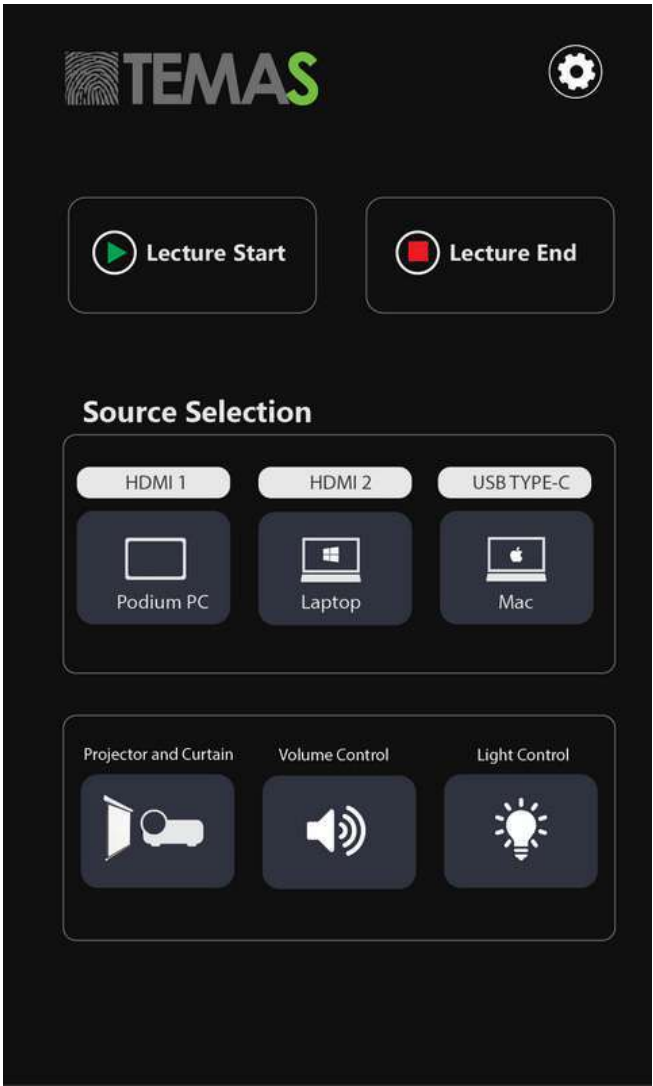
Specifications	
Cartridge Type Electret Condenser	Electret Condenser
Frequency Response	70–16000 Hz
Polar Pattern	Cardioid
Output Impedance	180 Ω
Sensitivity (at 1 kHz , open circuit voltage)	–33 dBV/Pa[1] (22 mV)
Maximum SPL (1 kHz at 1% THD)	120 dB SPL
Signal to Noise Ratio (referenced at 94 dB SPL)	67 dB
Dynamic Range	93 dB
Self Noise (equivalent SPL, A-weighted, typical)	27 dB SPL
Common Mode Rejection (10 Hz to 100 kHz)	45 dB
Preamplifier Output Clipping Level (1% THD)	–7 dBV
Polarity	3
Power Requirements	11–52 V DC[4], 2.0 mA

