UNITRON GROUP 9739 dSCR Add-On Multiswitch from Alltrade User Manual

9739 dSCR Add-On Multiswitch from Alltrade
User Manual

Contents

INSTALLATION OF THE HARDWARE

1.1. Quattro LNB with multiswitch
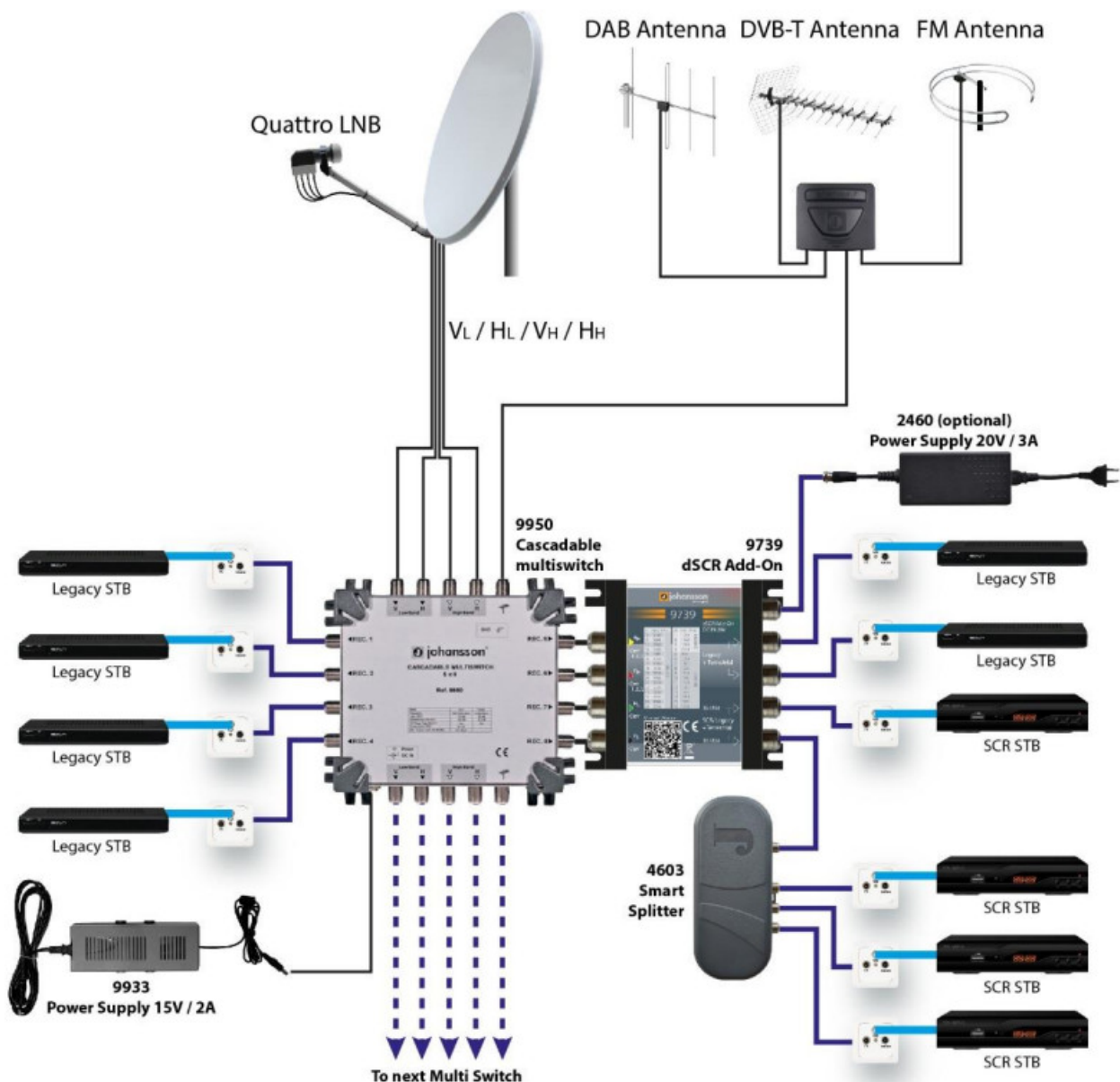
1.2. Quad LNB
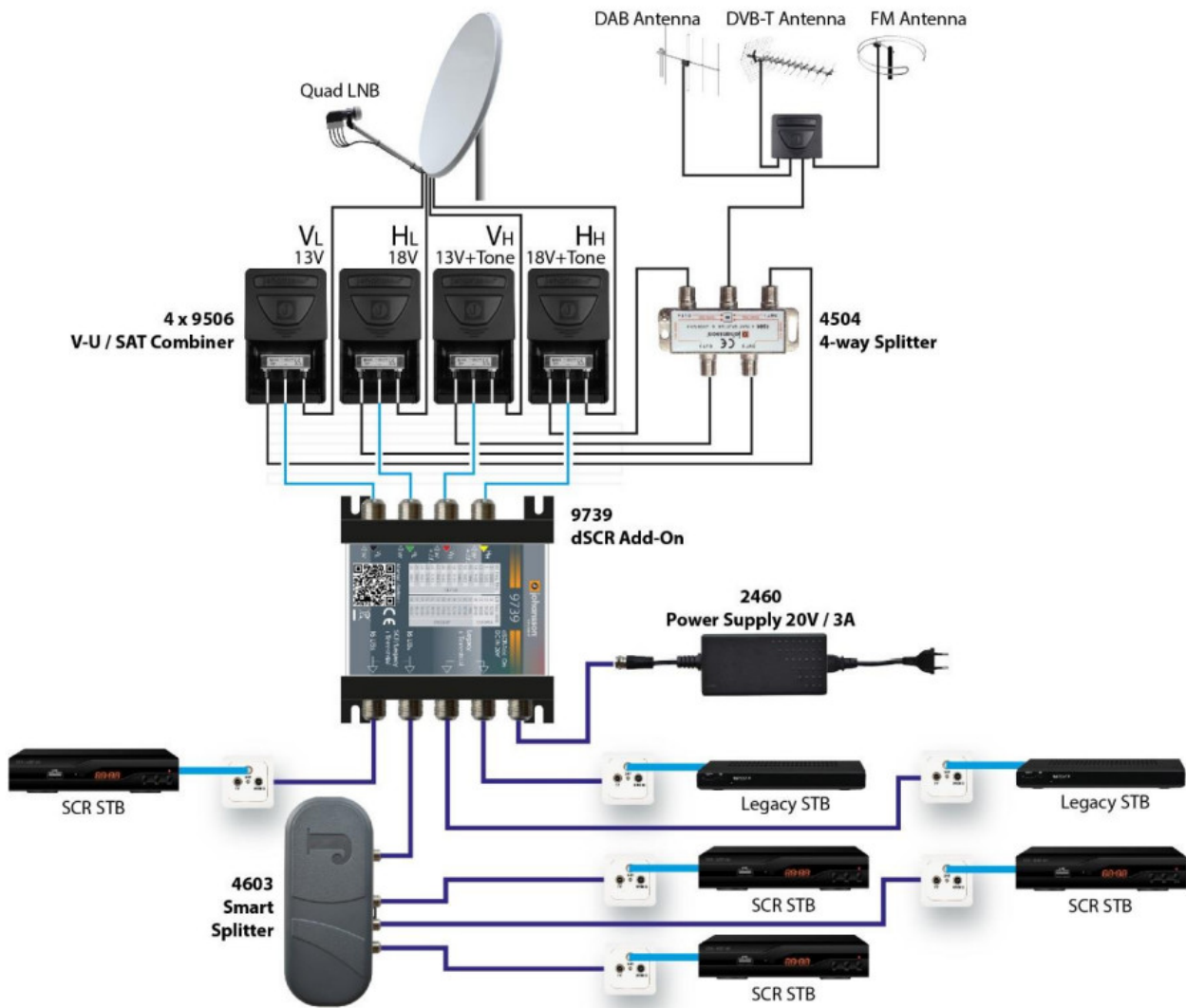
CONFIGURATION OF THE MODULE

