

microframe®

SERIES 5200

INSTALLATION AND SPECIFICATION GUIDE

ITEM NO: A5200-7010
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A5200-7010



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 solve the problem by phone. If it becomes necessary to return your Unit to the factory, please observe the following:

1. Call our Customer Service department to receive an RMA (Return Merchandise Authorization) number.
2. Place Unit in a sturdy box with sufficient packing material.
3. If requested, include the power supply. It is not necessary to return the cable and connectors unless they are the problem.
4. Return the product insured and prepaid. We are not responsible for shipping damages or losses on returned Units.

Warranty Service

For warranty service, please contact Microframe at 800-635-3811. A technician will gladly assist you.

Assistance

For any product assistance or maintenance help, contact Microframe by either calling 1-800-635-3811 or emailing us at: support@microframecorp.com.

Safety

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

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 installation everywhere indoors 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 anyone, 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 effect its safety or effectiveness.

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Installation Procedures

1.1 INSTALLATION

This 5200 Specialty Timer Display is designed for easy set-up and immediate use with the remote control.

Step 1: Wire in the power adapter to the 24VAC terminal. Simply place one wire from the adapter under one of the screwdown terminals and the other wire under the other screwdown terminal as shown (**Figure 1**).

Step 2: Attach the external push buttons to the Input 1, Input 2 and Common terminals located to the left of the 24VAC terminal. **Figure 1** shows the push buttons connected to the terminals.

Note: The push buttons share a common ground terminal. At this point, plug in the power adapter and check the Display for proper operation.

Step 3: Hang the Display. The Display is hung on the wall like a picture frame on a nail or screw. Simply secure a nail or screw into the wall and line up the “key hole” in the back of the Display to hang the Display.

Optional Installation

For aesthetic reasons, you may wish to run the wire from the power adapter to the Display concealed in the wall. A person skilled in wiring should complete this task. The Display uses low voltage (24-volt) wiring and generally does not require conduit.

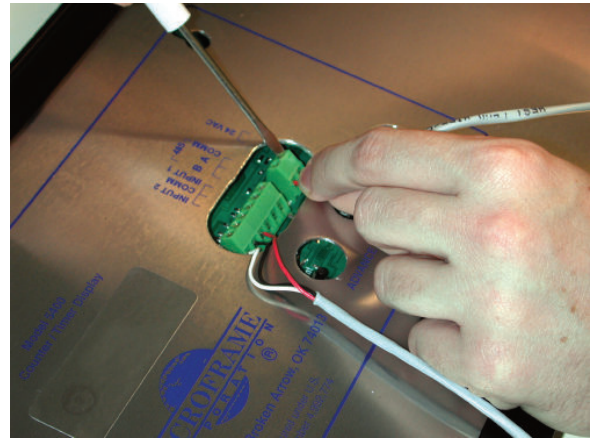


Figure 1: Wire in the power adapter.

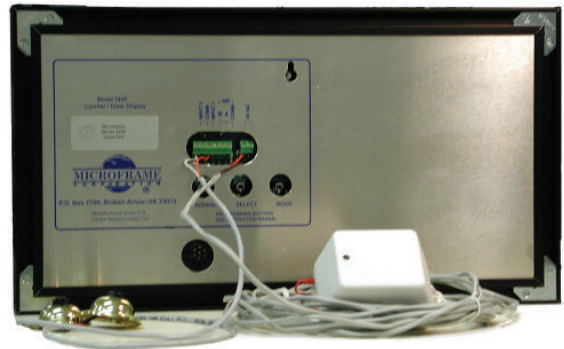
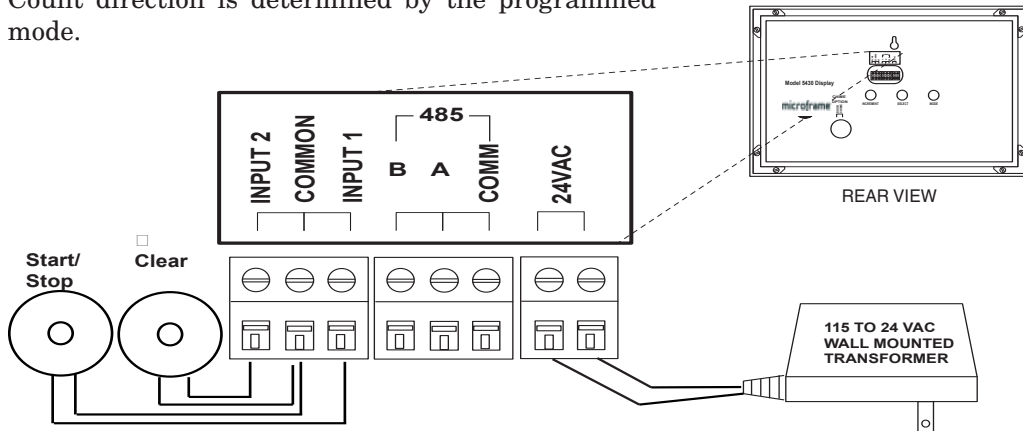


