



Proudly presents

**Wideband and dCSS solution for
multiscreen multiroom STB**

Market trends

Major trends in the satellite market coupled with advancements made by leading Integrated Circuit (IC) solution providers are driving a global transition from Analog to Digital products

- **Multi-screen viewing** – Increase number of demodulators per household
- **Multi-room viewing** – Transition towards server-client in-home architecture
- **Enhanced Digital Video Recorder**
- **Increase of number of video channels offered** – more transponders
- **Improved picture quality** – HD, Ultra HD or 4K TV

For DTH Operators it is not a simple task to follow these trends, the cable complexity increases accordingly if using traditional methods.

Single Family Resident application

Single Family Resident with wideband input

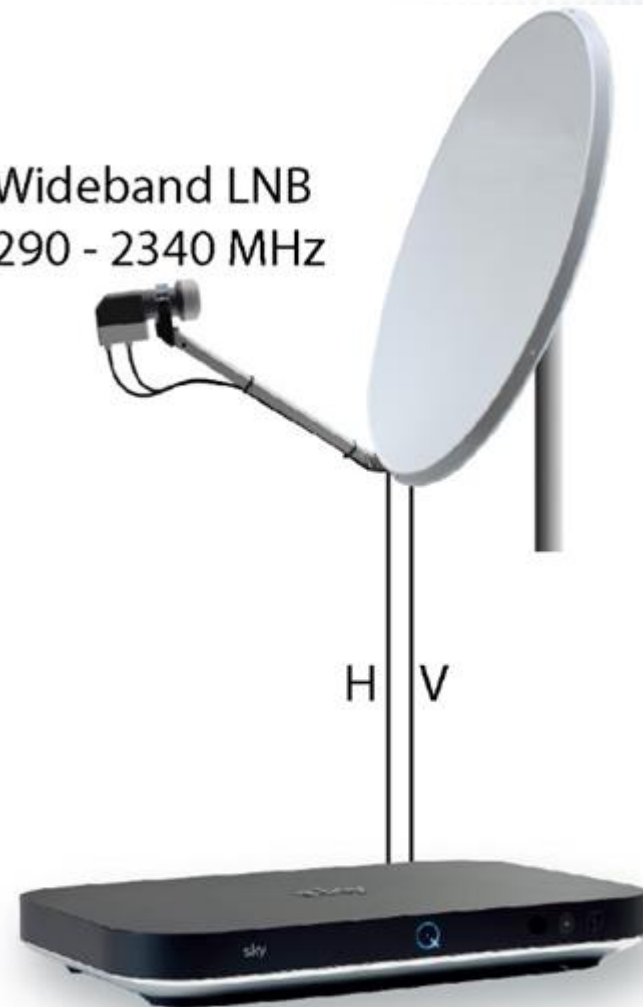
- Using Wideband LNB with Twin Coax for Satellite
- Optional separate Coax for Terrestrial Radio/TV
- All Sat Tps simultaneously accessible for all tuners

Wideband LNB



Input		1 Ku
Input Frequency	MHz	10700 – 12750
Outputs		2 (V & H)
Output frequency	MHz	290 – 2340
LO	MHz	10410
Conversion gain	dB	Typ. 55
Noise Figure	dB	Typ. 0.7
Cross polarization isolation	dB	25
Output channel power	dBm	Typ. -30*
DC supply voltage	V	9 – 20
Power consumption	W	1 max.
Operating temperature	°C	-40 to +60
LNB mount fitting	mm	40
Dimensions	mm	135 x 120 x 60