The 9739 can be used with Quattro or Quad LNB types and will output in Legacy or SCR mode.
Schematically the units support the following modes and applications:

Outputs

	Quattro/Quad LNB
Legacy	Universal multiswitch
SCR/SCR	SCR multiswitch

2.1. Output: Legacy versus SCR
Independent of the selected input mode, the 2 lower output ports (SCR) can support Legacy and SCR/SCR STBs.
The upper 2 output ports (Legacy) only support Legacy.
At startup, the SCR outputs work in Legacy mode and can be used as a universal multiswitch.
Upon receiving the first SCR command, the SCR outputs will automatically switch into SCR mode in which supports the following standards:
EN50494/SCR standard (DiSEqC 1.0)
STBs that only support EN50494 will only be able to use the first 4, user bands.

EN50607/dCSS/dSCR standard (DiSEqC 2.0)

STBs that support the newer EN50607 will be able to use the other 12 user bands (UB5 –UB16). This is typically for new multi-tuner STBs with 8 or 12 tuners, like SkyQ or other Home Media Gateways (HMG).

CONCURRENT EN50494/EN50607 standards

For upgrading existing SCR installations where the main STB is upgraded to Next Gen PVR (like SkyQ), the dSCR multiswitch can support both standards simultaneously. In this case, a mix of STBs can be supported:

- The existing STBs will use UB1 through UB4

- The new main STB will use UB5 through UB16

- In this case, DiSEqC 1.0 and DiSEqC 2.0 will be used over the same cable from LNB to the apartment

SKY UK standard

This is for Installations with the SKY Q-Box:

- SkyQ will have 16 user bands available

- Signaling DiSEqC 1.0 or 2.0 will be used.

For an overview, please see the table in chapter 3: Technical Specifications.
To return back to legacy mode, that output has to be reset. This can be done by removing the DC from the STB output connector. The 2 outputs are independent, so resetting (= empowering) 1 output does not affect the other output.

2.2. DC Power

Powering the units can be done in 2 ways:

1. From STBs: each STB has to power its connected unit. In this case, the power for the LNB will also be taken from the STB.

2. From DC IN: when connecting an external power supply to the 9739, the STBs do not need to power its connected unit.

   A power supply (Ref 2460) is designed to power the dSCR multiswitch including the Quattro or Quad LNB.

dCSS/dSCR Multiswitch (Ref. 9739) v1.0

Block diagram of the DC paths inside the 9739:
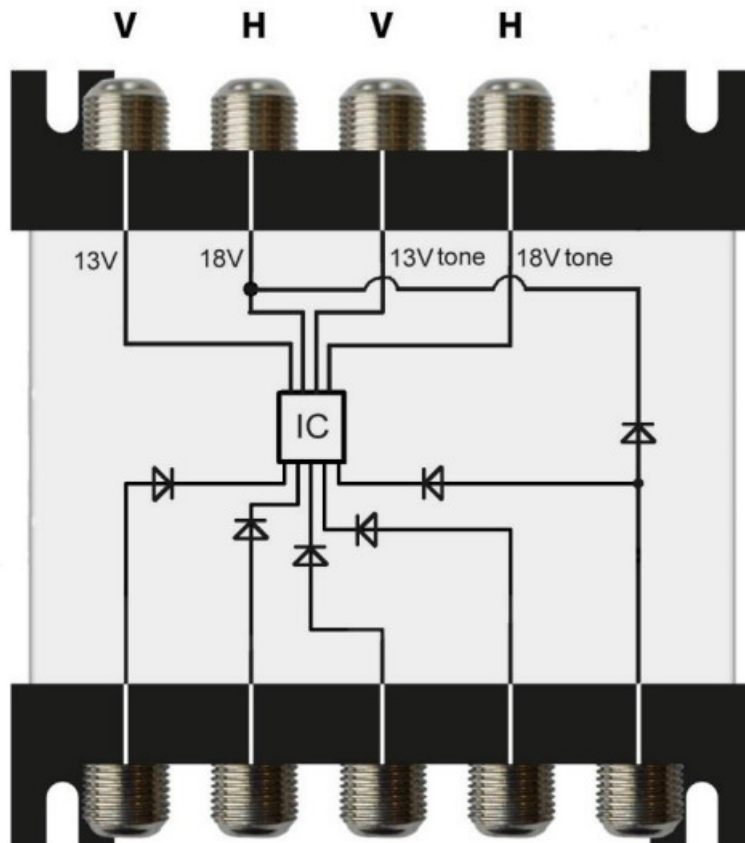
TECHNICAL SPECIFICATIONS

Inputs	–	4 ports Terrestrial + Satellite
Input Frequency	MHz	5 – 862 / 950 – 2150
STB Output Frequency	MHz	5 – 862 / 950 – 2150
dCSS/dSCR outputs	–	2 legacy only 2 SCR/legacy (auto detection)
dCSS/dSCR output connector	Ohm	75 F type (Female)
dCSS/dSCR UBs	–	16 per SCR output
dCSS/dSCR output level	dBm	-21
Satellite input power level	dBm	-45 to -15
Return loss	dB	>=8 (Typ 12)
Tap loss SCR	dB	Not applicable, AGC (automatic Gain control)
Tap loss legacy	dB	0 typical
Terrestrial/Cable loss	dB	-7 typical
Band and polarity selection		Universal LNB voltage & Tone DiSEqC 1.0 (unidirectional) DiSEqC 2.0 (bidirectional) Standard EN 50494 (SCD) Standard EN 50607 (SCD 2) SKY UK standard
Max DC current consumption Legacy only ports	vii	<2
Max DC current consumption SCR/Legacy ports	IN	<4,2
DC power pass from STB to input ports	V	13/18/22kHz 100mA max per port
From DC power port to input ports	V	13/18/22kHz 100mA max per port 1A max to HL port
Power supply	–	From STB or power inserter
Power (2460 available separately)	A	3.0 max, 20V
Dimensions	mm	90x85x40

