

SCW516/8

Cascadable dCSS/Legacy Multiswitch
1° IF-SAT with 4 cables + TV terrestrial

- Switchable Quattro/Wide Band LNB mode
- Auto-detection Legacy/SCR mode
- 8 x 16 SCR User Band
- Automatic Control Gain
- Adjustable output level
- DC plug for LNB and Multiswitch powering
- Low loss Terrestrial diplexer Lte ready

General rules

To avoid interference use one taps for each living unit.

Use only splitters and sockets which allow the power to run through diodes.

All multiswitch from the **SCW516** series may be equally used in new and already existing installations.

Technical Instructions



Electrical and electronic equipments **are not household waste**. In accordance with the European directive EN50419 (corresponding to the article 11(2) of the guideline 2002/96/EC) of the European Parliament of the Council of January, 27th 2003 on used electrical and electronic equipment, it must be disposed properly. At the end of the product life cycle please take this unit and dispose it on designated public collection points.



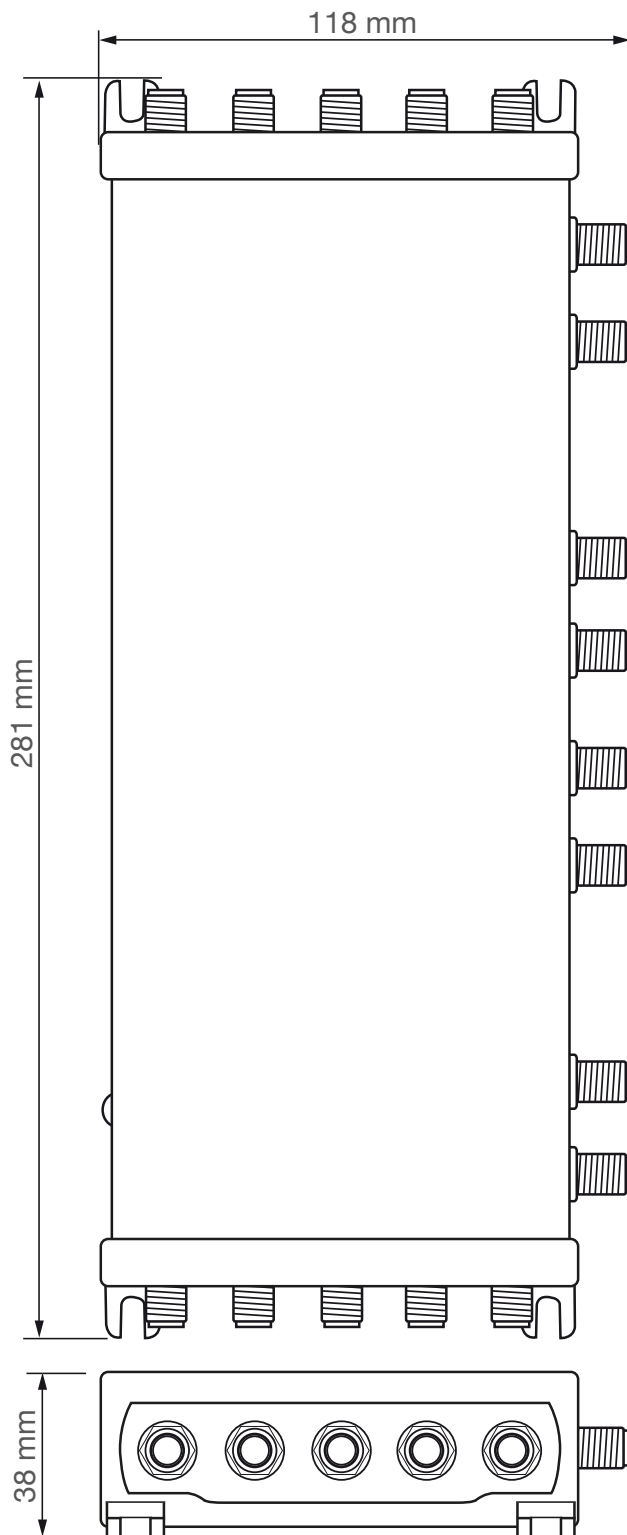
Installation is only permitted in dry rooms and upon a non combustibile surface. Ensure that there is an adequate air circulation.



