ARemote

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ARemote

COLLABORATORS						
	TITLE :					
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ARemote

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Chapter 1

ARemote

1.1 Contents

```
ARemote
V1.00B
by
Jeremy Friesner
Disclaimer
      Don't blame me!
Distribution
     ARemote is FreeWare!
Requirements
     What do I need to run this program?
Introduction
     What does ARemote do?
Installation
      How do I set up ARemote?
ToolTypes
        How can I customize ARemote?
Using ARemote
  How to use ARemote
Acknowledgments
  Thanks to...
History
           Bug fixes and enhancements
```

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Future

What next?

Known Problems
Bugs! Aack!

Other programs Plug, plug!

1.2 distribution

ARemote and its source code are in the public domain. Do whatever you like with them... although if you're nice you'll give me a credit in your docs. ;)

1.3 knownproblems

"Save Settings" isn't implemented yet.

1.4 history

```
1.00B : (Public Release 4/27/97)
- First public release. "Save Settings" is not implemented, and it hasn't been tested on multiple Amigas yet (sigh), but it *should* work!
```

1.5 requirements

To use ARemote, you will need the following:

```
    An Amiga with some free memory
    Workbench 2.04 or greater
    An Internet connection
    AmiTCP (or a compatible TCP stack) set up and running.
    amarquee.library
    v43+ in your LIBS: directory.
```

1.6 acks

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Thanks to Jan van den Baard for GadToolsBox, which made the GUI a breeze to write.

Thanks to Gerard Cornu for posting LED.c to Aminet, so I could steal its LED-flashing code. ;)

Thanks to Raj Joshi for suggesting the program.

1.7 introduction

ARemote is a Commodity that allows you to control multiple Amigas with one mouse and one keyboard. When activated, it will divert your mouse and keyboard input from the Commodities stream, out over a TCP connection, and back into the Commodities stream of another Amiga. Note that ARemote does NOT let you see the other Amiga's screen (if it could, it would be XWindow!), so unless you can work "blind", you will need to have the other Amiga's monitor within view. But for people with more than one Amiga on their desk, this can still be useful as you can then operate all your Amigas from one console. Go ahead and sell all your mice and keyboards but one.;)

Note that ARemote requires $\begin{array}{c} \text{amarquee.library} \\ \text{v43+ to be installed} \end{array}$

in your LIBS: directory. If you don't have this library, download the archive /comm/net/AMarquee1.43.lha from Aminet and install it.

The following files should be in the ARemote archive:

Listing of archive 'ARemote1.00B.lha':

Original	Packed	Ratio	Date	Time	Name
1204	504	58.1%	27-Apr-97	23:47:42	ARemote.info
18584	10291	44.6%	27-Apr-97	23:47:42	+ARemote
15270	5798	62.0%	27-Apr-97	23:47:42	+ARemote.guide
1542	1097	28.8%	27-Apr-97	23:47:42	+ARemote.guide.info
1213	437	63.9%	27-Apr-97	23:47:42	+ARemote.info
628	275	56.2%	27-Apr-97	23:47:40	+source.info
9190	2744	70.1%	27-Apr-97	23:47:42	+ARemote.c
5748	1086	81.1%	27-Apr-97	23:47:40	+ARemote.gui
3469	836	75.9%	27-Apr-97	23:47:42	+ARemote.h
4487	972	78.3%	27-Apr-97	23:47:42	+aremote_temp.c
1109	503	54.6%	27-Apr-97	23:47:40	+ARemote_temp_aux.h
6811	2251	66.9%	27-Apr-97	23:47:42	+aremotedebug.c
23588	6926	70.6%	27-Apr-97	23:47:42	+divert.c
7924	2764	65.1%	27-Apr-97	23:47:40	+divert.timer.c
1059	334	68.4%	27-Apr-97	23:47:42	+dmakefile
3435	1261	63.2%	27-Apr-97	23:47:42	+playback.c
105261	38079	63.8%	27-Apr-97	23:47:56	16 files

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1.8 installation

 $\label{eq:copy_the} \mbox{Just copy the executable file and icon to wherever you want to keep them.}$

Make sure that

amarquee.library
 v43+ is installed

in your LIBS: directory!

If you wish to use the ACTION (app-launching) feature of ARemote, it is very likely you will have to modify the paths in the ACTION ToolTypes to suit the paths in your system.

1.9 tooltypes

ARemote understands the following parameters. These parameters may be set either as ToolTypes in ARemote's icon, or specified on the command line (in the same exact format as the tooltypes, although you may have to use "quote marks" if the parameter contains spaces):

CONNECTTO/K:

Specifies the IP name of the Amiga that ARemote should connect to. That is, it sets the default value for the "Connect To" string gadget in the ARemote window.

