

microframe[®]

SERIES 4600 Ethernet Visual-Pager[®] Display INSTALLATION and SPECIFICATION GUIDE



Manual No. D4600-7010
Updated: 10/2019
Rev: 1.3

Microframe Corporation
604 South 12th Street
Broken Arrow, OK 74012

Local: 918-258-4839
Toll Free: 800-635-3811
Website: www.microframecorp.com
E-mail: support@microframecorp.com

D4600-7010



Limited Warranty Agreement

Your Microframe System is warranted against failure due to defects in workmanship or material for a period of one (1) year from the date of purchase. Microframe Corporation will repair or replace any defective unit. Obvious abuse or mishandling of the unit is NOT covered by this warranty.

Merchandise Return

If your Unit does not work satisfactorily, please give us a call. We may be able to clear up the problem by phone. If it becomes necessary to return your Unit to the factory, please observe the following:

1. Call Microframe for an RMA number. This will authorize you to return the unit.
2. Place Unit in a sturdy box with sufficient packing material.
3. If requested, include the AC power adapter. It is not necessary to return the cable and connectors unless they are the problem.
4. Return the system insured and prepaid. Microframe is not responsible for shipping damages and losses on returned Units.

Warranty Service

For warranty service, please contact Microframe toll-free at 800-635-3811. One of our technicians will be glad to assist you.

Assistance

For any product assistance or maintenance help, contact Microframe by either calling 800-635-3811 or e-mailing us at: support@microframecorp.com.

Safety

Do not install substitute parts or perform any modification to the product without first contacting Microframe.

Disclaimer

We constantly strive to improve our products. Specifications are subject to change without notice.

Warning

All power adapters, line cords, and electrical equipment should be kept out of the reach of children and away from water. (If you are installing cable in an air plenum area, such as a drop ceiling used for air return, you must use plenum-rated cable. The cable supplied from Microframe is rated CL2 and is approved for indoor installation everywhere except plenum areas.)

Life Support Policy

Microframe's products are not authorized for use as components in life support devices or systems without the express written approval of the President of Microframe Corporation. As used herein:

1. Life support devices or systems are defined as systems which support or sustain life, and whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user or any one depending on the system.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

FCC Notice (for wireless products only)

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Series 4600
Ethernet Visual-Pager® Display
Installation and Specification Guide

Table of Contents

1.0 Display Overview_____	4
1.1 Quick Install_____	4
1.2 Getting Started_____	4
2.0 Display Config Utility - Basic_____	5
2.1 Display Config Utility - Advanced_____	6
3.0 Installation / Operation / Options_____	7
4.0 Using the App_____	8
5.0 General Troubleshooting Chart_____	9
Specifications_____	10

STOP
INSTALL THE FREE APP NOW



1.0 Display Overview

The Ethernet Visual-Pager® Display is a wired version of our D4500 WiFi displays. This eliminates any WiFi connectivity or setup issues. Once this display is connected to your LAN network, it can be controlled from any computer or wireless device on the network. These devices are controlled by the same Visual Paging apps used by our WiFi displays.

1.1 Quick Install

We recommend setting up your unit and testing it before permanent installation.

Ethernet Displays

- 1) Use an Ethernet cable to plug the display into your LAN network
- 2) Attach the power cable to the terminals on the back of the display
- 3) Plug in the power adapter
- 4) When the middle status light (bottom right corner) goes solid, then the display is online and ready for use.

1.2 Getting Started

Download Apps

Download one of the following apps:

Android: Google Play Store search "Microframe WiFi Visual Pager"

iOS: Apple Store search "Microframe WiFi Visual Pager"

Kindle: Amazon App Store search "Microframe WiFi Visual Pager"

MAC: <https://www.microframecorp.com/download-software> -> D4500 Paging and Configuration Software for OS X

PC: <https://www.microframecorp.com/download-software> -> D4500 Paging and Configuration Software for Windows

Basic Configuration

Mobile App: Use the "Setup" mode under "Display Settings". Set the display name and pin, then save settings.

MAC/PC App: Click "Configure".

Advanced Configuration

To set a static IP address, download the Ethernet config tool here:

MAC\PC: <https://www.microframecorp.com/download-software> -> D4600 Discovery and Settings.

