



To Create the Beauty of Life

# HANDS-FREE EXPANDABLE VIDEO INTERCOM SYSTEM

## Features

- Expanding up to a total of 4 indoor monitors and 2 door cameras.
- Expansion monitor can choose video or non-video.
- 2-wire installation throughout the system.
- Intercom function among monitors.
- Remote door release control.
- Optional door sensor for status indication.
- External sound or light indicator other than bell.
- Automatic light supplement by white light LED.
- Suitable for villa and office purpose.



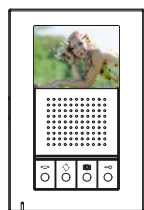
MODEL: K350

## Functions

- 1 Video door phone**  
Visitor calls from door camera can activate video door phone function.
- 2 Surveillance**  
Tenant can survey all cameras from any monitor.
- 3 Audio intercom**  
Any monitor can react to intercom calls from other monitor.
- 4 Remote door control**  
Remote lock control from monitor to the corresponding door camera.
- 5 External sound or light indicator**  
Other than build-in door bell, external sound or light indicator can extend call button reaction from door camera.
- 6 Expandable**  
The system is capable of expanding up to a total of 4 indoor monitors and 2 door cameras.

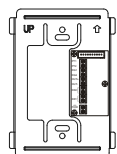
# Packages

## > K350 kit package:



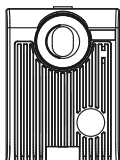
X1

Main monitor



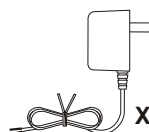
X1

Wall mount bracket



X1

Door camera



X1

Adaptor



X1

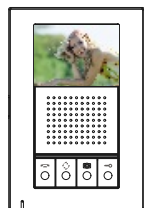
Manual



X4

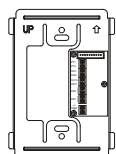
Wall Mount screws

## > M350 package:



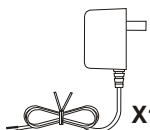
X1

Main monitor



X1

Wall mount bracket



X1

Adaptor



X1

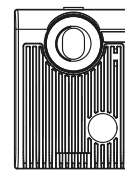
Manual



X2

Wall Mount screws

## > EX-350D package:



X1

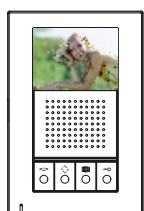
Door Camera



X2

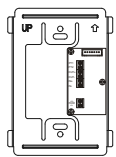
Wall Mount screws

## > EX-350H package:



X1

Expansion monitor



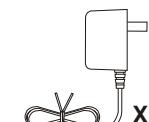
X1

Wall mount bracket



X2

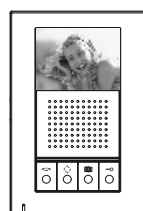
Wall Mount screws



X1

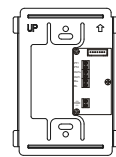
Adaptor

## > EX-350A package:



X1

Expansion monitor



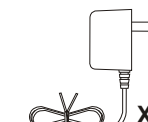
X1

Wall mount bracket

Wall Mount screws



X2



X1

Adaptor

# Technical Specifications

## > KIT(K350) specification

Power source	AC100V-240V 50/60Hz
Power adaptor spec	INPUT:AC100V-240V 50/60Hz OUTPUT:23V,1.04A(24W MAX.)
Power voltage for product	DC23V ± 10%
Working temperature	-10°C ~ 60°C
Storage temperature	-25°C ~ 70°C
Bell Melody	Make Ding-Dong when called by Door Camera Make Bird-Chime when conduct broadcast funtion
Automatic timer at operation	Called by door camera: off in 30 sec. w/o answer or 90 sec. conversation Called by intercom: off in 20 sec. w/o answer or 90 sec. conversation
Conversation	Hands free
Voice (audio) frequency	400~3400HZ
CCD sensor	1/3" Sharp CCD (NTSC/PAL)
CCD resolution	NTSC(250K pixels); PAL(290K pixels)
LCD type	3.5" Digital TFT LCD (auto system)
LCD resolution	320 x 240 Pixels
Communication	2 wires composed with power, audio, video, and command
Door strike control	Selectable by: 1. Dry contat bridge for maximum by pass current of 24V/1A 2. Direct current output of maximum DC12V/300mA
System capacity	Maximum of 2 door cameras and 4 monitors
Wiring distance	General specification: 1. 50M from door camera to main monitor w/ AWG22(ϕ 0.65mm) normal parallel wires. 2. 100M from door camera to main monitor w/ AWG18(ϕ 1.0mm) normal parallel wires. 3. 100M between monitors w/ AWG22(ϕ 0.65mm) normal parallel wires.
Wiring distance if w/ CAT-5	The best application w/ CAT-5 wires: 1. 50M from door camera to main monitor w/ 2 pairs CAT-5 wires. 2. 50M between monitors w/ 2 pairs CAT-5 wires.
Reliability	Gigatech standard (ISO)
MTBF	Gigatech standard (ISO)
Certificate	CE, FCC

