

SAMSUNG TECHWIN

시스템 컨트롤러

제품 사용 설명서

SPC-6000



SAMSUNG

A급 기기(업무용 방송통신기자재)

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- 스템 운용과 관련 없는 프로그램을 실행하여 시스템이 잘못된 동작을 한 경우
- 시간 경과에 따른 제품의 변화 또는 사용 중 자연적 마모에 의한 이상

❖ 제품의 외관, 사양등은 성능 개선을 위해 예고 없이 변경될 수 있습니다.

❖ 제품상에 초기 설정된 비밀번호는 노출의 위험이 있으므로, 제품 설치 후 즉시 새로운 비밀번호로 변경하세요.

변경되지 않은 초기 비밀번호로 인한 보안 및 기타 문제의 책임은 사용자에게 있으므로 각별히 주의하세요.

개요

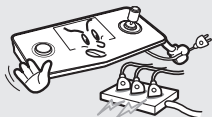
안전을 위한 주의사항

사용자의 안전을 보호하고 재산상의 손해 등을 막기 위한 내용입니다.
반드시 읽고 올바르게 사용해 주세요.

⚠ 경고 사람이 사망하거나 중상을 입을 가능성이 있는 내용입니다.	⚠ 주의 사람이 부상을 입거나 물적 손해 발생이 예상되는 내용입니다.
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⚠ 경고

설치하기 전에 반드시 본 기기의 전원을 off하시고, 전원 플러그를 동시에 여러개 꽂아 사용하지 마세요.
이상 발열 및 화재, 감전의 위험이 있습니다.



제품 위에 물, 커피, 음료수 등과 같은 액체가 담긴 그릇을 올려 놓지 마세요.
액체가 쏟아져 제품 내부로 들어가면 고장 및 화재의 원인이 됩니다.

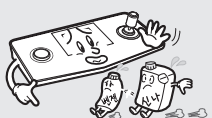


전원 케이블을 무리하게 구부리거나 무거운 물건에 눌러 파손되지 않도록 하세요.
화재의 원인이 됩니다.



본 기기를 설치하는 도중이나 설치한 이후에는 기기가 위치하는 정소를 항상 깨끗하게 하여 먼지가 없도록 유지하고, 특히 기기를 청소할 때에는 반드시 마른 수건으로 닦아 주고, 물이나 신나, 유기용제를 사용하지 마세요.

기기의 표면을 상하게 할 우려가 있고, 고장 및 감전의 위험이 있습니다.



습기, 먼지나 그늘음 등이 많은 곳에는 설치하지 마세요.
감전, 화재의 원인이 됩니다.



전원 케이블 부분을 무리하게 잡아당겨 빼거나 젖은 손으로 전원 플러그를 꽂거나 빼지 마시고, 전원 플러그 구멍이 헐거울 경우 전원 플러그를 꽂지 마세요.
화재 및 감전의 위험이 있습니다.



개요

기기가 정상적으로 동작이 안될 경우 구입처나 서비스 센터로 연락하시고, 절대로 기기를 분해, 수리, 개조 하지마세요.

사용자의 임의 분해 및 수리로 인한 문제에 대해서는 책임지지 않습니다.



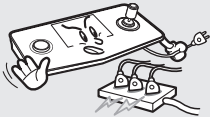
습기찬 바닥, 접지되지 않은 전원 확장 케이블, 낡은 전원 코드 안전 접지의 결여 등 작업 공간에서 있을 수 있는 위험을 주의 깊게 살피고, 문제가 발생할 경우 구입처나 전문가에게 문의하세요.

화재 및 감전의 위험이 있습니다.



본 기기의 작동을 위한 입력 전압은 전압 변동범위가 규정 전압의 10% 이내여야 하며, 전원 콘센트는 반드시 접지가 되어 있어야 합니다. 또한, 전원 커넥터를 연결하는 콘센트에는 헤어 드라이기, 다리미, 냉장고 등의 전열 기구를 같이 사용하지 마세요.

이상 발열 및 화재, 감전의 원인이 됩니다.



이상한 소리가 나거나 냄새가 날 때에는 즉시 전원 플러그를 뽑고 구입처나 서비스 센터로 문의하세요.

화재, 감전의 위험이 있습니다.



밀폐되지 않은 평평한 바닥에 설치하고, 수직으로 세우거나 비스듬히 놓고 사용하지 마세요.

기기가 넘어지거나 떨어질 경우 상해의 위험이 있습니다.

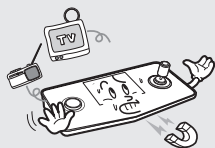


어댑터는 반드시 제품 구입시 당사에서 제공하는 어댑터를 사용하십시오.

당사에서 제공하지 않는 어댑터를 사용하면 화재, 감전, 고장의 원인이 됩니다.

주의

강한 자성이나 전파가 있는 곳, 충격이 있는 곳, 라디오나 TV 등의 무선 기기에 근접한 곳에는 설치를 피하여 주십시오.
자석류나 전파, 심한 진동이 없는 곳에 설치하세요.



제품 위에 무거운 물건을 올려 놓지 마세요.
고장의 원인이 됩니다.



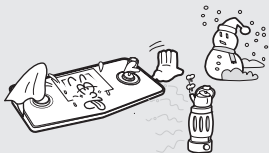
강한 충격이나 진동은 기기 고장의 원인이 되므로 사용시 주의하도록 합니다.
심한 진동이 없는 곳에 설치하세요.



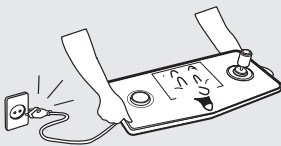
사용자의 부주의로 인한 고장에 대해서는 당사가 책임지지 않습니다.

주위 온도와 습도는 적절한 곳이 좋습니다.

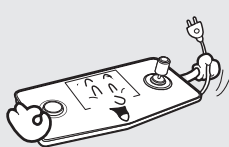
온도가 너무 높은 곳(40 이상)이나 낮은 곳(0 이하), 습기가 많은 곳은 피하세요.



설치된 제품을 이동하고자 할 땐 반드시 전원을 끄고 옮기거나 재설치 하세요.

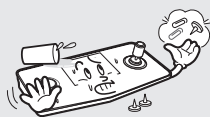


전원 콘센트는 반드시 접지가 되어 있는 것을 사용하세요.



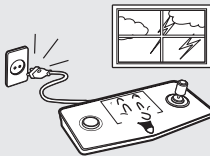
시스템 컨트롤러 위에 도전성 물질(드라이버, 동전, 쇠붙이 등) 및 물이 차있는 용기 등을 놓지 마세요.

화재, 감전, 낙하로 인한 상해의 원인이 됩니다.



천둥, 번개가 칠 때는 전원 플러그를 빼주세요.

화재 및 고장의 원인이 됩니다.



직사광선이나 열기구를 피해 설치하세요.



개요

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개요

제품의 주요 기능

SPC-6000 시스템 컨트롤러는 RS-485를 이용하여 PTZ 카메라, DVR, MATRIX 등의 기기를 제어할 수 있는 컨트롤러입니다.

