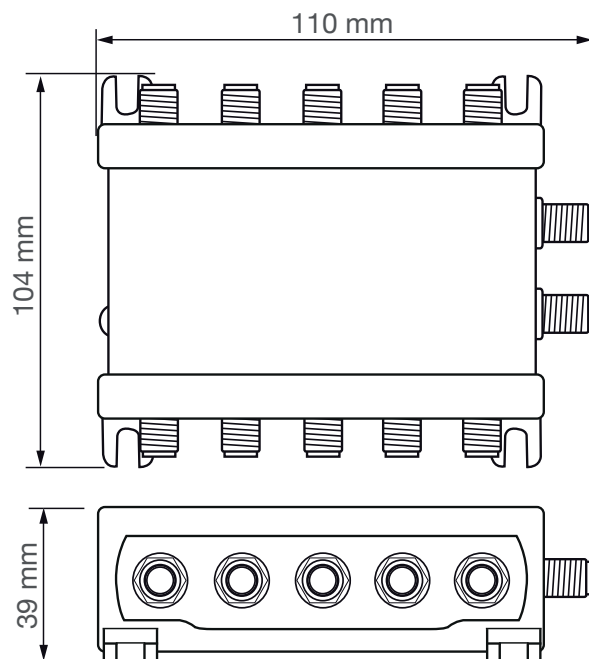


## SCX516A/2

Compact Hybrid Multiswitch dCSS/Legacy  
5 cables SAT+ Active TV Terrestrial

- 2 Taps 16 User Bands for each tap
- LNB Quattro/Wide Band Selectable
- Terrestrial Active with 0-10dB adjuster
- dCSS/SCR/Legacy Automatic selection
- Cascade or Stand-Alone mode switch
- Comply with EN 50494 and EN50607



### General 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.

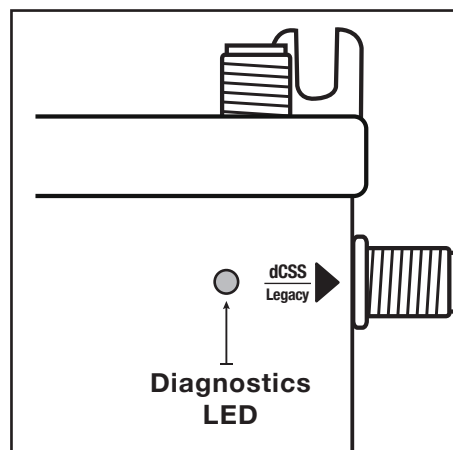
## Installation General Rules

To avoid interference use one taps for each living unit.

Use only splitters and sockets which allow the power to run through and which are equipped with protection diodes.

All multiswitches from the **SCX516A** series may be equally used in new and existing installations.

## TAP OUTPUT STATUS LED



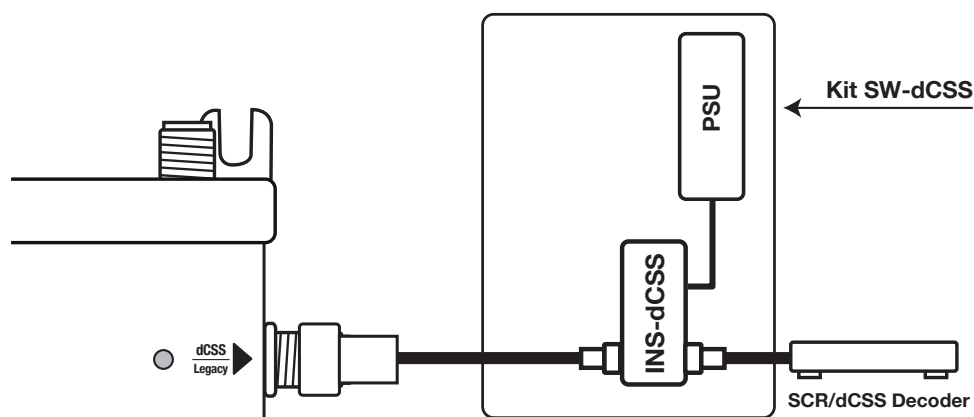
LED	Tap
Off	No power supply from STB
Solid Green	Legacy
Solid Blue	SCR
Green (blinking)	Voltage <8,5 Volt
Blue (blinking)	Not enough power from STB

## Multiswitch Power supply

The **SCX516A** series multiswitches with Active Terrestrial get the power for the functioning of the SAT section from the connected SAT decoders.

