■PRODUCT DRAWING

Sub trunk line 1
Common 2 trunk line
Common 1 trunk line

Sub trunk line 2
Sub trunk line 3
Sub trunk line 4

DIN rail
(Included)

Terminal lable

108.5 (4-1/4″)

R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2 R1 R2

| COMMON1 | COMMON2 | SUB1A | SUB1B | SUB2A | SUB2B |

STRIP LENGTH 8mm
SOLID CONDUCTOR

---DC24V
Power
OFF ON CN2
GTW-LC
R1 R2
SW2
STATUS
USB

210 (8-1/4″)

61 (2-3/8″)

Connector socket
(to: GT-VBX CN2)

Lift control line

USB terminal
NFC reader

●MOUNTING

・Mounting on wall surface

GT-BCXB-N

Unit center

(*)
DIN rail

Unit center
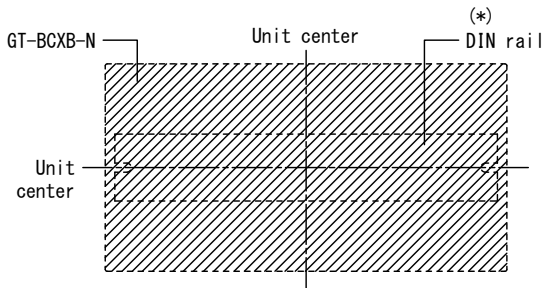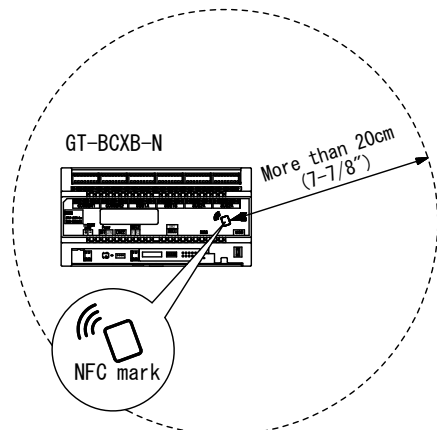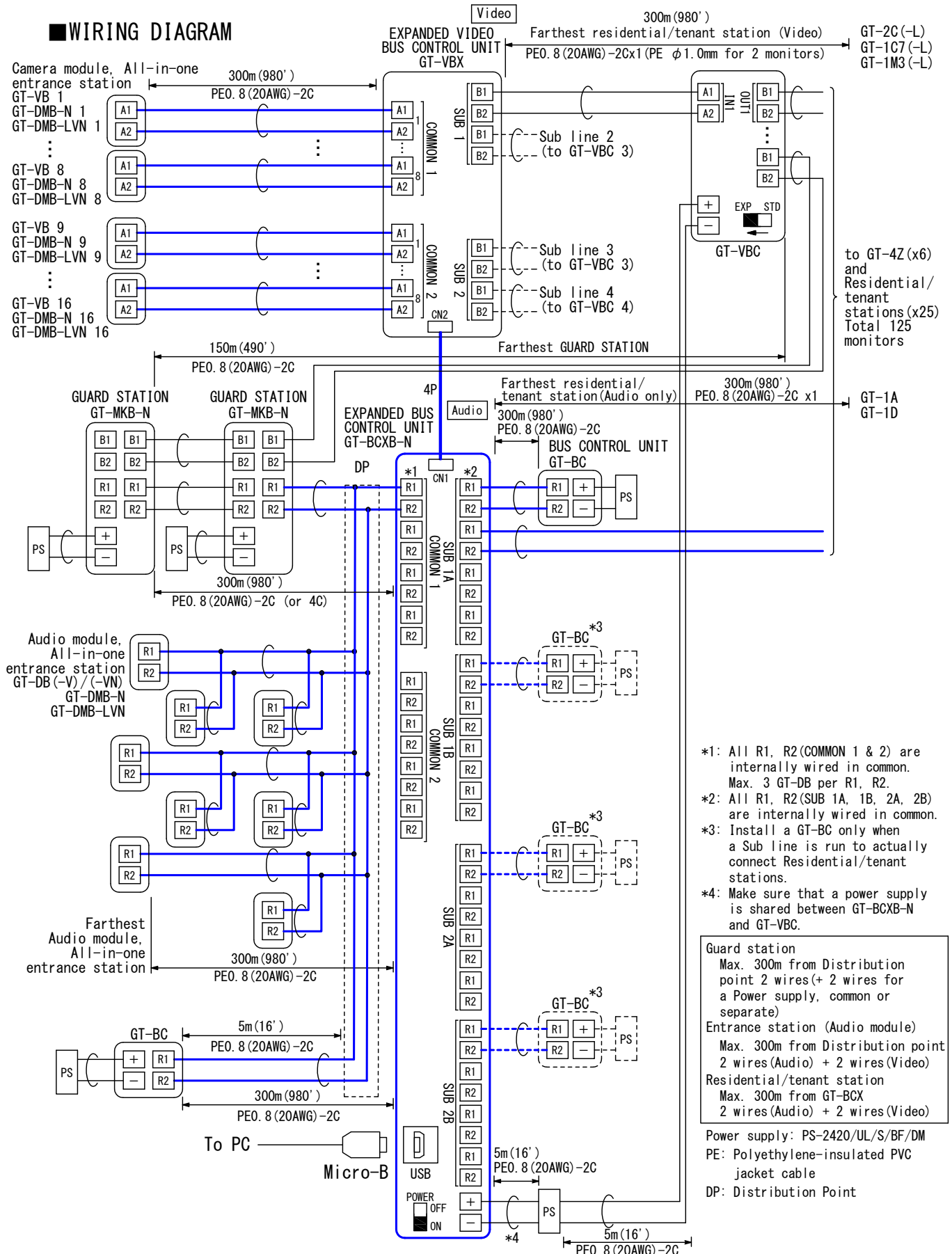
* DIN rail: Included with the unit

