Q Series Video

Schematics, connection diagrams
and installation notes

entryphone®

Contents

Telephones *
(QVT1)

Single Button
Entrance Unit
(QLSV)

Multi-button
Entrance Unit
(QLSV)

Door Release
(LOCK)

QVP1   **Power Supply**

QVS4   **4-way splitter ***

QVRL   **Lock Relay**

QVDC4   **4 Door Relay**

DIP Switch 8

DIP Switch 4

* Require correct BUS termination   ▮ = ON   ▯ = OFF

Important

Two Wire Bus. Entryphone Q Series equipment is designed to allow video systems to be installed on just two common bus wires. The video, speech, signalling and power are on two conductors to every part of the system.

Balanced signal. While the Q series BUS is not polarity-sensitive, the signal is balanced, and therefore, the installer must ensure that equipment is terminated correctly. This involves setting the termination switch (number 8) or jumper to "ON" at line ends or to "OFF" from mid-line equipment.

Termination ON   Termination OFF   Termination ON   Termination OFF
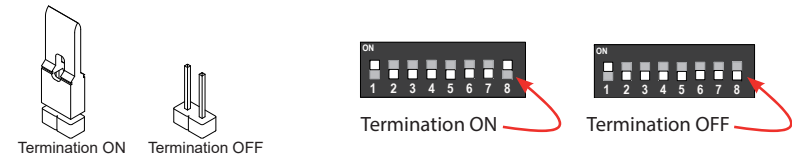
On the examples in this booklet we have shown how equipment should be terminated.

NOTE: If, on test, a video screen seems over bright or washed out it is likely that the line has not been terminated correctly.

Phone ID. There are no individual call lines for the Q series systems, instead each phone has an eight way DIL (dual in-line) switch that should be set when the telephone is installed. The phone's address is set as a binary number on the first five switches.

Example of a DIP switch set to binary address 11100 (7 in decimal [1+2+4]) with switch 8 set to ON (terminated)

When planning a system it is good practice to determine which address is to be assigned to which phone and noted on the **numbering sheet on page 12** of these instructions. NOTE: Q Series panels are pre-wired with the phone's call ID marked on the panel next to each call button.

Parallel phones. Up to four telephones can be set to the same address so that they ring simultaneously. These phones need to be set so the first is the main phone and the other three phones are subs, use switches 6 and 7 as below. This example below shows all phones set to address 9 (10010) and 6 and 7 with different settings, 00,10,01 and 11.
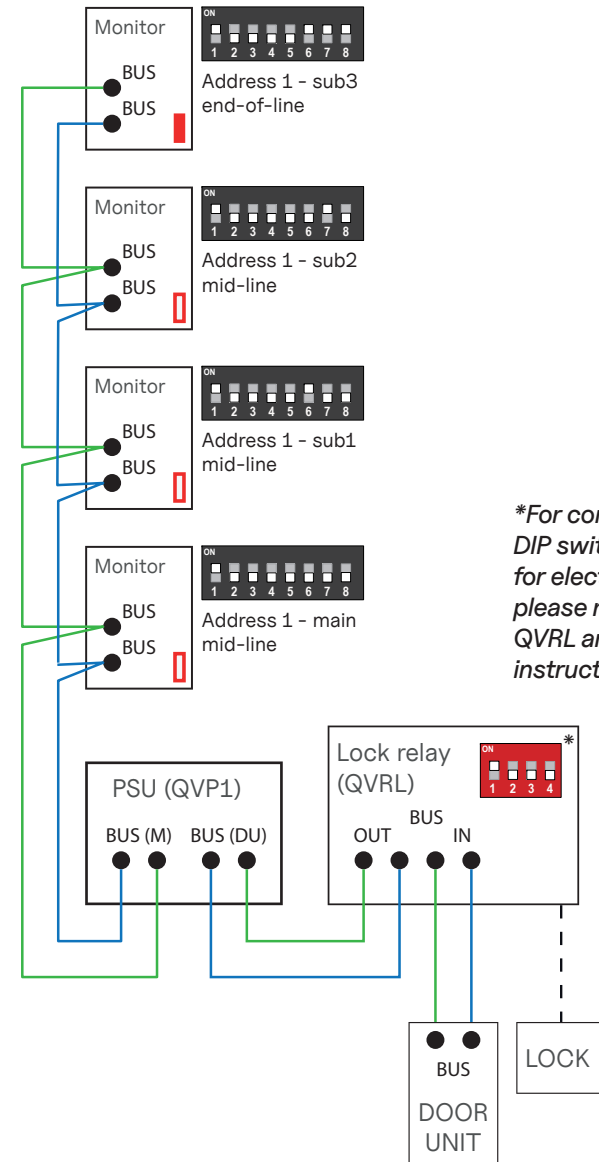
MAIN   SUB1   SUB2   SUB3

