



dCSS Multiswitch 2024

LEM ELETTRONICA®

Satellite and TV reception equipment

INDEX

dCSS MULTISWITCH

▶ CASCADABLE MULTISWITCH 4 CABLE dCSS : SC416/1	04
▶ CASCADABLE MULTISWITCH 5 CABLE dCSS/LEGACY: SERIES SC516.....	06
▶ CASCADABLE MULTISWITCH 5 CABLE dCSS/LEGACY : SERIES SCX516evo.....	08
▶ CASCADABLE MULTISWITCH 5 CABLE dCSS/LEGACY : SERIES SCX516A.....	10
▶ CASCADABLE MULTISWITCH 3 CABLE dCSS/LEGACY: SERIES SWB316.....	12
▶ CASCADABLE MULTISWITCH 4 CABLE dCSS/LEGACY: SERIES SCD416.....	14
▶ CASCADABLE MULTISWITCH 5 CABLE dCSS/LEGACY: SERIES SCD516.....	16
▶ CASCADABLE MULTISWITCH 4 CABLE dCSS/LEGACY: SERIES SCW416.....	18
▶ CASCADABLE MULTISWITCH 5 CABLE dCSS/LEGACY: SERIES SCW516.....	20
▶ COMPACT MULTISWITCH 5 CABLE dCSS/LEGACY: SERIES SRW516.....	22
▶ CASCADABLE MULTISWITCH 9 CABLE dCSS/LEGACY: SERIES SCW916.....	24

SATELLITE DISTRIBUTION & ACCESSORIES

▶ WIDE BAND AMPLIFIERS.....	26
▶ STANDARD IF-SAT AMPLIFIERS.....	27
▶ ACCESSORIES FOR MULTISWITCH.....	28

LNB Type	Quattro		Wide-Band	Selectable Lnb Quattro / Lnb WideBand							
Series	SC416/1	SC516	SWB316	SCD416	SCW416	SCD516	SCX516	SCX516A	SCW516	SRW516	SCW916
Legacy/dCSS Autoswitch	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N. of User Band per output	16	16	16	16	16	16	16	16	16	16	16
LNB powering from STB	Yes	Yes	No	Yes	No	Yes	No	No	No	No	No
DC power input	No	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes
N. Max. of Orbital Positions	1	1	1	2	2	2	2	2	2	2	4
Programmable	No	Yes	No	Yes	No	Yes	No	No	No	No	No
dCSS Output Level dBμV	85	85	85	85	85	94	85	85	94	94	94
Legacy Output Level dBμV	-	75	75	75	75	85	75	75	85	85	85
TV Terrestrial Line	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
TV terrestrial Active	No	No	No	No	No	No	NO	Yes	No	No	No
No of Taps	1	1-2	2-4-6-8	1-2	4-6-8	1-2	2-4-6-8	2-4-6-8	2-4-6-8	4-6-8-12	4-8

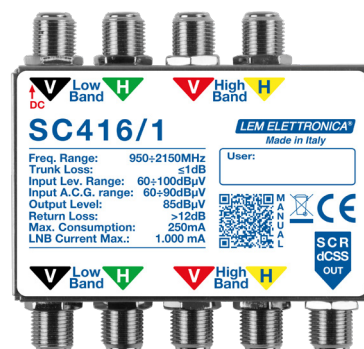
EN 50494 EN 50607 User Band Frequency Plan up on customer request

SC416/1

✓ **LNB Powering from STB**

✓ **Very Compact Size**

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led

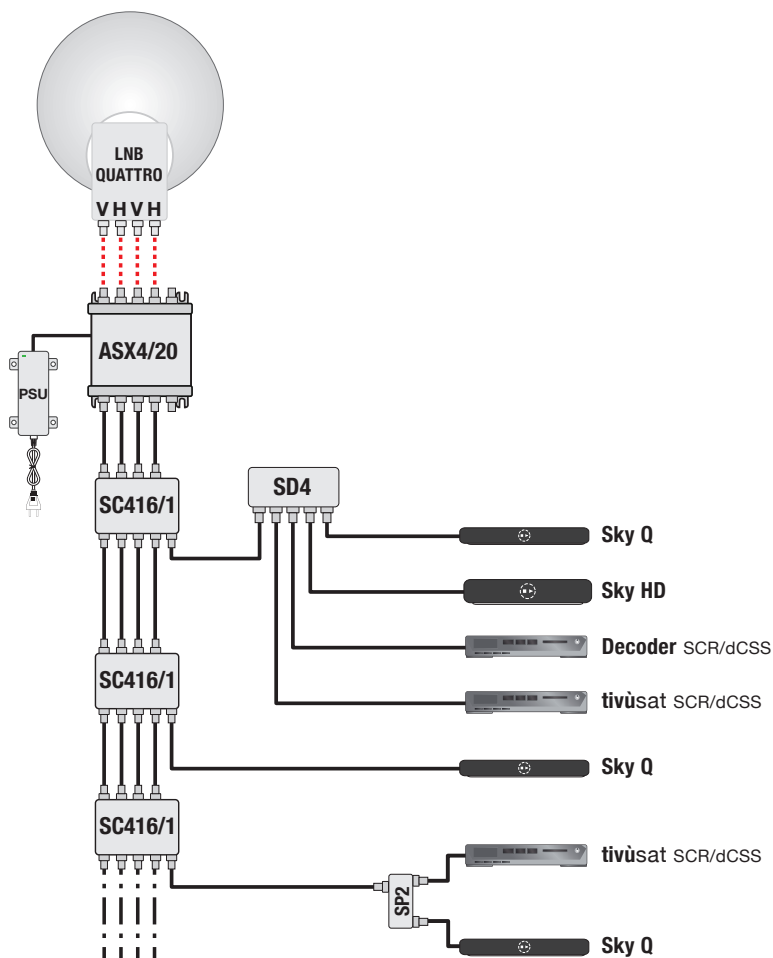


SKY_IT APPROVED

Designed for
4K^{ULTRA}HD

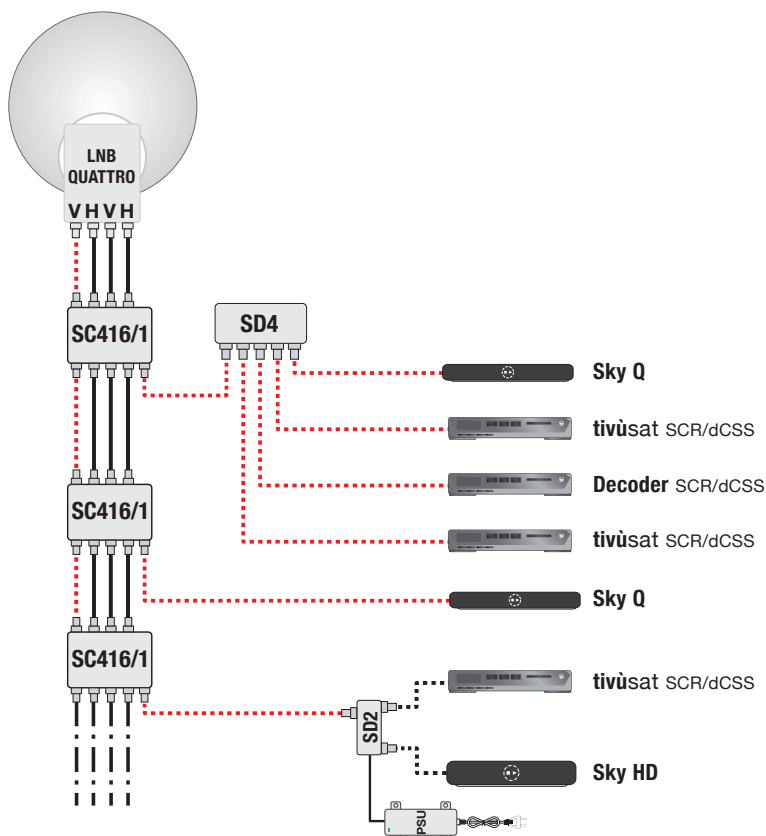
5
WARRANTY YEARS

MODEL		SC416/1
TYPE		Cascadable
INPUTS / OUTPUTS TRUNK		4 / 4
OUTPUT/TAPS		1
SATELLITE TRUNK FREQUENCY RANGE	MHz	950... 2200
SATELLITE TRUNK LOSS	dB	≤ 1
SATELLITE INPUTS POWER LEVEL RANGE	dBμV	60... 100
SATELLITE A.C.G. POWER LEVEL RANGE	dBμV	60... 90
SATELLITE OUTPUT/TAP FREQ. RANGE	MHz	950... 2150
MAX. SCR-dCSS OUTPUT LEVEL	dBμV	85
SCR/dCSS STANDARDS		Compliant with CENELC EN50494 (SCR) EN50607 (dCSS) SKY UK DSCR
SCR/dCSS USER BANDS		16
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT
DiSEqC SIGNALLING		DiSEqC 1.0 / 2.0 Compliant
CROSSPOLARITY ISOLATION	dB	> 30
TRUNK ISOLATION	dB	> 30
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz
RETURN LOSS	dB	> 12
MAX. POWER CONSUMPTION @ 13V PER OUTPUT	mA	250
LNB MAX CURRENT @ 20V	mA	1000
DIMENSIONS LxHxP	mm	74x70x22



- Schematic application of **SC416/1** with head amplifier supplying LNB. **The connected decoders must only power the SC416/1 multi-switches.**

Note: If several SCR/dCSS decoders are connected to the same derived output, the use of **SD4 Smart Splitters** is recommended to avoid possible malfunctions.



- In this example, the decoders directly supply the LNB. The connected decoders must carry the sum of the multiswitch and the LNB current.

Note: If several SCR/dCSS decoders are connected to the same derived output, the use of **SD2 and SD4 Smart Splitters** is recommended.

	2-Way Splitter with diodes
	2-Way Smart Splitter
	4-Way Smart Splitter
	SAT/DVB-T/FM-DAB Radio
	LNB Power Line

