

# **BOGEN®**

## **COMMUNICATIONS, INC.**

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### Intercom System: Open Voice All-Master, or Masters with Remotes

Models CM-206M  
CM-211M  
CM-200X

### **Specifications**

<b>No. of Stations:</b>	All master systems up to 6/11 master units Any combination of master and remotes totaling 6 or 11 stations
<b>Operating Voltage:</b>	12V DC
<b>Power Supply:</b>	Model RF12A, regulated 12VDC @ 1 amp.
<b>Supply Current:</b>	300mA Max.
<b>Audio Output Power:</b>	900mW
<b>Output Impedance:</b>	8 ohms
<b>Station Operation:</b>	<i>Master</i> — Push button station selection; TALK button operation; LOCK button; In-use LED <i>Remote</i> — CALL button; TALK button; PRIVACY button
<b>Call Signal:</b>	Electronic call tone
<b>Wiring Required:</b>	Multi-conductor cable
<b>Mounting:</b>	Wall or desktop. Junction boxes supplied.

## Important Safety Instructions

- Do not connect the power supply until system wiring is complete.
- Except for the power supply AC power cord plug, do not connect wires directly to AC power.
- Do not expose any equipment to rain or moisture.
- Do not hammer on or staple through cables.
- Route cables away from excessive heat and high-voltage cables.
- Do not alter component wiring.

## Installation

The junction box supplied may be mounted to a wall or single-gang outlet box. The screw terminal designations are as follows:

1,2,...11	Station Numbers
L	Call line terminal
L1	Audio ground
+	+ 12V DC conn.
-	- 12V DC conn.

Master stations can call any other Master. Remotes can communicate only with the Master to which they are connected.

System wiring diagrams for All-Master Systems are shown in Figure 2 and Figure 4. A typical wiring diagram for a mixed system (Masters and Remotes) is shown in Figure 5.

Lay the system out before beginning installation. Decide on the most efficient cable runs and assign station numbers. Future service or expansion of the system will be facilitated if you draw a diagram of the system.

AWG	24AWG	22AWG	20AWG	18AWG
Diameter	0.5mm	0.65mm	0.8mm	1.0mm
Distance	400'	650'	1,000'	1,600'
	120m	200m	300m	480m

	Weight (lbs.)	Width	Depth	Height
CM208M	1.5	10"	6-3/32"	2-3/16"
CM211M	1.48	(25.5cm)	15.5cm)	(5.5cm)

## Station Mounting

Each Master station has a bracket for wall mounting in installation. Secure bracket to wall with screws provided. Fit slots in base over the hooks on bracket and pull down to secure. The Remote station has keyhole slots to facilitate wall mounted installation

## Wiring

Use multi-conductor cable. Do not use twisted pair or shielded cable.

For All-Master systems, the number of conductors equals 3, plus the total number of stations. Single Master/Remote system wiring consists of 4-conductor cable from each remote to the master.

Begin wiring with station number 1. Write the color code of each wire on your diagram. Be sure to connect the proper wire to the L terminal at each station. **BE SURE TO OBSERVE CORRECT POLARITY WHEN CONNECTING THE POWER SUPPLY**

## Power Supply

Use only the Bogen Model RF12A power supply. **BE SURE TO OBSERVE CORRECT POLARITY WHEN CONNECTING THE POWER SUPPLY TO THE JUNCTION BOX.**

Connect power supply after system wiring is complete. If cable runs are very long, connect power supply to a point mid-way in the system.

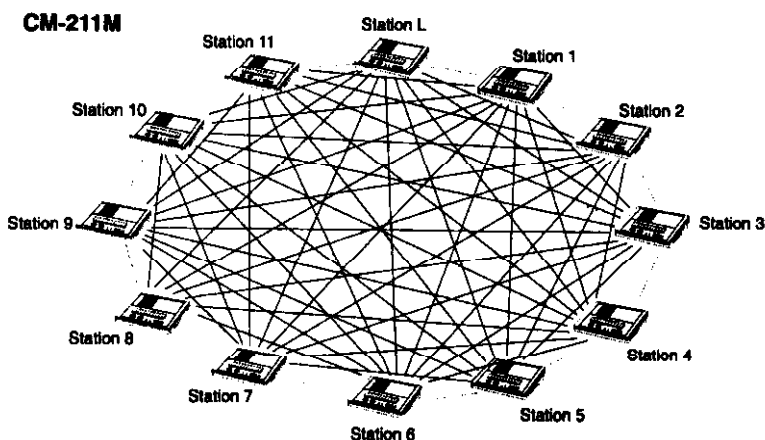


Figure 1. CM-211M All Master Communication Network.