Schematic
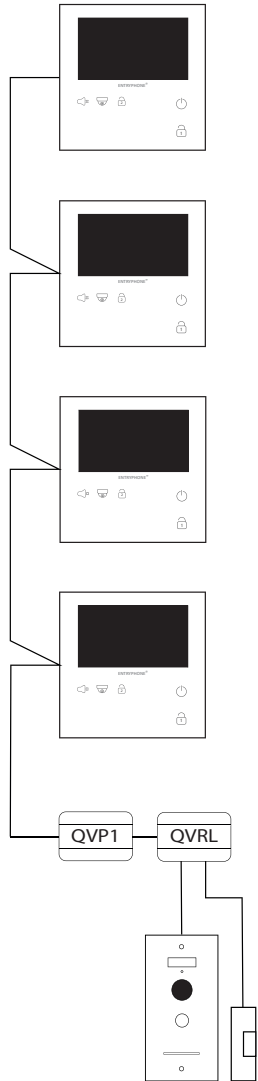
System Description
Single line system - looped wiring

A one-way system (with just a single-button door unit) with three parallel phones with wiring looped from phone to phone.

Single button panel's call address is set to 01.

There is no need for a splitter in this example.

Connections

Monitor
BUS
BUS
Address 1 - sub3 end-of-line

Monitor
BUS
BUS
Address 1 - sub2 mid-line

Monitor
BUS
BUS
Address 1 - sub1 mid-line

Monitor
BUS
BUS
Address 1 - main mid-line

For connections and DIP switch settings for electric locks please refer to the QVRL and lock device instructions.

PSU (QVP1)
BUS (M)   BUS (DU)

Lock relay (QVRL)
OUT   BUS   IN

BUS
DOOR UNIT

LOCK

Schematic
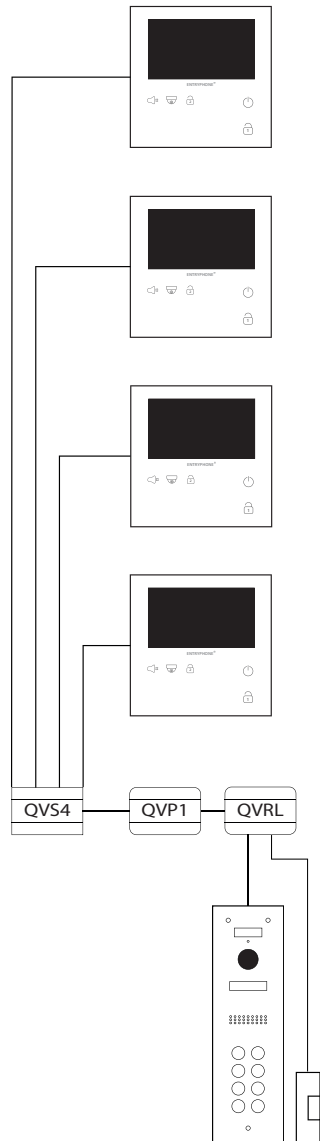
Connections

System Description
Four-way system - single run wiring

An example of a four-way system with wiring in single runs from the splitter to each phone.

As all monitors are at the end of a cable run all should be terminated (switch 8 on).