Wideband LNB 290 - 2340 MHz



Multi Dwelling Resident application - Wideband

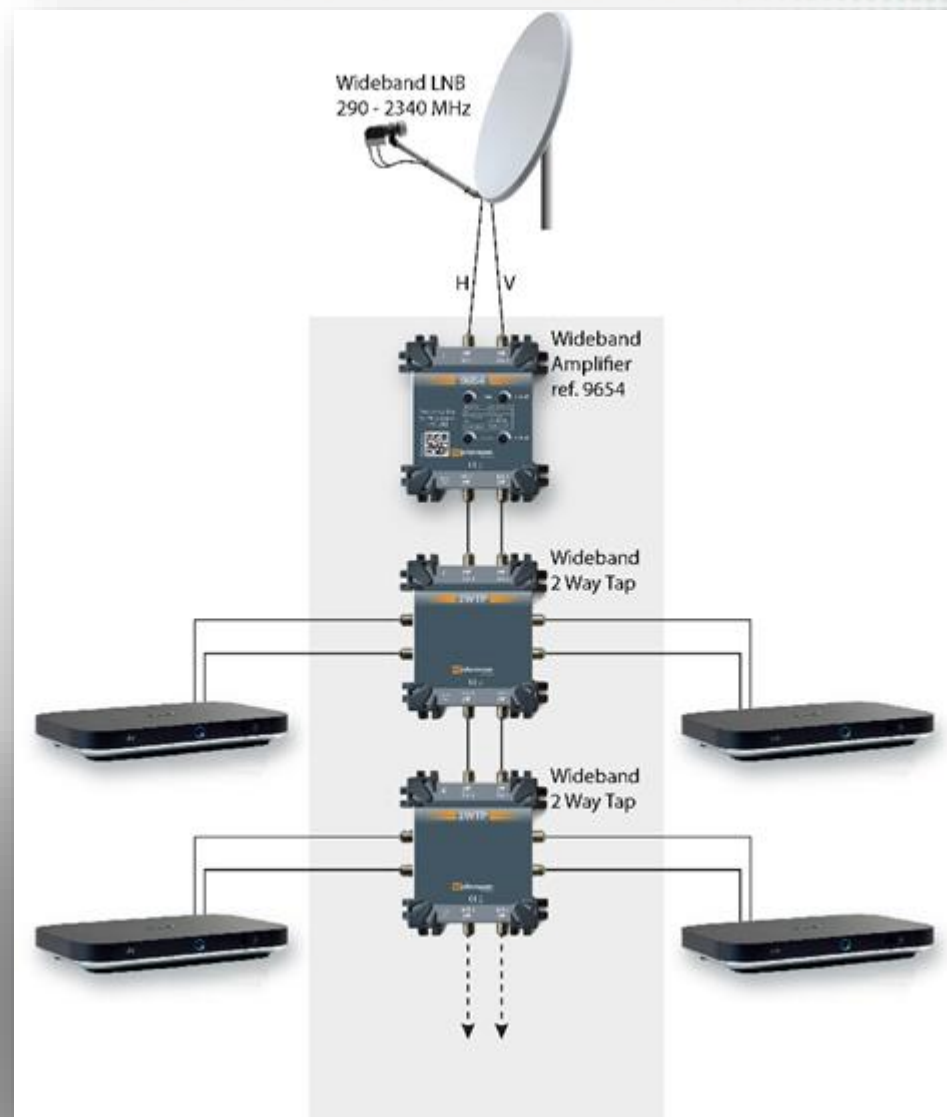
Running two or three cables to each apartment

- Using Wideband LNB with Twin Coax for Satellite
- Using Wideband Amplifiers and Splitters/Taps
- Optional separate Coax for Terrestrial Radio/TV
- All Sat Tps simultaneously accessible for all tuners

