RCU

Remote Control Unit and Monitoring

ENERGY SAVER

The **RCU** (Remote Control Unit) manufactured by Neetra S.r.l. allows to monitor a distant broadcasting station just as the operator were on site. There are four connection modes: direct cable connection (RS232 or USB), traditional telephone connection (PSTN), data connection GSM, Internet connection (dedicated software, web or SNMP).

It is possible to check and modify any parameter of the TV and FM amplifiers (power, power supply, temperature, etc.), of the exciters (frequency, gain, ON/OFF status) and of the switches (transmitter in antenna) with simple and intuitive operations.

In case of failure or breakdown, the **RCU** automatically informs the control centre by SMS or phone call. This way it is possible to be aware of the problem in time and perform a timely and effective intervention, limiting the inactivity period.

Besides, the **RCU** allows to monitor the mains voltage and, should the power fail, can be automatically powered by a battery in order to send the SMS/phone call. **RCU** is oriented towards the remote control of broadcasting equipment by Neetra S.r.l., but it has enough flexibility to allow controlling other general-purpose devices. In fact, the **RCU** is provided with 3 analog inputs, 4 digital inputs and 4 digital outputs.

It is also possible to set some user-defined rules allowing the **RCU** to automatically modify the output channels depending on the status of the inputs, with no operator intervention. By means of adequate sensors, it is possible to measure the humidity or air pressure (analog inputs), check the presence of fire or intruder alarms (digital inputs) or turn on/off the air conditioning or a lamp (digital output). Besides, the outputs can be controlled manually, from remote or locally, or automatically, depending on the inputs. Having a hooter sound when an intruder-alarm is

triggered, or turn on the air-conditioning when the temperature or humidity is too high, will be easy as sending a simple SMS. And if this is not enough, the input and outputs can be expanded by adding the GENIO option.

Main characteristics

- 3 Differential Analog Inputs (0 - 10V)
- 4 Digital Inputs (TTL Level) / 4 Digital Output (Free Contact)
- Control of up to 8 Neetra Devices by RS485 Connection
- 2x16 Alphanumeric Display / 6 Status LEDs, 4 Function Keys

Connection modes

- Direct Cable: RS232 or USB with Auto-Detection
- Telephone (PSTN model only), LAN/Ethernet (Ethernet model only), GSM (GSM model only)

PSTN model

- Automatic call to the control centre in case of anomalies or events

GSM model

- Option Dual (900-1800MHz) or Tri-band (900-1800-1900MHz)
- Automatic call to the control centre in case of anomalies or events
- SMS sent in case of anomalies or events
- Status request via SMS
- Radio antenna with magnetic support on SMA connector of front panel

LAN/Ethernet model

- Ethernet 10Base-T connection on RJ45 connector of front panel
- IP address and Subnet Mask configurable from display
- Implemented protocols: Web Server, SNMP Agent, RS232 Tunnelling

ERCoS

The **ERCoS** (Remote Control Software) is the Windows®
software to configure, monitor and modify from a simple
remote transmitter to a large network of broadcasting
equipment.

Its operation is made easy by the intuitive graphic interface.
It can be connected to the remote site by **direct cable
connection** (RS232 o USB), **telephone connection** using any
of the modem (GSM or PSTN) installed under the operating
system, or **through Internet connection**.

The network of Neetra transmitter can be customized, it is
possible to describe its composition, add backgrounds,
group the stations, display their status and any alarm,
browse a historical event log, turn on and off the devices or
change their settings, all this from a remote PC.

A **detailed block diagram**, including all real data
downloaded during the connection, is displayed for any
single device (modulator, amplifier, etc.).

The ERCoS can be configured so that it automatically
answers incoming calls from a remote RCU signalling an
event (for instance a black-out).

The information sent is automatically added to the event
log, which is then open and displayed on the monitor on top
of all windows.

All operations are password-protected in order to prevent
unauthorized people to change the settings of a remote
transmitter. Only users knowing the relevant password can
change the software configuration or the settings of a
device.

The AutoPolling function allows a periodic automatic check,
at scheduled intervals, of the status of the whole
transmitter network.

Any anomaly is always stored into the log.

Last but not least, ERCoS language can be easily
customised even by the end user.
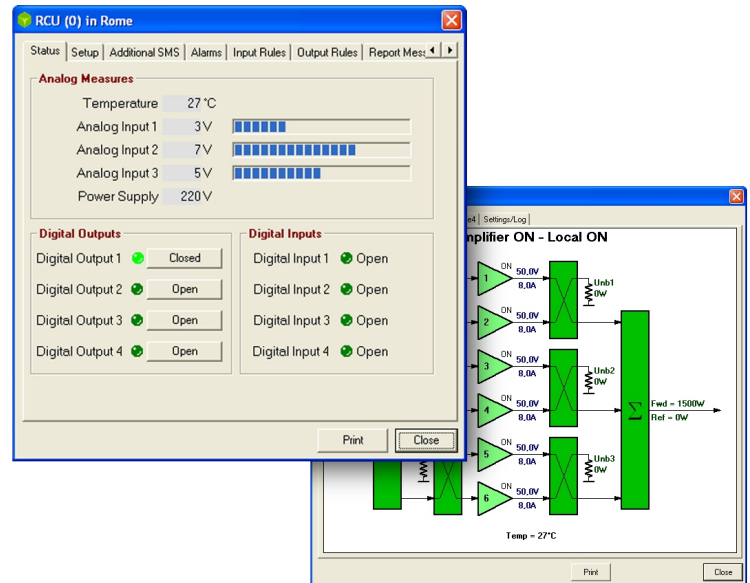
Main characteristics

- Compatible with Windows XP / Vista / 7
- Completely configurable transmitter network, organized into sub-groups
- Detailed and intuitive block diagram of each Neetra device
- Historical event log
- AutoPolling: checks tha status of all transmitter at custom times
- AutoAnswer: automatically answers incoming calls from a remote RCU
- Password-protection for the configuration of the software and the modification of the remote station parameters

RCU Rear panel ▲
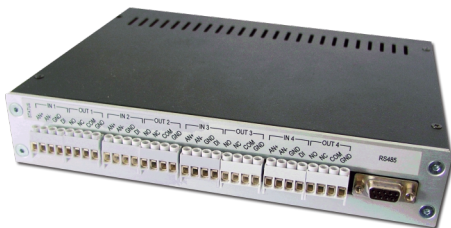
It is available the model equipped with one
RS485 port and a reduced set of telemetries. ▲
GENIO gives the possibility to expand
the inputs and outputs of the RCU

Reception of an SMS ▶
from the remote site
in case of alarm