

Modem_Parancsok

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	<i>TITLE :</i> Modem_Parancsok		
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WRITTEN BY		April 16, 2022	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

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Chapter 1

Modem_Parancsok

1.1 Louise's Modem Guide

Louise
's Modem Guide SEARCH
Thanks and greetings

ENGLISH Documentations

MNP or v.42 Commands

S-Registers (Summary) S00-S95
Hayes compatible S-Registers Summary
Hayes compatible AT commands

Informations about various modem types

FAX and DATA modems with voice Mail
Class 2 Fax/Modem Command Scorecard

'Disconnect redial restriction' on german modems releases

The Modem Dictionary v2.00

Frequently Asked Questions
Modem Cables

ZModem Protocoll Documentation
YModem Protocoll Documentation

Modem related informations on the Internet

MAGYAR Dokumentációk

Parancsösszefoglaló

Tárcsázási parancsok és módosítók

Modem működtető parancsok

Válaszkódok

Regiszterek

Discovery 1200/2400 modem felhasználói kézikönyv

Wise Link Modem Beállítások

1.2 Parancsösszefoglaló

AT Minden parancsot kötelezően megelőző előtag (kivéve A/ és +++)
A/ Utolsó parancs ismétlése
+++ Escape karakterek adatmódból parancsmódba kerüléshez

1.3 Tárcsázási parancsok és módosítók

D Hívás kezdeményezés (pld.: ATDT1234567 TONE módban tárcsázza a számot)
N Alternatív tárcsázás
S=n n- edik telefonszám tárcsázása
T Tárcsahangos tárcsázás
P Pulzus tárcsázás
R Tárcsázás fordított módban
W Tárcsahangra várás (pld.: ATDT 01W123456 a '01' után tárcsahangra vár)
, Szünet
! Hívás átadás alközponton keresztül
; Visszatérés parancsmódba
/n n sorszámú telefonszám tárcsázása

1.4 Modem működtető parancsok

A Automatikus válaszadás
B0 CCITT V.21, V.22
B1 Bell 103 / 212 A

C0	Vivő küldés tiltva
C1	Vivő küldés engedélyezve
E0	Parancs echo tiltva
E1	Parancs echo
F0	Félduplex mód
F1	Teljes duplex mód
H0	Telefonvonal megszakítás
H1	Telefonvonalra kapcsolódás
I0	Termékkód
I1	ROM ellenőrző összeg
I2	ROM ellenőrzés eredménye
I3	Információ a beállításokról
J0	Hang / adat érzékelés tiltva
J1	Hang / adat érzékelés engedélyezve
L1	Alacsony hangerő
L2	Közepes hangerő
L3	Nagy hangerő
M0	Hangszóró kikapcsolva
M1	Hangszóró bekapcsolva az összeköttetés létrejöttéig
M2	Hangszóró mindig bekapcsolva
M3	Hangszóró kikapcsolva a tárcsázás alatt, különben ua. mint M1
N=n	Ujrahívások száma foglaltság esetén
N?	Ujrahívások számának lekérdezése
O0	On-line adatmódba kapcsolás
O1	On-line adatmódba kapcsolás visszacsatolással (2400 bps)
Q0	Válaszkódok engedélyezése
Q1	Válaszkódok tiltva
Sr?	Regiszter kiolvasása
Sr=n	Regiszter beírása n tartalommal
V0	Számjegyes válaszkódok
V1	Szavas válaszkódok
X0	Válaszkód 0-4
X1	Válaszkód 0-5, 10
X2	Válaszkód 0-6, 8-10
X3	Válaszkód 0-5, 7-10
X4	Minden válaszkód engedélyezve
Y0	Hosszú megszakítás engedélyezve
Y1	Hosszú megszakítás tiltva
Z0	Modem alapállapotba állítás SCP0 konfigurációs profillal
Z1	Modem alapállapotba állítás SCP1 konfigurációs profillal

&C0 Vivő figyelés tiltva
&C1 Távoli modem vivőjének figyelése engedélyezve

&D0 DTR (adatterminál készenlét) jel figyelmen kívül hagyva
&D1 DTR megszűnése után feltételezett parancsmód vonalbontás nélkül
&D2 DTR megszűnése után feltételezett parancsmód vonalbontással
&D3 DTR megszűnése után modem alapállapotba állítás

