



1171 Notre-Dame W. # 100  
Victoriaville, Qc  
G6P 7L1

Phone: (819) 751-0095  
Fax: (819) 751-1292

**LBC-WG PINOUT  
and  
IMPORTANT RECOMMENDATIONS FOR INSTALLATION**  
Documentation Ver. 1.0A (31/08/2004)



**Use this documentation for the product : LBC-WG & Concentrator-WG**

Our Internet site: [http:// www.symcod.com/](http://www.symcod.com/)

Analyst Programmer: Steve Bilodeau  
Email: [sbill@symcod.com](mailto:sbill@symcod.com)

# LBC-WG & CONCENTRATOR-WG IMPORTANT RECOMMENDATIONS

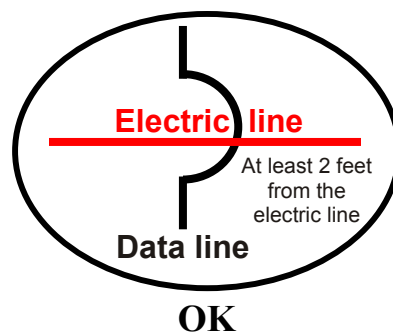
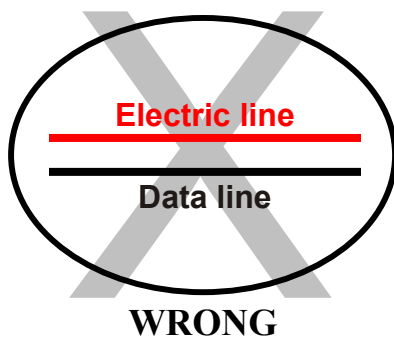
## SPECIFIC RECOMMENDATIONS FOR THE TERMINAL LBC-WG

- Be careful not to fix the terminals in a place where there can be lots of vibrations.
- Do not fix the terminals near a heat source or possible electrical static discharge.

## RECOMMENDATION FOR ETHERNET and RS-422 WIRING

(General recommendations)

- Never install a wire near (under 2 feet) of any source of magnetic field like a transformer, an high voltage line, power, neon lighting, motor or any other component that can produce induction.
- Do not fix the cables too tight; we suggest that you let a surplus of 2 feet for each cable so you will not have the stretched the cable because of the short of length; please note that any surplus must not be wind up in bundle and tied up.
- Do not use a stapler or any support that can damage or jam the wire.
- Never make a loop with the wire. This action can cause the wire to act as an antenna.
- You can cross an electric line, but never follow one in parallel
- Never pull a wire with too much force, because it can break inside or even shortcut.
- Never install a wire near a source of heat.
- Always identify each wire at each end to facilitate the troubleshooting if ever occur.



## **SPECIFIC RECOMMENDATIONS FOR ETHERNET**

*(Cable between Concentrator-WG and Ethernet network)*

- Use a multi-strand cable unshielded of category five.
- Use a RJ connector of multi-strand type.
- Each cable should not exceed 300 feet or 100 meters.
- The sheath must be well pushed in the RJ-connector. The sheath must not come out from the connector even when you pull out.
- To increase the stability rate, you can isolate the concentrators network from the rest of the local network. To do so, use a second network card in the computer to control only the Symcod terminals network.

## **SPECIFIC RECOMMENDATIONS FOR RS-422**

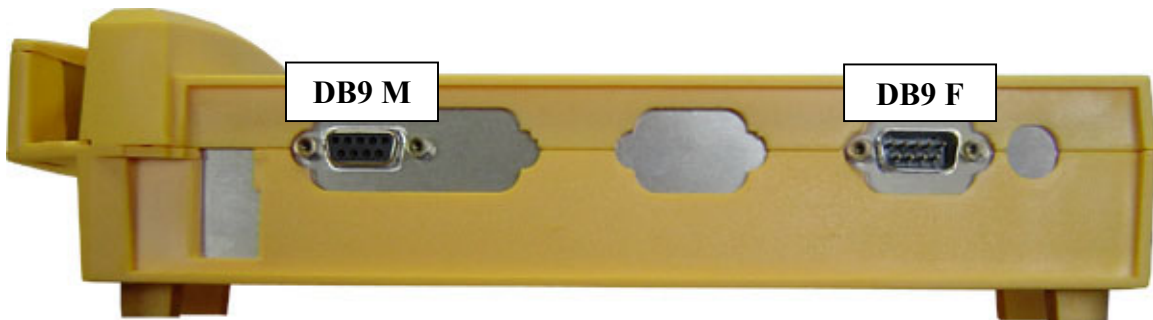
*(Cable between Concentrator-WG and LBC-WG)*