## ➤ K350 or M350 main monitor specification

Power voltage for product	DC23V ± 10%
Power consumption	Standby: 2.1W; Operating: 7.8W; Max: 12.4W (when door strike output)
Working temperature	-10°C ~ 60°C
Storage temperature	-25°C ~ 70°C
Speaker	8 Ω / 1W / 40 Φ
Microphone	-64dB ± 2
Bell Melody	Make Ding-Dong when called by Door Camera Make Bird-Chime when conduct broadcast function
Bell volume measurement	50cm in front, 0 ~ 85dB ± 5dB SPL (Type A)
Bell volume	VR adjustable
Automatic timer at operation	Called by door camera : off in 30 sec. w/o answer or 90 sec. Conversation Called by intercom: off in 20 sec. w/o answer or 90 sec. conversation
Conversation	Hands free
Voice (audio) frequency	400~3400HZ
Voice receiving measurement	50cm in front, maximum ≧ 65dB SPL when 75dB SPL/1KHZ composite voice input from door camera microphone (Type A)
Voice delivering measurement	50cm in front, maximum ≧ 65dB SPL when 75dB SPL/1KHZ input from monitor microphone (Type A)
Voice volume	VR adjustable
LCD type	3.5" Digital TFT LCD (auto system)
LCD resolution	320 x 240 Pixels
Communication	2 wires composed with power, audio, video, and command
Wiring distance	General specification: 1. 50M from door camera to main monitor w/ AWG22(φ 0.65mm) normal parallel wires. 2. 100M from door camera to main monitor w/ AWG18(φ 1.0mm) normal parallel wires. 3. 100M between monitors w/ AWG22(φ 0.65mm) normal parallel wires.
Wiring distance if w/ CAT-5 CAT-5 has 4 pairs Regards 1 pair as 1 wire 2 pairs for 2 wires	The best application w/ CAT-5 wires: 1. 50M from door camera to main monitor w/ 2 pairs CAT-5 wires. 2. 50M between monitors w/ 2 pairs CAT-5 wires.
Reliability	Gigatech standard (ISO)
MTBF	Gigatech standard (ISO)
Certificate	CE, FCC
Measurement	118mm(W) X 178mm(H) X 36mm(D)
Weight	436g

