



EdisConnect Modular Cable Kit

Manual and Installation instructions

General Description

EdisConnect is designed to be the ultimate connection system for Audio Visual, pro-audio, pro-video and IT installs in professional, office, classroom, home or full home cinema environments.

- A full mix and match modular cable connection system
- The Edisconnect Modular cable kit provides 24 combinations of connectivity in one box.
- EdisConnect is not only one of the most stylish options available but has much greater choice , flexibility and is faster to install than almost any similar products on the market.
- EdisConnect combines two modular families in one product, a highly efficient and fast snap-in module at the faceplate and a broad range of non-solder screw terminal modules for cut cable installation.
- The cable snap-in modules are low cost and very quick to install and provides a larger number of connector combinations.
- EdisConnect's cable module plate is a system of true "snap-in mini plates" for fixing pre-terminated cables direct to the faceplate. Flexible ergonomic design, simple to install at minimal cost. Reduces installation time and effort. Edis pre-terminated cables fit directly into the "snap-in mini plates" with virtually every type of audio, video or data connection.
- EdisConnect faceplates accept 6 modules providing users with more connector combinations and larger choice and flexibility. Dual gang faceplates are standard 146mm x 85mm size and fit other manufacturers backboxes, patresses, dado trunking, desk mounts and flooring systems with 120.6mm accessory fittings.

- The sliding cable panel in the backbox enables very quick and easy cable fixing without the need to thread cable through holes in the backbox
- A combination of fully terminated and/or bare end cables can be used to significantly reduce installation costs
- Edisconnect cables are available either terminated at both ends, or bare end at one end (or you can of course supply your own cut to length cables)

Components

Faceplate

High quality bevelled edge faceplates designed to match domestic fittings (not flat utility plates as often seen) in single and dual formats. EdisConnect faceplates are suitable for direct mounting into Dado trunking, surface mounted back boxes, sunken backboxes, floor boxes or desk mounts and accept the full range of EdisConnect modules.



The dual gang faceplate is a standard size of 145mm x 85mm which fits the backbox supplied but also fits most other dual gang backboxes for surface, flush, recessed or Dado trunking installs.

Modular design

This Edisconnect modular cable kit comprises a family of 24 separate modules

The cable modules accept VGA, mini jack, RCA and S-video connectors and are fully interchangeable providing a large range of combinations. Cable modules and screw terminal modules are also interchangeable and can be mixed on a single faceplate. Mixing cable connector types with screw terminal types reduces costs and adds flexibility

Snap-in modules in different styles

- Snap-in modules for terminated cables where the cable connector is attached directly to the snap-in plate
- Snap-in modules with screw terminals for cut to length cables
- Snap-in blanks and modules for RJ45 and USB

Terminated Cable Modules



Snap-in Modules for pre-terminated cables included :

2 x VGA and 1 way (For any 3.5mm Mini Jack, RCA, or S-Video cable)

1 x 3 way (typically for Composite Video (RCA) left and right audio (RCA) or S-Video left and right audio (RCA) cable)

1x 2 way (any RCA, 3.5mm Mini Jack, composite or S-Video combination)

1x 1 way (any RCA, 3.5mm Mini Jack, S-Video)

4 x Blanks

EdisConnect Cable Module Designs (these fit directly onto terminated cables)



Mini Jack



S-Video



Composite Video



Composite
Mini Jack



Composite
S-Video



Mini Jack
S-Video



Mini Jack
Mini Jack



2xRCA Audio



2x RCA
S-Video



2x RCA
Mini Jack



2x RCA
Composite Video



Mini Jack
Composite Video
S-Video



2x Mini Jack
Composite Video



2x Mini Jack
S-Video



VGA
Mini Jack



VGA
Composite Video



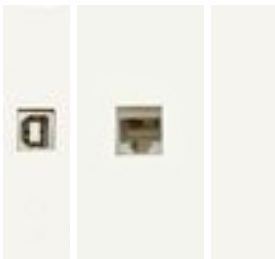
VGA
S-Video

The above selection shows only the combinations for the kit as supplied with standard cables, many other combinations can be made if extra cables are purchased

