

REV 2

SYSTEM ONE™

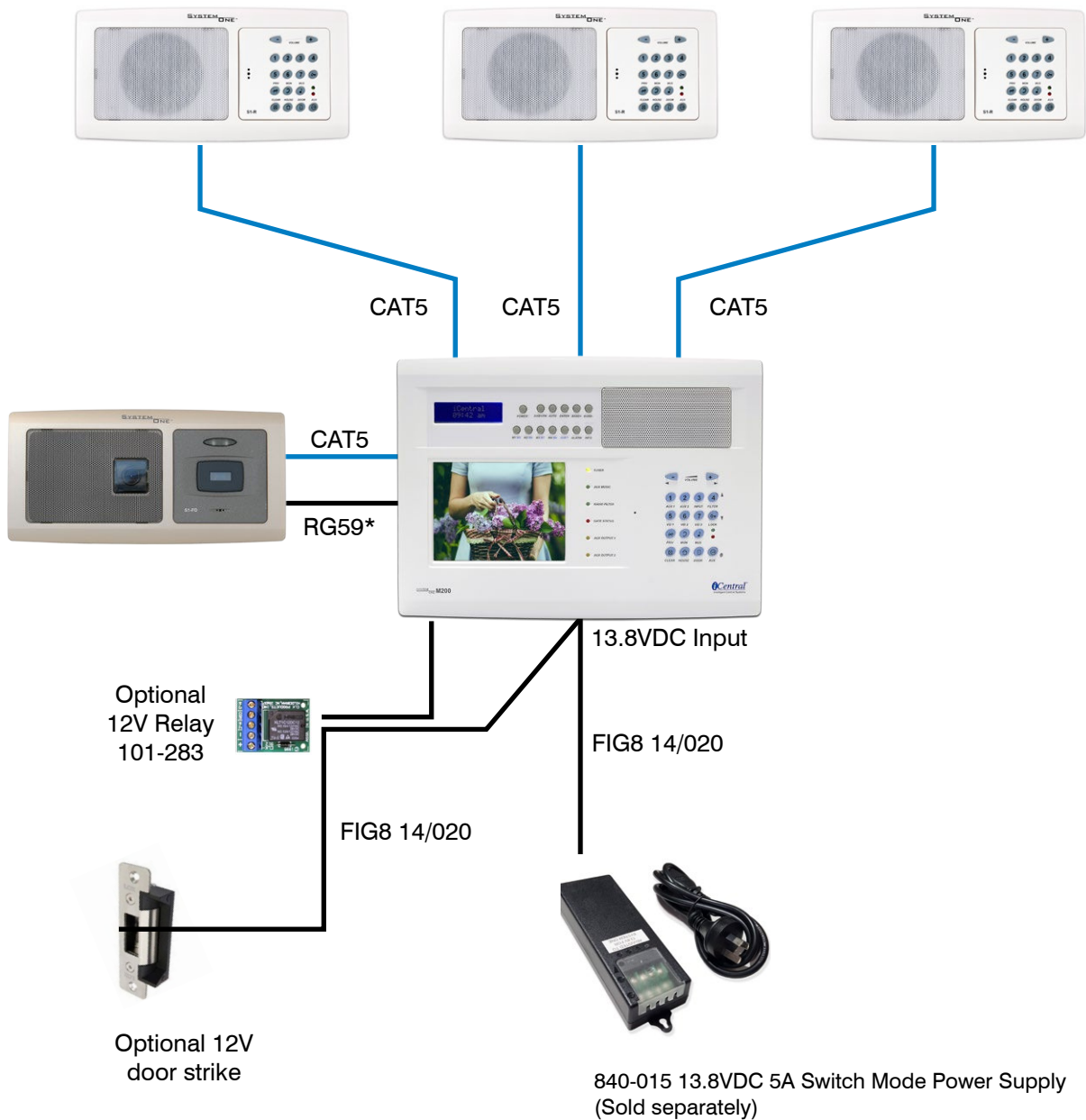
SYSTEM ONE INTERCOM SYSTEMS

QUICK START GUIDE

For Installers

iCentral™
Intelligent Central Systems
A DIVISION OF **NESS** CORPORATION

CONNECTION OVERVIEW 8 WIRE METHOD



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

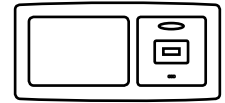
This diagram is an overview of required cabling, not a wiring diagram.