## ➤ EX-350H expansion monitor specification

Power voltage for product	DC23V ± 10%
Power consumption	Standby: 1.4W; Operating: 3W
Working temperature	-10°C ~ 60°C
Storage temperature	-25°C ~ 70°C
Speaker	8 Ω / 1W / 40 Φ
Microphone	-64dB ± 2
Bell Melody	Make Ding-Dong when called by Door Camera Make Bird-Chime when conduct broadcast function
Bell volume measurement	50cm in front, 0 ~ 85dB ± 5dB SPL (Type A)
Bell volume	VR adjustable
Automatic timer at operation	Called by door camera : off in 30 sec. w/o answer or 90 sec. Conversation Called by intercom: off in 20 sec. w/o answer or 90 sec. Conversation
Conversation	Hands free
Voice (audio) frequency	400~3400HZ
Voice receiving measurement	50cm in front, maximum ≧ 65dB SPL when 75dB SPL/1KHZ composite voice input from door camera microphone (Type A)
Voice delivering measurement	50cm in front, maximum ≧ 65dB SPL when 75dB SPL/1KHZ input from monitor microphone (Type A)
Voice volume	VR adjustable
LCD type	3.5" Digital TFT LCD (auto system)
LCD resolution	320 x 240 Pixels
Communication	2 wires composed with power, audio, video, and command
Wiring distance	General specification: 1. 50M from door camera to main monitor w/ AWG22(φ 0.65mm) normal parallel wires. 2. 100M from door camera to main monitor w/ AWG18(φ 1.0mm) normal parallel wires. 3. 100M between monitors w/ AWG22(φ 0.65mm) normal parallel wires.
Wiring distance if w/ CAT-5 CAT-5 has 4 pairs Regards 1 pair as 1 wire 2 pairs for 2 wires	The best application w/ CAT-5 wires: 1. 50M from door camera to main monitor w/ 2 pairs CAT-5 wires. 2. 50M between monitors w/ 2 pairs CAT-5 wires.
Reliability	Gigatech standard (ISO)
MTBF	Gigatech standard (ISO)
Certificate	CE, FCC
Measurement	118mm(W) X 178mm(H) X 36mm(D)
Weight	436g

## ➤ EX-350A expansion monitor specification

Power voltage for product	DC23V ±10%
Power consumption	Standby: 1.4W; Operating: 3W
Working temperature	-10°C ~60°C
Storage temperature	-25°C ~70°C
Speaker	8 Ω /1W/40 Φ
Microphone	-64dB ±2
Bell Melody	Make Ding-Dong when called by Door Camera Make Bird-Chime when conduct broadcast funtion
Bell volume measurement	50cm in front, 0 ~ 85dB ±5dB SPL (Type A)
Bell volume	VR adjustable
Automatic timer at operation	Called by door camera : off in 30 sec. w/o answer or 90 sec. Conversation Called by intercom: off in 20 sec. w/o answer or 90 sec. Conversation
Conversation	Hands free
Voice (audio) frequency	400~3400HZ
Voice receiving measurement	50cm in front, maximum ≧65dB SPL when 75dB SPL/1KHZ composite voice input from door camera microphone (Type A)
Voice delivering measurement	50cm in front, maximum ≧65dB SPL when 75dB SPL/1KHZ input from monitor microphone (Type A)
Voice volume	VR adjustable
Communication	2 wires composed with power, audio, video, and command
Wiring distance	General specification: 1. 50M from door camera to main monitor w/ AWG22(Ψ 0.65mm) normal parallel wires. 2. 100M from door camera to main monitor w/ AWG18(Ψ 1.0mm) normal parallel wires. 3. 100M between monitors w/ AWG22(Ψ 0.65mm) normal parallel wires.
Wiring distance if w/ CAT-5 CAT-5 has 4 pairs Regards 1 pair as 1 wire 2 pairs for 2 wires	The best application w/ CAT-5 wires: 1. 50M from door camera to main monitor w/ 2 pairs CAT-5 wires. 2. 50M between monitors w/ 2 pairs CAT-5 wires.
Reliability	Gigatech standard (ISO)
MTBF	Gigatech standard (ISO)
Certificate	CE, FCC
Measurement	118mm(W) X 178mm(H) X 36mm(D)
Weight	300g

