



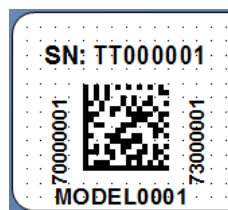
POWER SERIES NEO TECHNICAL TRAINING MANUAL

CORBUS

- 4 Wire Bus – RS485 protocol
- Free form wiring
- First Keypad Enrollment
 - Hardwired Keypad – Press any key
- PGH/Wire-free Keypads – [*]+[1]
- Replace First Keypad
- Automatic Enrollment [902][000]
- Manual Enrollment [902][001]
- Slot Reassignment [902][002],[003]
- Pre-enroll/Pre-Configure
- Pre-enrolled modules are not enrolled until added to the bus

MODULE SERIAL NUMBERS

- Serial Numbers are 8 HEX digits
- PCB label
- Label on carton with Serial Number
- Format – SN:TTXXXXXX



MODULE CAPACITY

Module	HS2016	HS2032	HS2064	HS2128
HSM2108 8 Zone expander	1	3	7	15
HSM2208 8 Output expander	2	4	8	16
Wireless Keypad: HS2LCDRF(P)4 HS2ICNRF(P)4 HS2LCDWF(P)(V)4	8	8	8	16
HSM2300 Power Supply 1A	3	3	3	4
HSM2204 4 High Current Output	1	1	3	4
HSM2HOSTx Transceiver	1	1	1	1
PC5950 Audio Verification (not UL evaluated)	1	1	1	1

CORBUS MODULE ENROLLMENT

AUTOMATIC MODULE ENROLL [902] -> [000]

This function will automatically enroll all modules connected to the CORBUS. This means that any zone or PGM expansion module will be assigned a slot automatically.

OPERATION

Enter Installer's programming mode: [*][8][Installer's Code]

Enter programming location [902] to enter module enrollment programming.

Select (902) <>
Module Enrol/De1



[902] [000] : will auto enroll all modules connected to Corbus

Select (000) <>
Auto Enroll



When [000] selected in [902], keypad will display the following:

Auto Enroll <>
KP:01 IO:00 M:00

Where:

- KP = # of keypads enrolled
- IO = # of output and input modules enrolled
- M = # of other modules enrolled

MANUAL ENROLLMENT [902] -> [001]

This function allows you to manually enter a module serial number, and then it automatically gets assigned to the first unused module slot.

OPERATION

Enter Installer's programming mode: [*][8][Installer's Code]

Enter programming location [902] to enter module enrollment programming.

Select (902) <>
Module Enrol/De1



[902] [001] : will select the manual module enrollment option.

Select (001) <>
Enroll Modules



When [001] selected in [902], keypad will ask you to enter the desired modules serial number. If the wrong serial number is entered, the keypad will give a "module not found" message and a long beep. Ensure the module is connected with the 4 CORBUS wires before entering the serial number.

Enter Serial
Number: 00000000



If successful, the keypad will display that the module successfully enrolled and will ask for another serial number.

NOTE: IF A MODULE IS NOT ENROLLED, THE RED LED WILL FLASH ONCE EVERY 2-3 SECONDS ON THE MODULE.

NOTE: IF MODULE IS ENROLLED AND IN NORMAL OPERATION, THE RED LED WILL FLASH ONCE EVERY 10 SECONDS ON THE MODULE.

MODULE SLOT ASSIGNMENT [902] -> [002]

Slot assignment is useful for adjusting the slot number of an enrolled module. This is especially important for zone and PGM expanders where the slot number corresponds to the zone or PGM numbers that the expander will use.

OPERATION

Enter Installer's programming mode: [*][8][Installer's Code]

Enter programming location [902] to enter module enrollment programming.

Select (902) <>
Module Enrol/Del



[002] will select the slot assignment option.

Select (002) <>
Slot Assignment



Now the keypad will ask you to enter a serial number for an already enrolled module

Enter Serial
Number: 00000000



Now the keypad will display the current slot number of the module, enter the desired 2 digit slot number now.