Screw Terminal Modules





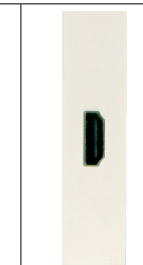
A full range of high quality screw terminal modules for audio, video and data include VGA, 3.5mm Mini Jack, RCA (Phono), S-Video, and 4 way audio with additional modules for USB and fully compliant EIA/TIA Cat 5e and Cat 6 data modules.

EdisConnect Miscellaneous Module Designs



USB RJ45 Blank

EdisConnect Screw Terminal Module Designs

				
VGA Mini Jack	2x RCA S-Video	2x RCA Comp video	4x Audio Bare wire	HDMI

Snap in Screw Terminal Modules included for cut to length cables

- 3 x VGA and 3.5mm Mini-Jack
- 1 x Composite Video (RCA) left and right audio (RCA)
- 1 x S-Video left and right audio (RCA)
- 1 x USB (B) adaptor
- 1 x RJ 45 connector
- 1 x bare wire speaker connector (2x left and right)

Edisconnect Back Box

The Edisconnect backbox design with sliding cable entry makes installation very easy, simply fix the back box to the wall and place the cables in position, no need to thread cables or connectors through holes, though knock-outs are provided if needed.

The Edisconnect backbox dimensions are 145mm x 85mm x 50mm (the inside depth is 46mm if you wish to use other backboxes) and has a sliding cable entry plate to simplify cable placement with a cut-away section to match 38mm trunking.

The lower half of the back box sliding plate can be “snapped off” or left whole if cables are fed from the rear of the backbox



Cables

Edisconnect modular cables are supplied in 5 metre 10m or 15m lengths already terminated with connectors that fit into the snap-in modules and are secured with two self-tapping screws. These pre-terminated cables make installation fast and easy to complete.



Cables included

- 2x 10m VGA 15 pin Male – Female with ferrite
- 1x 10m S-Video Male – Female
- 1x 10m RCA – RCA Male – Female Yellow Composite video cable
- 1x 10m 2 RCA – 2 RCA Red and White Male – Female audio cables
- 1x 10m 3.5 mm Mini Jack Male – Female audio cable

Installation

The Edisconnect Modular cable kit is designed for both terminated and cut-to-length cables i.e. cables with a termination at one end only. The system offers a fast, high integrity and low cost connection using snap-in modules for terminated cables, if cables need to be cut to length screw terminal modules are provided.

Cable Installation

Care needs to be taken when installing AV cables, and especially high definition cables. Improper handling, pulling and installation techniques can deform the cables which can in turn cause reflection problems and loss of signal. The following best practices should be adopted when installing AV cables, most of which may well be stating the obvious. We would recommend that BS 6701 and EN50174 installation standards for communication cables should be adhered to when installing this cable kit.

Cabling Basics

- Do not stand on or crush cables during installation.
- Do not place equipment or furniture on the cables.
- Do not allow the cables to be kinked during the installation process.
- Cable pulling should be done slowly and carefully with no snatching and only minimal force.
- Be careful not to exceed the minimum bend radius of the cable: 10 times the diameter of the cable. This is particularly important at right angle bends in trunking which often has sharp edges.
- Do not tighten cable ties too tightly. If you cannot move any cable inside a tied bundle, the cable tie is too tight.
- Do not put cable ties at identical distances apart. This can lead to deformation at a certain wavelengths, which can cause Structural Return Loss. Ideally place cable ties at random distances.
- Cables should be supported by trunking, conduit, cable trays, or tied at less than 600 mm horizontal or 1 metre vertical spacing to take the gravitational forces off of the cable. Cable sag should be less than 200mm.
- It is good practice to ensure that all cables are concealed in trunking, conduit or inside partition walls and labelled at the ends.

