

# User Manual

## dCSS/dSCR Multiswitch 9731MC





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## **1. INSTALLATION OF THE HARDWARE**





## **2.** CONFIGURATION OF THE MODULE

## **Installation Mode**

The device starts up in installation mode to check the equipment functionality and the correct installation. In this mode the automatic gain control is frozen (commands for activating the AGC are required). The multiswitch switches to SCR/CSS mode upon receiving a DiSEqC message.

To activate one or more of the UBs a proper DiSEqC message should be received.

The installation mode starts up with the following 2 transponders active (both output signals are having a fixed gain):

- Transponder 58 (Frequency: 11880 Vertical) placed in output IF 1281.
- Transponder 101 (Frequency: 12731 Horizontal) placed in output IF 2131.

### **CSS Mode**

#### ONLY EN50494/SCR standard

For Installation with Legacy STB and PVR SCR compatible:

- Max 8 User Bands (UB0 to UB7) available (as in the LNB SCR)
- Signalling DiSEqC 1.0

#### ONLY EN50607/dCSS standard

For NEW Installation of HMG:

- 16 User Bands for HMG in the range from UB0 to UB15
- Signalling DiSEqC 1.0 or 2.0

#### CONCURRENT EN50494/EN50607 standards

For existing MULTIVISION installations (Legacy STB/PVR SCR compatible), with main STB upgraded to Next Gen PVR/HMG:

- Max 8 User Bands (UB0 to UB7) available for current STB/PVR
- 16 User Bands for HMG in the range from UB0 to UB15
- Signalling DiSEqC 1.0 + signalling DiSEqC 2.0 in the same cable from LNB to apartment



## **3. TECHNICAL SPECIFICATIONS**

9731MC							
Trunk inputs	-	4					
Trunk outputs	-	4					
Frequency (MHz)	-	950 – 2150					
Trunk loss	-	1 dB					
dCSS/dSCR outputs	-	1					
dCSS/dSCR output connector	-	75 Ohm F type (Female)					
dCSS/dSCR UBs	-	16					
dCSS/dSCR output level	-	85 dBµV					
Return loss	-	- >=8 dB (Typ 12 dB)					
Tap loss	-	Not applicable, AGC (automatic Gain control)					
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	-	< 300mA @ 13 Volt					
Power supply	-	From STB, power inserter or trunk (VL)					
Power inserter (2460+9669 available separately)	-	3A, 20V					



UB index	UB center frequency (MHz)	UB default BW (MHz)		Usage
0	1210	40	EN50494	
1	1420	40	EN50494	
2	1680	40	EN50494	
3	2040	40	EN50494	Legacy STB and PVR
4	1006	40	EN50494	SCR compatible
5	1057	40	EN50494	
6	1108	40	EN50494	
7	1159	40	EN50494	
0	1210	40	EN50607	
1	1420	40	EN50607	
2	1680	40	EN50607	
3	2040	40	EN50607	
4	1006	40	EN50607	
5	1057	40	EN50607	
6	1108	40	EN50607	
7	1159	40	EN50607	LIMC 16 tuporo
8	1261	40	EN50607	HMG 16 tuners
9	1312	40	EN50607	
10	1363	40	EN50607	
11	1471	40	EN50607	
12	1522	40	EN50607	
13	1573	40	EN50607	
14	1624	40	EN50607	
15	1731	40	EN50607	



## 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

A 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 is YYWW format, example 1447 = year 2014 – week 47. For the serial number barcodes, the date corresponds to the 4 first numbers



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