TV/Satelitte Socket

Telephone, TV/FM and Satellite Socket Outlets

Standards and approvals

Logic Plus Telephone and TV sockets comply with the following:

Telephone sockets K422 and K427

BS 6312: 2.2, BS 5733: 1995 (where applicable).

K4817: BS 5733: 1979 (where applicable) and FCC68.

TV sockets K3520, K3521 and K3523

BS 3041: Part 2: 1977/IEC 169-2: 1977, BS5733: 1995 (where applicable) and IEC65, Cls 10.1, 10.3.

TV sockets K3525

BS 5733: 1995 (where applicable).

Technical specification

Electrical

Telephone sockets, cable specification:
CW1311, CW1293, CW1308, CW1316
No. of cables per termination: 2

Re-usability:
>9 reterminations (should not be reterminated with smaller diameter wire)

TV sockets:
Cable specification: CT 100 or equivalent
Any standard low-loss TV co-axial cable:
Outside 4-8mm diameter,
inner conductor 0.5-2mm diameter

Insertion loss:
Insertion loss data available on request

'F' Type satellite socket (K3525), cable specification:
Co-axial cable: inner core diameter – 0.5-1.2mm

RJ11 (K4817), Cable specification:
Capable of taking 0.08 to 0.65mm^2 solid or stranded cable

Physical

Ambient air:
–20°C to +60°C

IP rating:
IP2XD

Max. installation altitude:
2000 metres

Description

A part of the very wide range of products in the distinctive Logic Plus style to meet the latest technical requirements and the standards applicable to modern technology in the installation of telephone and television equipment. The master and secondary telephone sockets K422 and K427 comply with relevant approvals for direct and indirect connections between a termination point of a public telecommunications system and any piece of approved telecommunications apparatus. For applications requiring twin or dual telephone outlets, refer to 'Modular Data and Telephone Sockets'.

Logic Plus Telephone and TV sockets will fit in plaster depth boxes (except for RJ11).

The F-type Satellite Socket may be used for connection of CATV, MATV and satellite TV installations.

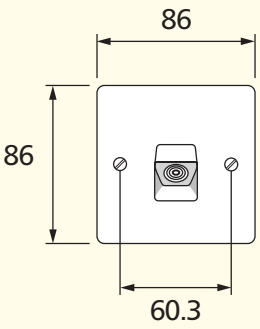
Digital TV outlets are available.

Features

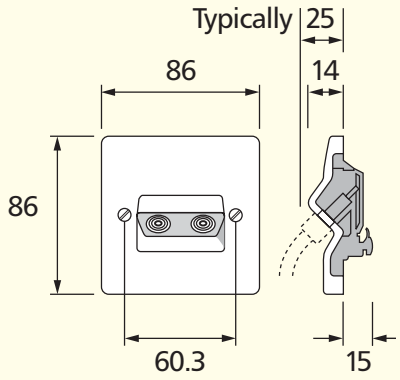
- Single screw termination on TV outlets
- Protected, fully enclosed PCBs
- Meet all relevant BS requirements
- Attractive new easy-clean Logic Plus styling
- Quick, simple and reliable terminal connection
- IDC connectors on telephone outlets
- Part of a complete range of products for telephone, television and data processing requirements
- Angled connector on TV outlets
- Sockets fit in plaster depth boxes (except K4817)

Telephone, TV/FM and Satellite Socket Outlets

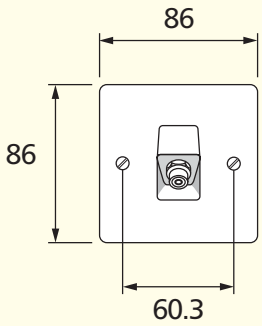
Dimensions (mm)



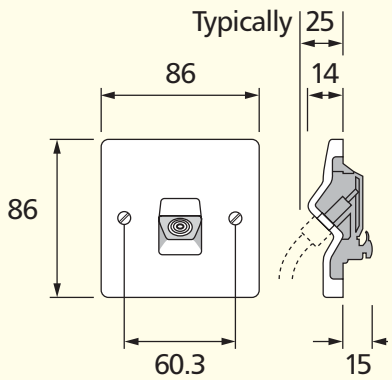
K3520/3521



K3522/3523



K3525



K3520/3521

Sectional drawings show the furthest projections from the back of the frontplate (wall surface), including a typical coaxial connector in the case of TV sockets. All units will fit in 16mm plaster depth boxes except for K4817 (Western Telecom socket).