- Conduit runs in excess of 30 metres and/or with more than two 90° equivalent turns should include a pull box. Each 90° turn is equivalent to the friction of a 10metre straight conduit run.
- If cable is pulled into conduit, an anti-friction lubricant should be used that is compatible with the cable jacketing material.
- Be sure to maintain the original physical shape of the cable.
- AV cable routes should be greater than 300 mm from fluorescent lights and other sources of electrical interference wherever possible.
- AV cables and power cables should only cross at right angles to each other.
- AV cables should be no closer than 50mm from any unprotected 230volt 20 amp 50/60Hz power cables to avoid interference though BS 6701:2004 and EN50174 conflict to some extent about segregation of AV cables from power – 50mm to 75mm is recommended depending on safety or EMC interference.
- Ideally AV cables should not share the same trunking as power cables due to interference but if they do then segregation and spacers should be used to provide electrical safety.

Mounting the back box

Surface mounting - on Masonry

Back box installation is made easier by fixing the adhesive template on the wall at the position that you prefer, ensure that it is horizontal ideally using a spirit level. Drill the fixing holes and place wall plugs in the holes.



Adhesive Template label

The back box is designed with a sliding entry for cables, ensure that this is facing the direction that you want before fixing to the wall.

If additional entries are to be used decide where the cable shall enter the box and use pliers to break out the plastic entryway. Pass the cable through the hole and align the box up to the fixing hole you have drilled. Use countersunk screws to fix the box to the wall. Before they have been fully tightened, use the spirit level to finally level off the box.

Surface mounting - on Plasterboard

Fixing a surface mount box to a plasterboard wall can be done in a similar way to masonry except that different wall plugs are used, i.e. those for plasterboard walls. .

It is best when placing the backbox on the plasterboard wall to align it so that the fixing screws go into the wooden frame behind the plasterboard. If you decide to do this it is important to check that it is possible to feed in the cable from behind if required.

Flush Mounting

You will require a 120.6 mm inset mounting backbox or pattress to flush mount the faceplate this is not the one supplied in the cable kit with a depth to suit the cable or screw terminal connector.

Flush mounting - on Masonry

Place the metal mounting box against the wall at the desired location and draw round it with a pencil. Mark a path from the location of the mounting box for the cable to reach it, e.g. from the skirting. Remove the plaster from within the marked area by first scoring the pencil line you have drawn and then using a masonry chisel and hammer.

Once the brick/concrete is exposed where the mounting box is to go, some of the brick will have to be removed. To do this fit a drill with a masonry bit and mark the depth of the mounting box on the bit. Next drill into the brick in a grid pattern as shown here:



Finally use a masonry chisel and hammer to cut away the remainder of the depth required for the mounting box. Make sure the box fits and then mark and drill holes to attach the mounting box to the brick behind. Use wall plugs in the drilled holes to secure the backbox. Pull through the length of cable required and attach the mounting box in the hole.

Finish the job by plastering around the box and the cable channel as necessary.

Flush mounting - on Plasterboard

Once you have decided where the back box is going to be located, draw round the box on the wall ensuring that it is horizontal using a spirit level. The hole should then be cut in the plaster wall using a sharp knife. Feed the cable through the hole then choose the best hole to remove in the mounting box and knock it out.

Fit a grommet to the cable entry hole and fit two lugs to the back box. Then pass the cable through the grommet and slide the box into the wall so that both of the lugs are behind the wall. The box should now sit behind the wall in position. The socket can then be wired up and screwed in place. By screwing the socket in place it clamps the plasterboard between the lugs and the socket.

Mounting in Dado Trunking

The 145mmx 85mm dual gang faceplate fits standard dual gang 120.6mm Dado accessory mounts and backboxes, but be sure that the Dado backbox depth is sufficient for the cables and connectors. The terminated VGA connector requires 45mm and the screw terminal VGA connector requires a minimum of 40mm. The other combinations of cable connectors and screw terminals are not so deep.

