User Manual

dCSS Stacker

Ref. 9738

CONTENTS

1. INSTALLATION OF THE HARDWARE 3
1.1. Quattro LNB with legacy multiswitch 3
1.2. Twin LNB 4
1.3 Two twin LNBs and terrestrial antenna with Twin DiSEqC Multiswitch 5
2. USE OF THE MODULE 6
2.1. Output dual Userband dSCR with Terrestrial 6
EN50494/SCR standard (DiSEqC 1.0) 6
EN50607/dCSS/dSCR standard (DiSEqC 2.0) 6
2.2. DC Power 6
3. TECHNICAL SPECIFICATIONS 8
4. SAFETY INSTRUCTIONS 9
5. CONDITIONS OF WARRANTY 10

No part of this manual may be copied, reproduced, transmitted, transcribed or translated into any language without permission.

Unitron reserves the right to change the specifications of the hardware and software described in these manuals at any time.

Unitron cannot be held liable for any damages resulting from the use of this product. Specifications are subject to change without notice. 8/17

© Unitron - Frankrijklaan 27 - B-8970 Poperinge - Belgium

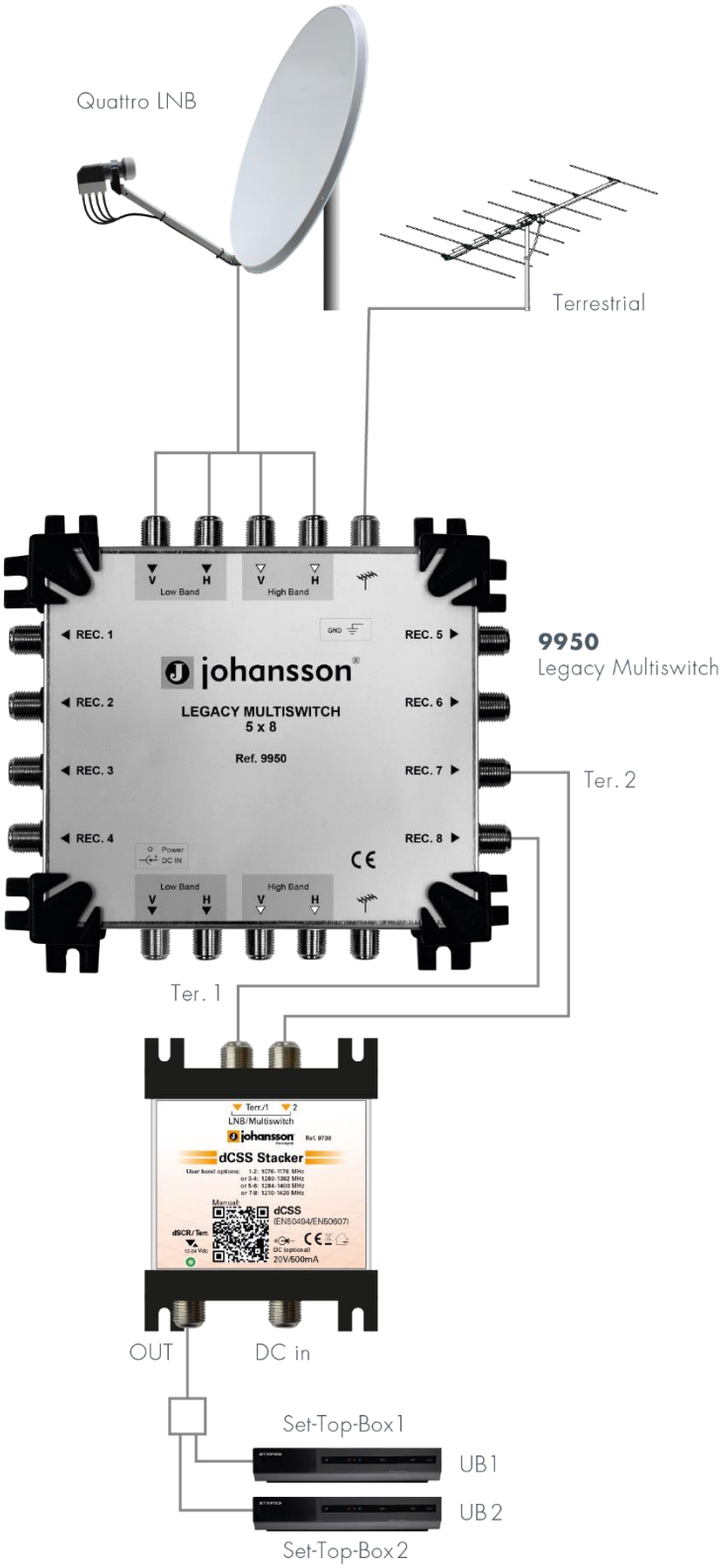
T +32 57 33 33 63 **F** +32 57 33 45 24

email sales@unitrongroup.com

www.unitrongroup.com

1. INSTALLATION OF THE HARDWARE

