

XGT Panel's Special Device

XGT Panel supports diverse special device.

1. Bit device.

| Device address | Property | Function | Property and description |
|----------------|-------------|--------------------------|--|
| HS0000.0 | Read | Always On | Always keep 1 |
| HS0000.1 | Read | Always Off | Always keep 0 |
| HS0000.2 | Read | Caps Lock status | 0: small letter 1: capital letter |
| HS0000.3 ~ 5 | Prohibition | - | - |
| HS0000.6 | Read | 200ms cycle On/Off timer | 200ms '0' → 200ms '1' → 200ms '0' repeated |
| HS0000.7 | Read | 1s cycle On/Off timer | 1s '0' → 1s '1' → 1s '0' repeated |
| HS0000.8 | Read | 2s cycle On/Off timer | 2s '0' → 2s '1' → 2s '0' repeated |
| HS0000.9 | Read | 5s cycle On/Off timer | 5s '0' → 5s '1' → 5s '0' repeated |
| HS0000.A | Read | 10s cycle On/Off timer | 10s '0' → 10s '1' → 10s '0' repeated |
| HS0000.B | Read | 30s cycle On/Off timer | 30s '0' → 30s '1' → 30s '0' repeated |
| HS0000.C | Read | 60s cycle On/Off timer | 60s '0' → 60s '1' → 60s '0' repeated |
| HS0000.D ~ F | Prohibition | - | - |

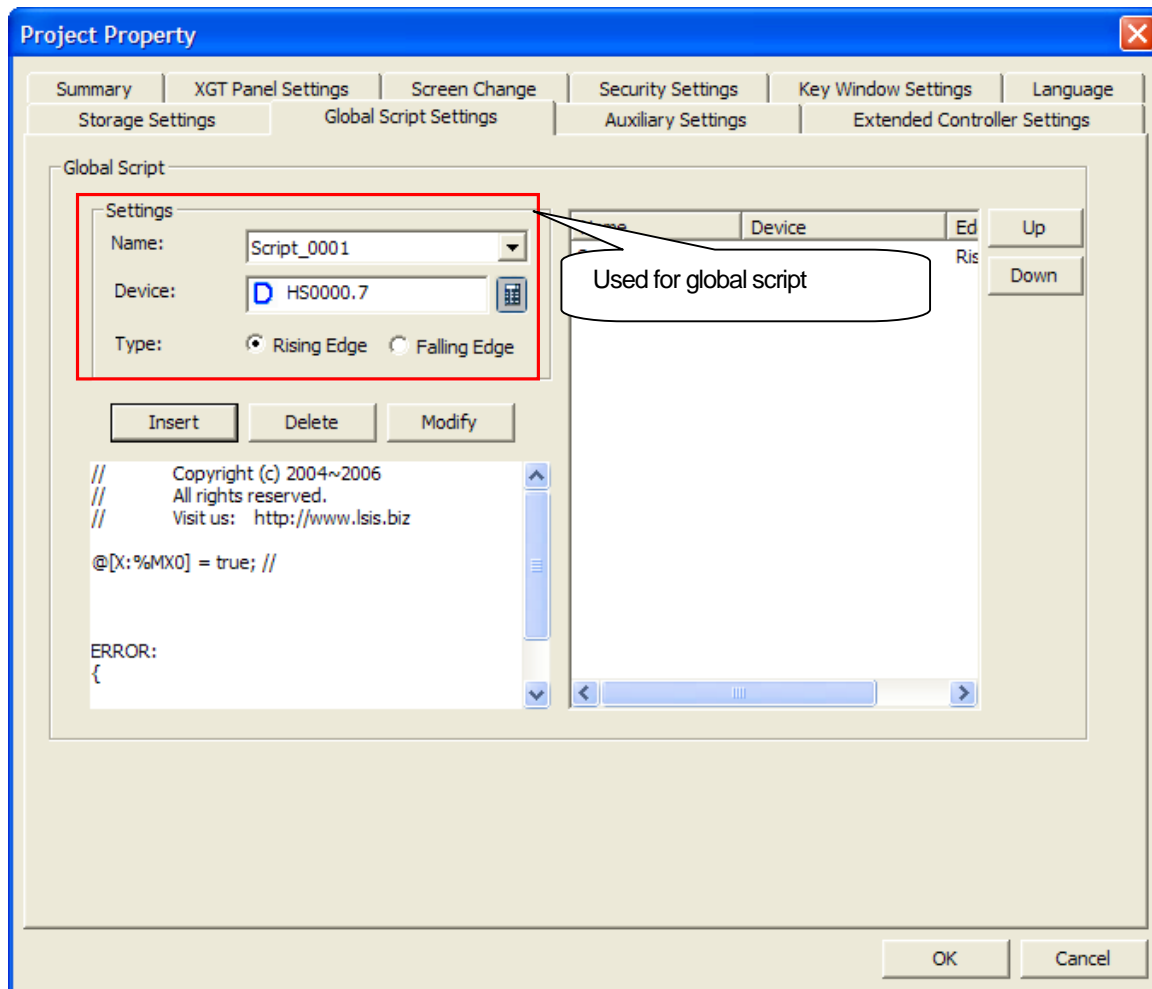
Above bit device is used for cycle function.
Especially, used for logging, recipe, script.