UB index	UB center frequency (MHz)	UB default BW (MHz)	Protocol	Compatible STBs
1	1210	46	EN50494	
2	1420	46	EN50494	

3	1680	46	EN50494	SCR-compatible STB and PVR
4	2040	46	EN50494	
5	985	46	EN50607	New multi-tuner STBs with up to 8 or 12 tuners
6	1050	46	EN50607	
7	1115	46	EN50607	
8	1275	46	EN50607	
9	1340	46	EN50607	
10	1485	46	EN50607	
11	1550	46	EN50607	
12	1615	46	EN50607	
13	1745	46	EN50607	
14	1810	46	EN50607	
15	1875	46	EN50607	
16	1940	46	EN50607	
3	1680	46	SKY UK	SkyQ or similar
9	1280	46	SKY UK	
11	1380	46	SKY UK	
14	1480	46	SKY UK	
15	980	46	SKY UK	
16	1030	46	SKY UK	
17	1080	46	SKY UK	
18	1130	46	SKY UK	
19	1530	46	SKY UK	
20	1580	46	SKY UK	
21	1630	46	SKY UK	
22	1730	46	SKY UK	
23	1780	46	SKY UK	
24	1830	46	SKY UK	

25	1880	46	SKY UK	
26	1930	46	SKY UK	

SAFETY INSTRUCTIONS

Read these instructions carefully before connecting the unit

To prevent fire, short circuit or shock hazards:

- Do not expose the unit to rain or moisture.
- Install the unit in a dry location without infiltration or condensation of water.
- Do not expose it to dripping or splashing.
- Do not place objects filled with liquids, such as vases, on the apparatus.
- If any liquid should accidentally fall into the cabinet, disconnect the power plug.

To avoid any risk of overheating:

- Install the unit in a well aery location and keep a minimum distance of 15 cm around the apparatus for sufficient ventilation
- Do not place any items such as newspapers, tablecloths, or curtains, on the unit that might cover the ventilation holes.
- Do not place any naked flame sources, such as lighted candles, on the apparatus
- Do not install the product in a dusty place
- Use the apparatus only in moderate climates (not in tropical climates)
- Respect the minimum and maximum temperature specifications

To avoid any risk of electrical shocks:

- Connect apparatus only to socket with protective earth connection.
- The mains plug shall remain readily operable
- Pull out the power plug to make the different connections of cables
- To avoid electrical shock, do not open the housing of the adapter.

Maintenance

Only use a dry soft cloth to clean the cabinet.

Do not use solvent

For repairing and servicing refer to qualified personnel.

🗑️ **Dispose of according to your local authority's recycling processes**

CONDITIONS OF WARRANTY

Unitron N.V. warrants the product as being free from defects in material and workmanship for a period of 24 months starting from the date of production indicated on it. See note below.
If during this period of warranty the product proves defective, under normal use, due to defective materials or workmanship, Unitron N.V, at its sole option, will repair or replace the product. Return the product to your local dealer for reparation

THE WARRANTY IS APPLIED ONLY FOR DEFECTS IN MATERIAL AND WORKMANSHIP AND DOES NOT COVER DAMAGE RESULTING FROM:

- Misuse or use of the product out of its specifications.
- Installation or use in a manner inconsistent with the technical or safety standards in force in the country where the product is used
- Use of non-suitable accessories (power supply, adapters…).
- Installation in a defective system.
- External causes beyond the control of Unitron N.V. such as drops, accidents, lightning, water, fire, improper ventilation…

THE WARRANTY IS NOT APPLIED IF

- Production date or serial number on the product is illegible, altered, deleted or removed.
- The product has been opened or repaired by a non-authorized person.

NOTE
Date of production can be found in the product's serial number code. The format will either be "YEAR W WEEK" (e.g., 2016W01 = year 2016 week 1) or "YYWW" (e.g., 1447 = year 2014 week 47).

www.unitrongroup.com
UNITRON NV
Frankrijklaan 27
B-8970 Poperinge
Belgium

Documents / Resources

User Manual

dCSS/dSCR Add-On
9739

UNITRON GROUP 9739 dSCR Add-On Multiswitch from Alltrade [pdf] User Manual
9739 dSCR Add-On Multiswitch from Alltrade, 9739, dSCR Add-On Multiswitch from Alltrade

Manuals+,