



Technical Hotline
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Elements Collection Technical

Digital TV and Radio

Standards and approvals

All TV outlets comply with
BS 5733:2010 + A1:2014 and BS EN 50083
where applicable.

TECHNICAL SPECIFICATION

SINGLE OUTLETS

TV/FM IEC MALE OR FEMALE
DC-950MHz

SATF-TYPE
DC-1.75GHz

TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO

TV

Diplexer: 5-65MHz
470-862MHz

Triplexer: 5-65MHz
470-862MHz

FM/DAB

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

SAT OR SAT1

Diplexer: n/a
Triplexer: 950-2300MHz

SAT2

Diplexer: n/a
Triplexer: 5-2300MHz



Description

There is one range of diplexer and triplexer products, which is 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.

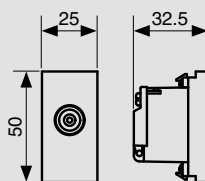
Triplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV, FM and SAT signals. The filtering in the triplexer splits out the appropriate signal and feeds it to the relevant output connection. A DC control path is provided in the SAT signal path through the triplexer.

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

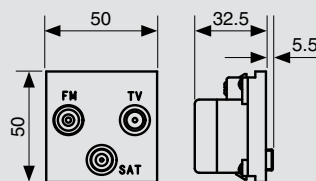
Telephone secondary outlets are provided on some products for connection of telephone or for interactive TV applications.

Dimensions (mm)

Euro 1 module



Euro 2 module Triplexer and Quadplexer



Note: Minimum box depth: 47mm

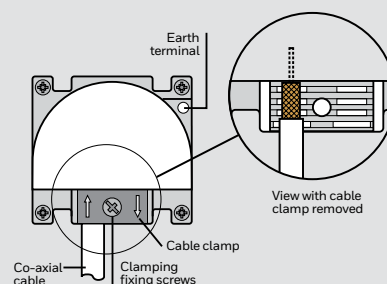
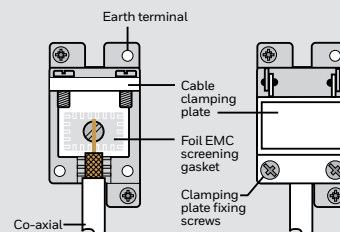
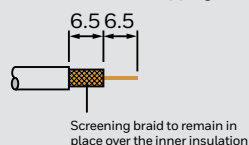
Features

- Non Isolated
- Fully screened
- Earth terminal provided on TV modules

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.)

TV Co-axial cable stripping details



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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 download. The filtering in the diplexer separates the appropriate signals and feeds them through to the relevant output connection port.

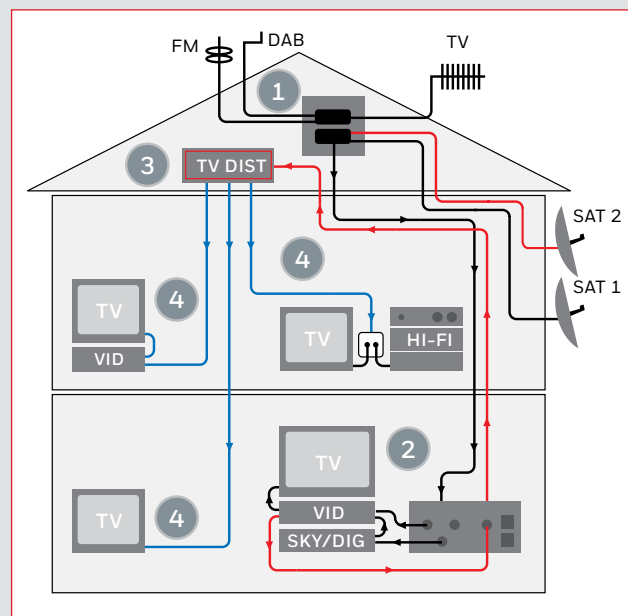
Cable Routing and Use of Cable Clamp

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 download.

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

- 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).