&F Gyári alapbeállítás betöltése

&G0 Őrzőhang tiltás
&G1 550 Hz őrzőhang
&G2 1800 Hz őrzőhang

&J0 RJ-11 telefoncsatlakozó, egy telefonvonalas rendszer
&J1 RJ-11 telefoncsatlakozó, több telefonvonalas rendszer

&L0 Tárcsázási üzemmód
&L1 Bérelt vnalas üzemmód

&P0 Pulzustárcsázás kitöltési tényező 39/61
&P1 Pulzustárcsázás kitöltési tényező 33/67

&Q0 Aszinkron mód
&Q1 Szinkrin mód 1
&Q2 Szinkrin mód 2
&Q3 Szinkrin mód 3

&R0 CTS követi az RTS jelet
&R1 CTS mindig bekapcsolva, RTS figyelmen kívül hagyva

&S0 DSR jel bekapcsolva
&S1 DSR követi az RS-232C-t

&T0 Diagnosztikai teszt befejezése
&T1 Lokális analóg hurok
&T3 Lokális digitális hurok
&T4 Távolról vezérelt digitális hurkolású teszt engedélyezve
&T5 Távolról vezérelt digitális hurkolású teszt tiltva
&T6 Távoli digitális hurkolású teszt kezdeményezés
&T7 &T6 + modem önteszt
&T8 Lokális analóg hurok + modem önteszt

&V Aktív konfigurációs profil megjelenítése
&V0 SCP0 profil megjelenítése
&V1 SCP1 profil megjelenítése

&W0 Aktív konfigurációs profil SCP0-ba írása
&W1 Aktív konfigurációs profil SCP1-be írása

&X0 Modem órajel
&X1 Terminál órajel
&X2 Távoli vivő órajel

&Y0 SCP0 a bekapcsolás utáni aktív (konfigurációs profil)
&Y1 SCP1 a bekapcsolás utáni aktív konfigurációs profil

&Zn= n-edik telefonszám tárolása

Megjegyzés: a & kezdetű parancsok 1200-as modemre nem érvényesek

1.5 Válaszkódok

OK	0	Sikeres parancssor végrehajtás
CONNECT	1	Összeköttetés távoli modemmel (300 bps/1200 bps)
RING	2	Csengetés jel érkezett
NO CARRIER	3	Távoli vivő jel nem érzékelhető
ERROR	4	Parancssor hiba
CONNECT 1200	5	Összeköttetés távoli modemmel 1200 bps
NO DIALTONE	6	Nincs tárcsahang
BUSY	7	Foglalt jel érzékelve
NO ANSWER	8	Nincs 5 mp csend
CONNECT 2400	10	Összeköttetés távoli modemmel 2400 bps
NVRAM ERROR	30	Modem memória hiba
VOICE CALL	31	Hanghívás érkezett automatikus válasz módban
HANG UP	32	Hanghívás megszakítása 60 mp után

1.6 Regiszterek

Regiszter	Tartomány	Egység	Alapérték	Funkció
*S0	0-255	csengetés	01	csengetésszám válasz előtt
S1	0-255	csengetés	00	csengetésszámláló
S2	0-127	ASCII	43	escape karakter
S3	0-127	ASCII	13	kocsivissza karakter
S4	0-127	ASCII	10	soremelés karakter
S5	0-32,127	ASCII	08	szóköz vissza karakter
*S6	2-255	másodperc	02	tárcsahangra várás
*S7	3-255	másodperc	45	vivő jelre várás
*S8	0-255	másodperc	02	vessző szünetidő
*S9	1-255	0.1 mp	06	vivőérzékelés válaszütem
*S10	1-255	0.1 mp	14	vivő kimaradás érzékelés
*S11	70-255	0.001 mp	95	hangtárcsázás sebessége
*S12	0-255	0.02 mp	50	escape késleltetés
S13-S17		fenntartott		
*S18	0-255	másodperc	00	tesztidő
*S19-S24		fenntartott		
*S25	0-255	0.01 mp	05 **	DTR jel késleltetés
*S26	0-255	0.01 mp	00	RTS-ből CTS-be átmenet
S27		fenntartott		

1.7 Wise Link Modem Beállítások

A Wise Link modemeknek a következő beállítást tudom ajánlani:

```
at&f <-- Ezt irod te
```


OK <-- Ez a gép válasza rá

atw2
OK

ats95=1
OK

at&w <-- Elmented a beállítást.
OK

at&v <-- A modem tartalmának listája.