8 Wire Connection
MASTER TO ROOM STATIONS
Using CAT5

MASTER**ROOM**

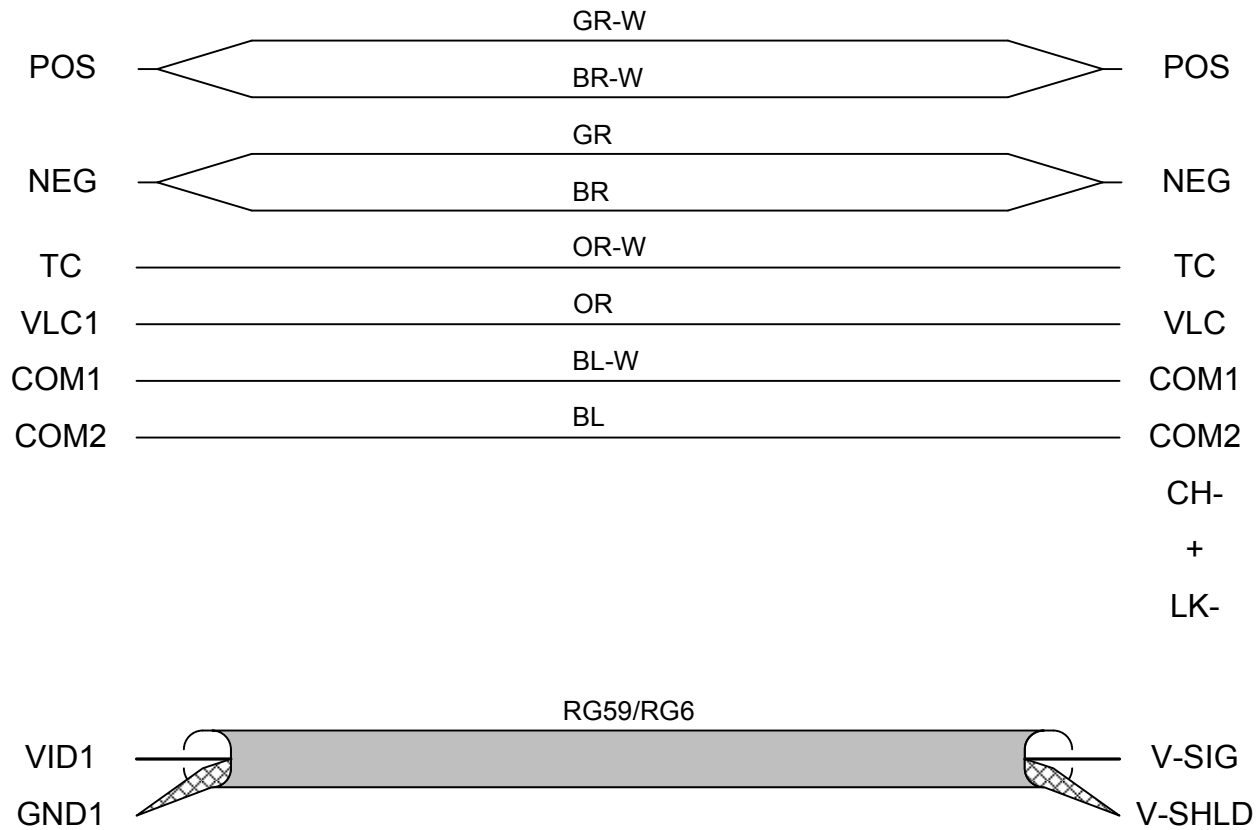
POS	GR-W	POS
NEG	GR	NEG
TC	OR-W	TC
VLC1	OR	VLC
COM1	BL-W	COM1
COM2	BL	COM2
MUS1	BR-W	MUS1
MUS2	BR	MUS2
AUX		AUX

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)