NOTES:
・Keep wiring away from NFC mark, as it may disturb the audio or video signals.
・Be sure to mount the other devices more than 20cm (7-7/8″) away from NFC mark of GT-BCXB-N.

GT-BCXB-N

More than 20cm
(7-1/8″)

NFC mark

DESCRIPTION	FIG. NAME	UNIT	DATE
EXPANDED BUS CONTROL UNIT	PRODUCT DRAWING	mm	11 September, 2017

MODEL NO.	FIG. NO.	PAGE	REVISION	AIPHONE
GT-BCXB-N	G55636-1-3	1/3	2	

10258E

■WIRING DIAGRAM

Video

EXPANDED VIDEO
BUS CONTROL UNIT
GT-VBX

300m(980')
Farthest residential/tenant station (Video)
PE0.8(20AWG)-2Cx1(PE φ1.0mm for 2 monitors)

GT-2C(-L)
GT-1C7(-L)
GT-1M3(-L)

Camera module, All-in-one
entrance station
GT-VB 1
GT-DMB-N 1
GT-DMB-LVN 1

300m(980')
PE0.8(20AWG)-2C

A1 / A2 ... A1 / A2

GT-VB 8
GT-DMB-N 8
GT-DMB-LVN 8

A1 / A2 ... A1 / A2 (COMMON 1)

GT-VB 9
GT-DMB-N 9
GT-DMB-LVN 9

A1 / A2 ... A1 / A2

GT-VB 16
GT-DMB-N 16
GT-DMB-LVN 16

A1 / A2 ... A1 / A2 (COMMON 2)

B1 / B2 (SUB 1)
B1 / B2 — Sub line 2 (to GT-VBC 3)

A1 / A2 (IN1) B1 / B2 (OUT1)

B1 / B2
... B1 / B2

+ / —   EXP STD

GT-VBC

B1 / B2 (SUB 2)
B1 / B2 — Sub line 3 (to GT-VBC 3)
B1 / B2 — Sub line 4 (to GT-VBC 4)

to GT-4Z(x6) and
Residential/
tenant
stations(x25)
Total 125
monitors

CN2

150m(490')
PE0.8(20AWG)-2C

Farthest GUARD STATION

4P

Farthest residential/
tenant station(Audio only)
300m(980')
PE0.8(20AWG)-2C

300m(980')
PE0.8(20AWG)-2C x1

GT-1A
GT-1D

GUARD STATION
GT-MKB-N

GUARD STATION
GT-MKB-N

EXPANDED BUS
CONTROL UNIT
GT-BCXB-N

Audio

BUS CONTROL UNIT
GT-BC

B1 / B2 / R1 / R2   B1 / B2 / R1 / R2   DP

*1 CN1 *2

R1 / R2 (COMMON 1)

R1 / R2 + / — PS

PS + / —   PS + / —

300m(980')
PE0.8(20AWG)-2C (or 4C)

Audio module,
All-in-one
entrance station
GT-DB(-V)/(-VN)
GT-DMB-N
GT-DMB-LVN

R1 / R2

GT-BC*3

R1 / R2 + / — PS

R1 / R2 (COMMON 2 / SUB 1B)