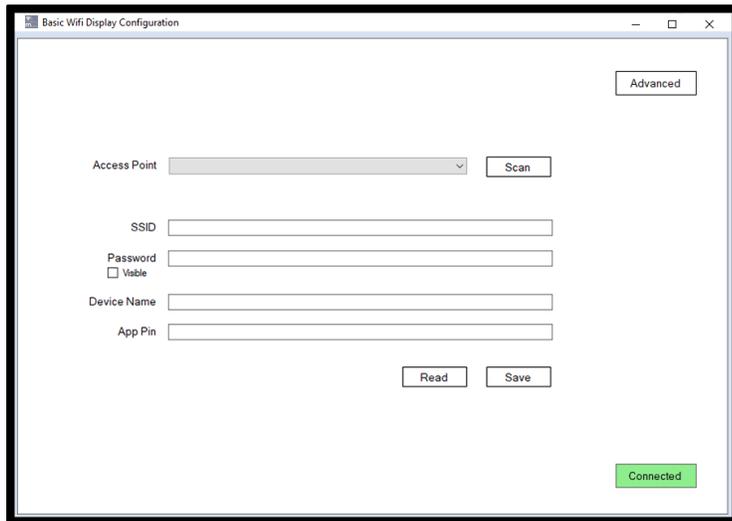
The Java "JAR" file inside the zip will run on both platforms.

You may change the following options: IP, Gateway, Subnet, Use DHCP.

Caution: do not change other options, as it will cause the Ethernet module to stop working. If this happens, you can reset the display to factory defaults by holding the button on the back of the display.

You can also change the Display Name and Pin Number using the MAC/PC app. Click "Configure", then "Advanced".

2.0 Wi-Fi Display Config Utility - Basic



Setup

1. Connect display to computer
2. Open Config Utility
3. Select network from list
4. Type in network password
5. <Optional> Set Device Name
6. <Recommended> Set App Pin
7. Click [SAVE]. The button will turn orange while connecting.
8. The button will turn red if failed, or green if success.
9. You may now disconnect the display from the computer and mount it on a wall.

Summary

This config utility is designed for WiFi displays, but it is also useful to set the Device Name and App Pin.

Details

The only network that will show up for Ethernet displays is "Ethernet".

The SSID must be selected, but is not used. Both the SSID and Password are ignored.

The Device Name is used in the app.

The App Pin must match the pin number set on your mobile app. It is strongly recommended that you change this from the default of "0000" to prevent unauthorized users from accessing the display.

Re-enabling setup mode

To place the display back in setup mode, press and hold the mode button. The display will start counting down "r5", "r4", etc. When it gets to "RST", release the button. The display will reset to factory defaults and reboot automatically.

2.1 Wi-Fi Display Config Utility - Advanced

Configuration Utility

Setup

- 1) Power Disp
- 2) Open Prog
- 3) Find
- 4) Read All
- 5) Scan
- 6) Select AP
- 7) Password
- 8) [Connect]

Summary

The Advanced version of the Config Utility allows for configuration of all Wi-Fi settings. For Ethernet displays the only options that apply are the device NAME and PIN.

Details

[Serial] – Shows the currently connected serial port.

[Connected/Disconnected] - Automatically scans for devices and prints results to the log. It will select the device found last.

[Read All] - Reads back settings for all three panels of the utility. Optionally you can read/write individual panels using the respective buttons.

[Scan] - Loads list of access points (AP).

[Connect] - Used to save settings if specific options are changed. Generally this will turn green if a save is required.

[AP] – Always returns “Ethernet” for Ethernet displays.

[NAME] - The name of the device. This is used in the app, and can also be typed into a browser, provided NETBIOS name lookups are working on your network. i.e. "DISPLAY1/" (note the slash).

[PIN] - The PIN used by the app to connect to this display.

[Basic] - Switch back to basic mode.

3.0 Installation / Operation / Options

Mounting the Display

This product comes with tilt-mount brackets. To mount the display, connect the 24-volt AC power adapter wire to the back of the display. Plug in the Ethernet cable and make sure it won't get pinched. Use two drywall screws per side to mount the display to the wall. Plug the adapter into the wall and you are ready to go.



Operation

The Visual-Pager® Display's primary operation is to display numbers that are sent to it via the computer or mobile apps.

Sending Numbers to Visual-Pager® Displays from the Smart Phone App (also see Section 5.1):

- To send a number to a display from the app, simply type the number that you want to display, i.e. "1234" and then tap [Add].
- To delete a number from the display from the app, tap the number to delete and tap [Delete].
- To clear all displays connected to the network tap [Clear All].