SC516 SERIES

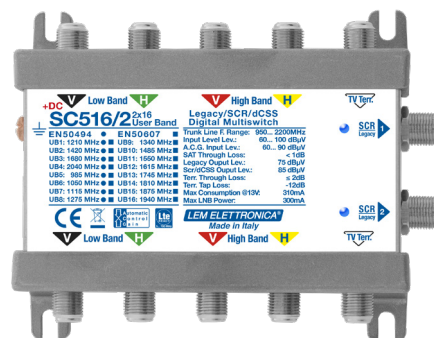


LNB Powering from decoder



Programmable in Dynamic or Static mode*

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led

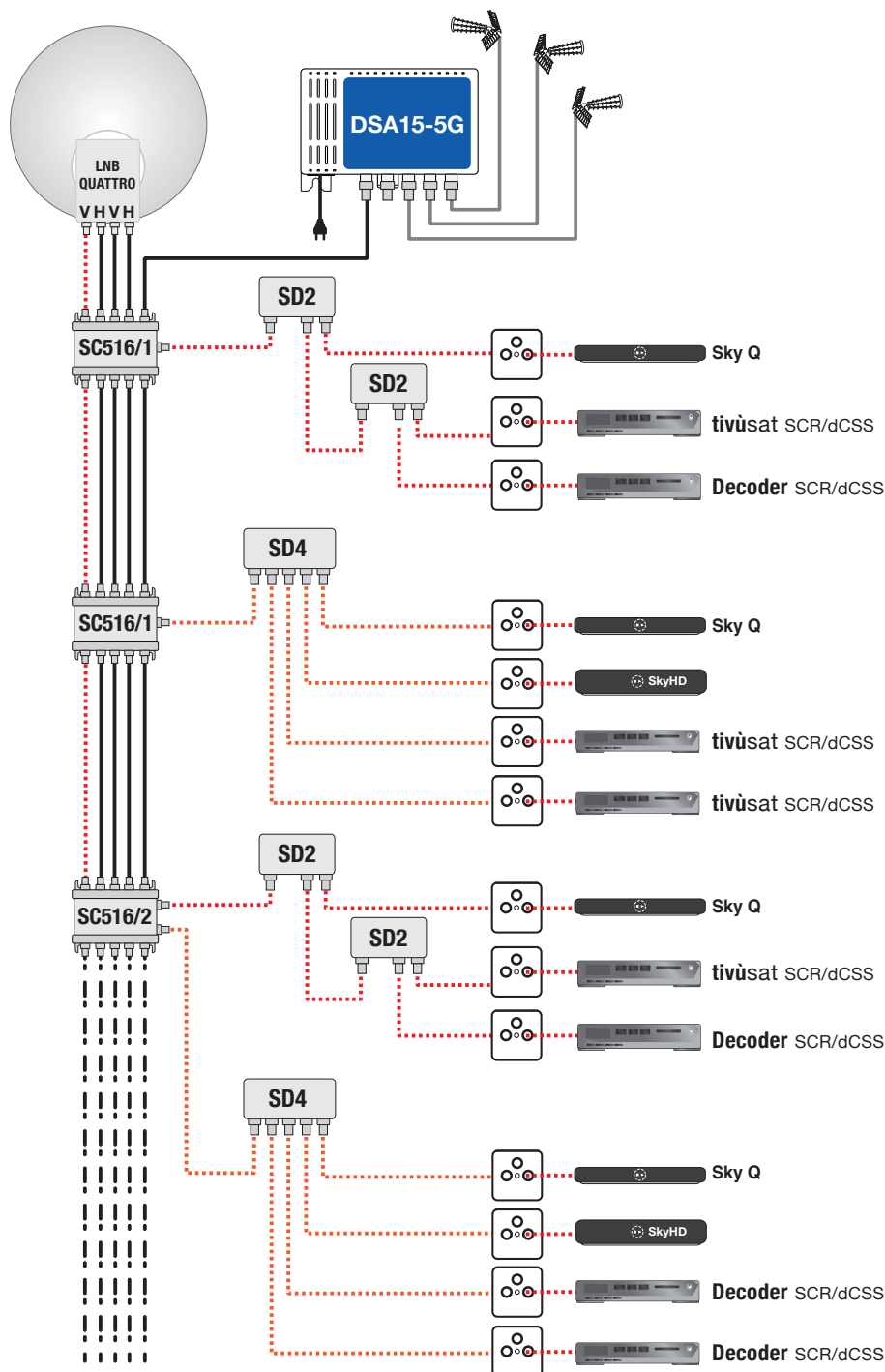


Designed for
4K^{ULTRA}HD

5
WARRANTY YEARS

* Programmer PSCD-01 required

MODEL		SC516/1	SC516/2
TYPE		Cascadable	
INPUTS / OUTPUTS TRUNK		5 / 5	
OUTPUT/TAPS		1	2
SATELLITE TRUNK LINES FREQ. RANGE	MHz	950... 2200	
SATELLITE TRUNK LOSS	dB	≤ 1	≤ 1
SATELLITE INPUTS POWER LEVEL RANGE	dBμV	60... 100	60... 100
SATELLITE A.C.G. POWER LEVEL RANGE	dBμV	60... 90	60... 90
SATELLITE OUTPUT/TAP FREQ. RANGE	MHz	950... 2150	
MAX. LEGACY OUTPUT LEVEL	dBμV	75	75
MAX. SCR-dCSS OUTPUT LEVEL	dBμV	85	85
TV TERRESTRIAL TRUNK LINE FREQ. RANGE	MHz	5... 790	
TV TERRESTRIAL OUTPUT/TAP LOSS	dB	- 7	- 10
TV TERRESTRIAL TRUNK LOSS	dB	≤ 2,5	≤ 2,5
TV TERRESTRIAL RETURN PATH LOSS	dB	- 7	- 10
SATELLITE / TV TERRESTRIAL DIPLEXER ISOLATION	dB	≥ 50	
SCR/dCSS STANDARDS		Compliant with CENELC EN50494 (SCR) EN50607 (dCSS) SKY UK DSCR	
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT	
SCR/dCSS USER BANDS		16	
LEGACY STANDARDS		13/18V 22KHz Universal Tone & Voltage	
DiSEqC SIGNALLING		DiSEqC 1.0 / 2.0 Compliant	
CROSSPOLARITY ISOLATION	dB	> 30	
TRUNK ISOLATION	dB	> 30	
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz	
RETURN LOSS	dB	> 12	
MAX. POWER CONSUMPTION @ 13V PER OUTPUT	mA	300	
LNB MAX CURRENT @ 20V	mA	300	
DIMENSIONS LxHxP	mm	118x92x38	



- For small installations with one or more **SC516** series multiswitches, if the multiswitch input signal is greater than 60dBμV, the headend amplifier could be not required. The Quattro LNB is powered directly from the decoders.
- Note: If multiple SCR/dCSS decoders are connected to the same derived output, the use of **SD2** and **SD4** Smart Splitters is recommended.

	2-Way Splitter with diodes
	2-Way Smart Splitter
	4-Way Smart Splitter
	SAT/DVB-T/FM-DAB Radio
	LNB Power Line

SCX516^{evo} SERIES



Selectable Quattro/WideBand Mode

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led
- DC input for multiswitch and LNB powering

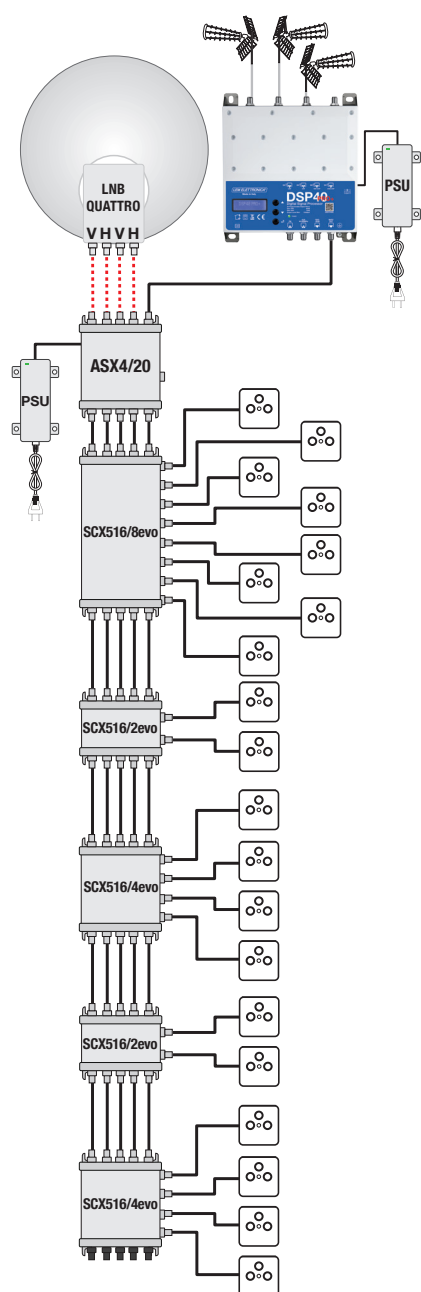


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4K^{ULTRA} HD

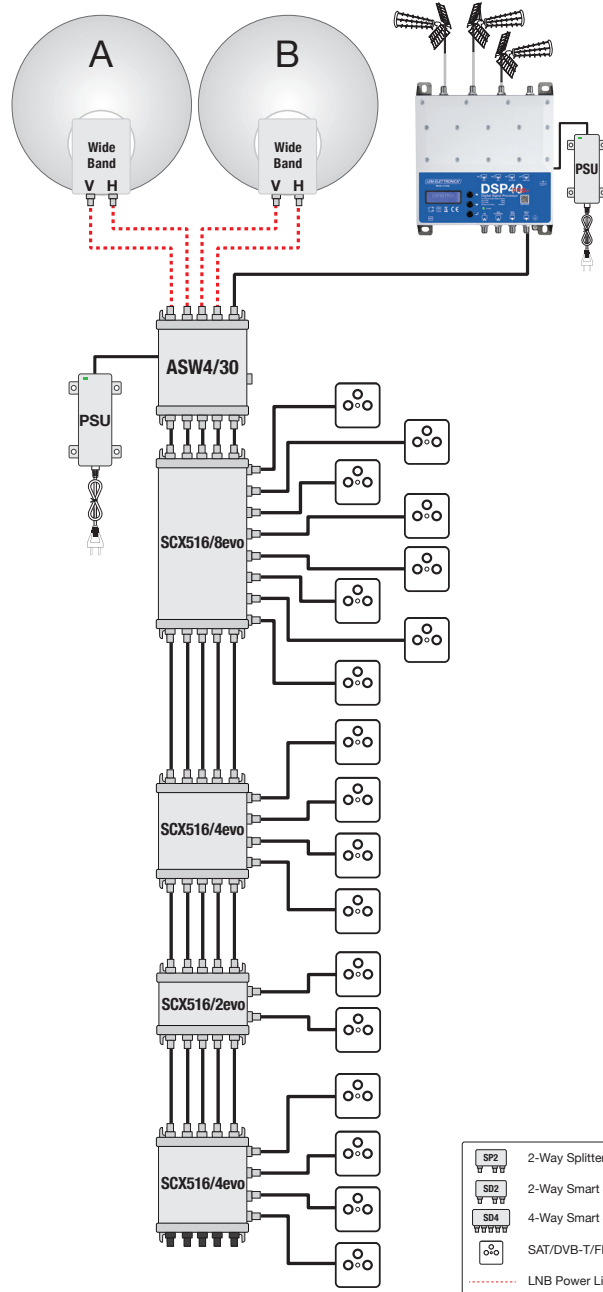
WIDEBAND
MULTISWITCH

5
WARRANTY YEARS

MODEL		SCX516/2EVO	SCX516/4EVO	SCXA516/6EVO	SCX516A/8EVO
TYPE		Cascadable			
N° INPUTS / OUTPUTS		5/5			
N° TAPS		2	4	6	8
SATELLITE					
TRUNK FREQUENCY RANGE	MHz	250... 2.400			
TAPS FREQUENCY RANGE	MHz	950... 2.150			
A.C.G. INPUT RANGE	dBμV	65... 100			
SCR/dCSS TAP OUTPUT LEVEL	dBμV	85			
LEGACY TAP OUTPUT LEVEL	dBμV	78			
TRUNK LOSS SATELLITE	dB	≤ 2	≤ 2	≤ 3	≤ 4
SUPPORTED STANDARDS		LEGACY / EN 50494 / EN 50607 / SKY UK (Automatic Selection)			
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT			
MAXIMUM CURRENT DRAIN @ 13V PER OUTPUT	mA	310			
MAXIMUM LNB(S) POWER	mA	600			
TV TERRESTRIAL					
TRUNK FREQUENCY RANGE	MHz	40... 900			
TAPS FREQUENCY RANGE	MHz	40... 790			
TV TERR. TAP LOSS	dB	-15	-16	-18	-20
TRUNK LOSS TV TERR.	dB	≤ 2,5	≤ 2,5	≤ 3,5	≤ 3,5
COMMON SPECIFICATIONS					
SEPARATION SATELLITE / TV TERR.	dB	≥ 50			
CROSS-POLAR ISOLATION	dB	> 30			
INPUTS - OUTPUTS ISOLATION	dB	> 30			
RETURN LOSS	dB	> 12			
MAXIMUM TOTAL CURRENT DRAIN @20V	mA	350	700	1.050	1.400
OPERATING TEMPERATURE RANGE	°C	0... 50			
DIMENSIONS	mm	104x110x39	144x110x39	184x110x39	224x110x39

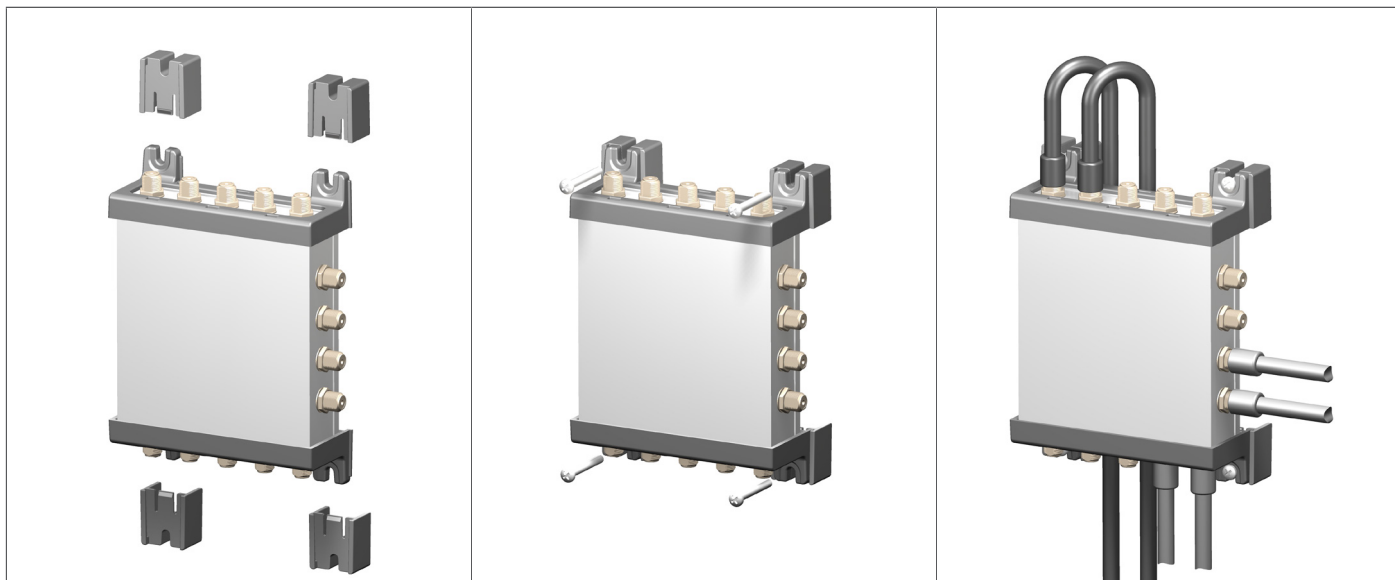


Cascade application for a single feed satellite reception with a standard Quattro LNB.



