

xdmcp	177/tcp	X Display Manager Control Protocol
xdmcp	177/udp	X Display Manager Control Protocol
nextstep	178/tcp	NextStep Window Server
NextStep	178/udp	NextStep Window Server
bgp	179/tcp	Border Gateway Protocol
bgp	179/udp	Border Gateway Protocol
ris	180/tcp	Intergraph
ris	180/udp	Intergraph
unify	181/tcp	Unify
unify	181/udp	Unify
audit	182/tcp	Unisys Audit SITP
audit	182/udp	Unisys Audit SITP
ocbinder	183/tcp	OCBinder
ocbinder	183/udp	OCBinder
ocserver	184/tcp	OCServer
ocserver	184/udp	OCServer
remote-kis	185/tcp	Remote-KIS
remote-kis	185/udp	Remote-KIS
kis	186/tcp	KIS Protocol
kis	186/udp	KIS Protocol
aci	187/tcp	Application Communication Interface
aci	187/udp	Application Communication Interface
mumps	188/tcp	Plus Five's MUMPS
mumps	188/udp	Plus Five's MUMPS
qft	189/tcp	Queued File Transport
qft	189/udp	Queued File Transport
gacp	190/tcp	Gateway Access Control Protocol
cacp	190/udp	Gateway Access Control Protocol
prospero	191/tcp	Prospero
prospero	191/udp	Prospero
osu-nms	192/tcp	OSU Network Monitoring System
osu-nms	192/udp	OSU Network Monitoring System
srmp	193/tcp	Spider Remote Monitoring Protocol
srmp	193/udp	Spider Remote Monitoring Protocol
irc	194/tcp	Internet Relay Chat Protocol
irc	194/udp	Internet Relay Chat Protocol
dn6-nlm-aud	195/tcp	DNSIX Network Level Module Audit
dn6-nlm-aud	195/udp	DNSIX Network Level Module Audit
dn6-smm-red	196/tcp	DNSIX Session Mgt Module Audit Redir
dn6-smm-red	196/udp	DNSIX Session Mgt Module Audit Redir
dls	197/tcp	Directory Location Service
dls	197/udp	Directory Location Service
dls-mon	198/tcp	Directory Location Service Monitor
dls-mon	198/udp	Directory Location Service Monitor
smux	199/tcp	SMUX
smux	199/udp	SMUX
src	200/tcp	IBM System Resource Controller
src	200/udp	IBM System Resource Controller
at-rtmp	201/tcp	AppleTalk Routing Maintenance
at-rtmp	201/udp	AppleTalk Routing Maintenance
at-nbp	202/tcp	AppleTalk Name Binding
at-nbp	202/udp	AppleTalk Name Binding
at-3	203/tcp	AppleTalk Unused
at-3	203/udp	AppleTalk Unused
at-echo	204/tcp	AppleTalk Echo
at-echo	204/udp	AppleTalk Echo
at-5	205/tcp	AppleTalk Unused

at-5	205/udp	AppleTalk Unused
at-zis	206/tcp	AppleTalk Zone Information
at-zis	206/udp	AppleTalk Zone Information
at-7	207/tcp	AppleTalk Unused
at-7	207/udp	AppleTalk Unused
at-8	208/tcp	AppleTalk Unused
at-8	208/udp	AppleTalk Unused
tam	209/tcp	Trivial Authenticated Mail Protocol
tam	209/udp	Trivial Authenticated Mail Protocol
z39.50	210/tcp	ANSI Z39.50
z39.50	210/udp	ANSI Z39.50
914c/g	211/tcp	Texas Instruments 914C/G Terminal
914c/g	211/udp	Texas Instruments 914C/G Terminal
anet	212/tcp	ATEXSSTR
anet	212/udp	ATEXSSTR
ipx	213/tcp	IPX
ipx	213/udp	IPX
vmpwscs	214/tcp	VM PWSCS
vmpwscs	214/udp	VM PWSCS
softpc	215/tcp	Insignia Solutions
softpc	215/udp	Insignia Solutions
atls	216/tcp	Access Technology License Server
atls	216/udp	Access Technology License Server
dbase	217/tcp	dBASE Unix
dbase	217/udp	dBASE Unix
mpp	218/tcp	Netix Message Posting Protocol
mpp	218/udp	Netix Message Posting Protocol
uarps	219/tcp	Unisys ARPs
uarps	219/udp	Unisys ARPs
imap3	220/tcp	Interactive Mail Access Protocol v3
imap3	220/udp	Interactive Mail Access Protocol v3
fln-spx	221/tcp	Berkeley rlogind with SPX auth
fln-spx	221/udp	Berkeley rlogind with SPX auth
fsh-spx	222/tcp	Berkeley rshd with SPX auth
fsh-spx	222/udp	Berkeley rshd with SPX auth
cdc	223/tcp	Certificate Distribution Center
cdc	223/udp	Certificate Distribution Center
	224-241	Reserved
sur-meas	243/tcp	Survey Measurement
sur-meas	243/udp	Survey Measurement
link	245/tcp	LINK
link	245/udp	LINK
dsp3270	246/tcp	Display Systems Protocol
dsp3270	246/udp	Display Systems Protocol
	247-255	Reserved
pawserv	345/tcp	Perf Analysis Workbench
pawserv	345/udp	Perf Analysis Workbench
zserv	346/tcp	Zebra server
zserv	346/udp	Zebra server
faterv	347/tcp	Fatmen Server
faterv	347/udp	Fatmen Server
clearcase	371/tcp	Clearcase
clearcase	371/udp	Clearcase
ulistserv	372/tcp	Unix Listserv
ulistserv	372/udp	Unix Listserv
legent-1	373/tcp	Legent Corporation
legent-1	373/udp	Legent Corporation