- Always use wire with different color. Some cable are offer with 3 pairs but each pair use a black wire with a different color, like black/red, black/white black/blue ,it can be difficult to unmixed 3 black wire...
- Our minimal recommendation for the wire are:  
24 AWG, Cat. 5 STP cable, Shielded Twisted Pair, low capacity stranded  
Soldered type DB9 connectors.
- To prevent static electricity, . Use a 1/4 watts 100 Ohms resistor between the shield and the DB-9 frame.
- Each cable should not exceed 1000 feet (no accessories connect to the LBC-WG)

## **HUB/SWITCH AND CONCENTRATOR-WG RECOMMANDATIONS**

- Make sure that all installation components are easy to reach.
- Make sure that the ground is good.
- Make sure that you have an electric outlet (90 to 240 VAC) near each Concentrator. For better result please use protected ground outlet.

# LBC-WG PINOUT CONNECTORS DESCRIPTION



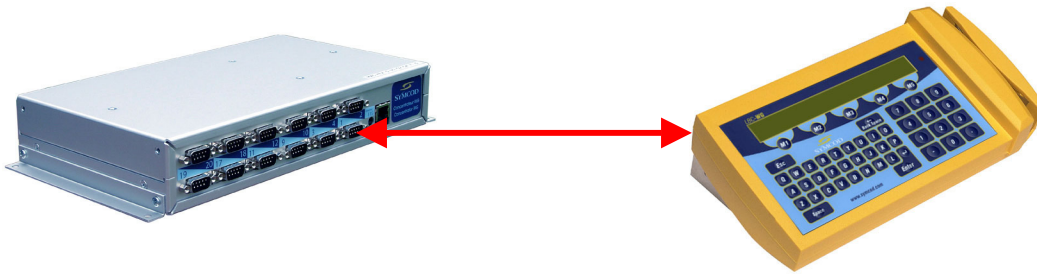
## LBC-WG DB9 M pinout description

PIN #	Description
1	Barcode input # 2 ( <i>Available only if internal jumper is on an integrated slot reader is off</i> )
2	Barcode input # 1
3	TTL input #1 (0-5 Volts)
4	5 Volts
5	TTL output #2 (0-5 Volts 8mA Max)
6	TTL output #1 (0-5 Volts 8mA Max)
7	Ground
8	Ground
9	5 Volts

## LBC-WG DB9 F pinout description

PIN #	Description
1	RX+ RS422
2	RX- RS422
3	TX+ RS422
4	TX- RS422
5	Ground
7	Ground
9	Input power 9 to 18 VDC

## Cable between CONCENTRATOR-WG and LBC-WG



Cable must be: 24 AWG, Cat. 5 STP cable, Shielded Twisted Pair, low capacity stranded  
**Soldered type connectors.**

### CABLE PINOUT DESCRIPTION

(Connect to Concentrator-WG) DB-9 Female PIN#	Conductors Colors	(Connect to LBC-WG) DB-9 Male PIN #
1	Blue and White	1
2	White and Blue	2
3	Green and White	3
4	White and Green	4
5	Brown and White	5
9	White and Brown	9
Case	Shield	Case (*See important notice)

\* *Important notice:* To prevent static electricity, you must ground each LBC/WG to a good earth ground. Use a 1/4 watts 100 Ohms resistor between the shield and the DB-9 frame.