사용자에게 친숙한 On-스크린 메뉴와 터치 스크린, 조이스틱을 적용하여 조작이 편리합니다.

- 장거리 원격 제어 가능
- RS-485 통신으로 최장 1km까지 원격 제어가 가능합니다.
- 통합 시스템 조정 가능
- 카메라 (Receiver Unit), DVR, MATRIX를 본 시스템 컨트롤러 1대로 제어가 가능합니다.
- 복수의 시스템 컨트롤러 연결 사용 가능
- 각각 다른 곳에서 시스템을 제어할 수 있으며 최대 16대를 동시에 연결하여 사용 할 수 있습니다.
- 조이스틱, 조그셔틀 모듈 교환 가능
- 사용자 편의를 고려하여 조이스틱, 조그셔틀 모듈 좌우 위치 교환이 가능합니다.
- 조작의 편의성

LCD 모니터를 통해 시스템 컨트롤러의 각 동작 상태를 표시 해주며, 터치 스크린으로 간편하게 메뉴를 선택하고, 조이스틱으로 편리하게 조작할 수 있습니다.

❖ 제어 가능한 제품 List

- 카메라
- MATRIX
SMX-25632
- DVR
SRD-XXXX계열, SHR-8/7/6XXX계열, SVR-1670, SRD-480D

❖ 사용 가능한 어댑터

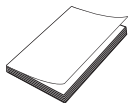
- 전압 : 1) 입력 (AC) : 100~240V
2) 출력 (DC) : 12V
- 용량 (출력 전류) : 4A
- 지속 표준 부하 : 48W
- 사용가능 온도 : 1) 동작온도 : 0 ~+40℃
2) 보관온도 : -20 ~+60℃

구성품 확인하기

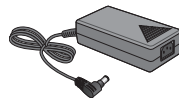
제품을 구입하신 다음 포장을 벗긴 후 평평한 바닥이나 사용할 장소에 본 기기를 내려 놓으세요.
다음과 같은 내용물이 모두 들어있는지 확인하세요.



본체



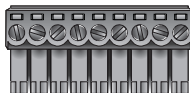
사용 설명서



전원 어댑터 1개



파워케이블 1개

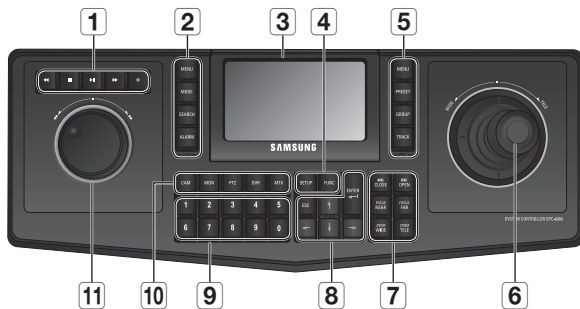


터미널 블록 1개

개요

각 부분의 명칭 및 기능

앞면



명칭	기능설명
1 DVR 재생 관련 버튼	재생/일시정지, 정방향 배속 재생, 역방향 배속 재생, 정지, 녹화를 실행합니다.
2 DVR 제어 버튼	선택된 DVR의 메뉴에 진입하거나 검색, 분할화면 선택, 알람제어를 실행합니다.
3 LCD Display	시스템 컨트롤러의 동작 상태와 설정 메뉴를 표시합니다.
4 SETUP 버튼	[FUNC] 버튼을 누른 후 [SETUP] 버튼을 눌러 설정 메뉴에 진입합니다.
5 카메라 동작 관련 버튼	선택된 PTZ의 메뉴에 진입하거나 프리셋, 그룹, 트랙 기능을 실행합니다.
6 조이스틱 컨트롤러	PTZ 카메라나 Receiver Unit에 연결된 Pan/Tilt의 동작을 상하 좌우로 움직일 수 있습니다. 또한 시계방향, 반시계방향으로 돌리면서 Zoom 동작을 제어할 수 있습니다. 연결된 제어기기의 메뉴 화면에서 상하좌우 방향키 기능을 제어할 수 있습니다.

명칭	기능설명	
7 카메라 렌즈 관련 버튼	IRIS	IRIS 제어 (CLOSE/OPEN)
	FOCUS	FOCUS 제어 (NEAR/FAR)
	ZOOM	ZOOM 제어 (WIDE/TELE)
8 방향, ENTER, ESC 버튼	방향	메뉴간 이동을 수행합니다.
	ENTER	방향 버튼을 이용해 이동한 메뉴를 선택합니다.
	ESC	실행을 취소합니다.
9 숫자(0~9) 버튼	카메라, 모니터, DVR, Preset이나 숫자 등을 지정하기 위해 사용합니다.	
10 제어기기 선택 버튼	카메라, 모니터나 DVR 등을 지정하기 위해 사용합니다.	
11 조그셔틀	조그	DVR의 재생 모드에서 Forward/Reverse Frame 검색을 위해 사용합니다.
	셔틀	DVR의 재생 모드에서 Forward/Reverse /Play/FF/REW 기능을 수행합니다.

설치|하기

설치 환경 점검하기

제품을 사용하기 전 다음의 사항들을 주의하세요.

- 실내에서만 사용하세요.
- 물이나 액체가 제품의 접속부에 닿지 않게 하세요.
- 무리한 충격이나 힘을 가하지 마세요.
- 전원 코드를 무리하게 잡아 당기지 마세요.
- 임의로 제품을 분해하지 마세요.
- 정격 입출력 범위에서만 사용하세요.
- 승인된 전원 코드만 사용하세요.
- 입력 그라운드가 있는 제품에 대해서는 반드시 그라운드가 있는 전원 플러그와 함께 사용하세요.
- 시스템 컨트롤러는 평평한 테이블 위에 설치하세요.
- 본체의 위치와 배선실의 구성은 시스템을 올바르게 운영하는데 매우 중요합니다.
- 장비가 너무 가까이에 놓여 있거나, 통풍 장치가 미비한 환경에서는 시스템이 제대로 작동하지 않을 수 있으며, 시스템에 접근하기 어려운 환경에서는 시스템의 유지보수를 어렵게 할 수도 있습니다.
- 시스템의 고장을 막고 주변 환경 요소에 의해 시스템이 셧 다운 되는 경우를 줄이려면 시스템 운영실의 공기를 적절히 순환시키고 본체의 덮개를 단단히 고정 시키세요.
- 시스템 컨트롤러의 내부에는 고전압 부위가 있으므로 임의로 분해하지 마세요.
- 동작 온도 : 0°C ~ 40°C
- 보존 온도 : -20°C ~ 60°C
- 동작 습도 : 10%~70% RH
- 보존 습도 : 10% ~ 90% RH
- 동작 전원 : DC 12V, 최대 4W (— —(— +)