legent-2	374/tcp	Legent Corporation
legent-2	374/udp	Legent Corporation
exec	512/tcp	remote process execution; authentication performed using passwords and UNIX login names
biff	512/udp	used by mail system to notify users of new mail received; currently receives messages only from processes on the same machine
login	513/tcp	remote login a la telnet; automatic authentication performed based on privileged port numbers and distributed data bases which identify "authentication domains"
who	513/udp	maintains data bases showing who's logged in to machines on a local net and the load average of the machine
cmd	514/tcp	like exec, but automatic authentication is performed as for login server
syslog	514/udp	
printer	515/tcp	spooler
printer	515/udp	spooler
talk	517/tcp	like tenex link, but across machine - unfortunately, doesn't use link protocol (this is actually just a rendezvous port from which a tcp connection is established)
talk	517/udp	like tenex link, but across machine - unfortunately, doesn't use link protocol (this is actually just a rendezvous port from which a tcp connection is established)
ntalk	518/tcp	
ntalk	518/udp	
utime	519/tcp	unixtime
utime	519/udp	unixtime
efs	520/tcp	extended file name server
router	520/udp	local routing process (on site); uses variant of Xerox NS routing information protocol
timed	525/tcp	timeserver
timed	525/udp	timeserver
tempo	526/tcp	newdate
tempo	526/udp	newdate
courier	530/tcp	rpc
courier	530/udp	rpc
conference	531/tcp	chat
conference	531/udp	chat
netnews	532/tcp	readnews
netnews	532/udp	readnews
netwall	533/tcp	for emergency broadcasts
netwall	533/udp	for emergency broadcasts
uucp	540/tcp	uucpd
uucp	540/udp	uucpd
klogin	543/tcp	

klogin	543/udp	
kshell	544/tcp	krcmd
kshell	544/udp	krcmd
new-rwho	550/tcp	new-who
new-rwho	550/udp	new-who
dsf	555/tcp	
dsf	555/udp	
remotefs	556/tcp	rfs server
remotefs	556/udp	rfs server
rmonitor	560/tcp	rmonitord
rmonitor	560/udp	rmonitord
monitor	561/tcp	
monitor	561/udp	
chshell	562/tcp	chcmd
chshell	562/udp	chcmd
9pfs	564/tcp	plan 9 file service
9pfs	564/udp	plan 9 file service
whoami	565/tcp	whoami
whoami	565/udp	whoami
meter	570/tcp	demon
meter	570/udp	demon
meter	571/tcp	udemon
meter	571/udp	udemon
ipcserver	600/tcp	Sun IPC server
ipcserver	600/udp	Sun IPC server
nqs	607/tcp	nqs
nqs	607/udp	nqs
mdqs	666/tcp	
mdqs	666/udp	
elcsd	704/tcp	errlog copy/server daemon
elcsd	704/udp	errlog copy/server daemon
netcp	740/tcp	NETscout Control Protocol
netcp	740/udp	NETscout Control Protocol
netgw	741/tcp	netGW
netgw	741/udp	netGW
netrcs	742/tcp	Network based Rev. Cont. Sys.
netrcs	742/udp	Network based Rev. Cont. Sys.
flexlm	744/tcp	Flexible License Manager
flexlm	744/udp	Flexible License Manager
fujitsu-dev	747/tcp	Fujitsu Device Control
fujitsu-dev	747/udp	Fujitsu Device Control
ris-cm	748/tcp	Russell Info Sci Calendar Manager
ris-cm	748/udp	Russell Info Sci Calendar Manager
kerberos-adm	749/tcp	kerberos administration
kerberos-adm	749/udp	kerberos administration
rfile	750/tcp	
loadav	750/udp	
pump	751/tcp	
pump	751/udp	
qrh	752/tcp	
qrh	752/udp	
rrh	753/tcp	
rrh	753/udp	
tell	754/tcp	send
tell	754/udp	send
nlogin	758/tcp	
nlogin	758/udp	