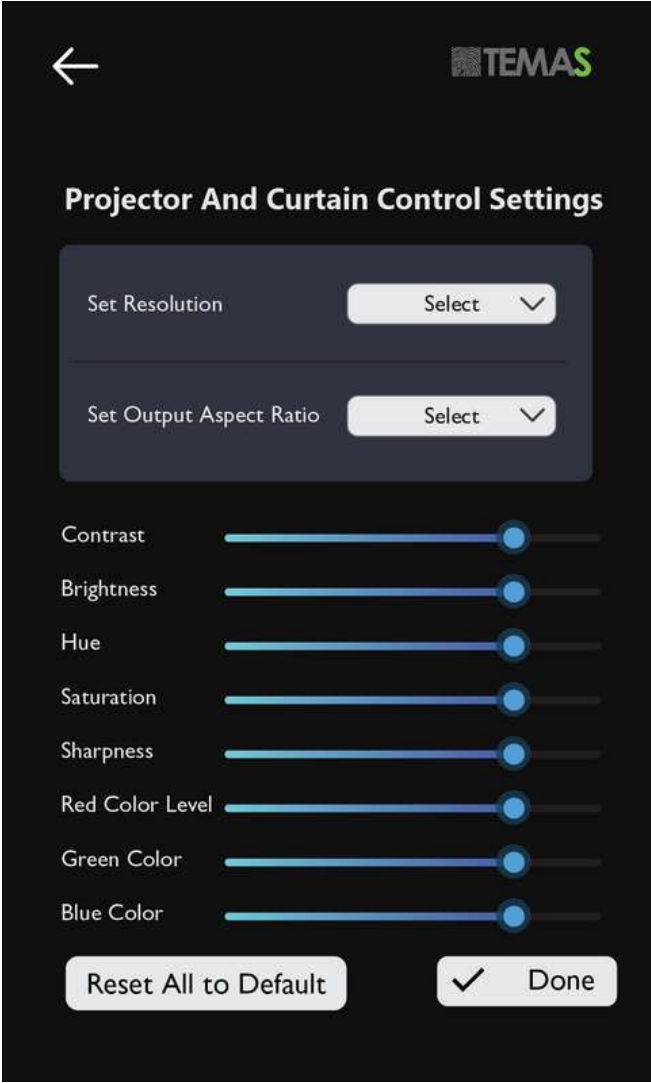
Shure A400SMXLR Shock Mount

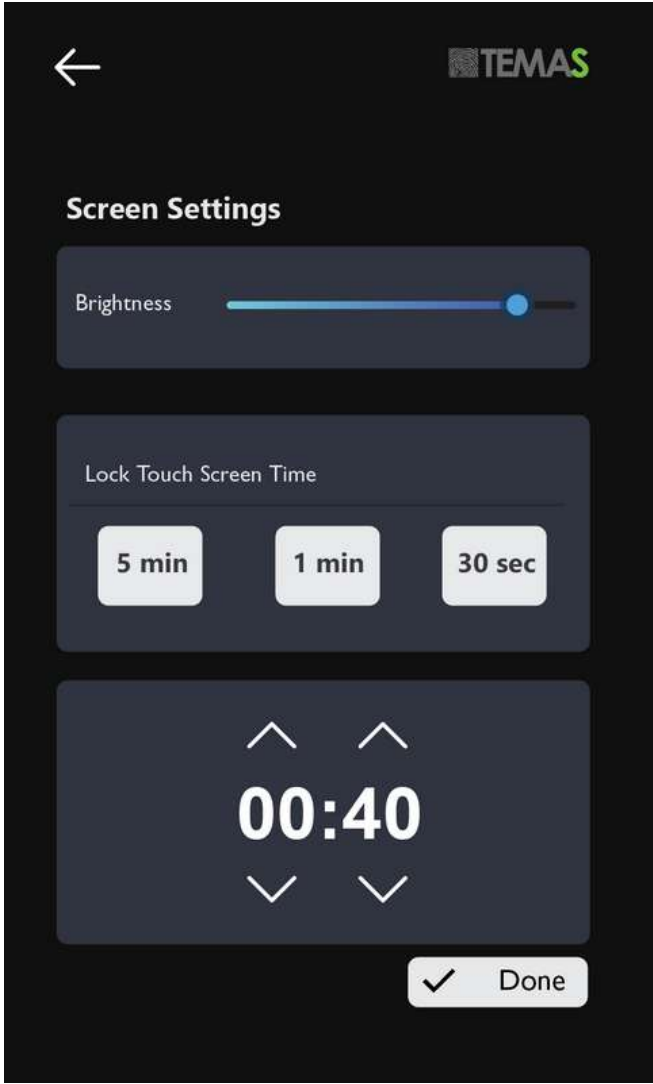
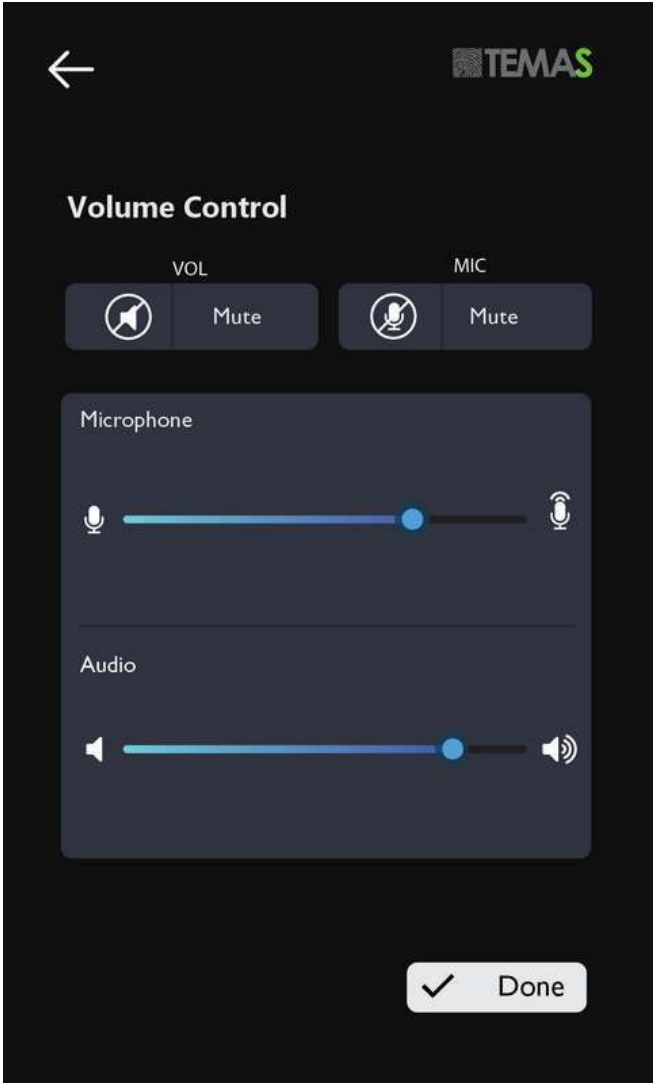
Shure A400SMXLR Shock Mount Socket