BOX TYPES		
	Flush	Surface
1 gang	861 ZIC	K2140 WHI

Installation (Telephone sockets)

Product performance, systems compatibility

Master Sockets: for use as the first socket outlet on a direct exchange or PABX line. They contain surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets: For use as extension sockets when connected on the same line as a Master Socket.

Installation tools required

MK IDC insertion tool List No. 400 or 22630 (not supplied with product).

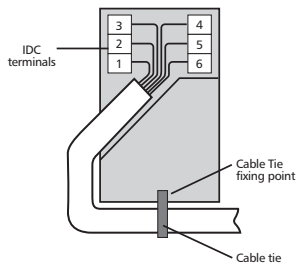
Wiring regulation restrictions

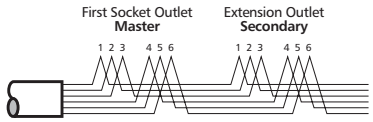
Domestic installations: Any number of MK sockets may be installed thereafter, with a total REN (Ring Equivalent Number) value of all telephone equipment connected on a line not exceeding 4.

BT Wiring Scheme

1 GREEN / white
2 BLUE / white
3 ORANGE / white
4 WHITE / orange
5 WHITE / blue
6 WHITE / green

Note: Main wire colour is shown in capitals





Telephone, TV/FM and Satellite Socket Outlets

Installation (TV sockets)

Product performance, systems compatibility

Isolated Outlets are intended for use where safety isolation (rated at 2000V ac) is required to provide protection against faults occurring within any mains powered product used on different parts of the distribution system. They are not suitable for use in systems where DC signals are passed through the socket, (e.g. where masthead/headend equipment is controlled by receiver/decoder equipment).

Diplexer Outlets are used in distribution systems where both TV and FM band signals are combined on a single aerial downlead. The filtering in the diplexer separates the appropriate signals and feeds them through to the relevant output connection port.

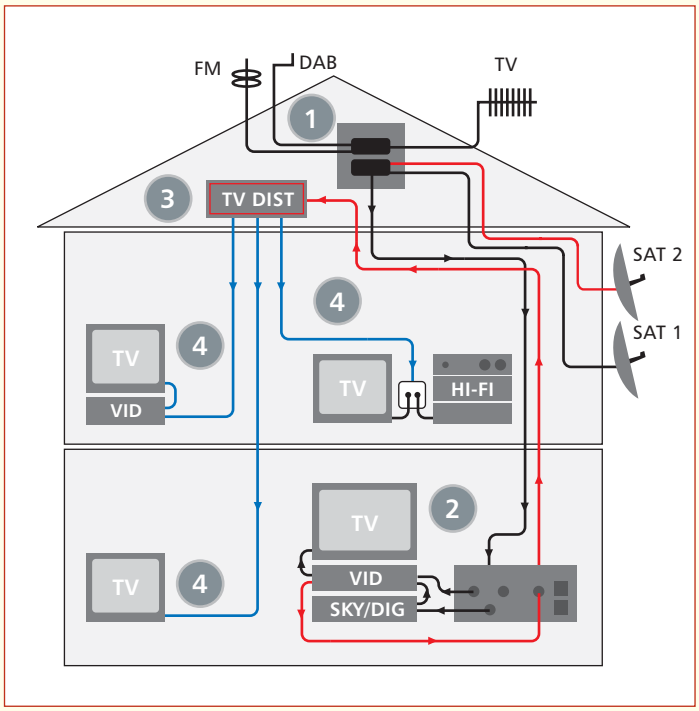
Cable Routing and Use of Cable Clamp

Sharp bends in the cable must be avoided during installation. The single TV/FM socket is fitted with a cable clamp that can be fixed on either side of the termination position to facilitate this.

When tightening the screening braid clamps ensure that the cable is firmly gripped and that the inner insulation is not squashed flat beyond a slight oval shape.

Safety Information

TV outlets or modules must not be installed in the same enclosure as equipment rated in excess of 50V, (e.g. mains rated 13A sockets or switches).



Method of installation of TV and FM aerial connection by using MK co-axial socket outlet and only one downlead.

Conventional distribution system for TV and FM signals using a single aerial downlead.

1. The signals from the TV and FM aerials and the satellite dish are combined together using two products. The first combines the TV and FM signals and the second adds the Sky signal to the TV/FM signal and provides a DC control path to power the LNB unit on the satellite dish. (These products are not supplied by MK).

   The single aerial down lead feeds into the triplexer (black lines in wiring diagram).