Cascade application for a dual feed satellite reception with two Wide Band LNB.

SP2	2-Way Splitter with diodes
SD2	2-Way Smart Splitter
SD4	4-Way Smart Splitter
○ ○ ○	SAT/DVB-T/FM-DAB Radio
---	LNB Power Line



Spacers supplied to make easy the passage of the coaxial cables under the multiswitch.

SCX516A SERIES

- ✓ **Terrestrial Active with 0-10dB adjuster**
- ✓ **Quattro/Wide band Lnb switch**
- ✓ **Cascade or Stand-alone mode switch**

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led
- DC input for multiswitch and LNB powering

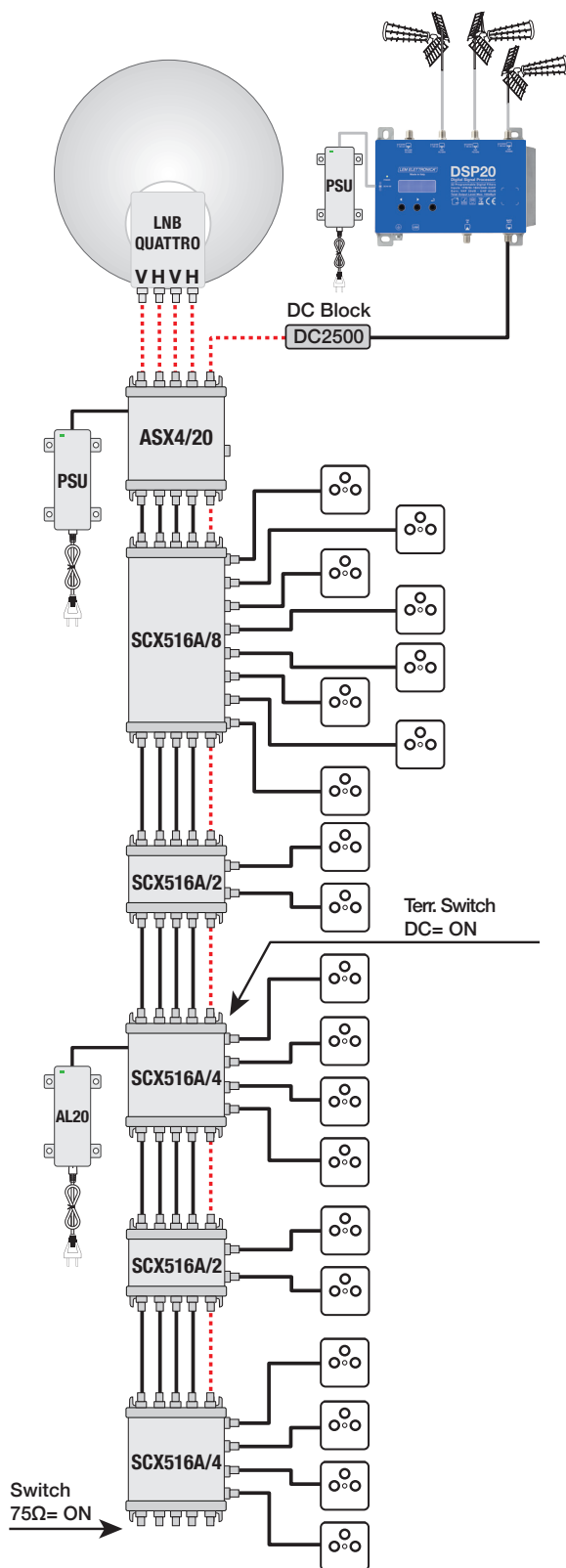


Designed for
4K HD

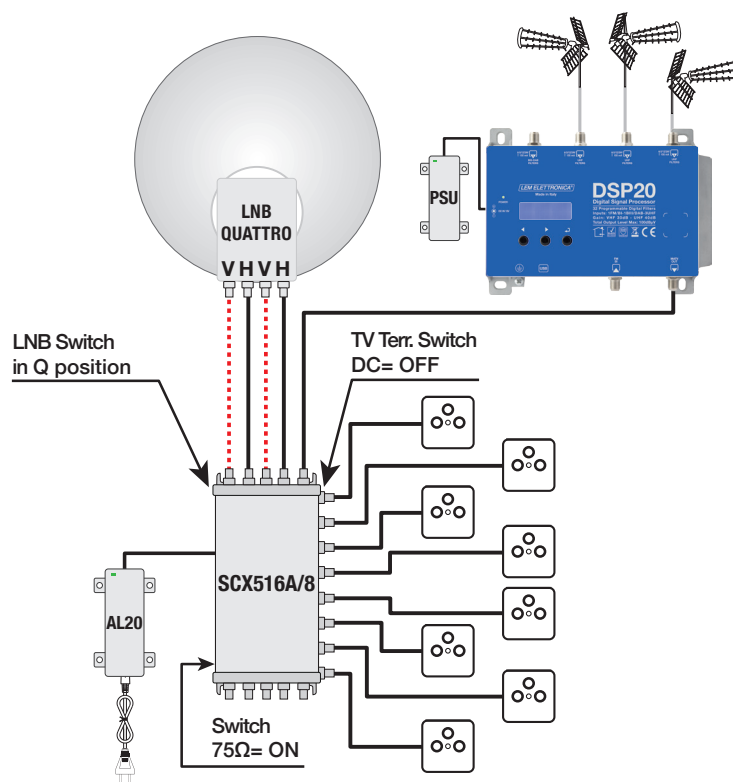
WIDEBAND
MULTISWITCH

5
WARRANTY YEARS

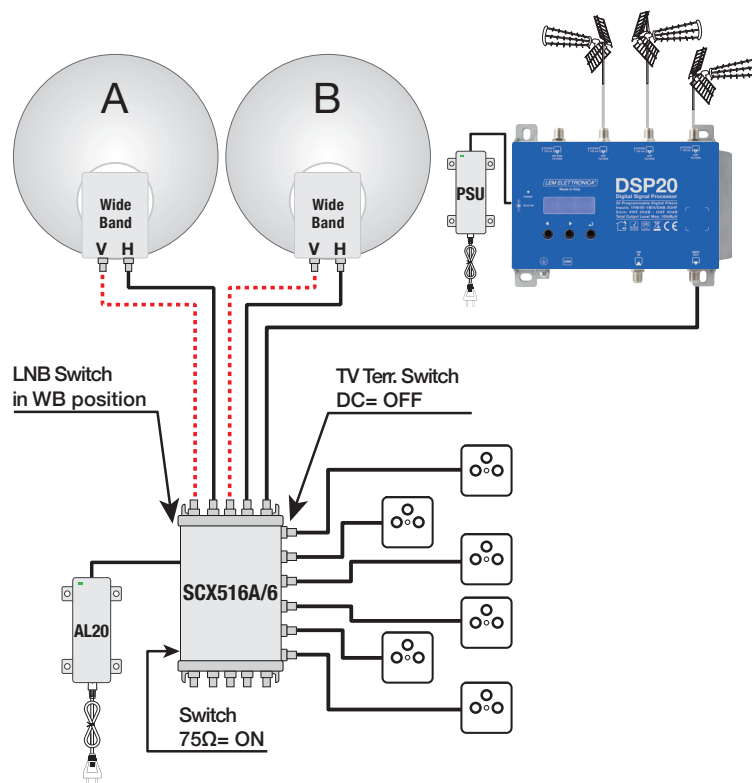
MODEL		SCX516A/2	SCX516A/4	SCXA516/6	SCX516A/8
TYPE		Cascadable / Stand-alone			
N° INPUTS / OUTPUTS		5/5			
N° TAPS		2	4	6	8
SATELLITE					
TRUNK FREQUENCY RANGE	MHz	250... 2.400			
TAPS FREQUENCY RANGE	MHz	950... 2.150			
A.C.G. INPUT RANGE	dBµV	65... 100			
SCR/dCSS TAP OUTPUT LEVEL	dBµV	85			
LEGACY TAP OUTPUT LEVEL	dBµV	78			
TRUNK LOSS SATELLITE	dB	≤ 2	≤ 2	≤ 3	≤ 4
SUPPORTED STANDARDS		LEGACY / EN 50494 / EN 50607 / SKY UK (Automatic Selection)			
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT			
MAXIMUM CURRENT DRAIN @ 13V PER OUTPUT	mA	310			
MAXIMUM LNB(S) POWER	mA	600			
TV TERRESTRIAL					
TRUNK FREQUENCY RANGE	MHz	40... 900			
TAPS FREQUENCY RANGE	MHz	40... 790			
TV TERR. INPUT ATTENUATOR RANGE	dB	0... -10			
TV TERR. MAX INPUT RANGE	dB	100... 110			
TV TERR. TAP LOSS	dB	0	2	3	4
TRUNK LOSS TV TERR.	dB	≤ 2,5	≤ 2,5	≤ 3,5	≤ 3,5
COMMON SPECIFICATIONS					
SEPARATION SATELLITE / TV TERR.	dB	≥ 50			
CROSS-POLAR ISOLATION	dB	> 30			
INPUTS - OUTPUTS ISOLATION	dB	> 30			
RETURN LOSS	dB	> 12			
MAXIMUM TOTAL CURRENT DRAIN @20V	mA	400	750	1.100	1.450
OPERATING TEMPERATURE RANGE	°C	0... 50			
DIMENSIONS	mm	104x110x39	144x110x39	184x110x39	224x110x39



Cascade application for a single feed satellite reception with a standard Quattro LNB.



Stand-alone application of a SCX516A/8 for a single feed satellite reception with a standard Quattro LNB.



Stand-alone application of a SCX516A/6 for a dual feed satellite reception with two Wide Band LNB.