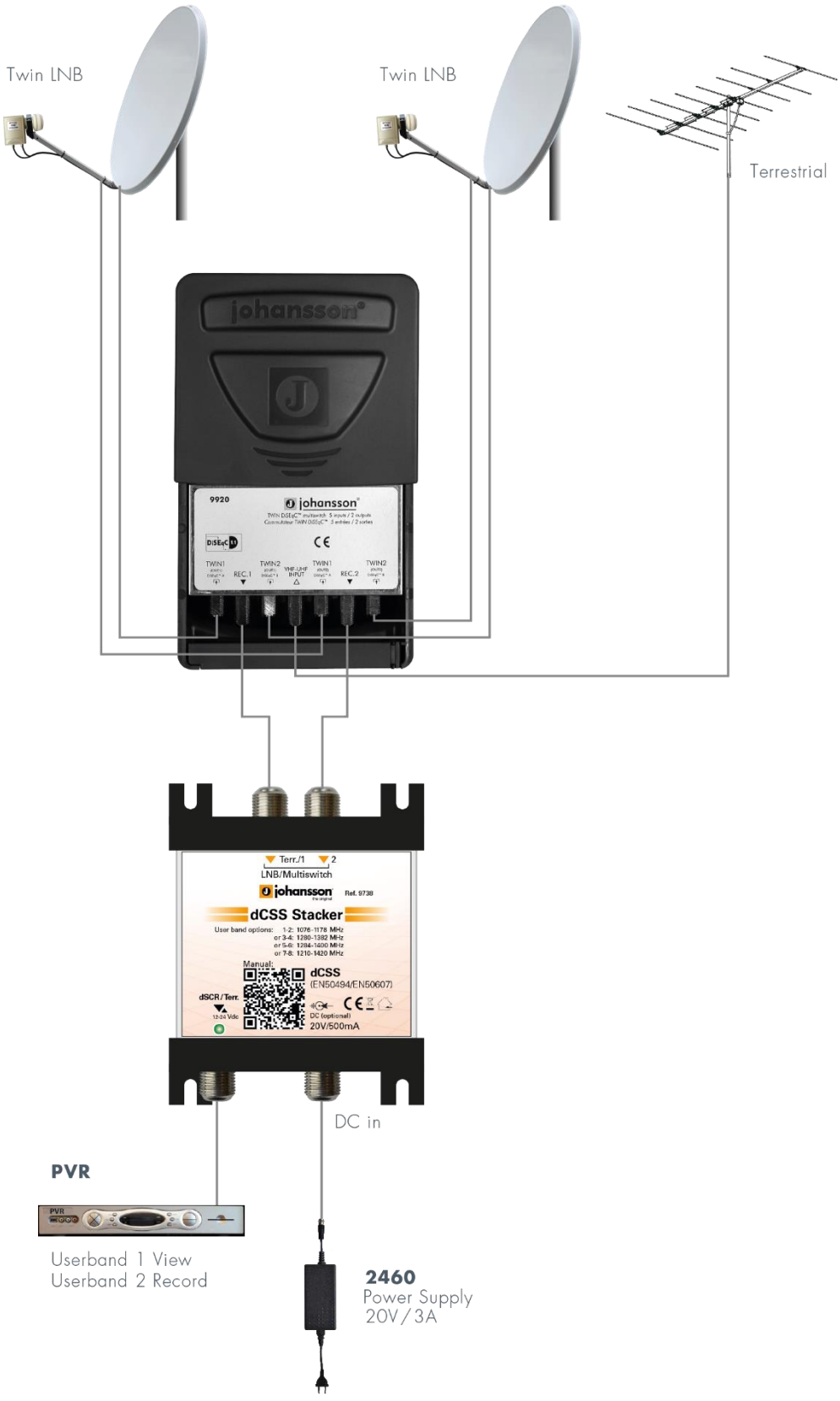
1.1. Quattro LNB with legacy multiswitch



1.2. Twin LNB

Twin LNB
13V
18V
13VT
18VT
Terr./1
2
LNB/Multiswitch
johansson
Ref. 9738
dCSS Stacker
User band options:
1-2: 1076-1178 MHz
or 3-4: 1280-1382 MHz
or 5-6: 1284-1400 MHz
or 7-8: 1210-1420 MHz
Manual:
dCSS
(EN50494/EN50607)
dSCR/Terr.
12-24 Vdc
DC (optional)
20V/500mA
DC in
PVR
Userband 1 View
Userband 2 Record
2460
Power Supply
20V/3A

1.3 Two twin LNBs and terrestrial antenna with Twin DiSEqC Multiswitch



2. USE OF THE MODULE

The 9738 can be used with Quattro or Universal LNB types and will only output in SCR mode. Schematically the units support the following modes and applications:

2.1. Output dual Userband dSCR with Terrestrial

Upon receiving the dSCR command, the SCR output will automatically tune to the desired userband. Only 2 userbands can be tuned and supports the following standards:

EN50494/SCR standard (DiSEqC 1.0)

EN50607/dCSS/dSCR standard (DiSEqC 2.0)

STBs that support EN50494 or EN50607 will be able to use userbands 1284 & 1400MHz.