LEM ELETTRONICA confirms the keeping of the EMC requirements in accordance to the EU product norm EN 50083-2 and the keeping of the safety requirements in accordance to the EU product norm EN 60728-11 by the CE sign.

Class A

This product meets the more stringent screening requirements according to EN 50083-2, quality grade A.



Technical Specifications

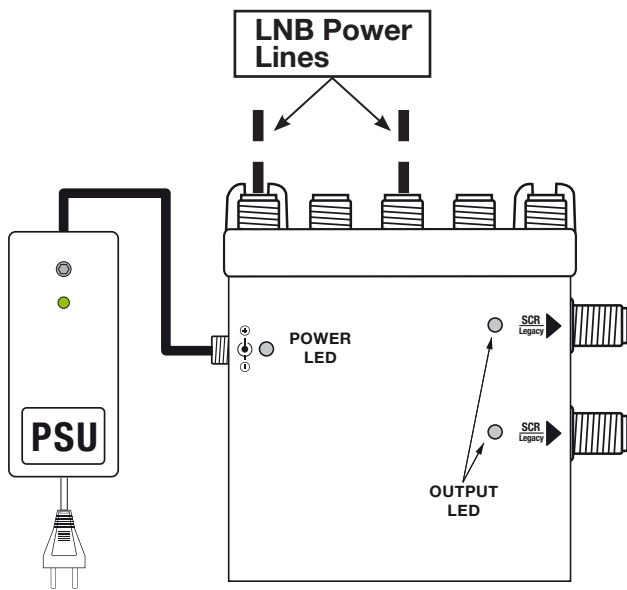
5 CABLES 8 TAPS		SCW516/8
TYPE		Cascadable
SAT TRUNKS BANDWIDTH	MHz	250... 2400
TV TERR. TRUNK BANDWIDTH	MHz	5... 790
INPUT/OUTPUT		5 / 5
No TAPS		8
TAPS OUTPUT BANDWIDTH	MHz	950... 2150 MHz
IF-SAT INPUT LEVEL	dB μ V	60... 100
A.C.G. IF-SAT RANGE	dB μ V	60... 90
TAP LEGACY LEVEL	dB μ V	85 (Typical)
TAP SCR LEVEL	dB μ V	84/88/92 (Typical)
IF-SAT THROUGH LOSS	dB	≤ 4
TV TERR. TAP LOSS	dB	20
TV TERR. THROUGH LOSS	dB	- 4
SUPPORTED STANDARDS		SKY UK - EN50494 - EN50607 DiSEqC 1.0 DiSEqC 2.0 Univ. LNB Voltage & Tone
SCR/dCSS BANDWIDTH	MHz	46
SCR/dCSS USER BAND x TAP		16
CROSS-POL. ISOLATION	dB	> 30
IN/OUT ISOLATION	dB	> 30
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz
RETURN LOSS	dB	> 12
LNB POWER LINE		Vertical Low Band + Vertical High Band*
MAX LNB POWER	mA	500
MAX CURRENT DRAIN @ 13V	mA	310
DIMENSIONS	mm	281x118x38

* When the Wide band LNB Mode is selected

SCW516/8 User Band / Frequency plan

EN 50494 (SCR Standard)	EN 50607 (SCD2 / dCSS)
UB1: 1210 MHz	UB1: 1210 MHz
UB2: 1420 MHz	UB2: 1420 MHz
UB3: 1680 MHz	UB3: 1680 MHz
UB4: 2040 MHz	UB4: 2040 MHz
UB5: 985 MHz	UB5: 985 MHz
UB6: 1050 MHz	UB6: 1050 MHz
UB7: 1115 MHz	UB7: 1115 MHz
UB8: 1275 MHz	UB8: 1275 MHz
	UB9: 1340 MHz
	UB10: 1485 MHz
	UB11: 1550 MHz
	UB12: 1615 MHz
	UB13: 1745 MHz
	UB14: 1810 MHz
	UB15: 1875 MHz
	UB16: 1940 MHz

Diagnostic LED



Off	No power supply from STB
Solid Green	Legacy
Solid Blue	SCR
Blinking Green	Voltage <8,5 Volt
Blinking Blue	Power Too Low from STB

Off	No power supply from PSU
Solid Green	Power supply OK
Solid Red	LNB Power Line Short Circuit
Blinking Green	LNB Power Line Short Circuit

Power Consumption

Each TAP of the SCW516/8 is separately powered from the connected decoders and the consumption depends on the status mode (Legacy or SCR). The consumption in SCR mode increases progressively with the number of active User Band.

