

REV 2



SYSTEM ONE INTERCOM SYSTEMS

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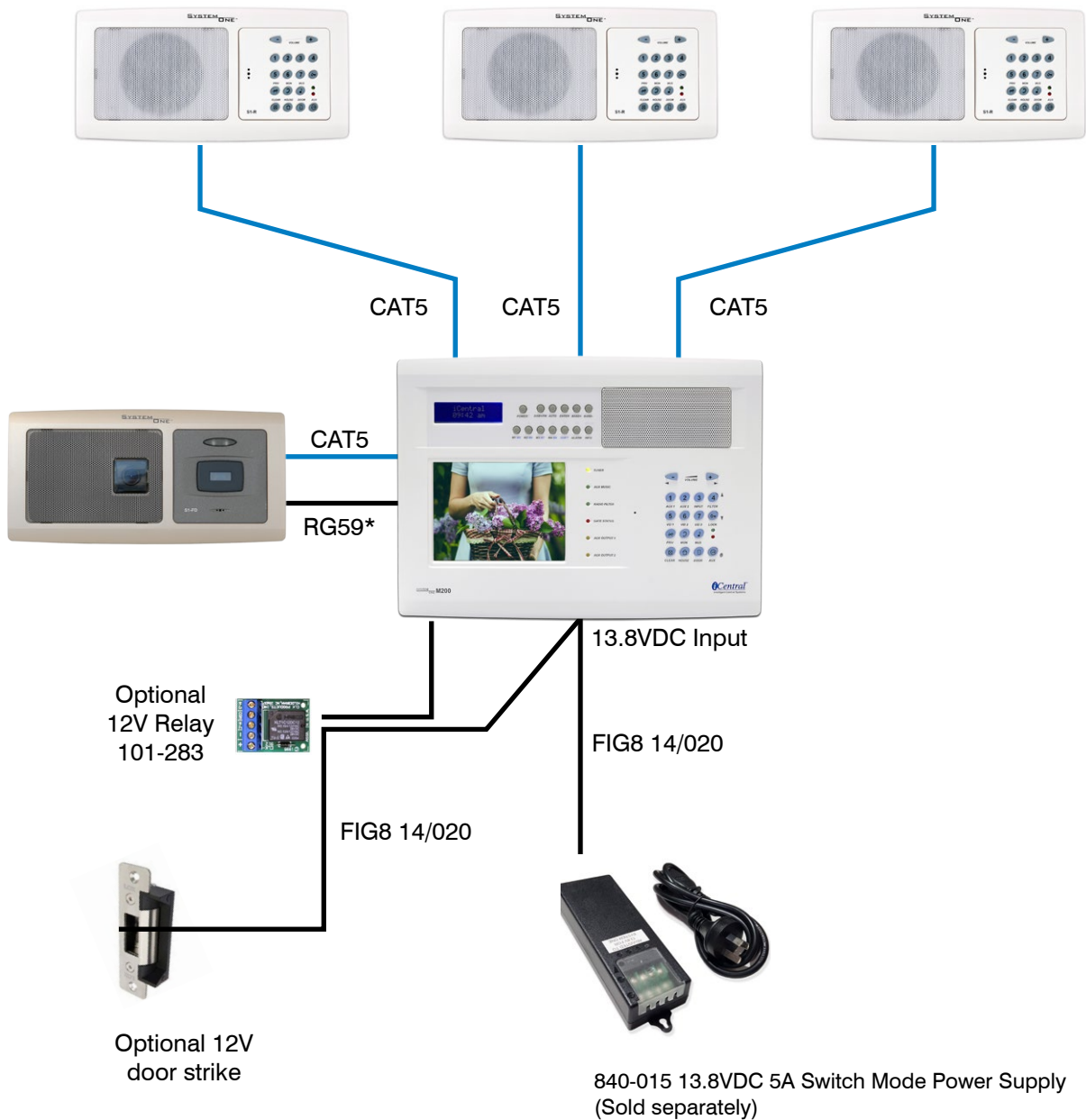
# QUICK START GUIDE

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For Installers



## CONNECTION OVERVIEW 8 WIRE METHOD



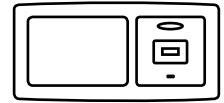
\*RG59 coax cable for video door stations. Or see page xx 'Video via 6 wire cable'

This diagram is an overview of required cabling, not a wiring diagram.