ACTIVE PROFILE: NORMAL RINGING DETECTION
B1 E1 L2 M1 N1 P Q0 V1 W2 X4 Y0 &C1 &D2 &G0 &I0 &L0 &K3 &Q5 &R0 &S0 &T4 &X0 &Y0
S00:000 S01:000 S02:043 S03:013 S04:010 S05:008 S06:002 S07:050 S08:002 S09:006
S10:014 S11:095 S12:050 S18:000 S25:005 S26:001 S36:007 S37:000 S38:060 S44:003
S46:138 S48:007

STORED PROFILE 0:
B1 E1 L2 M1 N1 P Q0 V1 W2 X4 Y0 &C1 &D2 &G0 &I0 &L0 &K3 &Q5 &R0 &S0 &T4 &X0
S00:000 S02:043 S06:002 S07:050 S08:002 S09:006 S10:014 S11:095 S12:050 S18:000
S25:005 S26:001 S36:007 S37:000 S38:060 S44:003 S46:138 S48:007

STORED PROFILE 1:
B1 E1 L3 M1 N1 Q0 T V1 W0 X4 Y0 &C1 &D2 &G0 &I0 &L0 &K3 &Q5 &R0 &S0 &T4 &X0
S00:001 S02:043 S06:002 S07:045 S08:002 S09:006 S10:014 S11:095 S12:050 S18:000
S25:005 S26:001 S36:007 S37:000 S38:060 S44:003 S46:138 S48:007

TELEPHONE NUMBERS:

0= 1=
2= 3=

OK

Ha a tied is így nézz ki akkor mindent jól csináltál és aránylag van egy optimális beállításod amit ugyan a modem könyv segítségével csiszolhatsz. Nekem ezekkel a beállításokkal működnek a modemek és kb 1700-1800 CPS a file átviteli sebesség. (Legrosszabb esetben is 1630 CPS) Ha még ezen kívül van gondod és a könyvből sem találsz rá megoldást akkor hagyj nyugodtan egy üzenetett.

Zotya

1.8 S Registers Summary

Commands to Change or Read Registers

ATSn = ??? Changes the value of a register
'n' = number of register
??? = new value of register in decimal

ATSn Points to a new register
 'n' = number of register to point

 ATSn? Displays the conternts of the register selected with 'n'

 AT = ??? Changes the value of the last referenced register
 ??? = new value

 AT? Displays the value of the referenced register

S-Registers (Register summary)

The modem uses registers to store configuration status. Some of the registers control only one function, but some of them are called bit mapped registers which control several functions in single register.

S-Register list (Hayes compatible Modems)
 S-Register list (Supra Modems)
 S-Register list (USR Modems)

1.9 FAQs for modems

Q: How to connect 2 modems with a presented line?

A: Just type on your modem "ATX1DT1", and type on another modem "ATA"...
 The connect is ready.

Q: How to maximising my modem for the Net?

A:

1.10 Modem based informations in the NET

Modem related informations on teh NET

<http://www.rosenet.net/~costmo>
<http://uts.cc.utexas.edu/~loudon/>

Online groups

In general ask questions on AOL, Compuserve, the LineLink mailing list. I believe there is a forum/area for Prometheus on AOL.

The following internet Usenet newsgroups would be helpful also

comp.dcom.modems
 comp.dcom.fax

For Mac users also look at
comp.sys.mac.comm
comp.sys.mac.hardware

For Amiga owners also look at
comp.sys.amiga.comm

1.11 Infos about LouiSe, and his projects...

The development is the future of AMIGA

If you have unique informations about modems, please send it for me!

LouiSe's E-Mail Address: louise@bedrock.fido.hu (sometime doesn't work!)
 alan@elender.hu (works everytime)

LouiSe's Post Address: 1399 Pf 701/836 BUDAPEST HUNGARY
 (AMIGAonly P.O. Box)

If you want to know more about the world largest AMIGA foreign language
dictionary, the LSDictionary, just contact with NHL
(Native Human Laboratories)
at e-mail: alan@elender.hu

A nice home page for NHL (including LouiSe's) coming soon!