Figure 2: Back of Display after wiring is completed.

Display Operation

2.1 PUSH BUTTONS (Default Settings)

Press input 1 button to start/stop the Display.
 Press input 2 button to stop and reset the Display to 0.
 Count direction is determined by the programmed mode.



2.2 REMOTE CONTROL

Clear

- resets to zero or reload time

Up/Down

- start/stop the count up/down
- scroll through programming options

Enter

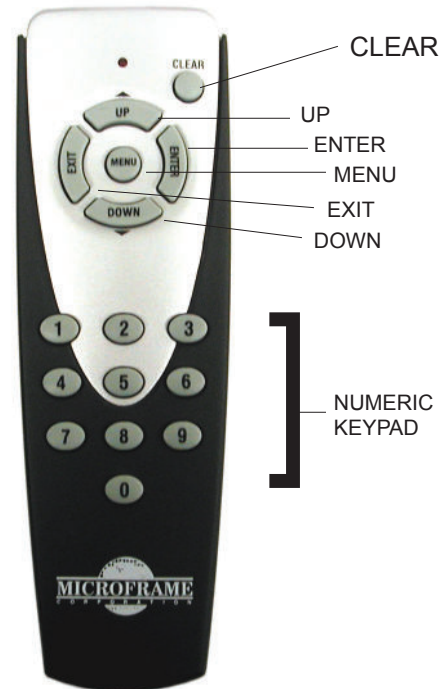
- accept/enter an entry

Exit

- cancel an entry

Menu

- puts the Display in programming mode.



Although the system works with most Phillips (RC5) remotes, Microframe pre-programs the remotes to work exclusively with the 5200 Displays.

2.3 Status - Power Light

When the counter is stopped, the power light flashes slowly (1x per second).

When the counter is running, the power light flashes faster (3x per second).

When the counter is in precount mode, the power light flashes very fast (16x per second).

2.4 Precount Mode

Precount is used to delay the timer start until a target time. A typical use would be setting the precount to start a day counter at midnight.

2.5 Viewing Precount

To get to the precount area, press the menu button, push “**Up**” until you get to area “9-” and then press “**Enter**”. If the Display is running an active precount, you will see it counting down here, otherwise the Display will be all 0’s.

2.6 Setting Precount

While viewing the precount: To set a new precount, type the precount time and press “**Enter**.” The format for the precount time is HH:MM:SS, where HH=hours, MM=minutes, and SS=seconds. Remember that seconds must be entered.

2.7 Activating Precount

The precount mode will be activated when the next start event occurs. **Note:** Once precount mode is used, the last precount setting is cleared. For example: precount was used to start a count and the Display is stopped, precount will not be reactivated when the Display is restarted.

Programming Options

The timer is programmed using the remote control.

Clear

- resets to zero or reload time

Up/Down

- start/stop the count up/down
- scroll through programming options

Enter

- accept/enter an entry

Exit

- cancel an entry

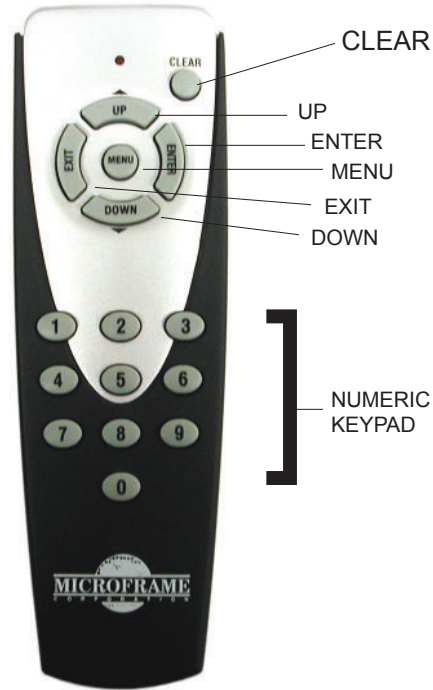
Menu

- puts the Display in programming mode.