The Terrestrial amplifier section gets the power either from the multiswitch DC plug or from the Terrestrial line via remote power supply.

**Note:** If the power supplied by the decoders in **SCR/dCSS mode** is not enough, please use the **SW-dCSS kit**, placed between the decoder and the multiswitch tap.

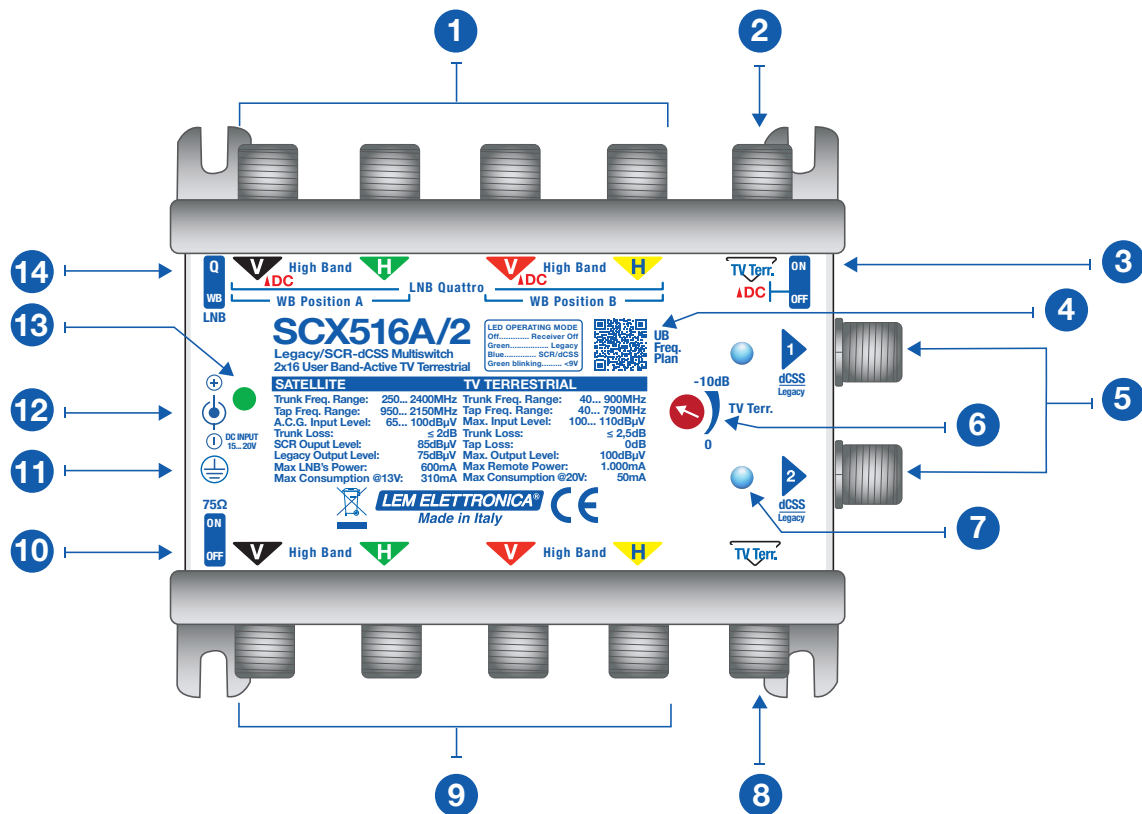


## SCX516A/2 Progressive Power Consumption

This function limits the power taken from the decoder according to the number of the User Bands actually in use.