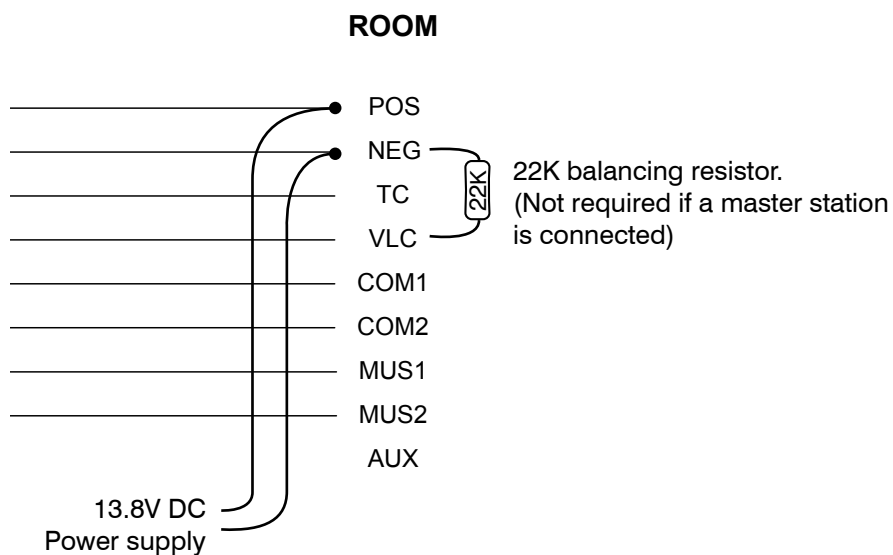
*For distances over 100m an additional power source is required at the door station

IMPORTANT:

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

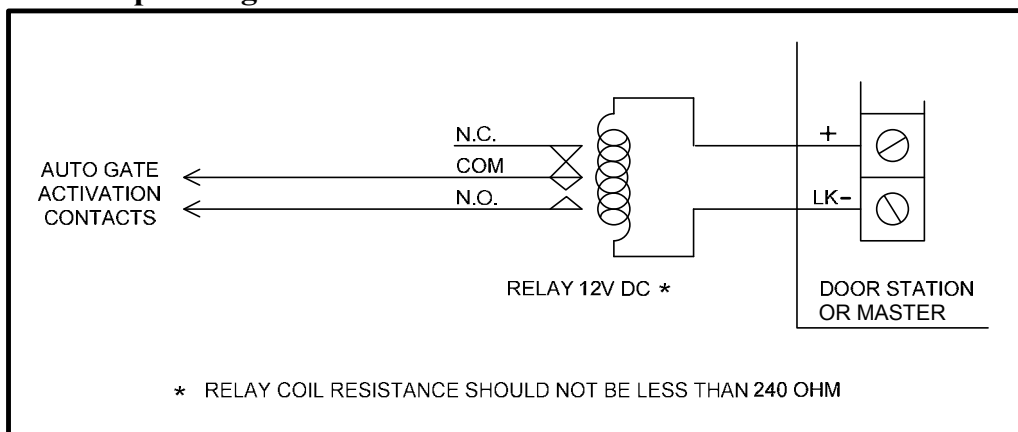
BALANCING RESISTOR

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.