2. The separated satellite signal is then fed to the decoder. The decoded satellite signal is then fed into the VCR along with the TV signal from the Triplexer. The output signal from the VCR then feeds into the TV and also back to the single outlet and onto the distribution amplifier (black lines in wiring diagram).

3. The single cable back-feed then feeds back to the input of a multi way distribution amplifier, (typically located in the loft or garage) (red lines in wiring diagram).

4. Each individual output from the distribution amplifier is then fed to the individual rooms in the house to a standard TV (single or diplexer) outlet to which the TV/VCR and/or Hi-Fi can be connected (blue lines in wiring diagram).

Digital TV, Radio and Telephone Outlets

Standards and approvals

All Logic Plus TV Outlets comply with BS 5733 and BS EN 50083 where applicable.

Also IEC 169-2, BS EN 60169-24 and BS 6312 part 2

Modular products are Euro compatible.

Technical specification

Single Outlets

TV/FM IEC Male or Female	DC-950MHz
SAT F-Type	DC-1.75GHz

Diplexer and Triplexer products

TV

Diplexer:	DC-68.5MHz, 174-862MHz
Triplexer:	DC-68.5MHz, 174-862MHz

FM

Diplexer:	87.5-108MHz
Triplexer:	87.5-108MHz

SAT

Diplexer:	n/a
Triplexer:	DC-200kHz, 950-2400MHz

TV/FM/DAB/SAT products for digital radio

TV

Diplexer:	470-862MHz
Triplexer:	470-862MHz

FM/DAB

Diplexer:	87.5-230MHz
Triplexer:	87.5-230MHz

SAT or SAT1

Diplexer:	n/a
Triplexer:	950-2400MHz

SAT2

Diplexer:	n/a
Triplexer:	DC-2300MHz

Cable management

Logic Plus TV outlets can be mounted in a variety of MK trunking systems.

Description

There are two ranges of diplexer and triplexer products, an established range suitable for VHF TV, and a range suitable for digital radio (DAB).

Diplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV and FM signals. The filtering in the diplexer splits out the appropriate signal and feeds it to the relevant output connection. A DC control path is provided in the TV signal path through the diplexer.

Triplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV, FM and SAT signals. The filtering in the triplexer splits out the appropriate signal and feeds it to the relevant output connection. A DC control path is provided in the SAT signal path through the triplexer.

The quad outlet contains a triplexer together with a separate satellite output, for use with Sky+, or more complex installations.

Telephone secondary outlets are provided on some products for connection of telephone or for interactive TV applications.

Features

- Non Isolated
- Fully screened
- Earth terminal provided on TV modules
- Selected products with BT secondary outlets for interactive TV applications
- Selected products with supplementary TV outlet for back-feed for further distribution

BOX TYPES

	Flush	Flush (for Extra wiring space)	Surface Insulated	Surface Metal
1 gang	861 ZIC	866 ZIC	K2140 WHI	K2211 ALM/K2213 ALM
2 gang	862 ZIC	886 ZIC	K2142 WHI	K2212 ALM/K2214 ALM

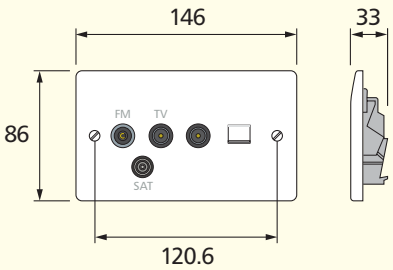
Minimum recommended box depth 32mm
Note: Edge/Insignia mounted modular products require 45mm box

Digital TV, Radio and Telephone Outlets

Dimensions (mm)

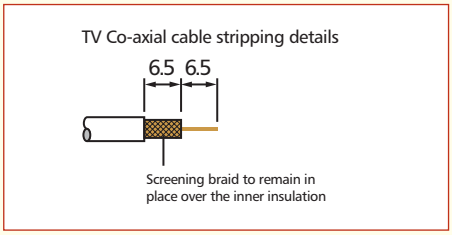
1 gang (monobloc) dimensions (mm)

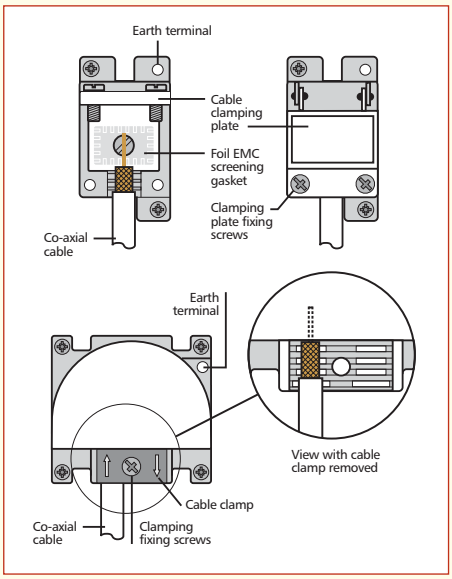
2 gang (monobloc) dimensions (mm)



Installation

- When installing the TV co-axial cable ensure that all cable bends are smooth so that the inner insulation is not crushed or squashed, otherwise the TV signal quality may be affected.
- Not suitable for loop-in loop-out installations.
- Use CT100 cable (or equivalent).