Tension	Legacy	2 User Band	4 User Band	8 User Band	16 User Band
13 Volt	180 mA	200 mA	270 mA	280 mA	300 mA
18 Volt	140 mA	150 mA	190 mA	200 mA	220 mA

# SCX516A/2 Description

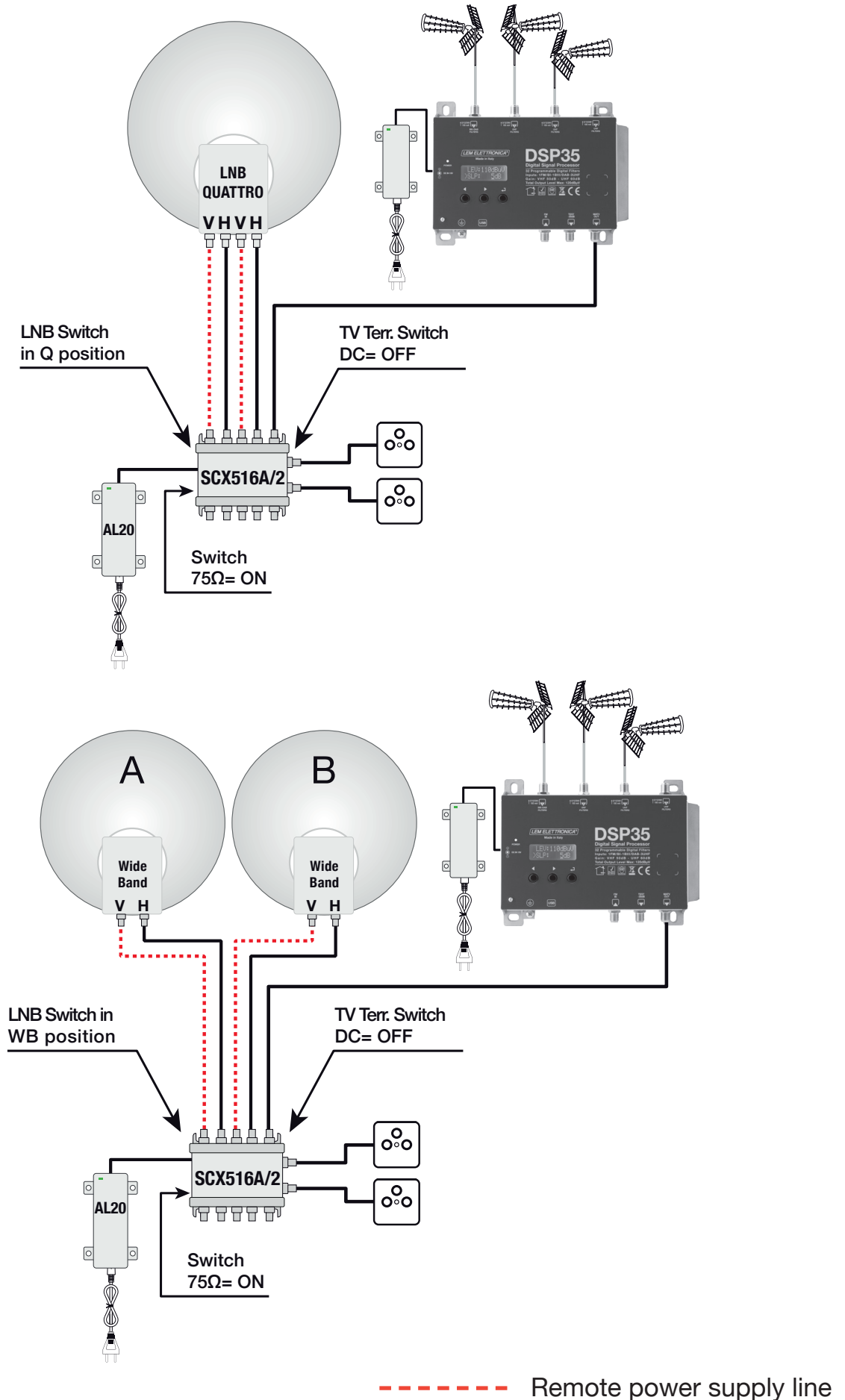


- 1 - 4x Satellite trunk inputs 250... 2.400MHz
- 2 - TV Terrestrial trunk input 40... 900MHz
- 3 - TV Terrestrial remote power supply switch
- 4 - User Band/Frequency plan QR code
- 5 - Satellite and TV Terrestrial taps
- 6 - TV Terr. 0...- 10dB Output Adjuster
- 7 - Tap output status led (green legacy / blue SCR/dCSS)
- 8 - TV Terrestrial trunk output 40... 900MHz
- 9 - 4 x Satellite trunk output 250... 2.400MHz
- 10 - Cascade or Stand alone mode switch (75Ω ON= Stand Alone)