# Wiring Diagrams

No1 No2 No3 No4 No5 No6 No7 No8 No9 No10 No11 NoL

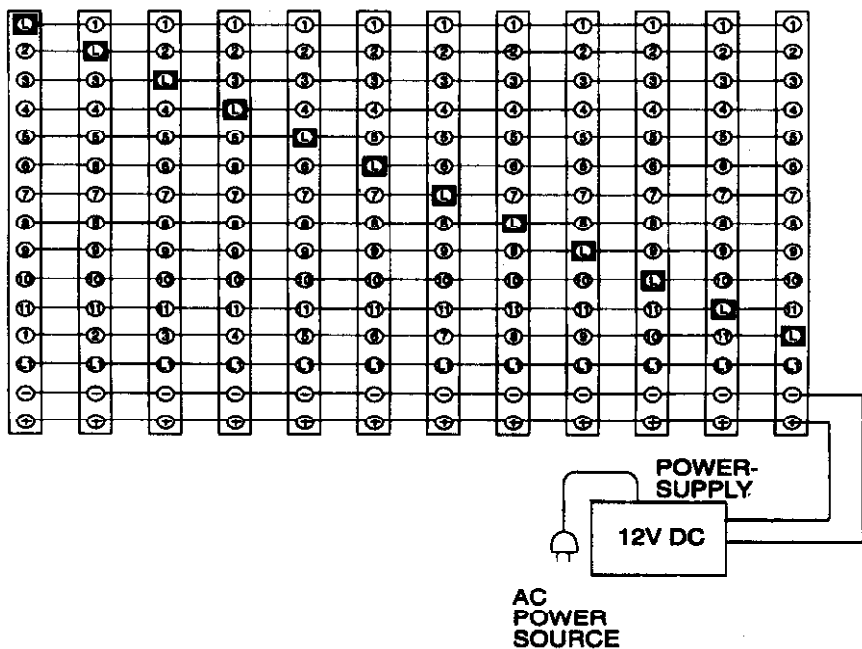


Figure 2. CM-211M All-Master System Wiring Diagram.

# Wiring Diagrams

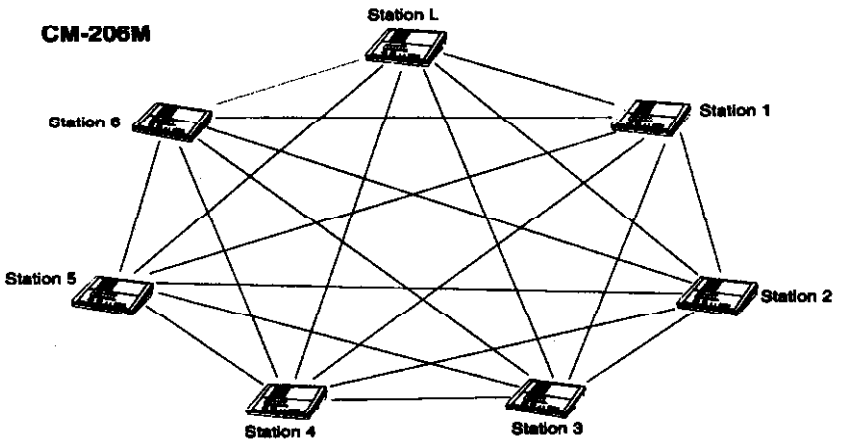


Figure 3. CM-206M Communications Network.

No1 No2 No3 No4 No5 No6 NoL

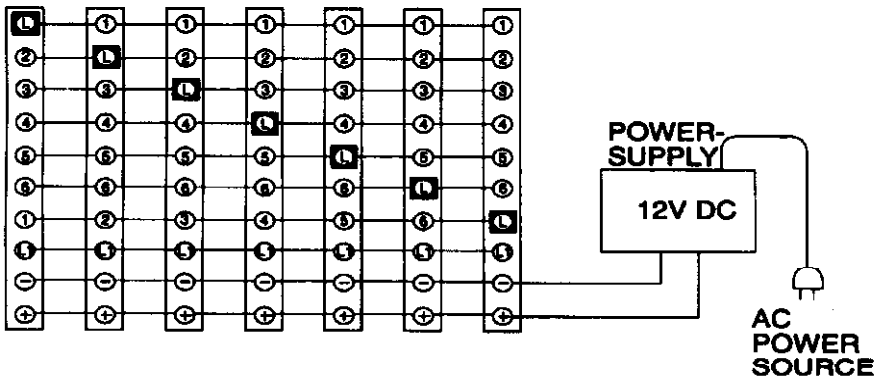


Figure 4. CM-206M All-Master System Wiring Diagram.

