

THE JACKDAW, THE DEVIL'S HIGHWAY
MORTIMER WEST END, READING, BERKS RG7 2AD, UK

COMPUTER VIDEO INTERFACES

WE PRODUCE A WIDE RANGE OF PRODUCTS THAT MAKE IT EASY TO CONNECT COMPUTERS TO REMOTE VIDEO PROJECTORS and MONITORS

- We can supply interfaces in PCB form or mounted on wall plates, floor plates or custom panels. Mounted interfaces can be produced with additional connectors and custom legend to your exact requirement.
- From a simple passive connector plate for a Plasma screen, to an active floor box interface with local monitor output, to a floor box mounted dual prioritizing SXGA interface with balanced audio, we have a range of solutions to meet your needs.
- If you can't find what you need here or on our web-site www.teelectronics.co.uk, please contact us – we may be able to provide a non listed or custom solution.



PASSIVE INTERFACES

TE3418 "RIGHT ANGLE" INTERFACE

The **TE3418** is designed for wall plate applications in installations with relatively short cable runs. The right angle format allows the installer to use **pre-made cables** with TE wall plates that mount on standard mains type back boxes.



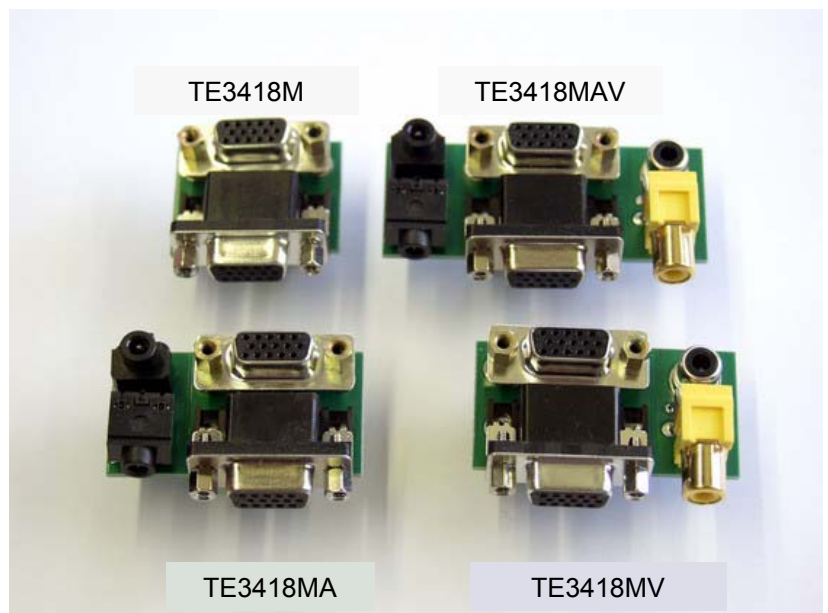
The TE3418 PCB comes in four variants to cater for any combination of monitor, audio and video connection. The same industry standard type connectors are used externally (user connection) and internally (installer connection) to allow the use of standard pre-made cables throughout.

The **TE3418M** is for monitor only (high density 15w "D" sockets).

The **TE3418MA** is for monitor and PC audio (TE3418M plus 3.5mm stereo jack sockets).

The **TE3418MV** is for monitor and video (composite video, CV) using a yellow phono CV socket.

The **TE3418MAV** is for monitor, audio and video inputs.



TE3419 "VIDEO TAIL" INTERFACE

The **TE3419** is designed for wall and floor plate use where the computer video is carried in 5-wire form using individual RGBHV coax cables (Red, Green, Blue and Horizontal and Vertical sync). Standard back boxes can be used. The installed coax cables need BNC plugs.



Like the TE3418 above, there are four variants to cater for any combination of monitor, audio and video connection. The TE3419M is for monitor only, the TE3419MA adds audio, the TE3419MV adds video (CV) and TE3419MAV adds both.

The audio connection can be by 2-part screw terminal connector as shown, or by 3.5mm stereo jack.



TE3419MA



TE3419MAV

ACTIVE INTERFACES

TE3321 SERIES of SXGA ACTIVE INTERFACES

The **TE3321** comes in four variants all designed for wall and floor plate use where the computer video is carried in 5-wire form using individual RGBHV coax cables (Red, Green, Blue and Horizontal and Vertical sync). They can be supplied with or without PSUs.

The standard interface is type **TE3321-1**. This uses a single PCB to provide buffered RGBHV and unbuffered audio. It is ideal for use with long cable runs; the video signals *and* sync signals are matched to 75Ω (but the syncs are still TTL compatible).

TE3321-2 adds a second PCB giving local monitor output.

TE3321-3 adds a second PCB giving local monitor output *plus* balanced buffered audio.

