Unicable II Cascadable switch with Terrestrial input and 4x Unicable II/ Legacy+Terrestrial outputs

Model: IDLU-UST110-CUO4O-32P

Item: 5413

2 SAT | Terrestrial | 4x Unicable II or Legacy | Programmable*

The IDLU-UST110-CUO4O-32P is a small size casacdable Unicable2 multiswitch with 4 auto-detect output ports, each supporting Unicable II or Legacy functionality. The Multiswitch unit can be connected to a single satellite Quattro LNB (default configuration) or two Wideband LNBs to support reception of 2 satellites. A Terrestrial input allows to connect a terrestrial antenna for reception of UHF/VHF/DAB/radio broadcasts. The terrestrial signal can be amplified (ON/OFF switch) and is combined over each of the 4 output ports. By default, each output port functions in Legacy mode and can be controlled through 13/18V+0/22kHz signals or DiSEqC1.0/2.0 commands. The port switches to Unicable II mode automatically upon receiving a EN50494/EN50607 command and provides 16x dynamic User Bands (refer to the product technical specifications for the default settings of the 16 user bands).

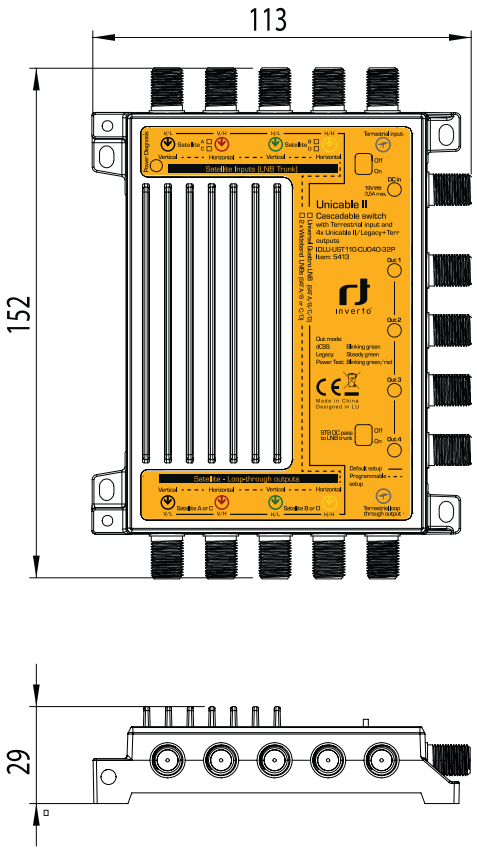
The Multiswitch unit can be powered through a DC input port, any of the trunk output lines or from the STB output ports (typically through a power inserter device). In typical cascaded MDU installations, the DC voltage supplied over the DC in or trunk output lines is passed through to the trunk input lines in order 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, 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 a 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 of the output ports, indicates the operating mode of the port (Legacy=solid green, Unicable II=blinking green, Power diagnosis=blinking red/green).

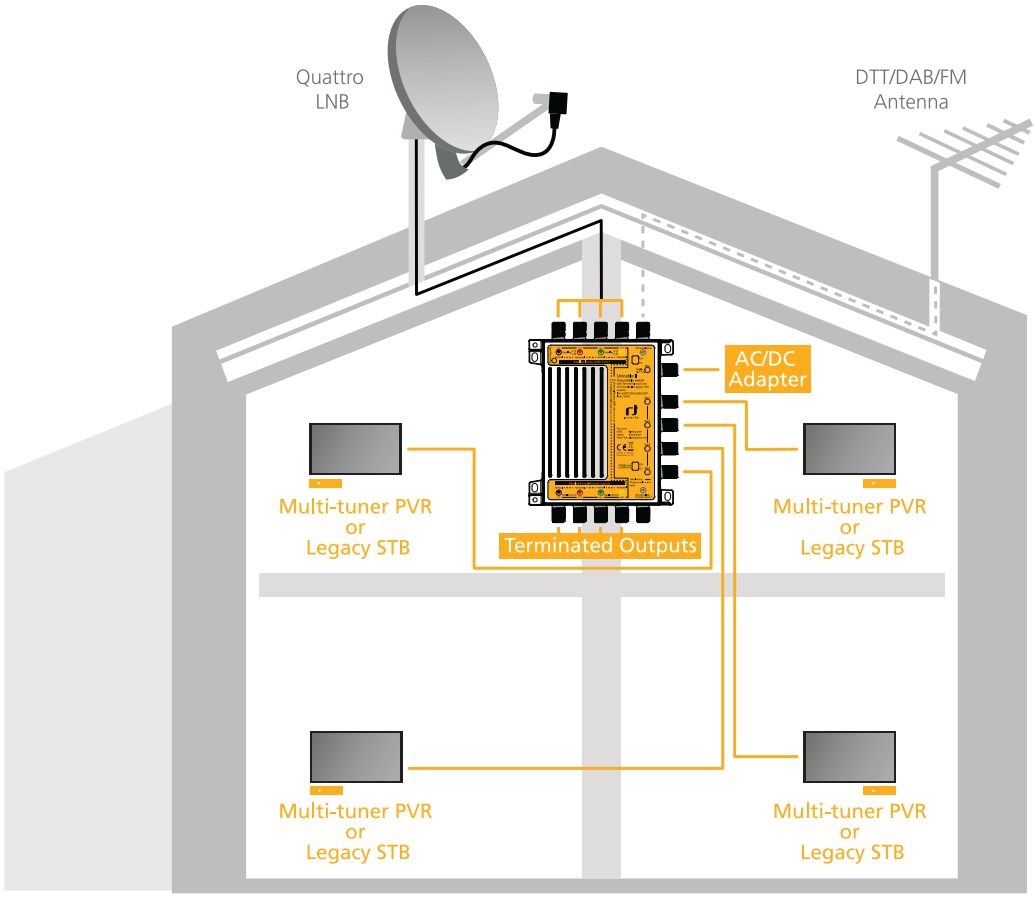
Optional accessories (sold separately):
- MDU power supply unit, supplying up to 4 units + LNB (19V, 3.5A) - Item 5417 IDLU-ADPT01-19V3AO-OPP
- Power Inserter including a single unit power supply (19V, 0.94A) - Item 5380 IDLU-PINS02-OOOOO-OPP