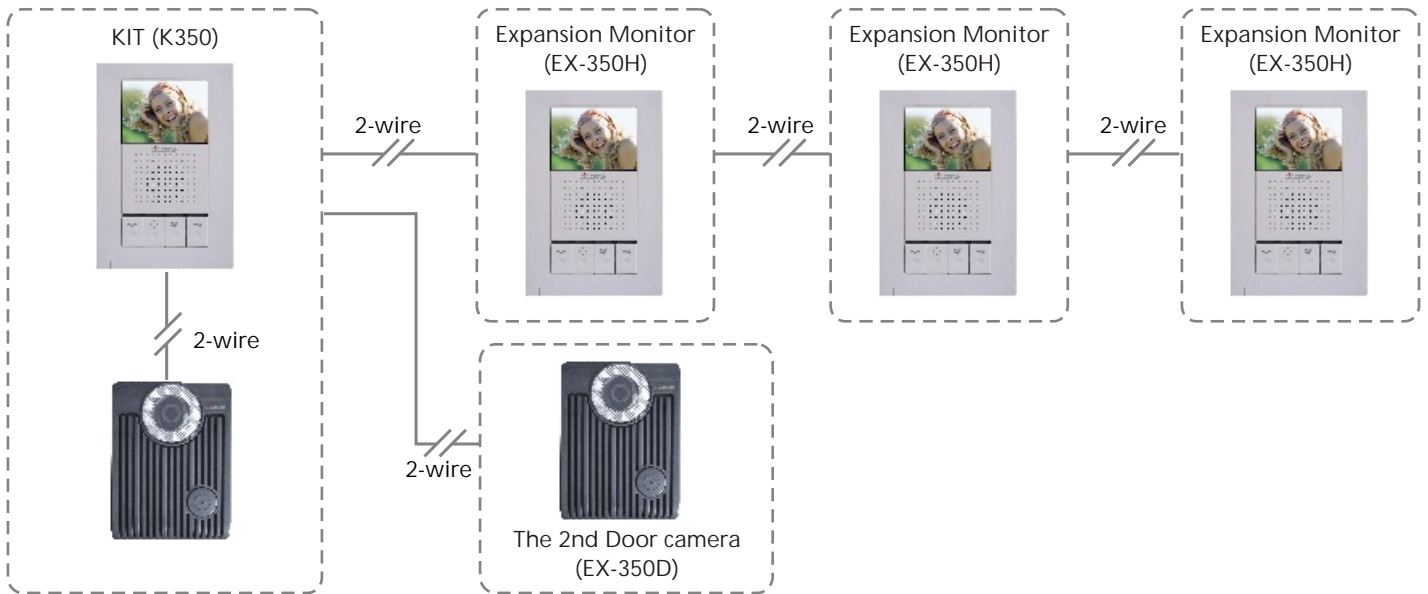
## ➤ K350 or EX-350D door camera specification

Power source	Power by main monitor
Working temperature	-20°C ~ 60°C
Storage temperature	-25°C ~ 70°C
Speaker	8 Ω / 1W / 50 Φ
Microphone	-64dB ± 2
Bell generation	Electronic bell echo from main monitor
Bell volume measurement	10cm in front, ≧ 65dB SPL (Type A)
Automatic timer at operation	Off in 30 sec. w/o answer or 90 sec. conversation
Conversation	Hands free
Voice (audio) frequency	400~3400HZ
Voice receiving measurement	50cm in front, maximum ≧ 65dB SPL when 75dB SPL/1KHZ input from monitor microphone (Type A)
Voice delivering measurement	50cm in front, maximum ≧ 65dB SPL when 75dB SPL/1KHZ composite voice input from door camera microphone (Type A)
Light suppliment	White light LED suppliment enable/disable selectable
Light measurement	Light sensor sensitivity definition, too dark < 5LUX normal > 20 LUX
Lighting range	Light suppliment range: 50cm in front, 40 x 40 cm area ≧ 1LUX for CCD can present color picture.
Call function	Can repeat call signal to active indoor monitor(s)
Monitoring function	Can deliver audio and video for monitor when being monitoring
CCD sensor	1/3" Sharp CCD (NTSC/PAL)
CCD resolution	NTSC(250K pixels); PAL(290K pixels)
CCD LENS	BOARD LENS F/NO:2.0, diagonal 120°
CCD adjustment	Manual up-n-down -6° ,0° ,8° ,16°
Video output	CVBS 1.2VP-P/75 Ω
Communication	2 wires composed with power, audio, video, and command
Door strike control	Selectable by: 1. Dry contat bridge for maximum by pass current of 24V/1A 2. Direct current output of maximum DC12V/300mA
Wiring distance	General specification: 1. 50M from door camera to main monitor w/ AWG22(ψ 0.65mm) normal parallel wires. 2. 100M from door camera to main monitor w/ AWG18(ψ 1.0mm) normal parallel wires. 3. 100M between monitors w/ AWG22(ψ 0.65mm) normal parallel wires.
Wiring distance if w/ CAT-5 CAT-5 has 4 pairs Regards 1 pair as 1 wire 2 pairs for 2 wires	The best application w/ CAT-5 wires: 1. 50M from door camera to main monitor w/ 2 pairs CAT-5 wires. 2. 50M between monitors w/ 2 pairs CAT-5 wires.
Reliability	Gigatech standard (ISO)
MTBF	Gigatech standard (ISO)
Certificate	CE, FCC
Measurement	98mm(W) X 130mm(H) X 36mm(D)
Weight	245g

