Data, Phone, RF Coax and Alarm Cabling Information

12A Newtown Road

Last updated April 2024

Notes:

- Cabling was installed during the construction of the house June-December 2004
- All data cabling is Cat5e and was tested at installation using an Agilent Framescope 350 for compliance.
- All RF coax cable is CT100, braid and copper foil outer shield, foam core and copper inner.
- When the cabling was pulled in each cable was labelled at either end with a number/letter. Elsewhere in this document 'Cable#' refers to this label.
- The Coax cable termination to the 24-way F-connector patch panel was completed in February 2017. Up to this date only the cables in use had been fitted with screw-on F-plugs and connected directly to the RF distribution amplifier.
- The RF distribution amplifier mixes the TV and FM radio signals from the aerials onto each amplifier output. This allows a single cable to feed each TV/FM faceplate. The faceplate contains a filter that splits the signal back into TV and FM radio at the output sockets.
- Some TV/FM faceplates have two coax cables feeding into the backbox. Only ONE is connected. See previous note above.
- The incoming telephone line terminates at a BT master socket in the roof space directly above the loft hatch access. There is an ADSL filter here and separate phone and broadband signals are fed through two CAT5e cables from the roof to the patch panel in the Comms Rack.
- n/c means 'not connected'
- xDSL is cable/connection carrying a broadband Internet signal like ADSL / ADSL2 / VDSL / VDSL2. As of 2017 it was BT supplied FTTC VDSL2. (Feb2023-April 2024 Now Broadband)
- Gigaclear FTTH installed 28/03/2024



November 2004





April 2024

February 2017



Cabling feeding from garage up to roof space



Cabling at the data cabinet location in garage





Gigaclear FTTH – installed 28/03/2024





Voice 10GE 2.5GE Alarm Optical Prover Adtran Install 28/03/2024 Kelly Communications





Patch Panel	Cable#	Location		
1	16	Landing		
2	26	Kitchen		
3	27	Kitchen		
4	9	Breakfast bar		
5	10	Breakfast bar		
6	14	Lounge (back right)		
7	15	Lounge (back right)		
8	23	Lounge (front right)		
9	24	Lounge (front right)		
10	17	Lounge (left)		
11	18	Lounge (left)		
12	19	Lounge (left)		
13	20	Lounge (left)		
14	21	Office/Study		
15	22	Office/Study		
16	1	Bedroom (left)		
17	2	Bedroom (left)		
18	3	Bedroom (left)		
19	4	Bedroom (left)		
20	5	Bedroom (right inside)		
21	6	Bedroom (right inside)		
22	7	Bedroom (right outside)		
23	8	Bedroom (right outside)		
24	25	Under stair cupboard		
25	28	Garage outside wall		
26	29	Garage outside wall		
27-28-29-30		Garage inside wall		
31-32-33-34		Garage inside wall		
35	11	Roof		
46	12	Roof		
49	F	Bedroom Satellite Plate		
50	37	Lounge Satellite Plate		



Telephone and Broadband

The incoming telephone cable terminates at a BT master socket in the roof just above the loft access hatch.

The patch panel outlets 41-42-43-44-45 are wired together in parallel.

Outlets 41,42,43 and 44 can be cross patched to any room data outlet for the connection of up to four telephones. You will need a suitable RJ45 to 431A/ 631A socket adapter to connect a standard telephone plug

To 28/03/2024 – Sky broadband – telephone # 01572 345535 From 28/03/2024 – Gigaclear FTTH (no phone service)



15 21 11 12 13 16 17 18 19 20 22 23 2 3 5 6 7 8 9 10 14 24 4 1 \bigcirc \odot \odot \odot \bigcirc \bigcirc \odot \bigcirc \bigcirc \odot \odot \odot \bigcirc \odot \odot \odot \odot \odot (\circ) (\circ) \odot (0) (0) ((o))

Patch panel	Cable#	Location	Patch panel	Cable #	Location
1	1	Satellite feed (roof outside) n/c	13	none	
2	2	Satellite feed (roof outside) n/c	14	14	Bedroom, far corner (TV/FM)
3	3	Aerial down lead FM Radio (roof)	15	15	🗲 Bedroom (garage wall)
4	4	Aerial down lead TV (roof)	16	16	L Bedroom (garage wall)
5	5	Spare (roof) n/c	17	none	
6	6	Spare (roof) n/c	18	none	
7	7	Breakfast bar, back of cupboard (n/c)	19	none	
8	8	Breakfast bar, in back of cupboard (TV/FM)	20	42	Study/office (TV/FM)
9	9	Lounge (left wall satellite)	21	43	Lounge, right, far corner (TV/FM)
10	10	Lounge (left wall satellite)	22	55	Bedroom, bathroom wall (TV/FM)
11	11	Lounge (left wall TV/FM)	23	77	from Alarm Bell Box n/c
12	12	Lounge (left wall TV/FM)	24	99	Garage, outside wall (TV/FM)

• Where a wall face plates uses a TV/FM splitter only one cable is connected from the patch panel. The other cable is unconnected in the back box.

- Indicates two cables feeding into one back box
- *n/c indicates cable is not connected at the far end (so don't patch it)*

Data and Coax Outlet Locations

Ground Floor







When viewed from the front the outlet numbers on the plan are the same order as the outlets on the faceplate.

Data and Coax Outlet Locations 1^{st} Floor







When viewed from the front the outlet numbers on the plan are the same order as the outlets on the faceplate.

Data and Coax Outlet Locations Loft space



Bell		
А	Red	12 volt
В	White	-ve activate bell
С	Yellow	-ve removed on tamper
D	Black	0 volt
S	Blue	-ve activate strobe
	Bell A B C D S	BellARedBWhiteCYellowDBlackSBlue

Alarm

- 1 Garage door (back)
- 2 Garage door (front)
- 3 PIR bedroom
- 4 Keypad
- 5 Front door
- 6 PIR landing
- 7 Bell box (not marked)

LAN Connectivity - April 2024



Network - April 2024



Background Notes

April 2024 – Telephone history

The original BT phone number was 01572 821751 but on BT records it was registered to Number 12 because when the house was built 12A didn't exist on their records, so using Number 12 was the only way I could get them to install a phone line. I tried a few times but could never get them to update the address, even though they billed it to 12A.

When the broadband and phone was moved to Now, they wouldn't move the number because the address is 12A, so ended up with a new number 01572 345535. I didn't care because I hadn't used the landline phone for years.

As of the installation of Gigaclear FTTH installed in April 2024, I did not take up their phone service.

Why all the copper cabling?

When the house was built in 2004, Internet was ADSL copper broadband and not that fast, like < 10Mbs. Wi-Fi standards were 802.11a/g for 54Mbs and actually most equipment in 2004 was still 802.11b. Streaming media over the Internet was not a thing and not even on the horizon. IP cameras, IoT and everything common today did not exist. For these reasons the house was built with a lot more UTP network cabling and CT100 coax than I would use today.