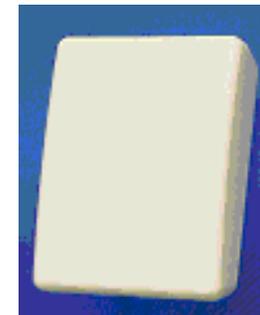


Manual for Installation V1.0

CHUNDE TECHNOLOGY

CH-CO2

High Concentration CO₂ transmitter



CH-CO2

Connection Terminal	Function	Electrical Data	Remark
G+ G0	Power (+) Ground (-)	24 vac/dc + (+-20%), 2w 24 vac/dc -	System Voltage Ref.
M Vo Io	Signal Ground Voltage output Current output	0 – 10V 4 – 20mA	Connected to GND 0 – 20 vol.% CO ₂ 0 – 20 vol.% CO ₂
Cal	Calibration	Active when S/C to M	Push on function

Table 1. Electrical terminal connections for **CH-CO2**

WARRANTY AND LIMITATION OF LIABILITY

1. Telasia warrants that for a period of twelve (12) months following receipt by Buyer the Product supplied by Telasia to the Buyer will be, under normal use and care, free from defects in workmanship or material and to be in material conformity with Telasia's specifications. Units returned to Telasia for warranty repairs shall be shipped to Telasia, at Buyer's expense, according to Telasia's instruction. Telasia shall replace or repair such units and shall ship them to Buyer's designated return destination freight pre-paid within ninety (90) days of the receipt of product.
2. Warranty Limitations. This warranty does not extend to any unit that has been subjected to mis-use, neglect or accident; that has been damaged by causes external to the unit; that has been used in violation of Telasia's instructions; that has been affixed to any non-standard Accessory attachment; or that has been modified, disassembled, or reassembled by anyone other than Telasia.
3. The retailer is not responsible for any consequential loss or damages, which may occur by reason of purchase and use of this product. **The warranty is, in any event, strictly limited to the replacement/repair of the product.**

This product is in accordance with the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC including amendments by the CE-marking Directive 93/68/EEC. The product fulfils the following demands:
EN50081-1, EN55011(B)
EN50082-2, EN61000-4-2,-3,-4,-5, Level3



General

The **CH-CO2** (sensor for wall mounting) and **CH-CO2-IP45** (for industrial wall mount) are designed to measure carbon dioxide (CO₂) concentration up to 30 vol.%.

The unit is designed for connecting to controllers, Direct Digital Control (DDC) or other system with 0-10V or 4-20mA signal inputs. The two parallel signal outputs Vo (0-10V) and Io (4-20mA) give linear signals corresponding to the measuring range of 0 – 20 vol.% carbon dioxide (0-30% option on request). An additional fresh-air calibration (Cal) command input is added to facilitate the calibration in the field.

To open the wall mounted housing

Figure 1. . Closed housing seen from above. The housing is opened by pressing a screw driver into the lock opening slot. .



Figure 2. .By pressing a flat screw-driver into the opening slot, the two locking hook would be released.

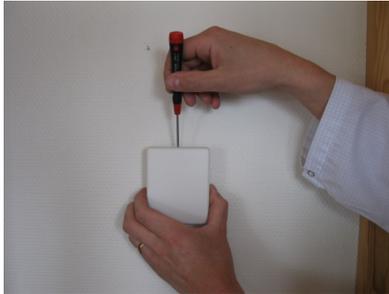


Figure 2. .Hold the top cover and slowly separate the top and base housing.



Sensor Connections

The sensor connecting terminal is shown in the figure on the right. Please refer to Table 1 for terminal definition.

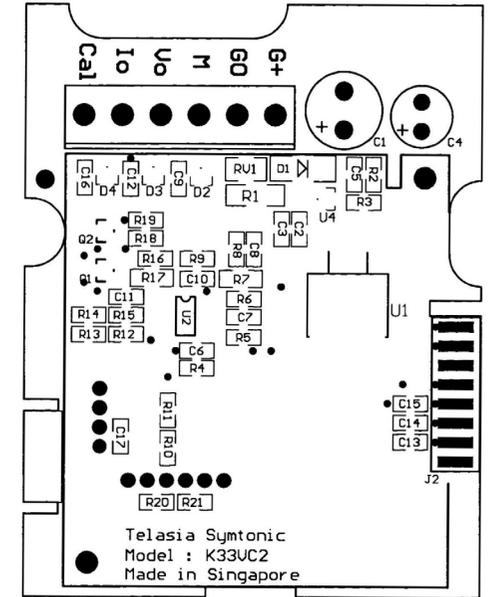
Electrical connections

The power supply has to be connected to G+ and G0. G0 is considered as system ground. The same ground reference has to be used for the **CH-CO2** unit and for the DDC/signal receiver.



PLEASE NOTE!

The same ground reference has to be used for the **CH-CO2** unit and for the control system!



Output Configurations

The sensors/controllers are supplied from the factory with 0...10VDC and 4...20mA linear outputs for Vo and Io (see Table I).

Fresh-Air Calibration (Cal)

The CH-CO2 has built-in fresh-air calibration (Cal) features. To initiate a Cal function, simply place the powered-up sensor in the room near an opened window, wait for the sensor to stabilize, and then short the **Cal** to **M** for **approximately 5 seconds**. The sensor reading is then re-calibrated to 0.04 vol.% CO2; a reading closed to the fresh-air concentration.

PLEASE NOTE!

Avoid doing Fresh-air calibration when;

1. Unit is just powered up (sensor should be powered for at least several minutes)
2. In place where the room is crowded with people
3. Where there is source of CO2 generation, such as gas-burner,
4. When the sensor reading is unstable