8 Wire Connection  
**MASTER TO ROOM STATIONS**  
Using CAT5

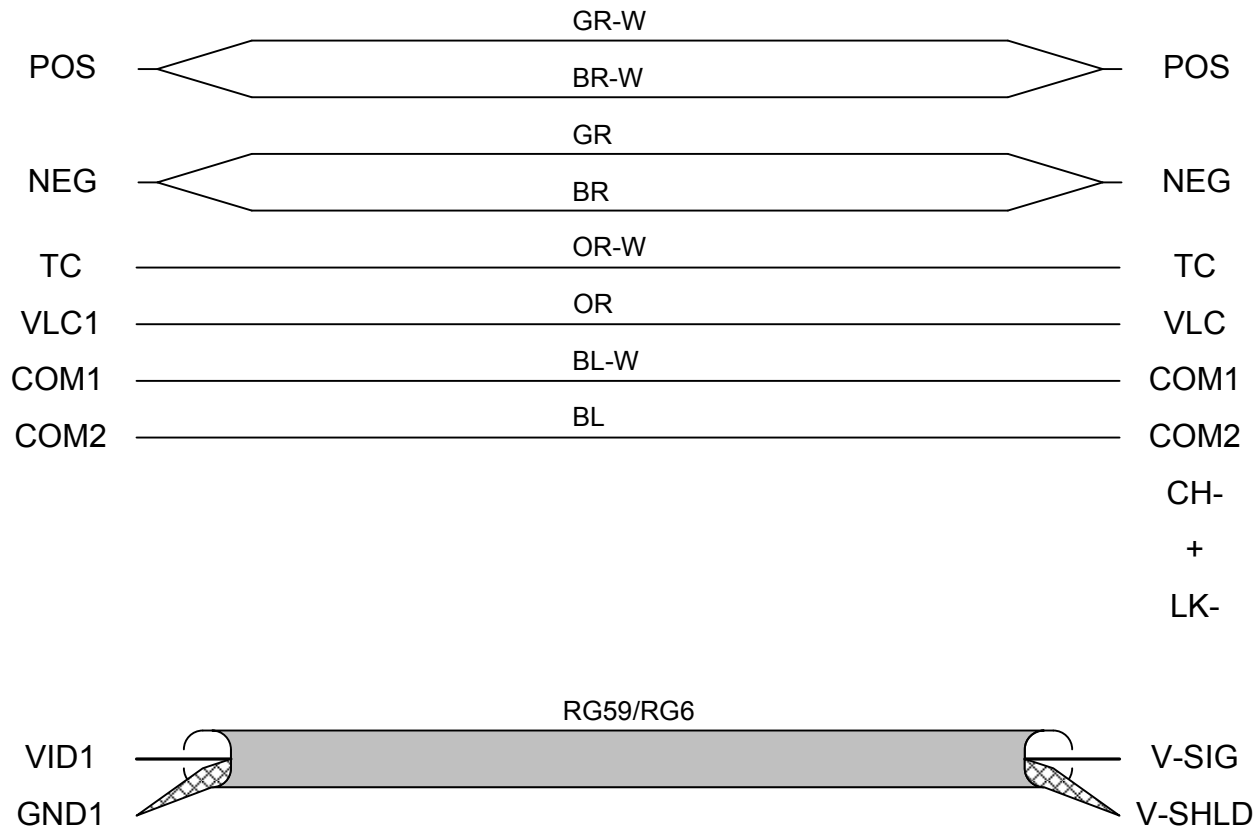
| <b>MASTER</b> |      | <b>ROOM</b> |
|---------------|------|-------------|
| POS           | GR-W | POS         |
| NEG           | GR   | NEG         |
| TC            | OR-W | TC          |
| VLC1          | OR   | VLC         |
| COM1          | BL-W | COM1        |
| COM2          | BL   | COM2        |
| MUS1          | BR-W | MUS1        |
| MUS2          | BR   | MUS2        |
| AUX           |      | AUX         |

# 8 Wire Connection MASTER TO DOOR STATION Using CAT5 and RG59/RG6



**MASTER**

**DOOR**



**Notes:**

It is important to strictly adhere to the above format for optimum performance

**Cable Requirement:**

- 1 x CAT5 Cable (for general intercom operation)
- 1 x Coaxial Cable (for video transmission)

Extra FIG-8 cable required for operation of Electric Lock or Automatic Gate

- \* Lock Output available at master or door station
- \* Lock Output requires additional relay (Minimum coil resistance 240 ohm)