con	759/tcp	
con	759/udp	
ns	760/tcp	
ns	760/udp	
rx	761/tcp	
rx	761/udp	
quotad	762/tcp	
quotad	762/udp	
cycleserv	763/tcp	
cycleserv	763/udp	
omserv	764/tcp	
omserv	764/udp	
webster	765/tcp	
webster	765/udp	
phonebook	767/tcp	phone
phonebook	767/udp	phone
vid	769/tcp	
vid	769/udp	
cadlock	770/tcp	
cadlock	770/udp	
rtip	771/tcp	
rtip	771/udp	
cycleserv2	772/tcp	
cycleserv2	772/udp	
submit	773/tcp	
notify	773/udp	
rpasswd	774/tcp	
acmaint_dbd	774/udp	
entomb	775/tcp	
acmaint_transd	775/udp	
wpages	776/tcp	
wpages	776/udp	
wpgs	780/tcp	
wpgs	780/udp	
hp-collector	781/tcp	hp performance data collector
hp-collector	781/udp	hp performance data collector
hp-managed-node	782/tcp	hp performance data managed node
hp-managed-node	782/udp	hp performance data managed node
hp-alarm-mgr	783/tcp	hp performance data alarm manager
hp-alarm-mgr	783/udp	hp performance data alarm manager
mdbs_daemon	800/tcp	
mdbs_daemon	800/udp	
device	801/tcp	
device	801/udp	
xtreelic	996/tcp	XTREE License Server
xtreelic	996/udp	XTREE License Server
maitrd	997/tcp	
maitrd	997/udp	
busboy	998/tcp	
puparp	998/udp	
garcon	999/tcp	
applix	999/udp	Applix ac
puprouter	999/tcp	
puprouter	999/udp	
cadlock	1000/tcp	
ock	1000/udp	
blackjack	1025/tcp	network blackjack

blackjack	1025/udp	network blackjack
hermes	1248/tcp	
hermes	1248/udp	
bbn-mmcc	1347/tcp	multi media conferencing
bbn-mmcc	1347/udp	multi media conferencing
bbn-mmxx	1348/tcp	multi media conferencing
bbn-mmxx	1348/udp	multi media conferencing
sbook	1349/tcp	Registration Network Protocol
sbook	1349/udp	Registration Network Protocol
editbench	1350/tcp	Registration Network Protocol
editbench	1350/udp	Registration Network Protocol
equationbuilder	1351/tcp	Digital Tool Works (MIT)
equationbuilder	1351/udp	Digital Tool Works (MIT)
lotusnote	1352/tcp	Lotus Note
lotusnote	1352/udp	Lotus Note
ingreslock	1524/tcp	ingres
ingreslock	1524/udp	ingres
orasrv	1525/tcp	oracle
orasrv	1525/udp	oracle
prospero-np	1525/tcp	prospero non-privileged
prospero-np	1525/udp	prospero non-privileged
tlisrv	1527/tcp	oracle
tlisrv	1527/udp	oracle
coauthor	1529/tcp	oracle
coauthor	1529/udp	oracle
issd	1600/tcp	
issd	1600/udp	
nkd	1650/tcp	
nkd	1650/udp	
callbook	2000/tcp	
callbook	2000/udp	
dc	2001/tcp	
wizard	2001/udp	curry
globe	2002/tcp	
globe	2002/udp	
mailbox	2004/tcp	
emce	2004/udp	CCWS mm conf
berknet	2005/tcp	
oracle	2005/udp	
invokator	2006/tcp	
raid-cc	2006/udp	raid
dectalk	2007/tcp	
raid-am	2007/udp	
conf	2008/tcp	
terminaldb	2008/udp	
news	2009/tcp	
whosockami	2009/udp	
search	2010/tcp	
pipe_server	2010/udp	
raid-cc	2011/tcp	raid
servserv	2011/udp	
ttyinfo	2012/tcp	
raid-ac	2012/udp	
raid-am	2013/tcp	
raid-cd	2013/udp	
troff	2014/tcp	
raid-sf	2014/udp	

