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HS2LCDWF(V)PRO/ HS2LCD(RF)PROx
Installation Instructions

Johnson Controls

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HS2LCDWF(V)PROx Introduction

These instructions must be used with the appropriate control panel installation manual with which this equipment is intended to be used. Operating instructions shall be made available to the user. The HS2LCDWF(V)PROx wireless keypad is compatible with wireless transceiver HSM2HOST, HS2LCDRFPROx keypads and panels HS3032, HS3128, HS3248.

⚠ WARNING: Please refer to the System Installation Manual for information on limitations regarding product use and function and information on the limitations as to liability of the manufacturer.

ⓘ Note: These instructions shall be used in conjunction with the system Installation Manual of the Control Panel with which this equipment is intended to be used.

Safety instructions

Read the safety information before you install the equipment.

➤ **Important:** This equipment must be installed by a skilled person only. A skilled person is an installer with appropriate technical training. The installer must be aware of potential hazards during installation and measures available to minimize risks to the installer and other people.

• Before you install this equipment, disconnect all power sources (for example mains, battery, and telephone line) connected to the alarm panel.

• Install the equipment indoors in a non-hazardous environment where the following conditions are met:

  - Pollution degree - Maximum 2

  - Over voltages - Category II

• Internal wiring must be routed to prevent strain on wire and terminal connections, loose terminal connections, and damage to conductor insulation.

• Instruct the user that there are no user serviceable parts in this equipment. All equipment must be serviced by a skilled person.

Specifications

• Temperature range: -10°C to +55°C (14°F to 131°F) UL/ULC: 0°C to +49°C (32°F to 120°F)

• Humidity (MAX): 93%R.H. non-condensing

• Plastic enclosure protection degree: IP30, IK04

• Power adaptor output voltage: 9.0Vdc @ 1.25A. Models - US/Latin America: HK-XX11-U09N (UL), Canada: HK-XX11-U09NC (ULC), EU: HK-XX11-U09EU, UK: HK-XX11-U09NGB, AUS./NZ, China: HK-XX11-U09NAU limited power supply, acceptable to the authority having jurisdiction.

• Restraints are in place for UL installations.

• This product is not to be connected to a receptacle that is controlled by a switch.

- Battery. 4 AA, 1.5V, Energizer alkaline consumer-grade (E91)

- Low Battery Indication: 4.5V

- HS2LCDWF(V)PROx current draw: 30mA(min)/105mA(max)

- Wall-mount tamper (connected when installed in UL commercial applications

- 5 programmable function keys

- Ready (Green LED), Armed (Red LED), Trouble/RF Jam (Red/Yellow), AC (Green)

- Frequency: 433MHz (Brazil, China, Aus.(CE), NZ (NA), South Africa (ICASA), MEA, India (WPC)

- Frequency: 868MHz (EN + Local, MEA (CE))

- Frequency: 912 - 919MHz (NA/LATAM, Argentina)

- Dimensions (LxWxD): 168mm x 122mm x 25 mm

- Weight: 370g (batteries included)

ⓘ **Note:** For UL commercial installations, the tamper switches are enabled.

Unpack

The HS2LCDWF(V)PROx keypad package is available in three configurations. The keypad contains patented technology for the Proximity (Prox) Tag.

Component	HS2LCDWF - Wall Mount	HS2LCDWFPROx - Prox	HS2LCDWFVPROx - Prox Tag w/verbal annunciation
HS2LCDWF wall bracket	1	1	1
Installation manual	1	1	1
Inner door sticker	1	1	1
AA batteries	4	4	4
Hardware pack	1	1	1
Prox tag		1	1

Mount the Keypad

Mount the keypad where it is accessible from designated points of entry and exit. Once a dry and secure location has been selected, perform the following steps to mount the keypad.
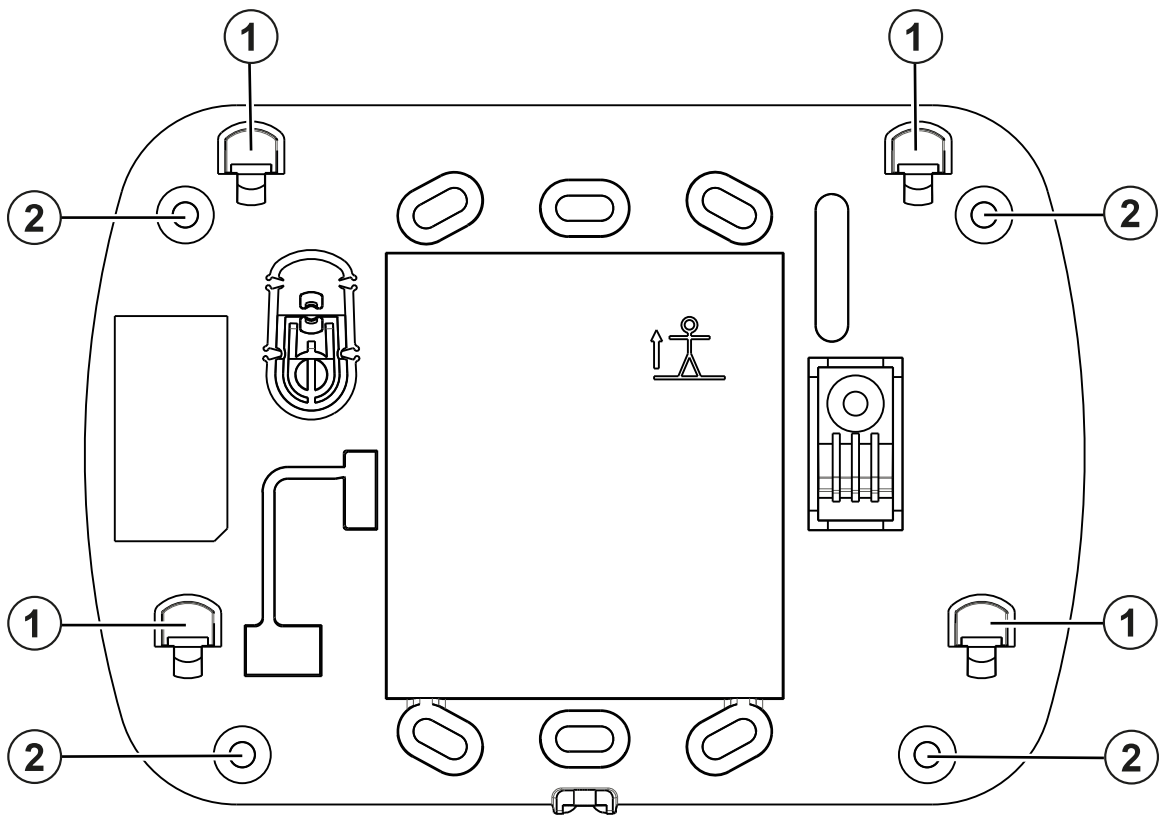
Callout	Description
1	Mounting tab
2	Screw hole

Wall Mounting Plate

1. Locate the screw holes (4) at each corner of the mounting plate.

2. Use the four screws provided to affix the mounting plate to the wall; ensure the mounting tabs are facing you (see following diagram). If the keypad is to be mounted on drywall, use plastic anchors.

3. Once the batteries are installed, align the four mounting slots in the HS2LCDWF(V)PROx housing with the four mounting tabs protruding from the mounting plate.

4. Firmly but carefully snap the keypad down onto the mounting plate.

Desk Stand - HS2LCDWFDMK (Optional)

1. Insert the four rubber feet provided the indentations in the bottom of the desk stand.

2. Place the desk stand on a secure, uncluttered surface.

3. Align the four mounting slots in the HS2LCDWF(V)PROx housing with the four mounting tabs protruding from the desk stand.

