

User Manual

Wideband-Amplifier

WBV 220 PRO

Art. Nr: 57004068



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1. Introduction

Product Description

The WBV 220 PRO has been designed to amplify Wideband and Universal TV signals for home installations and distribution systems. The WBV 230 has separate inputs for two polarities or bands. The different signals are levelled individually and automatically by the device.

The WBV 220 PRO

- 2 Inputs (Vertical and Horizontal)

- 2 Outputs (Vertical and Horizontal)

- AGC (Automatic Gain Control) and ASC (Automatic Slope Control) per output

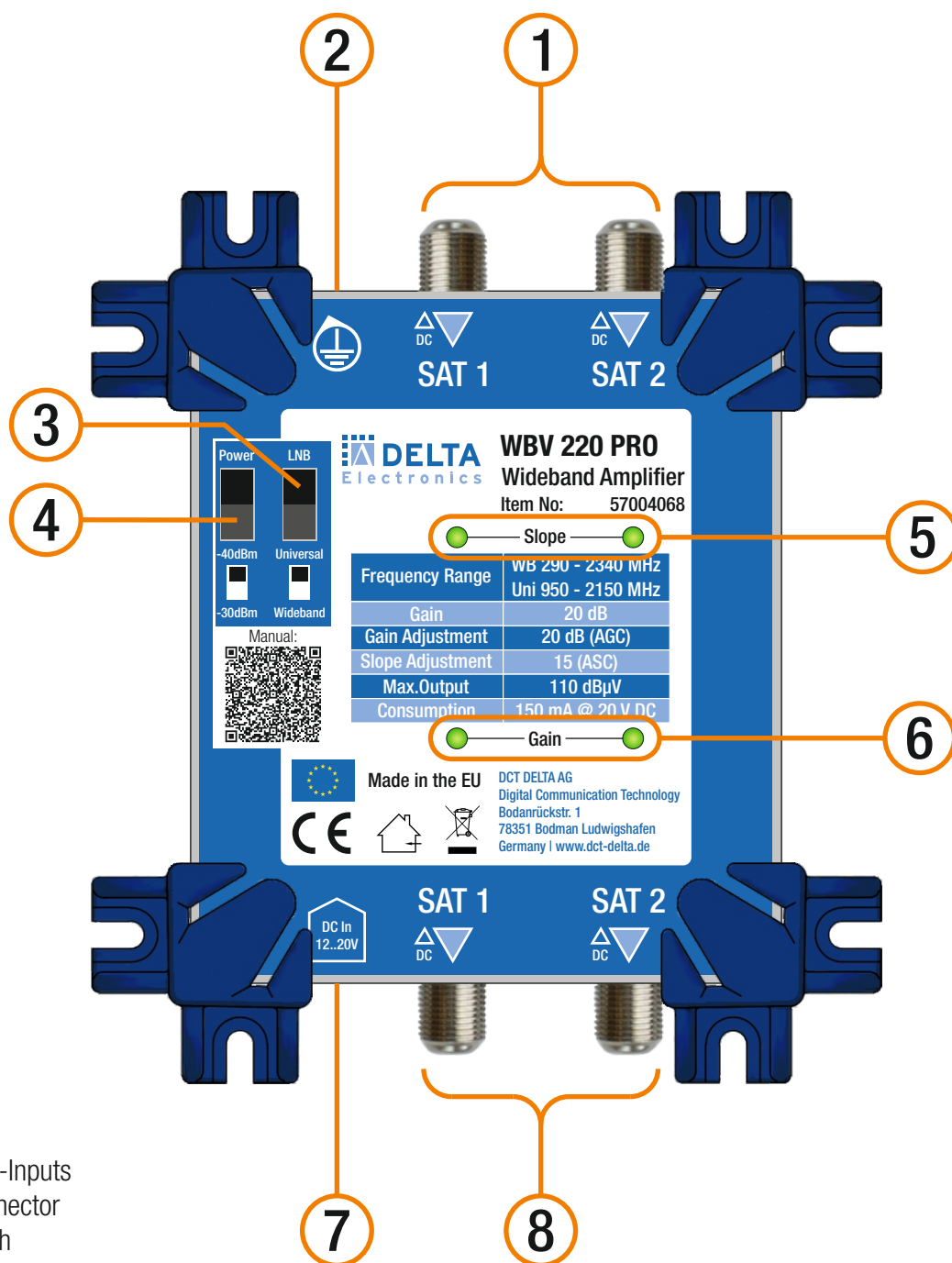
The output signals can be distributed via splitters to several multi switch cascades and from there to the subscribers.