Press “Menu” to enter programming mode. The Display will blink briefly and then show the first area (i.e. 11).

To save settings or enter areas, press “Enter.”

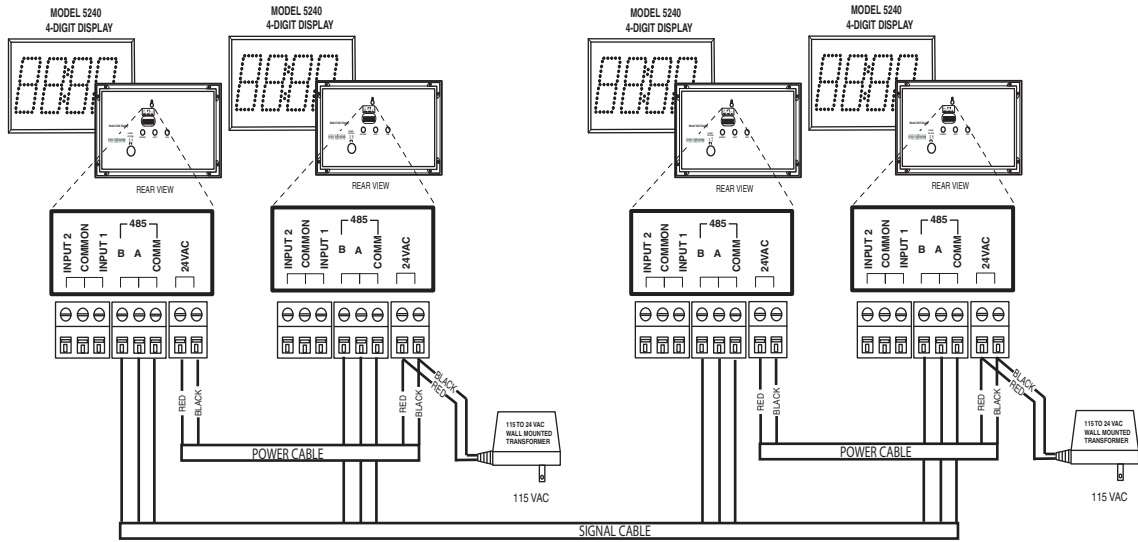
To exit without saving changes or leave entry mode, press “Exit.”



Menu Areas	Options	Default
1 Direction	1=up, 2=down	[1]
2 Interval	1=seconds, 2=minutes, 3=hours, 4=days	[1]
3 On Zero	0=stop, 1=reload/stop, 2=reload/start, 3=count up	[1]
4 Input 1 Action	See Table 1	[3]
5 Input 2 Action	See Table 1	[5]
6 Chime on Zero	0=off, 1=chime	[0]
7 Internal Chime	0=off, 1=low volume single, 2=high volume single, 3=low volume double 4=high volume double	[0]
8 External Chime Duration	0=off, 1-9=0.1-0.9 seconds	[3]
9 Set Precount		[00:00:00] (disabled)
A Set Reload Count		[00:00:25]
B Set Chime Count		[00:00:00] (disabled)
C Reset Factory Defaults		