4. Slide the keypad into place. Firmly but carefully snap the keypad down onto the desk stand.

5. To fasten the keypad securely onto the desk stand, locate the hole in the center of the bottom of the desk stand. Using the screws provided, screw the keypad to the desk stand.

Apply Battery Power

1. If required, slide the keypad up and out from the mounting plate/desk stand (removing the screws first if required). The bay for the four AA batteries is open and visible at the back of the keypad.

2. Insert the batteries as directed on the back of the keypad. Ensure the correct polarity is observed.

3. Replace the keypad on the mounting plate/desk stand.

⚠ **CAUTION:** Do not mix old batteries with new ones.

⚠ **WARNING:** If a low battery trouble signal is received, the unit will operate for a duration of no longer than 30 days. When a low battery trouble signal is received, the batteries must be replaced to ensure proper operation of the unit.

ⓘ **Note:** If you arm and disarm the system twice a day, and do not use the proximity tag, voice, and chime features, the battery lasts for 3 years.

Apply AC Power

1. Slide the keypad up and out from the mounting plate/desk stand.

2. Locate the power adaptor jack at the back of the keypad housing.

3. Place the adaptor plug in the housing indentation, perpendicular to the keypad. Insert the adaptor plug firmly into the jack.

4. Pivot the adaptor plug downwards so that it fits flush with the housing. Guide the AC wire along the channel provided in the keypad housing; the wire will extend through the bottom of the housing.

5. Replace the keypad on the mounting plate/desk stand (in the latter case, a further channel is provided in the bottom of the desk stand. Guide the AC wire along this channel; the wireextend through an opening in the back of the stand).

6. Plug the adaptor into a wall outlet.

Only use the power adaptor (9.0VDC, @1.25A, 2.25W, limited power supply for models: HK-XX11-U09N (UL) and HK-XX11-U09NC (ULC).

⚠ **CAUTION:** The socket-outlet in the direct plug-in adaptor is inserted must be close to the keypad, easily accessible, and have unobstructed access. The plug of the adaptor serves as a means of disconnection from the supply mains.
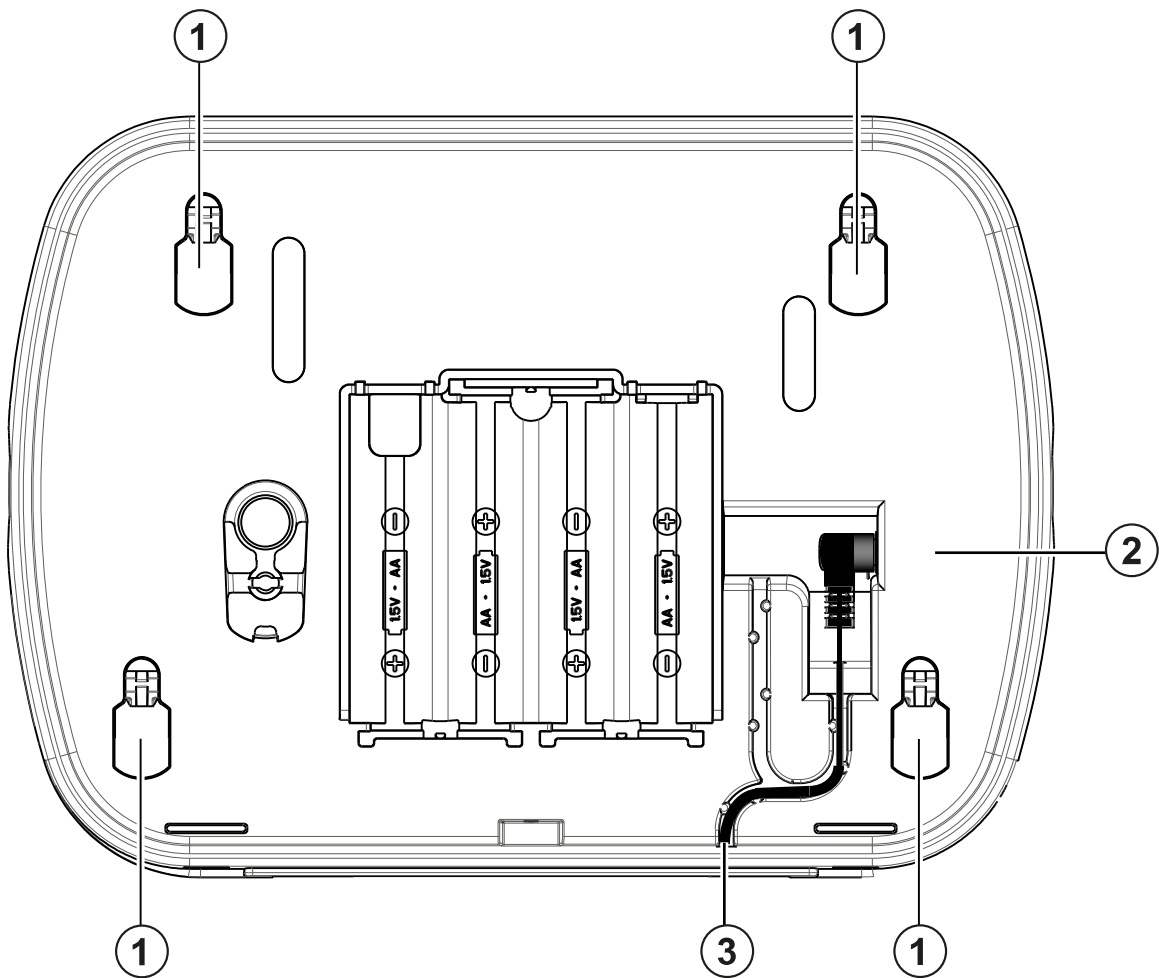
Callout	Description
1	Mounting holes
2	Plug
3	Wire channel

Program the Keypad

About this task: There are several programming options available for the keypad (see the following table). Programming the keypad is similar to programming the rest of the system. The installer menu is a text driven flow. For information on programming the rest of your security system, refer to your system's installation manual.

1. Press [*][8][Installer Code].

2. Use the [<][>] keys to navigate through the menus or jump directly to a specific section by entering the section number.

Language Programming

To enter language programming, enter [000]>[000], then enter the two-digit number that corresponds to the language desired:

ⓘ **Note:** Not all languages are available on all models.

01	English	16	Turkish
2	Spanish	17	Future Use
3	Portuguese	18	Croatian
4	French	19	Hungarian
5	Italian	20	Romanian
6	Dutch	21	Russian
7	Polish	22	Bulgarian
8	Czech	23	Latvian
9	Finnish	24	Lithuanian
10	German	25	Ukrainian
11	Swedish	26	Slovakian
12	Norwegian	27	Serbian
13	Danish	28	Estonian
14	Hebrew	29	Slovenian
15	Greek		

Keypad Symbols

Symbol		Description
✔	Ready Light (Green)	If Ready light is ON, the system is ready to arm.
🔒	Armed Light (Red)	If Armed light is ON/Flashing, the system has been armed successfully.
⚠	System Trouble (Yellow)	ON - Indicates that a system trouble is active. Flashing - Keypad low battery.
⊚	AC (Green)	ON - Indicates that AC is present at the keypad

Enroll HSM2HOST

About this task: The HSM2HOST wireless transceiver or HS2LCDRFPROx keypad must be enrolled onto the alarm panel before any wireless devices can be enrolled. When the alarm system is powered up for the first time, the first keypad or the HSM2HOST (if using a wireless keypad as the first keypad) can be enrolled. To do this:

1. Once the HSM2HOST is wired to the alarm panel and power has been applied, power up a wireless keypad.

2. Press any button on the keypad to enroll it on the HSM2HOST. The HSM2HOST is then automatically enrolled on the alarm panel.

Enroll Keypad

1. Press [*][8][Installer Code] and then [804][000].

2. When prompted, either activate the device to enroll immediately or enter a device serial number. Do the latter to pre-enroll devices then enroll them later at the customer site.