Maximum Distance: 100m (Using this cable configuration)

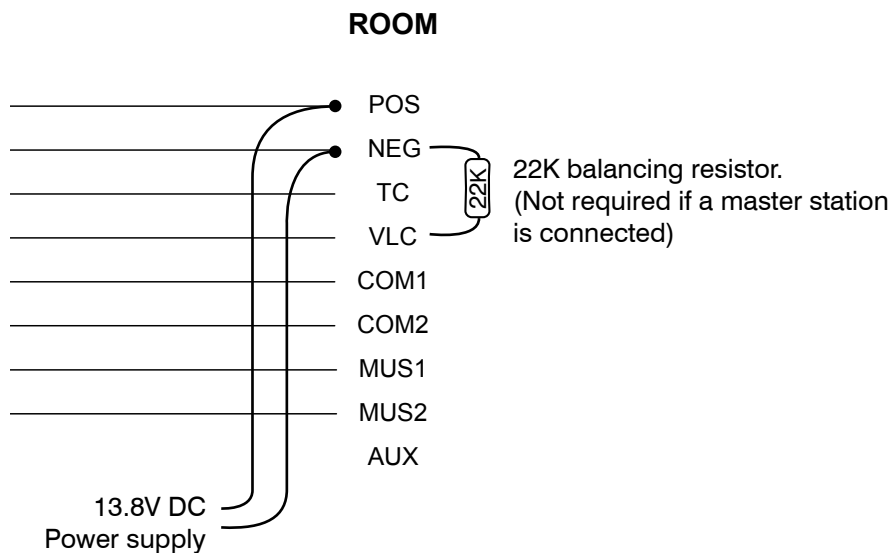
\*For distances over 100m an additional power source is required at the door station

**IMPORTANT:**

The type and number of wires used for POS and NEG are always to be balanced.

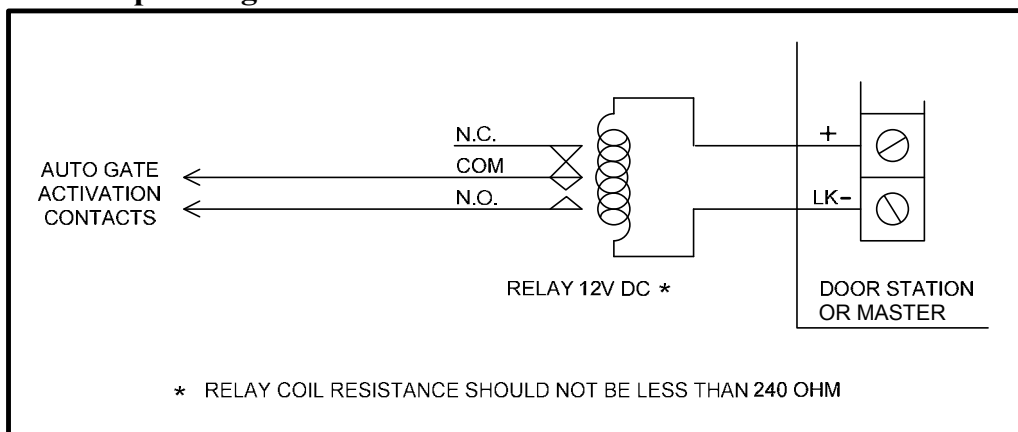
## BALANCING RESISTOR

On **Room Station Only systems** (without a Master), a **22K load resistor is required** and must be fitted across the VLC and NEG terminals of the Room Station to which the power supply is connected.