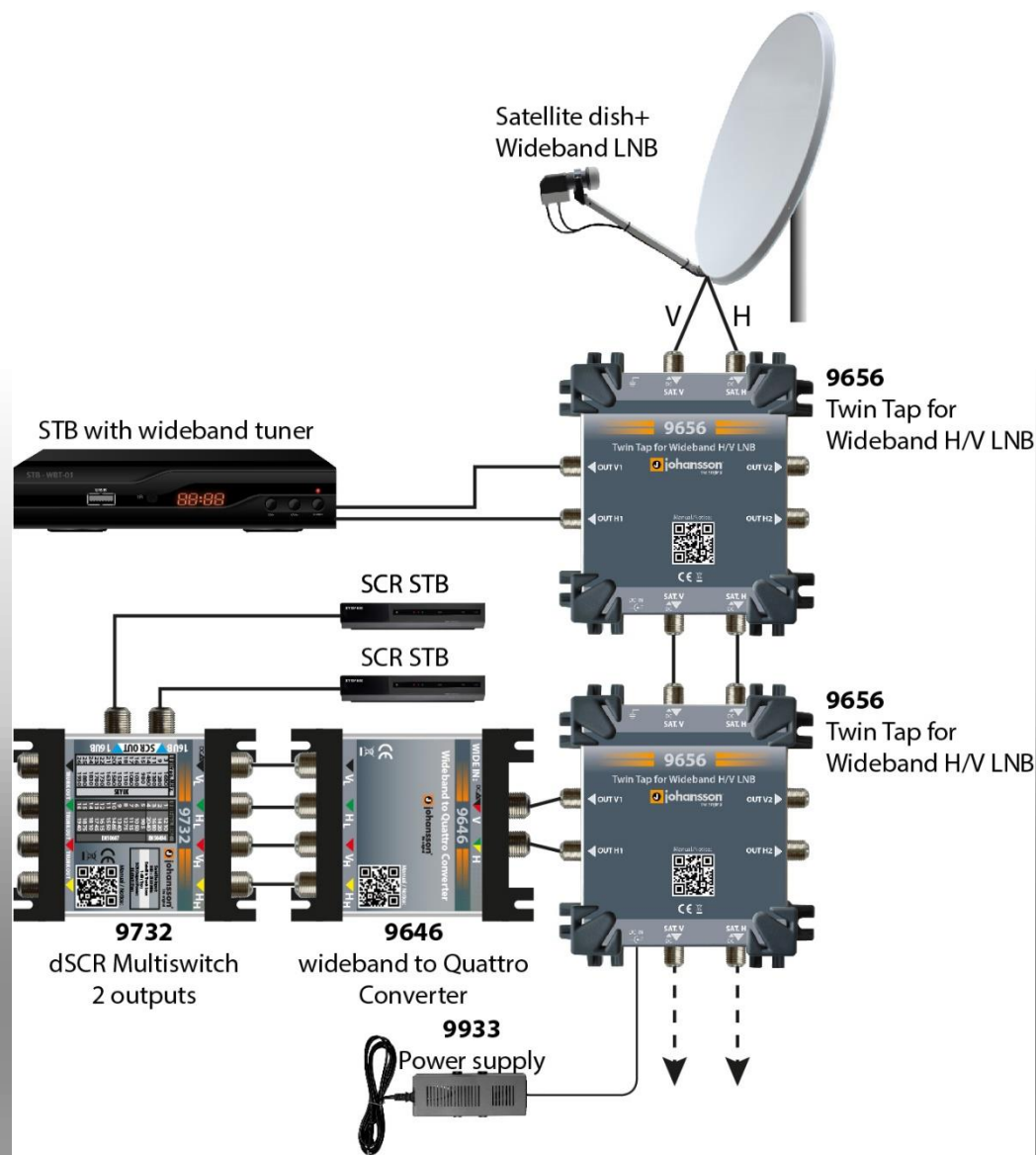
Wideband Trunk amplifier



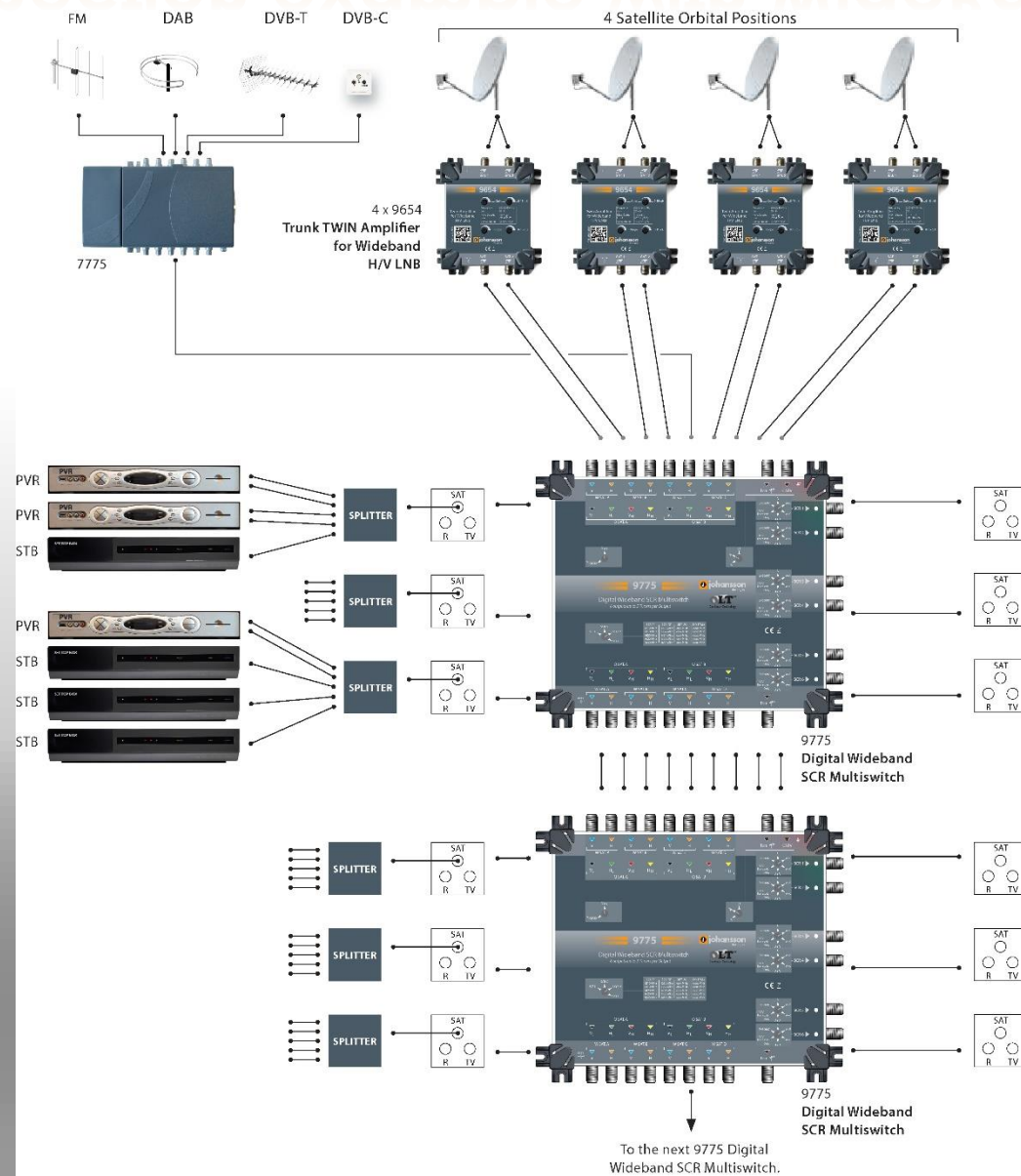
		9654
Inputs	-	2 SAT
Outputs	-	2
Frequency range	MHz	290-2340
Gain	dB	30
Noise figure	dB	5
Gain adjustment	dB	15
Slope adjustment	dB	15
Max. Output level	-	110 dBμV (-35 dB/IM3)
Consumption	-	200 mA from 15 VDC external power supply or input/output
Dimensions	mm	177 x 133 x 51