3. Use the [<][>] keys or enter the corresponding number to select an option.

4. Scroll through the available selections and enter a number or enter text as appropriate.

5. Press [*] to accept and move to the next option.

6. Once all options are configured, the system prompts you to enroll the next device.

7. Repeat this process until all wireless devices are enrolled.

For UL/ULC Residential Fire applications, HS2LCDWFPRO9, HS2LCDWFVPRO9 keypads must be set up for 200 seconds wireless supervision, by enabling toggle option 4 (200s Fire Supv), in section [804][810].

Delete Keypad

1. Press [*][8][Installer Code] and then [804][905].

2. Use the [<][>] keys to select the keypad or press [#] to exit.

3. Press [*] to delete. The screen will read "Keypad deleted".

Program Labels

About this task: Use this section to assign a meaningful name (e.g., Front Door, Hallway, etc.) to each zone.

1. Press [*][8] [Installer code].

2. Press [*] and use the [<][>] keys to scroll to Zone Labels and press [*] again. The first zone is displayed. Alternatively, enter [000][001].

3. Scroll to the zone label to be programmed and press [*] or enter the zone number (e.g., 001 for zone label 1).

4. Scroll to the desired character's location using the [<][>] keys.

5. Enter the number of the corresponding character group until the desired character is displayed (see the following table).Example: Press the "2" key 3 times to enter the letter "F". Press the "2" key 4 times to enter the number "2".

[1] - A, B, C, 1	[4] - J, K, L, 4	[7] - S, T, U, 7	[0] - Space
[2] - D, E, F, 2	[5] - M, N, O, 5	[8] - V, W, X, 8	[*] - Select
[3] - G, H, I, 3	[6] - P, Q, R, 6	[9] - Y, Z, 9,0	[#] - Escape

6. To save the label, press [#], and the label is automatically saved. To delete a character, use the [<][>] keys to move the cursor under the character, then press [0]. If any key other than [<] or [>] is pressed before [0], the cursor moves one space to the right and deletes that character.

ASCII Character

032	035	038	041	044	047	060	063	094	124	127	228	231	238	241	246	253
033	036	039	042	045	058	061	064	095	125	176	229	234	239	244	248	254
034	037	040	043	046	059	062	093	123	126	225	230	236	240	245	249	255

Label Library

About this task: The Label Library is a database of words commonly used when programming labels. Individual words can be combined as needed (e.g., Front Door). Each line of the display supports a maximum of 14 characters. If a word will not fit on a line, scroll right until the cursor appears at the first character of the second line then add the word.

About this task: To program a custom label using the Label Library:

1. Press [*][8][Installer Code][000][001] (to program the label for zone 01).

2. Press [*] to open the menu.

3. Press [*] again to select the "Word Entry" option.

4. Enter the 3-digit number corresponding to a word (see Words Library) or use the scroll keys [<] [>] to view words in the library.

5. Press [*] to select the word.

6. To add another word, repeat the previous procedure from step 2.

7. To add a space, press the right scroll key [>].

8. To clear characters, select "Clear to End" or "Clear Display" from the "Select Options" menu.

9. To save the label, press [#], and the label is automatically saved.

Broadcast LCD Labels

If more than one LCD keypad is present on the system, labels programmed at one keypad will be broadcast to all other LCD keypads right after the change is confirmed.

Voice Prompt/Voice Chime

Voice Prompt Control

Menu: [*][6][access code] > Voice Prompt

This function is used to change the volume level of keypad voice prompts, for example, "User arming in progress." The voice prompt speaks the zone labels programmed for zone openings/

closings. Use the scroll keys [<][>] to increase or decrease the volume from levels 0-10. Selecting 00 turns off keypad voice prompts.

Voice Chime Control

Menu: [*][6][access code] > Chime Control

This function is used to change the keypad voice chime volume level. Use the scroll keys [<][>] to increase or decrease the volume from levels 0-10. Selecting 00 turns off voice chime.

Change Brightness/Contrast/Buzzer

1. Press [*][6][Master Code].

2. Use the [<][>] keys to scroll to either Brightness Control, Contrast Control, Buzzer Control.

3. Press [*] to select the setting you want to adjust.

4. Brightness/LED Bar Control: There are 15 back lighting levels. Use the [<][>] keys to scroll to the desired level. Changing this level adjusts the LED bar accordingly.

5. Contrast Control: There are 15 different display contrast levels. Use the [<][>] keys to scroll to the desired contrast level.

6. Buzzer Control: There are 15 different buzzer control levels. Use the [<][>] keys to scroll to the desired buzzer level.

Proximity Tags

The proximity tag can be used to perform any keypad function that would normally require a user access code or to activate a programmable output. The tag is to be presented to the center left face of the keypad. While the keypad is running off AC, the transceiver is always on to detect any prox tag approaching. While the keypad is running on battery and in sleep mode, the user can press any key to wake the keypad, then present the prox tag.

Enroll Proximity Tags

About this task: Enrolling a tag on one keypad will enroll it automatically to all HS2LCDWFPROx or HS2LCDWFVPROx keypads enrolled on the system. Master code (code 1) cannot have a prox tag assigned to it.

1. Press [*][5][Master Code].

2. Use the [<][>] keys to scroll to the applicable user and press [*].

3. Use the [<][>] keys to scroll to Prox Tag and press [*]. The screen displays: "Present Tag".

4. Pass the enrolled tag near the tag reader on the keypad. A prox tag can only be assigned to one user at a time.

5. If enrollment is successful, acknowledgment beeps will sound and the keypad LCD will read 'Tag Enrolled Successfully'. If enrollment is unsuccessful, an error tone will sound and the keypad will read 'Invalid Tag Not Enrolled'. If the tag has been enrolled previously, an error tone will sound and the keypad will read 'Duplicate Tag Not Enrolled'.

Delete Proximity Tags

About this task: Delete the prox tags from the system when they are lost or no longer needed.

1. Press [*][5][Master Code].

2. The keypad displays the user number and includes the letter 'T' if a prox tag is programmed.

3. Use the [<][>] keys to locate the desired user and press [*]. Scroll to Prox Tag and press [*].

4. The keypad reads 'Press [*] To Delete Tag'. After pressing [*], the message 'Tag Deleted Successfully' appears.

Keypad Function Key Programming

About this task: To program a function key:

1. Press [*][8][Installer Code].

2. Enter [861] for keypad programming.

3. Enter [001]-[005] for function keys 1-5.

4. Enter a 2-digit number to assign a function key operation - [00]-[68]. See the following tables.

5. Continue from step 3 until all function keys are programmed.

6. Press [#] twice to exit Installer Programming.

[001]-[005] Function Key Assignments

Section	Key	Button	Range	Default	Function	
[001]	1	⌂	00-92	03	Stay Arm	|___|___|
[002]	2	⬭	00-92	04	Away Arm	|___|___|
[003]	3	⬭	00-92	06	Chime ON/OFF	|___|___|
[004]	4	⊗	00-92	22	Comm Output 2	|___|___|
[005]	5	⬭	00-92	16	Quick Exit	|___|___|

Keypad Function Keys

Please see your system installation manual for more details on the function key options:

[00] - Null	[14] - Global Disarming	[32] - Bypass Mode
[02] - Instant Stay Arm	[15] - Temperature	[33] - Bypass Recall
[03] - Stay Arm	[16] - Quick Exit	[34] - User Programming
[04] - Away Arm	[17] - Arm Interior	[35] - User Functions
[05] - [*][9] No-Entry Arm	[21] - Command Output 1	[37] -Time and Date Program
[06] - Chime ON/OFF	[22] - Command Output 2	[39] -Trouble Display
[07] - System Test	[23] - Command Output 3	[40] - Alarm Memory

[09] - Night Arm	[24] - Command Output 4	[61-92] - Partition Select 1-32
[12] - Global Stay Arm	[29] - Bypass Group Recall	
[13] - Global Away Arm	[31] - Local PGM Activate	

Keypad Programming

Press [*][8][Installer Code]

[860] Keypad Slot Number

This is not for programming; the two-digit slot number is displayed for informational purposes only.

