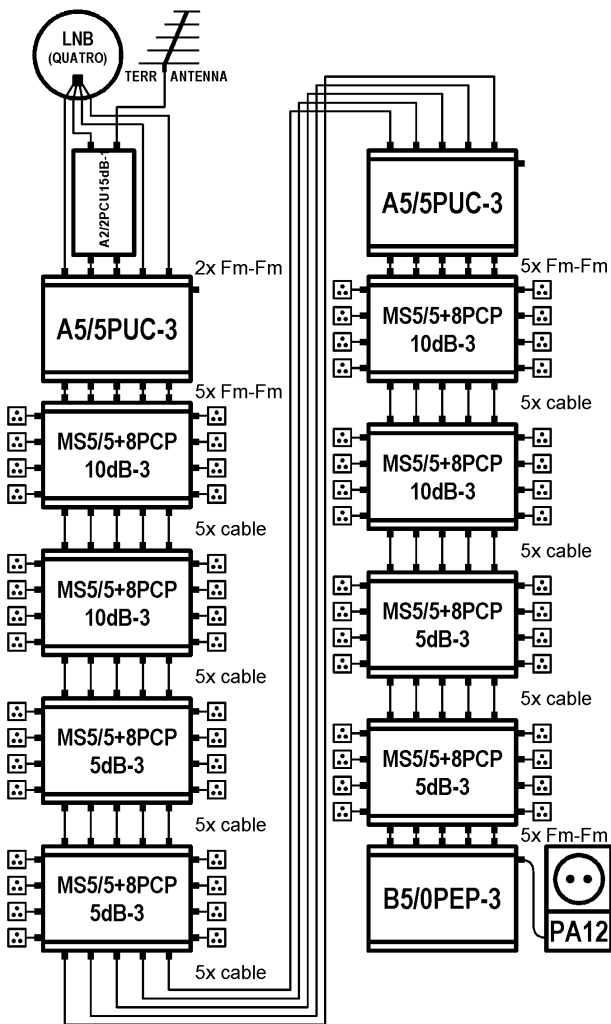


Instruction Manual

MS5/5+8PCP5dB-3 MS5/5+4PCP10dB-3 MS4/4+4PCN5dB-3
 MS5/5+8PCP10dB-3 MS4/4+8PCN5dB-3 MS4/4+4PCN10dB-3
 MS5/5+4PCP5dB-3 MS4/4+8PCN10dB-3



Dear Customer, congratulations on the purchase of the EMP-Centauri product. Before its installation and putting into operation, read carefully the entire operation manual. Keep the purchase and rework (if any) records for future need.

1 Field of Application, Warranty

The product is designed for the distribution of satellite (SAT) and terrestrial* (TERR), TV and radio signals. **We recommend the device to be installed and serviced by the qualified technician.** EMP-Centauri's PROFI CLASS products are covered under 4 (four) years warranty from the date of purchase. The warranty shall not apply to the product used for other than the specified purpose. The user will be responsible for injury or material damage which may arise in consequence of any product use in contradiction with the manual. Repairs or any interventions in the product may be performed only by EMP-Centauri company, or other companies authorized by EMP-Centauri.

2 Technical Specifications

The products are cascable multiswitches for distribution of terrestrial and satellite signals from 1 satellite position (4 polarities) to 4 or 8** users. Cascable multiswitches are controlled by analogue commands from a receiver. Every satellite trunk transmits DC voltage, 22 kHz and DiSeQc commands, terrestrial* trunk transmits DC voltage, outputs and trunks are DC blocked. Cascable multiswitches are designed in such way that a number of them can be stacked together to set up 2, 4, or 8-satellite cascable multiswitch (using switch S2/1PCT-1, S4/1PCT-11 or S8/1PCT-10).

* only for MS5/5+8PCP5dB-3, MS5/5+8PCP10dB-3, MS5/5+4PCP5dB-3, MS5/5+4PCP10dB-3

** only for MS5/5+8PCP5dB-3, MS5/5+8PCP10dB-3, MS4/4+8PCN5dB-3, MS4/4+8PCN10dB-3

Specification	MS5/5+8PCP 5dB-3	MS5/5+8PCP 10dB-3	MS4/4+8PCN 5dB-3	MS4/4+8PCN 10dB-3
Number of Trunk Inputs	5		4	
Number of Trunk Outputs		5		4
Number of Outputs	8			
Frequency Range	TERR 5–862 MHz, SAT 950–2300 MHz		SAT 950–2300 MHz	
Insertion Loss - Trunks (avg)	TERR 3 dB, SAT 2 dB		SAT 2 dB	
Insertion Loss – Outputs (avg)	TERR 21 dB, SAT 5 dB	TERR 24 dB, SAT 10 dB	SAT 5 dB	SAT 10 dB
Isolation (min)	SAT 30 dB (between trunks), SAT 20 dB (between inputs)			
Control	analogue (12/18 V, 0/22 kHz)			
Current Consumption	55 mA max (18 V DC) from each satellite receiver			
Dimensions (w,d,h)	13.5 x 10.4 x 4.1 cm			