cypress	2015/tcp
raid-cs	2015/udp
bootserver	2016/tcp
bootserver	2016/udp
cypress-stat	2017/tcp
bootclient	2017/udp
terminaldb	2018/tcp
rellpack	2018/udp
whosockami	2019/tcp
about	2019/udp
xinupageserver	2020/tcp
xinupageserver	2020/udp
servexec	2021/tcp
xinuexpansion1	2021/udp
down	2022/tcp
xinuexpansion2	2022/udp
xinuexpansion3	2023/tcp
xinuexpansion3	2023/udp
xinuexpansion4	2024/tcp
xinuexpansion4	2024/udp
ellpack	2025/tcp
xribs	2025/udp
scrabble	2026/tcp
scrabble	2026/udp
shadowserver	2027/tcp
shadowserver	2027/udp
submitserver	2028/tcp
submitserver	2028/udp
device2	2030/tcp
device2	2030/udp
blackboard	2032/tcp
blackboard	2032/udp
glogger	2033/tcp
glogger	2033/udp
scoremgr	2034/tcp
scoremgr	2034/udp
imsl doc	2035/tcp
imsl doc	2035/udp
objectmanager	2038/tcp
objectmanager	2038/udp
lam	2040/tcp
lam	2040/udp
interbase	2041/tcp
interbase	2041/udp
isis	2042/tcp
isis	2042/udp
isis-bcast	2043/tcp
isis-bcast	2043/udp
rims1	2044/tcp
rims1	2044/udp
cdfunc	2045/tcp
cdfunc	2045/udp
sdfunc	2046/tcp
sdfunc	2046/udp
dls	2047/tcp
dls	2047/udp
dls-monitor	2048/tcp

dls-monitor	2048/udp	
shilp	2049/tcp	
shilp	2049/udp	
www-dev	2784/tcp	world wide web - development
www-dev	2784/udp	world wide web - development
NSWS	3049/tcp	
NSWS	3049/ddddp	
rfa	4672/tcp	remote file access server
rfa	4672/udp	remote file access server
complex-main	5000/tcp	
complex-main	5000/udp	
complex-link	5001/tcp	
complex-link	5001/udp	
rfe	5002/tcp	radio free ethernet
rfe	5002/udp	radio free ethernet
rmonitor_secure	5145/tcp	
rmonitor_secure	5145/udp	
padl2sim	5236/tcp	
padl2sim	5236/udp	
sub-process	6111/tcp	HP SoftBench Sub-Process Control
sub-process	6111/udp	HP SoftBench Sub-Process Control
xdsxdm	6558/udp	
xdsxdm	6558/tcp	
afs3-fileserver	7000/tcp	file server itself
afs3-fileserver	7000/udp	file server itself
afs3-callback	7001/tcp	callbacks to cache managers
afs3-callback	7001/udp	callbacks to cache managers
afs3-prserver	7002/tcp	users & groups database
afs3-prserver	7002/udp	users & groups database
afs3-vlserver	7003/tcp	volume location database
afs3-vlserver	7003/udp	volume location database
afs3-kaserver	7004/tcp	AFS/Kerberos authentication service
afs3-kaserver	7004/udp	AFS/Kerberos authentication service
afs3-volser	7005/tcp	volume managment server
afs3-volser	7005/udp	volume managment server
afs3-errors	7006/tcp	error interpretation service
afs3-errors	7006/udp	error interpretation service
afs3-bos	7007/tcp	basic overseer process
afs3-bos	7007/udp	basic overseer process
afs3-update	7008/tcp	server-to-server updater
afs3-update	7008/udp	server-to-server updater
afs3-rmtsys	7009/tcp	remote cache manager service
afs3-rmtsys	7009/udp	remote cache manager service
man	9535/tcp	
man	9535/udp	
isode-dua	17007/tcp	
isode-dua	17007/udp	

23. What is a trojan/worm/virus/logic bomb?

This FAQ answer is excerpted from: Computer Security Basics  
by Deborah Russell  
and G.T. Gengemi Sr.