[861]-[892] Keypad Programming Sections

Sections [861]-[892] apply to keypad slot numbers 1-32 accordingly. After selecting the appropriate keypad section number, the following programming options are available:

[000] Address of Partition

On selecting [000], a 2-digit entry is required to assign the keypad to a partition. Valid entries are 01-08. The default is 01.

ⓘ   **Note:** The HS2LCDWF(V)PROx keypad cannot be assigned as a global keypad.

[001]-[005] Function Key 1- 5 Assignment

[011] Keypad Input/Output Programming

Zone or PGM Number	000	|____|____|____|

[012] Local PGM Output Pulse Activation Time

|____|____| Minutes (00-99); |____|____| Seconds (00-99)

[021] First Keypad Options

Default		Opt.	ON	OFF
ON	|____|	1	Fire Key Enabled	Fire Key Disabled
ON	|____|	2	Medical Key Enabled	Medical Key Disabled
ON	|____|	3	Panic Key Enabled	Panic Key Disabled
ON	|____|	4	Display Access Code When Programming	Display X's When Programming Access Codes
OFF	|____|	5	For Future Use	For Future Use
OFF	|____|	6	For Future Use	For Future Use
OFF	|____|	7	For Future Use	For Future Use

Default		Opt.	ON	OFF
OFF	|_____|	8	For Future Use	For Future Use

ⓘ **Note:** For EN50131-1/EN50131-3 compliant systems, section [021]: options 1 and 2 shall be OFF.

[022] Second Keypad Options

Default		Opt.	ON	OFF
ON	|_____|	1	Local Clock Display ON	Local Clock Display OFF
OFF	|_____|	2	Local Clock Displays 24-hr Time	Local Clock Displays AM/PM
ON	|_____|	3	Auto Alarm Scroll ON	Auto Alarm Scroll OFF
OFF	|_____|	4	For Future Use	For Future Use
OFF	|_____|	5	Power LED Enabled	Power LED Disabled
ON	|_____|	6	Power LED AC Present ON	Power LED AC Present OFF
ON	|_____|	7	Alarms Displayed While Armed	Alarms Not Displayed While Armed
OFF	|_____|	8	Auto-Scroll Open Zones ON	Auto-Scroll Open Zones OFF

[023] Third Keypad Options

Default		Opt	ON	OFF
OFF	|_____|	1	Armed LED On in Sleep Mode	Armed LED Off in Sleep Mode
ON	|_____|	2	Keypad Status Shows Stay Arm	Keypad Status Shows Stay/Away Arm
ON	|_____|	4	Prox Tag Will Arm/ Disarm	Prox Tag Does Not Arm/Disarm
OFF	|_____|	7	Temperature Display Enabled	Temperature Display Disabled
Programming options indicated in GREY are required for systems compliant with EN50131-1 and EN50131-3 standards. Section [023]: 1=OFF				

[030] LCD Message

\|____\|____\|____\|____\|____\|____\|____\|____\|____\|____\|____\|____\|____\|____\|____\|____\|

ⓘ **Note:** Clock display (Section [022], Option 1) must be enabled.

[031] Downloaded LCD Message Duration

Default: 000 |_____|_____|_____| (Valid entries are 000-255), 000=Unlimited Message Display.

This number represents the number of times the downloaded message must be cleared before it is permanently removed. Press any key to delete message.

[041] Indoor Temperature Zone Assignment

Default: 000 |_____|_____|_____| (Valid entries are 000-248)

[042] Outdoor Temperature Zone Assignment

Default: 000 |_____|_____|_____| (Valid entries are 000-248)

[101]-[348] Door Chime for Zones 1-248

The keypad can be programmed to make up to four different chime sounds for individual zones. (e.g., for Zone 1, enter Section [101], for Zone 2 enter Section [102]). Default: 01 |_____|_____|

Option	Chime
01	6 beeps
02	Bing-Bing tone
03	Ding-Dong tone
04	Alarm tone (4 second duration)
05	Zone Name

[991] Reset Keypad Programming to Factory Defaults

1. Press [*][8][Installer Code].

2. Enter [991].

3. Use the [<][>] keys to scroll to the applicable keypad.

4. Press [*] to select the keypad.

5. Re-enter [Installer Code].

6. Press [*] to reset the selected keypad to factory defaults.

FCC Compliance Statement

This equipment generates and uses radio frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for Class B device in accordance with the specifications in Subpart "B" of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in any residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to television or radio reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient the receiving antenna

- Relocate the alarm control with respect to the receiver

- Move the alarm control away from the receiver

- Connect the alarm control into a different outlet so the alarm control & receiver are on different circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC helpful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402, Stock # 004-000-00345-4.

This Class B digital apparatus complies with CanadianI CES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. IC:160A-HS2LCDWF(V)PROx The term IC before the radio certification number signifies that the Industry Canada technical specifications were met.

Simplified EU declaration of conformity

Hereby, Tyco Safety Products Canada Ltd. declares that the radio equipment type is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

HS2LCDWFVPRO4: http://dsc.com/1903009

HS2LCDWFVPRO8: http://dsc.com/pdf/1903006

Frequency band and Maximum power

433,22 MHz - 434,62 MHz: 10 mW

868.0 MHz - 868.6 MHz: 10 mW

868,7 MHz - 869,2 MHz: 10 mW

119 KHz – 135 KHz: 66 dbµA/m @ 10 m

European single point of contact: Tyco Safety Products, Voltaweg 20, 6101XK Echt, Netherlands.

This installation sheet applies to models HS2LCDWFPRO8 and HS2LCDWFVPRO8.

The Model HS2LCDWFPRO8 and HS2LCDWFVPRO8 keypads have been certified by Telefication according to EN50131-1:2006+ A1:2009, EN50131-3:2009 for Grade 2, Class II.

Caution: Do not dispose of the waste battery as unsorted municipal waste. Consult your local rules and/or laws regarding recycling of this battery.

The use of external power adapter is optional and it has not been investigated by Telefication for EN50131 certified installations. For INCERT certified applications the wireless keypads have been evaluated under the requirements of T031A using power supply type C.

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Tech Support: 1-800-387-3630 (Canada, US), 905-760-3000

Limited warranty

Digital Security Controls (DSC) warrants that for a period of 12 months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use and that in fulfilment of any breach of such warranty, DSC shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of DSC such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment. The foregoing warranty shall apply only to the original buyer, and is and shall be in lieu of any and all other warranties, whether expressed or implied and of all other obligations or liabilities on the

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HS2LCD(RF)PROx Introduction

The HS2LCD(RF)PROx keypads are compatible with the following panels: HS3032, HS3128, HS3248.

ⓘ **Note:** This equipment must be installed by a skilled person in non-hazardous locations.

⚠ **WARNING:** All equipment must be turned off before you begin the installation.

Safety instructions

Read the safety information before you install the equipment.

➤ **Important:** This equipment must be installed by a skilled person only. A skilled person is an installer with appropriate technical training. The installer must be aware of potential hazards during installation and measures available to minimize risks to the installer and other people.

- Before you install this equipment, disconnect all power sources (for example mains, battery, and telephone line) connected to the alarm panel.

- Install the equipment indoors in a non-hazardous environment where the following conditions are met:

    - Pollution degree - Maximum 2

    - Over voltages - Category II

- Internal wiring must be routed to prevent strain on wire and terminal connections, loose terminal connections, and damage to conductor insulation.