BT Outlet Connection

Carefully strip 50mm of the BT cable outer sheath to expose the inner insulated conductors. Using the insertion tool supplied, (MK List no. 400) carefully push each lead into the appropriate IDC terminals according to the wiring colour code stated in the BT Wiring Scheme diagram.

Pins 1 and 6 are frequently unused, 4 wire cable may be used in these installations.

If an existing installation uses a different wiring colour code system, this should be retained on any new or extended installation.

Additional secondary extension outlets should be wired in parallel with the existing installation via the IDC terminals, (i.e. pin 1 to pin1, pin 2 to pin 2, etc).

In the event that the earth terminal is required to be used, the installer must ensure that a suitable earth conductor is present to connect to the earth terminal. (In the case of 2G products both TV modules should be earthed).

In the event that the earth terminal is required to be used, the installer must ensure that a suitable earth conductor is present to connect to the earth terminal. (In the case of 2G products both TV modules should be earthed).

BT Wiring Scheme

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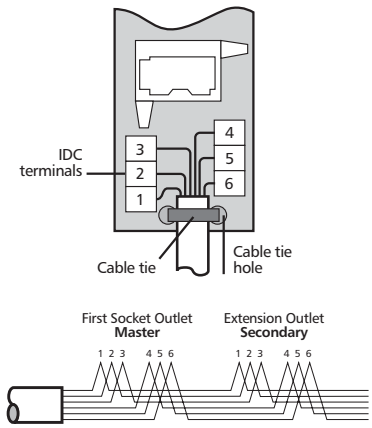
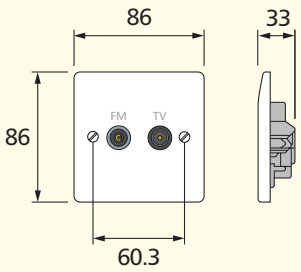
Note: Main wire colour is shown in capitals



Grid Plus Front Plates

Standards and approvals

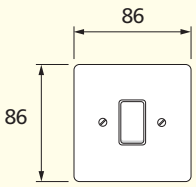
BS 5733: 1995



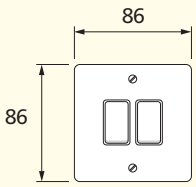
Description

Grid Plus is a comprehensive modular switching and monitoring system ideal for a variety of applications within the commercial, public and domestic sectors.

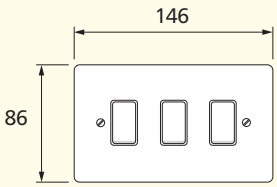
Dimensions (mm)



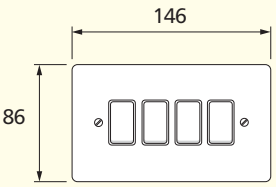
1 module
K3631 WHI
K3631 GRA



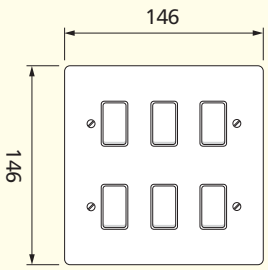
2 module
K3632 WHI
K3632 GRA



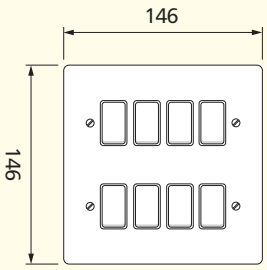
3 module
K3633 WHI
K3633 GRA



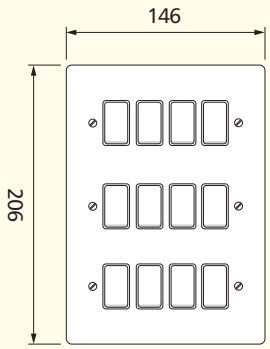
4 module
K3634 WHI



6 module
K3636 WHI
K3636 GRA



8 module
K3638 WHI
K3638 GRA



12 module
K3639