1.12 Maximising your modem for the Net

Maximising your modem for the Net

The Internet seems slow. Is it your modem? Is it the service provider or is it the server carrying the Web page you are trying to download? Read this and at least you will get the best possible performance out of your modem.

The link between your computer and the Internet is a tenuous one. A thin piece of copper wire stretches from your house through several telephone exchanges to your Internet service provider's computer. But tenuous though it may be, you hardly ever notice this link.

At either end of the line there are two devices that keep the data flying down this thin copper wire. They are modems (a contraction of the term modulator/demodulator). They stuff data down that wire at tremendous speed and also handle error correction if something does go wrong in the transmission.

For many people who do not have the benefit of a corporate network - a modem, a telephone line and a dial up Internet account are the only way to establish a link from the desktop to the outside world. Browsing the World

Wide Web, downloading files via FTP or sending e-mail messages around the world are all possible with a modem and Internet access software.

But modern fax modems do more than just allow access to the Internet. They provide fax capability to and from your desktop or laptop machine. They can also provide communications between remote offices or just between friends for something like a game of two-player Doom .

While the modem is often the forgotten technology, you can get the best out of your modem by understanding how it works and how to tune it to get its best performance. We will start by explaining modem technology to identify the main factors in controlling your modem's performance when accessing the Internet. By the end of this tutorial you should be able to ensure that your modem is delivering its maximum performance.

Before connecting to your Internet service provider you must ensure that the modem and software are set up correctly. There are three main areas to consider: Line Speed Interface or Terminal Speed Flow Control Many people confuse the terms line speed and interface speed. When thinking about modem communications it is important to remember that there are two separate speeds at which your modem communicates. Your modem will speak to your Internet service provider's modem at what is referred to as line speed, the speed the modems are exchanging information across the telephone line. Common speeds are 28,800 bits per second (sometimes referred to as V.34) or 14,400 (V.32bps). The terminal or interface speed, as opposed to line speed is the speed at which your modem communicates with your computer. Flow control regulates the flow of information between your computer and modem.

Line speed

Your modem's line speed is determined by the modem during the loud hand shaking routine at the beginning of the connection. The faster the line speed the two modems agree to operate at, the more quickly data can be sent to or from the Internet. As well, at high speeds you will spend less time waiting and you will lower your online charges.

The speed decided by the hand shaking process is dependent on the modem's analysis of the quality of the telephone line and of their respective capabilities and settings. So rather than you picking a speed, start your modem off at its highest speed setting and let it determine the optimum speed for the line you are using. Line quality can vary depending upon the load on your local exchange, the quality of cabling to your office or house and to your service provider's modems.

Typically, a V.34 modem will start out attempting to connect at its fastest speed of V.34 28,800 bits per second. If it can't negotiate a connection at that speed it will fall back to a lower speed. For example, the NetComm Roadster 288 will lower the speed by steps of 2400 bits per second until a successful connection is achieved.

However, if necessary, the modem can be forced to only connect at a specified speed using the AT+MS command. If you are experiencing difficulties connecting to your Internet service provider, you might try connecting at a slower speed. You will need to refer to the your modem reference manuals or command card for commands and settings. Also check your Internet access software for references as to how the settings should be configured.

Terminal speed

Terminal speed refers to the speed your computer or terminal is communicating with your modem. The terminal speed should always be set higher than the line speed so that your modem is transmitting or receiving data as quickly as possible.

To set the correct terminal speed for your modem and your computer, you must determine several facts: Firstly, the maximum terminal speed at which your modem can communicate with your computer needs to be determined. In the case of a typical V.34, the maximum terminal speed it supports might be 115,200 bits per second. For information specific to your modem refer to your modem specifications. Terminal speed may also be referred to as DTE speed.

The type and speed of the serial port of your computer will also determine the maximum speed at which you can communicate with your modem. If you are using a Microsoft DOS (including Windows 3.11) based machine you can investigate the type of serial port by using Microsoft Diagnostics.

To do this simply type MSD at the DOS prompt, select <O>Serial Ports<O> and note down the bottom line UART (Universal Asynchronous Receive and Transmit) number. This will be either 8250 or 16550 with each number referring to the capability or speed that your computer's serial port can accommodate.