Monitor
BUS
BUS
Address 4
end-of-line

Monitor
BUS
BUS
Address 3
end-of-line

Monitor
BUS
BUS
Address 2
end-of-line

Monitor
BUS
BUS
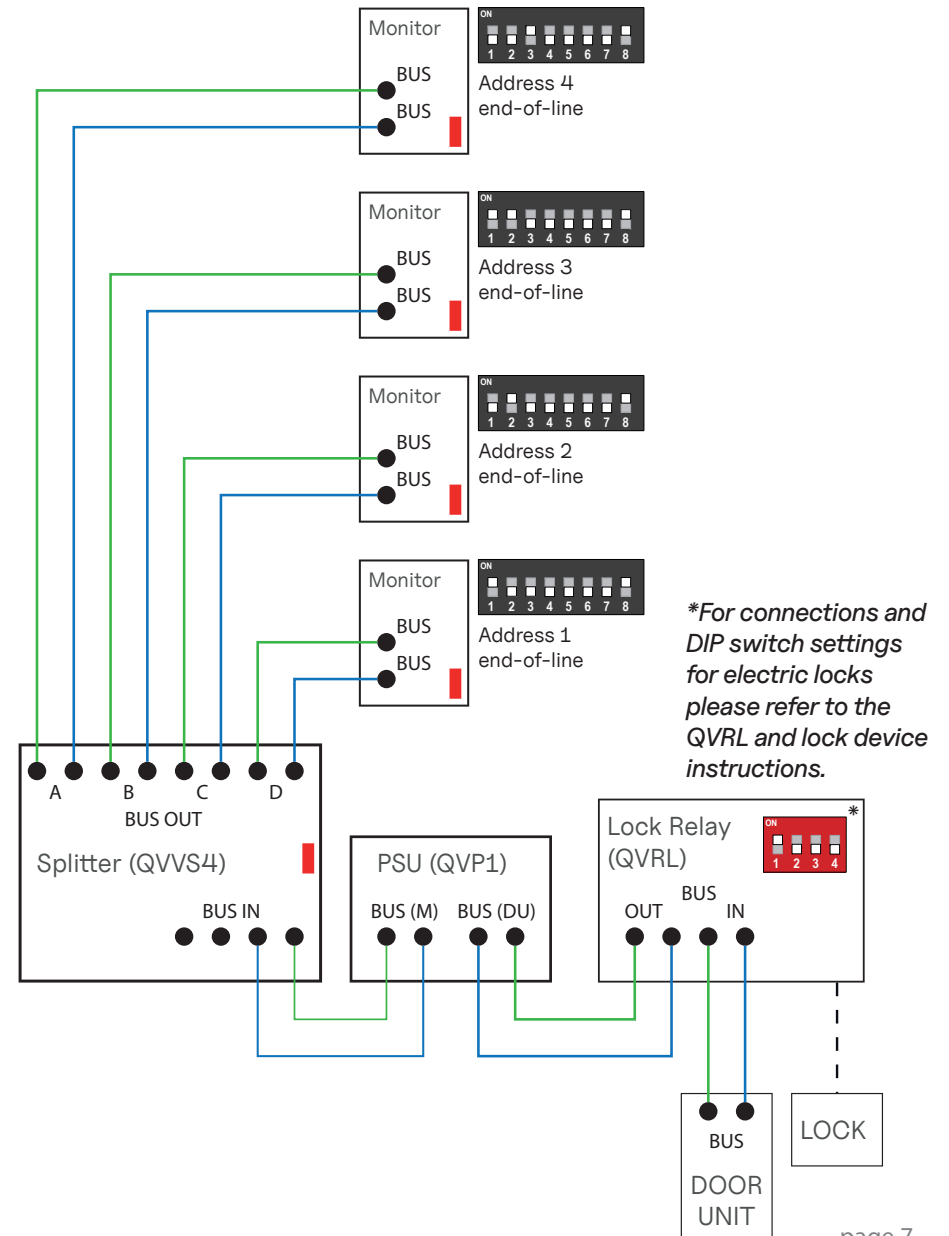Address 1
end-of-line

For connections and DIP switch settings for electric locks please refer to the QVRL and lock device instructions.

