

Handle the console – Software 2.4.3

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Version 1.1

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1. Access the console

1. Open a terminal as TeraTerm.



2. Select Setup>Serial port...

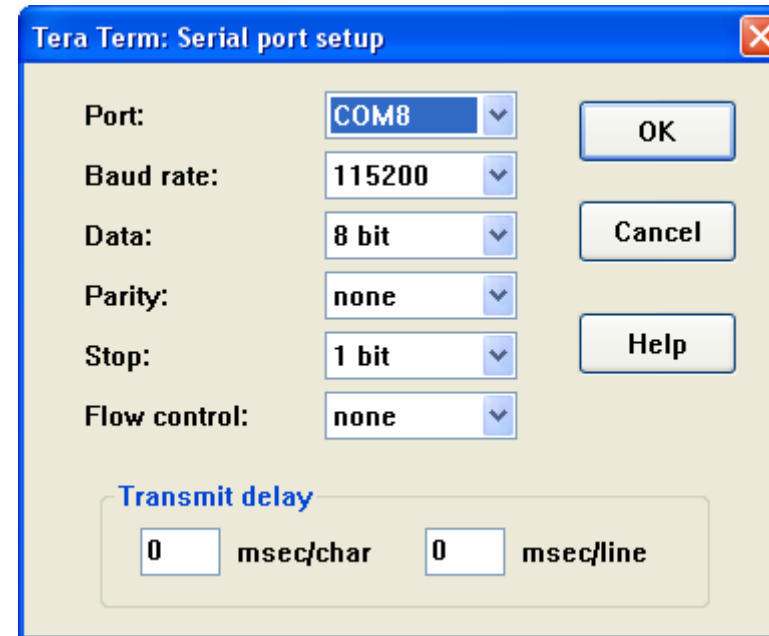
3. Enter the values below then click OK.

- Baud rate: 115200
- Data bits: 8
- Parity: none
- Stop bit: 1
- Flow control: none

4. Select File>New connection...

5. Select Serial, browse the dropdown list to select the correct port then click OK.

6. Type #SWITCH# then press <enter> to access the 'Basics' console.



Once you are in the console, type screen 0, screen 1 or screen 2 to display the required console.

- Screen 0 → Basics (light console)
- Screen 1 → Advanced (full console)
- Screen 2 → Commands

2. Screen o (Basics)

```
Basics> screen 0
Basics :
1wire          Display 1wire information
setspeed {str} Change serial connection speed
iostate        Display input/output state
modem          Display modem state
gpspos         Retrieve last GPS position
list [all|{module}][dl] List available modules.
                [all] List all available modules parameters.
                [module] List available module parameters.
                [dl] Download result.
g {module} {parameter} [(index)] Get module parameter value
s {module} {parameter} [(index)] {value} Set module parameter value
listdb         List available DB parameters
gdb {name}     Get a DB parameter
sdb {name} {value} Set a DB parameter
log [print|debug|warn|error|{str}] Display last logs
logdump [print|debug|warn|error|{str}] Display all logs
configure      Upload a new conf file

Basics> █
```

2.1 The 1wire command

This command is used to display the list of detected 1wire devices as temperature sensors or driver key.

→ Type **1wire** then press <ENTER>.

```
Basics> 1wire
found 1 devices
ac000801194d0f10 : TEMPERATURE SENSOR, value 23687
Basics> █
```

2.2 The iostate command

This command is used to display the state of inputs and outputs.

→ Type **iostate** then press <ENTER>.

```
Basics> iostate
Input 1 : Disconnected
Input 2 : Disconnected
Input 3 : Disconnected
Output 1 : Disconnected
Output 2 : Disconnected
Alarm : Connected
Ignition : Connected
Basics>
```

2.3 The *modem* command

This command is used to display the modem information as the IMEI, the APN, etc.

→ Type *modem* then press <ENTER>.

```
Basics> modem
ppp0 10.142.28.234
APN:
autoAPN: a2bouygtel.com
Your IMEI is : 358281007253796
Your IMSI is : 208201450032488
DNS servers are
nameserver 208.67.222.222
nameserver 208.67.220.220
In case of problem, check your configuration (with "list all" command)
Basics>
```

2.4 The *gpspos* command

This command is used to display the GPS information as antenna configuration, current position, etc.