- 11 - Ground connection
- 12 - DC plug with short circuit protection
- 13 - DC power LED
- 14 - LNB Quattro / WideBand switch

**Note:** The TV terrestrial built-in amplifier is the same for the **SCX516A** whole series. With one AL20B the ActiveTV Terrestrial is granted up to 10 multiswitch from the **SCX516A** series in the same distribution.

# Radial distribution with SCX516A/2

For the functioning of the Active Terrestrial section the multiswitches from the **SCX516A** series must be connected to the **AL20B** power supplier (not included) which also feeds the Quattro LNB or two WideBand LNB for dual feed distributions.



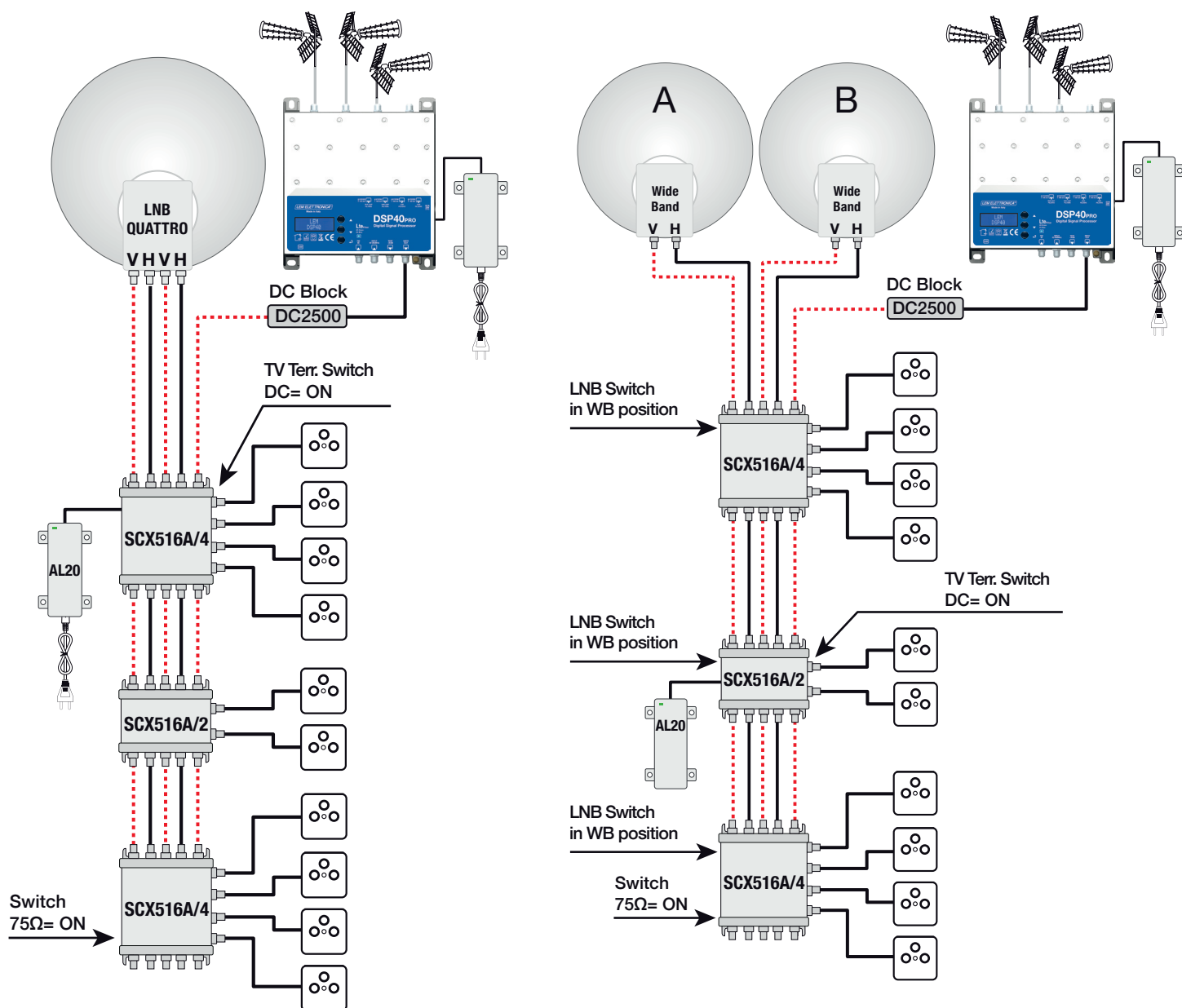
# Distribution without the SAT Head Amplifier