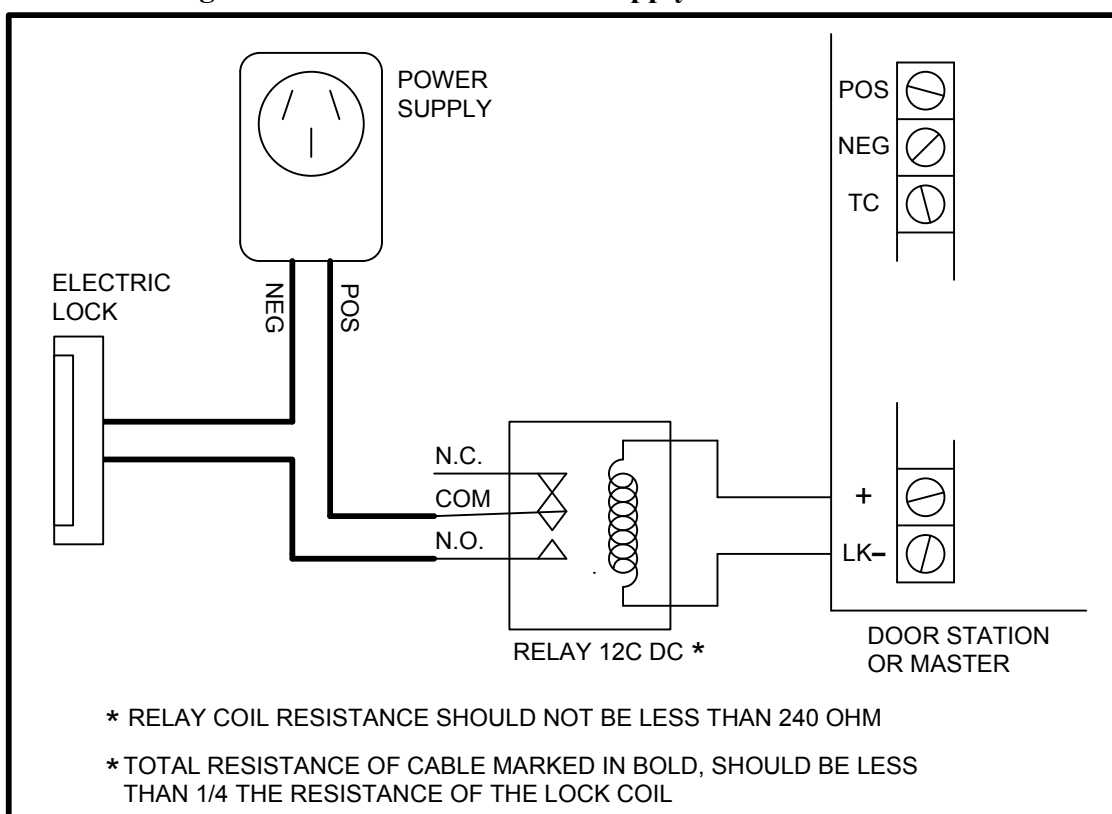


840-015 13.8V 5A Switch Mode power supply
(Sold separately)