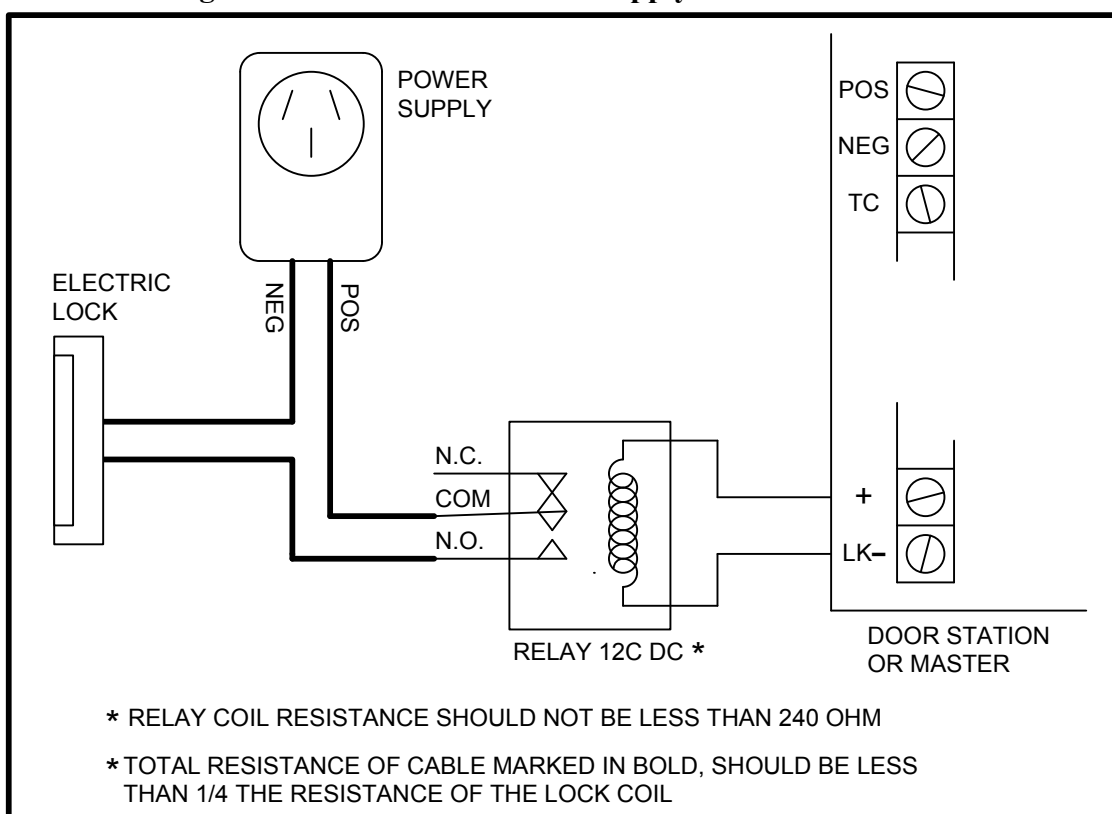


840-015 13.8V 5A Switch Mode power supply  
(Sold separately)

