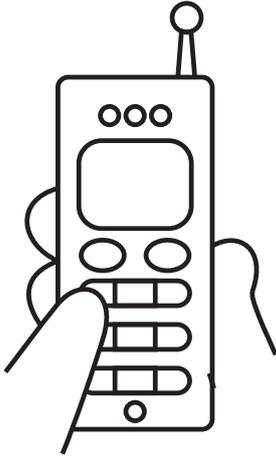


# TX-SMS - Remote Command Guide

Firmware version 4.3

24hr Standby  
082 444 7176



## Remote configuration

The TX-SMS can be configured using SMS commands. It is recommended that the PC application software be used for the initial configuration of the unit. SMS commands can then be used to make configuration changes when the unit has been installed in the field. This is particularly useful for installations in far off or inaccessible locations.

## IMPORTANT - Firmware version

Please note that the SMS commands listed in this document are for TX-SMS units with version 4.2 firmware or later. It is possible that the commands will not work on units with previous or later versions of firmware. If the unit has version 4.2 firmware, it will be indicated on the sticker on the base of the unit. The firmware version can also be requested by SMS command. `$12134*ver`

## IMPORTANT - Delivery reporting

Due to the dual SIM feature, the user sending a command to the TX-SMS may have to try both cell numbers associated with the unit if two SIM cards are used. This is because the TX-SMS may have switched SIM cards due to a problem encountered with a cellular network. For this reason it is important for users sending commands to have 'delivery reports' enabled on their cell phones so that they are able to see if the command has been received.

## SMS sender verify

The unit can be configured to only accept commands and requests from a cell phone that is listed in the Reporting Numbers list. This will not affect the missed call operation.

### SMS command rules

- All commands must start with a \$.
- A command pin (4 numeric digits) must follow the \$. The pin allows the user access to send commands to the unit. The command pin is not the same as the SIM pin which must be disabled. The factory default pin is 1234 which has also been used in the command examples.
- A \* character separates the fields within the command string.
- All cell numbers must be entered into commands using the international format beginning with a +.

## Commands

- Set unit time to network time** - `$1234*syt`  
Use this command to synchronize the unit time and date during initial setup. No delivery report is sent for this command.
- Unit status request** - `$1234*sts`  
Returns the following information by SMS: Which SIM is currently in operation, inputs status, relays status, battery voltage, AC status, time and date.
- Request firmware version** - `$1234*ver`
- Add reporting number** - `$1234*usrz*cellnumber*add`  
(cell phone number for reporting)  
Up to 4 reporting numbers are supported  
**examples**  
Add cellphone number 0831234567 as reporting number 3  
`$1234*usr3*+27831234567*add`  
Add cellphone number 0829876543 as reporting number 1  
`$1234*usr1*+27829876543*add`
- Note:** Existing cell numbers are overwritten so it is not necessary to delete them first.
- Delete reporting number** - `$1234*usrz*del`  
**example**  
Delete user 3 - `$1234*usr3*del`
- Warning:** Deleting all reporting numbers with the sender verify option enabled will result in control over the unit being lost.
- Sender verify** - `$1234*vfy*on/off`  
**vfy** - Switch sender verify option on or off.  
On- unit only accepts commands from any of the 4 reporting numbers.  
Off- unit accept commands from any number.  
**example**  
Set sender verify on - `$1234*vfy*on`
- Change reporting name (Unit ID)** - `$1234*uid*name*add`  
Set name of the unit 16 characters or less  
**example**  
Change reporting name to "Pump Station 2"  
`$1234*uid*Pump Station 2*add`
- Change command pin** - `$1234*pin*new pin`  
The command pin must be 4 digits long and must be numeric (no letters allowed)  
**example**  
Change the command pin from 1234 to 6789 - `$1234*pin*6789`
- Warning:** This command can cause loss of control of the unit if the new command pin is not remembered.
- Auto test time** - `$1234*aut*set-HHMM*dowd*add/del`  
Change or delete auto test time.
- dowd** - Specify days of the week for test auto signals d= 1-7. 1= Monday, 2= Tuesday, 7= Sunday etc. See example for selecting multiple days. If *dow* is not specified, test signals are sent every day.  
**examples**  
Set the auto test for 13H20 on Wednesday and Sunday  
`$1234*aut*set-1320*dow37*add`  
Cancel auto test - `$1234*aut*del`



**Change vibration sensor sensitivity** - `$1234*vib*n`  
 0 = least sensitive 250 = most sensitive  
**example**  
 Set the vibration sensitivity to 50  
`$1234*vib*50`

**Message centre number** - `$1234*mctn* msg center number max 15 digits*add/del`

**mctn** - Sets or changes message centre number  
 n= primary SIM 1 or secondary SIM 2.  
**example**  
 Set SIM1 message centre number to +279119 - `$1234*mct1*+279119*ad`  
 Set SIM2 message center number to +271234 - `$1234*mct2*+271234*add`

**Swap SIM cards** - `$1234*sim*sss`  
**sss** - pri = primary SIM  
 sec = secondary SIM  
**examples**  
 Switch to secondary SIM - `$1234*sim*sec`  
 Switch to primary SIM - `$1234*sim*pri`

**Change input event SMS messages** - `$1234*msg*input*message*add/del`  
 A definable 16 character SMS message is associated with each of the 4 inputs. This message is sent to the reporting number/s when the input on the unit changes state.  
**input** - ip1h = input #1 high state  
 ip2l = input #2 low state  
**examples**  
 Assign message Alarm Active to input 2 high - `$1234*msg*ip2h*Alarm Active*add`  
 Delete message assigned to input 2 low  
`$1234*msg*ip2l*del`

**Note:** If a message is deleted, nothing is sent when the input changes state.

**Operate relays** - `$1234*rlyn*opr`  
**examples**  
 Pulse relay 2 - `$1234*rly2*pls`  
 Turn relay 1 on - `$1234*rly1*on`  
 Turn relay 1 off - `$1234*rly1*off`  
 Toggle relay 2 - `$1234*rly2*tog`

**Note:** A confirmation SMS is automatically sent back to confirm that the operation was successfully. If no confirmation is received, check that the unit has not swapped to the alternate SIM card.