- Instruct the user that there are no user serviceable parts in this equipment. All equipment must be serviced by a skilled person.

Specifications

- Temperature range: -10°C to +55°C (14°F to 131°F); UL/ULC: 0°C to +49°C (32°F to 120°F)

- Humidity (MAX): 93%R.H. non-condensing

- Plastic enclosure protection degree: IP30, IK04

- Voltage rating: 13.8Vdc nominal (power provided by the compatible control panel)

- Connects to control panel Corbus via 4 wires

- 1 configurable zone input or PGM output*

- HS2LCD(RF)PROx Current draw:55mA(min)/105mA(max)

- Wall-mount tamper

- 5 programmable function keys

- Ready (Green LED), Armed (Red LED), Trouble (Yellow LED), AC (Green LED)

- Dimensions (L x W x D): 168mm x 122mm x 20 mm

- Weight: 260g

- Low temperature sensor

- Frequency: 433 MHz (HS2LCDRFPRO4)

- 868 MHz (HS2LCDRFPRO8)

- 912-919MHz (HS2LCDRFPRO9)

- Up to 128 wireless zones

*Zone not to be programmed as Fire type or 24h type.

ⓘ **Note:** Keypads contain no serviceable parts.

ⓘ **Note:** Only models operating in band 912-919MHz are UL/ULC listed.

Unpack

The keypad package includes the following:

Component	Number
Keypad	1
Mounting screws	4
End-of-line resistors	2
Keypad inner door labels	1
Tamper switch	1
Installation Instructions	1
Mini proximity tag (MPT)	1

Mount the Keypad

Mount the keypad where it is accessible from designated points of entry and exit. Once a dry and secure location has been selected, perform the following steps to mount the keypad.

Disassemble Keypad

Insert the tip of a flat-head screwdriver into the slots at the bottom left and right of the keypad.

Gently pry open the faceplate. This will remove it and allow access for mounting.

Mount and Wire Keypad
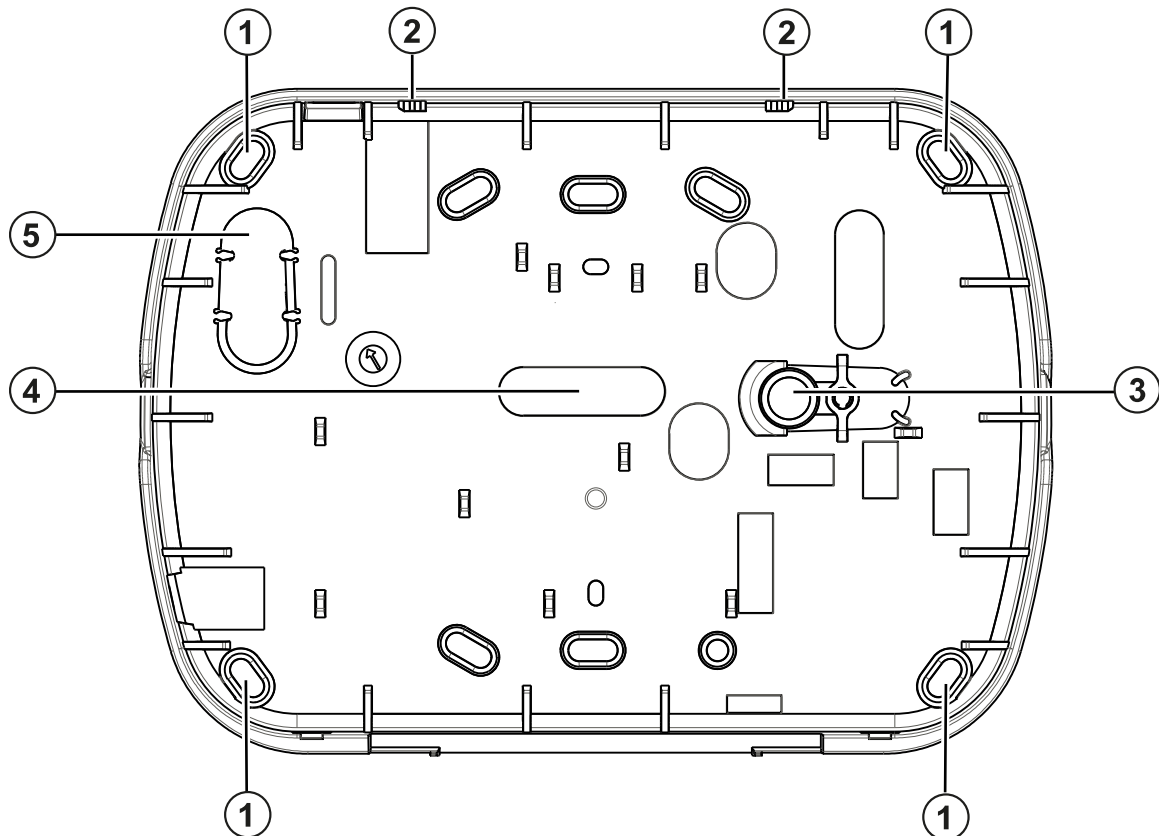
Callout	Description
1	Mounting holes
2	Latch
3	Tamper
4	Knockout
5	Wiring slot

1. Secure keypad to wall using mounting holes. Use all four screws provided unless mounting on a single gang box. Use the plastic anchors supplied if the unit is to be mounted on drywall.

2. If using the keypad tamper, secure the tamper plate to the wall with a screw.

    ⓘ **Note:** For UL/ULC listed commercial burglary installations, the use of the keypad tamper is mandatory.

3. Run wire through wiring slot or knockouts. Connect Corbus and PGM/Zone wiring to keypad. Place tamper switch into tamper hole on backplate.

4. Place keypad into backplate, ensuring the wire is pushed back into the wall as much as possible. Route the wire inside the keypad, ensuring high components are avoided. Snap the front assembly closed, ensuring that there is no pressure to the keypad from the wire below.

ⓘ **Note:** If any tension is found between the front keypad assembly and the wiring, open the keypad, reroute the wire and close again. Repeat these steps until the keypad is closed properly.

Wiring

To wire the keypad, complete the following steps:

1. Before wiring the unit, ensure that all power (AC transformer and battery) is disconnected from the control panel.

2. Connect the four Corbus wires from the control panel (red, black, yellow and green) to the keypad terminals. Refer to the diagram: If programmed as an input, a device - such as a door contact - may be connected to the 'P/Z' terminal of the keypad. This eliminates the need to run wires back to the control panel for the device. To connect the zone, run one wire from the device to the 'P/Z' terminal and the other wire from the device to the B (black) terminal. For powered devices, run the red wire to the R (positive) terminal and the black wire to the B (negative) terminal. When using end of line supervision, connect the zone according to one of the configurations described in the Reference Manual.

   ⓘ **Note:** For UL/ULC installations, the zone input is a supervised type (SEOL/DEOL). The supervision resistor is 5600Ω. If no EOL supervision is used, there is a three foot maximum distance required for the connected device. Use only in conjunction with UL/ULC listed devices

   ⓘ **Note:** This initiating device connected to this input contact is not to be used for medical or fire applications

3. If the 'P/Z' terminal is programmed as an output, a small relay (such as DSC model RM-1 or RM-2) or buzzer or other DC operated device may be connected between the positive supply voltage and the 'P/Z' terminal (max.load is 50mA)

   ⓘ **Note:** For UL/ULC-listed installations, use UL/ULC listed devices.

Apply Power

About this task: Once all wiring is complete, and the equipment is secured to the building structure with at least two screws, apply power to the control panel

1. Connect the battery leads to the battery.

2. Connect the AC transformer.

For more information on control panel power specifications, see the Reference manual.

Program the keypad

1. Press [*][8][Installer Code].

2. Use the [<][>] keys to navigate through the menus or jump directly to a specific section by entering the section number.