Connection example with WideBand accessories



Connection example with WideBand multiswitch



Wideband accessories

WB LNB



WB Trunk Amplifier



WB 2-way Splitter



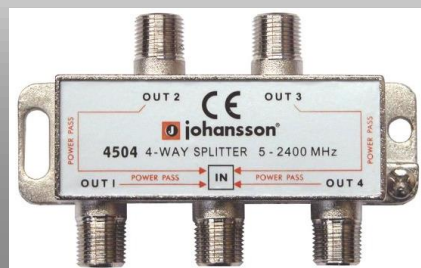
WB 2-way tap



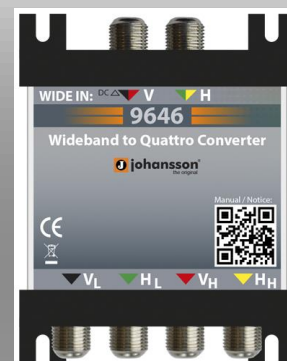
WB Line Amplifier



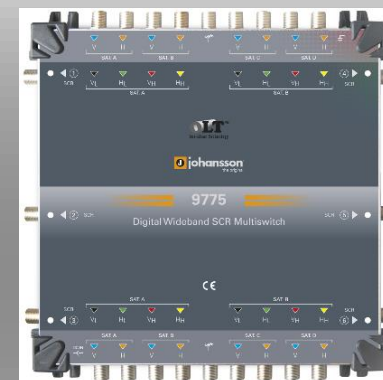
WB Splitters



WB to Quattro



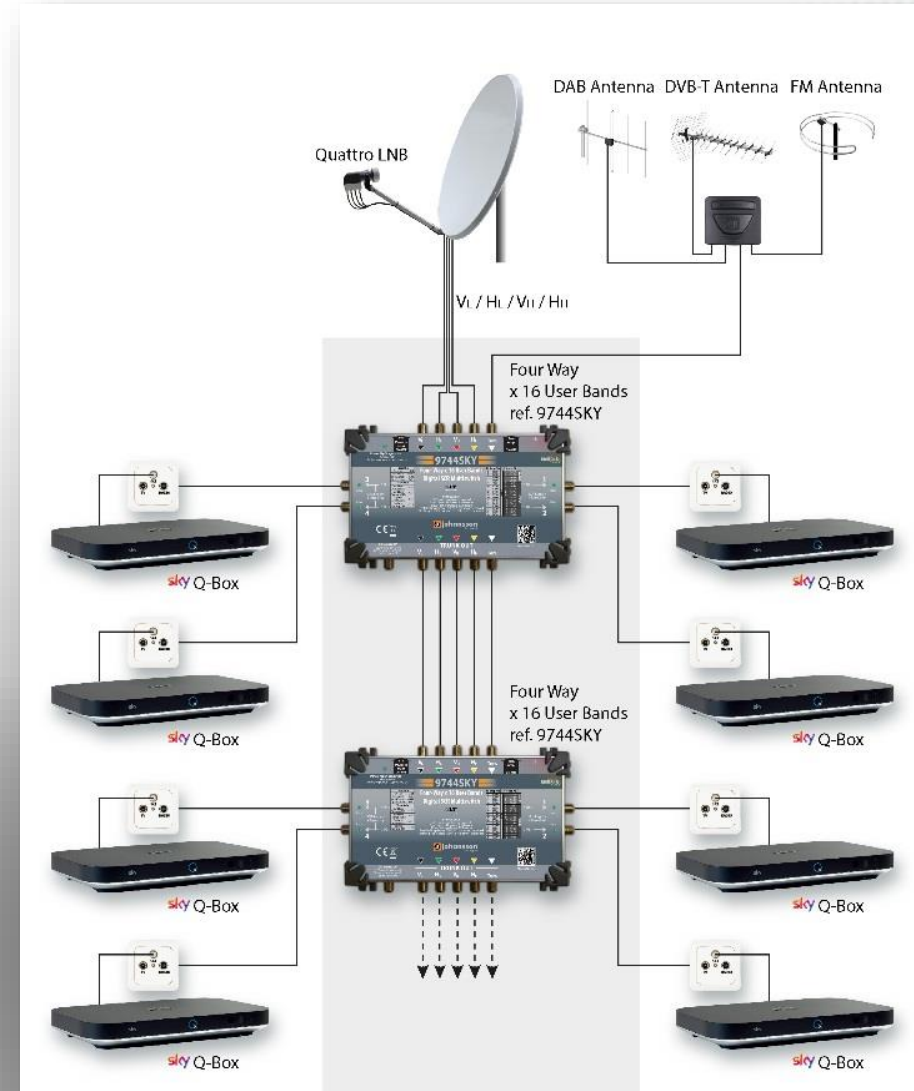
WB SCR MultiSwitch



Multi Dwelling Resident application - SCR