→ Type *gpspos* then press <ENTER>.

```
Basics> gpspos
Internal antenna
GPRMC Frame value is
$GPRMC,082806.000,A,4847.0312,N,00222.0169,E,0.00,,180310,,A*7C
GPGGA Frame value is
$GPGGA,082807.000,4847.0312,N,00222.0169,E,1.06,1.8,110.5,M,47.3,M,,0000*50
Basics>
```

2.5 The *list* command

This command is used to list the parameters.

- Type *list* then press <ENTER> to display the list of all components parameters.
- Type *list <COMPONENT>* then press <ENTER> to display the list of all parameters.
- Type *list all dl* then press <ENTER> to download the list of all parameters in a config.txt file.

```
Basics> list gps
gps.allowLowPower=0
gps.data_source=0
gps.default_antenna_source=1
gps.file_data_source=data/gps/file-1.dat
gps.pdop_filter=0
gps.positionSyncPeriod=600
gps.satnum_filter=0
Basics>
```

2.6 The *g {module} {parameter} [(index)] {value}* command

This command is used to retrieve the value of one parameter.

- Type *g {module} {parameter} [(index)] {value}* then press <ENTER> to display the value of selected parameter.

```
Basics> g gps default_antenna_source
1
Basics>
```

2.7 The *s {module} {parameter} [(index)]* command

This command is used to set the value of one parameter.

- Type *s {module} {parameter} [(index)]* then press <ENTER> to display the value of selected parameter.

For instance, type *s dataRecorder fieldPeriod 127 0* to set the parameter *dataRecorder.fieldPeriod[127]*

```
Basics> s dataRecorder fieldPeriod 127 1
Setting key dataRecorder.fieldPeriod[127]='1'
Value updated successfully
Basics>
```

2.8 The *log* command

This command is used to display the software debug.

→ Type *log* then press <ENTER> to display the value of selected parameter.

Note: The debug is the same using the command *llog soft*.

```
Basics> log
Type 'stop' to stop watching the file
com/asbotek/positionOnDemand$0] PDM DATA SIZE :43
2009/02/15 00:24.48 I[netMonitoring] NetMonitoring::getDryMonitoringInfo: Rxbytes=30 (total=80) - Txbytes=42 (total=124)
2009/02/15 00:24.48 I[netMonitoring] NetMonitoring::run: Rx_kbytes=0, Tx_kbytes=0
2009/02/15 00:25.36 ADL [MODEM][START] Modem starting
2009/02/15 00:25.36 ADL [MODEM][START] Init state machine
2009/02/15 00:25.36 ADL [MODEM][START] serial port open sucefully
2009/02/15 00:25.36 WARN:GpsDriver::run: a truncated frame was read. Dropping.
2009/02/15 00:26.05 I[j$com/asbotek/positionOnDemand$0] NO of PENDING SMS :0
2009/02/15 00:26.05 I[j$com/asbotek/positionOnDemand$0] PDM DATA SIZE :43
2009/02/15 00:26.49 I[netMonitoring] NetMonitoring::getDryMonitoringInfo: Rxbytes=30 (total=80) - Txbytes=42 (total=124)
2009/02/15 00:26.49 I[netMonitoring] NetMonitoring::run: Rx_kbytes=0, Tx_kbytes=0
stop
Basics>
```

2.9 The *logdump* command

This command is used to display the software debug since the device started (current session). For instance, this is useful to check if a component has correctly been started.

→ Type *logdump* then press <ENTER> to display the log.

```
Basics> logdump
2010/03/22 11:03.26 pdm: initialising static components ...
2010/03/22 11:03.26 INIT: std (2.4.0)
2010/03/22 11:03.26 INIT: pcom (2.4.0)
2010/03/22 11:03.26 system: initialising static components ...
2010/03/22 11:03.26 INIT: net (2.4.0)
2010/03/22 11:03.26 INIT: dbg (2.4.0)
2010/03/22 11:03.26 INIT: std (2.4.0)
```