SWB316 SERIES

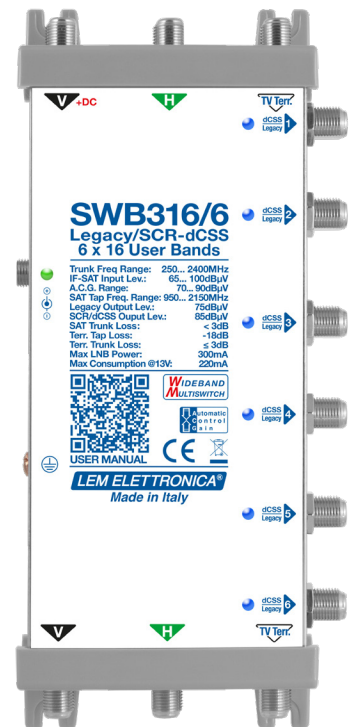


Trunk with 3 cables only



Very Low Consumption Max. 220mA

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led
- DC input for multiswitch and LNB powering

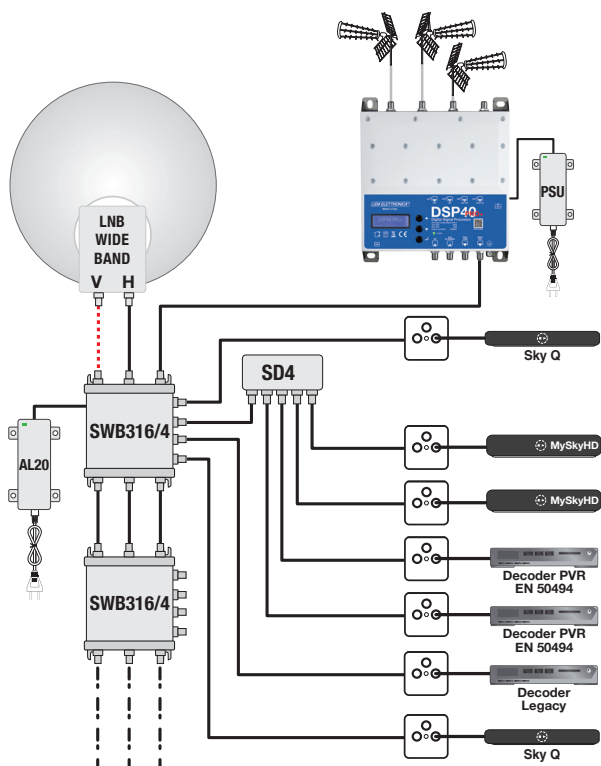


Designed for
4K HD

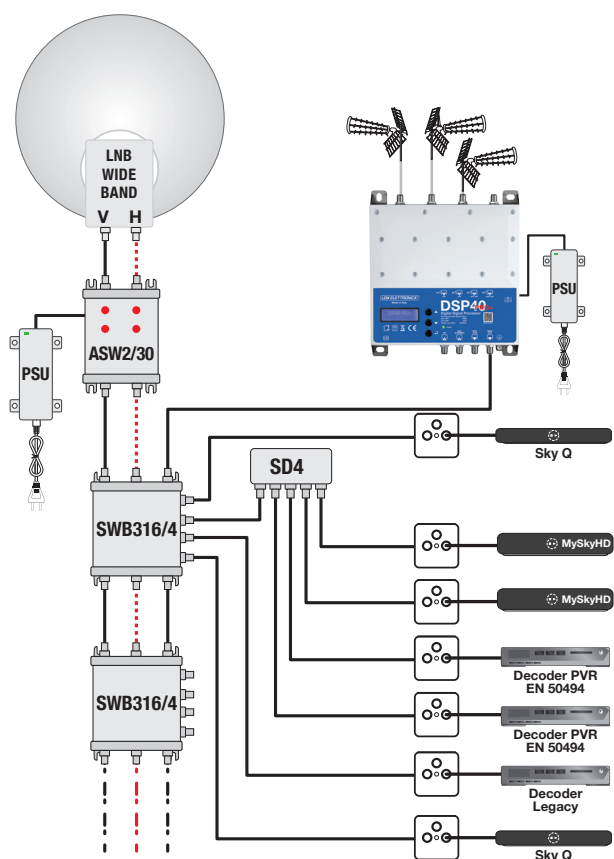
WIDE BAND
MULTISWITCH

5 YEARS
WARRANTY

MODEL		SWC316/2	SWB316/4	SWB316/6	SWB316/8
TYPE		Cascadable			
INPUTS / OUTPUTS TRUNK		3 / 3			
OUTPUT/TAPS		2	4	6	8
SATELLITE TRUNK LINES FREQ. RANGE	MHz	250... 2400			
SATELLITE TRUNK LOSS	dB	≤ 1	≤ 2	≤ 3	≤ 4
SATELLITE INPUTS POWER LEVEL RANGE	dBμV	60... 100			
SATELLITE A.C.G. POWER LEVEL RANGE	dBμV	60... 90			
SATELLITE OUTPUT/TAP FREQ. RANGE	MHz	950... 2150			
MAX. LEGACY OUTPUT LEVEL	dBμV	75			
MAX. SCR-dCSS OUTPUT LEVEL	dBμV	85			
TV TERRESTRIAL TRUNK LINE FREQ. RANGE	MHz	5... 790			
TV TERRESTRIAL OUTPUT/TAP LOSS	dB	- 15	- 16	- 18	- 20
TV TERRESTRIAL TRUNK LOSS	dB	≤ 1	≤ 2	≤ 3	≤ 4
TV TERRESTRIAL RETURN PATH LOSS	dB	- 15	- 16	- 18	- 20
SATELLITE / TV TERRESTRIAL DIPLEXER ISOLATION	dB	≥ 50			
SCR/dCSS STANDARDS		Compliant with CENELC EN50494 (SCR) EN50607 (dCSS) SKY UK DSCR			
SCR/dCSS USER BANDS		16			
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT			
LEGACY STANDARDS		13/18V 22KHz Universal Tone & Voltage			
DiSEqC SIGNALLING		DiSEqC 1.0 / 2.0 Compliant			
CROSSPOLARITY ISOLATION	dB	> 30			
TRUNK ISOLATION	dB	> 30			
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz			
RETURN LOSS	dB	> 12			
MAX. POWER CONSUMPTION @ 13V PER OUTPUT	mA	220			
LNB MAX CURRENT @ 20V	mA	300			
DIMENSIONS LxHxP	mm	97x94x34	87x147x34	87x199x34	87x252x34



► Example of cascading a **Wide Band LNB** powered by a **SWB316** series multiswitch connected to an external power supply.



► Example of a **ASW2/30** Wide Band headend amplifier with SWB316 Wide Band multiswitches.

	2-Way Splitter with diodes
	2-Way Smart Splitter
	4-Way Smart Splitter
	SAT/DVB-T/FM-DAB Radio
---	LNB Power Line

SCD416 SERIES



LNB Powering from STB

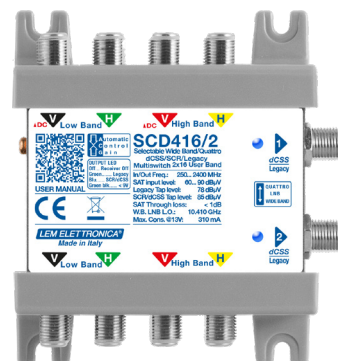


Selectable Quattro/WideBand Mode



Programmable in Dynamic or-Static mode*

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led



Designed for
4K HD
ULTRA

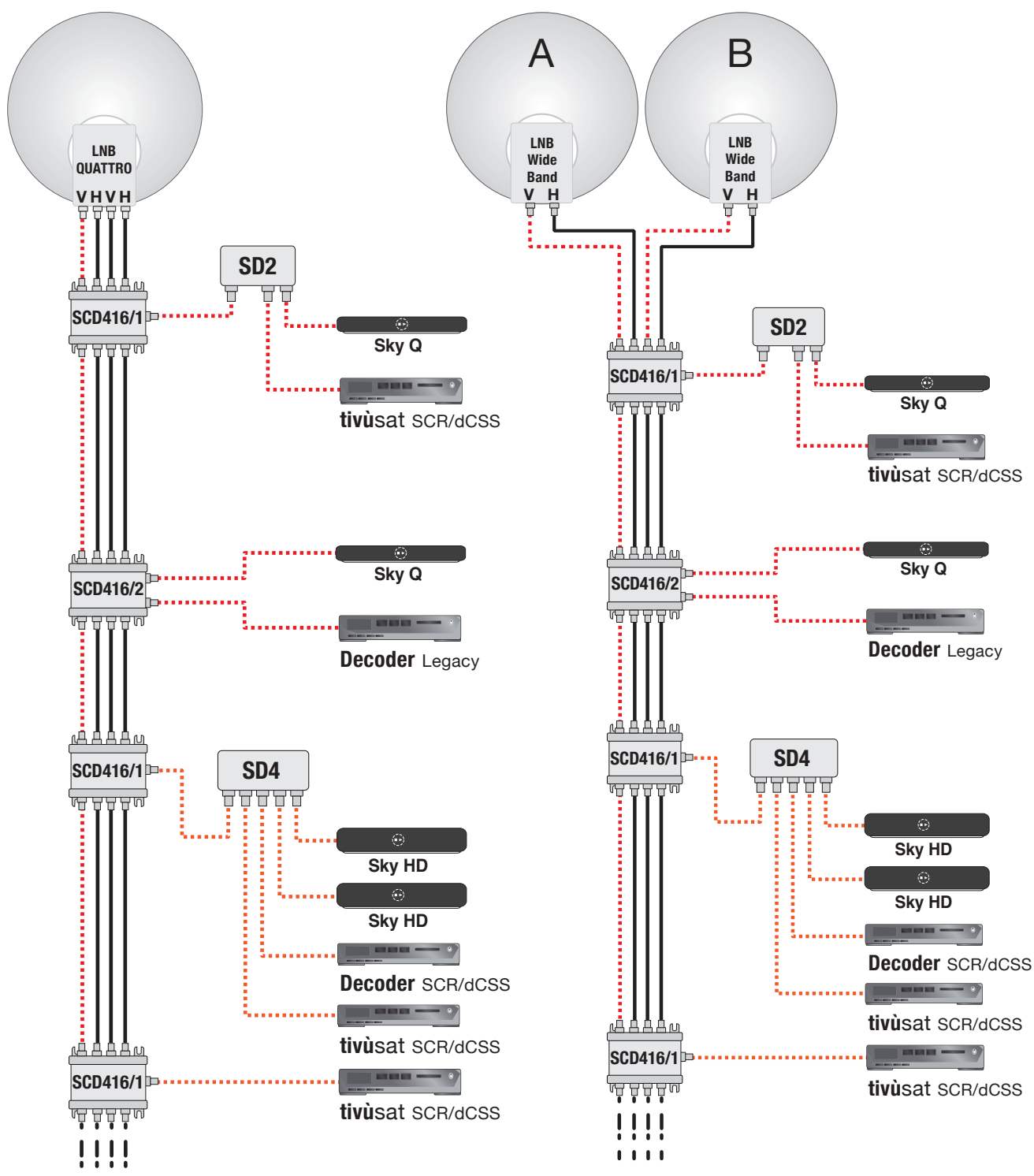
WIDEBAND
MULTISWITCH

2 ORBITAL
POSITIONS
A LNB B
WIDE BAND

5
WARRANTY YEARS

* Programmer PSCD-01 required

MODEL		SCD416/1	SCD416/2
TYPE		Cascadable	
INPUTS / OUTPUTS TRUNK		4 / 4	
OUTPUT/TAPS		1	2
SATELLITE TRUNK LINES FREQ. RANGE	MHz	250... 2400	
SATELLITE TRUNK LOSS	dB	≤ 1	≤ 1
SATELLITE INPUTS POWER LEVEL RANGE	dBμV	60... 100	
SATELLITE A.C.G. POWER LEVEL RANGE	dBμV	60... 90	
SATELLITE OUTPUT/TAP FREQ. RANGE	MHz	950... 2150	
MAX. LEGACY OUTPUT LEVEL	dBμV	75	
MAX. SCR-dCSS OUTPUT LEVEL	dBμV	85	
SCR/dCSS STANDARDS		Compliant with CENELC EN50494 (SCR) EN50607 (dCSS) SKY UK DSCR	
SCR/dCSS USER BANDS		16	
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT	
LEGACY STANDARDS		13/18V 22KHz Universal Tone & Voltage	
DiSeqC SIGNALLING		DiSeqC 1.0 / 2.0 Compliant	
CROSSPOLARITY ISOLATION	dB	> 30	
TRUNK ISOLATION	dB	> 30	
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz	
RETURN LOSS	dB	> 12	
MAX. POWER CONSUMPTION @ 13V PER OUTPUT	mA	300	
LNB MAX CURRENT @ 20V	mA	300	
DIMENSIONS LxHxP	mm	97x94x34	



► For small installations with one or more **SCD416** series multiswitches, if the multiswitch input signal is greater than 60dB μ V, the headend amplifier could be not required. The Quattro LNB is powered directly from the decoders.

