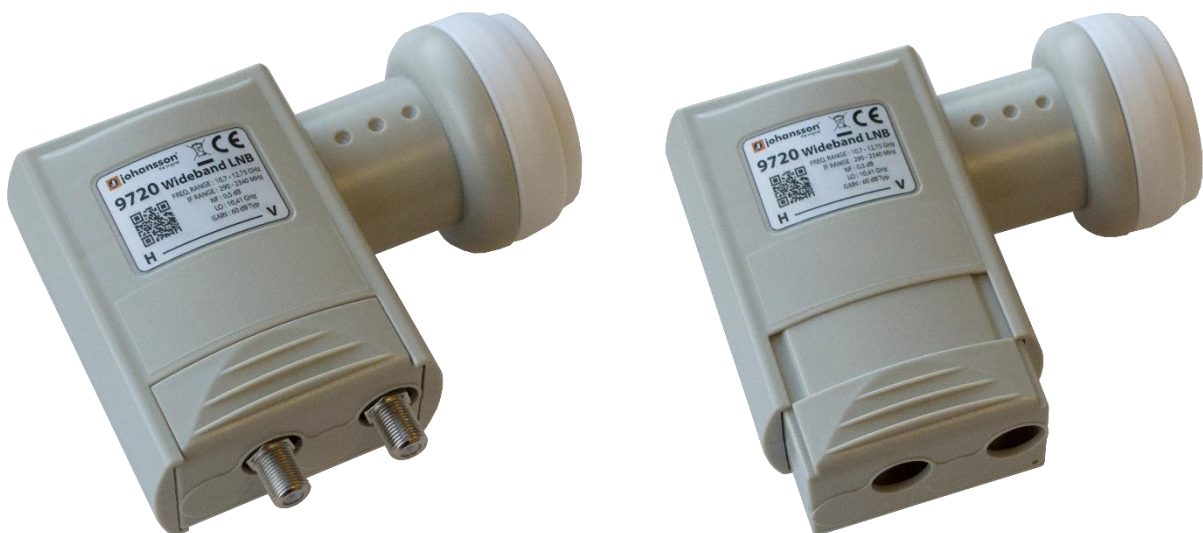




# User Manual

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## Wideband LNB (Ref. 9720)



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## 1. INTRODUCTION

Wideband Satellite Distribution is a new and more efficient way of distributing satellite signals. While in universal LNBs, the Ku band is split into a low and high band for both vertical and horizontal polarisation, the wideband LNB converts each polarisation as a whole, leaving only 2 cables coming from the LNB. This is a much more efficient way of distribution, with the following benefits:

- Lower power consumption in all products of the distribution
- Lower cost of the products
- Less cables needed, making the installation cheaper
- Less connections, which leads to a more reliable system

## 2. SAFETY INSTRUCTIONS



**Read these instructions carefully before connecting the unit**



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.