QVS4   QVP1   QVRL

A   B   C   D
BUS OUT

Splitter (QVVS4)

BUS IN

PSU (QVP1)

BUS (M)   BUS (DU)

Lock Relay (QVRL)
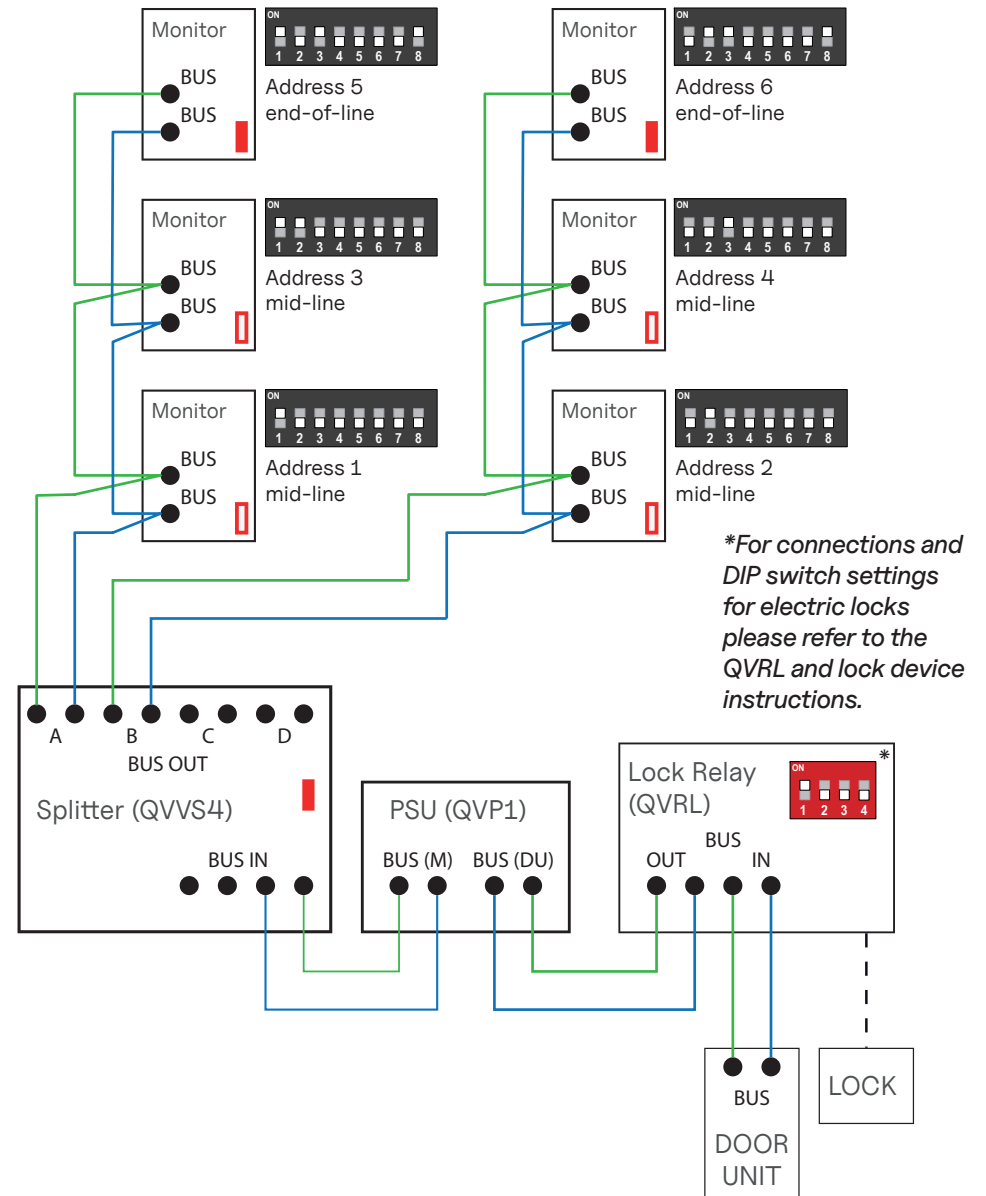BUS
OUT   IN

BUS
DOOR UNIT

LOCK

Schematic
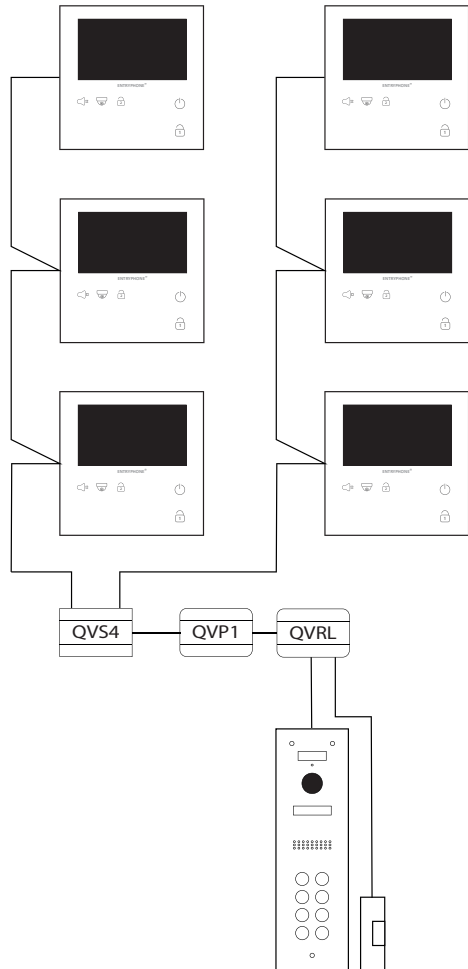
System Description