Trojan: An independent program that appears to perform a useful



function but that hides another unauthorized program inside it. When an authorized user performs the apparent function, the trojan horse performs the unauthorized function as well (often usurping the privileges of the user).

**Virus:** A code fragment (not an independent program) that reproduces by attaching to another program. It may damage data directly, or it may degrade system performance by taking over system resources which are then not available to authorized users.

**Worm:** An independent program that reproduces by copying itself from one system to another, usually over a network. Like a virus, a worm may damage data directly, or it may degrade system performance by tying up system resources and even shutting down a network.

**Logic Bomb:** A method for releasing a system attack of some kind. It is triggered when a particular condition (e.g., a certain date or system operation) occurs.

24. How can I protect myself from virii and such?

Always write protect your floppy disks when you are not purposefully writing to them.

Use ATTRIB to make all of your EXE and COM files read only. This will protect you from many poorly written viruses.

Scan any software that you receive with a recent copy of a good virus scanner. The best virus scanner currently available for DOS is F-Prot by Fridrik Skulason. The current version is FP-215. It is best to use more than one virus scanner. That will decrease your chances of missing a virus.

Backup regularly, and keep several generations of backups on hand. If you always backup over your last backup, you may find yourself with an infected backup tape.

25. What is Cryptotxxxxxxx?

This FAQ answer is excerpted from: Computer Security Basics  
by Deborah Russell  
and G.T. Gengemi Sr.

A message is called either plaintext or cleartext. The process of disguising a message in such a way as to hide its substance is called encryption. An encrypted message is called ciphertext. The process of turning ciphertext back into plaintext is called decryption.

The art and science of keeping messages secure is called cryptography,

and it is practiced by cryptographers. Cryptanalysts are practitioners of cryptanalysis, the art and science of breaking ciphertext, i.e. seeing through the disguise. The branch of mathematics embodying both cryptography and cryptanalysis is called cryptology, and it's practitioners are called cryptologists.

## 26. What is PGP?

This FAQ answer is excerpted from: PGP(tm) User's Guide  
Volume I: Essential Topics  
by Philip Zimmermann

PGP(tm) uses public-key encryption to protect E-mail and data files. Communicate securely with people you've never met, with no secure channels needed for prior exchange of keys. PGP is well featured and fast, with sophisticated key management, digital signatures, data compression, and good ergonomic design.

Pretty Good(tm) Privacy (PGP), from Phil's Pretty Good Software, is a high security cryptographic software application for MS-DOS, Unix, VAX/VMS, and other computers. PGP allows people to exchange files or messages with privacy, authentication, and convenience. Privacy means that only those intended to receive a message can read it. Authentication means that messages that appear to be from a particular person can only have originated from that person. Convenience means that privacy and authentication are provided without the hassles of managing keys associated with conventional cryptographic software. No secure channels are needed to exchange keys between users, which makes PGP much easier to use. This is because PGP is based on a powerful new technology called "public key" cryptography.

PGP combines the convenience of the Rivest-Shamir-Adleman (RSA) public key cryptosystem with the speed of conventional cryptography, message digests for digital signatures, data compression before encryption, good ergonomic design, and sophisticated key management. And PGP performs the public-key functions faster than most other software implementations. PGP is public key cryptography for the masses.

## 27. What is Tempest?

Tempest stands for Transient Electromagnetic Pulse Surveillance Technology.

Computers and other electronic equipment release interference to their surrounding environment. You may observe this by placing two video monitors close together. The pictures will behave erratically until you space them apart.

Although most of the time these emissions are simply annoyances, they can sometimes be very helpful. Suppose we wanted to see what project a target was working on. We could sit in a van outside her office and

use sensitive electronic equipment to attempt to pick up and decipher the emanations from her video monitor.

Our competitor, however, could shield the emanations from her equipment or use equipment without strong emanations.

Tempest is the US Government program for evaluation and endorsement of electronic equipment that is safe from eavesdropping.

28. What is an anonymous remailer?

An anonymous remailer is a system on the Internet that allows you to send e-mail anonymously or post messages to Usenet anonymously.