(Example) Logging setting

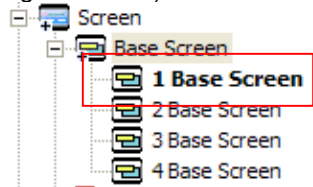
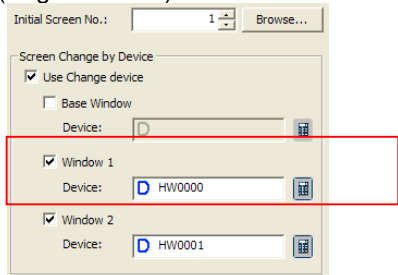
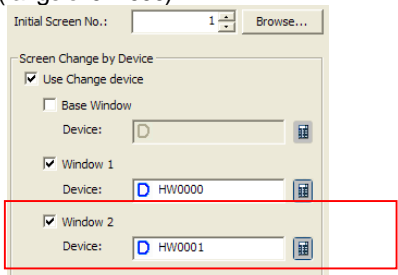
The screenshot shows the 'Property' dialog box for logging settings. The 'Conditional Logging' section is highlighted with a red box and a callout bubble saying 'Used for logging'. The 'Device(BIT)' field is set to 'D HS0000.9'. Other settings include 'Repeat Count: 1', 'Repeat Period: 0 Da 0 Ho 0 Mir 10 Se', 'Logging Device: Bit Word', and 'No. of Device: 1'.