An 8250 UART with its one bit buffer can only support one bit of data at any one time, reducing the maximum speed at which it can communicate to 19200 bits per second. This is particularly the case with multi-tasking environments like Windows, as the serial port may not always be able to send data to the CPU immediately.

A 16550 UART can buffer 16 bits of data, allowing more data to be stored until your computer's CPU is ready to receive information. 16550 serial ports allow terminal speeds of up to 115,200 bps ensuring that data is quickly transferred to or from your modem.

Once you have determined the type of serial ports and maximum terminal speed of your modem, refer to your Internet access software for references as to where the settings should be configured. In the case of terminal speed, there is no specific command that has to be set on the modem. The modem will automatically detect the speed at which the computer/.EEEEInternet access software is attempting to communicate and adjust accordingly. This is termed auto bauding.

If you have determined your computer has high speed serial ports, it is recommended that you configure your Internet access software to communicate at 38400 bps or higher - assuming your modem can support these speeds. This will ensure the fast transfer of data to or from your computer.

Flow control

Finally, to ensure that no data is lost when being transferred between your computer and modem it is necessary to specify a form of flow control. Flow control, as the name suggests, regulates the flow of information between your computer and modem. If your computer's serial port buffer is

approaching its capacity, the computer will indicate to the modem that it is no longer ready to receive information and request the modem suspend transmitting until the computer indicates it is ready for further data.

In the case of data being transferred from your computer to your modem, flow control also operates, allowing the modem to inform the transmitting computer that its storage buffers are almost full and request the computer cease transmitting until the modem indicates it is ready to continue.

Hardware flow control generates signals along the serial cable to indicate that a regulation of the data flow is required. Software flow control, on the other hand, uses specific characters within the data to indicate the data flow should be slowed or restarted.

When setting flow control on your modem, it is important that both your modem and Internet access software be set to use the same type of flow control.

The recommended form of flow control is referred to as Hardware flow control, sometimes known as RTS/.EEECTS or Hardware hand shaking. For commands for your modem please refer to the your modem's command guide.

So, by setting the modem to attempt the fastest line speed, and the optimum interface speed, as well as ensuring both the software and hardware are configured for the same form of flow control, you will be utilising your modem to its maximum potential.

Technobabble

The word modem is a contraction of 'modulator/demodulator'. Modems come with a string of number and letters that can be baffling for all but the technical experts. Here is our short guide to the number soup: V.42bis is a way of compressing data in the modem. Think of it as shrinking your letter to fit a smaller envelope.

V.42 is an error control protocol for sending data. This covers the way the data is bundled up before transmission. You could think of it as the envelope.

V.32, V.32bis and V.34 are all ways of sending and modulating the analog telephone signal to carry data. You can think of these schemes as different ways of sending your letter. You can send it express post or register mail or just normal mail. V.32 and V.32bis run at 9600 and 14,400 bits per second. V.34 is for 28,800 bits per second (V.FC also works at 28,800).

1.13 Thanks and greetings to my friends, and more...

T H A N K S A N D G R E E T I N G S

```

HHHHHHHHHHHHHHHHHHHH  HHHHHH  HHHHHH  HHHHHH  HHHHHH
HH  HHHHHH  HH  HHHH  HHHH  HHHH  HHHH
   HHHHHH      HHHH  HHHH  HHHH  HHHH
   HHHHHH      HHHHHHHHHHHH      HHHHHHHH
   HHHHHH      HHHH  HHHH  HHHH  HHHH
   HHHHHH      HHHH  HHHH  HHHH  HHHH

```

HHHHHHHHH HHHHHH HHHHHH HHHHHH HHHHHH

A big thank coming up to Joerg Riemer at Berlin, for spelling and bug corrections.

Some big thanks coming up to all LSDictionary v3 owners all over the world.

Some medium thanks coming up to the Hungarian AMIGA modem, and BBS scene for some little helps and init strings...

Thanx and greetX for the PoWeR Team for the cool, long time diskmag.

GreetX for the AMIGAonly, the largest Hungarian AMIGA newspaper.

Another greetX to: Lord/Imp/Abs!/CJ, WinterMute/CJ, Gizmo, Magic, ADT, Chris, Zozo, Jagu, Lya, Alan, JawBreaker, Phoenix, Bozo, Dark, and every guyz in the AMIGA world!