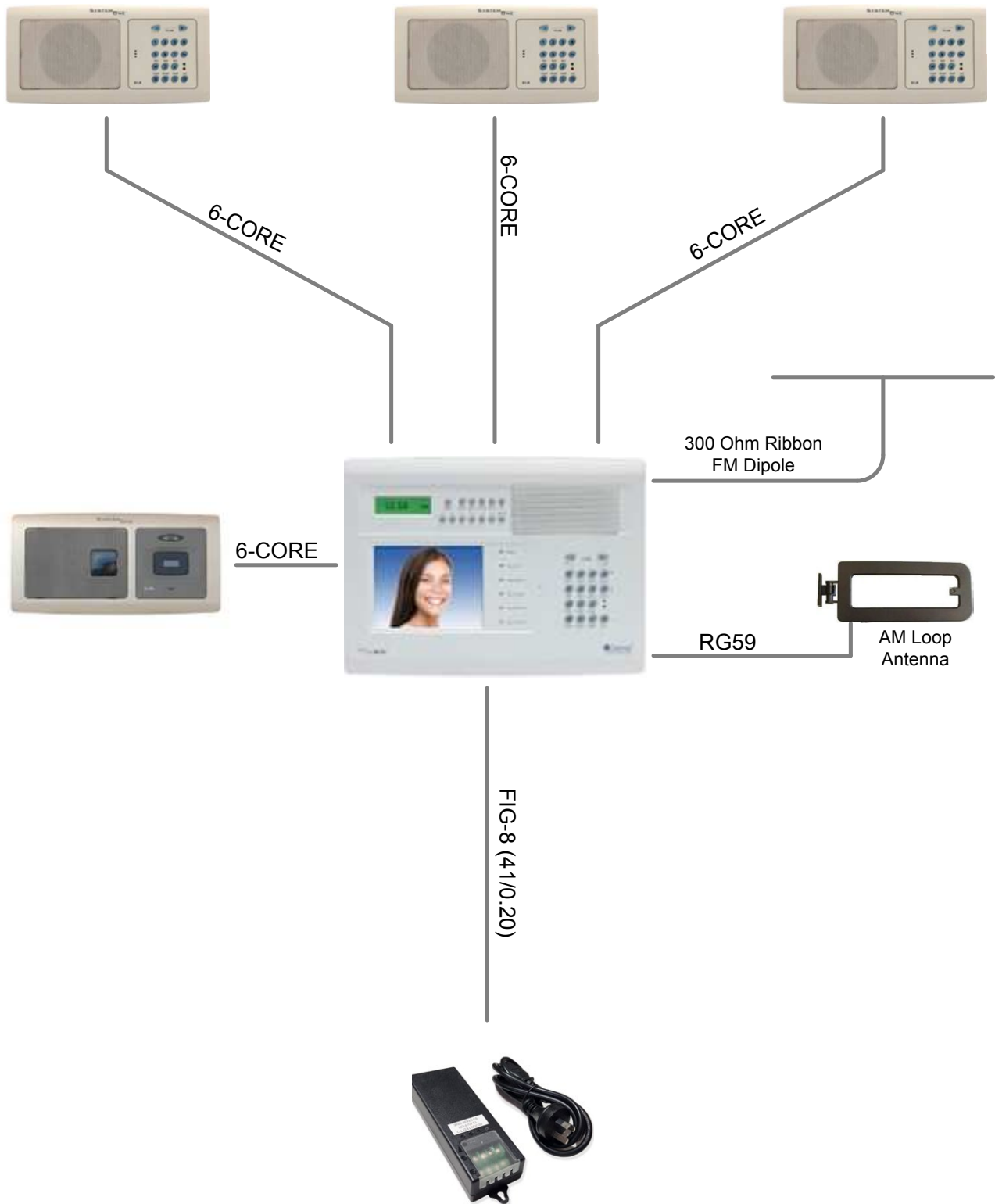
Operating Automatic Gates



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.

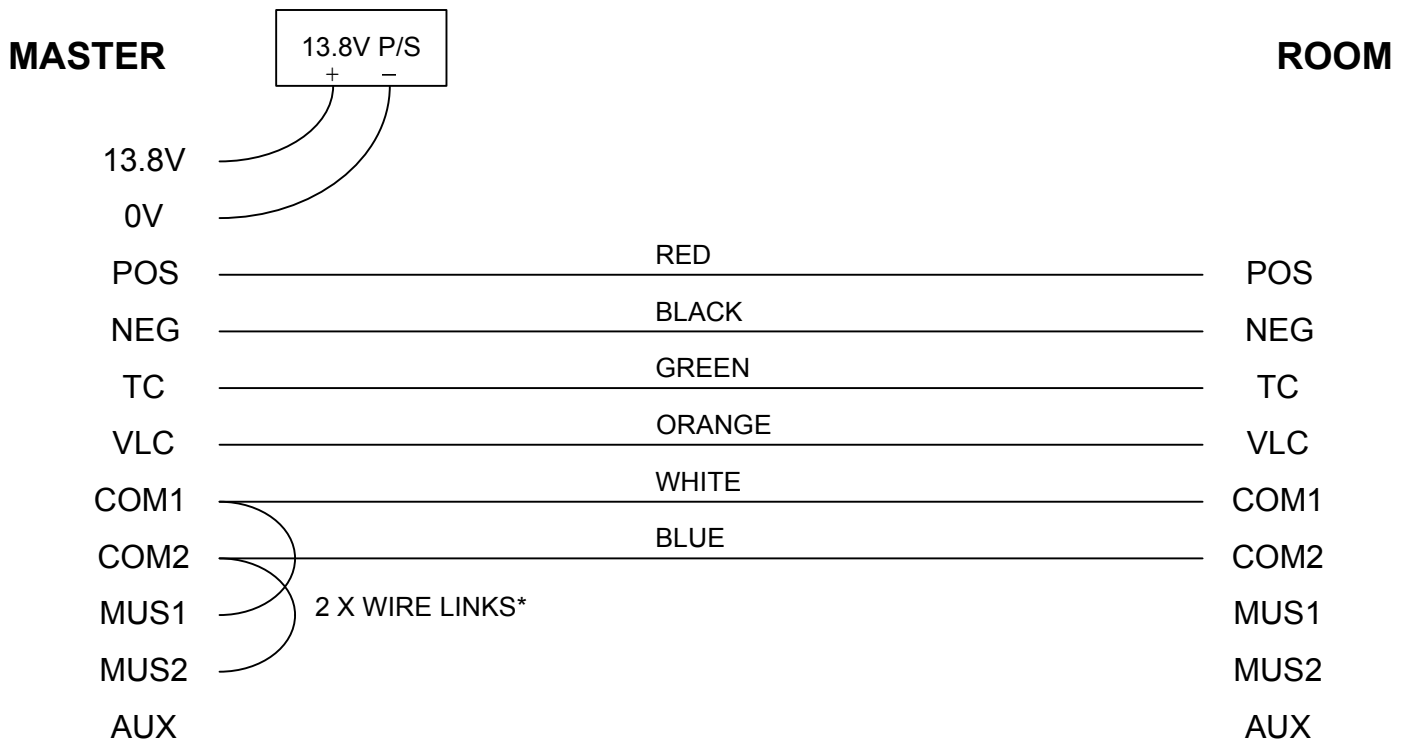


840-015 13.8V 5A
Switch Mode power supply

(Power Supply sold separately)