Programming consists of toggling on and off options in each section or by populating data fields. Toggle options are d or disabled by pressing the corresponding number on the keypad. For example, to toggle options 1 and 4, press the [1] and [4] keys. All enabled options are displayed.

a. To input data, use the [<][>] keys to select a character then press the keypad button for the number/letter.

b. Using the [<][>] keys, scroll to the next character and repeat the procedure. For information on entering HEX data, refer to the associated reference manual.

Language Programming

Enter [000][000]. Enter the two-digit number corresponding to the language desired:

Languages

01 = English (default)	11 = Swedish	21 = Russian
02 = Spanish	12 = Norwegian	22 = Bulgarian
03 = Portuguese	13 = Danish	23 = Latvian
04 = French	14 = Hebrew	24 = Lithuanian
05 = Italian	15 = Greek	25 = Ukrainian
06 = Dutch	16 = Turkish	26 = Slovak
07 = Polish	17 = Future Use	27 = Serbian
08 = Czech	18 = Croatian	28 = Estonian
09 = Finnish	19 = Hungarian	29 = Slovenian
10 = German	20 = Romanian	

Enroll the Keypad

Keypads can be enrolled automatically or manually. In either case, the serial number of the device is used as an identifier.

ⓘ **Note:** If there is no keypad enrolled on the system, once you power up, the keypad will display the message: Press any key to enroll. Other keypads can then be enrolled from the first keypad. Use one of the following enrollment options:

[902][000] Auto Enroll

When this mode is selected, the total number of keypads currently enrolled is displayed on the keypad.

• Enter [902][000] to begin the auto-enrollment of new keypads.

As each device is enrolled, the number of enrolled modules is displayed.

[902][001] Manual Enroll

To manually enroll individual keypads:

1. Enter [902][001] or use the [<][>] keys and press [*].

2. When prompted, enter the serial number of the keypad found on the back of the device.

3. An error tone is sounded if an invalid serial number is received. Once enrolled, the device model, serial number and slot assignment are displayed. Keypads are enrolled into the next available slot for the device. The slot assignment can be changed using the [<][>] keys.

4. To cancel the enrollment of a module, press [#].

    ⓘ **Note:** Once the maximum number of devices have been enrolled, an error tone sounds and a warning message is displayed.

    ⓘ **Note:** Only one HS2LCDRFPROx may be enrolled on a system.

[902][002] – Module Slot Assignment

This section is used to change the slot number in which a module is enrolled. To change the slot number:

1. Enter [902][002] or use the [<][>] keys and press [*].

2. Enter the serial number of the module.

3. When prompted, enter the new two-digit slot number. The previous slot assignment is replaced with the new one. An error tone sounds if an invalid slot number is entered.

[902][003] – Module Slot Assignment

Similarly to [002], this section is also used to change the slot number of a module. With this option, however, the serial number is not required. To change the slot number:

1. Enter [902][003] or the use the [<][>] keys and press [*].

2. Use the [<][>] keys to locate the module then press [*] to select.

3. Enter the new two-digit slot number. The previous slot assignment is replaced with the new one. An error tone sounds if an invalid slot number is entered.

[902][101] Delete Keypads

1. Enter [902][101] or use the [<][>] keys and press [*].

2. Use the [<][>] keys to scroll to the specific keypad to delete.

3. Press [*] to select the module and when prompted, press [*] again to delete it.

[903][101] Confirm Keypad

To confirm the enrollment of individual keypads and to locate them physically:

1. Enter [903][101] or use the [<][>] and press [*].

2. Use the [<][>] keys to scroll to the applicable keypad. The module's serial number and slot number are displayed on the keypad and the status LEDs on the device flash.

3. To confirm the keypad, press [*]. If communication with a module is lost at the time of confirmation, a warning message is displayed for 1 second before exiting the section.

Assign a Partition to the Keypad

The keypad must be assigned to a partition if supervision or keypad zones are required. Keypad assignments and keypad option programming must be done at each keypad individually.

ⓘ **Note:** On the HS3248 panel, the maximum number of partitions is 32 and the maximum number of keypads is 32. For more information on the system configurations, refer to the Reference Manual.

At each keypad installed on the system:

1. Press [*][8][Installer Code].

2. Enter [861]-[892] for Keypad Programming and Keypad Partition Mask, corresponding to keypads 1 to 32.

3. Press [*] for partition assignment.

4. Enter 01 to 32 for partition assignment or use the [<][>] keys to scroll to the specific partition If partitioning is not used, enter [01]. For Global keypads, enter [00].

5. Press [#] twice to exit programming.

6. Continue this procedure for each keypad until all have been assigned to the correct partition.

Program Labels

1. Press [*][8][Installer Code].

2. Press [*] and use the [<][>] keys to scroll to Zone Labels and press [*] again. The first zone is displayed. Alternatively, enter, [000][001].

3. Use the [<][>] keys to scroll to the zone label to be programmed and press [*] or enter the zone number (e.g., 001, for zone label 1).

4. Use the [<][>] keys to scroll to the desired character's location, using the [<][>] keys.

5. Enter the number of the corresponding character group until the desired character is displayed (see the following table). Example, press the "2" key three times to enter the letter "F". Press the "2" key four times to enter the number "2". Press [*], then scroll to "Save". Press [*] again to save the label. To delete a character, use the [<][>] keys to move the cursor under the character, then press [0]. If any key other than [<][>] is pressed before [0], the cursor moves one space to the right and deletes that character.

[1] - A, B, C, 1	[5] - M, N, O, 5	[9] - Y, Z, 9, 0
[2] - D, E, F, 2	[6] - P, Q, R, 6	[0] - Space
[3] - G, H, I, 3	[7] - S, T, U, 7	[*] - Select
[4] - J, K, L, 4	[8] - V, W, X, 8	[#] - Escape

CHANGE CASE – Will toggle the next letter entries between upper case (A, B, C...) and lower case letters (a, b, c...).

ASCII ENTRY – Used to enter uncommon characters. Valid entries range from 000 to 255. Use the [<] [>] keys to scroll through the characters or enter a 3-digit number from 000-255. Press [*] to enter the character into the label.

CLEAR TO END – Clears the display from the character where the cursor was located to the end of the display.

CLEAR DISPLAY – Clears the entire label.

Continue from Step 2, until all labels are programmed.

Label Library

The Label Library is a database of words commonly used when programming labels. Individual words can be combined as needed (e.g., Front Door). Each line of the display supports a maximum of 14 characters. If a word will not fit on a line, scroll right until the cursor appears at the first character of the second line and then add the word.

To program a custom label using the Label Library:

1. Press [*][8][Installer Code][000][001].

2. Enter [001] (to program the label for zone 01), or use the [<][>] keys to scroll to the Zone Labels and then press [*]. The current label name is displayed for that zone.

3. Press [*] to open the menu.

4. Press [*] again to select the "Word Entry" option.

5. Enter the 3-digit number corresponding to a word (see Words Library) or use the [<][>] keys to view words in the library.

6. Press [*] to select the word.

7. To add another word, repeat the previous procedures from step 3.

8. To add a space, press the right scroll key [>].

9. To clear characters, select "Clear to End" or "Clear Display" from the menu.

10. To save the current label and exit, press [#].

Broadcast LCD Labels

If more than one LCD keypad is present on the system, labels programmed on one keypad will be broadcast to all other LCD keypads, after the change is confirmed.

Change Brightness/Contrast/Buzzer

1. Press [*][6][Master Code].

2. Use the [<][>] keys to scroll to either Bright Control, Contrast Control, or Buzzer Control.

3. Press [*] to select one of the following settings:

   - Brightness Bar Control - 15 backlighting levels available.

   - Contrast Control - 15 display contrast levels available.

   - Buzzer Control - 15 buzzer control levels available.