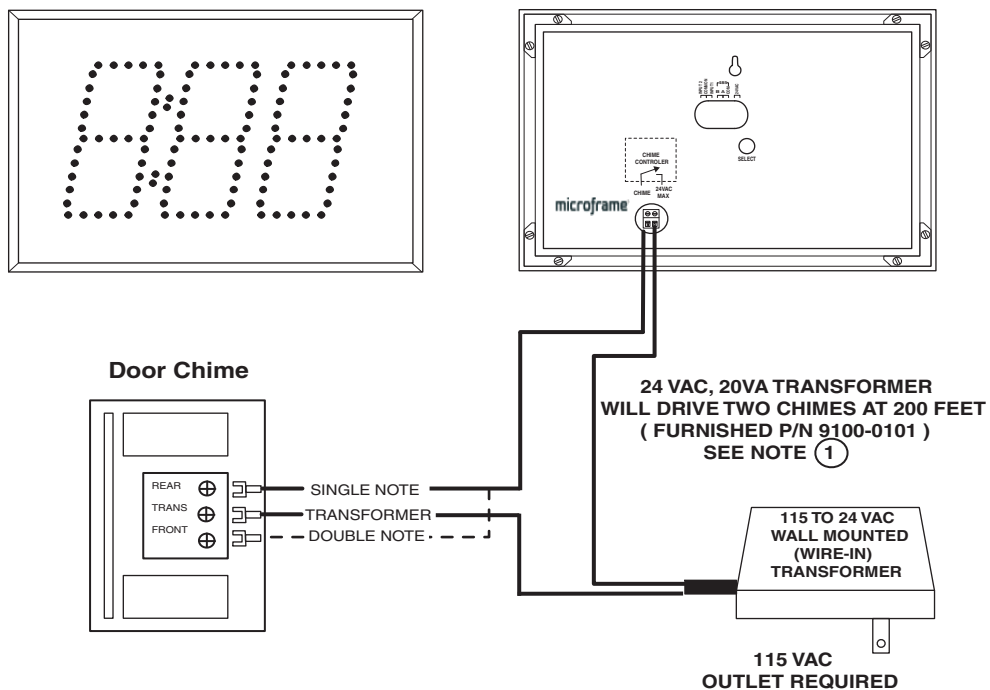
Wiring Diagrams

Multiple AC Power Adapter Connection Detail



Optional External Chime Connection Detail

Model 5230 Remote Display



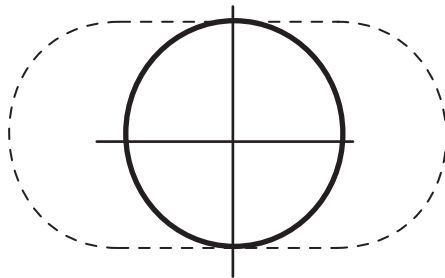
Mounting Template

TOP OF DISPLAY

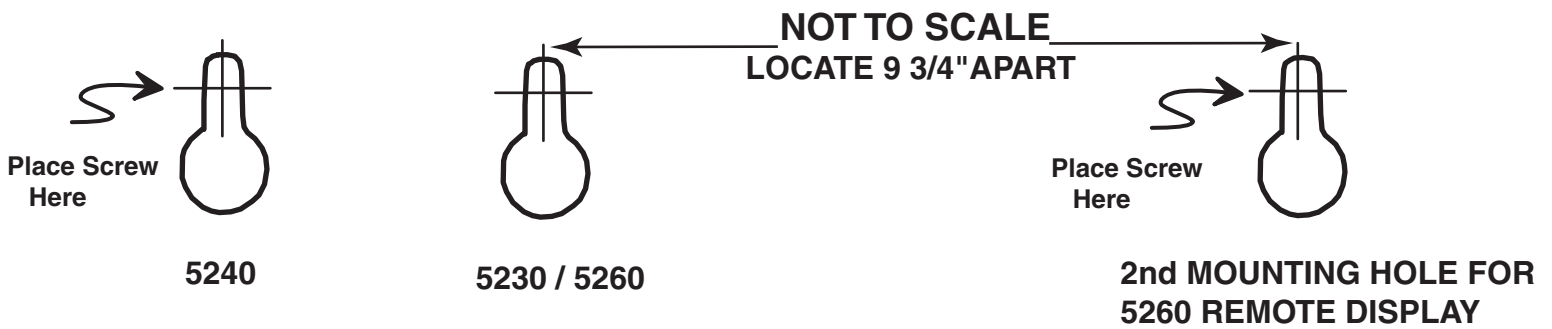


5220 REMOTE DISPLAY DRILL TEMPLATE

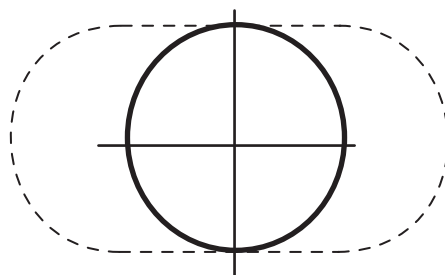
Drill 1" Diameter Hole



TOP OF DISPLAY



Drill 1" Diameter Hole



5230,40, 60 REMOTE DISPLAY DRILL TEMPLATE

Troubleshooting

SYMPTOM	POSSIBLE CAUSE	CURE
Display will not light up.	Display is not connected to power or power adapter is bad.	Check AC wall connection or change to another wall outlet.
Display lights up but will not respond to buttons.	Poor or no signal connection to buttons.	Check signal cable connections to buttons and check for proper wiring on back panel. Try with a short cable to prove whether the problem is in the units or in the cable.
One or more segments do not light up.	One or more LEDs burned out. This typically happens only when lightning strikes.	Call Microframe to receive an RMA and then return to factory for repair.
Slave Display is showing a different number.	Poor signal connection to master Display or slave Display is in wrong mode.	Check signal cables and routing. Make sure "A" and "B" wires are not reversed. Check Programmable Options to make sure correct mode is selected.