The default value for this parameter is "" (unset).

CONNECTTOPASSWORD/K:

CONNECTTOPORT/K/N:

Specifies the password to use when connecting to another Amiga. That is, it sets the default value for the "Connect Password" string gadget in the ARemote window.

The default value for this parameter is "ARemote".

Specifies the port number that ARemote should try to connect to when initiating a connection to another Amiga. This sets the value of the "Connect Port" integer gadget in the ARemote window. The default value for this parameter is 20000.

ACCEPTFROM/K:

Specifies which computers are allowed to connect to this ARemote session. This sets the value of the "Accept From" string gadget in the ARemote window. Note that this value can be an IP name (such as "sdcc8.ucsd.edu"), or a regular expression (such as "#?.ucsd.edu" or "(bob.ucsd.edu|fred.netcom.com)"). The defauld value for this parameter is "" (i.e. accept connections from nobody)

ACCEPTFROMPASSWORD/K:

Specifies the password that ARemote should use to verify incoming connections. This sets the value of the "Accept Password" string gadget in the ARemote window.

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The default value for this parameter is "ARemote".

ACCEPTFROMPORT/K/N:

Specifies the port number that ARemote should listen on for connections from other Amigas. This sets the value of the "Accept Port" integer gadget in the ARemote window. The default value for this parameter is 20000.

TOGGLEKEY/K:

Specifies the Commodities event expression that will toggle input stream transmission on and off. This sets the value of the "Xmit Trigger" string gadget in the ARemote window. The default value for this parameter is "lcommand shift x".

CX_POPKEY/K:

Specifies the Commodities event expression that will cause the ARemote window to open. This sets the value of the "Popup Hotkey" string gadget in the ARemote window. The default value for this parameter is "lcommand y".

FLASHLED/K:

If set to TRUE, this will cause the Amiga's power LED to flash whenever input events are being transmitted. This parameter sets the "Flash LED" checbox in the ARemote window. The default value for this parameter is FALSE.

CONNECTONSTARTUP/K:

If set to TRUE, ARemote will attempt to connect to the host specified with CONNECTTO/K when it is launched. This parameter sets the "Connect on Startup" checkbox in the ARemote window. The default value for this parameter is FALSE.

ENABLED/K:

If set to NO, ARemote will open in "disabled" mode. In this mode, ARemote will not connect to the server.

ALLOWMULTIPLE/K:

If set to YES, ARemote will allow you to run more than one copy of it at once. In this way, you can be connected to more than one remote Amiga at a time. If you do have multiple connections running simultaneously, you will probably want to run each ARemote session with different hotkeys, to avoid conflicts.

CX_POPUP/K:

If set to NO, ARemote will not open its window on startup. Defaults to YES.

CX_PRIORITY/K/N:

Sets the Commodities priority of the ARemote commodity. Defaults to 127. This value may be important, as Commodities with priorities higher than ARemote's priority will receive user events before ARemote—thus, those events may not be transmitted to the remote Amiga.

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1.10 using

ARemote has a reasonable simple GUI. It is divided into three areas, the "connect to" area (on top), the "accept from" area (in the middle), and some miscellaneous controls on the bottom.

The "connect to" area allows you to set parameters that govern how ARemote initiates TCP connections. You may specify the IP name of the computer you wish to connect to, the port number to connect on, and the password you should send to it. When you have done this, you can click the "Connect Now" button, at the bottom, to initiate the connection.

In order for the connection to succeed, the remote computer must be running a TCP stack and ARemote, be accepting connections from your computer, and must be accepting the password you specified. The status of your connection attempt will be reflected in the title bar of the ARemote window.

The "accept from" area of the GUI governs on what conditions your computer should accept an ARemote connection request. The "Accept From" string gadget should be set to indicate which Internet host names are allowed to control your Amiga. This parameter may be a simple IP name (e.g. "myamiga.mycompany.com") if you wish to only allow one Amiga access to your machine, or it can be a regular expression (e.g. "#?.#?.com" or "(bob.spm.com|fred.spoo.edu|jeff.netnet.net)") if you wish to allow more than one Amiga access. The port gadget allows you to specify which port ARemote should listen for connections on. Connecting ARemote sessions should connect to this port number specified here. The final gadget in this area allows you to set a password for your Amiga. The connecting ARemote session must specify the same string (case counts!) as this in its Connect To->Password gadget, or the connection will be refused.

The lower area of the window contains some miscellaneous controls.

The "popup hotkey" string gadget allows you to specify the Commodities key event that will cause the ARemote window to open.

The "Xmit Trigger" string gadget lets you specify what key combination should trigger the diversion of your input events into the TCP connection. This same key combination is used to stop the diversion of input events and return your Amiga to it's "normal" state.