4. Use the [<][>] keys to scroll to the desired setting.

Keypad Programming

1. Press [*][8][Installer Code].

2. Select one of the programming options identified in the following.

[860] Keypad Slot Number

Not for programming; the two-digit slot number is displayed for informational purposes only.

[861]-[892] Keypad Programming Sections

[000] Address of Partition

Default: 01

A 2-digit entry is required to assign the keypad to a partition. Valid entries are 00-32.

[001]-[005] Keypad Function Key Programming

To program a function key:

1. Press [*][8][Installer Code].

2. Enter [861]-[892] for keypad programming.

3. Enter [001]-[005] for function keys 1-5 or use the [<][>] keys and press [*].

4. Enter a 2-digit number to assign a function key operation - [00]-[68]. See the following table.

5. Repeat from step 3 until all function keys are programmed.

6. Press [#] twice to exit Installer Programming.

Table 1: Function Key Assignment

	Function Key	**Button**	**Valid Range**	**Default**	**Function**	
[001]	Key 1	⌂	00–68	03	Stay Arm	|__|__|
[002]	Key 2	⌂	00–68	04	Away Arm	|__|__|
[003]	Key 3	🔔	00–68	06	Chime ON/ OFF	|__|__|
[004]	Key 4	⟳	00–68	22	Com Output 2	|__|__|

Table 1: Function Key Assignment

	Function Key	Button	Valid Range	Default	Function	
[005]	Key 5	⬛	00–68	16	Quick Exit	|__|__|

Keypad Function Keys

The following table describes the available function key options:

[00] - Null	[14] - Global Disarming	[32] - Bypass Mode
[02] - Instant Stay Arm	[15] - Temperature	[33] - Bypass Recall
[03] - Stay Arm	[16] - [*][0] Quick Exit	[34] - User Programming
[04] - Away Arm	[17] - Arm Interior	[35] - User Functions
[05] - [*][9] No-Entry Arm	[21] - [*][7][1]Command Output 1	[37] - Time & Date Program
[06] - [*][4] Chime ON/OFF	[22] - [*][7][2]Command Output 2	[39] - Trouble Display
[07] - [*][6][----][4] System Test	[23] - [*][7][3]Command Output 3	[40] - Alarm Memory
[09] - Night Arm	[24] - [*][7][4]Command Output 4	[61]-[92] - Partition Select 1-32
[12] - Global Stay Arm	[29] - Bypass Group Recall	
[13] - Global Away Arm	[31] - Local PGM Activate	

[011] Keypad Input/Output Programming

Zone / PGM Number Default 000 |____|____|____|

[012] Local PGM Output Pulse Activation Time

|_____|_____| Minutes (00-99)	|_____|_____| Seconds (00-99)

[021] First Keypad Options

Default		Opt.	ON	OFF
ON	|___|	1	Fire Key Enabled	Fire Key Disabled
ON	|___|	2	Medical Key Enabled	Medical Key Disabled
ON	|___|	3	Panic Key Enabled	Panic Key Disabled
ON	|___|	4	Display Access Code	Display Xs When Entering Access Code

ⓘ **Note:** For EN50131-1/EN50131-3 compliant systems, section [021], options 1 and 2 shall be OFF.

[022] Second Keypad Options

Default		Opt.	ON	OFF
ON	|___|	1	Local Clock Display ON	Local Clock Display OFF
OFF	|___|	2	Local Clock Display 24-hr	Clock Display AM/PM
ON	|___|	3	Auto Alarm Mem Scroll ON	Auto Alarm Mem Scroll OFF
OFF	|___|	4	Future Use	
OFF	|___|	5	Power LED Enabled	Power LED Disabled
ON	|___|	6	Power LED AC Present ON	Power LED AC Present OFF
ON	|___|	7	Alarms Display While Armed	Alarms Not Displayed While Armed
OFF	|___|	8	Auto-Scroll Open Zones ON	Auto-Scroll Open Zones OFF

[023] Third Keypad Options

Default		Opt.	ON	OFF
OFF	|___|	1	Armed LED Power Save	Armed LED Off in Sleep Mode
ON	|___|	2	Keypad Status Shows Stay Arm	Keypad Status Shows Stay/Away Arm
OFF	|___|	3	5th Terminal is PGM Output	5th Terminal is Zone Input
ON	|___|	4	Prox Tag Will Arm/Disarm	Prox Tag Does Not Arm/Disarm
OFF	|___|	5	Future Use	
OFF	|___|	7	Local Display of Temperature	No Local Display of Temperature
OFF	|___|	8	Low Temperature Warning Enabled	Low Temp Warning Disabled

[030] Downloaded LCD Message

\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|

\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|___\|

ⓘ **Note:** Clock display (Section [022], Option 1) must be enabled.

[031] Downloaded LCD Message Duration

Default: 000 |____|____|____|
(Valid entries are 000-255, 000=Unlimited Msg Display)
This number represents the number of times the downloaded message must be cleared before it is permanently removed. This message can be cleared by pressing any key.

[041] Indoor Temperature Zone Assignment

Default: 000 |____|____|____| (Valid entries are 000-248)

[042] Outdoor Temperature Zone Assignment

Default: 000 |____|____|____| (Valid entries are 000-248)

[101]-[348] Door Chime for Zones

Default: 01 |____|____|

The keypad can be programmed to make up to four different chime sounds for individual zones.

(e.g., for Zone 1, enter section [101], for Zone 2 enter section [102]).

01 6 beeps	04 Alarm Tone (4s duration)
02 Bing bing tone	05 Zone Name
03 Ding dong tone	

[991] Reset Keypad Programming to Factory Defaults

1. Press [*][8][Installer Code].

2. Enter [991].

3. Use the [<][>] keys to scroll to the applicable keypad.

4. Press [*] to select the keypad.

5. Re-enter [Installer Code].

6. Press [*] to reset the selected keypad to factory defaults

Proximity Tags Support (HS2LCDPRO)

The proximity tag can perform any keypad function that would normally require a user access code or to activate a programmable output. Present the prox tag to the prox reader (⌨) to the left of the keypad LCD.

Assign Proximity Tags

1. Press [*][5][Master/Supervisor Code].

2. Enter a 4-digit user number.

3. Press [2].

4. Present the tag to the tag reader on the keypad.

Delete Proximity Tags

1. Press [*][5][Master/Supervisor Code].

2. Enter a 4-digit user number.

3. Press [*] to delete when prompted.

LED Bar

On the HS2LCD(RF)PRO keypads, a blue LED bar indicates that a prox tag is presented. The LED bar flashes three times when a valid prox tag is being read by the keypad. If the prox tag is invalid, the LED bar stays on steadily and the keypad sounds an error tone. The brightness of the LED bar is adjustable from the [*][6] menu.

Downloading

The HS2LCD(RF)PROx keypads can be programmed over DLS 5. This auto-detects the keypad type and downloads programming accordingly.

Wireless Device Setup and Programming

This section describes how to enroll and program wireless devices such as contacts, motion sensors and sirens on the alarm panel.

ⓘ   **Note:** The following sections are only available on RF models, or with an HSM2HOST installed.

[804] [000] Enroll Wireless Devices

1. Once the HSM2HOST or HS2LCDRFPROx is installed and enrolled on the alarm panel wireless devices can be enrolled using the following method: Enter Installer Programming section [804] [000]:

2. When prompted, either activate the device (see device installation sheet) to enroll immediately or enter a device ID number. Do the latter to pre-enroll devices then enroll them later at the customer site.

    The alarm panel determines the type of device being enrolled and presents the appropriate programming options.