You apply for an anonymous ID at the remailer site. Then, when you send a message to the remailer, it sends it out from your anonymous ID at the remailer. No one reading the post will know your real account name or host name. If someone sends a message to your anonymous ID, it will be forwarded to your real account by the remailer.

29. What are the addresses of some anonymous remailers?

The most popular and stable anonymous remailer is anon.penet.fi, operated by Johan Helsingus. To obtain an anonymous ID, mail ping@anon.penet.fi. For assistance in obtaining an anonymous account at penet, mail help@anon.penet.fi.

To see a list on anonymous remailers, finger remailer-list@kiwi.cs.berkeley.edu.

30. How do I defeat Copy Protection?

There are two common methods of defeating copy protection. The first is to use a program that removes copy protection. Popular programs that do this are CopyIIPC from Central Point Software and CopyWrite from Quaid Software. The second method involves patching the copy protected program. For popular software, you may be able to locate a ready made patch. You can then apply the patch using any hex editor, such as debug or the Peter Norton's DiskEdit. If you cannot, you must patch the software yourself.

Writing a patch requires a debugger, such as Soft-Ice or Sourcer. It also requires some knowledge of assembly language. Load the protected program under the debugger and watch for it to check the protection mechanism. When it does, change that portion of the code. The code can be changed from JE (Jump on Equal) or JNE (Jump On Not Equal) to JMP (Jump Unconditionally). Or the code may simply be replaced with NOP (No Operation) instructions.

31. What is 127.0.0.1?

127.0.0.1 is a loopback network connection. If you telnet, ftp, etc... to it you are connected to your own machine.

## Section B: Telephony

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01. What is a Red Box?

When a coin is inserted into a payphone, the payphone emits a set of tones to ACTS (Automated Coin Toll System). Red boxes work by fooling ACTS into believing you have actually put money into the phone. The red box simply plays the ACTS tones into the telephone microphone. ACTS hears those tones, and allows you to place your call. The actual tones are:

|                |           |                                        |
|----------------|-----------|----------------------------------------|
| Nickel Signal  | 1700+2200 | 0.060s on                              |
| Dime Signal    | 1700+2200 | 0.060s on, 0.060s off, twice repeating |
| Quarter Signal | 1700+2200 | 33ms on, 33ms off, 5 times repeating   |

02. How do I build a Red Box?

Red boxes are commonly manufactured from modified Radio Shack tone dialers, Hallmark greeting cards, or made from scratch from readily available electronic components.

To make a Red Box from a Radio Shack 43-141 or 43-146 tone dialer, open the dialer and replace the crystal with a new one. The purpose of the new crystal is to cause the \* button on your tone dialer to create a 1700Mhz and 2200Mhz tone instead of the original 941Mhz and 1209Mhz tones. The exact value of the replacement crystal should be 6.466806 to create a perfect 1700Mhz tone and 6.513698 to create a perfect 2200mhz tone. A crystal close to those values will create a tone that easily falls within the loose tolerances of ACTS. The most popular choice is the 6.5536Mhz crystal, because it is the easiest to procure. The old crystal is the large shiny metal component labeled "3.579545Mhz." When you are finished replacing the crystal, program the P1 button with five \*'s. That will simulate a quarter tone each time you press P1.

03. Where can I get a 6.5536Mhz crystal?

Your best bet is a local electronics store. Radio Shack sells them, but they are overpriced and the store must order them in. This takes approximately two weeks. In addition, many Radio Shack employees do not know that this can be done.

Or, you could order the crystal mail order. This introduces Shipping and Handling charges, which are usually much greater than the price of the crystal. It's best to get several people together to share the S&H cost. Or, buy five or six yourself and sell them later. Some of the places you can order crystals are:

Digi-Key  
701 Brooks Avenue South  
P.O. Box 677  
Thief River Falls, MN 56701-0677  
(80)344-4539  
Part Number:X415-ND /\* Note: 6.500Mhz and only .197 x .433 x .149! \*/  
Part Number:X018-ND

JDR Microdevices:  
2233 Branham Lane  
San Jose, CA 95124  
(800)538-5000  
Part Number: 6.5536MHZ

Tandy Express Order Marketing  
401 NE 38th Street  
Fort Worth, TX 76106  
(800)241-8742  
Part Number: 10068625

04. Which payphones will a Red Box work on?

Red Boxes will work on TelCo owned payphones, but not on COCOT's (Customer Owned Coin Operated Telephones).