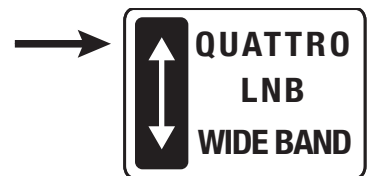
Voltage	Legacy	2 User Band	4 User Band	8 User Band	16 User Band
13 Volt	190 mA	210 mA	280 mA	290 mA	310 mA
18 Volt	150 mA	160 mA	200 mA	210 mA	230 mA

Quattro / Wide Band Mode Selector

The SCW516/8 can be set-up to work with typical Quattro LNB or with the new generation Wide Band LNB's.

When the Quattro mode is selected the IF-SAT input range is from 950 to 2.150 MHz.

If the multiswitch is directly powered from an external PSU the power trunk line is the Vertical Low band.

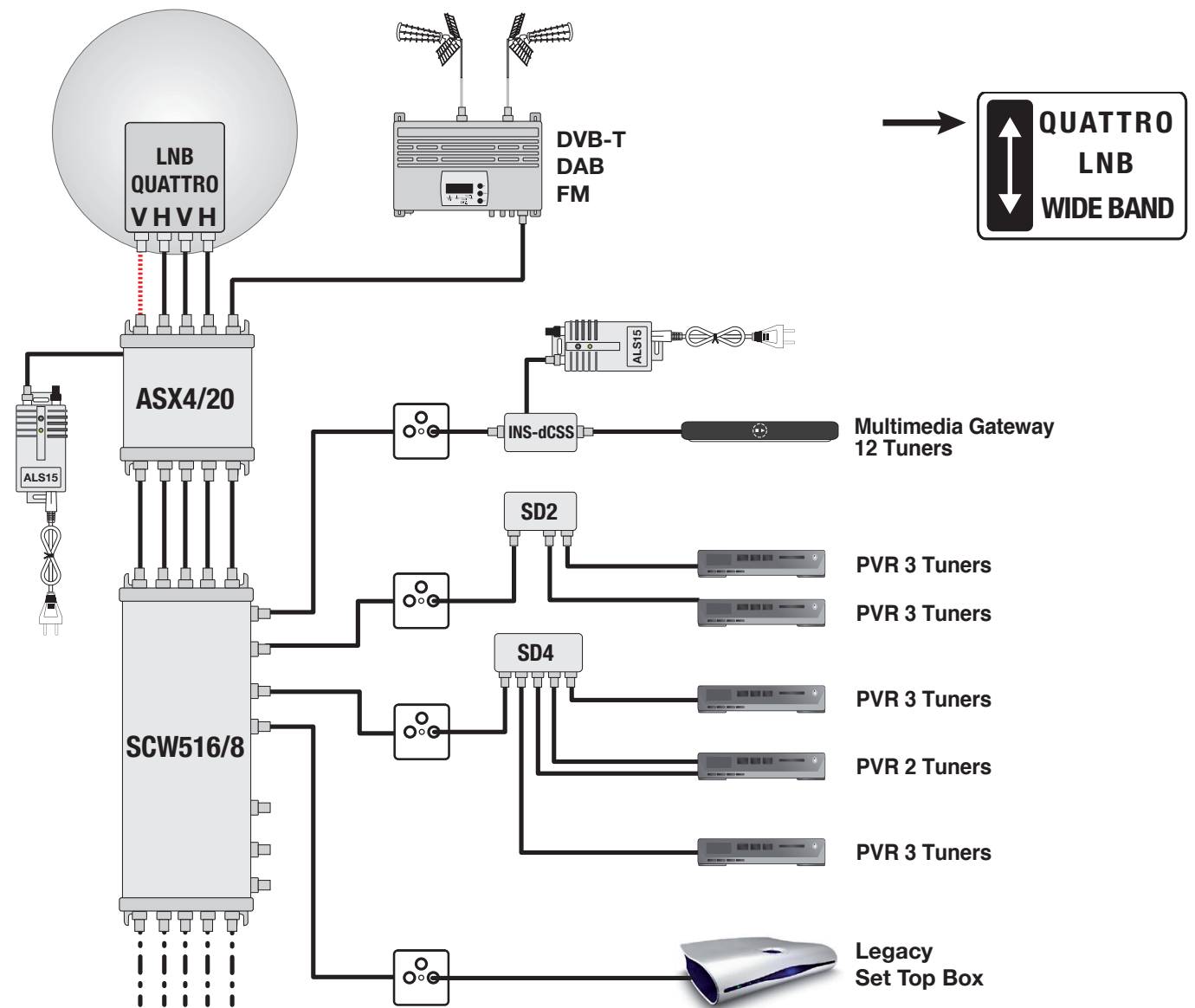


When the Wide band mode is selected the IF-SAT input range is from 250 to 2.400 MHz.

