



## Unicable II Cascadable switch with Terrestrial input and 4x Sky dSCR/SatCR/Legacy+Terrestrial outputs

Model: ISKY-UST110-CUO40-16P

Item: 5412

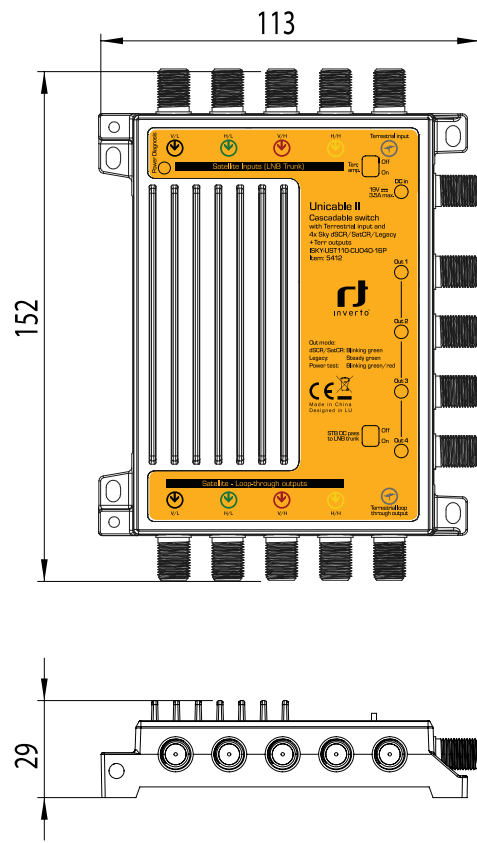


The Multiswitch unit connects to a Quattro LNB and offers a terrestrial input port to connect a terrestrial antenna for reception of UHF/DAB/radio broadcasts. The terrestrial signal can be amplified through a dedicated "On/Off" switch and is combined over each of the 4 output ports.

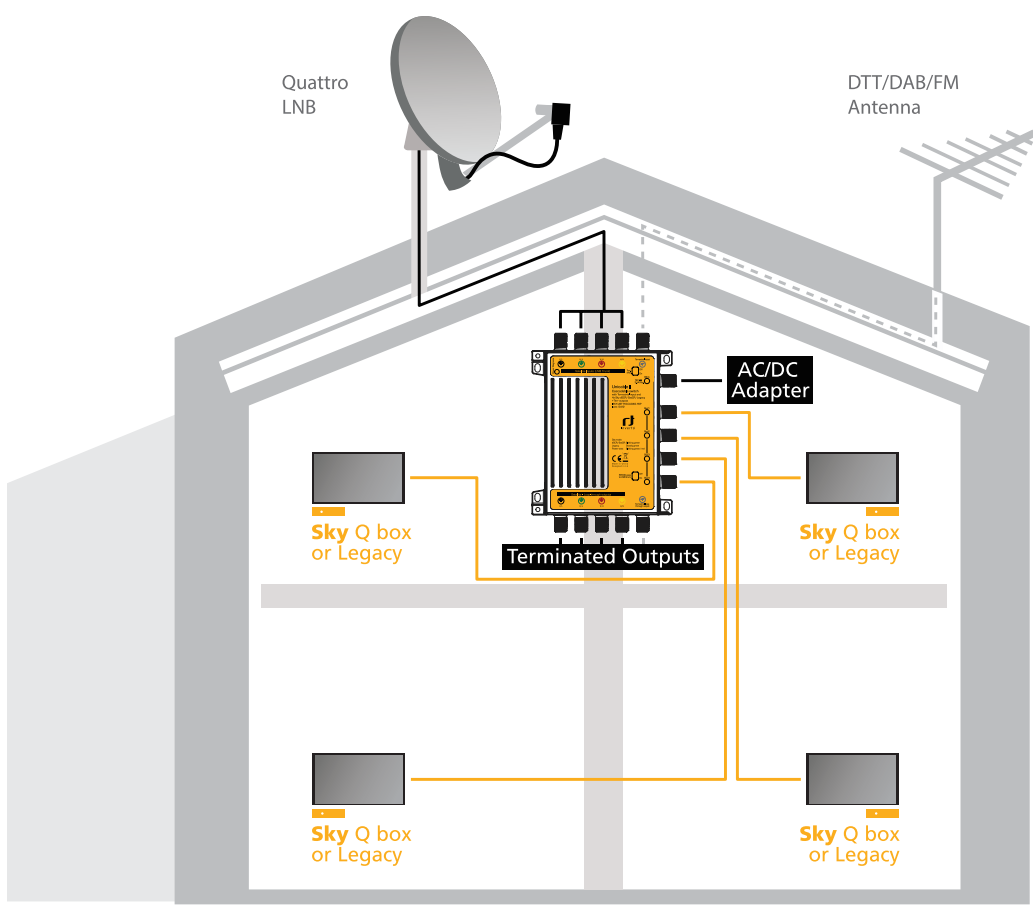
The Multiswitch unit can be powered through a "DC in" port, any of the trunk output lines or from the STB output ports (typically using a Sky power inserter device). In typical cascaded MDU installations, the DC voltage supplied over the DC in or trunk output lines is passed through to the trunk input lines to power the LNB and the "STB DC pass to LNB trunk" switch must be set to "Off".

To help the installer ensure at the time of installation that the unit's power supply is sufficient to support a full load in the future, i.e. 4x SkyQ STBs, the Multiswitch features a special power diagnosis test mode that is triggered automatically upon unit startup. During this 15 second test, the Multiswitch will operate in full load and will light the power-diagnosis led in green if the unit is supplied with sufficient power or in amber if not.