11 Contact

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Specification	MS5/5+8PCP 5dB-3	MS5/5+8PCP 10dB-3	MS4/4+8PCN 5dB-3	MS4/4+8PCN 10dB-3
Temperature Range	-30 °C – +70 °C			
Specification	MS5/5+4PCP 5dB-3	MS5/5+4PCP 10dB-3	MS4/4+4PCN 5dB-3	MS4/4+4PCN 10dB-3
Number of Trunk Inputs	5		4	
Number of Trunk Outputs	5		4	
Number of Outputs	8			
Frequency Range	TERR 5–862 MHz, SAT 950–2300 MHz		SAT 950–2300 MHz	
Insertion Loss - Trunks (avg)	TERR 3 dB, SAT 2 dB		SAT 2 dB	
Insertion Loss – Outputs (avg)	TERR 18 dB, SAT 5 dB	TERR 21 dB, SAT 10 dB	SAT 5 dB	SAT 10 dB
Isolation (min)	SAT 30 dB (between SAT trunks), SAT 20 dB (between SAT inputs)			
Control	analogue (12/18 V, 0/22 kHz)			
Current Consumption	55 mA max (18 V DC) from each satellite receiver			
Dimensions (w,d,h)	12.7 x 10.4 x 4.1 cm			
Temperature Range	-30 °C – +70 °C			

* TERR: EN 50083-3/60dB IMA₃ [dBuV]; SAT: EN 50083-3/35dB IMA₃ [dBuV]

avg – average value, there is ±4 dB tolerance in specified range

min – minimum value

3 Product Takeover

Make sure that the product is not damaged. Please contact your dealer in the case of damage.

4 Product Storing and Installation

The product must not be stored and installed in the place with excessive humidity, in the place with dropping or running water, in the place with excessive dust pollution, mechanical vibrations or impacts, in the place out of temperature limits specified in the section 2 Technical Specifications, close to heat sources (radiators or air ventilators, direct sunshine etc.), in the reach of children. Fix the product firmly on a wall or another hard and inflammable surface with screws and dowels. The product shall be in no case held only by the connected cables. Ensure the free space for the air circulation (space on sides and bellow the product should be at least 20 cm and the space over its top at least 50 cm). Do not cover the product (with curtains etc.). Do not place any containers with liquids (vases, glasses etc.) or naked flame sources (lighted candle etc.) on the product or near the product.

5 Product Connection

Connect the product in accordance with this manual and valid regulation. Use high-quality 75 Ω coaxial cable designed for satellite reception. Mount the F connectors (screw, crimp or compress type) on the ends of coaxial cables. Connect the F connectors into the F sockets of product and fasten them with an appropriate force. The coaxial cables shall not be broken, the minimum bending radius should be 5 cm. Connect input F sockets marked A–D and TERR IN* with output F sockets marked A–D and TERR OUT* with preceding element of cascade (cascadable

multiswitch or amplifier). Connect output F sockets marked A–D and TERR OUT* with input F sockets marked A–D and TERR IN* of next element of cascade (cascadable multiswitch, amplifier or bias tee). Connect output F sockets marked 1-8, resp. 1–4** with other components in distribution system (satellite receiver, terrestrial receiver, wall socket, switch etc.). The wiring examples are shown in the section 10 Wiring Diagrams or at www.emp-centauri.eu.

* only for MS5/5+8PCP5dB-3, MS5/5+8PCP10dB-3, MS5/5+4PCP5dB-3, MS5/5+4PCP10dB-3

** only for MS5/5+4PCP5dB-3, MS5/5+4PCP10dB-3, MS4/4+4PCN5dB-3, MS4/4+4PCN10dB-3

6 Product Settings

There are no special settings for the products described in this instruction manual.

7 Safety




Due to security reasons the product and wiring in which the product is connected, must be grounded properly. Make sure the antennas are grounded properly. Connect all devices to power grid only after all connections are finished and checked. Never work on the wiring (including satellite and terrestrial* receivers, TVs) during or before a storm. A lightning stroke into the antenna may cause dangerous overvoltage in the product metallic parts. The product should be disconnected from the wiring immediately if it gets into contact with liquids (dropping water, spilled drinks etc.).

* only for MS5/5+8PCP5dB-3, MS5/5+8PCP10dB-3, MS5/5+4PCP5dB-3, MS5/5+4PCP10dB-3

8 Product Maintenance

Always disconnect the product from the wiring before performing any maintenance of the product. If you have to enter places with a risk of fall, pay attention to your safety. Use only dry cloth to clean the product and do not use any liquid agents. Coaxial cables installed outdoors should be replaced once in a few years. Unscrew all F connectors and clean connector contacts, resp. shorten the coaxial cable by approx. 2 cm, every 2 years.

9 Symbols Explanation

	certificate of conformity
	for indoor use only
	According to EU directive, electric and electronic devices which are identified by one of the following symbols must not be disposed of together with municipal waste. When disposing of the old device, use local waste collection and separation systems.

10 Wiring Diagrams

Remark 1: Recommended length of cable is 5 m (for cables with 1–3 dB / 950–2300 MHz at 5 m).

Remark 2: Recommended adaptor F_m–F_m is quick adaptor F_m–F_m 1002227 from EMP-Centauri offer.

Remark 3: If using switch S2/1PCT-1, S4/1PCT-11 or S8/1PCT-10 use 2, 4 or 8 quick adaptors F_m–F_m 1002227 from EMP-Centauri offer.