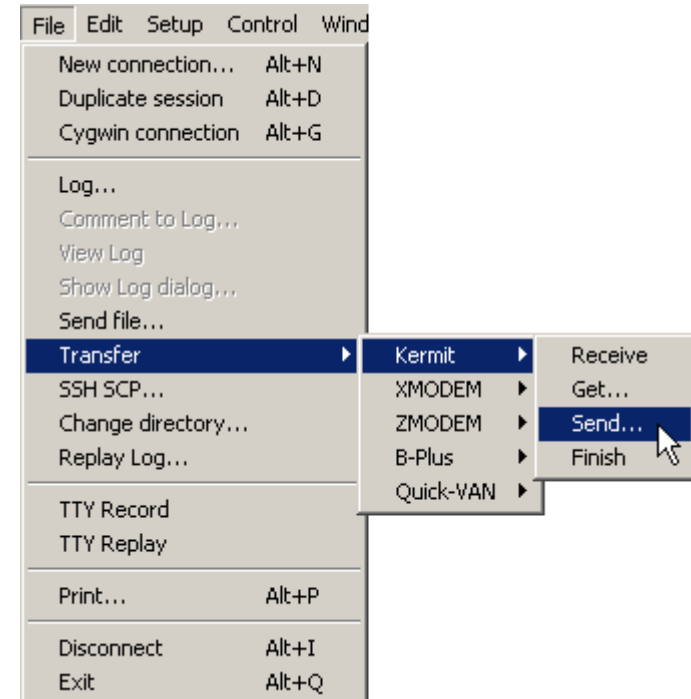
2.10 The *configure* command

This command is used to transfer a configuration file.

- Type *configure* then press <ENTER>.
- Transfer a file *config.txt* using Kermit.

```
Basics> configure
Send your 'config.txt' file
Send your file with kermit
G-Kermit CU-1.00, Columbia University, 1999-12-25
Escape back to your local Kermit and give a SEND command.

KERMIT READY TO RECEIVE...
# N3
Transfert done
Copying file...
Transfert complete!
Setting key dataEmitter.deviceId='test'
Value updated successfully
Basics>
```



2.11 The *reboot* command

- Type *reboot* then press <ENTER> to reset the device.

3. Screen1 (Advanced)

This screen is used for advanced configuration.

```
Basics> screen 1
Advanced :
ip [{str}]          Display all ip addresses. If str, display only str adress.
stats              Display stats.
llog [soft|gps|update|kstart|mAT|mPPP] Display last logs of:
                  software, gps, kernel start, modem AT, or modem PPP
skey [update|delete] Update/Delete server key
ukey [update|delete] Update/Delete user key
logs [get|delete]  Retrieve or Delete logs of software
stopsoft          Stop the software
usercpn [list|start|stop|remove][all|{module}] List user components
gprsupdate [start|stop] Enable / Disable GRPS update
geomap [update|delete] Update / Delete a geofencing map
update            Upload an update package
sysupdate [diff|full] Update the system
restore [all|write|pdm|db] Restore parameters of write, db or pdm
restoreFull       Restore device to the initial configuration state
version           Display software/hardware version

Advanced> █
```

3.1 The *ip* command

This command is used to display the current ip.

→ Type *ip* then press <ENTER> to display the ip (host and connected device).

```
Advanced> ip
lo        127.0.0.1
ppp0     10.141.49.234
Advanced> █
```

3.2 The `stats` command

This command displays the following data:

- The software status;
- The GPRS update status;
- The restore status;
- The content of the public DSA key;
- The PPP status;
- The RTC time;
- Information about the memory.

→ Type `stats` then press <ENTER> to display the statistics.

3.3 The `llog` command

```
llog [soft|gps|update|kstart|mAT|mPPP] Display last logs of :
      software, gps, kernel start, modem AT, or modem PPP
```

This command allows retrieving the following logs:

- Software
- Gps (not implemented yet)
- Update
- Kernel
- Modem AT (not implemented yet)
- modem PPP (not implemented yet)

→ Type `llog {option}` then press <ENTER> to display the logs.