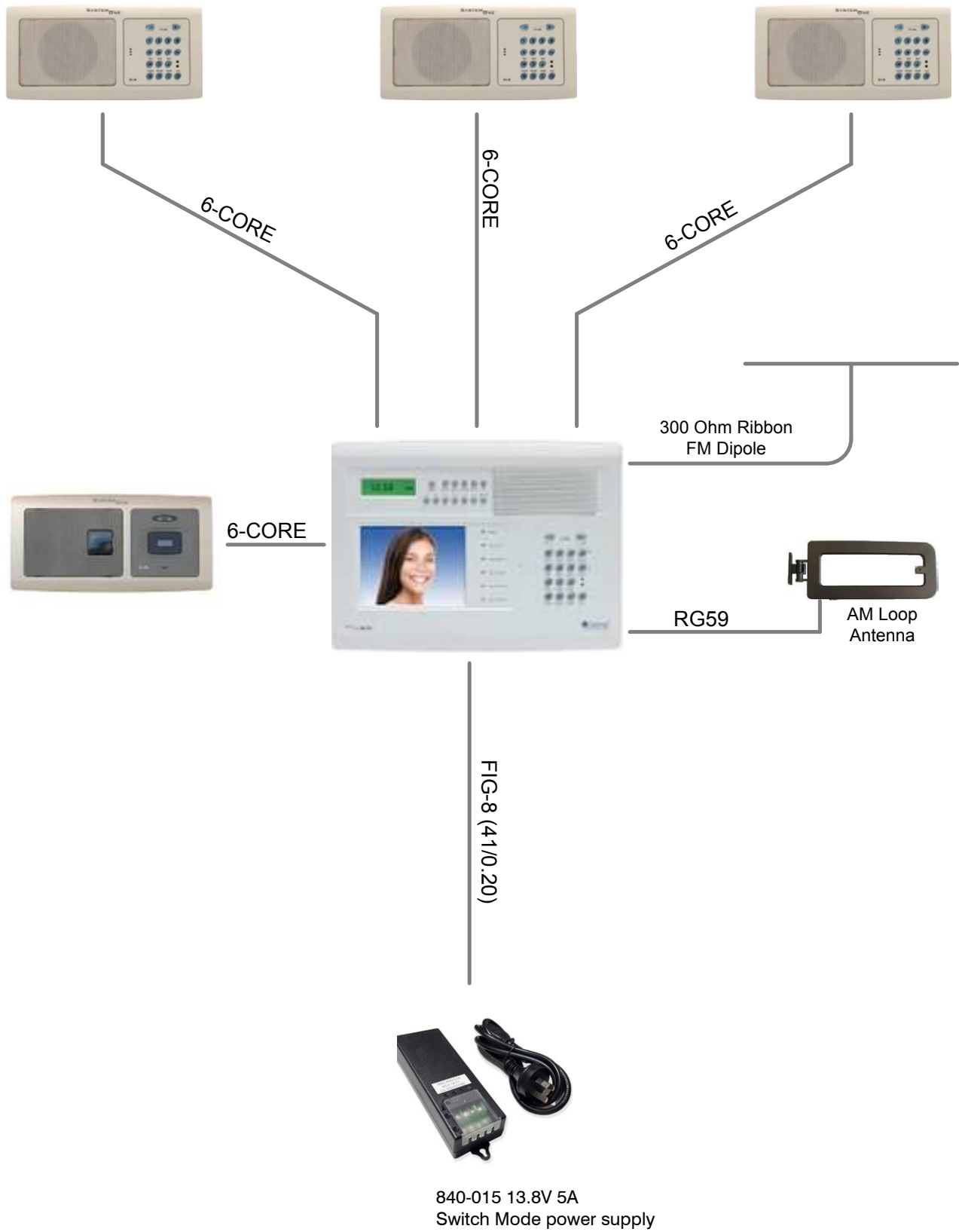
### Operating Automatic Gates



### Powering Electric Lock From Power Supply



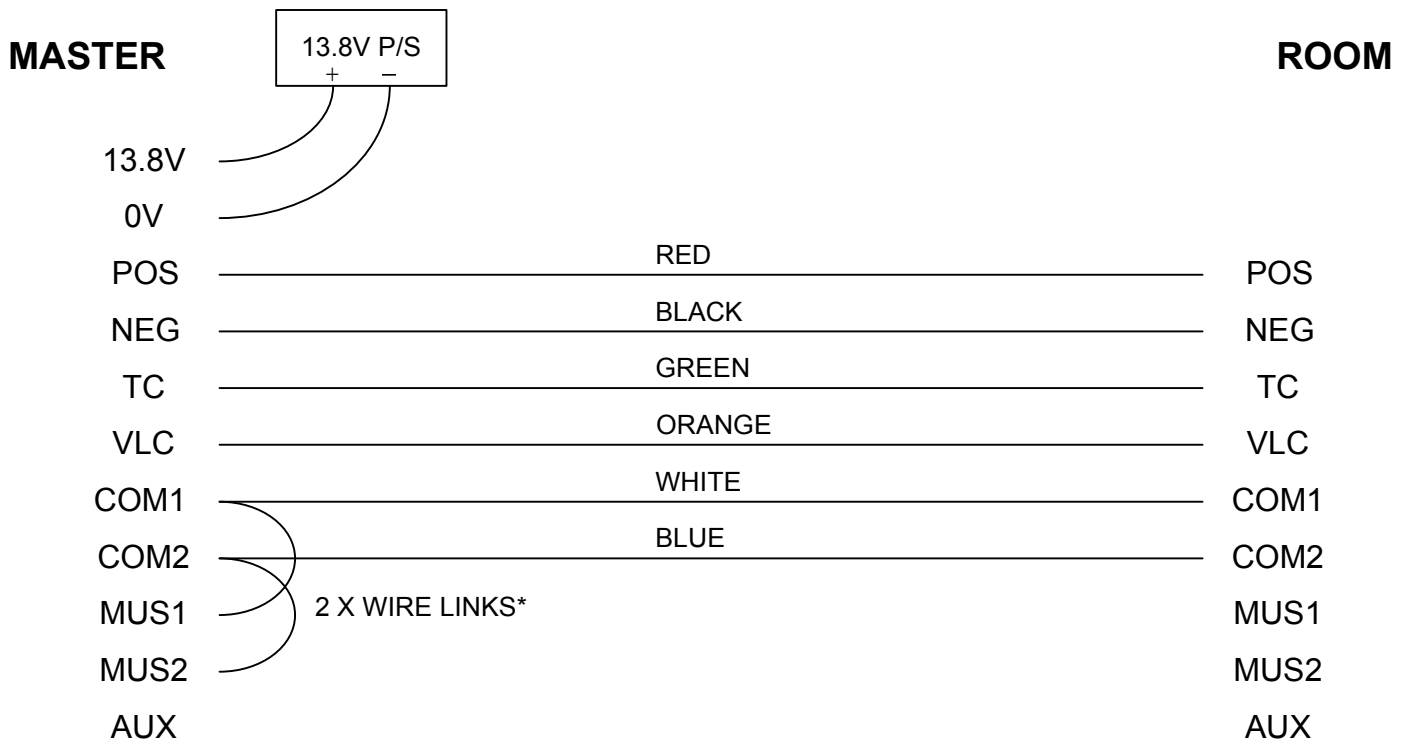
Note: Lock Relay can be fitted to Lock Output (+ and LK-) at master station or (+ and LK-) at door station.