# Wiring Diagrams

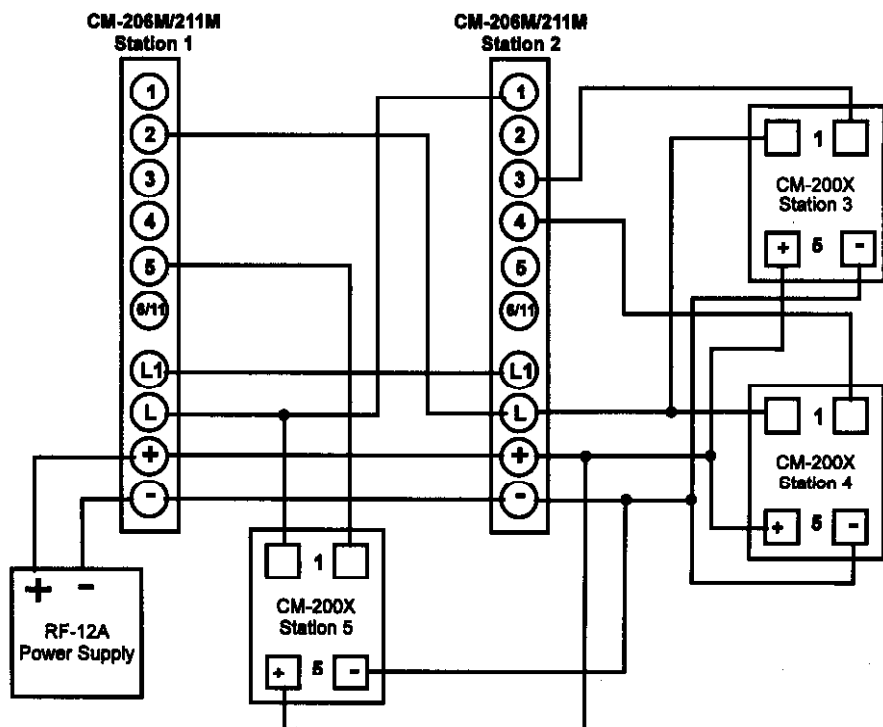
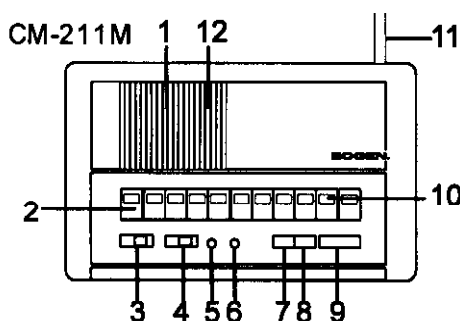


Figure 5. Typical Wiring Diagram for a Mixed System (Masters and Remotes)

# Operating Instructions



- 1 Speaker
- 2 Station selector buttons
- 3 Talk volume control
- 4 Call tone volume control
- 5 Power LED
- 6 Busy LED

## Master Operation

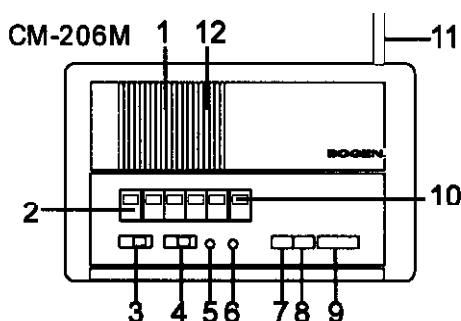
**To Call Another Master:** Press the desired station selector button. A call tone will be heard at the selected station.

Press **TALK** to speak. To listen, release **TALK** button. To send long messages, press **LOCK** button.

**To Call a Remote:** Press the desired station selector button as above. **Note:** You can only call and talk to the remotes attached to your master.

**To speak with station L:** Press the selector button for the station you are at (station 4, press button 4).

**Privacy:** Press the **PRIV** button to prevent others from hearing anything at your station.



- 7 Privacy button
- 8 Lock button
- 9 Talk button
- 10 Station selection LED
- 11 Terminal cord
- 12 Microphone

## Remote Operation

**To Call the Master:** Make sure the **PRIV** button is not depressed. Press the button marked **CH**. It will lock in the depressed position and a call tone will sound at the Master station. You will hear a reply from the Master over the speaker. To talk, press the **TALK** button. Listen hands free. When finished with the call, press the **CH** button again to release it.

**To Answer a Call from the Master:** You can talk and listen hands free when a call is initiated from a Master station.

**Privacy:** Press the **PRIV** button to prevent others from hearing anything at your station.

**BOGEN<sup>®</sup>**  
**COMMUNICATIONS, INC.**

50 Spring Street, Ramsey, NJ 07446  
(201) 934-8500 Fax: (201) 934-9832