A400SMXLR Shock Mount decouples a microphone from the mounting surface and reduces transmission of impact or surface











Application

■ CreaPen Software

Screen Annotation & Screen Recording Solution for Presentations

CreaPen is an extremely simple yet powerful screen annotation and recording software. You can easily write on top of any other application that is currently active on the desktop, even on a running video. You can then save your annotations as an image file or even record the whole session as a video for sharing. It is a useful tool for presenters to communicate and share ideas during a live session, for educators to create effective video tutorials and for salespeople to create impressive video presentations.



Text Input



Whiteboard



Multiple Pages



Screen
Recording

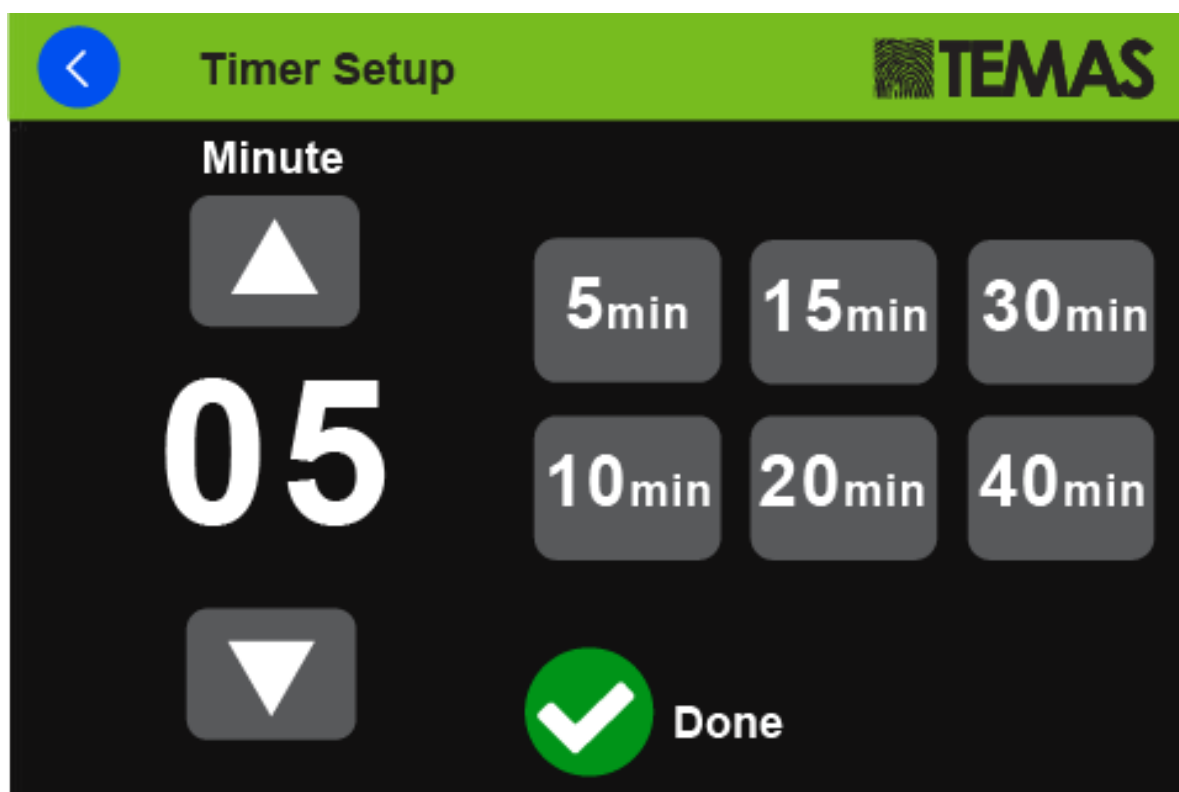
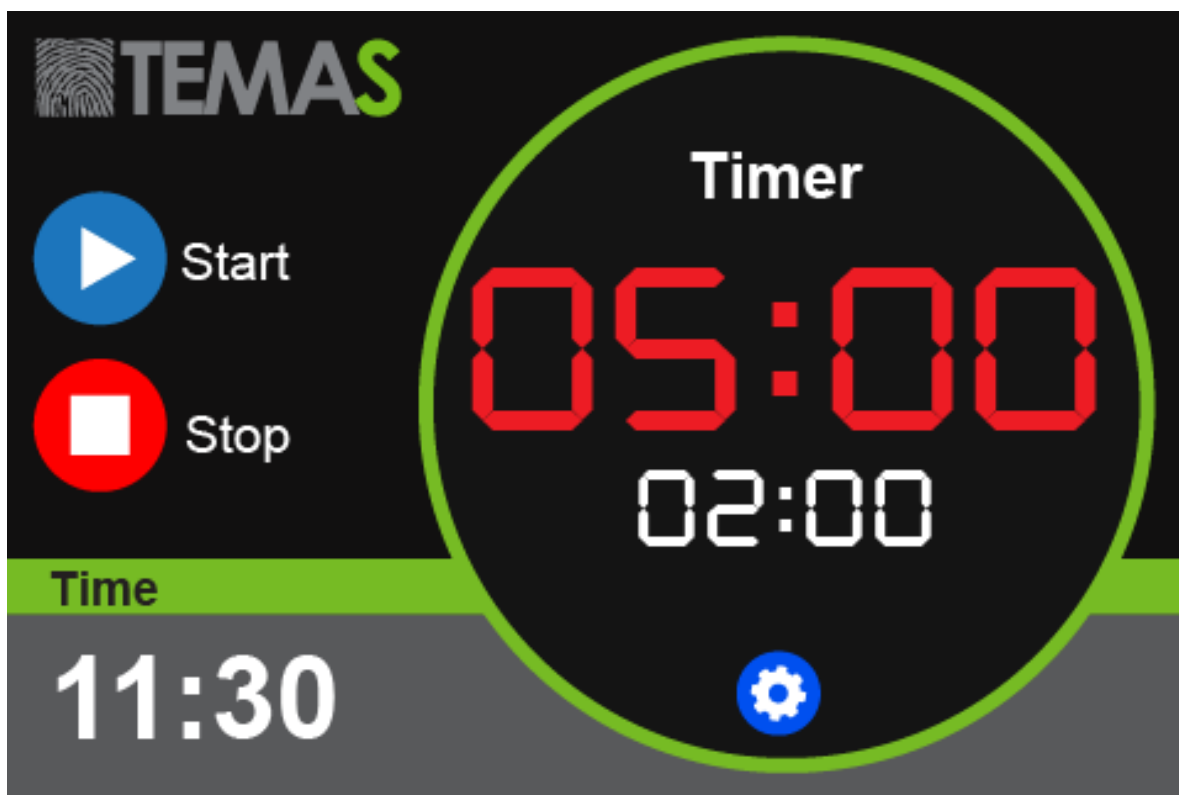