If the multiswitch is directly powered from an external PSU the power trunk lines are the Vertical Low band and the Vertical High Band.



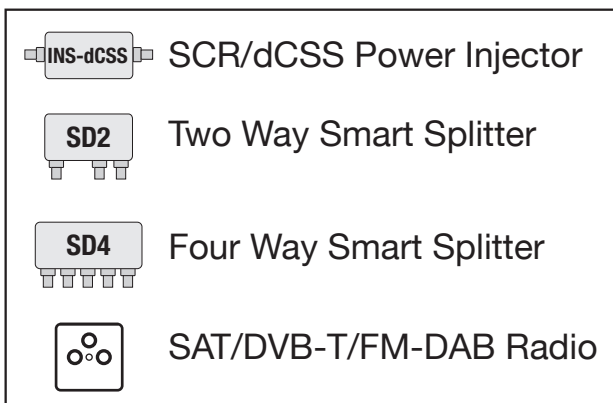
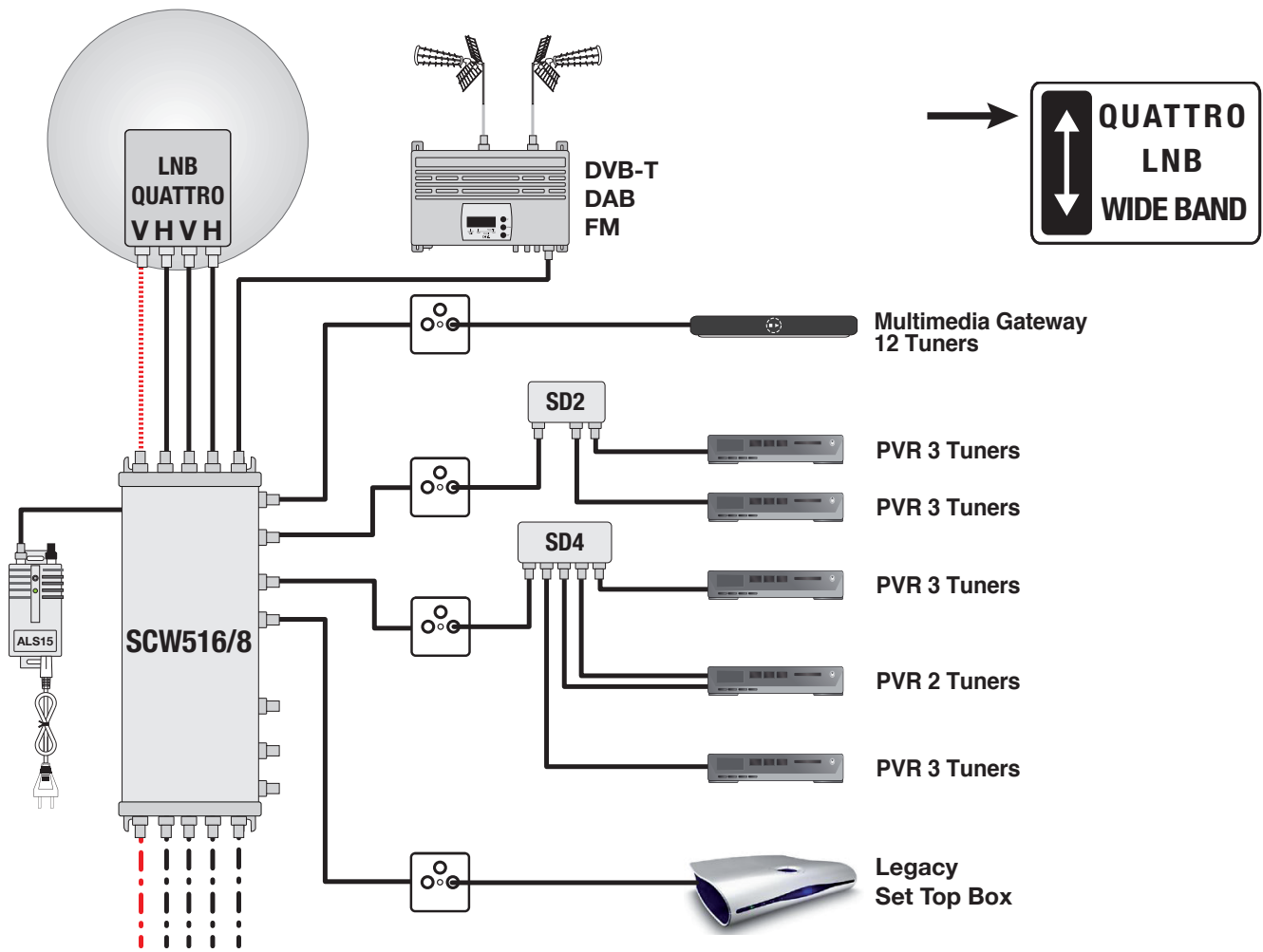
The SCW516/8 in Quattro LNB mode for single satellite reception. The LNB is powered from the IF-SAT amplifier ASX4/20.