설치하기

설치 시 주의 할 점

- 설치하기 전에 반드시 제품의 전원을 끄세요.
- 강한 충격이나 진동은 제품 고장의 원인이 되므로 사용시 주의하세요.
- 강한 자성이나 전파가 있는 곳, 라디오나 TV 등의 무선기기에 근접한 곳에는 설치를 피하여 주세요.
- 장비를 설치하는 도중이나 설치한 이후에는 본체가 위치하는 장소를 항상 깨끗하게 하여 먼지가 없도록 유지하세요.
- 밀폐되지 않은 평평한 바닥에 설치하고 적정 온도를 유지하세요.
그리고 벽에서 15cm 이상 거리를 유지하세요.
- 통풍을 위해 뚫린 홈에 도전성 물체가 빠지지 않도록 주의하세요.
- 시스템을 직사광선이 비치지 않는 서늘한 장소에 두고 장비나 도구를 사람들이 왕래하는 장소에서 멀리 떨어지게 두어 다치지 않도록 하세요.
- 연기나 냄새가 나는 이상 상태를 그대로 두고 사용하면 화재나 감전이 일어날 수 있습니다.
이런 경우에는 전원 스위치를 즉시 차단하고 구입처로 문의하여 전문 기술자의 상담을 받으세요.
- 습기 찬 바닥, 접지되지 않은 전원 확장 케이블, 닳은 전원 코드, 안전 접지의 결여 등 작업 공간에서 있을 수 있는 위험을 주의 깊게 살펴야 합니다.



- 이 기기를 청소할 때에는 반드시 마른 수건으로 닦아주세요. 심하게 더러워진 경우에는 중성세제 용액을 묻힌 천으로 닦은 후 마른 수건으로 닦아주세요.
알콜, 벤젠, 신나 등의 휘발성이 있는 것은 표면을 상하게 할 우려가 있으므로 사용하지 마세요.
- LCD 모니터의 수명을 위해서 고온에서 사용을 금하며, 화면보호기 사용을 권장합니다.

시스템 컨트롤러 LCD 화면 각도 조절하기

LCD 화면을 들어올려 화면이 잘 보이도록 각도를 조절할 수 있습니다.

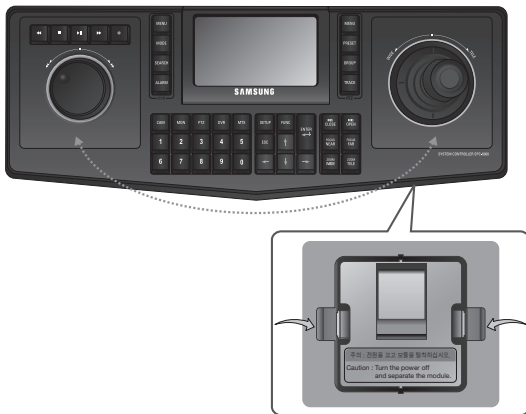


조이스틱과 조그서를 교환하기

조이스틱과 조그서를 모듈의 좌우 위치를 교환하여 사용할 수 있습니다.



- 모듈의 좌우 위치를 변경하려면 먼저 전원을 끄거나, 컨트롤러 설정화면에서 모듈 <교체> 버튼을 누른 후 위치를 변경하세요. (▶ 37쪽)



<밑면>

- 시스템 컨트롤러의 본체 바닥에 있는 후크를 양손으로 누르면 모듈이 본체에서 분리됩니다.
- 조이스틱과 조그서를 모듈을 모두 분리시켜 좌우의 원하는 위치를 선택하고 딸깍 소리가 나도록 장착하세요.



다른 기기와 연결하기

SPC-6000 시스템 컨트롤러는 카메라, DVR 및 다른 외부 기기들과 연결하여 사용할 수 있습니다.

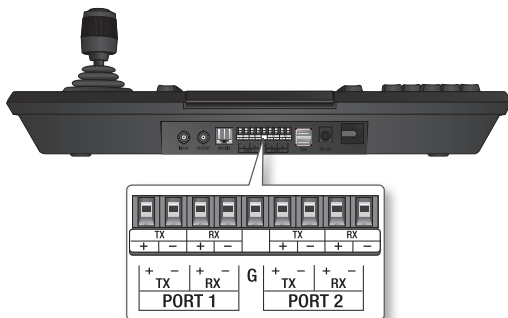
RS-485 장치 연결하기

시스템 컨트롤러를 통해 RS-485 통신을 지원하는 PTZ 카메라, DVR을 제어할 수 있습니다.

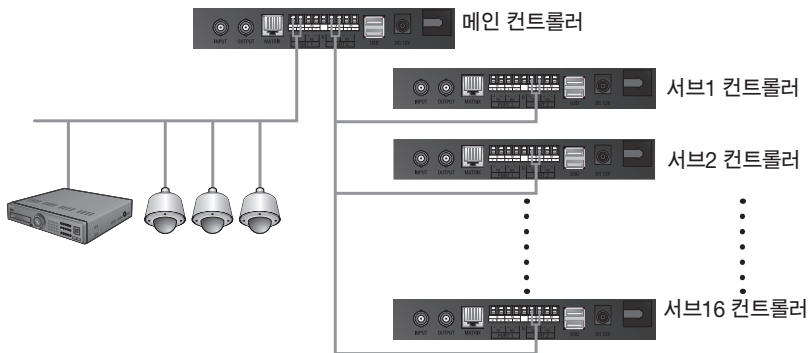
1. 후면의 PORT 1 단자와 PTZ 카메라 또는 DVR의 RS-485 단자를 연결하세요.
2. 연결된 기기의 특성에 따라 Half Duplex 또는 Full Duplex 방식으로 연결할 수 있습니다.



- Half Duplex 방식으로 연결할 경우에는 TX +, - 부분에 연결하세요.
- RS-485를 연결 할 때에는 +, - 극성표시가 있으므로 극성이 바뀌지 않도록 주의하세요.
- 제품 구성품에 포함된 터미널 블록을 장착하여 사용하세요.
- RS-485 장치가 SPC-6000에서 지원 가능한 제품인지를 먼저 확인하세요.

