



Interface Adapter for VRV Systems
User Manual

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1 RS232 Terminal

1.1 RS232 Port Settings

Interface Adapter for VRV Systems requires following RS232 port settings:

| | |
|-----------------|------|
| Bits per second | 9600 |
| Data bits | 8 |
| Parity | None |
| Stop bits | 1 |
| Flow control | None |

1.2 Terminal Commands

To get list of supported commands type help

```
>help
```

<UID> used in following commands description is indoor unit ID represented by three hexadecimal characters. For example UID=201 is unit 2-01, UID=10A is unit 1-10 e.t.c.

Pay attention: **Commands are case sensitive**

Decoding and/or execution of every command will be acknowledged by one of the following completion strings:

| | |
|-----------------|-----------------------------------|
| OK | Command was successfully executed |
| ERROR: <CODE> | Command Execution Failed |
| Unknown Command | Command Decoding Failed |
| Bad Parameters | Command Parameters are wrong |

1.3 on

COMMAND NAME

on

SYNOPSIS

on <UID>

DESCRIPTION

Turn on indoor unit

EXAMPLE

Turn on unit 1-01

```
>on 101
```

1.4 off

COMMAND NAME

off



SYNOPSIS

off <UID>

DESCRIPTION

Turn off indoor unit

EXAMPLE

Turn off unit 1-01

```
>off 101
```

1.5 temp

COMMAND NAME

temp

SYNOPSIS

temp <UID> <TEMP>

DESCRIPTION

Set temperature of indoor unit. Temperature can be in range 16°C to 32°C (decimal value).

EXAMPLE

Set temperature to 16°C on unit 1-02 and 20°C on unit 2-11

```
>temp 102 16
>temp 20B 20
```

1.6 cool

COMMAND NAME

cool

SYNOPSIS

cool <UID>

DESCRIPTION

Set cooling mode on unit

NOTES

This command may take effect only if sent to master indoor unit (usually 1-00) if VRV system was in heating mode.

EXAMPLE

Set cooling mode on indoor unit 1-00

```
>cool 100
```



1.7 heat

COMMAND NAME

heat

SYNOPSIS

heat <UID>

DESCRIPTION

Set heating mode on indoor unit

NOTES

This command may take effect only if sent to master indoor unit (usually 1-00) if VRV system was in cooling mode.

EXAMPLE

Set heating mode on unit 1-01

```
>heat 101
```

1.8 fan

COMMAND NAME

fan

SYNOPSIS

fan <UID>

DESCRIPTION

Set fan mode on indoor unit

EXAMPLE

Set fan mode on unit 1-01

```
>fan 101
```

1.9 dry

COMMAND NAME

dry

SYNOPSIS

dry <UID>

DESCRIPTION

Set dry mode on indoor unit

EXAMPLE

Set dry mode on unit 1-01

```
>dry 101
```

Ver≥0.3.1



1.10 fspeed

COMMAND NAME

fspeed

SYNOPSIS

fspeed <UID> <FSPEED>

DESCRIPTION

Set fan speed on indoor unit. Fan speed can be h - high or l - low

EXAMPLE

Set low fan speed on unit 1-01. Set high fan speed on unit 1-02

```
>fspeed 101 l
>fspeed 102 h
```

1.11 stat

COMMAND NAME

stat

SYNOPSIS

stat [<UID>]

DESCRIPTION

Query status of indoor unit(s) connected to VRV System Bus . Unit status will contain following information: on/off, set temperature, room temperature, mode (Cool,Heat,Fan,Hum), fan speed (High/Low), failure alerts. If UID is not specified, command will list status of all detected indoor units.

EXAMPLE

Units 1-01 and 1-02 are connected to VRV System Bus

```
>stat
101 ON 18C 22,16C High Cool OK
102 OFF 20C 23,15C Low Fan C9
```

Unit 101 is on, set for temperature 18°C, room temperature is 22,16°C, fan speed is high, cooling mode, there is no alert. Unit 102 is off set for 20°C, room temperature 23,15°C, fan speed is low, fan mode, alert code is C9.

1.12 allon

COMMAND NAME

allon

SYNOPSIS

allon

DESCRIPTION

Turn on all indoor units detected on VRV System Bus



EXAMPLE

All indoor units on

```
>allon
```

1.13 alloff

COMMAND NAME

alloff

SYNOPSIS

alloff

DESCRIPTION

Turn off all indoor units detected on VRV System Bus

EXAMPLE

All indoor units off

```
>alloff
```

1.14 set

COMMAND NAME

set

SYNOPSIS

set [**<echo|myid|lcd>** **<val>**]

DESCRIPTION

Change/Query Interface Adapter for VRV Systems Configuration. Supported parameters are

- **echo** **<0|1 >** - Turn on/off commands echo
- **myid** **<hex>** - Own UID used by Interface Adapter for VRV Systems . Value is two hex digits. Default value for myid is FF (0xFF).
- **lcd** **<dec>** - LCD width in characters.
- **simul** **<dec>** - Number of Permanently simulated indoor units.

Ver≥0.2.9

Without parameters set command will list current configuration. Some configuration parameters (like version) are read only.

EXAMPLE

List configuration

```
>set
echo      : 1
myid      : 0A
version   : 0.3.1
lcd       : 8
simul     : 0
```



Turn off echo

```
>set echo 0
```

NOTE

Parameters are stored in non-volatile memory. Once set parameter value will not change after power reset. If you turn off echo, for example, it will not come back after reset.

1.15 simul

Ver \geq 0.2.8

COMMAND NAME

simul

SYNOPSIS

simul <N>

DESCRIPTION

Simulate N indoor units. (N can be zero). To stop simulation reboot unit.

EXAMPLE

Simulate 20 indoor units

```
>simul 20
```

1.16 filt

Ver \geq 0.3.1

COMMAND NAME

filt

SYNOPSIS

filt <UID>

DESCRIPTION

Turn off (reset) Filter Sign

EXAMPLE



Turn off Filter Sign for unit 1-01

```
>filt 101
```



2 FirmWare Update

Below step-by-step instruction explains how to make CoolMaster FirmWare Update.

| | |
|-------|---|
| STEP1 | Unscrew 4 cap screws to open CoolMaster top cover  |
| STEP2 | Disconnect power. Close Bootloader jumper. Connect power back. After power connected you should see BOOT232 X.X.X message on LCD.  |
| STEP3 | Connect RS232 cable and run FirmWare update utility |
| STEP4 | Disconnect power Open Bootloader jumper Close top cover. Screw cap screws |
| STEP5 | Connect power You should see message CoolMaster X.X.X X.X.X Denotes current Firmware version |