CONNECTIONS – M200 MASTER TO ROOM STNS

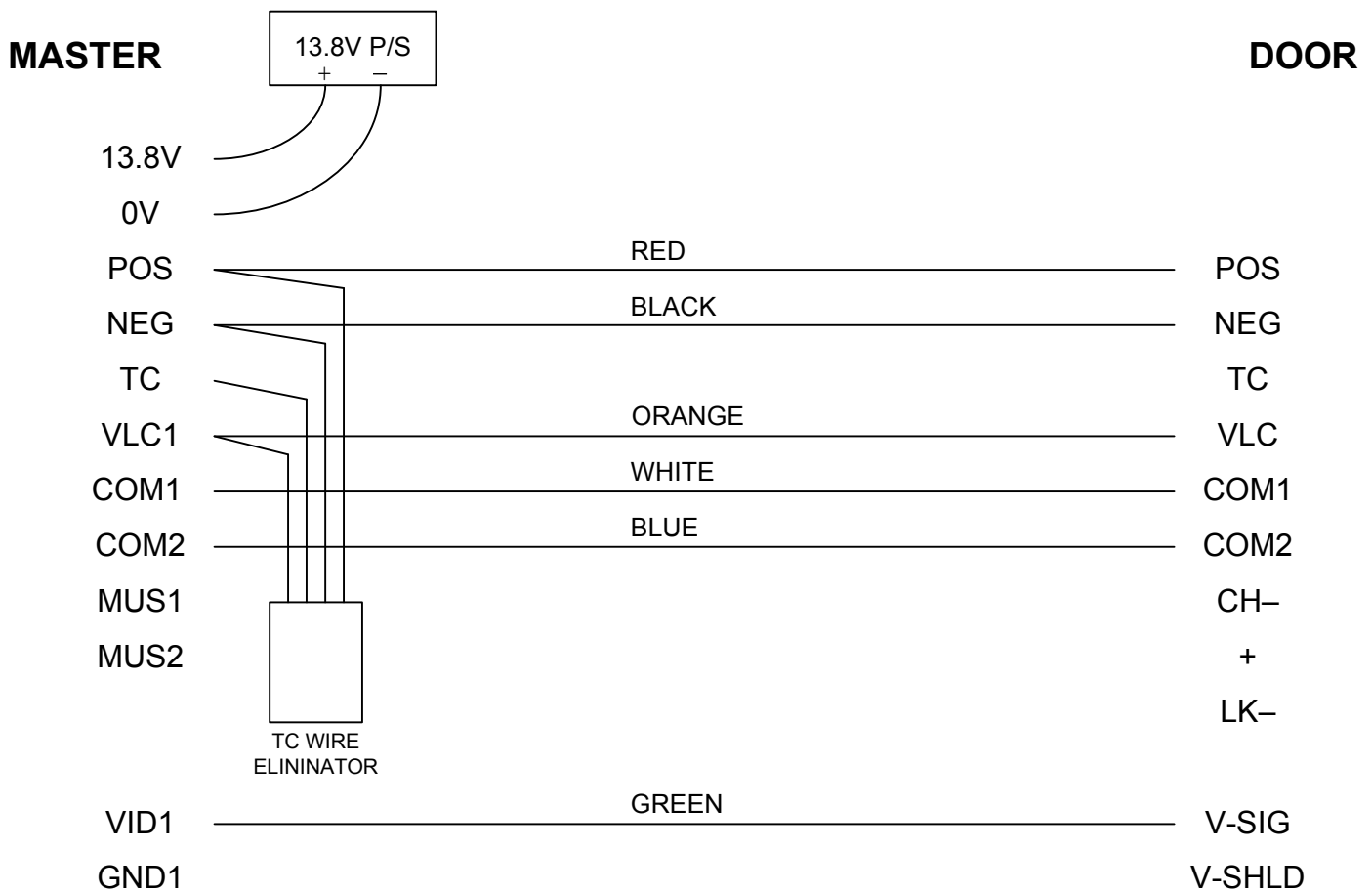
Using 6-Core Cable



*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.