Package Content

1x Wideband amplifier WBV 220 PRO

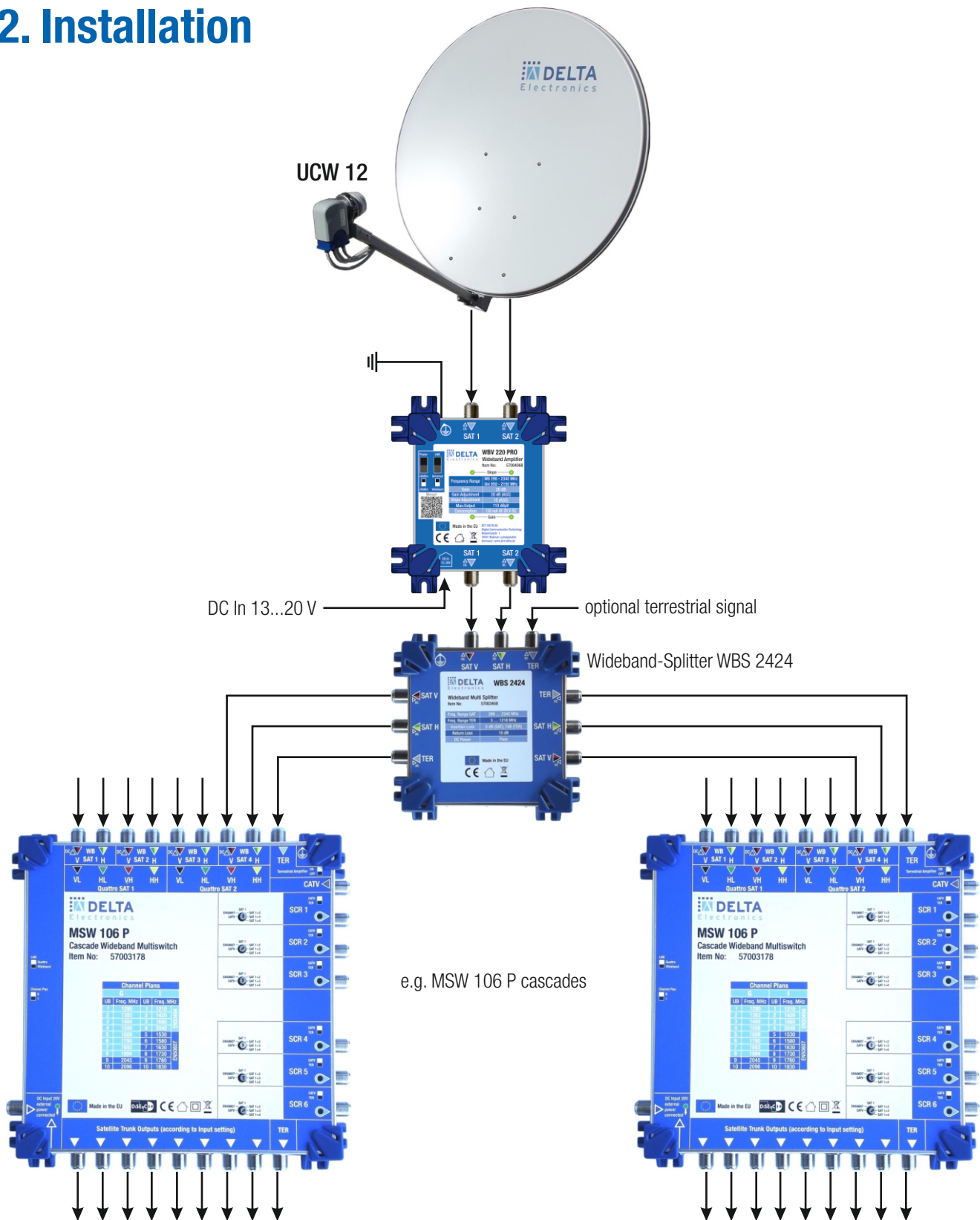
1x User Manual

Product Elements



- 1 Wideband-Inputs
- 2 Earth connector
- 3 LNB switch
- 4 Output power switch
- 5 LEDs for automatic slope control (ASC)
- 6 LEDs for automatic gain control (AGC)
- 7 DC connector
- 8 Wideband-Outputs

2. Installation



3. Configuration of the WBV 230

Wideband inputs 1

Connect the cables of a Wideband LNB (290 - 2340 MHz) or two bands of an Universal-LNB to these inputs. Mark the cables on both ends with the polarization or band that it's used for. If no cable is connected, you need to terminate the connector with a 75 Ohms resistor. We suggest to connect the vertical polarization to input 1.