# System Layout

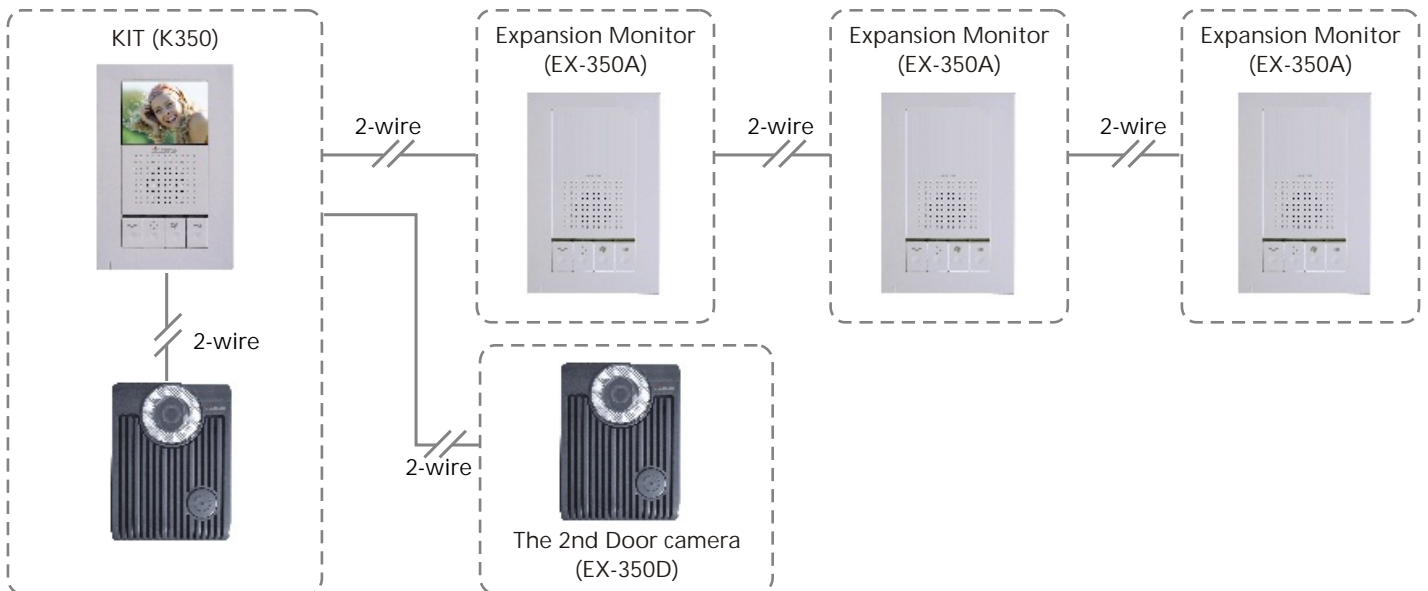
## ➤ System layout 1:

- A. K350 kit package consists a main monitor, a door camera, and a power adaptor for the monitor.
- B. With K350 as a basic, the system is capable of expanding up to a total of 4 monitors  
(1 main video monitor + 3 expansion video monitor) and 2 door cameras.