The "Connect on Startup" checkbox controls whether or not ARemote should attempt a connection when it is first launched.

The "Flash LED" checkbox enables the LED-flashing feature of ARemote. If this is checked, then each input event that is transmitted over the TCP stream will cause the LED light on your Amiga to change intensity.

The "Connect Now" and "Disconnect Now" buttons allow you to initiate and break TCP connections, respectively. Clicking "Connect Now" will close any current session, and attempt to create a new connection to the computer specified in the "Connect To" area of the GUI. Clicking "Disconnect Now" will close any current session, and ARemote will go back to listening for connections on the port specified in the "Accept

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From" area of the GUI.

Lastly, there is the menu. It contains a few standard items. The only one which bears explanation is the "Enabled" checkbox menu item. This controls whether or not ARemote is "enabled" in the Commodities Exchange broker window, and vice versa. If ARemote is disabled, incoming TCP packets will be dropped instead of fed into the Commodities input stream. It has no effect on outgoing packets.

Now, to actually USE ARemote: once you are connected to another ARemote session, (the "Connect Now" button will be grayed out), you can press the hotkey specified in the "Xmit Trigger" string gadget to transfer your input from the local Amiga to the remote Amiga. At this point, the mouse pointer on your Amiga will freeze, and keystrokes will have no effect on your Amiga. Also, if you have selected "Flash LED" in the ARemote window, your Amiga's power LED may begin flickering. (If this does not happen, and you get a screen flash/system beep instead, check the ARemote window—you are not connected to another Amiga!) Do not panic, this is normal behavior. You are now in control of the remote Amiga—as if you were typing on its keyboard and moving its mouse. When you wish to return to controlling the local Amiga, just press the Xmit Trigger hotkey again.

1.11 disclaimer

This software comes with no warranty, either expressed or implied.

The

author

is in no way responsible for any damage or loss that may occur due to direct or indirect usage of this software. Use this software entirely at your own risk.

1.12 me

This program was written by Jeremy Friesner, using DICE C. The GUI was created with GadToolsBox.

My email address is jfriesne@ucsd.edu. (Try jaf@chem.ucsd.edu if that one doesn't work, though)

1.13 unnamed.1

The "Save Settings" option has not been implemented yet.

The LED flash is kind of a bad idea, since it makes it look a lot like your computer has crashed. But it was easier to implement than some other notification options (like changing the mouse pointer or screen colors, or opening a special window). Let me know if it is worth it to implement another method!

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1.14 future

Implement the "Save Settings" menu item.

Make multiple simultaneous connections easier to use (imagine controlling an array of 100 Amigas on 100 monitors, from one keyboard... muahahahaha!)

Make ARemote re-entrant

Integrate the Windoze client, so that your Amiga can control your PC, and vice versa.

1.15 amarquee.library

ARemote is based on the AMarquee data broadcasting system, and thus requires v43 or greater of amarquee.library to be installed in your LIBS: directory. This library is available as part of the AMarquee archive available on Aminet, in /comm/net.

1.16 otherprogs

Some other programs I wrote:

- GadMget Loads in an Aminet RECENT or INDEX file and lets you choose files to download via a pair of ListViews. Features keyword searching and sorting by name, size, age, directory, and description. When you're done, it outputs the ftp commands that are needed to download the selected files. The output formatting is extremely flexible, allowing generation of many formats: ftp, ncftp, ftp-by-mail, shell scripts, etc. Comes with an ARexx script to completely automate downloading with ncFTP. (util/misc/GadMget2.05.lha,93K)
- AmiSlate A paint program that works with AmiTCP to allow two people to cooperatively paint on the same drawing from different computers. Features an extensive ARexx port which allows the construction of new features and games. Comes with ARexx scripts for chess, tic-tac-toe, backgammon, and others. (comm/tcp/AmiSlate1.4.lha,115K)
- AmiPhone An Internet voice-chat program, similar to IPhone and VoiceChat and Nevot and all that, only Amiga-specific. Features aflexible buffering mechanism for slow connections, an ARexx port, IFF 8SVX transmission and playback, internal multitasking, and support for a variety of digitizers. (comm/net/AmiPhone1.92.lha,142K)
- AMarquee The TCP front-end library and server daemon that ARemote uses to send data over the net. Allows an arbitrary number of Amigas to broadcast messages and state information to each other without "polling". Fully multithreaded, with an easy-to-use C API that requires no knowledge of sockets

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programming. (comm/net/AMarquee1.43.lha)

QAmiTrack - An AMarquee program that lets you register your Amiga as "on-line" and find out what other Amigas are currently available on the Internet.

(comm/net/QAmiTrack1.80.lha)