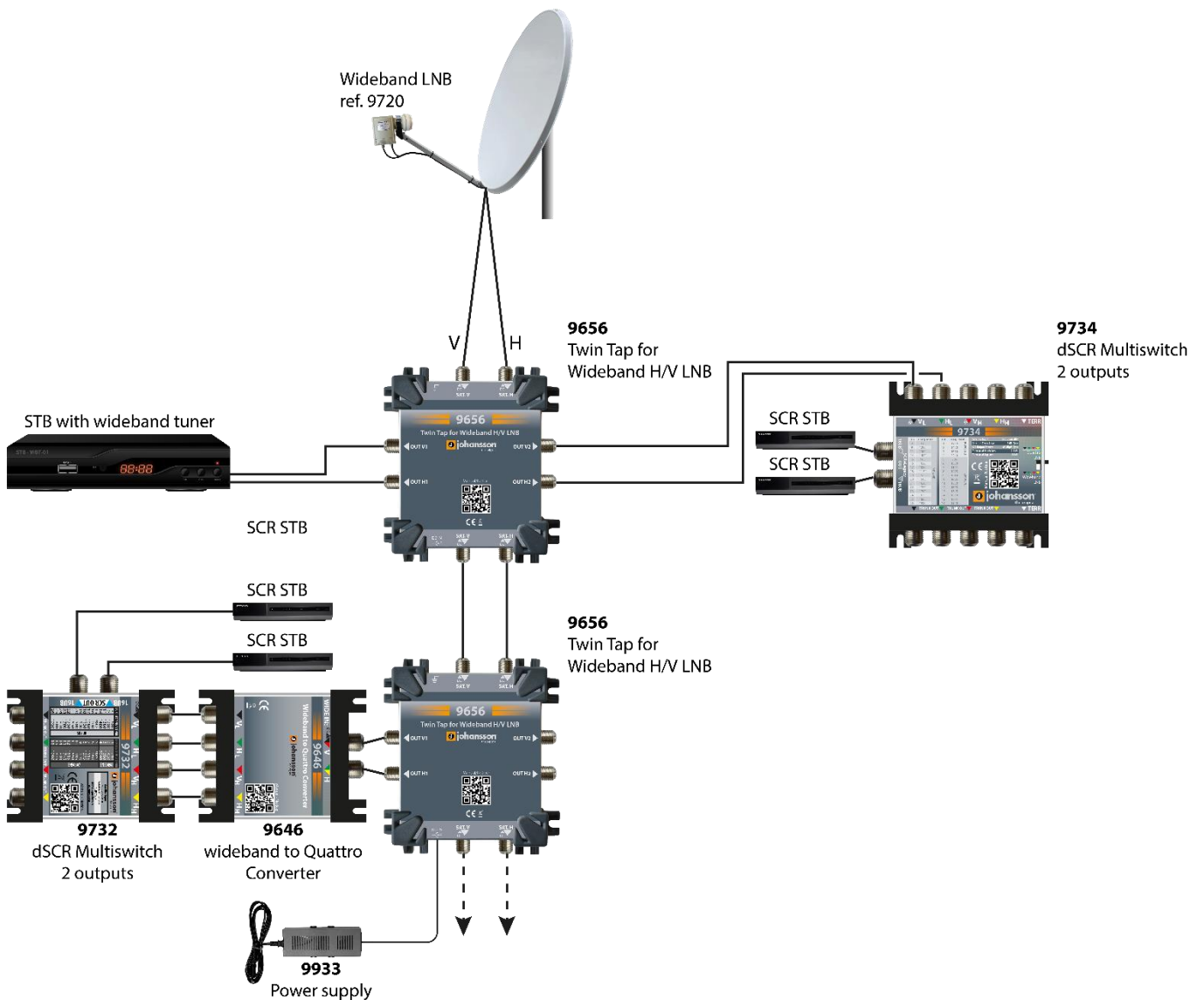


**Dispose according to your local authority's recycling processes**

### 3. PRODUCT DESCRIPTION

The Wideband LNB receives any standard Ku satellite and generates a Horizontal and Vertical IF signal. Each output contains both the low and the high band of the polarization. The signal can be split or tapped and distributed to multiple STB's with wideband compatible tuners.

The Wideband LNB can also be used in MDU's where there are still end-users without wideband tuners. The wideband signal can be converted to 4 satellite bands using the Wideband to Quattro converter, Ref. 9646 and subsequently distributed by a dSCR MultiSwitch to multiple tuners that are not wideband compatible.



## **Installing the Wideband LNB**

Proper installation and adjustment of the feedhorn is critical to system performance. It is particularly important to install the Wideband LNB correctly in order to receive optimal signal quality.

LNB installation is usually straightforward, especially if you already have a dish installed.

1. You should gather a screwdriver, wrench, or other appropriate fastener tools and a coaxial cable.
2. If there's already an LNB attached to your dish, carefully disconnect its connectors. Unscrew the coax cable connectors and store them where they won't get crushed or bent.
3. Using the screwdriver or wrench, unfasten the bolts that hold the existing LNB in place. Be careful not to jar the mast holding the dish or knock the dish out of alignment. After removing the screws or bolts, you should be able to pull the LNB up and off the mount arm. If your LNB is located behind the dish or held by a captive arm bracket, this process may be slightly different.
4. Attach the new LNB to the arm the same way the original was connected.
5. Connect a field strength analyser to the LNB and analyse the signal quality of one satellite transponder from either the horizontal or vertical band. Change the skew and focus position of the LNB to optimize the signal quality (i.e., make sure you receive a maximum MER on the measured transponders). It might be possible that you need to re-align the satellite dish to receive the best signal quality.
6. Tighten the bolts as much as you can, but don't strip their heads or nuts and check if the signal quality (or MER) didn't change.
7. Hook up the coax cables to the LNB's connectors and pull down the sleeve to cover the connectors.
8. Plug the connectors into your wideband compatible STB. If you want to connect to an SCR STB, check the application scheme above.

## 4. TECHNICAL SPECIFICATIONS

9720 Wideband LNB		
Input	-	1Ku
Input frequency	MHz	10700 – 12750
Outputs	-	2 (V & H)
Output frequency	MHz	290 – 2340
LO frequency	MHz	10410
Conversion gain	dB	Typical 55
Noise figure	dB	Typical 0,5
Cross polarization isolation	dB	25
Output power	dBm	-30*
DC supply voltage	VDC	9 – 20
Power consumption	W	< 1
Operating temperature	°C	-40 to +60
LNB mount fitting	mm	40
Dimensions	mm	135 x 120 x 60

\* output power depends on dish size and the satellites EIRP

## 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 code, the date corresponds to the 4 first numbers



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