(Power Supply sold separately)

# CONNECTIONS – M200 MASTER TO ROOM STNS

## Using 6-Core Cable

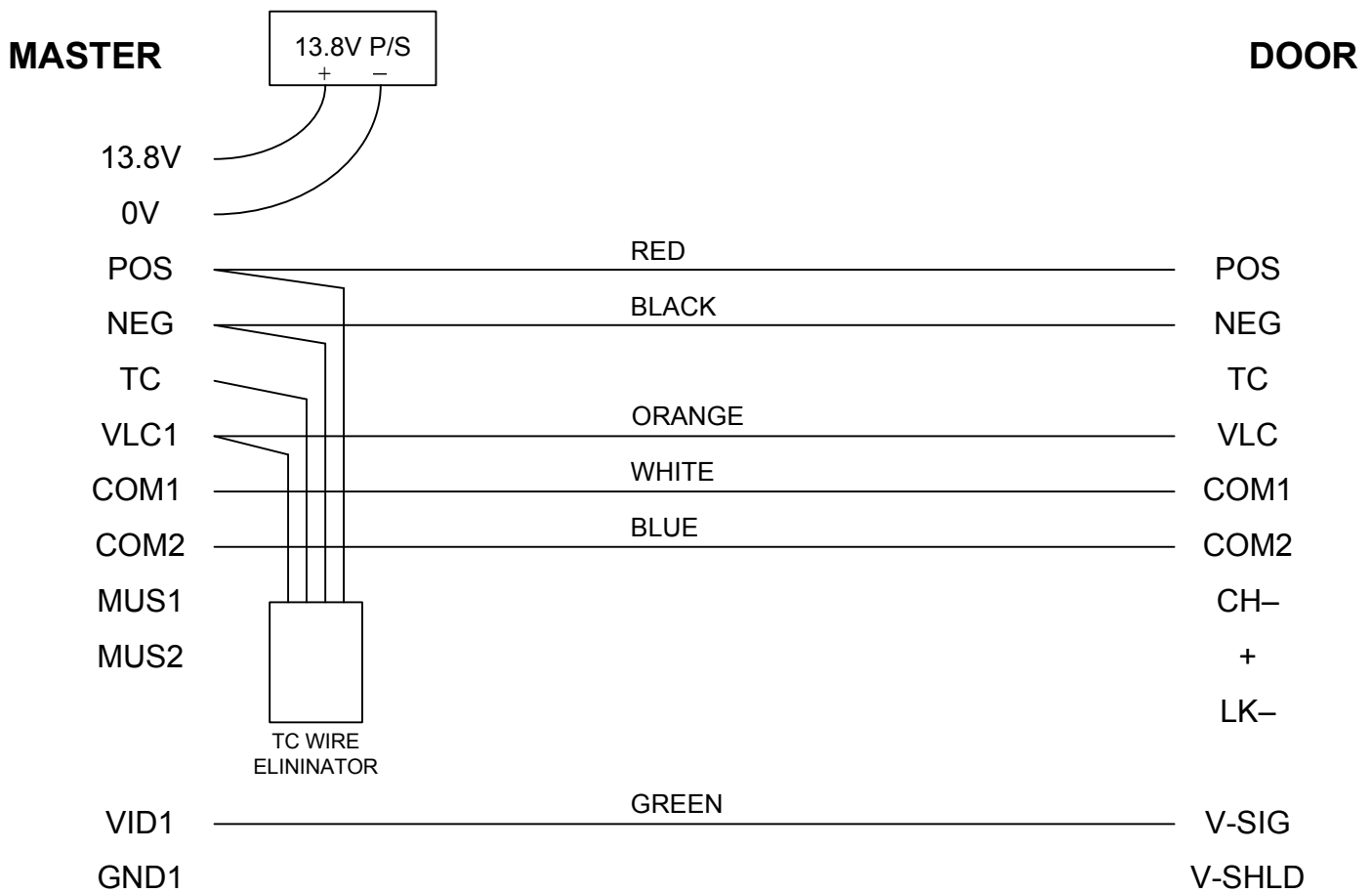


\*2 X WIRE LINKS ARE  
FITTED AT MASTER ONLY



# CONNECTIONS – M200 MASTER TO VIDEO DOOR STN #1

## Using 6-Core Cable (Option #1)



### Notes:

It is important to strictly adhere to the above format for optimum performance

### Cable Requirement:

- 1 x 6-Core Cable (for intercom and video operation)