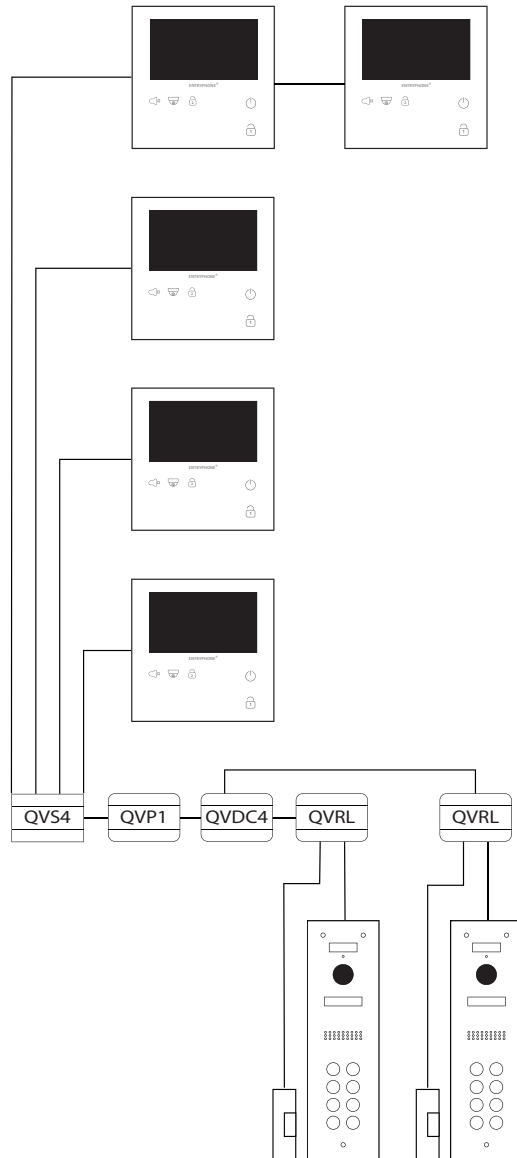Six-way system - with two risers each looped.

An example showing how single run and looped wiring can be combined.

Note: For correct line termination, telephones at the end of a cable run should be terminated (switch 8 on) and mid-line equipment left unterminated (switch 8 off).