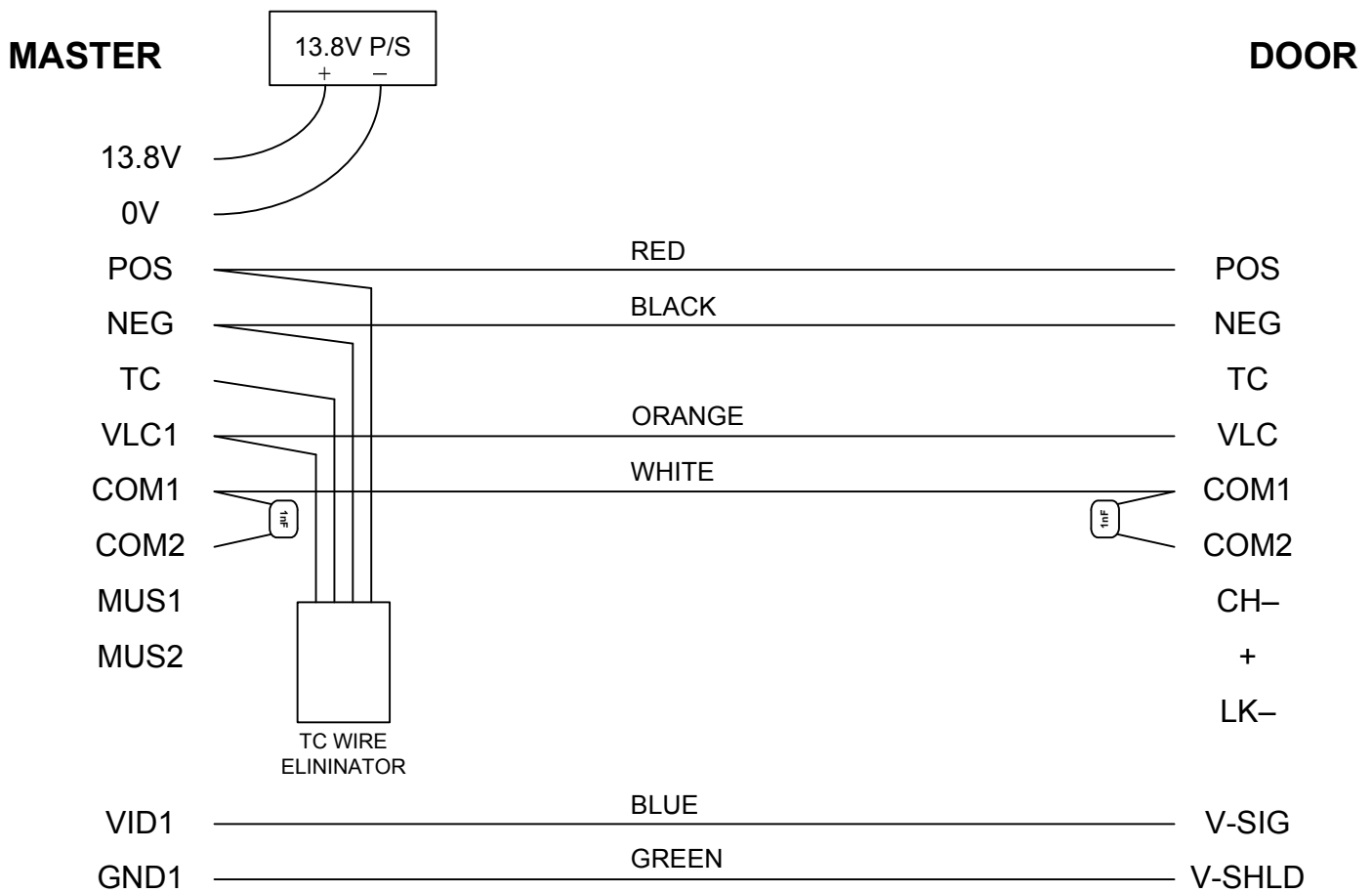
***Note:** This configuration is a compromise and may result in degraded video performance. If video performance is unacceptable, try Option #2 (on next page) instead.

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

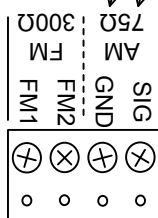


AM LOOP ANTENNA

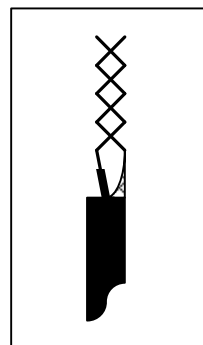


RG59

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.