For Indoor and outdoor (IP54) installations.

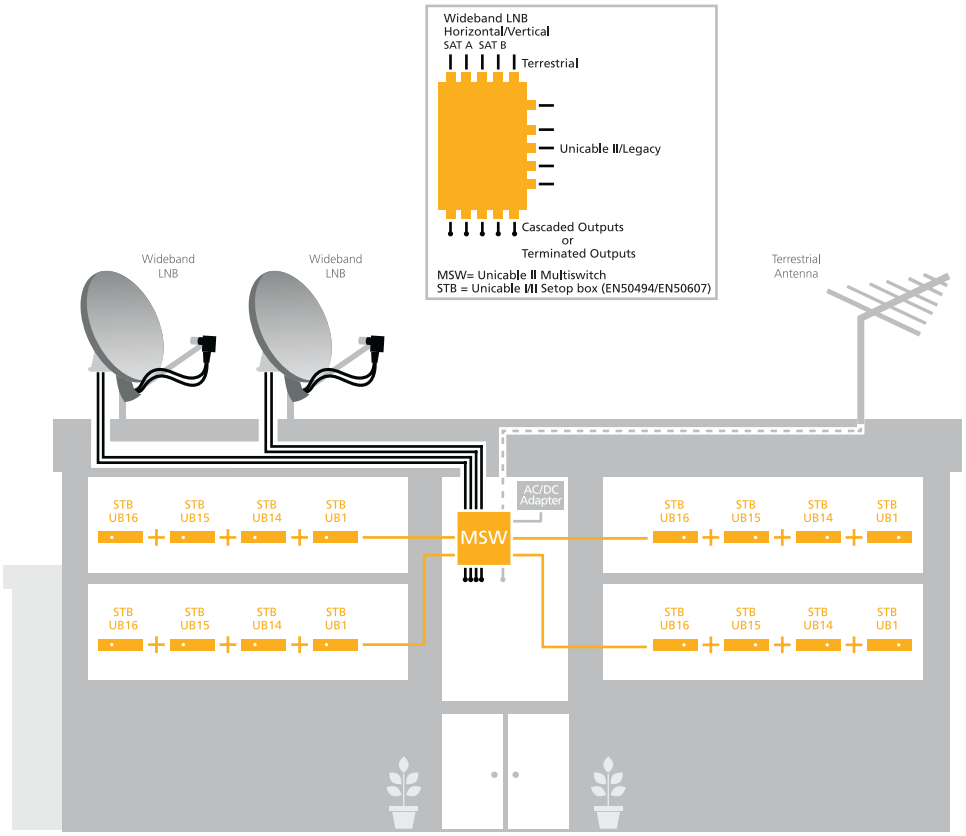
* Programmer not included, sold separately as an optional accessory.