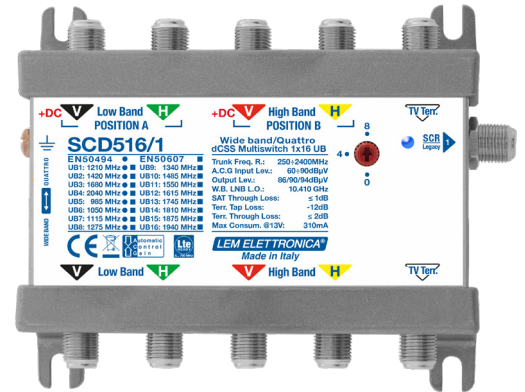
Note: If multiple SCR/dCSS decoders are connected to the same derived output, the use of **SD2** and **SD4** Smart Splitters is recommended.

	2-Way Splitter with diodes
	2-Way Smart Splitter
	4-Way Smart Splitter
	SAT/DVB-T/FM-DAB Radio
	LNB Power Line

SCD516 SERIES

- ✓ **LNB Powering from STB**
- ✓ **10 dB Extra Power Level Output**
- ✓ **Selectable Quattro/WideBand Mode**
- ✓ **Programmable in Dynamic or-Static mode***

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led



Designed for
4K HD

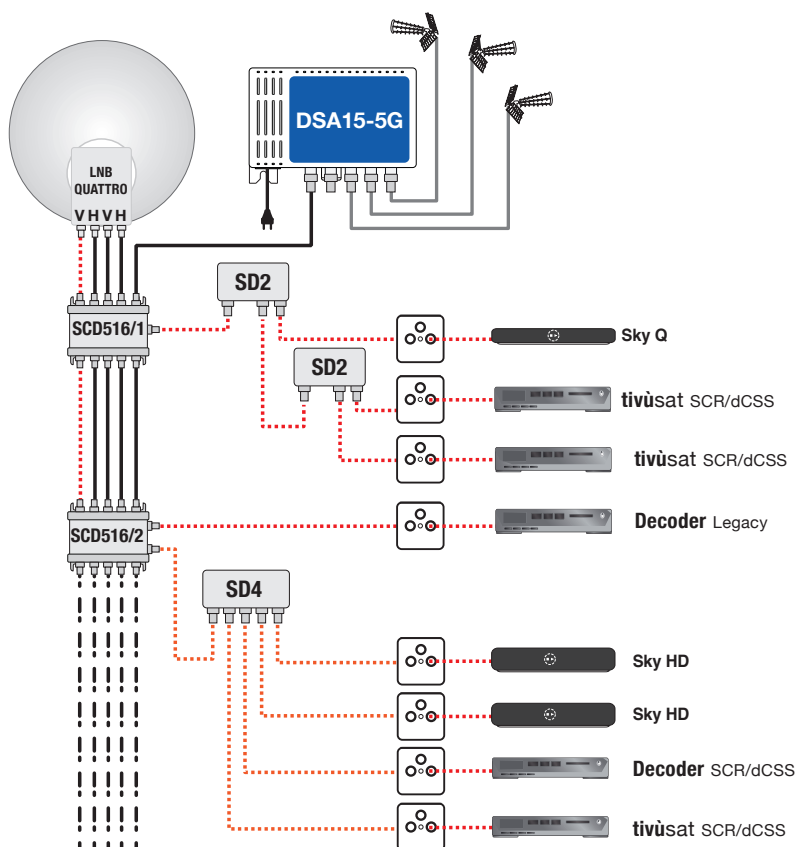
WIDE BAND
MULTISWITCH

A 2 ORBITAL
POSITIONS
B
LNB
WIDE BAND

5
WARRANTY YEARS

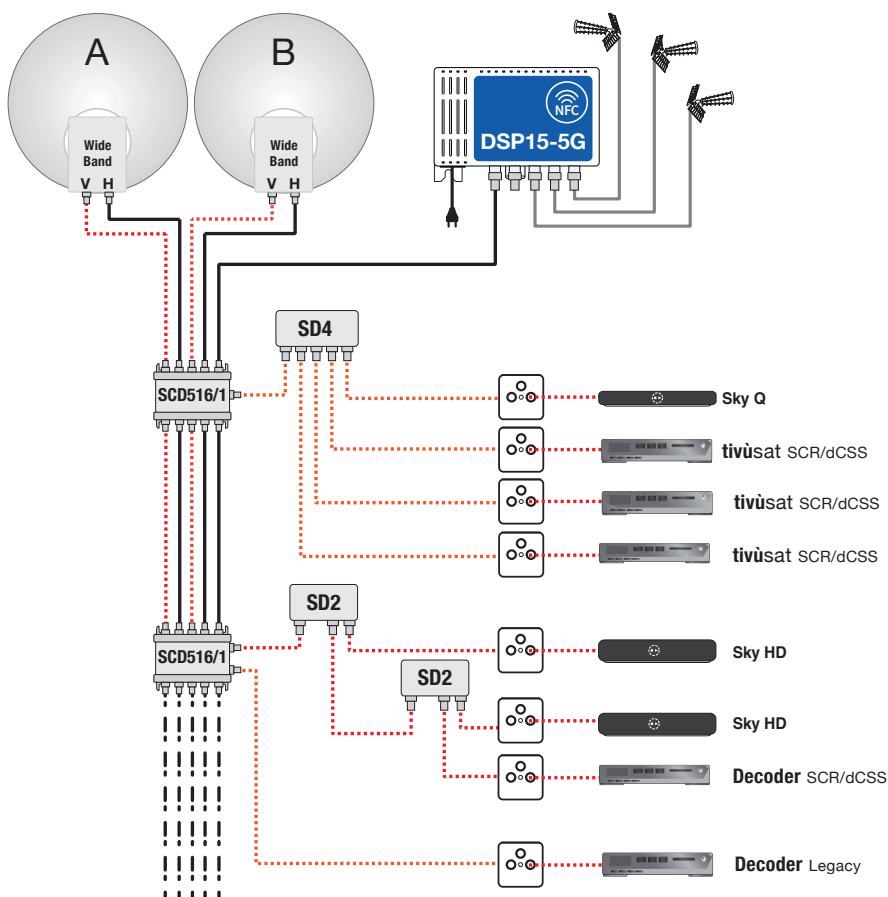
* Programmer PSCD-01 required

MODEL		SCD516/1	SCD516/1-15	SCD516/2	SCD516/2-15
TYPE		Cascadable			
INPUTS / OUTPUTS TRUNK		5 / 5			
OUTPUT/TAPS		1	1	2	2
SATELLITE TRUNK LINES FREQ. RANGE	MHz	950... 2200			
SATELLITE TRUNK LOSS	dB	≤ 1			
SATELLITE INPUTS POWER LEVEL RANGE	dBμV	60... 100			
SATELLITE A.C.G. POWER LEVEL RANGE	dBμV	60... 90			
SATELLITE OUTPUT/TAP FREQ. RANGE	MHz	950... 2150			
MAX. LEGACY OUTPUT LEVEL	dBμV	85			
MAX. SCR-dCSS OUTPUT LEVEL	dBμV	86/90/94			
TV TERRESTRIAL TRUNK LINE FREQ. RANGE	MHz	5... 790			
TV TERRESTRIAL OUTPUT/TAP LOSS	dB	- 7	- 12	- 10	- 14
TV TERRESTRIAL TRUNK LOSS	dB	≤ 2,5	≤ 2,5	≤ 2,5	≤ 2,5
TV TERRESTRIAL RETURN PATH LOSS	dB	- 7	- 12	- 10	- 14
SATELLITE / TV TERRESTRIAL DIPLEXER ISOLATION	dB	≥ 50			
SCR/dCSS STANDARDS		Compliant with CENELC EN50494 (SCR) EN50607 (dCSS) SKY UK DSCR			
SCR/dCSS USER BANDS		16			
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT			
LEGACY STANDARDS		13/18V 22KHz Universal Tone & Voltage			
DiSEqC SIGNALLING		DiSEqC 1.0 / 2.0 Compliant			
CROSSPOLARITY ISOLATION	dB	> 30			
TRUNK ISOLATION	dB	> 30			
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz			
RETURN LOSS	dB	> 12			
MAX. POWER CONSUMPTION @ 13V PER OUTPUT	mA	300			
LNB MAX CURRENT @ 20V	mA	300			
DIMENSIONS LxHxP	mm	118x92x38			



► For small installations with one or more **SCD516** series multiswitches, if the multiswitch input signal is greater than 60dBμV, the headend amplifier could be not required. The Quattro LNB is powered directly from the decoders.

Note: If multiple SCR/dCSS decoders are connected to the same derived output, the use of **SD2** and **SD4 Smart Splitters** is recommended.



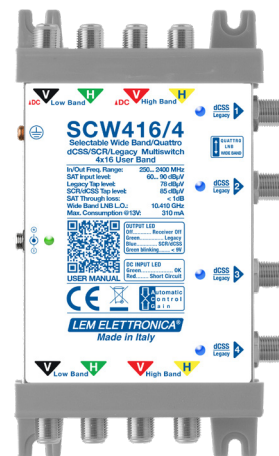
	2-Way Splitter with diodes
	2-Way Smart Splitter
	4-Way Smart Splitter
	SAT/DVB-T/FM-DAB Radio
	LNB Power Line

SCW416 SERIES



Selectable Quattro/WideBand Mode

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led
- DC input for multiswitch and LNB powering