- 1 x TC Wire Eliminator Module (P/N: 110-001)

Maximum Distance: 40M (Using this cable configuration with video door station)

\*For longer distances an additional power source will be required at the door station.

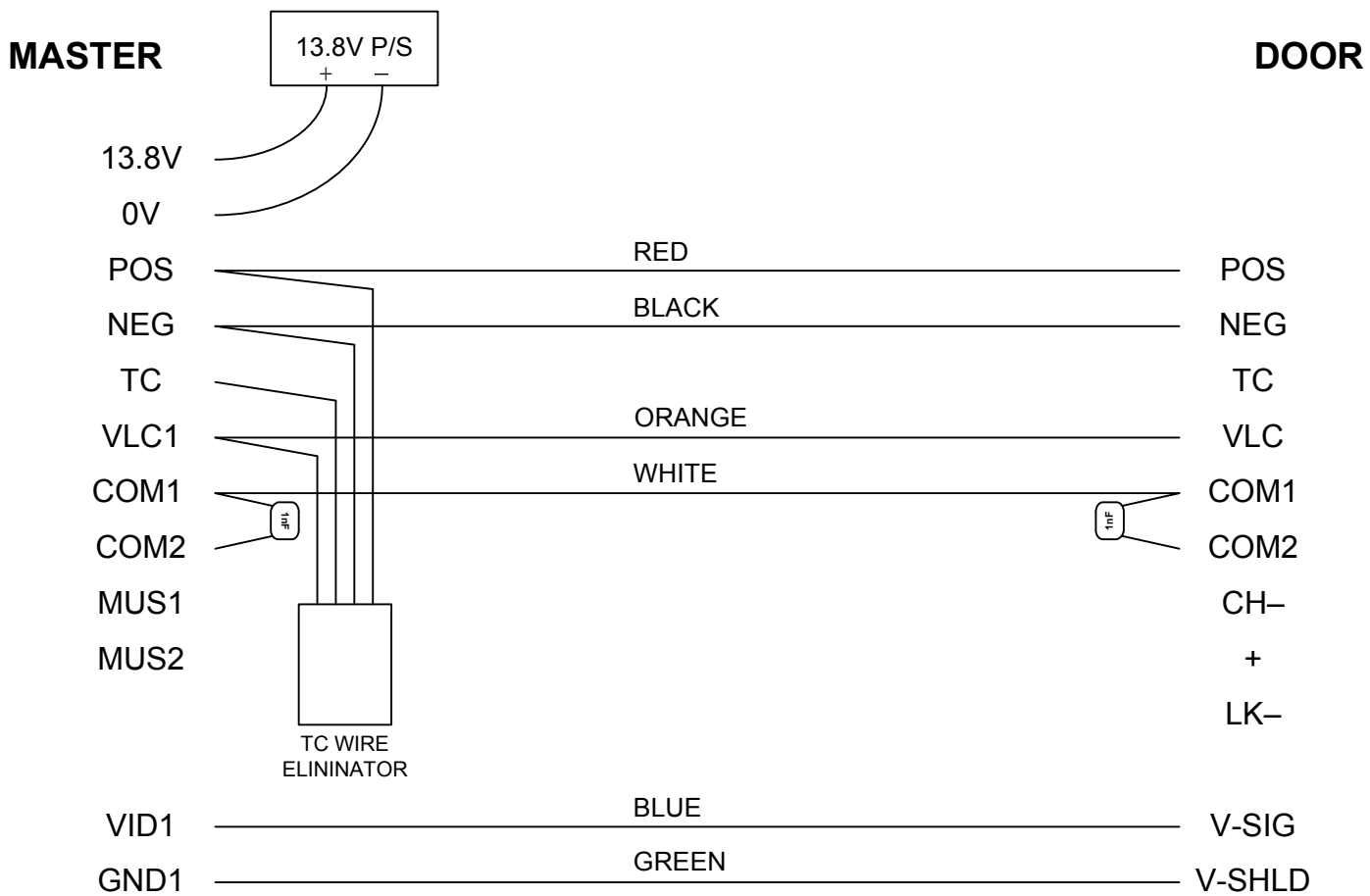
**\*Note:** This configuration is a compromise and may result in degraded video performance.  
If video performance is unacceptable, try Option #2 (on next page) instead.