Running single coaxial cable to each apartment

- Using Quattro LNB for Satellite
 - 4 cables (HL, VL, HH, VH) in the trunk
- Using 1 cable for Terrestrial in the trunk
 - FM, DAB, DVB-T (40 – 790MHz)
- Using 1 cable to each apartment
- Up to 16 User Bands in Sat band (950-2150MHz)
 - Each tuner can be allocated to any UB
- All Sat Tps switchable accessible for all tuners



Single Cable Technology

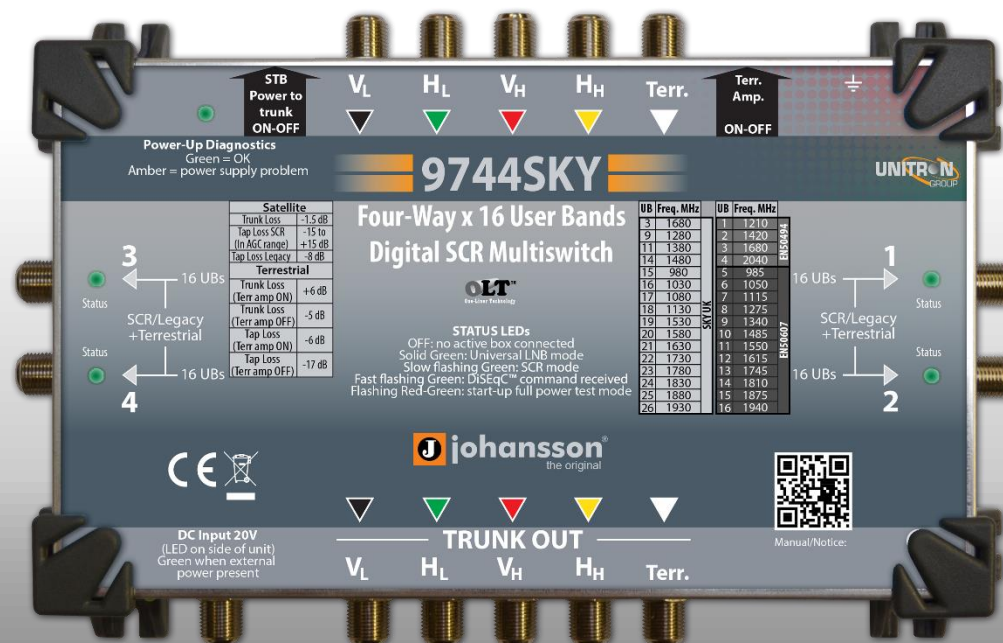
Digital Channel Stacking Switches for MultiChoice