The green LED is on when the unit is powered. The green LED will blink when receiving a valable dSCR command.

Input port 1 will use Userband 1 (1076 MHz), 3 (1280 MHz), 5 (1284 MHz) **or** 7 (1210 MHz).
Input port 2 will use Userband 2 (1178 MHz), 4 (1382 MHz), 6 (1400 MHz) **or** 8 (1420 MHz).
Note: only the following combinations of Userbands are possible: Userbands 1-2 **or** 3-4 **or** 5-6 **or** 7-8.

The terrestrial signal is only loop through via input port 1.

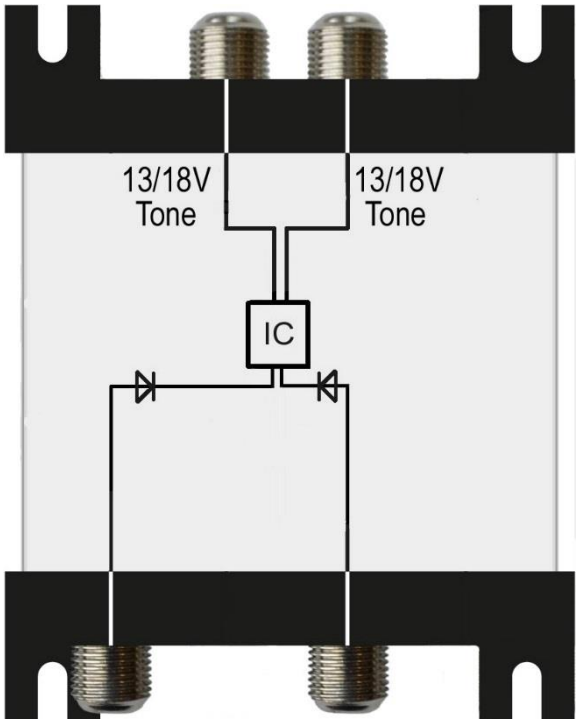
2.2. DC Power

Powering the unit can be done in 2 ways:

1. **From STBs:** each STB can power the 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 9738, the STBs do not need to power the unit.

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

Block diagram of the DC paths inside the 9738:



3. TECHNICAL SPECIFICATIONS

		9738
Inputs	-	2 Satellite ports, combined with Terrestrial on port 1
Input Frequency	MHz	Userbands 1-2: 1076 - 1178 MHz or Userbands 3-4: 1280 - 1382 MHz or Userbands 5-6: 1284 - 1400 MHz or Userbands 7-8: 1210 - 1420 MHz
STB Output Frequency	MHz	5 – 862 / 950 – 2150
dCSS/dSCR outputs	-	1 SCR
dCSS/dSCR output connector	Ohm	75 F type (Female)
dCSS/dSCR UBs	-	2 on SCR output
dCSS/dSCR output level	dBm	-23
Satellite input power level	dBm	-45 to -15
Return loss	dB	>=8 (Typ 12)
Tap loss SCR	dB	Not applicable, AGC (automatic Gain control)
Terrestrial/Cable loss	dB	-7 typical
Band and polarity selection	-	DiSEqC 1.0 (unidirectional) DiSEqC 2.0 (bidirectional) Standard EN 50494 (SCD) Standard EN 50607 (SCD 2)
Max DC current consumption SCR port	W	<4,0
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 500mA max combined
Power supply	-	From STB or power inserter
Power (Ref. 2460 available separately)	A	500mA max, 20V
Dimensions	mm	90x85x40

UB index	UB center frequency (MHz)	UB default BW (MHz)	Protocol	Compatible STBs
1	1076	46	EN50494 and EN50607	SCR compatible STB and PVR
2	1178			
3	1280			
4	1382			
5	1284			
6	1400			
7	1210			
8	1420			

4. SAFETY INSTRUCTIONS

Read these instructions carefully before connecting the unit

To prevent fire, short circuit or shock hazard:

- 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, table-cloths, 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 power plug to make the different connections of cables
- To avoid electrical shock, do not open the housing of 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 according your local authority's recycling processes

5. 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 defect system.
- External cause beyond the control of Unitron N.V. such as drop, 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., 2017W01 = year 2017 week 1) or "YYWW" (e.g., 1747 = year 2017 week 47).

www.unitrongroup.com

UNITRON NV
Frankrijklaan 27
B-8970 Poperinge
Belgium

T +32 57 33 33 63
F +32 57 33 45 24

sales@unitrongroup.com
www.unitrongroup.com