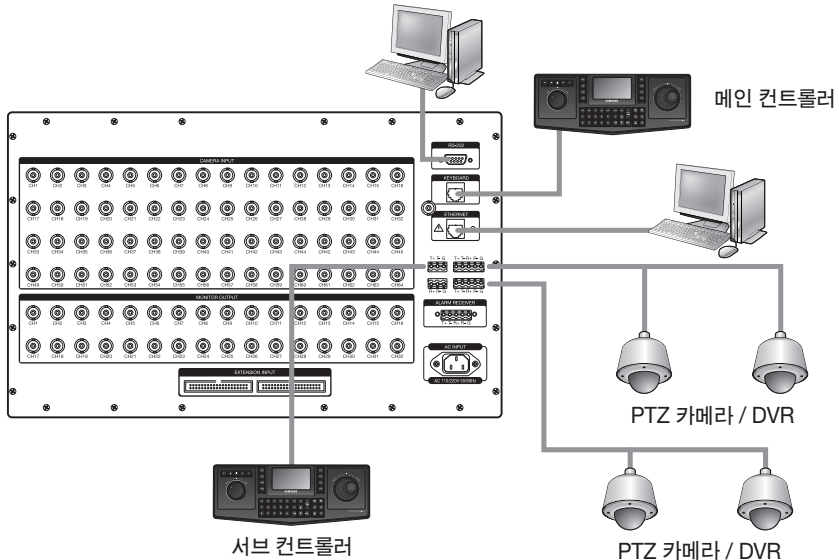


MATRIX가 없는 경우



다른 기기와 연결하기

MATRIX가 있는 경우



1. 메인 컨트롤러로 작동할 컨트롤러의 **[MATRIX]** 포트와 매트릭스의 **[KEYBOARD]** 포트를 연결하세요.
전원은 MATRIX 연결선에서 공급받기 때문에 따로 전원을 연결하지 않아도 됩니다.
2. 서브 컨트롤러 PORT2의 TX+와 TX-를 매트릭스의 T+와 T-를 연결하세요.
 - MATRIX와 연동하는 경우 서브 컨트롤러간의 통신은 9600bps로 고정됩니다.
 - MATRIX ID는 <SUB 09>번으로 고정되어 있습니다.
3. DVR과 PTZ 카메라는 MATRIX에 연결하세요.

PTZ 카메라 연결하기

PTZ 카메라 후면의 RS-485 단자와 SPC-6000의 PORT 1 단자를 연결하여 PTZ 카메라를 제어할 수 있습니다.

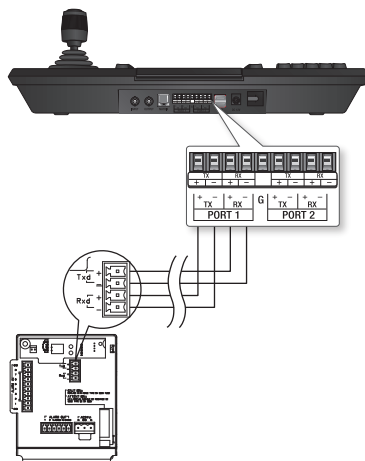
-  ■ 카메라의 종류에 따라서 연결 극성이 다를 수 있습니다.
자세한 사항은 해당 PTZ 카메라의 설명서를 참조하세요.

Half Duplex로 연결할 경우

- PTZ 카메라 RS-485 단자의 RX (+)를 SPC-6000의 PORT 1 단자 TX (+)와 연결하세요.
- PTZ 카메라 RS-485 단자의 RX (-)를 SPC-6000의 PORT 1 단자 TX (-)와 연결하세요.

Full Duplex로 연결할 경우

- PTZ 카메라 RS-485 단자의 RX (+)를 SPC-6000의 PORT 1 단자 TX (+)와 연결하세요.
- PTZ 카메라 RS-485 단자의 RX (-)를 SPC-6000의 PORT 1 단자 TX (-)와 연결하세요.
- PTZ 카메라 RS-485 단자의 TX (+)를 SPC-6000의 PORT 1 단자 RX (+)와 연결하세요.
- PTZ 카메라 RS-485 단자의 TX (-)를 SPC-6000의 PORT 1 단자 RX (-)와 연결하세요.



다른 기기와 연결하기

SRD-16XX/8XX 계열, SHR-8/7/6XXX계열 DVR 연결하기

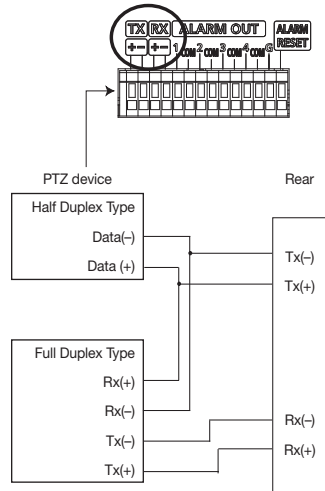
DVR 뒷면의 RS-485 단자를 통하여 SPC-6000과 연결하세요.

Half Duplex로 연결할 경우

- DVR의 RS-485 단자의 TX (+)를 SPC-6000의 PORT 1 단자 TX (+)와 연결하세요.
- DVR의 RS-485 단자의 TX (-)를 SPC-6000의 PORT 1 단자 TX (-)와 연결하세요.

Full Duplex로 연결할 경우

- DVR의 RS-485 단자의 TX (+)를 SPC-6000의 PORT 1 단자 RX (+)와 연결하세요.
- DVR의 RS-485 단자의 TX (-)를 SPC-6000의 PORT 1 단자 RX (-)와 연결하세요.
- DVR의 RS-485 단자의 RX (+)를 SPC-6000의 PORT 1 단자 TX (+)와 연결하세요.
- DVR의 RS-485 단자의 RX (-)를 SPC-6000의 PORT 1 단자 TX (-)와 연결하세요.

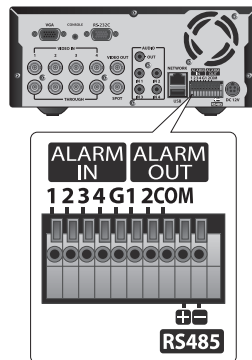


SRD-4XX, SHR-604X 계열 DVR 연결하기

SRD-4XX, SHR-604X 뒷면의 RS-485 단자를 SPC-6000과 연결하세요.

❖ Half Duplex로 연결할 경우

- SRD-4XX, SHR-604X 단자의 TX (+)를 SPC-6000의 PORT 1 단자 TX (+)와 연결하세요.
- SRD-4XX, SHR-604X 단자의 TX (-)를 SPC-6000의 PORT 1 단자 TX (-)와 연결하세요.



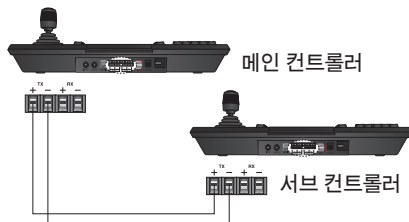
다른 기기와 연결하기

다른 시스템 컨트롤러와 연결하기

- 최대 16대의 컨트롤러를 동시에 연결하여 사용할 수 있습니다.
- 컨트롤러 통신 설정방법은 “메뉴 설정하기”의 “서브리스트 설정하기”를 참조하세요. (▶ 36쪽)

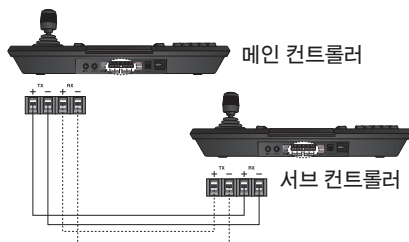
Half Duplex로 연결할 경우

- SPC-6000의 PORT 2 단자 TX (+)를 다른 SPC-6000의 PORT 2 단자 TX (+)와 연결하세요.
- SPC-6000의 PORT 2 단자 TX (-)를 다른 SPC-6000의 PORT 2 단자 TX (-)와 연결하세요.