Remote control buttons stop responding.	Batteries are dead.	Replace batteries.

Model 5220 Specifications



DISPLAY FEATURES	
Mounting	Wall Mount
Case	Black Aluminum Extrusion with dark red plexiglas faceplate
Character Size	5.5-inches (14 cm)
Display Width	8.8 inches
Display Height	9.1 inches
Weight	2.5 lbs
Power Requirements	24 VAC 1.2A Supplied by Adapter which requires 115 Volts AC @ 0.72 Amps, 2.9 Watts
Viewing Distance	125 feet indoors
Temp	-20°C to 70°C or -4°F to 158°F
SUPPLIED ACCESSORIES	24 VAC 1.2A Power adapter, remote control, 2 push buttons, 40 feet of 22 AWG 2-conductor wire



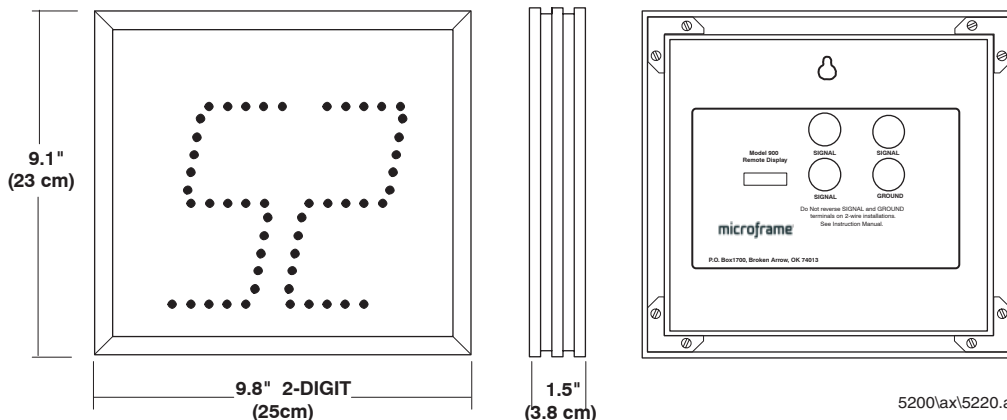
Features

The 5200 Series Display is a 2-, 3-, 4-, or 6-digit intelligent LED Display with infrared capabilities. Each Display has two inputs for push buttons or logic controls and a communications link for communicating with slave Displays. Displays are powered by a 24 Volt AC power adapter (included). This Display is an event counter that advances a count by a selected time interval. The range for the timer is 0-999999 (limited to the number of digits the Display shows). The Specialty Timer can be set to count by seconds, minutes, hours, or days.

Common uses include:

- Days accident free
- 90-minute countdown
- Count down to New Year's Day (by Days, Hours, etc.)
- Variable length process time in seconds or minutes

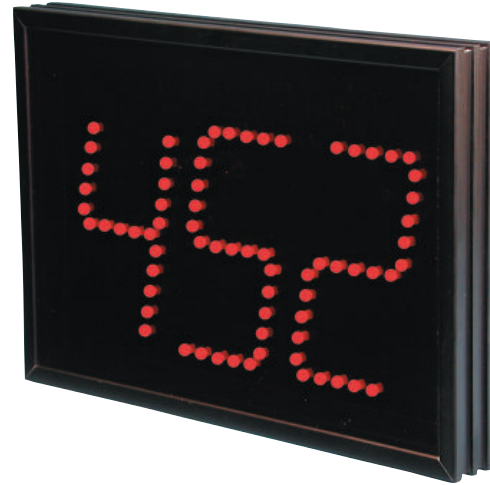
Displays include a built-in audio chime and remote control.