Screen
Annotation



Web Camera





	ML22T PRO
■ Lecturer Panel	22”
Screen	
Resolution	1920x1080
Brightness	250 cd/m2
Aspect Ratio	16:9
Number of Touch Point	10 Points Capacitive
Lecturer Panel PC	
CPU	Intel 4,10 GHz
RAM	4 GB
HDD	120 GB SSD
Operation System	Windows 10 Pro
■ Tablet Controller	
Layout size	181mm(L)x109mm(W)x9.3mm(H)
Active Area (A.A)	164.90mm(L)x100.00mm(W)
Visual Area (V.A)	154.08-mm(L)x85.92mm(W)
Resolution	800x480 pixel also can be set as 480x800
Touch Type	Capacitive
Touches	1 million
Backlight	LED
Brightness	300nit 0% to 100%
■ Microphone	
Lenght	18”
No of Microphone	1 pcs
Output Connector	3-way XLR(Male)
Microphone Type	Cardioid
Frequency Response	50 - 18 kHz
Power ON Indicator	LED
Power Requirement	Phantom Power (48V)
■ Outputs (Bottom of Podium)	
HDMI	Available (Projector Out)
Ethernet	Network Connection
XLR for Microphone	3-way XLR(Male)
USB	USB 2.0 (for internal PC)
■ Mechanical Specs	
Outline Dimesion(mm)Set	754 x 810 x 1049
Outlibe Dimension(mm)Package	890 x 906 x 1255
Weight(kg)	Set: 104 kg Package: 161 kg



BRAVOUR
STAND OUT & IMPRESS