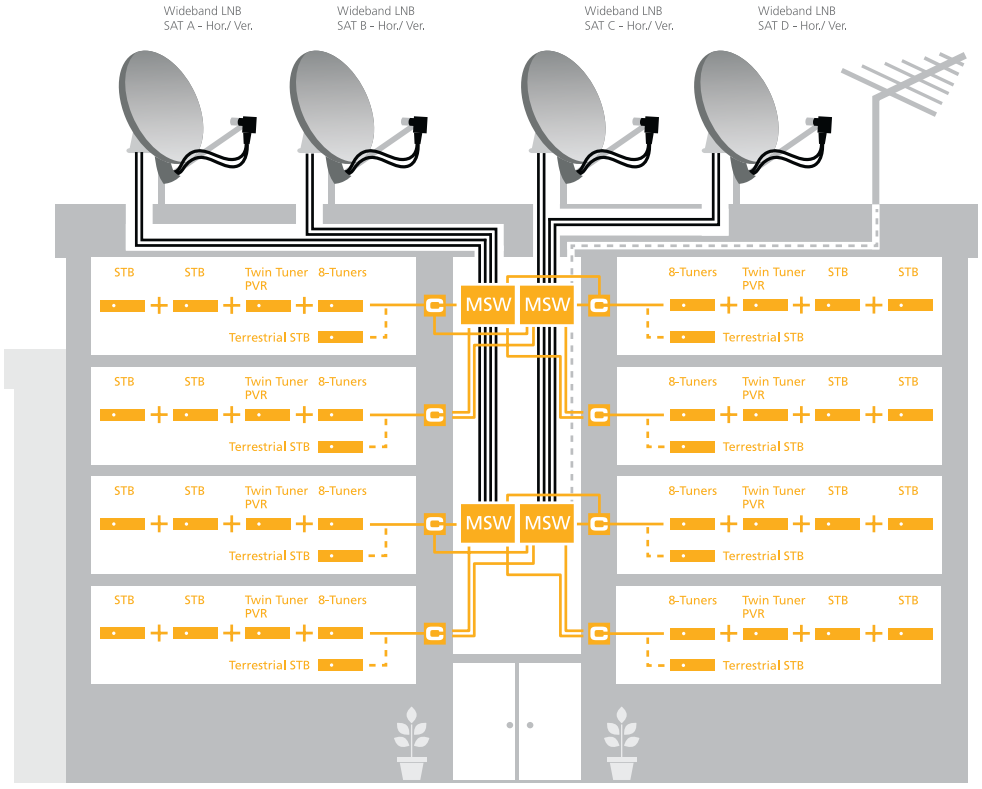
Typical single household intallation



Reception of 2 satellites, each output port provides 16x dynamic User Bands allowing to access any transponder of the 2 satellites



Reception of 4 satellites, each output port provides 16x dynamic User Bands allowing to access any transponder of the 4 satellites



Technical Specifications

Inputs	4 x IF inputs: - From 1x Quattro LNB (default) - From 2x Wideband LNBs 1 x UHF/VHF input from Terrestrial antenna
Outputs	4 x Loopthrough satellite IF outputs* 1 x Loopthrough terrestrial output 4 x auto-detect Unicable II / Legacy output ports with combined terrestrial signal. Default behavior: Legacy mode on power up, auto-switch to Unicable II dynamic mode upon receiving an EN50494/EN50607 command.
Control protocols and signals	EN50494 (SatCR), EN50607 (dCSS), DiSEqC1.0/2.0, 13/18V+0/22kHz
Inputs frequency range: Satellite	Quattro LNB: 950-2150MHz (default) Wideband LNB: 300-2350MHz
Terrestrial	47 ~ 862 MHz
Loop-through loss/gain: Satellite	4dB max. (loss)
Terrestrial	5dB max. (loss) [Amplification=OFF] +12dB min. (gain) [Amplification=ON]
Conversion gain: Satellite signal (out of AGC)	25dB min
Terrestrial signal	-20dB min. [Amplification = OFF] -5 ~ +5dB [Amplification = ON]
Output signal level (AGC controlled)	-25dBm (83dBuV), programmable
Input power range	-50 to -5 dBm
User band (Channel) bandwidth	46MHz, programmable 10-80MHz
User band (Channel) gain ripple	3 dB max.
User band frequencies (Channels)	Default Unicable II dynamic user bands per output port: CH1: 1210MHz EN50607+EN50494 (dCSS+SatCR) CH2: 1420MHz EN50607+EN50494 (dCSS+SatCR) CH3: 1680MHz EN50607+EN50494 (dCSS+SatCR) CH4: 2040MHz EN50607+EN50494 (dCSS+SatCR) CH5: 985MHz EN50607+EN50494 (dCSS+SatCR) CH6: 1050MHz EN50607+EN50494 (dCSS+SatCR) CH7: 1115MHz EN50607+EN50494 (dCSS+SatCR) CH8: 1275MHz EN50607+EN50494 (dCSS+SatCR) CH9: 1340MHz EN50607 (dCSS) CH10: 1485MHz EN50607 (dCSS) CH11: 1550MHz EN50607 (dCSS) CH12: 1615MHz EN50607 (dCSS) CH13: 1745MHz EN50607 (dCSS) CH14: 1810MHz EN50607 (dCSS) CH15: 1875MHz EN50607 (dCSS) CH16: 1940MHz EN50607 (dCSS)
RF Isolation:	
Satellite/Satellite IF	25 dB min.
Satellite/Terretsrial	25 dB min.
Satellite Channel/Channel (UBs)	28 dB min.
Integrated phase noise	1.5 degrees max.
Input / Output VSWR	2.5 : 1
Input / Output Impedance	75 Ω (F-Type)
Legacy port switching	V/L=>13V/0kHz , V/H=>13V/22kHz H/L=>18V/0kHz , H/H=>18V/22kHz
LNB power supply	500mA max. @18VDC
DC Power consumption	600~900mA @10~20VDC [max.]
Working Temperature	- 20 ~ + 50 °C
Ingress protection	IP54
Dimensions	152 x 113x 29(H x W x D) mm

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

For further details contact: **sales@inverto.tv**

FTA Communication Technologies S.a r.l Tel. +352 264 367 1 Fax. +352 264 313 68

www.inverto.tv