QVS4 — QVP1 — QVRL

Connections

Monitor
BUS
BUS
Address 5
end-of-line

Monitor
BUS
BUS
Address 6
end-of-line

Monitor
BUS
BUS
Address 3
mid-line

Monitor
BUS
BUS
Address 4
mid-line

Monitor
BUS
BUS
Address 1
mid-line

Monitor
BUS
BUS
Address 2
mid-line

For connections and DIP switch settings for electric locks please refer to the QVRL and lock device instructions.

Splitter (QVVS4)
A B C D
BUS OUT
BUS IN

PSU (QVP1)
BUS (M) BUS (DU)

Lock Relay (QVRL)
OUT BUS IN

BUS
DOOR UNIT

LOCK

Schematic

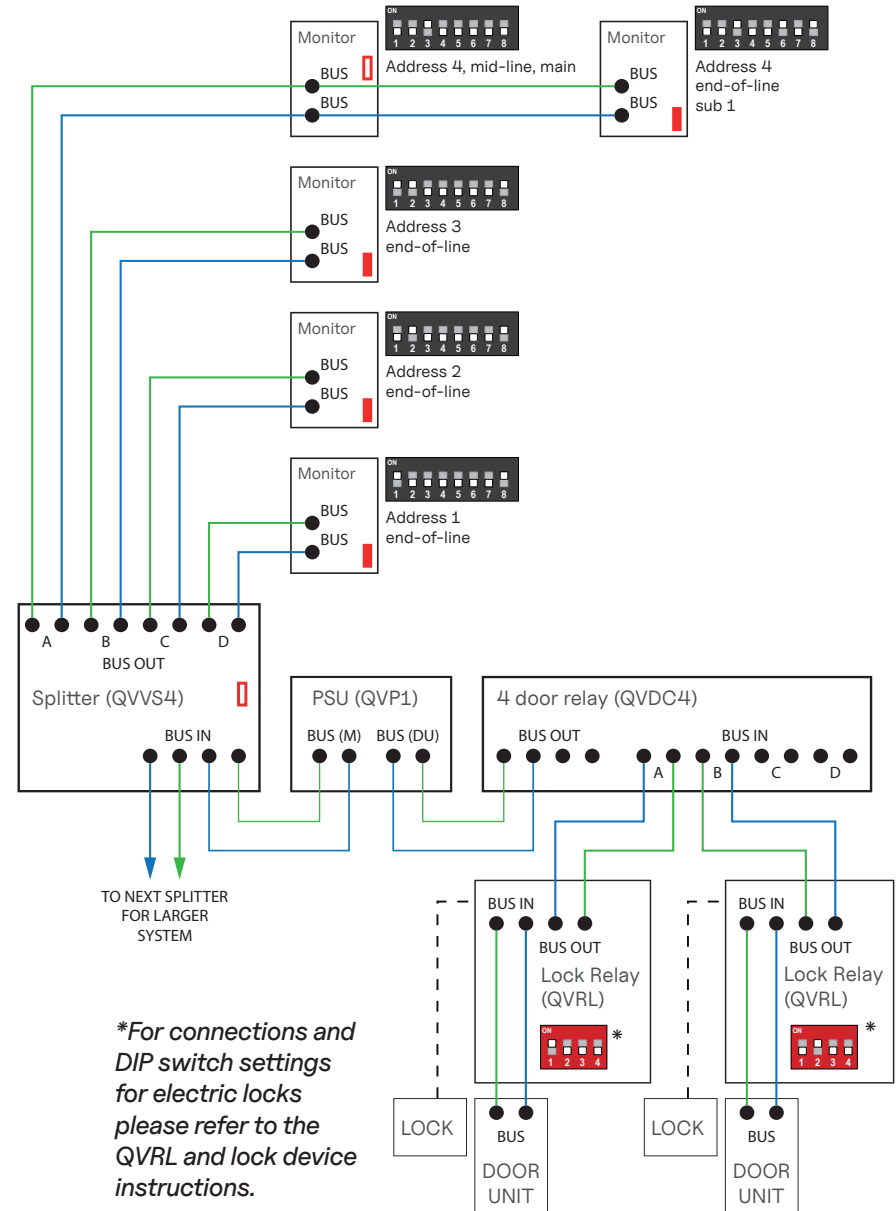## System Description
Two-door, four-way plus one system

An example of a two-door, four-way system with an additional paralell instrument in one unit.