Special Device

(Example) Global script



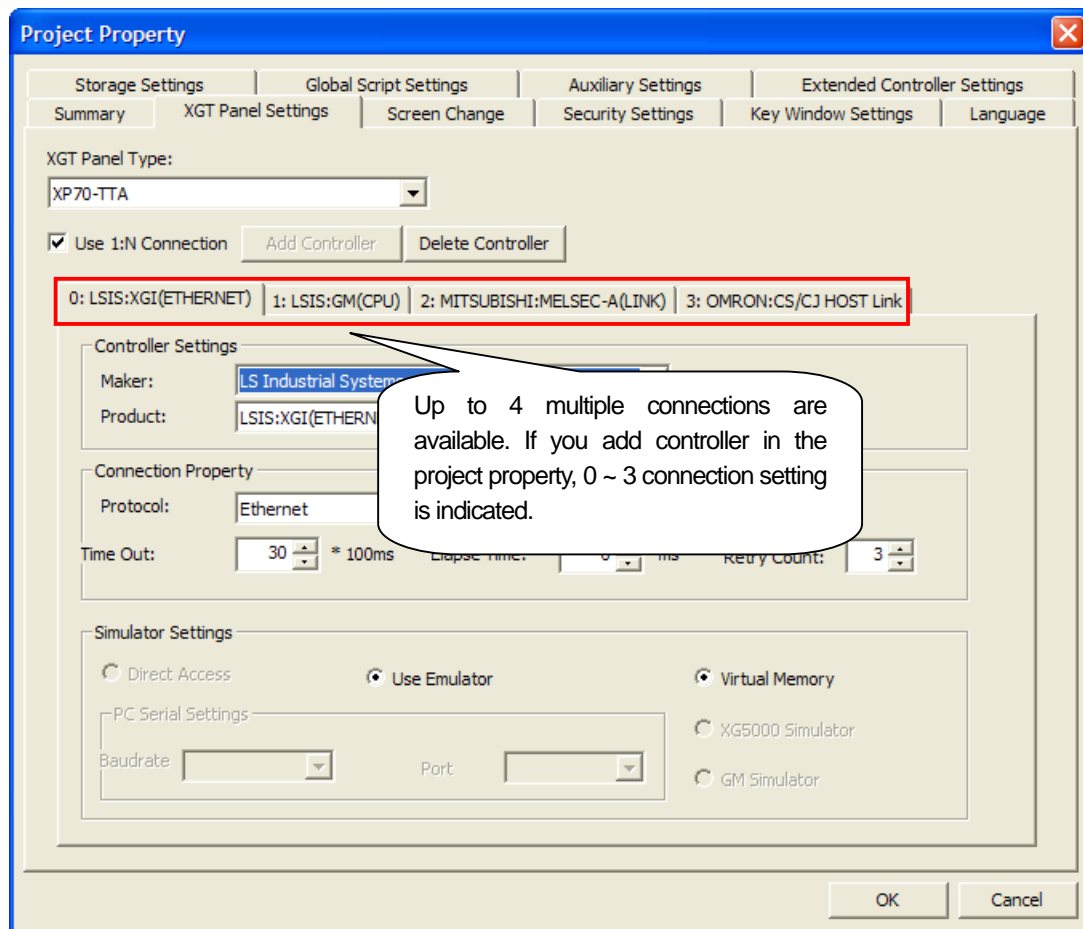
2. Word device

| Device address | Property | Function | Property and description |
|----------------|-------------|---|--|
| HS0001 | Read | XGT Panel S/W version information (Upper) | In case of V1.04, '1' is indicated |
| HS0002 | Read | XGT Panel S/W version information (Lower) | In case of V1.04, '4' is indicated |
| HS0003 | Prohibition | - | - |
| HS0004 | Read | Date information (year) | In case of 2007, '2007' is indicated |
| HS0005 | Read | Date information (month) | In case of 12, '12' is indicated (range of 1~12) |
| HS0006 | Read | Date information (day) | In case of 4, '4' is indicated (range of 1~31) |
| HS0007 | Read | Clock information (hour) | In case of AM11, '11' is indicated (range of 0~23) |
| HS0008 | Read | Clock information (minute) | In case of 25, '25' is indicated (range of 0~59) |
| HS0009 | Read | Clock information (second) | In case of 55, '55' is indicated (range of 0~59) |
| HS0010 | Read | Current basic screen number | Basic screen number set in XP-Builder (range of 1~4095)  |
| HS0011 | Read | Current global window 1 screen number | Screen number set as global window 1 (range of 0~4090)  |
| HS0012 | Read | Current global window 2 screen number | Screen number set as global window 2 (range of 0~4090)  |
| HS0013 | Read | Current security level | Currently activated security level (range of 0~9) |
| HS0014 | Read | Always '0' | Always indicates 0 |
| HS0015 | Read | 500ms counter | Increased as 1 per each 500ms (range of 0~65535) |
| HS0016 | Read | 1s counter | Increased as 1 per each 1s (range of 0~65535) |
| HS0017 | Read | 2s counter | Increased as 1 per each 2s (range of 0~65535) |
| HS0018 | Read | 5s counter | Increased as 1 per each 5s (range of 0~65535) |
| HS0019 | Read | 10s counter | Increased as 1 per each 10s (range of 0~65535) |