**Missed call relay operation** - `$1234*mclm*cell number*rlyn-opr*cfm*lm-n*st-HHMM*en-HHMM*dw-d*`  
 There are 500 missed call locations. Each missed call can perform 1 of 4 operations on 1 of the 2 onboard relays. Special time access rules allow the number of missed calls accepted from a particular cell number to be limited and to further limited access to certain hours on certain days of the week.  
**mclm** - Create, edit or delete up to 500 missed call entries. mcl= missed call command  
 m= missed call location number (1-500)  
**opr** - 1 of 4 operations - pls= pulse, on= turn on off= turn off and tog= toggle.  
**cfm** - If *cfm* is present a confirmation SMS is sent.  
**lm-n** - The access lifespan limits the number of missed calls before deleting the entry.  
 n= 0-255 missed calls. If *lm* not present or if the value is 0, there is no limit to the number of missed calls accepted. If *cfm* is present, the delivery report will include the remaining number of missed calls allowed.  
**st/en** - The operational time window sets an access start and end time (HHMM)  
 It defines the hours that the caller will be able to use the missed call feature. If no parameters are present, there is no limit.  
**dw-d** - Select certain days of the week d=1-7  
 1= Monday, 2= Tuesday, 7= Sunday etc.

**examples**  
 Add missed caller 35 to turn on relay 1  
`$1234*mcl35*+27825551234*rly1-on`  
 Add missed caller 200 to have access from 06h30 to 07h00 from Monday to Friday, with a 25 count lifespan. Relay 2 must be pulsed and have confirmation SMS enabled.  
`$1234*mcl200*+27825551234*rly2-pls*cfm*lm-25*st-0630*en-1700*dw-12345`

**Delete missed call operation** - `$1234*mclm*del`  
**example**  
 Delete missed call location 90  
`$1234*mcl90*del`

**Query missed call location** - `$1234*mclm*???`  
**example**  
 Query missed call location 20 -  
`$1234*mcl20*???`

**Set timer relay operation** - `$1234*tmry*rlyn-opr*tm-HHMM*dw-d*id-timer label 16 characters max*`

**tmry** - Sets 16 independent timers to operate once a day until deleted. y= timer number  
**rlyn** - Relay number n= 1 or 2  
**opr** - 1 of 4 operations - pls= pulse, on= turn on off= turn off and tog= toggle.  
**tm** - Set time in 24 hour format (HHMM)  
**dw-d** - Select certain days of the week d=1-7  
 1= Monday, 2= Tuesday, 7= Sunday etc.  
**id** - Defines a timer label (16 character max)  
**examples**  
 Set timer 4 to turn relay 1 off at 12h00 each day - `$1234*tmr4*rly1*1200*off`  
 Set timer 10 to turn relay 2 off at 23h00 on Saturday with label 'Geysler'  
`$1234*tmr10*rly2-off*tm-2300*dw-6*id-Geysler`

Set timer 9 to turn relay 1 on at 06h30 on Monday, Tuesday and Friday with label 'Pool Pump' - `$1234*tmr9*rly1-on*tm-0630*dw-125*id-Pool Pump`

A timer confirmation SMS can be sent to 1 of the 4 reporting numbers. It is either on or off for all timer events. The setting can only be done via the PC configuration software.

**Delete a timer** - `$1234*tmrn*del`  
**example**  
 Delete timer 16 - `$pppp*tmr16*del`

**GSM signal (quality of signal)** - `$12134*rsi`  
 Signal strength ranges from -113dBm (very weak) to -51dBm (very strong). -70 to -80dBm is considered normal.

**Request prepaid balance** - `$1234*bal`  
 Query monetary value on active SIM.

## USSD SESSIONS

USSD network commands can be complex and extreme care should be used. Incomplete commands will leave the channel active for some time, will cause the unit to seem unresponsive and will incur per minute network USSD session charges. To initiate a USSD session and forward any replies via SMS to the requesting number, use the following commands:

**Request balance** - `$1234*usd*USSD request#`  
 Vodacom - `$1234*usd**100#` (prepaid balance)  
 - `$1234*usd**111*1*2#` (SMS bundle)  
 MTN - `$1234*usd**141#` (airtime & SMS bundle)  
 Cell C - `$1234*usd**101#` (airtime only)

**Note:** An error message will show for contract SIMs or if the network does not support airtime balance features.

**Load prepaid voucher** - `$1234*usd*USSD request#`  
 Vodacom voucher  
`$1234*usd**100*01*voucher number#`  
 MTN voucher  
`$1234*usd**141*voucher number#`  
 Cell C voucher  
`$1234*usd**102*voucher number#`