# //////// Mircom™

# **CEILING MOUNT LED HORN/STROBES**

## **FHS-400C SERIES**



## **Description**

Mircom's FHS-400C Series ceiling mount horn/ strobes offer an audible/visual solution that delivers exceptional energy efficiency in a compact design. Utilizing advanced LED technology, the FHS-400C Series LED horn/strobes provide a lower current draw which allows for more devices on a NAC circuit while reducing the number of external power supplies required.

The FHS-400C Series horn/strobes offer a wide range of audible/visual settings in a single compact device. The audible settings include Temporal, Continuous, March Time and 20 BPM tones that can each be set for Low or High volume settings. The candela settings can be field-configured for 15, 15/75, 30, 75, 110 cd. The candela setting is displayed through the front window for easy identification All device settings are located on the back of the unit to prevent tampering.

The FHS-400C Series horn/strobes can be synchronized using a control panel with the Mircom sync protocol or the SDM-240 synchronization module.

The FHS-400C Series notification appliances utilize a universal mounting plate that allows for mounting to a single gang, double gang, octagon, 4" junction or 4" square electrical box. The back plate allows the installer to mount the plate and connect the wire connections. The device attaches to the mounting plate and is secured by a single mounting screw. In addition, the FHS-400C can mount to the Mircom BB-400 back box for surface mount applications.

#### **Features**

- Compact Design
- Advanced LED technology provides superior current draw performance
- Lower power consumption per device allows for more notification appliances per circuit and reduces the need for external power supplies
- Standard and High candela settings in one unit to meet virtually any application
  - 15, 15/75, 30, 75, 110 cd
- Multiple field-selectable audible settings
  - Temporal, Continuous, March Time and 20 BPM audible tones
  - High and Low volume settings
- Red or white finish
- Device settings are located on the back of the unit to prevent tampering
- Includes shorting clip that allows installers to test the wiring before the device is installed
- Supports 12 to 22 AWG
- Mount to Mircom BB-400 surface mount back box, single gang, 4-inch square, double gang, octagon and 4-inch junction boxes
- All units include universal mounting plate
- For indoor applications

#### Compliance

- UL 1971
- UL 1638
- UL 464
- ULC-S525
- ULC-S526
- NFPA 72 2016 Edition

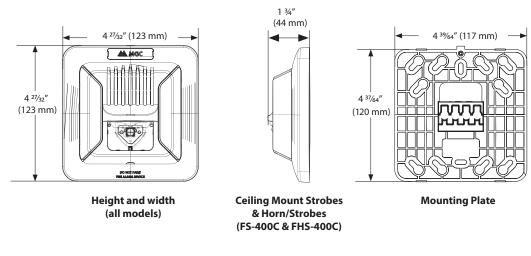


CATALOG NUMBER

NOT TO BE USED FOR INSTALLATION PURPOSES.

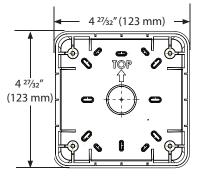
## **Engineering Specifications**

The horn/strobe shall be a Mircom FHS-400C notification appliance for ceiling mount applications. The horn/ strobe shall be of a low current draw design and operate at 24 VDC regulated or full wave rectified. The horn/ strobe shall have two field selectable volume settings and a choice of four tone settings for temporal, continuous, march time or 20 BPM. The horn/strobe shall incorporate a Light Emitting Diode (LED) as the light source and have five field selectable settings of 15, 15/75, 30, 75, 110 candela. The candela settings shall show the candela selection in a visible location at all times when installed. Both the audible and candela settings shall be tamper resistant. The horn/strobe shall be synchronized using a control panel with the Mircom sync protocol or the SDM-240 sync module. The horn/strobe shall utilize a mounting plate that allows the installer to pre-wire the mounting plate. The mounting plate shall mount on a single gang, double gang, octagon, 4-inch square box or Mircom's BB-400 series back box. The horn/strobe shall be listed to UL standard 464, Audible Signaling Devices for Fire Alarm and Signaling Devices, UL standard 1638, Visible Signaling Devices for Fire Alarm and Signaling Systems and standard 1971, Signaling Devices for Fire Alarm Systems and ULC S526, Visible Signal Devices for Fire Alarm Systems.