The wiring is in single runs from the splitter to each phone. but with the additional phone's wiring looped through the first.

Where monitors are at the end of a cable run they must be terminated (switch 8 on).

If a monitor is set to the same address as another, switches 6 and 7 on the DIP switch must differ (see phone code settings on page 12).

Connections

Monitor — BUS / BUS — Address 4, mid-line, main

Monitor — BUS / BUS — Address 4 end-of-line sub 1

Monitor — BUS / BUS — Address 3 end-of-line

Monitor — BUS / BUS — Address 2 end-of-line

Monitor — BUS / BUS — Address 1 end-of-line

Splitter (QVVS4) — A B C D BUS OUT — BUS IN

TO NEXT SPLITTER FOR LARGER SYSTEM

PSU (QVP1) — BUS (M) BUS (DU)

4 door relay (QVDC4) — BUS OUT / A B C D BUS IN

BUS IN — BUS OUT — Lock Relay (QVRL) *

LOCK — BUS — DOOR UNIT

For connections and DIP switch settings for electric locks please refer to the QVRL and lock device instructions.

Phone address codes

Phone ID. There are no individual call lines for the Q series systems, instead each phone has a switch setting that should be set when the telephone is installed.
The phone's address is set as a binary number on the first five switches of an eight way DIL (dual in-line) switch (up to 32 addresses are available) fitted in each phone. For systems with more than 32 phones refer to manual for the system extender QVREX.

It is good practice to decide the layout of the system and the allocation of phone codes before starting an installation. Fill in the list below to indicate which code is assigned to which phone, e.g. flat number.
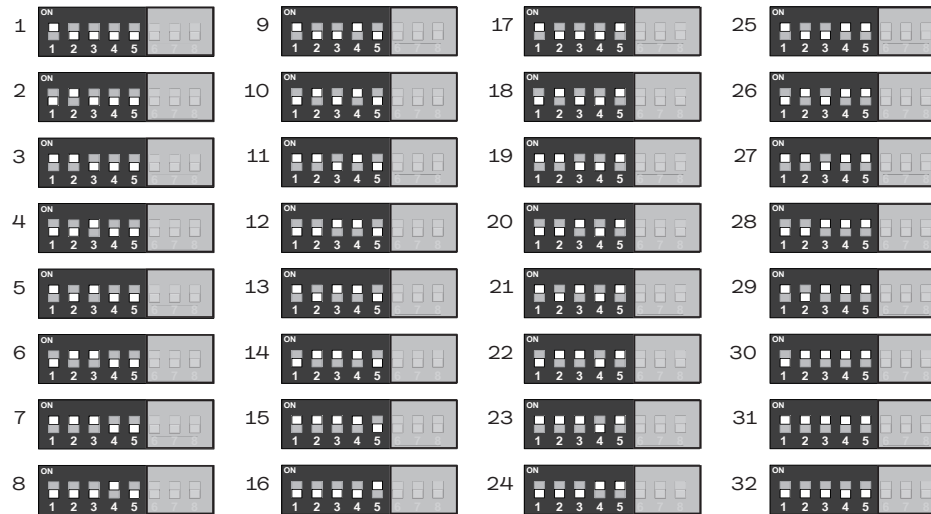
Parallel phones. Up to four telephones can be set to the same address so that they all ring simultaneously. These phones need to be set so one is the main phone and the other three phones are subs, use switches 6 and 7 as below.

MAIN   SUB1   SUB2   SUB3

Line termination. if a telephone is at the end of the line switch 8 on the DIL switch shoud be set to "ON".

Termination ON   Termination OFF