Ent. Module Slot
Slot: 01

EDIT MODULE SLOT [902] -> [003]

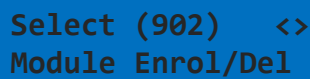
This function is similar to module slot assignment except instead of entering a module serial number, you scroll through a list of already enrolled modules and simply enter the 2 digit slot you wish to change it to.

Note: This is only for LCD style keypads.

OPERATION

Enter Installer's programming mode: [*][8][Installer's Code]

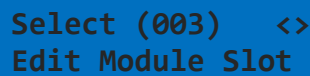
Enter programming location [902] to enter module enrollment programming.



Select (902) <>
Module Enrol/De1



Enter [003] to select the edit module slot option.



Select (003) <>
Edit Module Slot



Now the keypad will display a list of enrolled modules, their serial number and current slot number, simply enter the desired 2 digit slot number you wish to change it to, or use the right and left arrow keys to view a different module.



HS2LCDP 01 <>
SN: 5200008C

Note: If the slot number you selected already had a module enrolled to it, it will take effect and the slot numbers of these 2 modules will be swapped with each other.

DELETING MODULES [902] -> [101] – [110]

This programming location allows us to delete modules from the system.

OPERATION

Enter Installer's programming mode: [*][8][Installer's Code]

Enter programming location [902] to enter module enrollment programming.

Select (902) <>
Module Enrol/Del



Enter [101] – [110] to select the type of module you wish to delete where:

[101] = Delete Keypads -> select [01] – [16] for keypads 1 – 16

[102] = Delete HSM2108 Zone Expanders -> select [01] – [15] for Zone Expanders 1 - 15

[103] = Delete HSM2208 Output Expanders -> select [01] – [16] for Output Expanders 1 - 16

[106] = Delete HSM2HOST -> select [01] for Host

[109] = Delete HSM2300 Power Supply-> select [01] – [04] for Power Supply 1 - 4

[110] = Delete HSM2204 Output Expander -> select [01] – [04] for Output Expanders 1 – 4

Select (101) <>
Delete Keypads



Select (102) <>
Delete HSM2108



Select (103) <>
Delete HSM2208



Now select the desired module you wish to delete with the arrow keys and press [*] to delete, and [*] to confirm the deletion. Note: For LED keypads, select the module number (2 digits) and enter that module number again for confirmation (pressing [*] will not confirm the deletion).

HS2XXXX 01 <>
Keypad 1

CONFIRM MODULES [903]

Confirming modules allows us to see the current module slot number of a selected module, verify the serial number and it also flashes the onboard LED of the module in question. This makes it easier to identify modules for installers who are performing maintenance on a system where they are unsure which module is which.

[903] -> [000] VIEW ALL MODULES – (LCD ONLY)

Here we can scroll and view all enrolled modules. The serial number, model number and the module number are all displayed here from the LCD keypad.

- Note that a keypad with a built-in wireless receiver will show up twice in this menu.

OPERATION

Enter Installer's programming mode: [*][8][Installer's Code]

Enter programming location [903] to enter module enrollment programming.

Select (903) <>
Confirm Module



Enter [000] to select the view all modules option.

Select (000) <>
View All Modules



Now the keypad will display a list of enrolled modules, their serial number and current slot number, simply enter the desired 2 digit slot number.

HS2LCDP 01 <>
SN: 5200008C

[903] -> [101] TO [110] CONFIRM MODULES

OPERATION

Enter Installer's programming mode: [*][8][Installer's Code]

Enter programming location [903] to enter module enrollment programming.

Select (903) <>
Confirm Module



Enter [101] – [110] to select the type of module you wish to confirm

Where:

[101] = Confirm Keypads -> select [01] – [16] for keypads 1 – 16

[102] = Confirm HSM2108 Zone Expanders -> select [01] – [15] for Zone Expanders 1 - 15

[103] = Confirm HSM2208 Output Expanders -> select [01] – [16] for Output Expanders 1 - 16

[106] = Confirm HSM2HOST -> select [01] for Host

[109] = Confirm HSM2300 Power Supply-> select [01] – [04] for Power Supply 1 - 4

[110] = Confirm HSM2204 Output Expander -> select [01] – [04] for Output Expanders 1 - 4

Select (101) <>
Confirm Keypads



Select (101) <>
Confirm HSM2108



Select (101) <>
Confirm HSM2208



Select the exact module you wish to confirm and press [*], if that module is enrolled the red LED will be blinking rapidly (if applicable) and the message "module confirmed" will be displayed.