Faceplate and module installation

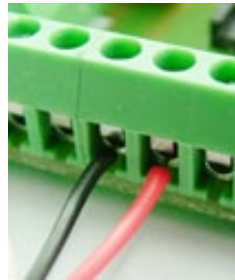
Fit the snap-in modules of your choice into the faceplate and screw the cable connectors to the snap-in modules, screw the faceplate to the backbox and fit the faceplate screw covers. The faceplate has a ridge just inside the outer edge which fits inside the backbox to make a secure fit. Make sure that you fit the modules to the faceplate with the gap in the ridged edge facing the sliding cable entry.

You will find it easier to fit the cables into the back box if the VGA module is near the centre of the faceplate.



Terminating Cables with screw terminal modules

If the cables need to be cut to length use the appropriate screw terminal modules instead of cable modules.



Stripped wires in a screw terminal.

Note that just enough insulation has been stripped off so that the terminal's cage will close on the wire and not the insulation, but not so much is stripped that bare wire is hanging out of the terminal.

Preparation of the wire is important:

- ³⁵₁₇ Cut the wires to length and strip 5mm of insulation from the end of each wire - if you strip more and too much wire is left exposed, there's a possibility of making contact with other terminals. If you don't strip enough, the screw terminal may close on the insulation instead of the wire, making a poor connection.
- ³⁵₁₇ Tin/solder the wire if you've used stranded wire. This is optional, but recommended.



Screwdriver, Screws and caps

35
17 make sure that the cage on the screw terminal is open enough to allow the wire to enter fully. The screwdriver provided fits both the screw terminals and crosshead screws in the kit. Insert the wire and screw down the terminal firmly. Don't screw it down too hard and, you may shorten the life of the connection if screwed too tightly. A light tug on the wire will tell if a good connection has been made.

Wiring configurations (Pin-outs)

VGA Module Pin-outs

PCB/Module Label	Signal	Wire Colour	Pin number
R	Audio Right	Red	Tip
Sc	Audio Ground	Shield	Base
L	Audio Left	White	Ring
R	Red	Red	1
Rs	Red ground	Red screen	6
G	Green	Green	2
Gs	Green ground	Green screen	7
B	Blue	Blue	3
Bs	Blue ground	Blue screen	8
BL	Horizontal sync	Black	13
BLs	Sync ground	Black screen	5
Ys		Yellow screen	10
Y	Vertical sync	Yellow	14
Gr	SDA	Grey	15
Wh	Data clock	White	12
Cs	Outer screen	Case-screen	

Note: The outer shield of the VGA cable should remain un-terminated

There is no colour standard for the Horizontal and Vertical Sync wires, so if you use other than Edisconnect cables you will need to check the pin-outs yourself using a tester.

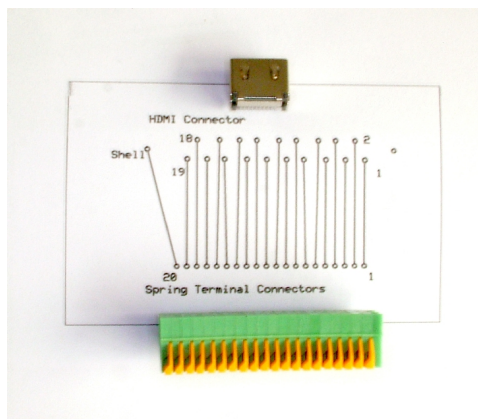
S-Video Module Pin-outs

PCB/Module Label	Signal	Wire Colour	Pin
L	Left Audio	White	Centre
Ls	Left Audio ground	Screen	Outer
R	Right Audio	Red	Centre
Rs	Right audio ground	Screen	Outer
Bl	(Y) Luminance Ground	Black	1
R	(Y) Luminance+sync	Red	3
Sc	Ground	Screen	Screen
O	Chrominance	Orange	4
Br	Chrominance Ground	Brown	2