↑ QUATTRO
LNB
↓ WIDE BAND

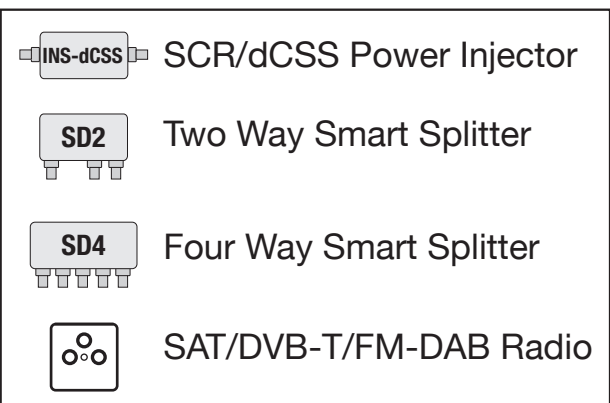
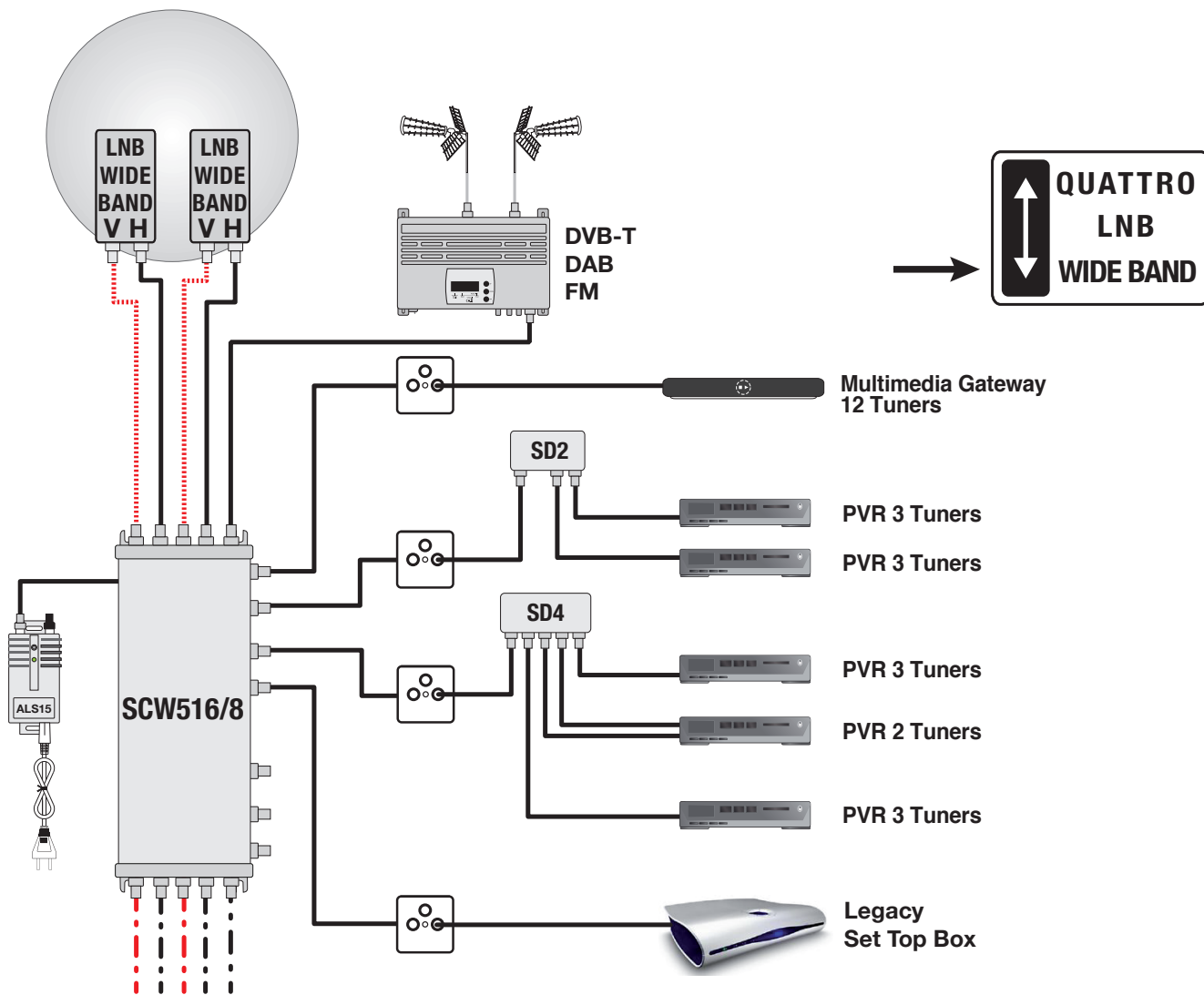
..... LNB Power Path

The SCW516/8 in Quattro LNB mode for single satellite reception. The LNB is powered from the PSU directly connected to SCW516/8.