Red boxes work by fooling ACTS (Automated Coin Toll System) into believing you have put money into the pay phone. ACTS is the telephone company software responsible for saying "Please deposit XX cents" and listening for the coins being deposited.

COCOT's do not use ACTS. On a COCOT, the pay phone itself is responsible for determining what coins have been inserted.

05. How do I make local calls with a Red Box?

Payphones do not use ACTS for local calls. To use your red box for local calls, you have to fool ACTS into getting involved in the call.

One way to do this, in some areas, is by dialing 10288-xxx-xxxx. This makes your call a long distance call, and brings ACTS into the picture.

In other areas, you can call Directory Assistance and ask for the number of the person you are trying to reach. The operator will give you the number and then you will hear a message similar to "Your call can be completed automatically for an additional 35 cents." When this

happens, you can then use ACTS tones.

06. What is a Blue Box?

Blue boxes use a 2600hz tone to size control of telephone switches that use in-band signalling. The caller may then access special switch functions, with the usual purpose of making free long distance phone calls, using the tones provided by the Blue Box.

07. Do Blue Boxes still work?

Blue Boxes still work in areas using in band signalling. Modern phone switches use out of band signalling. Nothing you send over the voice portion of bandwidth can control the switch.

08. What is a Black Box?

A Black Box is a 1.8k ohm resistor placed across your phone line to cause the phone company equipment to be unable to detect that you have answered your telephone. People who call you will then not be billed for the telephone call. Black boxes do not work under ESS.

09. What do all the colored boxes do?

Acrylic           Steal Three-Way-Calling, Call Waiting and programmable

                  Call Forwarding on old 4-wire phone systems

Aqua             Drain the voltage of the FBI lock-in-trace/trap-trace

Beige            Lineman's hand set

Black            Allows the calling party to not be billed for the call

                  placed

Blast            Phone microphone amplifier

Blotto           Supposedly shorts every fone out in the immediate area

Blue             Emulate a true operator by seizing a trunk with a 2600hz

                  tone

Brown            Create a party line from 2 phone lines

Bud              Tap into your neighbors phone line

Chartreuse      Use the electricity from your phone line

Cheese           Connect two phones to create a diverter

Chrome           Manipulate Traffic Signals by Remote Control

Clear            A telephone pickup coil and a small amp use to make free

                  calls on Fortress Phones

Color            Line activated telephone recorder

Copper           Cause crosstalk interference on an extender

Crimson          Hold button

Dark             Re-route outgoing or incoming calls to another phone

Dayglo            Connect to your neighbors phone line  
Divertor         Re-route outgoing or incoming calls to another phone  
DLOC             Create a party line from 2 phone lines  
Gold             Trace calls, tell if the call is being traced, and can

change a trace

Green            Emulate the Coin Collect, Coin Return, and Ringback tones  
Infinity         Remotely activated phone tap  
Jack             Touch-Tone key pad  
Light            In-use light  
Lunch            AM transmitter  
Magenta         Connect a remote phone line to another remote phone line  
Mauve            Phone tap without cutting into a line  
Neon             External microphone  
Noise            Create line noise  
Olive            External ringer  
Party            Create a party line from 2 phone lines  
Pearl            Tone generator  
Pink             Create a party line from 2 phone lines  
Purple           Telephone hold button  
Rainbow         Kill a trace by putting 120v into the phone line (joke)  
Razz             Tap into your neighbors phone  
Red              Make free phone calls from pay phones by generating

quarter tones

Rock            Add music to your phone line  
Scarlet         Cause a neighbors phone line to have poor reception  
Silver           Create the DTMF tones for A, B, C and D  
Static          Keep the voltage on a phone line high  
Switch         Add hold, indicator lights, conferencing, etc..  
Tan             Line activated telephone recorder  
Tron            Reverse the phase of power to your house, causing your

electric meter to run slower

TV Cable        "See" sound waves on your TV  
Urine           Create a capacitative disturbance between the ring and

tip wires in another's telephone headset

Violet          Keep a payphone from hanging up  
White           Portable DTMF keypad  
Yellow          Add an extension phone

Box schematics may be retrieved from these FTP sites:

ftp.netcom.com            /pub/va/vandal                            (DnA)  
ftp.winternet.com         /users/craigb                             (H/P)

10. What is an ANAC number?

An ANAC (Automatic Number Announcement Circuit) number is a telephone number that plays back the number of the telephone that called it.