• Ports

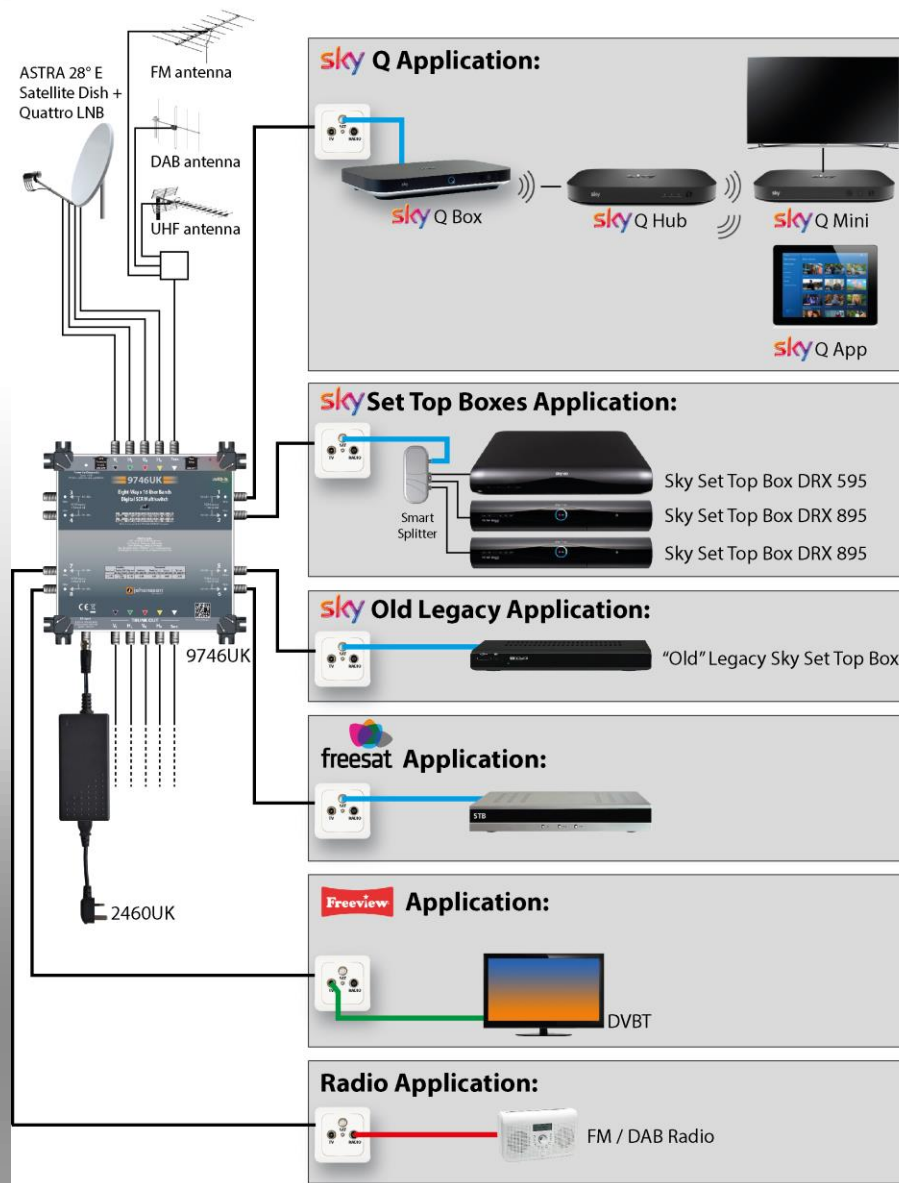
- 4 satellite input ports
 - Standard Quattro Universal LNB
- Terrestrial port
 - Active or Passive
 - TV DVB-T(2), RADIO FM and DAB
 - LTE_4G filtered
- 5 trunk output ports
- 4 outputs
 - Up to 16 User Band per output
 - frequencies fixed for MultiChoice
 - MultiChoice SCR backwards compatible
 - SCR STBs standards:
 - EN50494 and EN50607
 - Auto detection switch for SCR and Legacy
 - EN50494 / EN50607
 - With Status LED indication per port
 - Compatible with all legacy STBs
 - All MultiChoice STB's
 - Non-MultiChoice STBs
 - Terrestrial diplexer