Sending Numbers to Visual-Pager® Displays from the computer app:

- To send a number to a display using the app, simply type the number that you want to display, i.e. "1234" and then click [Send].
- To delete a number from the display using the app, click on the number to delete and click [Delete].
- To clear all displays connected to the network click [Delete All].

Programmable Configurations

Roll-Over Time Setting

The Roll-Over Time is the time each number in the display's memory is shown before changing to the next number. This time can be set from 1 to 9 seconds.

Auto Delete Setting

The display can be set to automatically delete a number from its memory after a preset time from 0 to 42 minutes. When set to 0 the display will not auto-delete.

Chime Volume Setting

The chime volume can be set from 0 to 9. Setting to 0 will turn off the chime, while 9 is the loudest setting.

Chime Cycle Setting

The chime can be set to Off, a Single Chime, or a Double Chime. Setting this option to 0 turns off the chime. Setting this option to 1 will make the display chime once every time it receives a new number. Setting this option to 2 will make the display chime twice every time it receives a new number.

4.0 Using the App

Visual Paging Page

On this page you can add and delete numbers to all connected and active displays. To add a number, tap the text box labeled "Number to Display". This will activate your device's keyboard. Type the number you would like to show on the display, and tap [ADD]. To delete numbers from the display, tap on the number in the list and then tap [Delete]. To clear all numbers on all the displays across the network you can tap [Clear All].

Hymn Mode Page

On this page you can add a list of numbers and then show them one by one. To add a number tap the text box labeled "Number to Add". This will activate your device's keyboard. Type the number you would like to add to the list, and tap [ADD]. To delete numbers from the list, tap on the number in the list and then tap [Delete]. To clear all numbers from the list, tap [Clear All]. Once you have your list entered tap [Start]. The first number in the list will show. To show the next hymn tap [Next]. The display will clear the number showing, and then show the next number in the list.

Displays Page

This page contains a list of all the Visual-Pager® Displays that the app finds on the network. This list shows the Name of the device and the IP address that is assigned to the display. To edit a display, tap the display in the list that you wish to edit. The Display Settings page allows you to do the following:

Active: When a display is active it will receive from this app. If you wish not to send to a certain display you can uncheck this box. The display will no longer receive numbers from this app.

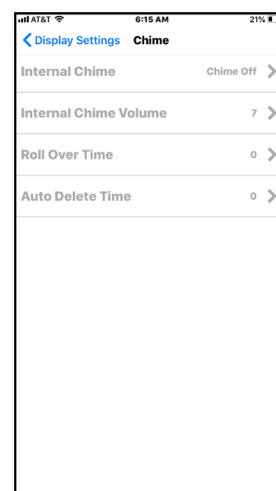
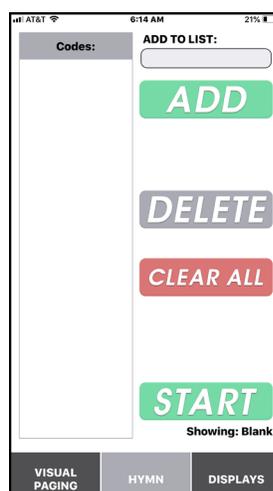
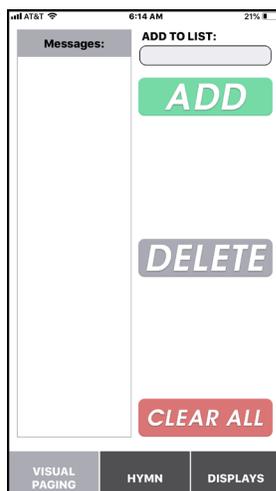
Pin: The pin number is specified during the initial setup. To communicate with the display, you will need to type in the correct Pin number here. The default pin is 0000.

Rollover: The Roll-Over time is the time each number in the display memory is shown before changing to the next number. This time can be set from 1 to 9 seconds.

Auto Delete: The display can be set to automatically delete a number from its memory after a preset time of from 0 to 42 minutes. When set to 0 the display will not auto-delete.

Chime Volume: This option can be set by dragging the volume bar.

Chime Cycle: The drop down will allow you to set how many times you would like the chime to sound when sending a number. Chime off, Single Chime, or Double Chime.