HSM2108 01 <>
Zone Exp. 1

Note: At each keypad, section [*][8][Installer Code][860] will show the current keypad module number.

LED KEYPADS

TO VIEW MODULES

- [903] [001] to [110]: to view modules enrolled
- [001] = Confirm Keypads -> 1 – 16 is displayed for keypads 1 - 16
- [002] = Confirm HSM2108 Zone Expanders -> 1 – 15 is displayed for expanders 1 - 15
- [003] = Confirm HSM2208 Output Expanders -> 1 – 16 is displayed for expanders 1 - 16
- [006] = Confirm HSM2HOST -> 1 is displayed for HOST module
- [009] = Confirm HSM2300 Power Supply-> 1 – 4 is displayed for power supply modules
- [010] = Confirm HSM2204 Output Expander -> 1 – 4 is displayed for output modules

Example:

If [903] [001] turns on LEDS 1 2 3, then the system has 3 keypads (keypads 1, 2 and 3)

HSM2108 – 8 ZONE EXPANDER



- Provides 8 zone inputs
- Tamper Input
- Same terminal Configuration as the PC5108
- Same form factor and hole configuration as the PC5108 – Compatible with existing enclosures
- Each zone input capable of fast loop response up to 50ms
- Aux output can provide up to 100 mA power
- Red Status LED
- Current draw = 30 mA
- This module is not firmware updateable

HSM2208 – 8 LOW CURRENT OUTPUT EXPANDER



- Provides 8 low current PGM outputs
- Tamper Input
- Same terminal configuration, form factor and hole configuration as the PC5208 – Compatible with existing enclosures
- Each PGM output capable of sinking up to 50mA (5VDC to 14VDC)
- Aux output can provide up to 250 mA
- Red status LED
- Supports all bell/PGM cadences and squawks
- Supports output synchronisation
- This module is not firmware updateable
- Current draw 40 ma

HSM2204 – 4 HIGH CURRENT OUTPUT EXPANDER



- Provides 4 high current PGM outputs
- Tamper Input
- Same terminal Configuration as the PC5204
- Same form factor and hole configuration as the PC5204 – Compatible with existing enclosures
- Each PGM output capable of sinking up to 3A (when connected to separate 12VDC source)
- PGM1 supervised with a 1K EOL
- Aux output can provide up to 1A power
- High (700mA)/Low (400mA) Battery Charge – Software setting
- Red Status LED
- Supports all bell/PGM cadences and squawks
- Supports output synchronisation
- Current draw 35 ma
- This module is not firmware updateable
- Can use more than one in system according to panel (power series only support one 5204)

HSM2300 – POWER SUPPLY MODULE



- 1A Power Supply
- Tamper Input
- Same terminal Configuration as the PC5200
- Same form factor and hole configuration as the PC5200 – Compatible with existing enclosures
- Aux output can provide up to 1A
- High (700mA)/Low (400mA) Battery Charge – Software setting
- Red Status LED
- Current draw 35 ma
- This module is not firmware updateable

HSM2HOST – POWER G TRANSCEIVER



- Provides wireless Power G capability
- Case tamper and wall tamper
- Green and Red Status LED visible through window
- Receiver placement test - Green LED = No Jam, Red LED = Jam condition
- Current draw 35 ma
- This module supports firmware update
 - Note: only one HSM2HOST can be used on a system.

PCL-422 PC-LINK EXTENSION MODULE



- The PCL-422 PC-Link extension kit comes in two types of kits
- One kit with two PCL-422 units allowing for remote installation up to 50ft from the panel
- Another kit with two PCL-422 boards and a HSM2300 power supply. This kit allows for remote installation up to 1000ft from the panel