3x RCA (Phono) Module Pin-outs

PCB/Module Label	Signal	Wire Colour	Pin
Ws	Left Audio Ground	White screen	Outer
W	Left Audio	White	Centre
Rs	Right Audio	Red screen	Outer
R	Right Audio Ground	Red	Centre
Ys	Composite Video ground	Yellow screen	Outer
Y	Composite Video	Yellow	Centre

HDMI Module Pin-outs



Pin 1	TMDS Data2+	Red	
Pin 2	TMDS Data2 Shield	Drain	Screened Pair
Pin 3	TMDS Data2-	White	
Pin 4	TMDS Data1+	Green	
Pin 5	TMDS Data1 Shield	Drain	Screened Pair
Pin 6	TMDS Data1-	White	
Pin 7	TMDS Data0+	Blue	
Pin 8	TMDS Data0 Shield	Drain	Screened Pair
Pin 9	TMDS Data0-	White	
Pin 10	TMDS Clock+	Brown	
Pin 11	TMDS Clock Shield	Drain	Screened Pair
Pin 12	TMDS Clock-	White	
Pin 13	CEC	Grey	Single
Pin 14	Reserved (N.C. on device)	Orange	
Pin 15	SCL	Yellow	Pair
Pin 16	SDA	White	Single
Pin 17	DDC/CEC Ground	Purple	Single
Pin 18	+5 V Power (max 50 mA)	Red	Single
Pin 19	Hot Plug Detect	Pink	Single
Shell		Braid – Drain	

Testing

After installation the cables and connectors should be tested for continuity, crosses and open circuits. Very few suitable and purpose made AV testers are available but the Pro's Tester 3PK-NT013 and the Paladin PC cable check Pro CT 1577 both have VGA testing functions as well as USB, RJ45 – adaptors may be needed for S-video, RCA and Mini Jack.

Best practice is to test through the PC or peripheral cables as well as the cable kit components.

Warranty

2 year return to base warranty on components.

Standards

All products and components in the Edisconnect range comply with RoHS (EU directive 2002/95/EC), and WEEE (EU directive 2002/96/EC), the RJ45 connectors comply with EIA/TIA standards.

Packing Dimensions

Carton dimensions : 26 x 41 x 11 cm

Gross weight : 3.5 Kg

Cable Kit packing list

Dual gang Faceplate, 2x 18mm screws and 2x screw covers
Dual gang Back box including sliding plate
Template label for fitting backbox

Cables

2 x 10m VGA Cable M/F (low profile connectors)
1 x 10m Composite Video Cable (RCA) M/F
1 x 10m Audio Left and Right (RCA) M/F
1 x 10m Audio Cable 3.5mm mini-jack M/F
1 x 10m S-video Cable M/F

Cable modules

2 x VGA and 1 way (For any 3.5mm Mini Jack, RCA, or S-Video cable)
1 x 3 way (typically for Composite Video (RCA) left and right audio (RCA) or
S-Video left and right audio (RCA) cable)
1x 2 way (any RCA, 3.5mm Mini Jack, composite or S-Video combination)
1x 1 way (any RCA, 3.5mm Mini Jack, S-Video)
4 x Blanks
4x Hex bolts for VGA connectors
14x Cross head 11.5mm screws for cable modules

Screw Terminal Modules for cut to length cables

3 x VGA and 3.5mm Mini-Jack
1 x Composite Video (RCA) left and right audio (RCA)
1 x S-Video left and right audio (RCA)
1 x USB (B) adaptor
1 x RJ 45 connector
1 x bare wire speaker connector (2x left and right)

Screwdriver, screws and caps

Manual and Installation Instructions

Because we are committed to ongoing quality improvement the specification
of this product may change without warning E&OE