For the functioning of the Active Terrestrial section of the multiswitches from the **SCX516A** series there must be at least one **AL20B** power supplier (not included) connected to any of the multiswitch in the distribution.

The powered **SCX516A** multiswitch will feed the Quattro LNB and the active Terrestrial sections of the **SCX516A** multiswitches in the distribution.

To activate the remote power supply on the TV terrestrial line place the DC switch on ON

Please note you must use the DC block **DC2500** between the TV Terrestrial input of the first multiswitch in the distribution and the TV Terrestrial amplifier.



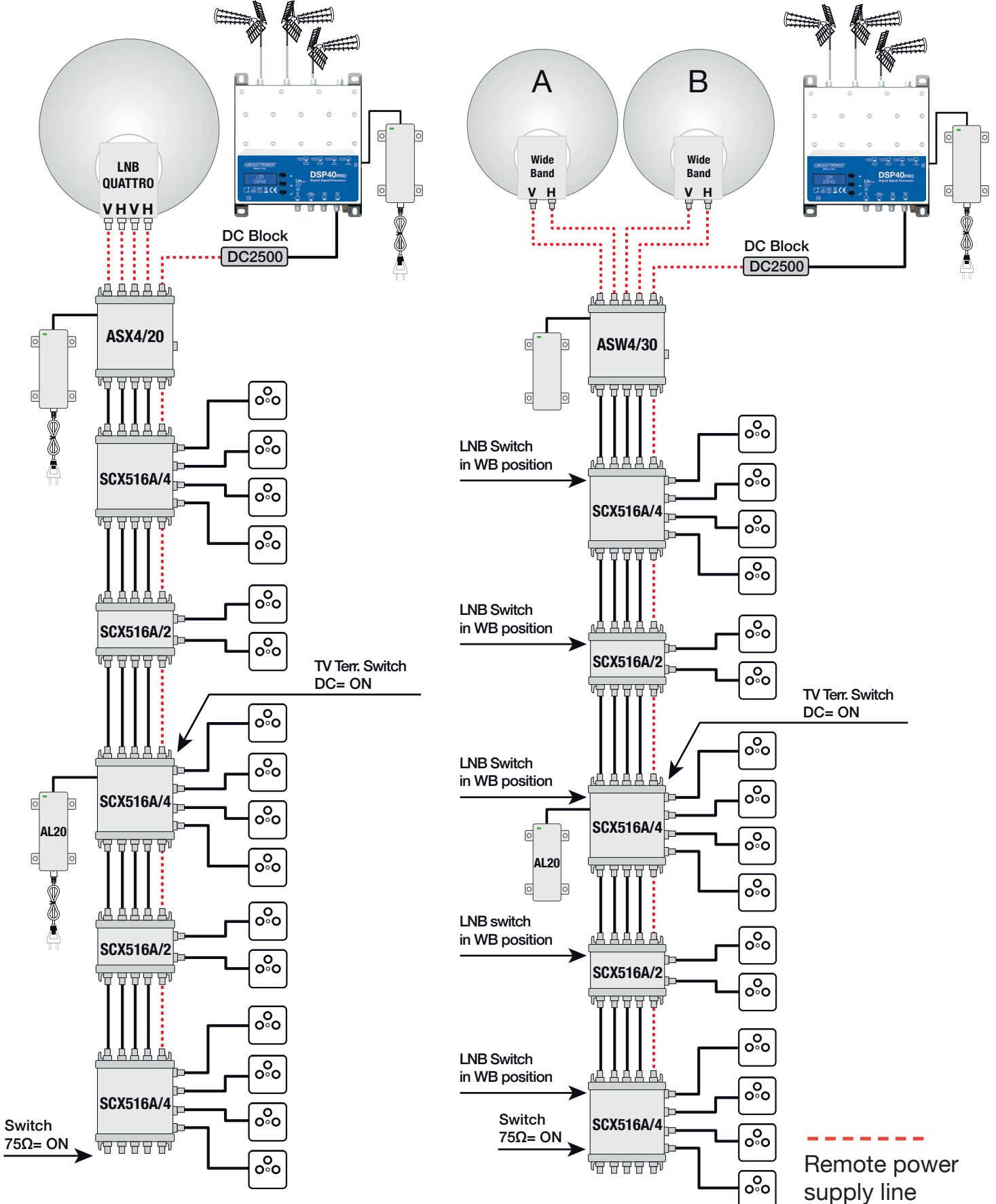
----- Remote power supply line

# Distribution with SAT Head Amplifier

The LNB is powered directly by the SAT head amplifier.

For the functioning of the Active Terrestrial section of the multiswitches from the **SCX516A** series there must be at least one **AL20B** power supplier (not included) connected to any of the multiswitch in the distribution.