Full Duplex로 연결할 경우

- 메인 컨트롤러 SPC-6000의 PORT 2 단자 TX (+)를 서브 컨트롤러 SPC-6000의 PORT 2 단자 RX (+)와 연결하세요.
- 메인 컨트롤러 SPC-6000의 PORT 2 단자 TX (-)를 서브 컨트롤러 SPC-6000의 PORT 2 단자 RX (-)와 연결하세요.
- 메인 컨트롤러 SPC-6000의 PORT 2 단자 RX (+)를 서브 컨트롤러 SPC-6000의 PORT 2 단자 TX (+)와 연결하세요.
- 메인 컨트롤러 SPC-6000의 PORT 2 단자 TX (-)를 서브 컨트롤러 SPC-6000의 PORT 2 단자 RX (-)와 연결하세요.



-  ■ 다른 시스템 컨트롤러를 연결할 때는 PORT 2를 사용해야 합니다.

사용하기

시작하기

1. 모든 시스템 구성기기의 전원을 켜세요.



2. 시스템 컨트롤러의 뒷면에 전원 어댑터를 연결하여 전원이 켜지면, 로그인 화면이 나타납니다.
3. 숫자키를 이용하여 비밀번호를 입력하고 [ENTER] 키를 누르세요.
PTZ 컨트롤 시스템 제어화면이 나타납니다.
 - 초기 비밀번호는 "4321"입니다.



PTZ 카메라 제어하기

PTZ 제어 모드 진입

컨트롤러의 [PTZ] 키를 누르세요.

카메라 선택

1. 숫자 버튼을 이용해 원하는 카메라 번호를 입력하세요.
2. [CAM] 또는 [ENTER] 버튼을 누르세요.



사용하기

PAN/TILT 제어

컨트롤러의 조이스틱을 상하좌우로 움직여서 카메라의 PAN과 TILT를 조절할 수 있습니다.
조이스틱의 중심에서 멀리 움직일수록 카메라의 이동속도가 빨라집니다.

ZOOM

컨트롤러의 조이스틱을 시계방향으로 돌리거나, **[ZOOM TELE]** 키를 눌러 카메라의 ZOOM IN 동작을 조절할 수 있습니다.

컨트롤러의 조이스틱을 시계 반대방향으로 돌리거나, **[ZOOM WIDE]** 키를 눌러 카메라의 ZOOM OUT 동작을 조절할 수 있습니다.

FOCUS

컨트롤러의 **[FOCUS FAR]**, **[FOCUS NEAR]** 키를 눌러 카메라의 포커스를 조절할 수 있습니다.

IRIS

컨트롤러의 **[IRIS OPEN]**, **[IRIS CLOSE]** 키를 눌러 카메라 영상의 밝기를 조절할 수 있습니다.

프리셋

사전에 지정된 위치로 카메라를 이동시킬 수 있습니다.

프리셋 설정

1. 조작할 카메라를 선택하세요.
2. 조이스틱을 이용하여 적절한 위치로 카메라를 움직이세요.
3. **[SETUP]** 키를 누르고 숫자키로 설정할 숫자를 누르고 **[PRESET]** 키를 누르세요.

프리셋 실행

1. 카메라를 선택하세요.
2. 숫자키로 설정할 숫자를 누르고 **[PRESET]** 키를 누르세요.
3. 프리셋 기능이 실행됩니다.



■ SCP-3430, SCP-2430, SCP-3250, SCP-2250 PTZ Dome Series의 Preset 은 Samsung E 프로토콜 선택 시에만 512개까지 지원됩니다.

스윙

카메라 MENU에서 설정된 2개의 프리셋 구간을 왕복하면서 이동 경로를 감시할 수 있습니다.

스윙 설정

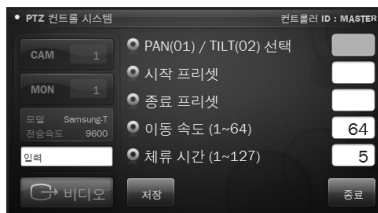
1. LCD 화면에서 <스윙> 메뉴를 선택하세요.
2. <설정> 버튼을 누르세요.



3. 숫자 버튼을 눌러 PAN/TILT를 선택하고 시작 프리셋과 종료 프리셋을 설정하세요.
4. 이동 속도와 체류 시간을 설정하세요.
5. <저장> 버튼을 누르세요.

스윙 실행

1. LCD 화면에서 <스윙>메뉴를 선택하세요.
2. 번호를 눌러 PAN, TILT 중 실행할 스윙의 종류를 선택하세요.
3. 스윙 기능이 실행됩니다.



사용하기

그룹

사용자가 이미 지정한 여러개의 프리셋을 그룹화하여 연속적으로 호출할 수 있습니다.

그룹 설정

1. LCD 화면에서 <그룹/스캔> 메뉴를 선택하세요.
2. <그룹 설정> 메뉴를 선택하세요.
3. 그룹 번호를 입력하고 [ENTER] 버튼을 누르세요.
4. 이동 속도와 체류시간을 입력하세요.
5. <저장> 버튼을 누르세요.

그룹 실행

1. LCD 화면에서 <그룹/스캔> 메뉴를 선택하세요.
2. <그룹 실행> 메뉴를 선택하세요.
3. 실행할 그룹의 번호를 입력하고 [ENTER] 버튼을 누르세요.
4. 그룹 기능이 실행됩니다.



투어

1개 이상의 그룹을 투어로 지정하여 연속 그룹 동작을 실행할 수 있습니다.

투어 설정

1. LCD 화면에서 <투어> 메뉴를 선택하세요.
2. <투어 설정> 메뉴를 선택하세요.
3. 투어에 추가하기를 원하는 그룹의 번호를 누를 때마다 투어에 그룹이 추가됩니다.
 - 최대 6개의 그룹을 추가할 수 있습니다.
4. <저장> 버튼을 누르면 설정이 완료됩니다.



투어 실행

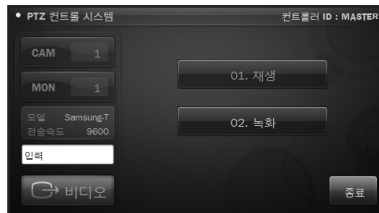
1. LCD 화면에서 <투어> 메뉴를 선택하세요.
2. <투어 실행> 메뉴를 선택하세요.
3. 투어 기능이 실행됩니다.

트레이스

조이스틱 또는 카메라 조작 버튼 등을 통한 카메라의 움직임을 일정 시간동안 기억하여 기억된 움직임을 반복하도록 할 수 있습니다.

트레이스 설정

1. LCD 화면에서 <트레이스/패턴> 메뉴를 선택하세요.
2. <녹화> 메뉴를 선택하세요.
3. 녹화할 트레이스 번호를 선택하세요.
4. 조이스틱 또는 카메라 조작 버튼을 통해 기억시키고자 하는 카메라의 움직임을 조작하세요.