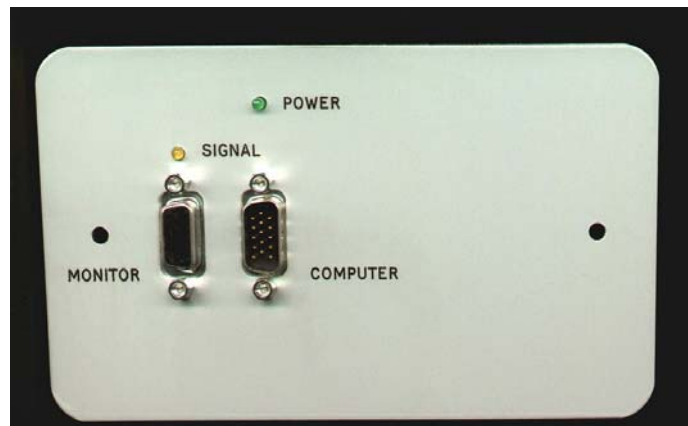
Finally, for systems with relatively short cable runs but with balanced audio, single PCB type **TE3321_0** has unbuffered RGBHV coax outputs BUT balanced buffered audio.

NB: Types TE3321-1 and TE3321-2 are available without audio – add suffix NA.

For wall mounting the TE3321 can be supplied on plates which match your architectural scheme and fix to standard mains type back boxes. Additional connectors can be added if required and the plates are engraved to your specification.



TE3321-1.
Single white plastic plate



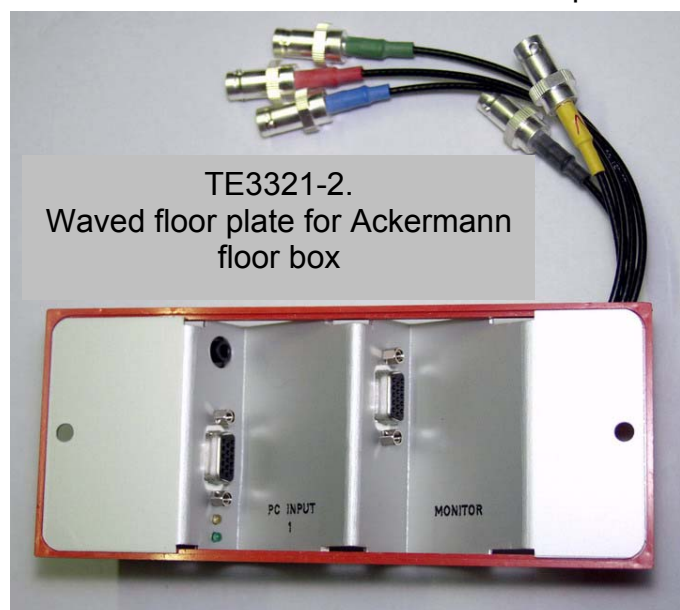
TE3321-2NA.
Double satin anodised aluminium plate

The installed RGBHV coax cables need standard 75Ω BNC plugs. Audio and power connectors are 2-part screw terminal type.

For floor box use the plates are tailor made for the particular floor box type and can be waved to allow operation with the lid closed.

Installation is easy – all cables are made off to the mating connectors and then the interface plate is plugged in and secured.

See Appendix for full specification.



TE3321-2.
Waved floor plate for Ackermann floor box

TE3203 LOCAL/REMOTE VGA SELECTOR

A compact, mains powered stand alone VGA selector designed to allow the local user's monitor to display either the local PC signal or a signal from a remote PC. This capability is often useful in TRAINING suites. The bandwidth is suitable for use up to XGA resolution.

Audio follows the selected video and control of the source is by a choice of several remote and local contact closure protocols. The local user has a push button over-ride and LED status indicators. The local control and LED indicators can be duplicated on a separate panel by using the front panel "Local Control" connector.

Local signals use standard VGA and audio cables while the remote signals use RGBHV coaxes and BNC connectors plus balanced audio. The balanced audio and remote control signals are input to a 0.2" two part screw terminal connector. The RGBHV coax inputs have isolated grounds to avoid earth loop problems.

There is a priority option that causes the TE3203 to switch to whichever signal is present if one is absent.

The default/power-up state is "Local".



Power requirement: 230V ac, 6VA.

RGB bandwidth: dc to 200MHz

RGB impedance: 75Ω

Remote commands: Contact closures or TTL signals, edge triggered switchover with selectable edge polarity

Local commands: Contact closure or TTL levels; over-ride local and remote plus toggle inputs.

Overall dimensions: 135mm wide x 54mm high x 150mm deep

The ABS case has provision for fixing to a mounting surface or can be free standing.

Supplied with 2m IEC to BS1363 lead (other lead and voltage options available).

Full specifications are available on request.

TE3302 VGA PRIORITY SELECTOR

A two input VGA selector with audio that selects a priority PC input, if present, but otherwise selects the fall-back input. The PC video inputs are on standard 15w Hi-density "D" connectors and the audio inputs are standard 3.5mm stereo jacks. The audio selection slaves the video and front panel LEDs indicate the selected input.

The 250MHz bandwidth allows transparent use on high definition modes such as SXGA .

A connector is available on the PCB that allows control of the selection by remote contact closure or TTL logic level.