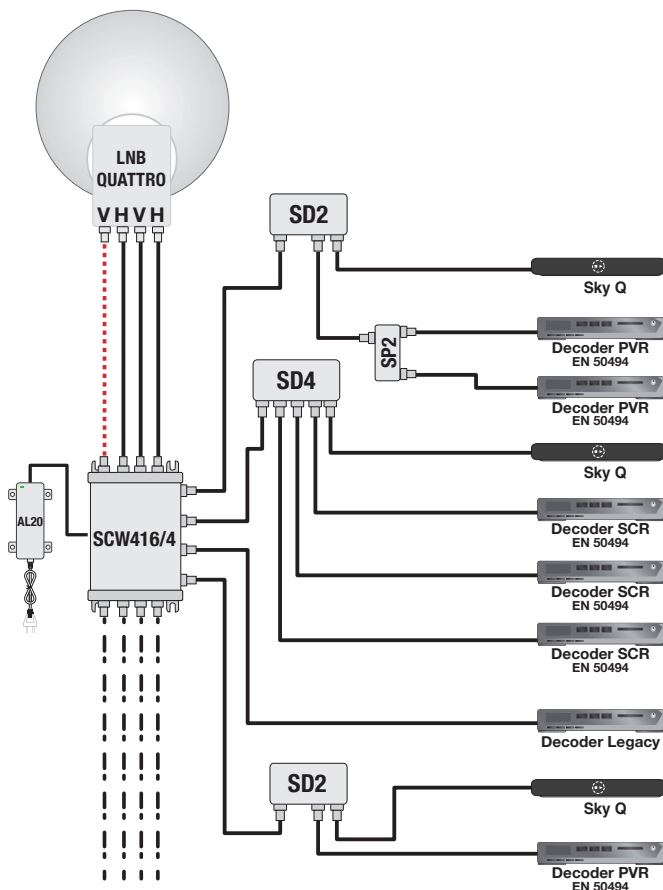
Designed for
4K HD

WIDE BAND
MULTISWITCH

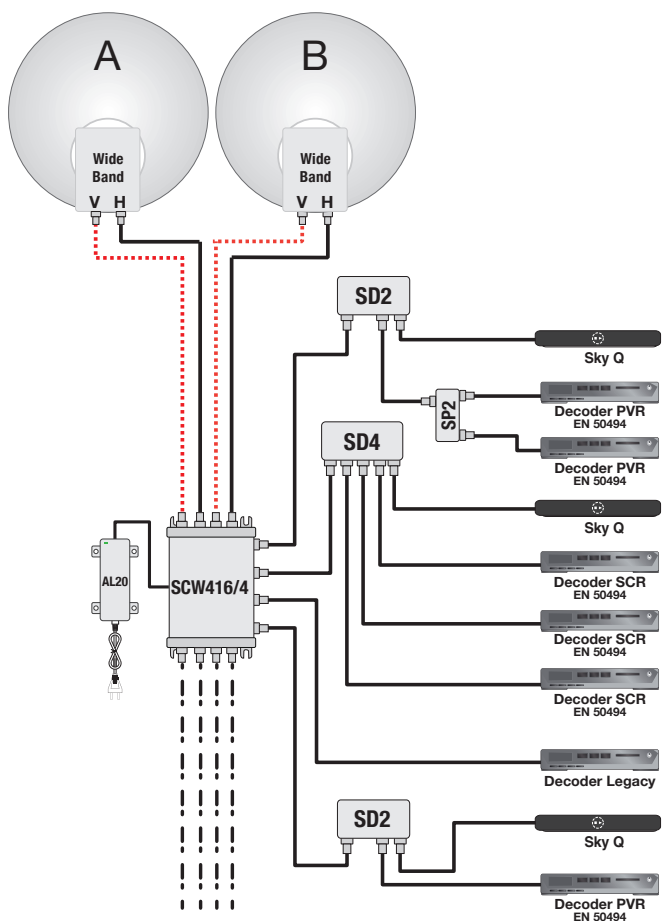


5 YEARS
WARRANTY

MODEL		SCW416/4	SCW416/6	SCW416/8
TYPE		Cascadable		
INPUTS / OUTPUTS TRUNK		4 / 4		
OUTPUT/TAPS		4	6	8
SATELLITE TRUNK LINES FREQ. RANGE	MHz	250... 2400		
SATELLITE TRUNK LOSS	dB	≤ 2	≤ 3	≤ 4
SATELLITE INPUTS POWER LEVEL RANGE	dBμV	60... 100		
SATELLITE A.C.G. POWER LEVEL RANGE	dBμV	60... 90		
SATELLITE OUTPUT/TAP FREQ. RANGE	MHz	950... 2150		
MAX. LEGACY OUTPUT LEVEL	dBμV	75		
MAX. SCR-dCSS OUTPUT LEVEL	dBμV	85		
SCR/dCSS STANDARDS		Compliant with CENELC EN50494 (SCR) EN50607 (dCSS) SKY UK DSCR		
SCR/dCSS USER BANDS		16		
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT		
LEGACY STANDARDS		13/18V 22KHz Universal Tone & Voltage		
DiSEqC SIGNALLING		DiSEqC 1.0 / 2.0 Compliant		
CROSSPOLARITY ISOLATION	dB	> 30		
TRUNK ISOLATION	dB	> 30		
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz		
RETURN LOSS	dB	> 12		
MAX. POWER CONSUMPTION @ 13V PER OUTPUT	mA	310		
LNB MAX CURRENT @ 20V	mA	500		
DIMENSIONS LxHxP	mm	87x147x34	87x199x34	87x252x34



► Example of Quattro LNB powered by a multiswitch connected to an external power supply.



► Example of two Wide Band LNB fed by a multiswitch connected to an external power supply.

	2-Way Splitter with diodes
	2-Way Smart Splitter
	4-Way Smart Splitter
	SAT/DVB-T/FM-DAB Radio
.....	LNB Power Line

SCW516 SERIES

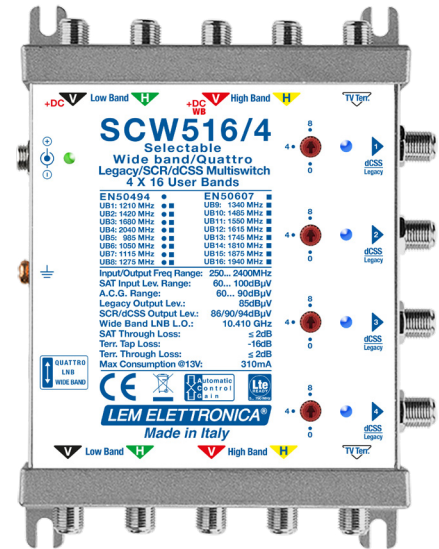


Selectable Quattro/WideBand Mode



Up to 9 dB Extra Power Level Output

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led
- DC input for multiswitch and LNB powering



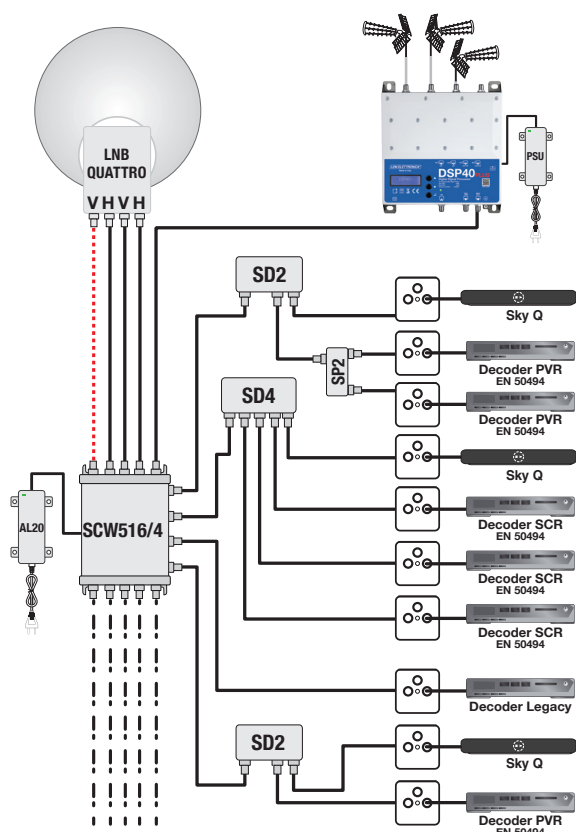
Designed for
4K HD

WIDEBAND
MULTISWITCH

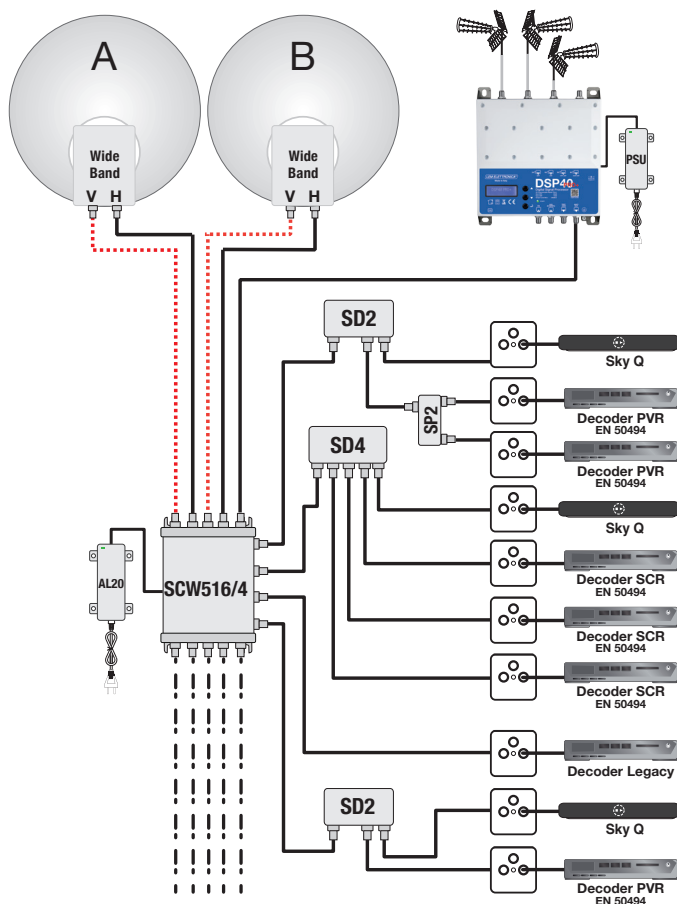


5
WARRANTY YEARS

MODEL		SCW516/2	SCW516/4	SCW516/6	SCW516/8
TYPE		Cascadable			
INPUTS / OUTPUTS TRUNK		5 / 5			
OUTPUT/TAPS		2	4	6	8
SATELLITE TRUNK LINES FREQ. RANGE	MHz	250... 2400			
SATELLITE TRUNK LOSS	dB	≤ 1	≤ 2	≤ 3	≤ 4
SATELLITE INPUTS POWER LEVEL RANGE	dBμV	60... 100			
SATELLITE A.C.G. POWER LEVEL RANGE	dBμV	60... 90			
SATELLITE OUTPUT/TAP FREQ. RANGE	MHz	950... 2150			
MAX. LEGACY OUTPUT LEVEL	dBμV	85			
MAX. SCR-dCSS OUTPUT LEVEL	dBμV	86/90/94			
TV TERRESTRIAL TRUNK LINE FREQ. RANGE	MHz	5... 790			
TV TERRESTRIAL OUTPUT/TAP LOSS	dB	- 15	- 16	- 18	- 20
TV TERRESTRIAL TRUNK LOSS	dB	≤ 1	≤ 2	≤ 3	≤ 4
TV TERRESTRIAL RETURN PATH LOSS	dB	- 15	- 16	- 18	- 20
SATELLITE / TV TERRESTRIAL DIPLEXER ISOLATION	dB	≥ 50			
SCR/dCSS STANDARDS		Compliant with CENELC EN50494 (SCR) EN50607 (dCSS) SKY UK DSCR			
SCR/dCSS USER BANDS		16			
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT			
LEGACY STANDARDS		13/18V 22KHz Universal Tone & Voltage			
DiSEqC SIGNALLING		DiSEqC 1.0 / 2.0 Compliant			
CROSSPOLARITY ISOLATION	dB	> 30			
TRUNK ISOLATION	dB	> 30			
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz			
RETURN LOSS	dB	> 12			
MAX. POWER CONSUMPTION @ 13V PER OUTPUT	mA	220			
LNB MAX CURRENT @ 20V	mA	300			
DIMENSIONS LxHxP	mm	118x104x38	118x163x38	118x223x38	118x281x38



▶ Example of Quattro LNB powered by a multiswitch connected to an external power supply.



▶ Example of two Wide Band LNB fed by a multiswitch connected to an external power supply.

-  2-Way Splitter with diodes
-  2-Way Smart Splitter
-  4-Way Smart Splitter
-  SAT/DVB-T/FM-DAB Radio
-  LNB Power Line

SRW516 SERIES



Selectable Quattro/WideBand Mode



Up to 9dB Extra Power Level Output

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led
- DC input for multiswitch and LNB powering



