

GT Series Multi-Tenant

Wire Distance Chart For Alternative Wire Types

Entrance /GT-MK to Bus Control Units		R1/R2	980'	-	330'	650'
Aiphone #	Aiphone #					
872002	871802					
20AWG	18AWG			24AWG	18AWG	

Power supply wiring not shown

Bus Control Units to Tenant Stations		R1/R2	980'	-	330'	650'
Aiphone #	Aiphone #					
GT-BC	GT-VBC					
2-Conductor for Audio	2-Conductor for Video					

Power supply wiring for GT-2C not shown

Maximum cumulative wiring distance (Sum of all audio (R1/R2) wire runs in the system.)	Standard System	8,200'	5,400'	6,560'
	Expanded System	8200'	5,400'	6,560'

This information is a guide to determine if existing wire in a building can be used for the GT system.

The maximum wire distance specifications published in the literature for the GT system are based on

PE insulated (low capacitance), non-shielded, 20 or 18AWG wire, and for full station capacity.

Smaller gauge and/or higher capacitance wire can be used for smaller systems and at shorter distances.

For complete distance specifications on alternative cables, see attached charts.

* To extend video distance to tenant stations, add GT-VBC's. See bottom of page 8 in Installation Manual.

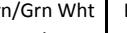
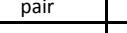
Aiphone Corporation

1700 130th Ave NE

Bellevue, WA 98005

www.aiphone.com

(800) 692-0200

CAT-5e or CAT-6			
(Distances shown reflect either using a pair as 2 conductors or using a pair twisted together as one conductor.)			
		Grn/Grn Wht pair	Blu/Blu Wht pair
		Org/Org Wht pair	Brn/Brn Wht pair
R1/R2	-	-	330'
R1 (audio)	-	-	650'
R2 (audio)	-	-	650'
B1/B2	-	-	330'
B1 (video)	650'	-	-
B2 (video)	650'	-	-

CAT-5e or CAT-6		330'	-
R1 (audio)	-	650'	650'
R2 (audio)	-	-	650'
B1/B2	-	-	330'
B1 (video)	330'*	-	-
B2 (video)	330'*	-	-

Standard	-	-	5,400'	-
Expanded	-	-	6,560'	

= CAT-5e, one pair used for 2 conductors
(R1 = Org, R2 = Org Wht. B1 = Brn, B2 = Brn Wht.)

= CAT-5e, using one pair for each conductor for maximum distance.
(R1 = Org/Org Wht pair, R2 = Brn/Brn Wht pair)

Color code designations are based on twist rate of each pair.

Wiring distance with PVC Insulated Cable on GT Series System

PVC (Polyvinyl chloride) Insulation on individual conductors

	Wire Gauge PVC (Polyvinyl chloride)		
	24AWG	20AWG	18AWG
GT-BC - DP	6'	16'	16'
Entrance station - DP	330'	650'	650'
Entrance station - GT-VBC	330'	490'	490'
GT-MK - DP	330'	650'	650'
DP - farthest residential station (except GT-2H)	330'	650'	650'
GT-VBC - farthest residential station (except GT-2H)	330'	330'	330'
GT-VBC(STD) - GT-VBC(EXP)	330'	330'	330'
GT-BC - power supply	6'	16'	16'
GT-VBC - power supply	6'	16'	16'
Entrance station - power supply	330'	650'	650'
GT-MK - power supply	330'	650'	650'
Door station - GT-2C	100'	260'	260'
GT-2CL - farthest GT-2H	130'	260'	260'
GT-2CL - power supply	50'	130'	165'
GT-2HL - power supply	100'	260'	330'
GT-BCX - power supply	6'	16'	16'
GT-BCX - GT-BC	330'	650'	650'
GT-VBX - GT-VBC(EXP)	330'	490'	490'
Entrance station - GT-BCX	490'	490'	490'
Entrance station - GT-VBX	330'	650'	650'
Standard system total wiring distance *1	5400'	6560'	6560'
Expanded system total wiring distance per	5400'	6560'	6560'

*1 The trunk lengths from a door station and from GT-2H to a GT-2C are not included.

DP: Distribution Point

Wiring distance with CAT-5e Cable on GT Series System

CAT-5e Cable (24AWG UTP4) 4 Unshielded Twisted Pairs

	1 pair = 2 cond	2 pair = 2 cond	4 pair = 2 cond
	1Pr (24AWG)	2Pr (22AWG)	4Pr (20AWG)
GT-BC - DP	3'	13'	16'
Entrance station - DP	330'	650'	980'
Entrance station - GT-VBC	330'	650'	980'
GT-MK - DP	330'	650'	980'
DP - farthest residential station (except GT-2H)	330'	650'	980'
GT-VBC - farthest residential station (except GT-2H)	330'	490'	490'
GT-VBC(STD) - GT-VBC(EXP)	330'	490'	490'
GT-BC - power supply	3'	13'	16'
GT-VBC - power supply	3'	13'	16'
Entrance station - power supply	330'	650'	980'
GT-MK - power supply	330'	650'	980'
Door station - GT-2C	100'	230'	330'
GT-2CL - farthest GT-2H	130'	260'	330'
GT-2CL - power supply	50'	130'	165'
GT-2HL - power supply	100'	260'	330'
GT-BCX - power supply	-	13'	16'
GT-BCX - GT-BC	330'	650'	980'
GT-VBX - GT-VBC(EXP)	490'	490'	490'
Entrance station - GT-BCX	650'	980'	980'
Entrance station - GT-VBX	330'	650'	980'
Standard system total wiring distance *1	5400'	6560'	8200'
Expanded system total wiring distance per	5400'	6560'	6560'

*1 The trunk lengths from a door station and from GT-2H to a GT-2C are not included.

DP: Distribution Point

*2 For CAT-5e, use each pair of wires as a single conductor.

Using 1 pair for each audio and video signal:



Using each pair as a single conductor:



Using each pair as a conductor in audio video system