## ➤ System layout 2:

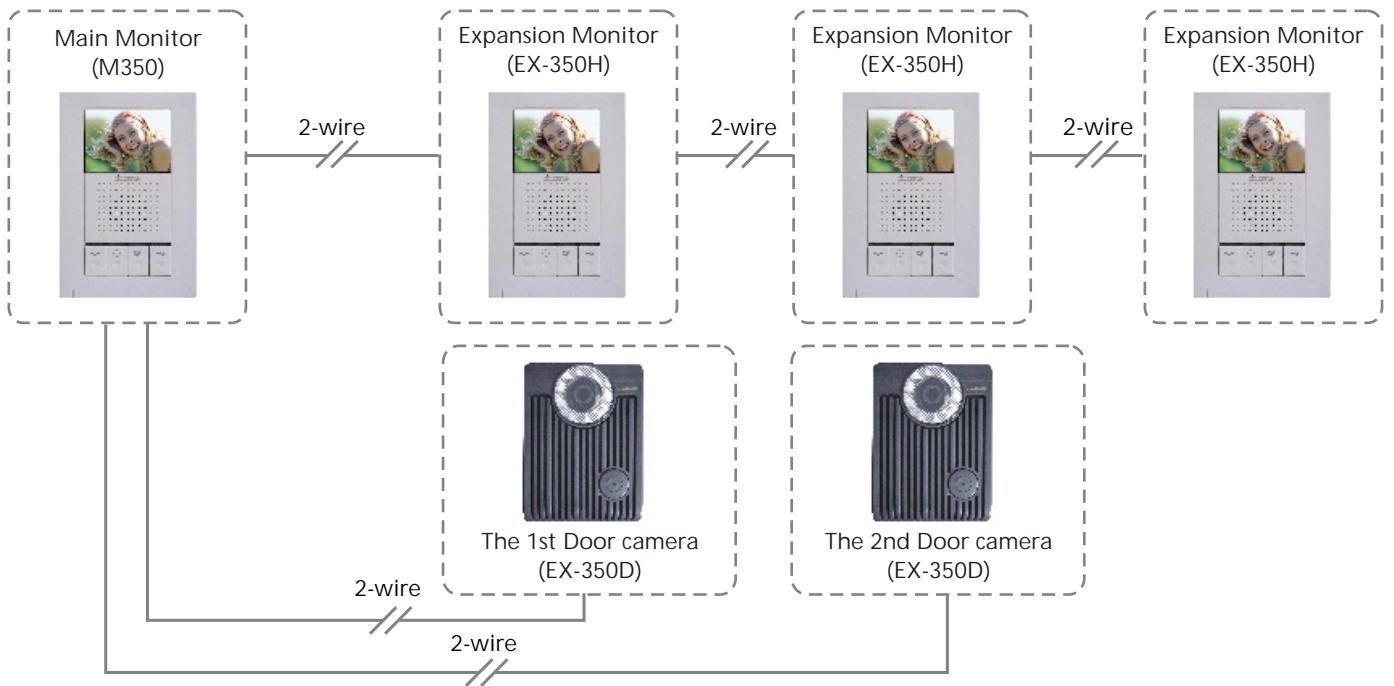
- A. K350 kit package consists a main monitor, a door camera, and a power adaptor for the monitor.
- B. With K350 as a basic, the system is capable of expanding up to a total of 4 monitors  
(1 main video monitor + 3 expansion non-video monitor) and 2 door cameras.



➤ System layout 3:

A. M350 package consists a main monitor, and a power adaptor for the monitor.

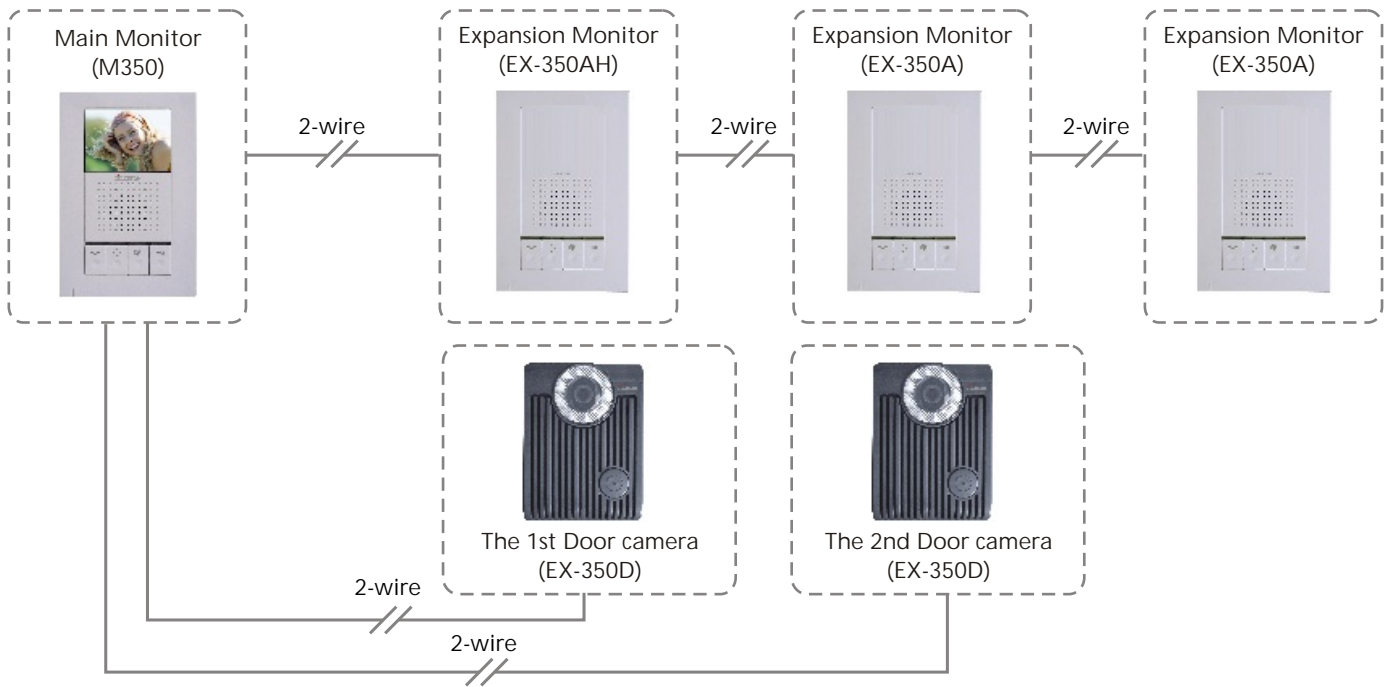
B. The system is capable of expanding up to a total of 4 monitors (1 main video monitor + 3 expansion video monitor) and 2 door cameras.



➤ System layout 4:

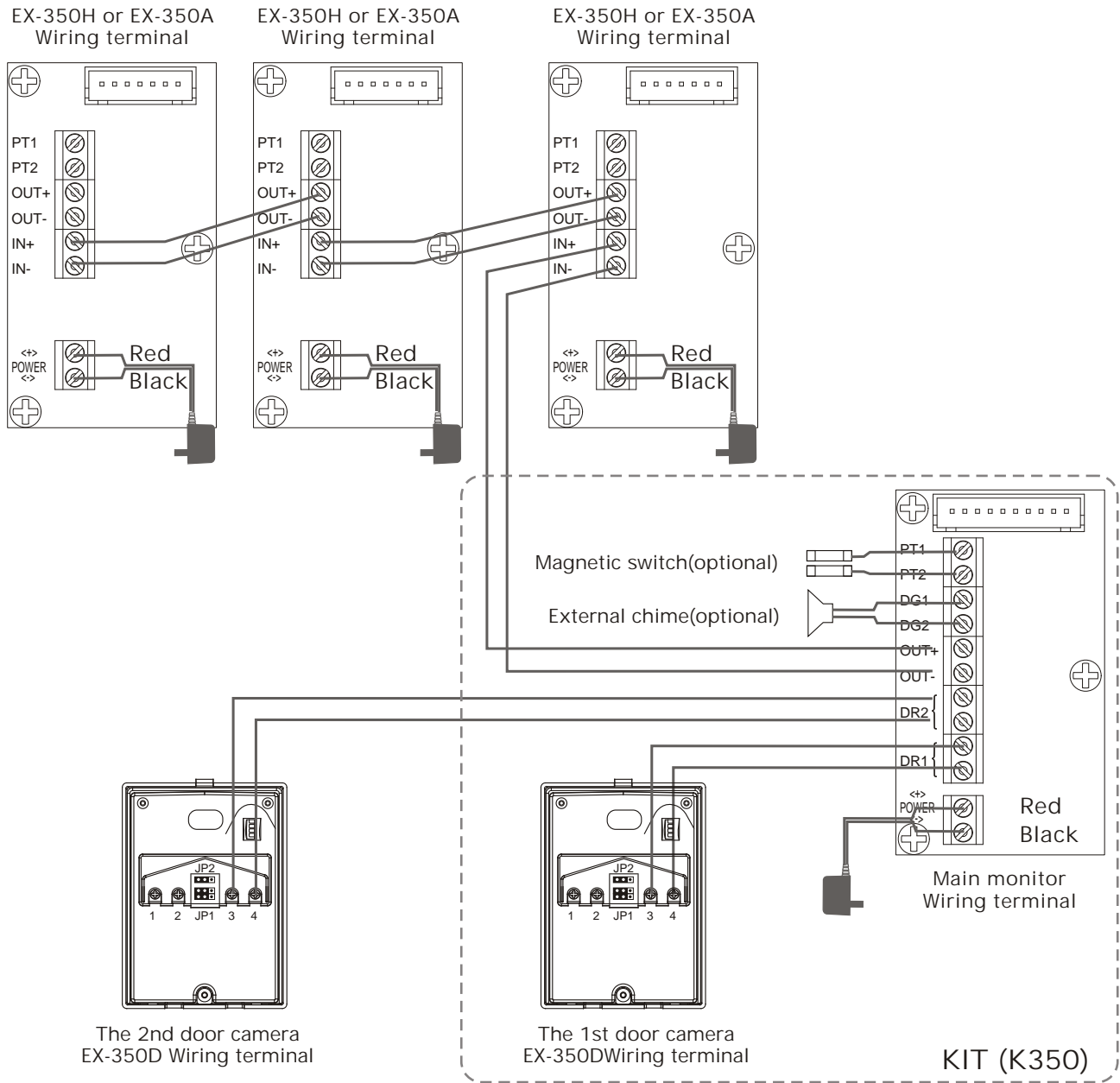
A. M350 package consists a main monitor, and a power adaptor for the monitor.

B. The system is capable of expanding up to a total of 4 monitors (1 main video monitor + 3 expansion non-video monitor) and 2 door cameras.



# Wiring Terminals

## ➤ System wiring



## ➤ Door release options

- A. The system can either provide a normally open dry contact , or can be configured to give power (12V DC 300mA) straight to an electric lock that is within the power requirements.
- B. Figure 1: Additional power supply: Dry contact relay can sustain maximum of 1A/24VDC by pass current.
- C. Figure 2: Using power from the system: Maximum current output of 300mA/12VDC.

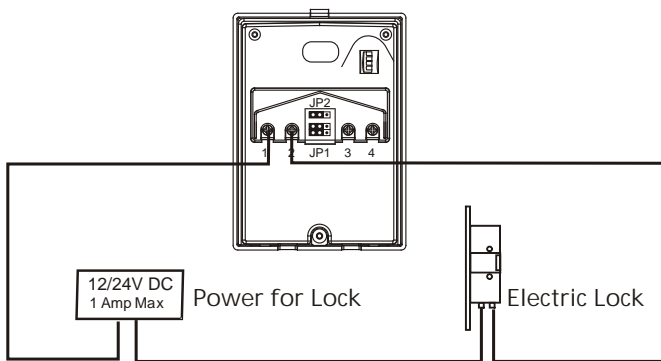


Figure 1

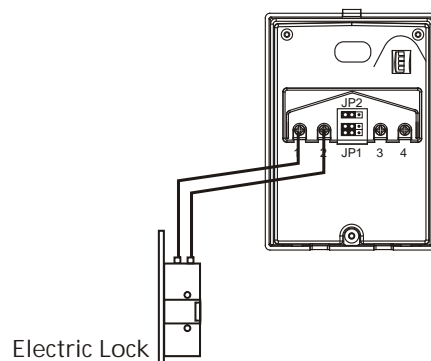


Figure 2