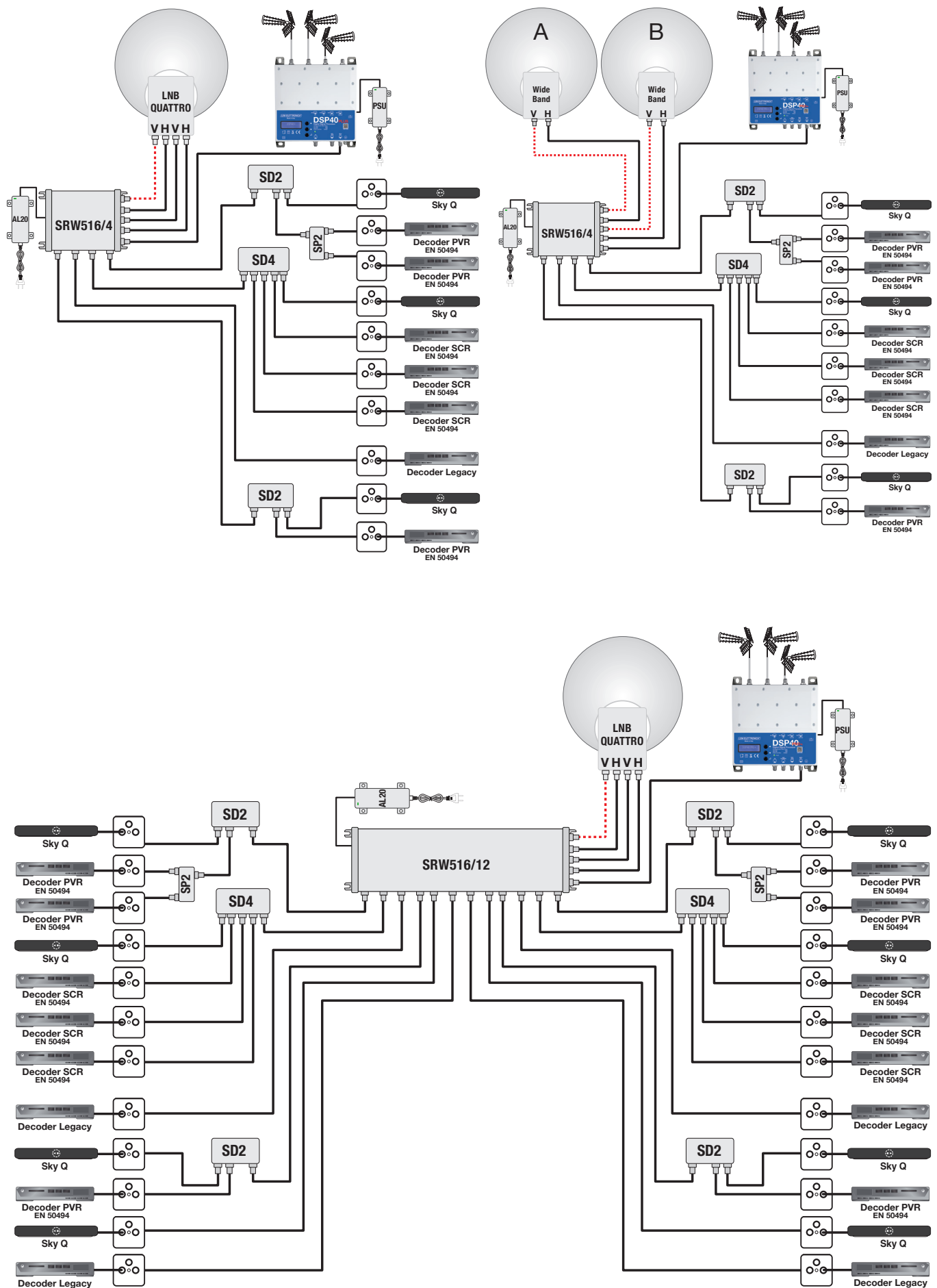
Designed for
4K HD
ULTRA

WIDE BAND
MULTISWITCH

A 2 ORBITAL
POSITIONS
B
LNB
WIDE BAND

5
WARRANTY YEARS

MODEL		SRW516/4	SRW516/6	SRW516/8	SRW516/12
TYPE		Compact			
INPUTS		5			
OUTPUT/TAPS		4	6	8	12
SATELLITE INPUTS FREQ. RANGE	MHz	250... 2400			
SATELLITE INPUTS POWER LEVEL RANGE	dBμV	60... 100			
SATELLITE A.C.G. POWER LEVEL RANGE	dBμV	60... 90			
SATELLITE OUTPUT/TAP FREQ. RANGE	MHz	950... 2150			
MAX. LEGACY OUTPUT LEVEL	dBμV	85			
MAX. SCR-dCSS OUTPUT LEVEL	dBμV	86/90/94			
TV TERRESTRIAL INPUT FREQ. RANGE	MHz	5... 790			
TV TERRESTRIAL OUTPUT/TAP LOSS	dB	- 16	- 18	- 20	- 24
TV TERRESTRIAL RETURN PATH LOSS	dB	- 16	- 18	- 20	- 24
SATELLITE / TV TERRESTRIAL DIPLEXER ISOLATION	dB	≥ 50			
SCR/dCSS STANDARDS		Compliant with CENELC EN50494 (SCR) EN50607 (dCSS) SKY UK DSCR			
SCR/dCSS USER BANDS		16			
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT			
LEGACY STANDARDS		13/18V 22KHz Universal Tone & Voltage			
DiSEqC SIGNALLING		DiSEqC 1.0 / 2.0 Compliant			
CROSSPOLARITY ISOLATION	dB	> 30			
TRUNK ISOLATION	dB	> 30			
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz			
RETURN LOSS	dB	> 12			
MAX. POWER CONSUMPTION @ 13V PER OUTPUT	mA	50			
LNB MAX CURRENT @ 20V	mA	300			
DIMENSIONS LxHxP	mm	118x163x38	118x223x38	118x281x38	118x341x38



SCW916 SERIES



Up to 4 Orbital Positions

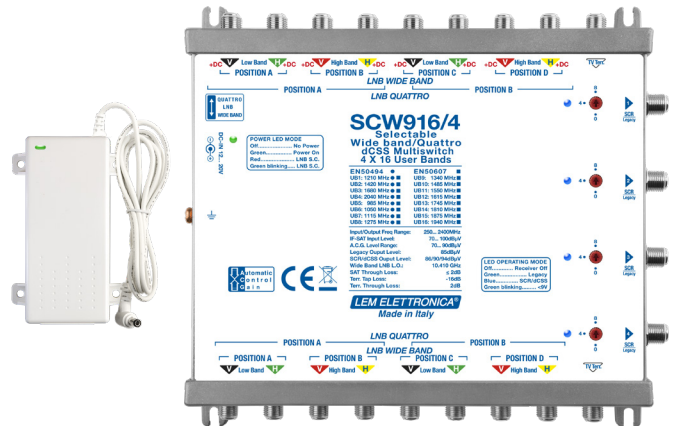


Selectable Quattro/WideBand Mode



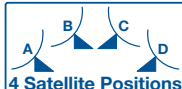
Up to 9dB Extra Power Level Output

- Legacy/SCR-dCSS automatic selection
- 16 User band for each output
- User band Freq. Plan up on customer request
- Diagnostic/Status Led
- DC input for multiswitch and LNB powering



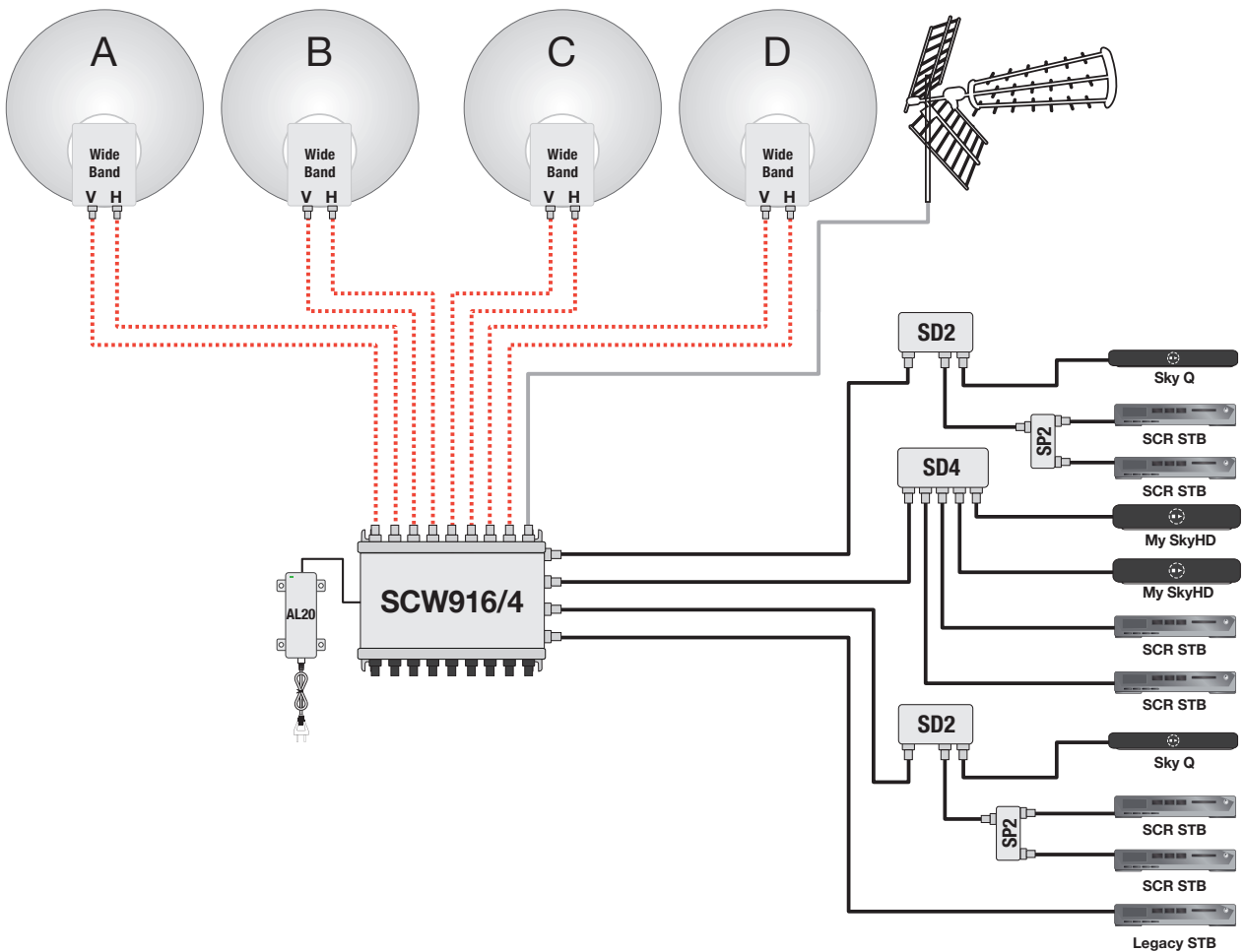
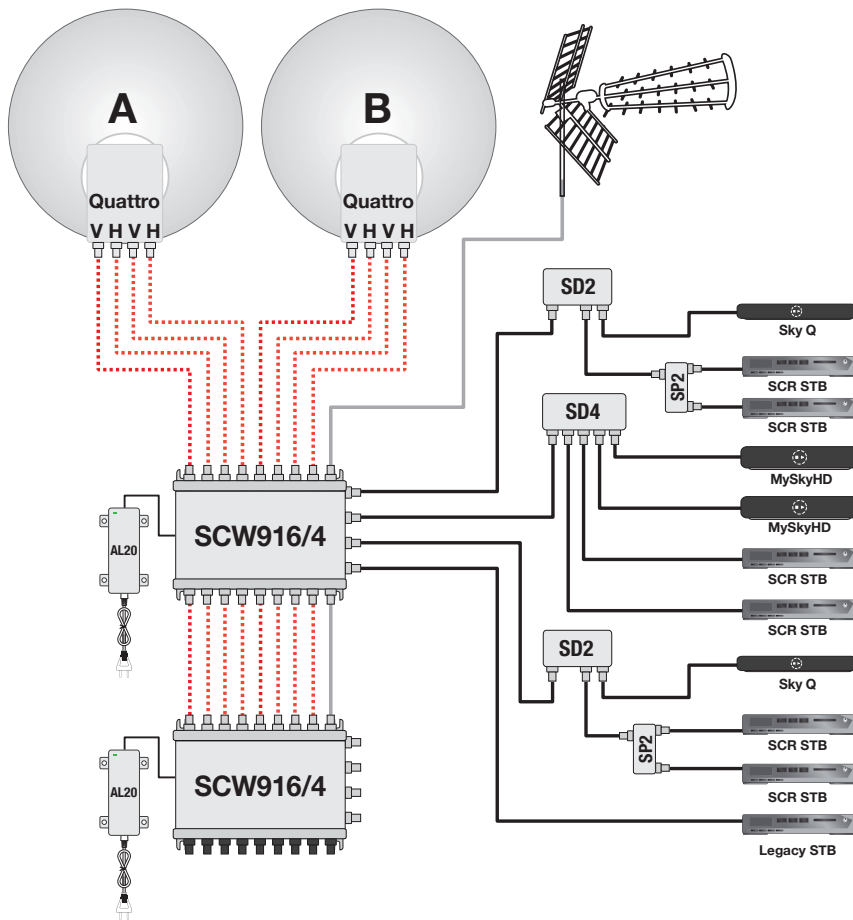
Designed for
4K HD

WIDEBAND
MULTISWITCH



5
WARRANTY YEARS

MODEL		SCW916/4	SCW916/4-20	SCW916/8	SCW916/8-20
TYPE		Cascadable			
INPUTS / OUTPUTS TRUNK		9 / 9			
OUTPUT/TAPS		4	4	8	8
SATELLITE TRUNK LINES FREQ. RANGE	MHz	250... 2400			
SATELLITE TRUNK LOSS	dB	≤ 2	≤ 2	≤ 4	≤ 4
SATELLITE INPUTS POWER LEVEL RANGE	dBμV	60... 100			
SATELLITE A.C.G. POWER LEVEL RANGE	dBμV	60... 90			
SATELLITE OUTPUT/TAP FREQ. RANGE	MHz	950... 2150			
MAX. LEGACY OUTPUT LEVEL	dBμV	85			
MAX. SCR-dCSS OUTPUT LEVEL	dBμV	86/90/94			
TV TERRESTRIAL TRUNK LINE FREQ. RANGE	MHz	5... 790			
TV TERRESTRIAL OUTPUT/TAP LOSS	dB	- 16	- 20	- 20	- 25
TV TERRESTRIAL TRUNK LOSS	dB	≤ 2	≤ 2	≤ 4	≤ 4
TV TERRESTRIAL RETURN PATH LOSS	dB	- 16	- 20	- 20	- 25
SATELLITE / TV TERRESTRIAL DIPLEXER ISOLATION	dB	≥ 50			
SCR/dCSS STANDARDS		Compliant with CENELC EN50494 (SCR) EN50607 (dCSS) SKY UK DSCR			
SCR/dCSS USER BANDS		16			
AVAILABLE USER BAND FREQUENCY PLANS		SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT			
LEGACY STANDARDS		13/18V 22KHz Universal Tone & Voltage			
DiSEqC SIGNALLING		DiSEqC 1.0 / 2.0 Compliant			
CROSSPOLARITY ISOLATION	dB	> 30			
TRUNK ISOLATION	dB	> 30			
PHASE NOISE	dBc/Hz	-90 @ DELTA F=1KHz			
RETURN LOSS	dB	> 12			
MAX. POWER CONSUMPTION @ 13V PER OUTPUT	mA	50			
LNB MAX CURRENT @ 20V	mA	500			
DIMENSIONS LxHxP	mm	200x188x38	200x188x38	200x350x38	200x350x38