Earth connector 2

Connect a qualified earthing cable to this connector. The earthing cable must be connected to ground

LNB switch 3

With this switch you can determine the frequency range for the automatic slope control (ASC). If set to „Wideband“, ASC is working from 290 to 2340 MHz. If set to „Universal“, ASC is working from 950 to 2150 MHz.

Switch for output power 4

With this switch you can attenuate the output signal to easy set the optimum signal level for following devices in case you do not split the signals. For example if you use the WBV 220 PRO as a preamplifier for DCT DELTA's OCH optical transmitters then you can set the output level to a perfect 80 dB.

LEDs for automatic slope control (ASC) 5

The LEDs are showing, if and how the slope control is active. This directly depends on the input signal level. If the input level is high enough and the difference in the levels at 300 and 2000 MHz are too small, then the LEDs are showing permanently red (no slope control necessary). Is the difference in levels at 300 and 2000 MHz too high, then the LEDs are blinking red (level difference > maximum control range). If the level difference is within the working range, the LEDs are permanently green.

LEDs for automatic gain control (AGC) 6

The LEDs are showing the level of the input signals. If the level is too low, the LEDs are blinking red. If the input level is too high, the LEDs are permanently red. If the input level is in the intended range, then the LEDs are permanently green.

DC input 7

Here you can connect an external power supply in case the power provided through the trunk lines is not sufficient. A LED beside the DC input is on if the provided power (through trunklines or external power supply) is sufficient. We suggest to use DCT DELTA's power supply NT 15-3.3.

Wideband outputs 8

This output provides the amplified and leveled signal of the inputs. The output level is depending on the setting of the switch for output power.

4. Technical Specification

WBV 220 PRO Amplifier	
Inputs	2 (F female)
Outputs	2 (F female)
Frequency range	290...2340 MHz (Wideband) or 950...2150 MHz (Universal)
Gain	20 dB
Maximum output level*	110 dB μ V (-35 dB/IM3) selectable
Slope adjustment (ASC)	15 dB
Gain adjustment (AGC)	20 dB
Power supply	Via trunk lines or external power supply
Power consumption	150mA @ 20V
Dimensions	115 x 130 x 50 mm (120 x 140 x 60 mm incl. packaging)
Weight	235 g (265 g incl. packaging)
Operation temperature range	-25°C - +60°C
Item number	57004068

* EN 50083-3 / 60 dB IMA3

5. Safety Notes



Read the instructions carefully before you connect the device!



To avoid fire, shortage or electrical shock:

- Never expose the product to rain or high humidity.
- Install the device at a dry place without water infiltration or condensation.
- Don't expose the device to drops or splash water.
- don't place any containers with liquids (e.g. vases) onto the device.
- If any liquid penetrates the device, pull the power cord immediately.



To avoid overheating:

- Install the device at a sufficient ventilated place. Make sure to keep a distance of at least 15cm around the device to ensure a proper ventilation.
- Don't place anything onto the device that could block the ventilation slots (news paper, table cloths, curtains, ...)
- Don't place any open flames like candles onto the device.
- Don't install the device in a dusty environment.
- Don't use the device in areas with tropical climate.
- Maintain the minimum and maximum temperature limits.



To avoid electrical shocks:

- Make sure the device is properly grounded
- The power plug should be easy to reach.
- Always pull the power plug before connecting any signal cable
- Never open the device.



Maintenance



Use dry, soft cloth to clean the device

Don't use any aggressive detergents.

For repair and maintenance please contact qualified retailers.



Disposal according to the local regulations.

6. Warranty Terms

For a periode of 24 years after the purchase of the product, DCT DELTA AG garantees that it is free of material and production faults.

In case the product turns out to be faulty during normal use within the warranty periode, DCT DELTA AG will repair or replace the product at ist own discretion. Please bring the device for repair to your local dealer.

The warranty is only valid for materials and production faults and does not cover damage out of:

- Abuse of the product or the use outside it's specification.
- Installation or usage which does not comply with the technical and safety rules of the country where it is used.
- Usage of non-compliant accessories (power supply, adaptors,...).
- Installation in a faulty environment.
- External reasons outside the influence of DCT DELTA AG like dropping the device, accidents, flashes, water, fire, insufficient ventilation ...

The warranty is omitted if:

- The production date or the serial number on the device cannot be read anymore or has been tampered, deleted or removed
- the product has been opened by an non-authorized person.

Hereby DCT DELTA AG declares that the radio equipment type Wideband Amplifier WBV 220 PRO is in compliance with directive 2014/53/EU. The complete text of the EU declaration of conformity is available at the following internet address:

www.dct-delta.de/service/



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