A status led, located next to each output port, indicates the operating mode of the port (Legacy=solid green, Sky dSCR=blinking green, Power diagnosis=blinking red/green).



**Typical single household installation**



# Typical cascaded MDU/building installation



## Technical Specifications

Frequency range	Satellite Terrestrial	VHF UHF	950-2150 MHz 174-230 MHz 470-790 MHz
Inputs (F-type connectors) Trunk outputs (F-type connectors) Tap output ports (F-type connectors)			4 SAT (Quattro) + 1 TERR 4 SAT (Quattro) + 1 TERR 4 x Sky dSCR (16 UBs) / SatCR / Legacy auto-detect ports with combined Terrestrial signal
Trunk DC pass	Satellite Terrestrial		Yes No
Trunk max through-loss	Satellite Terrestrial (Amp OFF)	VHF UHF	-4 dB -6 dB -8 dB
Gain (Tap)	Satellite  Terrestrial	Out of AGC AGC VHF - Amp OFF UHF - Amp OFF VHF - Amp ON UHF - Amp ON	>25 dB -25 dB to +27 dB -16 dB ±2dB -18 dB ±2dB +4 dB ±2dB +2 dB ±2dB
Gain control	Satellite Terrestrial	Tap Tap + Trunk	AGC +20dB amp., manual switch
Max Input signal level	Satellite Terrestrial		0dBm (108dBuV) -20dBm (88dBuV) when Amp=ON 0dBm (108dBuV) when Amp=OFF
Output power level (agregated) (input signal: single carrier at start/mid/end band freq @-20dBm)	Satellite	dCSS/Unicable UB power Legacy	-25 dBm (83 dBuV) ±2dB -21 dBm to -12 dBm (87 dBuV to 96 dBuV)
Output level variation (input signal: single carrier at start/mid/end band freq @-20dBm)	Satellite  Terrestrial	dCSS/Unicable Legacy full band, per port full band, all ports	<2 dB <4 dB per frequency across all ports <9 dB full band per port <4 dB <4 dB
Input power dynamic range (agregated)	Satellite		-36 dBm to -4 dBm (72 dBuV to 104 dBuV)
Return loss	Satellite trunk ports Terrestrial trunk ports Tap output ports	Satellite Terrestrial	>10 dB >8 dB >6 dB >8 dB
Isolation	Trunk port to port Trunk port to Tap port		>30 dB >26 dB
Integrated phase noise			1.5 degrees max.
Control and protocols			Sky dSCR, SatCR, DiSEqC 1.x/2.0 EN50949/EN50607 13/18VDC + 0/22kHz Legacy/dSCR auto switching
User bands per port dSCR/SatCR/Legacy mode indication Input/Output impedance			16 LED 75 ohm
Power supply	via DC in / SAT trunk via Tap ports		19 VDC 13/18 VDC
Power from DC-in to Trunk LNB power supply Power consumption Power indication Earth terminals	LNB power supply switch=ON		Yes 500mA max @ 18VDC 600mA max @19VDC (no load) LED Yes
Operating temperature			-20°C to +50°C
IP			IP54
Product dimensions (H x W x D)			15.2 x 11 x 2.6cm
Weight			280 g

\* Unused ports need to be terminated by 75 Ohm DC-blocked terminators

## Technical Specifications

User band (channel) frequencies:

### Sky UK (dSCR) User Band

3 : 1680MHz	19 : 1530MHz
9 : 1280MHz	20 : 1580MHz
11 : 1380MHz	21 : 1630MHz
14 : 1480MHz	22 : 1730MHz
15 : 980MHz	23 : 1780MHz
16 : 1030MHz	24 : 1830MHz
17 : 1080MHz	25 : 1880MHz
18 : 1130MHz	26 : 1930MHz

### EN50494/EN50607 User Bands

1 : 1210MHz	EN50494	9 : 1340MHz	EN50607
2 : 1420MHz		10 : 1485MHz	
3 : 1680MHz		11 : 1550MHz	
4 : 2040MHz		12 : 1615MHz	
5 : 985MHz	EN50607	13 : 1745MHz	
6 : 1050MHz		14 : 1810MHz	
7 : 1115MHz		15 : 1875MHz	
8 : 1275MHz		16 : 1940MHz	

User band (channel) bandwidth	User band 46 MHz
User band (channel) gain ripple	3 dB max.

### Logistical info

Packaging dimensions (h x w x d)	15.5 cm x 11.8 cm x 3.5 cm
Packaging weight	0.3 Kg
Quantity per carton	30
Carton dimensions (h x w x d)	48.2 cm x 24.9 cm x 50 cm
Carton weight	10.71 kg
Quantity per pallet	840

### Optional accessories (sold separately):

<ul style="list-style-type: none"> <li>65 W power supply unit, supplying up to 4 units + LNB(s)</li> </ul>	
5581 65W Power Supply adapter for Unicable II™ multiswitches (UK plug)	IDLU-ADPT04-19342-UPM
<ul style="list-style-type: none"> <li>18 W wall power supply, supplying 1 unit + LNB(s)</li> </ul>	
5638 19W Power Supply adapter for Unicable II™ multiswitches (UK plug)	MSA-C1000IS19.0-24K-GB
<ul style="list-style-type: none"> <li>Power Inserter</li> </ul>	
5958 Unicable II™ Power Inserter, 5-2400MHz	IDLU-PINS03-00000-OBT

For purpose of brevity, some product descriptions in this sheet remain at platform level and may not be referred to as detailed datasheets of the products. Inverto Digital Labs reserves the right to amend, omit or add products, product-lines, and / or features without notice. As product specifications may change without notice, always contact Inverto to obtain the latest product specification sheets.

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