Please note you must use the DC block **DC2500** between the TV Terrestrial input of the first multiswitch in the distribution and the TV Terrestrial amplifier.



# Technical Specifications

5 CABLES 2 TAPS		SCX516A/2
TYPE		Cascadable/Stand Alone
IF-SAT INPUT RANGE	MHz	250... 2400
TV TERR. INPUT RANGE	MHz	40... 900
IF-SAT TAP INPUT RANGE	MHz	950... 2150
TV TERR. TAP INPUT RANGE	MHz	40... 790
N° INPUTS/OUTPUTS		5 / 5
N° TAPS		2
C.A.G. INPUT RANGE	dBμV	65... 100
SCR/dCSS TAPS OUTPUT LEVEL	dBμV	85
LEGACY TAPS OUTPUT LEVEL		78
SAT THROUGH LOSS	dB	≤ 2
TV TERR. THROUGH LOSS	dB	≤ 2,5
TV TERR. TAP LOSS	dB	- 0
TV TERR. ATTENUATOR	dB	0... -10
IF-SAT / TV TERR. SEPARATION	dB	≥ 50
SCR USER BAND NORMS		EN 50494 EN 50607 DiSEqC 1.0 e 2.0
LEGACY		13/18 22KHz
CROSS - POLAR ISOLATION	dB	> 30
INPUT/OUTPUT ISOLATION	dB	> 30
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHZ
RETURN LOSS	dB	> 12
LNB POWER LINE		Vertical High Band + Vertical Low Band
MAX LNB POWER	mA	600
MAX CONSUMPTION @ 13V	mA	300

## SCX516A 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