Model 5230 Specifications



DISPLAY FEATURES	
Mounting	Wall Mount
Case	Black Aluminum Extrusion with dark red plexiglas faceplate
Character Size	5.5-inches (14 cm)
Display Width	13.2 inches
Display Height	9.1 inches
Weight	3 lbs
Power Requirements	24 VAC 1.2A Supplied by Adapter which requires 115 Volts AC @ 0.72 Amps, 3.5 Watts
Viewing Distance	125 feet indoors
Temp	-20°C to 70°C or -4°F to 158°F
SUPPLIED ACCESSORIES	24 VAC 1.2A Power adapter, remote control, 2 push buttons, 40 feet of 22 AWG 2-conductor wire



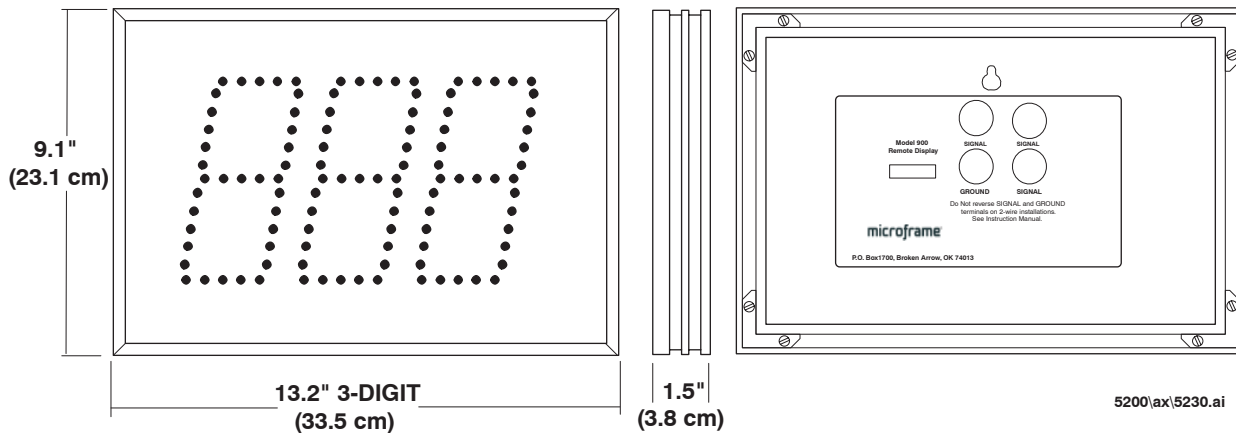
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The 5200 Series Display is a 2-, 3-, 4-, or 6-digit intelligent LED Display with infrared capabilities. Each Display has two inputs for push buttons or logic controls and a communications link for communicating with slave Displays. Displays are powered by a 24 Volt AC power adapter (included). This Display is an event counter that advances a count by a selected time interval. The range for the timer is 0-999999 (limited to the number of digits the Display shows). The Specialty Timer can be set to count by seconds, minutes, hours, or days.

Common uses include:

- Days accident free
- Count down to New Year’s Day (by Days, Hours, etc.)
- 90-minute countdown
- Variable length process time in seconds or minutes

Displays include a built-in audio chime and remote control.



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Model 5240 Specifications



DISPLAY FEATURES	
Mounting	Wall Mount
Case	Black Aluminum Extrusion with dark red plexiglas faceplate
Character Size	5.5-inches (14 cm)
Display Width	16.8 inches
Display Height	9.1 inches
Weight	3.5 lbs
Power Requirements	24 VAC 1.2A Supplied by Adapter which requires 115 Volts AC @ 0.72 Amps, 4.6 Watts
Viewing Distance	125 feet indoors
Temp	-20°C to 70°C or -4°F to 158°F
SUPPLIED ACCESSORIES	24 VAC 1.2A Power adapter, remote control, 2 push buttons, 40 feet of 22 AWG 2-conductor wire