• Power

- Powered from external DC port (20V)
 - 20V / 65W PS with F-connector
- Power to trunk or from trunk
- Power from STB or PI
 - Low power (<2W) from legacy STB
 - Soft start-up power
- Power-Up diagnostics with LED indication
 - Full power start-up test mode
 - Trunk power measurements



Connection example with Digital SCR Multiswitches

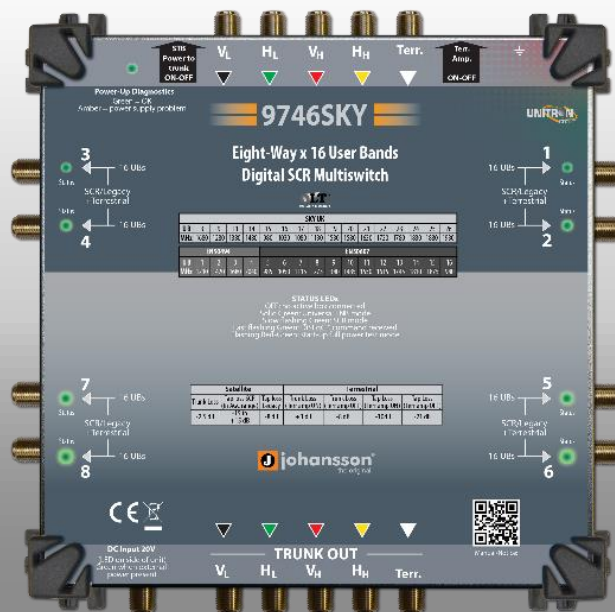


Unitron dSCR multiswitches

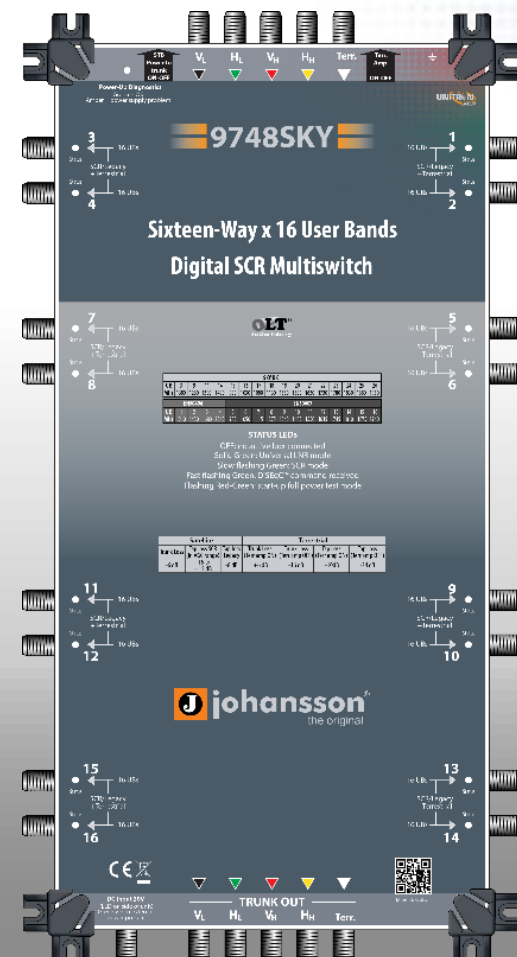
- 4 cascade-able LNB inputs from universal Quattro LNBF : VL-HL-VH-HH
- 1 terrestrial trunk (active or passive)
- 4/8/16 SCR/Legacy outputs
- 16 User Bands per output
- 1 DC input.



4 satellite + 1 Terrestrial inputs
4 outputs with 16 User Band per output



4 satellite + 1 Terrestrial inputs
8 outputs with 16 User Band per output



4 satellite + 1 Terrestrial inputs
16 outputs with 16 User Band per output

Smart Splitter – avoid SCR collisions



- indoor housing
Ref. 4603
- 3-way
- no power adapter needed
- buffers and sends out the different command signals sequential