사용하기

트레이스 실행

1. LCD 화면에서 <트레이스/패턴> 메뉴를 선택하세요.
2. <재생> 메뉴를 선택하세요.
3. 실행할 트레이스 번호를 선택하세요.
4. 트레이스 기능이 실행됩니다



A/F

1. LCD 화면에서 <A/F> 메뉴를 선택하세요.
2. 카메라가 오토 포커스가 실행됩니다.

리셋

1. LCD 화면에서 <리셋> 메뉴를 선택하세요.
2. 카메라가 리셋됩니다.

타겟 설정

1. LCD 화면에서 <타겟 설정> 메뉴를 선택하세요.
카메라 영상에 사각형 박스가 나타납니다.
2. 추적할 대상으로 이동하고 [ENTER] 버튼을 누르세요.
 - 트랙 기능을 지원하는 카메라에만 해당하는 기능입니다.



트랙

1. LCD 화면에서 <트랙> 메뉴를 선택하세요.
2. 트랙 기능이 실행됩니다.
 - 트랙 기능을 지원하는 카메라에만 해당하는 기능입니다.

DVR 제어하기

각 DVR에 따라 기능이 다르므로, 해당 DVR의 설명서를 참조하세요.

- DVR 설정이 잘못 된 경우 시스템 컨트롤러의 사용이 원활하지 않을 수도 있습니다.

DVR 선택

1. [DVR] 버튼을 누르세요.
2. 숫자 버튼을 이용하여 원하는 DVR 번호(0~255)를 입력하고 [ENTER] 버튼을 누르세요.



3. DVR 모델에 따라 화면이 표시됩니다.

- SRD 프로토콜에서는 연결된 DVR에 따라 설정 가능한 메뉴만 화면에 표시됩니다.
- SRD 프로토콜 DVR을 연결할 경우 PTZ 설정이 자동으로 이루어 집니다.



사용하기

DVR 채널 선택하기

1. 숫자 버튼을 이용해 원하는 DVR의 채널 번호를 입력하세요.
2. [CAM] 버튼을 누르세요.

DVR MENU 제어하기

1. 선택한 DVR의 MENU를 제어하려면 DVR 제어부의 [MENU] 버튼을 누르세요.
2. 방향키와 [ENTER]를 사용하여 DVR MENU를 제어하세요.

DVR에 연결된 PTZ 장치 제어

DVR 모델에 따라 DVR에 연결된 PTZ 장치를 직접 제어할 수 없는 경우도 있습니다. 이런 경우에는 DVR 제어 모드에서 [PTZ] 버튼을 눌러 카메라 제어 모드로 이동하여 해당 카메라를 제어할 수 있습니다.

DVR에서 PTZ 장치 제어하기

1. LCD에서 DVR 메뉴 우측 하단의 [PTZ] 버튼을 누르세요.
2. 조이스틱을 이용해 DVR과 연결된 PTZ 카메라를 제어하세요.
자세한 사항은 해당 DVR의 사용설명서를 참고하세요.

DVR 로그인하기

DVR의 메뉴에 접속할 때 해당 DVR의 설정에 따라 로그인 해야합니다.

- <입력> 부분을 선택하면 입력란이 비활성되며 [CAM] 버튼을 누르지 않더라도 숫자버튼 입력만으로 채널변환이나 DVR의 암호 입력이 가능합니다.
다시 <입력> 부분을 선택하면 원래의 입력 모드로 돌아옵니다.



MATRIX 제어하기

MATRIX에서 모니터와 카메라 제어

MATRIX에서 모니터와 카메라를 제어할 수 있습니다.

1. [MTX] 버튼을 누르세요.
2. 모니터 번호를 누르고 [MON] 버튼을 누르세요.
3. 카메라 번호를 누르고 [CAM] 버튼을 누르세요.
선택된 모니터에 선택된 카메라의 영상을 보여줍니다.



기존 모니터에 카메라 선택하기

번호를 입력하여 카메라를 선택할 수 있습니다.

1. MATRIX 설정 화면에서 카메라 번호를 누르고 [CAM] 버튼을 누르세요.
2. 이전에 선택된 모니터에 새로 선택된 카메라 영상을 보여줍니다.

오토 선택 설정하기

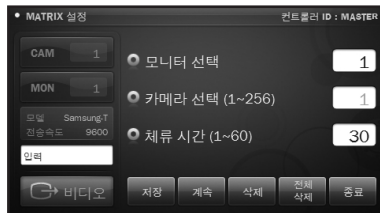
MATRIX에 동작 스케줄을 설정할 수 있습니다.

1. MATRIX 설정 화면에서 모니터 번호를 누르고 [MON] 버튼을 눌러 모니터를 선택하세요.
2. LCD 화면에서 <오토 선택 설정>을 누르세요.



사용하기

3. <오토 선택 설정> 화면이 나타나면 모니터를 선택하고 연결할 카메라와 체류 시간을 설정하세요.
4. 1번 카메라 설정을 완료 후 <계속> 버튼을 눌러 2번 카메라의 체류 시간을 설정하세요.
5. 각 카메라의 체류 시간 설정을 완료하면 <저장> 버튼을 누르세요.



RUN / HOLD 실행하기

RUN / HOLD는 설정된 오토 선택을 실제로 실행하거나 중지시키는 것입니다.

<전체>+<RUN>을 누르면 오토 선택의 설정대로 동작합니다.

<전체>+<HOLD>을 누르면 모든 모니터에 오토 선택에서 설정한 동작을 멈추고 사용자의 입력을 기다립니다.

 ■ 개별 모니터에 대한 동작을 명령하려면 “모니터 번호”+ <RUN> 또는 “모니터 번호”+<HOLD>를 누르세요.

Alarm Play 설정하기

Alarm Play 모드를 설정 상태에서 센서가 감지되면 알람 유닛에서 Siren ON을 설정한 경우 Siren이 울리고 알람 유닛에서 LED 제어출력을 설정한 경우는 LED 제어신호를 받아서 경광등과 같은 외부기기를 제어할 수 있습니다.

알람 유닛의 경계해제는 <Alarm Play>을 다시 터치하면 알람 유닛 경계모드가 해제됩니다.

메뉴 설정하기

메인 메뉴 시작하기

1. 컨트롤러의 **[FUNC]** 버튼을 누른 후 **[SETUP]** 버튼을 누르세요.
2. 설정 시스템 화면이 나타나면 원하는 설정 메뉴를 선택하세요.



PTZ 설정하기

PTZ 설정에서 프로토콜과 전송속도를 설정할 수 있습니다.

1. 설정 메인 화면에서 <PTZ> 버튼을 누르세요.
2. 방향 버튼 또는 조이스틱을 이용하여 설정할 메뉴로 이동하세요.
3. **[ZOOM WIDE]**, **[ZOOM TELE]** 버튼으로도 설정값을 변경할 수 있습니다.
4. 프로토콜과 전송속도 설정을 완료하면 <저장> 버튼을 누르세요.
5. PTZ 설정 화면에서 나가려면 <확인> 버튼을 누르거나 **[ESC]** 버튼을 누르세요.



■ 페이지를 이동하기 전에 설정을 저장하세요.

메뉴 설정하기

DVR 설정하기

DVR 설정에서 DVR 타입과 전송속도를 설정할 수 있습니다.