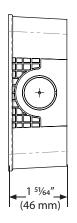


### **400 Series Dimensions**

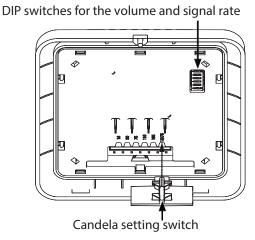




Knockout dimensions: 1 1/16" (27 mm)



## **Audible/Visual Settings**



Device settings are located on the back of the unit to prevent tampering



## **Specifications**

#### **General Specifications**

Operating temperature	0°C to 50°C (32°F to 122°F)
Humidity range	0% to 93%
Strobe flash rate	1 Hz
Nominal Voltage	Regulated 24 VDC / 24 VFWR
Operating Voltage Range (RMS)	16 to 33
Input terminal wire gauge	22 AWG to 12 AWG
Installation environment	For indoor use only

## **Audible Ratings**

#### dBA Reverberant Ratings per UL464 (dBA@10 ft)

Sound Pattern	Volume	16 VDC	Reg. 24 VDC	33 VDC	16 FWR	Reg. 24 FWR	33 FWR
Tomporol	High	82.2	84.9	84.6	76.8	79	80
Temporal	Low	75.5	80.5	80.2	71.8	75.1	76.6
	High	86.4	89.2	88.7	81.5	83.1	84
Continuous	Low	79.9	84	84.8	76.2	79.3	81.2
20 BPM	High	79	81.3	81.6	74	75.1	76.1
20 BPIVI	Low	72.3	76	76.7	68.9	71.7	73.3
March	High	83.2	86.4	85.7	79.2	80.6	81.4
warch	Low	76.9	80.9	81.7	73.3	76.2	78

#### dBA Anechoic Ratings per CAN/ULC-S525 (dBA@3 m)

Sound Pattern	Volume	16 VDC	Reg. 24 VDC	33 VDC	16 FWR	Reg. 24 FWR	33 FWR
Temporal	High	90.2	93.2	93.2	84.4	87.1	88.5
Temporal	Low	83.7	87.4	88.3	78	82.2	84.5
Continuous	High	90.2	93.2	93.3	85.1	87.8	89
Continuous	Low	83.8	87.6	88.6	78.5	83	85
20 BPM	High	90.3	92.9	92.9	84.4	87.2	88.6
	Low	83.6	87.3	88.3	78	82.2	84.5
March	High	90.2	92.9	92.9	84.4	87.1	88.4
warch	Low	83.7	87.4	88.3	78	82.2	84.4

#### **ULC Directional Sound Characteristics**

Horizontal Axis		
± 45°	-3 dbA	
± 61°	-6 dbA	
± 90°	-10 dbA	
Vertical Axis		
± 49°	-3 dbA	
± 61°	-6 dbA	
± 90°	-7.7 dbA	

# FHS-400C Ceiling Horn/Strobe Operating RMS Currents (mA)

	Regulated 24 VDC		Regulated 24 VFWR		
Candela	Temporal Tone, High Volume*	Continuous Tone, High Volume	Temporal Tone, High Volume*	Continuous Tone, High Volume	
15	41	52	95	98	
30	75	80	160	164	
75	155	158	228	232	
15/75	156	158	227	233	
110	227	231	258	261	

\*Temporal tone volume is representative of March and 20BPM as well

#### **Light Output Dispersion**

	% of Candela Rating			
Degrees	Vertical Dispersion X-Plane	Vertical Dispersion, Y-Plane		
±0	150	155		
±5	149	153		
±10	149	152		
±15	145	152		
±20	139	146		
±25	130	130		
±30	121	122		
±35	114	115		
±40	111	111		
±45	110	108		
±50	110	108		
±55	107	105		
±60	100	101		
±65	88	89		
±70	72	72		
±75	59	59		
±80	60	61		
±85	55	58		
±90	42	45		
Compound ±45°	79	83		

Note: The values are shown as percentages of the rated light output at any candela setting.



## **Ordering Information**

Model Number	Description
FHS-400C-RR	Ceiling Mount Horn/Strobe, Red
FHS-400C-WW	Ceiling Mount Horn/Strobe, White
BB-400R	Surface Mount Back Box, Red
BB-400W	Surface Mount Back Box, White
SDM-240	Synchronization Module

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