

Example of wiring	Suitable operating mode
	1 (DiSEqC 1.0)
	2 (DiSEqC 1.1) or 3 (DiSEqC 1.2)
	2 (DiSEqC 1.1) or 4 (DiSEqC 1.2)
	2 (DiSEqC 1.1) or 4 (DiSEqC 1.2)

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 6 (six) 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

SPECIFICATIONS	S4/1PCT-W2 (P.169-TW)
Number of Inputs	4
Number of Outputs	1
Frequency Range	SAT 950–2300 MHz, TERR 5–862 MHz
Insertion Loss (avg)	5 dB typ (8 dB max)
Current Consumption (avg)	40 mA (18 V DC) from receiver
Dimensions (w,d,h)	11.2 x 11.2 x 4.8 cm
Temperature Range	-30 °C – +70 °C

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 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, etc.) and in the reach of children. Fix the product firmly on a wall or another hard and inflammable surface with screws and dowels or fix it to the antenna mast with folding strip, the direction of F sockets is always downward. The product shall be in no case held only by the connected cables. Do not place any containers with liquids (vases, glasses etc.) or naked flame sources (lighted candle etc.) on the product or near the product.

Contact





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5 Product Connection and Setting up

Connect the product in accordance with this manual and valid regulation. Use high-quality 75 Ω coaxial cable designed for satellite reception. The coaxial cables shall not be broken, the minimum bending radius should be 5 cm. Mount the F connectors (screw, crimp or compress type) on the ends of coaxial cables.

Before fixing of cables to the product, choose operating mode of the switch by means of configuration levers placed on rear side of metal box, see table:

Utilizing of product – switched devices	Receiver's setting	Operating mode	Configuration levers
Individual LNBs Multiswitch for 1 satellite + added LNBs Several multiswitches for 1 satellite	DiSEqC 1.0	1	all OFF 
DiSEqC 1.0 switches 2/1, 4/1 Multiswitch for 2 to 4 satellites + added LNBs Several multiswitches for 2 to 4 satellites	DiSEqC 1.0+1.1	2	1-OFF 2-ON 3-OFF 4-OFF 
DiSEqC 1.0 switches 2/1 Multiswitch for 2 satellites + added LNBs Several multiswitches for 2 satellites	DiSEqC 1.2	3	1-ON 2-OFF 3-OFF 4-OFF 
DiSEqC 1.0 switches 4/1 Multiswitch for 3 or 4 satellites + added LNBs Several multiswitches for 3 or 4 satellites	DiSEqC 1.2	4	1-ON 2-ON 3-OFF 4-OFF 

Notes to product's setting:

- Due to more difficult setting of the receiver in modes 3 and 4, it is recommended to prefer mode 2 whenever the receiver supports concurrent generation of DiSEqC 1.1 & 1.0 commands
- Should the cascade of two switching devices (e.g. monoblock LNB + external DiSEqC switch) be connected to any of product's inputs, set the lever 4 to ON regardless on chosen operating mode.

Warning: It is necessary to reset the switch by a short disconnection of its DC supply after any change of levers positions.

Connect the F connectors into the F sockets of product and fasten them with an appropriate force.

- Connect input F socket marked TERR IN with outputs of LNBs, satellite switch or multiswitch. Input lead that transmits also terrestrial signals must be connected to input marked SAT IN 2 / TERR IN.
- Connect output F socket marked OUT with satellite receiver.

The wiring examples are shown in the section 10 Wiring Diagrams or at website www.emp-centauri.eu.

6 Setting up of satellite receiver

Proceed in setting up of satellite receiver according to chosen operating mode of the switch, see table:

Operating mode of the switch	Principles of setting up satellite receiver
1	Selection of input of the switch is determined by choosing satellite position A/B/C/D, event. LNB 1/2/3/4 or “committed DiSEqC command” AA/AB/BA/BB.

2	Selection of input of the switch is determined by setting DiSEqC 1.1 “uncommitted” command to values 1/2/3/4. Other switching devices connected to inputs of the product are controlled by choosing satellite position A/B/C/D, event. LNB 1/2/3/4 or “committed DiSEqC command” AA/AB/BA/BB.
3, 4	Similar to setting of motorized antenna (DiSEqC 1.2): it is necessary for each configured satellite to activate “move” command until expected signal is detected by the receiver; then stop rotation immediately and save the position. Repeat the procedure for all satellites.

Notes to setting up of the receiver:

Mode 1: Procedure is identical to setting of common DiSEqC switches 4in/1out.

Mode 2: In case that the receiver allows to specify sequence order of sent commands, choose “uncommitted, committed”.

Mode 3, mode 4: the switch operates as transcoder of DiSEqC 1.2 motor commands to DiSEqC 1.0 commands, which are sent to other distribution units connected to inputs of the switch. By command “Go to zero” the switch selects input SAT IN 1 and sends DiSEqC 1.0 command position A. As long as the command “Move to west” is active, DiSEqC 1.0 commands for positions A – B (mode 3) or A – B – C – D (mode 4) are sent in given sequence. After that the switch selects its next input and repeats DiSEqC 1.0 commands as described. In this matter, it is ensured that all LNBs connected to distribution system are scanned. (Command “Move to east” would scan the LNBs in reverse order.)

If satellite signal is not detected within few minutes, turn configuration lever 3 to ON, reset the product by disconnecting of satellite receiver and repeat the search. We also recommend to use low band transponders (up to 11700 MHz) for scanning satellites.

USALS mode cannot be utilized.

The setting procedures of each receiver can differ, follow instruction manual of your receiver.




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 terrestrial and satellite receivers, TVs) during or before a storm. A lightning stroke into the antenna may cause dangerous overvoltage in the product metallic parts.

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
	International standard for digital satellite equipment control; number (1.0, 1.1, 1.2 or 2.0) determines DiSEqC version
	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.