Special Device

3. Device related with communication

| Device address | Property | Function | Property and description |
|----------------|----------|--|---|
| HS800 | Read | Connection 0 transmission no. (32 bit) | Data transmission no. with controller connected 0 |
| HS802 | Read | Connection 0 receipt no. (32bit) | Data receipt no. with controller connected 0 |
| HS804 | Read | Connection 0 error no. (32bit) | Data error no. with controller connected 1 |
| HS820 | Read | Connection 1 transmission no. (32 bit) | Data transmission no. with controller connected 1 |
| HS822 | Read | Connection 1 receipt no. (32 bit) | Data receipt no. with controller connected 1 |
| HS824 | Read | Connection 1 error no. (32 bit) | Data error no. with controller connected 1 |
| HS840 | Read | Connection 2 transmission no. (32bit) | Data transmission no. with controller connected 2 |
| HS842 | Read | Connection 2 receipt no. (32 bit) | Data receipt no. with controller connected 2 |
| HS844 | Read | Connection 2 error no. (32 bit) | Data error no. with controller connected 2 |
| HS860 | Read | Connection 3 transmission no. (32 bit) | Data transmission no. with controller connected 3 |
| HS862 | Read | Connection 3 receipt no. (32 bit) | Data receipt no. with controller connected 3 |
| HS864 | Read | Connection 3 error no. (32 bit) | Data error no. with controller connected 3 |
| HS0910 | Read | Connection 0 comm. Scan time | Comm. Scan time connected 0 |
| HS0911 | Read | Connection 1 comm. Scan time | Comm. Scan time connected 1 |
| HS0912 | Read | Connection 2 comm. Scan time | Comm. Scan time connected 2 |
| HS0913 | Read | Connection 3 comm. Scan time | Comm. Scan time connected 3 |
| HS0970.0 | Bit read | Connection 0 comm. Time out | '1' in case of occurring communication time out |
| HS0970.1 | Bit read | Connection 0 comm. NAK signal | '1' in case of occurring NAK signal at controller connected 0 |
| HS0971 | Read | Connection 0 time out no. | Time out no. occurred at 0 |
| HS0972 | Read | Connection 0 max. Retry no. | Max Retry no. occurred at 0 continuously |
| HS0973 | Read | Connection 0 Retry no. | Retry no. occurred at 0 |
| HS0974 | Read | Connection 0 max. timeout no. | Max time out no. occurred at 0 continuously |
| HS0975.0 | Bit read | Connection 1 comm. time out | '1' in case of occurring communication time out at 1 |
| HS0975.1 | Bit read | Connection 1 comm. NAK signal | '1' in case of occurring NAK signal at controller connected 1 |
| HS0976 | Read | Connection 1 time out no. | Time out no. occurred at 1 |
| HS0977 | Read | Connection 1 max. Retry no. | Max Retry no. occurred at 1 continuously |
| HS0978 | Read | Connection 1 Retry no. | Retry no. occurred at 1 |
| HS0979 | Read | Connection 1 max time out no. | Max time out no. occurred at 1 continuously |
| HS0980.0 | Bit read | Connection 2 comm. Time out | '1' in case of occurring communication time out at 2 |
| HS0980.1 | Bit read | Connection 2 comm. NAK signal | '1' in case of occurring NAK signal at controller connected 2 |
| HS0981 | Read | Connection 2 time out no. | Time out no. occurred at 2 |
| HS0982 | Read | Connection 2 max Retry no. | Max Retry no. occurred at 2 continuously |
| HS0983 | Read | Connection 2 Retry no. | Retry no. occurred at 2 |
| HS0984 | Read | Connection 2 max time out no. | Max. time out no. occurred at 2 continuously |
| HS0985.0 | Bit read | Connection 3 comm. Time out | '1' in case of occurring time out at 3 |
| HS0985.1 | Bit read | Connection 3 comm. NAK signal | '1' in case of occurring NAK signal at controller connected 3 |
| HS0986 | Read | Connection 3 time out no. | Time out no. occurred at 3 |
| HS0987 | Read | Connection3 max. Retry no. | Max. Retry no. occurred at 3 continuously |
| HS0988 | Read | Connection 3 Retry no. | Retry no. occurred at 3 |
| HS0989 | Read | Connection 3 max. time out no. | Max time out no. occurred at 3 continuously |



Special Device

(Term description#1) time out



- ① Request read/write
----->
- ② PLC response waiting
(Waits as many as time set in XP-Builder)



- ③ Request read/write again
----->

Time out occurs when there is no response from controller.
It occurs when noise, communication wiring status, communication module are bad.