3.4 The `logs` command

This command allows downloading/deleting stored logs:

→ Type `logs {option}` then press <ENTER> to display the logs.

```
Advanced> logs get
Starting log retrieving
current
Which file? : all
Archiving log files
Transferring file 'all.tar.gz' in kermit
G-Kermit CU-1.00, Columbia University, 1999-12-25
Escape back to your local Kermit and give a RECEIVE command.

KERMIT READY TO SEND...
9 S~' @-#Y3~*!J*0+++J"U1@0
Transfert complete!
Advanced>
```

3.5 The `usercpn` command

```
usercpn [list|start|stop|remove][all|{module}] List user components
```

This command allows listing, starting, stopping or removing a user module.

→ Type `usercpn {option} {module}` then press <ENTER>.

```
Advanced> usercpn list
Running user components
com.gpsPosition
Installed user components
com.gpsPosition
Advanced>
```

```
Advanced> usercpn remove com.gpsPosition
com.gpsPosition
Do you really want to remove this component? [y/N] : y
Update will be done next time the device boots
Advanced>
```

3.6 The `gprsupdate` command

This command is used to launch a GPRS update (over the air) from the device.

→ Type `gprsupdate start` then press <ENTER>.

→ Fill in required fields (login, host, port, path) then press <ENTER> to launch the update.

```
Advanced> gprsupdate start
login : md
host : 77.72.89.165
port : 1150
path : serverUpdate/updTest
Advanced>
```

Once you launched a gprs update, you can display the log using the command llog.
→ Type **llog update** then press <ENTER> to display the logs.

```
Advanced> llog update
Type 'stop' to stop watching the file
g'
2010/03/18 09:43.06 update.sh: parseLine: should_reset
2010/03/18 09:43.07 update.sh: parseLine: should_reset in 120 seconds
2010/03/18 09:43.07 update.sh: Fork just created scp with pid 2012
2010/03/18 09:43.07 update.sh : cmdline = scp -C -2 -o PubkeyAuthentication=yes -o BatchMode=yes -i /mnt/user/id_dsa -P 115
0 md@77.72.89.165:serverUpdate/updTest/config.txt /var/mountSys
2010/03/18 09:43.09 update.sh: Pid 2012 is finished with ret 1
```

3.7 The update command

This command is used to install a package.

→ Type **update** then press <ENTER>.

→ Type (or copy) the full name (including the extension) of the file then press <ENTER>.

Note: You can update only the following types of packages:

- PKG-usersd-*.tar.gz
- PKG-user-*.tar.gz
- PKG-Deployment-patch.tar.gz

The name is case sensitive.

```
Advanced> update
Which PKG-*.tar.gz file do you want to transfer? : PKG-usersd-gpsPosition.tar.gz
Send your file with kermit
G-Kermit CU-1.00, Columbia University, 1999-12-25
Escape back to your local Kermit and give a SEND command.

KERMIT READY TO RECEIVE...

Transfert done
Copying file...
Transfert complete!
Update will be done next time the device boots
Advanced>
```

3.8 The `restore` command

```
restore [all|write|pdm|db] Restore parameters of write, db or pdm
```

This command is used to restore parameters the device.

- Type `restore all` then press <ENTER> to restore the write partition, the pdm and the DB.
- Type `restore write` then press <ENTER> to restore the write partition.
- Type `restore pdm` then press <ENTER> to restore the pdm.
- Type `restore db` then press <ENTER> to restore the db.

```
Advanced> restore pdm
Update will be done next time the device boots
Advanced>
```

3.9 The `restoreFull` command

This command is used to restore (software) the device.

- Type `restoreFull` then press <ENTER>.

```
Advanced> restoreFull
rm: cannot remove directory '/mnt/user/writeDir/lost+found': Directory not empty
Full restore done, rebooting...

```

3.10 The `version` command

This command allows retrieving all the device hardware/software versions.

- Type `version` then press <ENTER>.

```
Advanced> version
- device : 'type'
- version : 'C4D'
- category : 'Hardware'
- infos : ''
Result : 0
- device : 'release'
- version : 'Release-2.4.0'
- category : 'Software'
- infos : ''
```

3.11 The *reboot* command

→ Type *reboot* then press <ENTER> to reset the device.

4. Screen 2 (Commands)

This screen allows using the APIs.

```
Advanced> screen 2
Commands :
clist      List available commands
chelp {command_name} Display command help
crun {command_name} [{args}] Run the command
Commands> █
```