5.0 General Troubleshooting Chart

- 6.1 Can't access the display setup mode.
1. Reset display to factory defaults by pressing the button on the back of the display for 5 seconds.
 2. Make sure that both the display and your device are on the same network.
- 6.2 No Displays found on the network.
1. Be sure that your device is connected to the same network as the displays.
 2. Does your network allow communication between devices? Guest networks often have "client partitioning" enabled, which prevents devices from seeing each other.
 3. The display has one solid light and one blinking light. If both lights are blinking the display is not connected to the network. Check that the network cable is plugged in properly. Reboot the display by momentarily unplugging power.
 4. Check that the display Ethernet settings are correct by using the Wiznet config tool.
- 6.3 Numbers are not showing on displays.
1. Pin number in the app must be the same as the pin number you used when setting up the display.
 2. Display is no longer on the network. Are the power and network cables plugged in?

Model 4600 Specifications Numeric Display

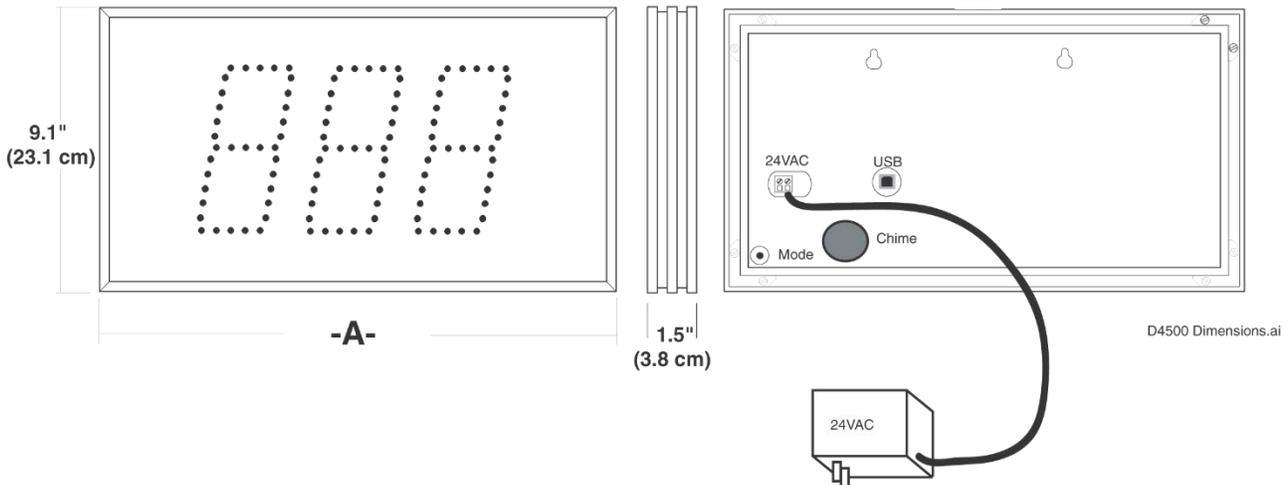
Features

The 4600 is an Ethernet connected numeric display intended for Visual-Paging®. The display will store and rotate up to 20 numbers at a time. Codes can be entered and deleted from the display using our apps. Apps are available for Android, Apple, Kindle, MAC, and PC devices.



Box Contents

- (1) D4600 Display; Tilt mount assembly
- (1) 24VAC power adapter w/ 20ft of wire
- (1) Manual, (1) Microframe Screwdriver
- (1) Configuration CD, (1) USB A to B cable



Model 4600 Specifications				
Voltage Input Requirements.....	14-24 VAC, 16-28VDC			
Character Height.....	5.5 inches			
Character Viewing Distance.....	125 feet			
Temperature Parameters.....	-20°C to 40°C (-4°F to 158°F)			
Casing.....	Aluminum extrusion			
Color.....	Black frame with dark red acrylic faceplate			
Environment.....	Indoor use			
Ethernet.....	10/100Mbps			
Display Size	2-Digit	3-Digit	4-Digit	6-Digit
Power Requirements	3.4 watts	4 watts	5.1 watts	7.3 watts
Display Weight, w/o adapter	2.8 lbs (1.1 kg)	3.5 lbs (1.4 kg)	4.2 lbs (1.6 kg)	5.6 lbs (2.4 kg)
Width "A" Dimension	9.8" (24.9 cm)	13.2" (33.5 cm)	16.8" (42.7 cm)	24" (61.4 cm)