




Expansion port **SD**


USER'S GUIDE



Symbols used

 Danger – important notice, which may have an influence on the user's safety or the function of the device.

 Attention – notice on possible problems, which can arise to in specific cases.

 Information, notice – information, which contains useful advices or special interest.

GPL license

Source codes under GPL license are available free of charge by sending an email to info@conel.cz.



**Declared quality system
ISO 9001**





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1. Safety instructions

Please observe the following safety instructions:

- ✧ The expansion port must be used in compliance with all applicable international and national laws and in compliance with any special restrictions regulating the utilization of the communication module in prescribed applications and environments.
- ✧ Use only the original Conel company accessories. Thus you will prevent possible health risks and damage to the devices and ensure compliance with all relevant provisions. Unauthorised adjustments or use of unapproved accessories may result in damage to the expansion port and breach of applicable laws. Use of unapproved adjustments or accessories may lead to cancellation of guarantee, which has no effects on your legal rights.
- ✧ Do not expose the expansion port to extreme conditions. Protect it from dust, moisture and heat.



PRODUCT DISPOSAL INSTRUCTIONS

2. Product disposal instructions

The WEEE (Waste Electrical and Electronic Equipment: 2002/96/EC) directive has been introduced to ensure that electrical/electronic products are recycled using the best available recovery techniques to minimize the impact on the environment. This product contains high quality materials and components which can be recycled. At the end of its life this product **MUST NOT** be mixed with other commercial waste for disposal. Check the terms and conditions of your supplier for disposal information.

3. SD description

3.1. General description

Expansion port SD is created as an addition of router desk that allows routers to use a SD card as a USB flash drive or as an internal memory that extends the capacity of the internal memory of your router. This expansion port is available in two basic versions – HUB and SWITCH.



Expansion port SD can be used only in PORT2.

3.2. HUB (SDH)

In case that the router is turned on and the CD card is inserted into the expansion port SD in version *HUB*, this SD card acts as the internal memory of the router (extends the existing memory). In the opposite case, i.e. the router is turned off and is connected to PC by A-A type of USB cabel, the SD card acts as a USB flash drive. For this function the router must be equipped with a jumper (for jumper position see figure below), otherwise this function will be blocked. Jumper is usually equipped in the manufacture of each SD port.



Fig. 1: Jumper position

3.3. SWITCH (SDS)

The mode of the expansion port SD is switched in this version (*SWITCH*) via the web interface of the router. The configuration can be displayed by selecting *Expansion port 2* item in the menu (see figure below).

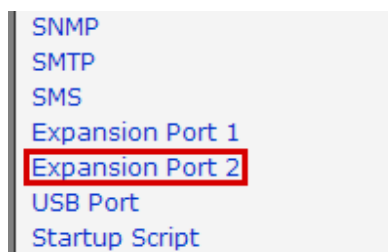


Fig. 2: Expansion Port 2

Then there will be displayed the form in which you can use the *Enable expansion port 2 access over TCP/UDP* item to switch the mode of the SD (see figure below). If this item is checked, the SD card acts as the internal memory of the router (expands existing memory). In the opposite case (the item is not checked), SD port can be used as a USB flash drive (for connecting the router to the PC use A-A type of USB cabel).

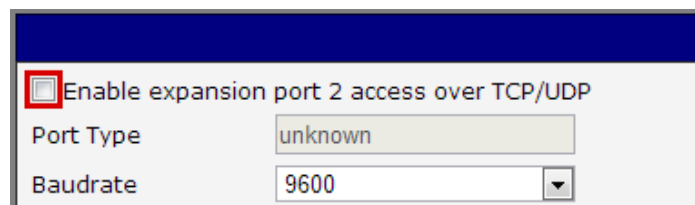


Fig. 3: Enable expansion port 2

Attention! If the expansion port SD is switched to the *USB flash drive* mode, the USB port is blocked and can't be used for anything else.

3.4. Compatibility with Conel routers

Expansion port SD can be used in all v2 routers with available PORT2. Therefore it is designed for routers in version known as FULL.

3.5. Technical specifications

Expansion port SD		
Power supply	Internal	+3,3V
Environment	Operating temperature	-30 .. +60 °C
	Storage temperature	-40 .. +85 °C
Standards	Emission	EN 55022/B
	Immunity	ETS 300 342
	Safety	EN 60950
Supported technologies		HS-SD, SDHC

Table 1: Technical specifications

Attention! For used SD cards it is necessary to distinguish industrial from commercial version. Industrial SD cards are usually marked with the word *Industrial* and are predetermined to demanding conditions. In practice, this means that industrial card can be used throughout the range of operating temperature of SD expansion port. Another advantage is increased resistance to falls and vibrations.

3.6. State indication

LED indication	
Green LED	Indicates when the expansion port SD is switched to the mode in which SD card extends the internal memory of the router.
Yellow LED	Indicates when a file is copied to the SD card

Table 2: State indication

3.7. Product marking

Trade name	Type name
SDH (<i>HUB version</i>)	XC-SD
SDS (<i>SWITCH version</i>)	XC-SD

Table 3: Product marking



Fig. 4: Expansion port label



4. Recommended literature

- [1] Conel: **Application guide – Expansion port mouting,**
- [2] Conel: **Configuration manual for v2 routers.**

5. Customers support

Up to date information about the product is on website:

www.conel.cz



Upkeep-advice:

During cleaning of the router do not use aggressive chemicals, solvents and abrasive cleaners!

Conel Company hereby declares that the router narrated in this user's guide fits all basic demands of directive 1999/5/EC (R&TTE).

Router fits values of coefficient SAR defined by association ICNIRP and values of "About protection of health before non-ionized radiation".



Declaration about consistency was issued and is possible get it in accompanying CD or at producer.