### IMPORTANT:

The type and number of wires used for POS and NEG are always to be balanced.

# CONNECTIONS – M200 MASTER TO VIDEO DOOR STN #1

## Using 6-Core Cable (Option #2)



### Notes:

It is important to strictly adhere to the above format for optimum performance

### Cable Requirement:

- 1 x 6-Core Cable (for intercom and video operation)
- 1 x TC Wire Eliminator Module (P/N: 110-001)
- 2 x 1nF capacitors (102 marking - monolithic or ceramic)

Maximum Distance: 40M (Using this cable configuration with video door station)

\*For longer distances an additional power source will be required at the door station.

**\*Note:** This configuration is a compromise and may result in degraded audio performance. If audio performance is unacceptable, a choice will need to be made between Option #1 or Option #2.

### IMPORTANT:

The type and number of wires used for POS and NEG are always to be balanced.

# CONNECTIONS – AM & FM ANTENNAS



FM 300 OHM  
RIBBON ANTENNA

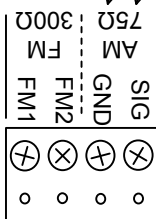


AM LOOP ANTENNA

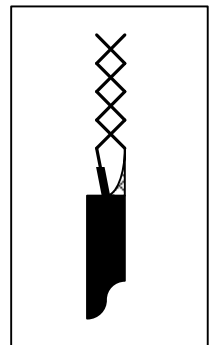


RG59

OUTER SHIELD  
CENTRE CORE



CONNECTION  
AT MASTER



# PROGRAMMING

All stations need to be programmed to “6-Wire” mode.

For the purpose of calling individual (or groups of) stations, stations can be programmed to different numbers (from 1 to 7)

All stations including master are programmed to #1 by default.

To program the master station:

Press PRIV and MON buttons at the same time to enter program mode  
- The GENERAL OPTIONS menu should appear on the video screen

Arrow down to “8 WIRE” (using LOCK button)

Press the VOLUME + button to change from “8 WIRE” to “6 WIRE”

Press CLEAR to exit program mode

\*Normally, master is left at default station number (#1)

To program room stations (the following must be done at each room station):

Press PRIV and MON buttons at the same time to enter program mode.

- Green LED should be ON (indicating 8-Wire mode) and Red LED should repeatedly flash once (indicating room station is programmed to station number 1)

Press HOUSE button to change to 6-Wire mode (Green LED will turn off)

Press desired number (from 2 to 7)

- Red LED will repeatedly flash programmed number

i.e. if programmed to #3, Red LED will repeatedly flash 3 times.

Press CLR to exit program mode

Note: For systems with a master and more than 6 room stations, multiple stations can be programmed to the same number (i.e. stations in a common area)

Alternately, the system can be programmed to Double Digit mode allowing each station to have its own two digit identification.

(See M200 installation manual for further detail)

## 6 WIRE OPERATION HOW IT WORKS

- Programming for 6-wire is required to shift functions associated with the music wires to the intercom wires.
- The master station and each individual room station have to be programmed for 6 wire.
- Music (whether radio or input jack) and monitor function are normally handled by the music pair (MUS1 and MUS2).
- Programming to 6-wire moves these functions to the intercom pair (COM1 & COM2).
- If music or monitoring function is not being used, programming for 6-wire becomes optional.

### FAULT FINDING

- If a 6-wire system has no music at room stations (but music works at the master), make sure that the 2 wire links have been fitted at the master between COM1 & MUS1 and between COM2 and MUS2.
- If there's no comms to room stations, it's very important that VLC from all the rooms wires to the VLC terminal at the master (not VLC1).
- Only VLC from the door door station is wired into **VLC1** at the master.

