Technical Notes

A note about memory usage:

Graphic Views take up the most space, possibly more than all of the application and the rest of the database combined.   You may use as many pictures as you like, but you will have to increase the run-time memory size of XTension.

A note about keeping the Macintosh running :

You must keep both the Macintosh powered on at all times.   If you really want to create a reliable security system, then you should invest in a battery backup system for your Macintosh.

The reasoning is that you want this system to stay running and alert at all times.   XTension is a system which expects to run continuously.   The features it provides need to be continuously aware of the state of all devices.

Should a power-fail occur, the Macintosh, XTension   and the interface will recover properly regardless of whether you have a battery backup.

A startup script can be used to ensure that any   devices which need to be reset after a power fail   can be serviced at each startup.

Scheduled events are automatically recovered, and those which may have been missed due to the outage are announced.
(If they were missed by more than 10 minutes, they will not be performed.)

Bandwidth

Because X-10 signals require about 6/10ths of a second for a single command, you must consider the number of commands that you initiate. When you create scripts and sequences, think about the number of commands that have to be sent to satisy the intention of the scripts.   Don't create a bigger problem.   Reduce unnecessary X-10 bus   activity.

Note that some X-10 interfaces differ in the the time required to process commands from the Mac.   The version of XTension you have is adapted to the timing of the your interface.

Serial ports :

In case you are interested in making your own cables, here are the maps :

CM11A   or CM10A :

Pinout between the DIN-8 and the RJ22 :

```
DIN-8    to      RJ22 (4)
  5                1    RxD to Mac from CM11A
  X                2    unused pin, any unused wire to fill plug(2)
  3                3    TXD from Mac to CM11A
  4                4    Gnd
```

NOTE: the RJ22 is the very small 4 pin plug often found in telephone handset cords.   The pin numbers above are relative to the position of the wires in the RJ22 :

    Hold the plug with the tab down, and pointing away from you.
    Pin number 1 is leftmost, sequential from there.

LynX-10 or LynX-Port :

Pinout between the DIN-8 and the DB-9 :

```
DIN-8    to      DB-9
  1                7    RTS from Mac to LynX-10
  2                8    CTS from LynX-10 to Mac
  3                3    TXD from Mac to LynX-10
  4                5    Gnd
  5                2    RXD from LynX-10 to Mac
```

"Two-Way" from Home Intelligence :

Pinout between the DIN-8 and the DB-25 :

```
DIN-8    to      DB-25
  1                4    RTS from Mac to TW
  2                5    CTS from TW to Mac
  3                2    TXD from Mac to TW
  4                1 & 7 ?    Gnd
  5                3    RXD from TW to Mac
```

It may be possible that a common Mac to DB25 Modem cable will work as

is...?   Note that the TW takes its power from the Mac handshake line RTS (pin 4).   Thus you don't want to make a cable which is unusually long.

CP290 :

Pinout between the DIN-8 and the DIN-5 :
Note that this is a 'mini' DIN-8, and a standard DIN-5....

```
DIN-8    to     DIN-5
   3                2   TXD from Mac to CP290
   4                3   Ground
   5                4   RXD from CP290 to Mac
```

...