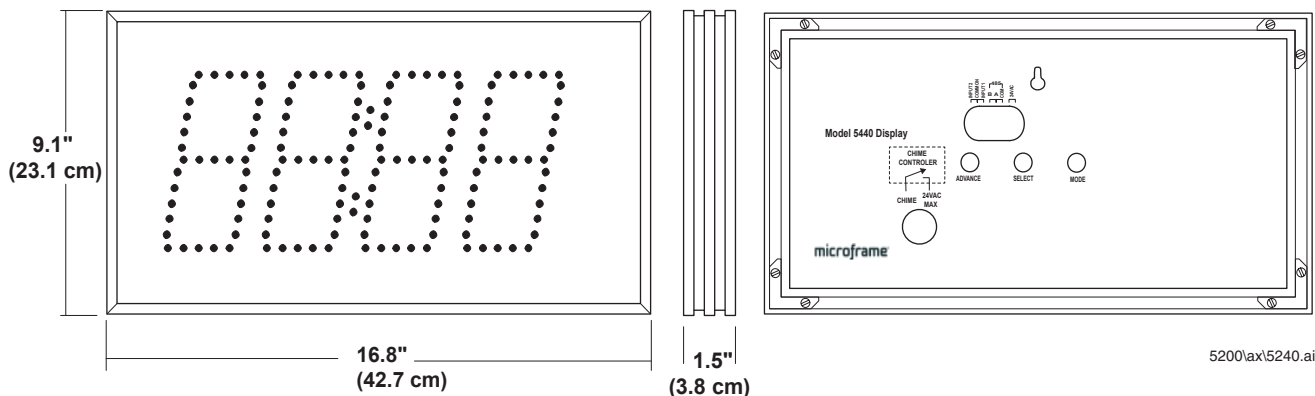
Features

The 5200 Series Display is a 2-, 3-, 4-, or 6-digit intelligent LED Display with infrared capabilities. Each Display has two inputs for push buttons or logic controls and a communications link for communicating with slave Displays. Displays are powered by a 24 Volt AC power adapter (included). This Display is an event counter that advances a count by a selected time interval. The range for the timer is 0-999999 (limited to the number of digits the Display shows). The Specialty Timer can be set to count by seconds, minutes, hours, or days.

Common uses include:

- Days accident free
- Count down to New Year's Day (by Days, Hours, etc.)
- 90-minute countdown
- Variable length process time in seconds or minutes

Displays include a built-in audio chime and remote control.



Model 5260 Specifications



DISPLAY FEATURES	
Mounting	Wall Mount
Case	Black Aluminum Extrusion with dark red plexiglas faceplate
Character Size	5.5-inches (14 cm)
Display Width	24 inches
Display Height	9.1 inches
Weight	5.25 lbs
Power Requirements	24 VAC 1.2A Supplied by Adapter which requires 115 Volts AC @ 0.72 Amps, 6.8 Watts
Viewing Distance	125 feet indoors
Temp	-20°C to 70°C or -4°F to 158°F
SUPPLIED ACCESSORIES	24 VAC 1.2A Power adapter, remote control, 2 push buttons, 40 feet of 22 AWG 2-conductor wire



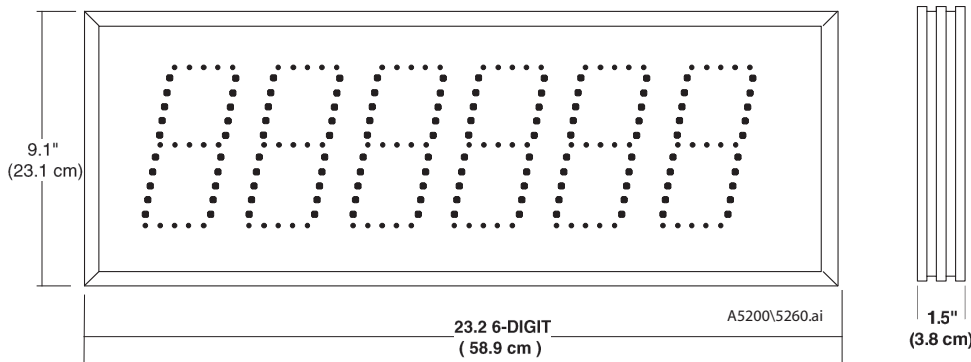
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Common uses include:

- Days accident free
- Count down to New Year’s Day (by Days, Hours, etc.)
- 90-minute countdown
- Variable length process time in seconds or minutes

Displays include a built-in audio chime and remote control.



Owners Information

Display Serial Number(s): _____

Date of Original Purchase: _____

Correct Settings: _____

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