GT-BC*3

R1 / R2 + / — PS

Farthest
Audio module,
All-in-one
entrance station

300m(980')
PE0.8(20AWG)-2C

SUB 2A

GT-BC*3

R1 / R2 + / — PS

GT-BC

5m(16')
PE0.8(20AWG)-2C

PS + / — R1 / R2

300m(980')
PE0.8(20AWG)-2C

SUB 2B

To PC — Micro-B   USB

POWER OFF ON

+ / —   PS

*4

5m(16')
PE0.8(20AWG)-2C

5m(16')
PE0.8(20AWG)-2C

*1: All R1, R2(COMMON 1 & 2) are
    internally wired in common.
    Max. 3 GT-DB per R1, R2.
*2: All R1, R2(SUB 1A, 1B, 2A, 2B)
    are internally wired in common.
*3: Install a GT-BC only when
    a Sub line is run to actually
    connect Residential/tenant
    stations.
*4: Make sure that a power supply
    is shared between GT-BCXB-N
    and GT-VBC.

Guard station
  Max. 300m from Distribution
  point 2 wires(+ 2 wires for
  a Power supply, common or
  separate)
Entrance station (Audio module)
  Max. 300m from Distribution point
  2 wires(Audio) + 2 wires(Video)
Residential/tenant station
  Max. 300m from GT-BCX
  2 wires(Audio) + 2 wires(Video)

Power supply: PS-2420/UL/S/BF/DM
PE: Polyethylene-insulated PVC
    jacket cable
DP: Distribution Point

DESCRIPTION	FIG. NAME	UNIT	DATE
EXPANDED BUS CONTROL UNIT	WIRING DIAGRAM	mm	11 September, 2017

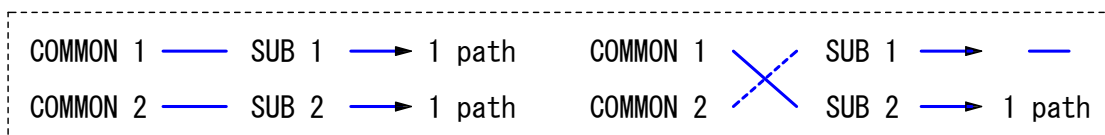| MODEL NO.	FIG. NO.	PAGE	REVISION	
GT-BCXB-N	G55636-2-3	2/3	2	AIPHONE

10258E

■RESTRICTIONS
- Max. 300m from Expanded Bus control unit to GT Entrance station
- Total wiring distance shall not exceed 2,500m accumulated for each Common & Sub trunk line
  Common: Max. 2 lines (to Entrance stations)
  Sub : Max. 4 lines (to Residential/tenant stations)
- Mounting location shall be accessible or servicing (never in such a place as attic, etc.)

■FUNCTIONS
- Controls both data signals and audio signals for all communications between any pair
  of Stations (Entrance stations, Guard stations & Residential/tenant stations).
- Provides two talk/video paths when a calling is made from an Entrance on each identical
  COMMON-SUB line. When the calling is crossed over, or a Security guard station is engaged,
  the entire system is occupied with a single line used.

```
COMMON 1 ——— SUB 1 ——→ 1 path      COMMON 1  ✕  SUB 1 ——→  —
COMMON 2 ——— SUB 2 ——→ 1 path      COMMON 2     SUB 2 ——→ 1 path
```

■SPECIFICATIONS

Power source	DC 24V. Supplied from a power supply unit (PS-2420 etc.)	
Power consumption	Standby 45mA, Maximum 320mA	
Ambient temperature	0～40℃ (32～104° F)	
Mounting	DIN rail	
Material	Self-extinguishing ABS resin	
Weight	Approx. 330g (0.73 lbs)	
Unit color	Middle gray(N6.4 Munsell Approximation)	
Capacity	Entrance station	Expanded system: Max. 16 (Max. 8 per common trunk 1 & 2)
	Residential/ tenant station	Expanded system: Max. 125 per Sub trunk line (Max. 25 per trunk)
	Guard station	Expanded system: Max. 4 (Max. 2 per common trunk line 1 & 2) ＊For multi building system, refer to the specification of GT-MCX.
Remarks	NFC receiver is equipped (Card type A, F)	

DESCRIPTION	FIG. NAME		UNIT	DATE
EXPANDED BUS CONTROL UNIT	RESTR./FCN./SPEC.		mm	11 September, 2017
MODEL NO.	FIG. NO.	PAGE	REVISION	**AIPHONE**
GT-BCXB-N	G55636-3-3	3/3	2	

10258E