(Term description#2) Retry



- ① Request read/write
----->
- ② NAK signal transmission
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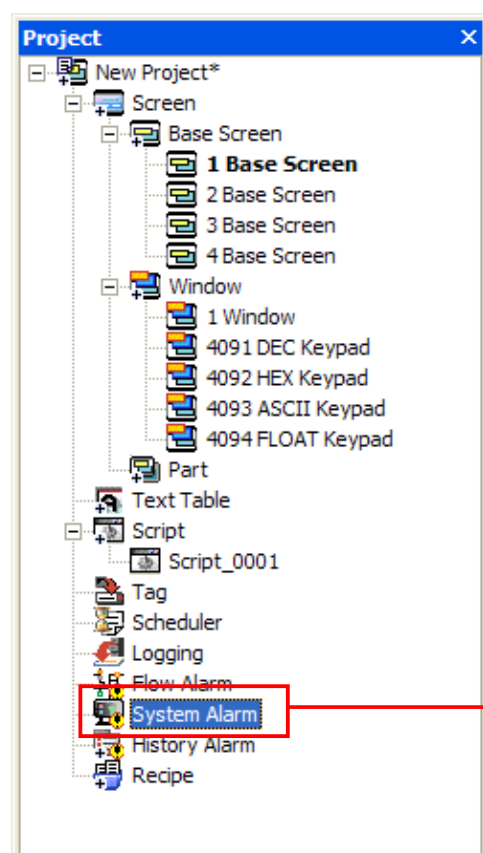
- ③ Request read/write again
----->

In case XGT Panel sends error data or data is lost because of noise and controller receives the error data, NAK occurs. At this time, Retry occurs. But there is no waiting time like time out.

4. System alarm device

| Device address | Property | Function | Property and description |
|----------------|-------------|-----------------------------|-------------------------------|
| HS0950.0 | Read | Battery low voltage warning | 0: Normal 1: Warning occur |
| HS0950.1 | Read | NVRAM data error | 0: Normal 1: Error occur |
| HS0950.2~7 | Prohibition | - | - |
| HS0950.8 | Read | USB over current warning | 0: Normal 1: Warning occur |
| HS0950.9~F | Prohibition | - | - |
| HS0951.0 | Read | No logging back up device | 0: Normal 1: No device |
| HS0951.1 | Read | No recipe back up device | 0: Normal 1: No device |
| HS0951.2 | Read | No screen back up device | 0: Normal 1: No device |
| HS0951.3 | Read | No alarm back up device | 0: Normal 1: No device |
| HS0951.4 | Read | No printer connected | 0: Normal 1: not connected |
| HS0951.5~F | Prohibition | - | - |

(System alarm): by using system alarm function, you can monitor the above device.



| | Device | Data Type | Description |
|---|---------|-----------|----------------------------|
| 1 | HS950.0 | BIT | NVRAM Low Battery Warning |
| 2 | HS950.1 | BIT | NVRAM Invalid Data Warning |
| 3 | HS951.0 | BIT | No Logging Backup Storage |
| 4 | HS951.1 | BIT | No Recipe Backup Storage |
| 5 | HS951.2 | BIT | No Screen Backup Storage |
| 6 | HS951.4 | BIT | No Printer |
| 7 | HS950.8 | BIT | USB Over Current Warning |

Special Device

To use system alarm, if you select Menu-> Common -> Project Property Setting -> Auxiliary Settings, the following setting window shows. If you check the system alarm window check box, system alarm occurs during XGT Panel operation.