1. 설정 메인 화면에서 <DVR> 버튼을 선택하세요.
2. 방향 버튼 또는 조이스틱을 이용하여 카메라 번호를 선택하고 DVR 타입을 선택하세요.
3. 전송 속도를 설정하세요.
4. 설정을 완료하면 <저장> 버튼을 누르세요.
5. DVR 설정 화면에서 나가려면 <확인> 버튼을 누르거나 [ESC] 버튼을 누르세요.



 ■ 페이지를 이동하기 전에 설정을 저장하세요.

컨트롤러 설정하기

컨트롤러 ID 설정

각 포트의 통신 방법을 RS-485로 할지 또는 RS-422로 할지 설정할 수 있습니다.

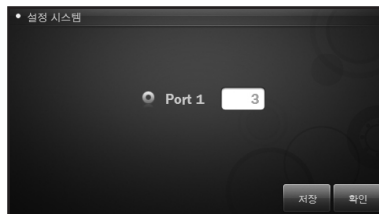
1. RS-485 또는 RS-422중 컨트롤러와 다른 장치간의 통신 방법을 설정하세요.
2. 각 포트의 ID를 설정하려면 각 포트 버튼을 누르세요.



PORT 1 ID 설정

다른 장치와 연결시 사용될 컨트롤러의 ID를 설정할 수 있습니다.

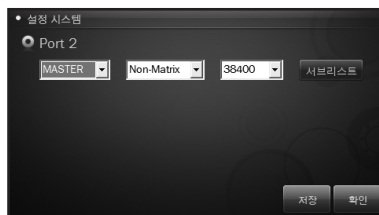
1. 컨트롤러 ID 설정화면에서 **[Port 1]** 버튼을 누르세요.
2. ID를 설정하고 **<저장>** 버튼을 누르세요.



PORT 2 설정

컨트롤러간 연결시 메인 또는 서버로 할지 설정하며, MATRIX 사용 여부와 서버 리스트를 설정할 수 있습니다.

1. 컨트롤러 ID 설정화면에서 **[Port 2]** 버튼을 누르세요.
2. 방향 버튼을 이용하여, 원하는 항목을 선택하고 컨트롤러간 통신 방법을 설정하세요.
 - 여러 대의 컨트롤러를 연결하여 사용할 경우 서버리스트를 설정해야 합니다.
3. 설정을 완료하면 **<저장>** 버튼을 누르세요.

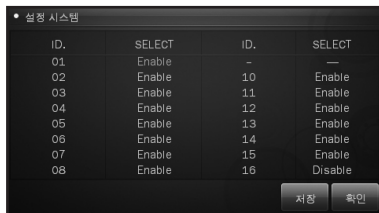


메뉴 설정하기

서브리스트 설정하기

메인 컨트롤러는 서브 컨트롤러가 있으면 <서브리스트>를 설정해야 합니다.

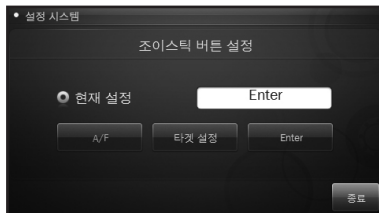
1. <서브리스트> 버튼을 누르세요.
2. 방향 버튼을 이용해 해당 항목을 선택한 다음 [ZOOM WIDE]/[ZOOM TELE] 버튼을 이용해 설정하세요.
 - MATRIX ID는 <SUB 09>번으로 고정되어 있습니다.
3. 설정을 완료하면 <저장> 버튼을 누르세요.
4. <서브리스트> 화면에서 나가려면 [확인] 버튼을 누르거나 [ESC] 버튼을 누르세요.



조이스틱 버튼 설정

조이스틱 버튼의 기능을 설정할 수 있습니다.

1. 조이스틱<버튼> 버튼을 누르세요.
2. 버튼 설정 화면에서 원하는 버튼의 기능 버튼을 누르세요.
3. 변경된 현재 설정을 확인하고 <종료> 버튼을 누르세요.



화면보호기 설정

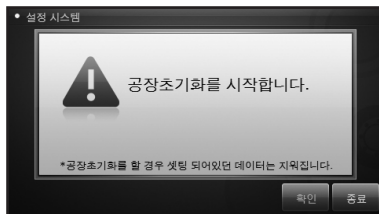
컨트롤러를 장시간 사용하지 않을 경우 화면 보호상태로 전환되도록 설정할 수 있습니다.

1. 사용하지 않는 시간에 화면로고가 표시되게 하려면 화면보호 상태를 <On>으로 설정하세요.
2. 새로 설정된 기능을 적용하려면 <확인> 버튼을 누르고 취소하려면 <종료> 버튼을 누르세요.

공장초기화

현재 설정된 상태를 공장 출고상태로 초기화할 수 있습니다.

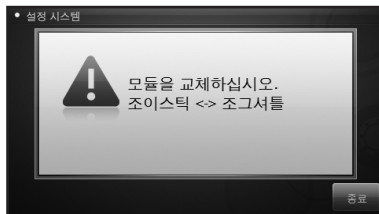
1. <리셋> 버튼을 누르세요.
2. <확인> 버튼을 누르세요.
공장초기 상태로 설정된 데이터가 초기화됩니다.
3. 공장초기화 화면에서 나가려면 <종료> 버튼을 누르세요.



모듈 교체

컨트롤러 좌우측의 조그셔틀과 조이스틱의 위치를 바꿀 수 있습니다.

1. <교체> 버튼을 누르세요.
2. 모듈을 교체 화면이 나타나면 좌우측의 조그셔틀과 조이스틱의 위치를 바꿀 수 있습니다.
3. 교체 화면에서 나가려면 <종료> 버튼을 누르세요.



언어 설정

화면에 표시되는 언어를 설정할 수 있습니다.

1. <언어> 버튼을 누르세요.
2. 언어 선택 화면이 나타나면 방향 버튼이나 조이스틱으로 원하는 언어로 이동 후 선택하세요.
 - 선택된 언어로 바로 변경됩니다.
3. 언어 설정 화면에서 나가려면 <종료> 버튼을 누르세요.

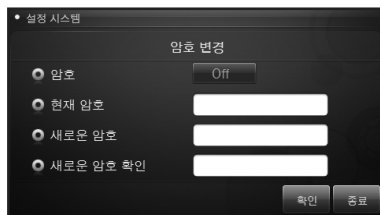


메뉴 설정하기

암호 기능 설정

컨트롤러 사용시 암호를 입력하거나 입력하지 않도록 설정할 수 있습니다.

1. 암호 <설정> 버튼을 누르세요.
2. 암호 기능을 설정하려면 <On>, 해제하려면 <Off>로 설정하세요.
3. 현재 암호를 입력하세요.
4. 새로 설정된 기능을 적용하려면 <확인> 버튼을 누르고 취소하려면 <종료> 버튼을 누르세요.



암호 변경하기

사용할 암호를 변경할 수 있습니다.

1. 암호 <설정> 버튼을 누르세요.
2. 현재 암호를 입력하세요.
3. 새로운 암호를 입력하세요.
4. 새로 설정된 기능을 적용하려면 <확인> 버튼을 누르고 취소하려면 <종료> 버튼을 누르세요.