The TE3302 can be a free standing unit or can be floor box or wall plate mounted. Wall and floor box plates are made to your requirements and can include additional connectors and legend. The PC video output can be in 5 wire RGBHS BNC form or on a 15w Hi-density "D" connector. The audio output is on a 3.5mm stereo jack.



The TE3302 requires an isolated 12V dc 100mA supply. Suitable "Plug-Top" or "In-Line" PSUs can be supplied. When free standing the power connector is a 2.1mm Lo Power dc type; when in floor box or wall box use power is input on a 2-part screw terminal connector.

The PCB assembly is 143mm wide x 32mm deep

Full specifications are available on request.

APPENDIX

TE3321 SERIES SPECIFICATIONS

TE3321-1 **SXGA interface (outputs: buffered RGBHV and unbuffered audio)** **(also TE3321-1NA; as above but with no audio)**

User data

PC Input Connector: 15w Hi Density "D" female with jack screw females
Audio Input Connector*: 3.5mm stereo miniature jack socket
Indicators: Green LED = Power
 Amber LED = Signal (H sync present)

Installer Data

PCB: Single PCB 66mm wide x 33mm deep
PC Video Connectors: 5 coax tails approx 200mm long with 75Ω BNC jacks
 carry the R,G,B,H and V signals, *ie the installer's coaxes*
 are terminated in standard BNC plugs at the TE3321.
Audio Connector*: 3 way 2 part screw terminal connector (Weidmuller
 3.5mm range). Left audio, common, right audio.
Power Connector: 2 way 2 part screw terminal connector (Weidmuller
 3.5mm range). +V and 0V(gnd).

Electrical Data

Power requirement: +10V to +30V dc at 150mA. *0V is common with video*
 ground.
RGB Video Bandwidth: dc to 500MHz
IP Signal levels, nominal: RGB: 0 - 1V; H and V: TTL
Input Impedance: RGB: 75Ω; H and V: 2k2
OP Signal levels, nominal: RGB: 0-1V into 75Ω load
 H and V: 0 – 1.5V into 75Ω load, 0 – 3V into TTL load
Output Impedance: RGBHV: 75Ω
Audio*: Direct through connection, fully isolated from ground.

TE3321-2 **SXGA interface (outputs: buffered local monitor and RGBHV,** **unbuffered audio; also TE3321-2NA, as above but with no audio)**

As TE3321-1 above, but with second PCB for local monitor output. PCB interconnection is by 100mm long 16 way ribbon cable. Monitor performance as RGBHV spec above.

User data

Monitor Output Connector: 15w Hi Density "D" female with jack screw females

Installer Data

Monitor (second) PCB: 52mm wide x 28mm deep

Electrical Data

Monitor drive as per TE3321-1 RGBHV spec above.

* Not present on TE3321-1NA and TE3321-2NA

TE3321 SERIES SPECIFICATIONS (contd)

TE3321-3 SXGA interface (outputs: buffered local monitor and RGBHV, balanced buffered audio)

As TE3321-1 above, but with second PCB for local monitor and balanced buffered audio output. PCB interconnection is by 100mm long 16 way ribbon cable.

User data

Monitor Output Connector: 15w Hi Density "D" female with jack screw females

Installer Data

Monitor (second) PCB: 66mm wide x 33mm deep

Audio Output Connector: 6 way 2 part screw terminal connector (Weidmuller 3.5mm range). Left audio +, Left audio -, gnd, right audio +, right audio -, gnd. (Gnd is common with video gnd)

Electrical Data

Monitor drive: as per TE3321-1 RGBHV spec above.

AUDIO SPEC:

Audio Input Impedance: 10k

Audio Input Common: Connected to output gnd and video gnd via 47 Ω .

Audio output Impedance: 50 Ω

Audio bandwidth: 2Hz – 50kHz into 10k, 15Hz – 50kHz into 600 Ω .

Common Mode Rejection: > 40dB 50Hz to 20kHz

Nominal Through gain: x 2 (6dB) (ie output is nominally +/-input)

Maximum input signal: 4V pk-pk less common mode voltage

Max IP Common Mode: +/- 2V less signal voltage (signal plus CM < 2Vpk)

TE3321-0 interface (outputs: unbuffered RGBHV, balanced buffered audio)

User data

PC Input Connector: 15w Hi Density "D" female with jack screw females

Audio Input Connector: 3.5mm stereo miniature jack socket

Installer Data

PCB: Single PCB 66mm wide x 33mm deep

PC Video Connectors: 5 coax tails approx 200mm long with 75 Ω BNC jacks carry the R,G,B,H and V signals, *ie the installer's coaxes are terminated in standard BNC plugs at the TE3321.*

Audio Connector*: 6 way 2 part screw terminal connector (Weidmuller 3.5mm range). Left audio +, Left audio -, gnd, right audio +, right audio -, gnd. (Gnd is common with video gnd)

Power Connector: 2 way 2 part screw terminal connector (Weidmuller 3.5mm range). +V and 0V(gnd).

Electrical Data

Power requirement: +10V to +30V dc at 15mA. 0V is common with video gnd.

Audio Spec: As per AUDIO SPEC of TE3321-3 above