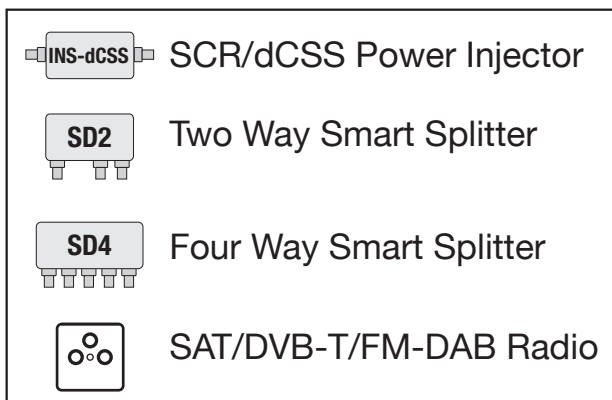
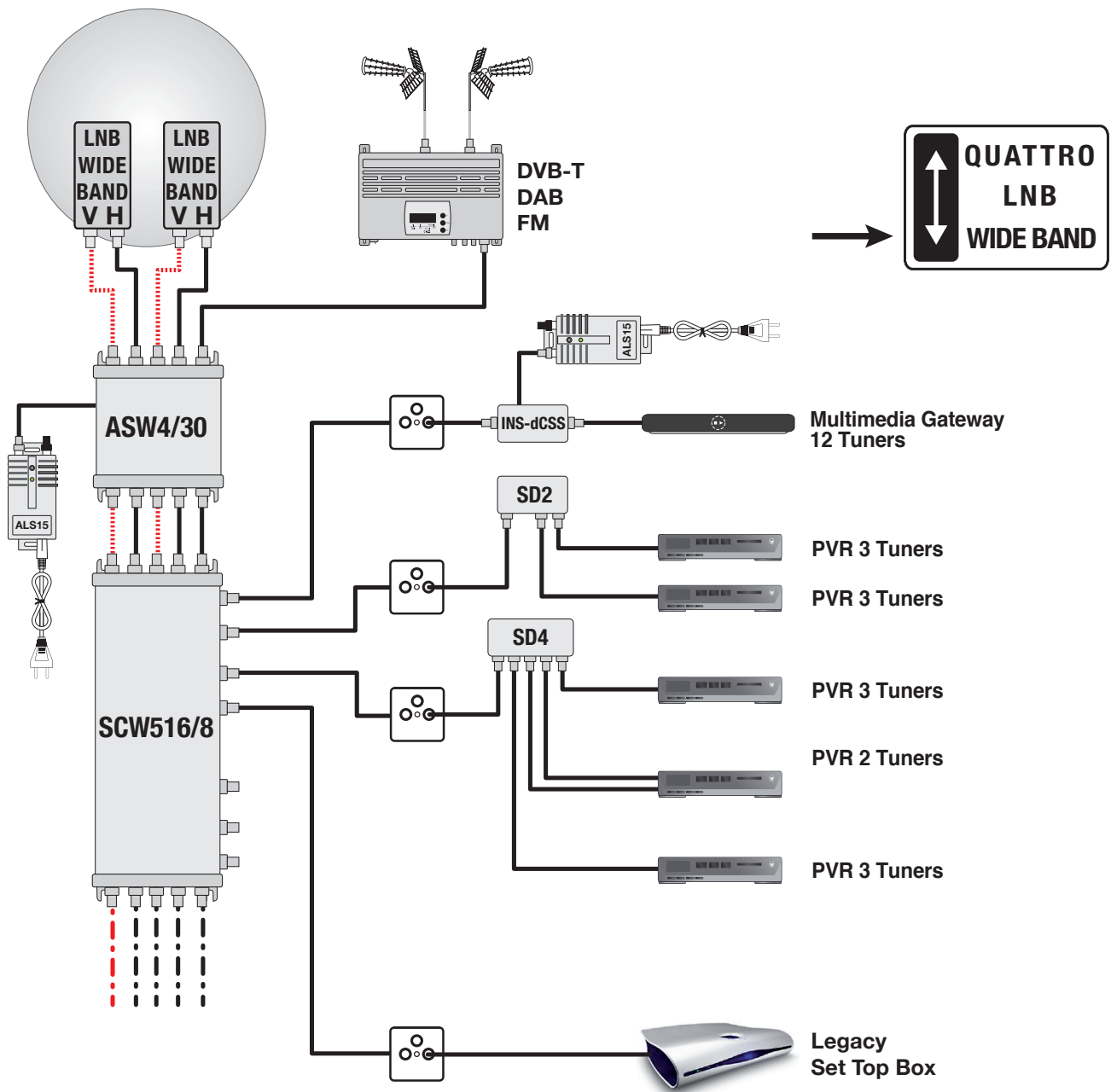
LNB Power Path

The SCW516/8 in Wide Band LNB mode for dual satellite reception. The LNB's are powered from the PSU directly connected to SCW516/6.



..... LNB Power Path

The SCW516/8 in Wide Band LNB mode for dual satellite reception. The LNB's are powered from the IF-SAT amplifier ASW4/20.



..... LNB Power Path