 ■ 초기 암호는 '4321'입니다.

 ■ 제품상에 초기 설정된 비밀번호는 노출의 위험이 있으므로, 제품 설치 후 즉시 새로운 비밀번호로 변경하세요. 변경되지 않은 초기 비밀번호로 인한 보안 및 기타 문제의 책임은 사용자에게 있으므로 각별히 주의하세요.

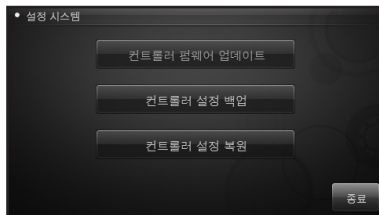
업데이트하기

USB 메모리 장치에 저장된 펌웨어 파일을 이용해 업데이트를 실행할 수 있습니다.

컨트롤러 펌웨어 업데이트

다운받은 펌웨어로 펌웨어 업데이트를 실행할 수 있습니다.

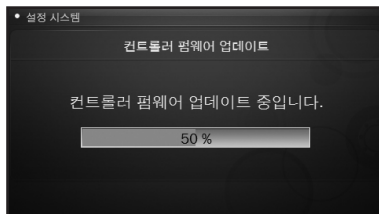
1. 신규 펌웨어가 저장된 USB 메모리 장치를 시스템 컨트롤러에 연결하세요.
2. 메뉴 설정화면에서 <업데이트> 버튼을 누르세요.
3. <컨트롤러 펌웨어 업데이트> 버튼을 누르세요.



4. 업데이트 화면에서 <확인> 버튼을 누르세요. 진행바가 표시되면서 업데이트를 실행합니다.
5. 업데이트 완료 후 프로그램이 다시 시작할 때까지 기다리세요.



- 재가동하기 전에 USB 메모리 장치 또는 전원의 연결을 해제하면 업데이트가 실패하거나 동작하지 않을 수 있습니다.



메뉴 설정하기

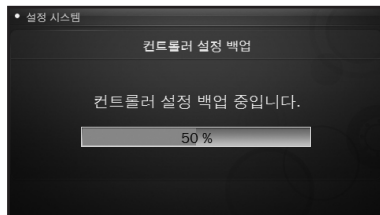
컨트롤러 설정 백업

설정 데이터를 다운 받아서 컨트롤러를 수정, 교체할 경우 교체한 카메라에 이미 설정한 설정 값을 그대로 업로드하기 위한 기능입니다.

1. 메뉴 설정화면에서 <업데이트> 버튼을 누르세요.
2. <컨트롤러 설정 백업> 버튼을 누르세요.
3. <확인> 버튼을 누르세요.
백업을 시작합니다.



- 컨트롤러 설정 백업을 완료하기 전에 USB 메모리 장치 또는 전원의 연결을 해제하면 컨트롤러 설정 백업을 실패할 수 있습니다.



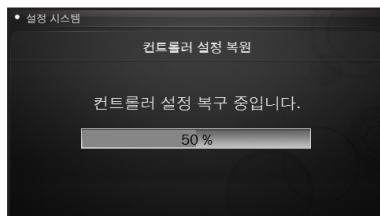
컨트롤러 설정 복원

컨트롤러 설정을 잘못하거나 초기화 됐을 경우 또는 다른 컨트롤러에 기존의 설정을 업로드할 수 있습니다.

1. 메뉴 설정화면에서 <업데이트> 버튼을 누르세요.
2. <컨트롤러 설정 복원> 버튼을 누르세요.
3. <확인> 버튼을 누르세요.
설정 복원을 시작합니다.



- 컨트롤러 설정 복원을 완료하기 전에 USB 메모리 장치 또는 전원의 연결을 해제하면 컨트롤러 설정 복원을 실패할 수 있습니다.



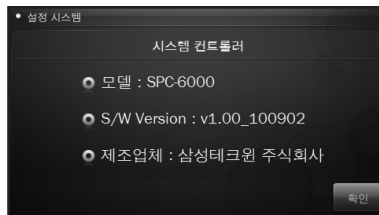
상태 확인하기

시스템 컨트롤러의 모델명과 소프트웨어 버전을 확인할 수 있습니다.

상태 화면

컨트롤러의 현재 상태를 확인할 수 있습니다.

1. 메뉴 설정 화면에서 <상태> 버튼을 클릭하세요.
2. 컨트롤러의 현재 상태를 확인하세요.



부록

제품사양

항목	내용
통신방식	RS-485 / 422 (원격제어 1km 가능) TTL (MATRIX 제어 용도)
제어규모	최대 255대
통신속도	2,400 ~ 38,400 bps
지원장비	PTZ / DVR / MATRIX / RECEIVER
프로토콜 (PTZ)	Samsung-T, Samsung-E, PELCO-D, PELCO-P, Panasonic, Vicon, AD, Honeywell, ELMO, BOSCH, GE
프로토콜(DVR)	SVR, SRD, SRP
프로토콜(MATRIX)	SMX-25632
프로토콜(RECEIVER)	Samsung-T
다국어 지원	영문, 스페인, 프랑스, 이탈리아, 독일, 폴란드, 터키, 러시아, 포르투갈, 스웨덴, 덴마크, 체코, 유고(세르비아), 한글, 중문, 일문
LCD 디스플레이	5인치 TFT LCD + 터치 LCD
USB 포트	설정 백업/복원, 소프트웨어 업데이트 용
영상 포트	BNC 비디오 입력, Loop Through 출력
조이스틱	PTZ 제어 (3축 Twist Zoom)
조그셔틀	DVR 재생 제어
동작전원	DC 12V, 최대 4W
동작온도	0°C ~ 40°C
동작습도	10 ~ 70% (Non-condensing)
크기	459.1(W) x 59.1(H) x 177.9(D) mm
중량	약 1.5kg (이답터 제외)

Q & A

문제	해결
시스템 컨트롤러 통신이 되지 않습니다.	• RS-485 통신선이 정상적으로 연결되어 있는지 확인하세요. • 노이즈 등으로 통신선로가 불안정할 경우, 장비의 G단자와 SPC-6000의 G단자를 연결하세요.
	• 시스템 컨트롤러의 주소가 정확하게 설정되어 있는지 확인하세요. • 주소 설정 방법은 "메뉴 설정하기"의 "컨트롤러 설정하기" 부분을 참고하세요. (▶ 34쪽)
USB 메모리가 인식되지 않아요.	• USB 메모리가 정상인지 확인하세요. • USB 메모리를 한 개만 연결하세요.



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 - Linux Kernel, QT, Busybox, Sysvinit, dosfstools, Uboot, Bash, initutils
- LGPL S/W
 - gLibc

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b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that

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- 제품과 관련된 타기기의 설치, 설명 요청시

[3] 단순 분해조립, 간단조정, S/W 업데이트 등으로 서비스 요청한 경우

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- 제품 간단조정이나 분해하지 않고 처리하는 경우
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	연락처	
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