HEADEND WIDE BAND AMPLIFIERS

- ▶ 4 Lines Wide Band Amplifiers 250... 2400 MHz
- ▶ Adjustable Gain
- ▶ Adjustable Slope
- ▶ Remote Power Line for Line Amplifiers
- ▶ PSU Equipped



MODEL		ASW2/30	ASW4/30	ASW5/30
INPUTS / OUTPUTS		2/2	5/5	5/5
FREQUENCY RANGE	MHz	250... 2400		
GAIN @ 290 MHz	dB	19		
GAIN @ 2400 MHz	dB	32		
SATELLITE MAXIMUM OUTPUT LEVEL (EN50083-3 -35dB IMA2)	dBμV	118		
SATELLITE NOISE FIGURE	dB	≤ 5		
GAIN ADJUSTERS	dB	2 x 0...-15	4 x 0...-15	4 x 0...-15
SLOPE ADJUSTERS	dB	2 x 0... +8	4 x 0... +8	4 x 0... +8
TV TERRESTRIAL RANGE	MHz	-	40... 790	40... 790
TV TERRESTRIAL GAIN	dB	-	0	30
TV TERRESTRIAL MAX. OUTPUT LEVEL (EN50083-3 -35dB IMA2)	dBμV	-	-	120
TV TERRESTRIAL NOISE FIGURE	dB	-	-	≤ 6
TV TERRESTRIAL GAIN ADJUSTER	dB	-	-	0... 10
INPUTS ISOLATION	dB	> 40		
OUTPUTS ISOLATION	dB	> 40		
RETURN LOSS	dB	> 12		
MAXIMUM CURRENT FOR REMOTE PWR LINE AMPLIFIERS		300	500	500
MAXIMUM CURRENT FOR LNB POWERING	mA	300	600	600
AMPLIFIER MAX. CONSUMPTION	mA	225	450	500
OPERATING TEMPERATURE RANGE	C°	0 - 50°		
DIMENSIONS	mm	138x82x33	148x108x38	
NOTE		PSU Equipped		

WIDE BAND LINE AMPLIFIERS

MODEL		ASW2/30L	ASW4/30L
INPUTS / OUTPUTS		3 / 3	5 / 5
FREQUENCY RANGE	MHz	250... 2400	
GAIN @ 290 MHz	dB	19	
GAIN @ 2400 MHz	dB	32	
SATELLITE MAXIMUM INPUT LEVEL (EN50083-3 -35dB IMA2)	dBμV	90	
SATELLITE MAXIMUM OUTPUT LEVEL (EN50083-3 -35dB IMA2)	dBμV	118	
SATELLITE NOISE FIGURE	dB	≤ 5	
GAIN ADJUSTERS	dB	2 x 0...-15	4 x 0...-15
SLOPE ADJUSTERS	dB	2 x 0... +8	4 x 0... +8
INPUTS ISOLATION	dB	> 40	
OUTPUTS ISOLATION	dB	> 40	
RETURN LOSS	dB	> 12	
AMPLIFIER MAX. CONSUMPTION	mA	225	450
OPERATING TEMPERATURE RANGE	C°	0 - 50°	
DIMENSIONS	mm	138x82x33	148x108x38

IF-SAT AMPLIFIERS

- ▶ Standard IF-SAT 950... 2200 MHz Amplifiers
- ▶ Adjustable Gain
- ▶ Adjustable Slope
- ▶ Fixed Slope for cable loss compensation
- ▶ PSU Equipped



MODEL		ASX4/30	ASX4/20
INPUTS / OUTPUTS		5 / 5	5 / 5
FREQUENCY RANGE	MHz	950... 2200	
GAIN @950 MHz	dB	24	15
GAIN @2150 MHz	dB	30	20
GAIN ADJUSTERS	dB	4 x 0... -15	
SLOPE ADJUSTER	dB	1 x 0...+5	
MAXIMUM OUTPUT LEVEL	dBμV*	118	118
NOISE FIGURE	dB	≤ 7	
INPUTS ISOLATION	dB	> 35	
OUTPUTS ISOLATION	dB	> 35	
RETURN LOSS	dB	> 12	
MAXIMUM CURRENT FOR LNB POWERING	mA	All inputs (Max. 600 or 300 for each input)	
AMPLIFIER MAX. CONSUMPTION	mA	400	200
MAX. TV TERR POWERING.		12V 200mA	
DIMENSIONS	mm	138x108x38	
NOTE		PSU Equipped	

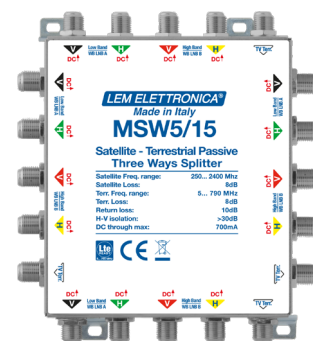
WIDE BAND SPLITTERS - 4 CABLE

MODEL		MSW4/8	MSW4/12
TYPE		2-Way	3-Way
INPUTS		4	
OUTPUTS		4+4	4+4+4
FREQUENCY RANGE		290 - 2400 MHz	
LOSS	dB	- 4	- 6
INPUTS ISOLATION	dB	> 40	
OUTPUTS ISOLATION	dB	> 40	
RETURN LOSS	dB	> 20	
MAX. CURRENT PASS THROUGH	mA	1.000	
DIMENSIONS	mm	85 x 95 x 27	95 x 95 x 27



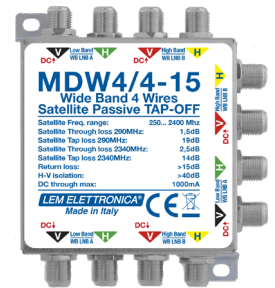
WIDE BAND SPLITTERS - 4 CABLE + TV TERR.

MODEL		MSW5/10	MSW5/15
TYPE		2-Way	3-Way
INPUTS		5	5
OUTPUTS		5+5	5+5+5
SATELLITE 290... 2400MHz LOSS	dB	4	7
TV TERR. 40... 790 MHz LOSS	dB	6	8
RETURN LOSS	dB	> 12	
MAX. CURRENT PASS THROUGH	mA	1000	
DIMENSIONS	mm	139x114x31	139x126x31



PASSIVE WIDE BAND 4 CABLE TAPS

MODEL	MDW4/4-10	MDW4/4-15	MDW4/4-20
FREQUENCY RANGE	250 - 2400 MHz		
INPUTS	4		
OUTPUTS	4		
TAPS	4		
TRUNK LOSS	- 0,7 dB		
TAPS LOSS	- 10 dB	- 15 dB	- 20 dB
INPUTS / OUTPUTS ISOLATION	> 40 dB		
RETURN LOSS	> 15 dB		
MAX. CURRENT PASS THROUGH	1.000 mA		
DIMENSIONS	96x 86 x 27		



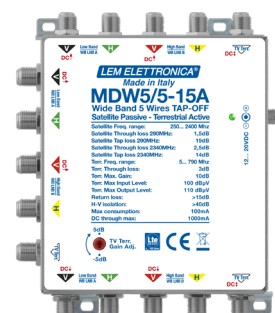
PASSIVE WIDE BAND 4 CABLE + TV TERR. TAPS

MODEL		MDW5/5-10	MDW5/5-15	MDW5/5-20
SATELLITE FREQUENCY RANGE	MHz	250... 2400		
SATELLITE INPUTS / OUTPUTS		4		
SATELLITE TAPS		4	4	4
SATELLITE TRUNK LOSS	dB	2,5	2,5	2,5
SATELLITE TAP LOSS	dB	10	15	20
TV TERRESTRIAL FREQUENCY RANGE	MHz	5... 790		
TV TERR. INPUT / OUTPUT		1		
TV TERRESTRIAL TAP		1		
TV TERRESTRIAL TRUNK LOSS	dB	3	1,5	1
TV TERRESTRIAL TAP LOSS	dB	8,5	12,5	17
INPUTS / OUTPUTS ISOLATION	dB	> 30		
RETURN LOSS	dB	> 10		
MAX. CURRENT PASS THROUGH	mA	700		
DIMENSIONS	mm	118x140x30		



PASSIVE WIDE BAND 4 CABLE + TV TERR. ACTIVE TAPS

MODEL		MDW5/5-10A	MDW5/5-15A
SATELLITE FREQUENCY RANGE	MHz	250... 2400	
SATELLITE INPUTS / OUTPUTS		4	
SATELLITE TAPS		4	4
SATELLITE TRUNK LOSS	dB	2,5	2,5
SATELLITE TAP LOSS	dB	10	15
TV TERRESTRIAL FREQUENCY RANGE	MHz	5... 790	
TV TERR. INPUT / OUTPUT		1	
TV TERRESTRIAL TAP		1	1
TV TERRESTRIAL TRUNK LOSS	dB	3	1,5
TV TERRESTRIAL TAP GAIN ADJUSTABLE	dB	-5... 5	-5... 5
INPUTS / OUTPUTS ISOLATION	dB	> 30	
RETURN LOSS	dB	> 10	
VOLTAGE LINE		VL + HL	
MAX. COURRENT PASS THROUGH	mA	1000	
DIMENSIONS	mm	118x140x30	
NOTE		PSU Equipped	



WIDE BAND LNB

MODEL		LNWB1
INPUT FREQ. RANGE	GHz	10.7... 12.75
OUTPUT FREQ. RANGE	MHz	290... 2340
L.O.	GHz	10,41
GAIN	dB	55 Typ.
NOISE FIGURE	dB	1.0 Typ.
MAX. CONSUMPTION @15V	mA	70



SWITCHING PSU 20V-45W FOR dCSS MSW

MODEL		AL20
INPUT	V	90.... 260
OUTPUT	V	20
MAX. OUTPUT COURRENT	A	2,5
MAX. OUTPUT POWER	W	45
DIMENSIONS	mm	58 x 56 x 27



USB - dCSS MSW TESTER & PROGRAMMER

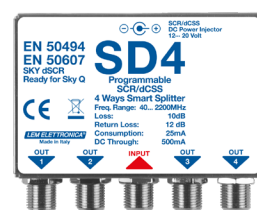
Programmer to change and personalize the set up of the User Band frequency slots in dynamic or static mode. It can be programmed to send SCR-dCSS-SKY UK DSCR messages to check the dCSS/SCR Multiswitch outputs.

MODEL		PSCD-01
FREQUENCY RANGE	MHz	5... 2200
INSERTION LOSS	dB	1
PC INTERFACE		USB
DIMENSIONS	mm	102x48x27



PROGRAMMABLE SMART SPLITTERS

MODEL		SD2	SD4
TYPE		2 Way	4 Way
INPUT / OUTPUTS FREQ. RANGE	MHz	5... 2400	
LOSS 40... 2200 MHz	dB	4 Typ.	10 Typ.
RETURN LOSS	dB	> 2	
MAX CONSUMPTION	mA	25	
DIMENSIONS	mm	59x45x31	72x65x27



SCR/dCSS DC INJECTOR

MODEL		SW-DCSS
FREQUENCY RANGE	MHz	5... 2200
THROUGH LOSS	dB	1
INS. MAX. CURRENT	mA	1000
DIMENSIONS	mm	58 x 56 x 27
NOTE		PSU Equipped



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