Table 2: Wireless Device Options

Device Type	Programming Options
Zone	(01) Zone type (02) Partition assignment (03) Zone label
Wireless key	(01) Partition assignment (02) User label

Table 2: Wireless Device Options

Device Type	Programming Options
Siren	(01) Partition assignment (02) Siren label
Repeater	(01) Repeater label

3. Use the scroll keys or type in the corresponding number to select an option.

4. Scroll through the available selections, key in a number or enter text as appropriate.

5. Press [*] to accept and move to the next option.

6. Once all options are configured, the system prompts to enroll the next device.

7. Repeat the process described above until all wireless devices are enrolled.

ⓘ **Note:** The configuration options listed above can be modified using [804][911] Modify Device.

[804][001]-[732] Wireless Device Configuration

To configure wireless devices:

1. Enter Installer Programming section [804] then select one of the following sub-sections:

Table 3: Wireless Zone Sub-Sections

Sub-Section	Description
001-248	Configure wireless zones
551-566	Configure wireless sirens
601-632	Configure wireless keys
701-732	Configure wireless keypads

2. Select a device to configure using the scroll keys or go directly to a specific device by entering a hotkey.

3. Use the scroll buttons or enter a hot key to select a configuration option for the device. See device sheets for details.

4. Press [*] to accept and move to the next option.

5. Once all options are configured, the system returns to the base configuration menu.

Repeat the process described above to configure other wireless devices.

[804][801] RF Jam Detect

RF jam detection (continuous interfering transmissions on the radio network) can be turned on or off. When on, RF jamming is logged and reported

To configure RF jamming:

1. Enter Installer Programming section [804][801].

2. Select one of the following options by scrolling or entering the hotkey:

3. Press [*] to accept the selection.

Table 4: RF Jam Detect Options

00	Enabled/Disabled	Jamming detection and reporting is enabled/disabled Note: Must be Enabled for UL/ULC listed installations.
01	UL 20/20-USA	Continuous RF jamming for 20 seconds
02	EN 30/60-Europe	30 seconds of accumulated jamming within 60 seconds
03	Class 6 30/60-British	As EN (30/60) but reported only if the jamming duration exceeds 5 minutes

[804][802] Wireless Supervision Window

This option is used to program the length of time a wireless device can be absent from the system before a fault is generated.

ⓘ **Note:** For EN installations, 1 hour or 2 hours must be selected.

To program the Wireless Supervisory Window:

1. Enter Installer Programming section [804][802].

2. Select one of the following options by scrolling or entering the hotkey.

00	Enabled/Disabled
01	After 1 Hour
02	After 2 Hour
03	After 4 Hour
04	After 8 Hour
05	After 12 Hour
06	After 24 Hour

3. Press [*] to accept the selection.

4. Press [#] to exit the section.

ⓘ **Note:** For UL Residential Burglary (UL1023), Home Health Care (UL1637), ULC Residential Burglary (ULC/ORD-C1023) installations, the maximum Supervision window shall be set to 24 hours.

For UL Residential Fire (UL985) installations, the maximum supervision window is set to 200s.

For UL Commercial Burglary (UL1610/UL365) and ULC Residential Fire (ULC-S545), the maximum supervision window shall be set to 4 hours.

[804][810] Wireless Option 1

To program wireless options:

1.   Enter Installer Programming section [804][810].

2.   Select one of the following options by scrolling or entering the hotkey.

Table 5: Wireless Options

01	RF Delinquency	On: the system cannot be armed if a wireless supervisory trouble exists. An RF delinquency trouble is generated. Off: wireless supervisory troubles do not prevent arming.
02	WLS Supervisory/RF Jam Alarm	On: if a supervisory or jamming trouble occurs during Away arming, the siren activates and the event is logged and reported. Off: supervisory or RF jam troubles during Away arming do not activate the siren or get logged and reported.
03	Module Tamper	On: module tampers are logged and reported. Off: module tampers are not logged or reported.
04	Fire Supervision	On: fire devices are supervised every 200 seconds. If the device fails to report within this window, a supervision trouble is generated. Off: fire devices follow the supervision window programmed in section 802, up to a maximum of 18 hours. The supervisory window can be programmed with a higher value, but detectors still go into fault after 18 hours.

Table 5: Wireless Options

05	Smart Temp Reporting	On: Temperature reporting from all smart devices enabled. Off: Temperature reporting from all smart devices disabled.

3. Press [*] to accept the selection and [#] to exit.

[804][841] Visual Verification Programming

To program wireless options:

1. Enter Installer Programming section [804][841].

2. Select one of the following options by scrolling or entering the hotkey

Table 6: Visual Verification Sub-Sections

001	Visual Verification	On: Alarms trigger image capture from PIR Cameras Off: Alarms do not trigger image capture from PIR Cameras
002	View Time Window	01 Alarm + 5 Minutes 02 Alarm + 15 minutes 03 Alarm + 1 Hour
003	View Other Alarms	01 Fire key enabled/disabled 02 Duress key enabled/disabled 03 Medical key enabled/disabled 04 Panic key enabled/disabled

[804][901]-[905] Delete Wireless Devices

To delete wireless devices:

1. Enter Installer Programming section [804] then select one of the following sub-sections:

Table 7: Module Label Sub-Sections

Sub-Section	Description
901	Delete wireless zone devices
902	Delete wireless key
903	Delete sirens
904	Delete repeaters
905	Delete keypads

2. Select a device to delete using the scroll keys or go directly to a specific device by entering a hotkey.

3. Press [*] to delete or [#] to exit.

[804][921]-[925] Replace Wireless Devices

Use this option to replace a faulty device enrolled on the system with another device of the same type while maintaining the configuration of the original. The faulty device does not need to be deleted. To replace a wireless device:

1. Enter Installer Programming section [804] then select one of the following sub-sections.

Table 8: Replace Device Sub-Sections

Sub-Section	Description
921	Replace wireless zone devices
922	Replace wireless keys
923	Replace sirens
924	Replace repeater
925	Replace keypad

2. Press [*] to select a sub-section. The first available device is displayed.

3. Select a device to replace using the scroll keys or go to a specific device by entering a hotkey. Press [*]. When prompted, activate the device (full enrollment) or enter the device ID (pre-enrollment). A message is displayed confirming enrollment.

[804][990][001- 005] Show All Devices

Use this section to review wireless devices enrolled on the system and to view serial numbers associated with each device.

To review wireless device information:

1. Enter Installer Programming section [804][990] then select one of the following sub-sections:

Table 9: Wireless Device Sub-Sections

Sub-Section	Descriptions
001	All zones
002	Repeaters
003	Sirens
004	Wireless keys
005	Keypads

2. Press [*] to select a wireless device type. The first available device is displayed.

3. Use the scroll keys to view the enrolled devices.

[904] Placement Testing Wireless Devices

This test is used to determine RF signal status for wireless devices and can be performed at a system keypad or at the individual device. These instructions pertain to testing at the keypad. For instructions on placement testing at the device, refer to the installation sheet provided with the wireless equipment. The following test modes are available:001-248 – Test wireless zones.

Table 10: Wireless Device Placement Test Modes

001-248	Test wireless zones	Test wireless devices individually by zone.
521-528	Test all repeaters	Test each enrolled wireless repeater. 521-528 for repeaters 1-8.
551-566	Test all sirens	Test each enrolled wireless siren. 551-556 for sirens 1-16
601-632	Test all wireless keys	Test individual wireless keys. Once in this section, press a button on the wireless key to begin the test. 601-632 for wireless keys 1-32.
701-732	Test all keypads	Test each enrolled keypad 701-732 for keypads 1-32.

ⓘ **Note:** You can enroll a maximum number of 16 wirefree keypads on the HS3248 panel. When you perform a placement test on a wirefree keypad, the keypad displays the message **Does not exist**.

Two test results are provided:

- 24-hour: Average results of signal strength testing over a 24-hour period.

- Now: Signal status results of the current test.

During testing, the Ready and Armed LED's flash to indicate data is being received. A flashing Trouble LED indicates RF interference. The following status indicators may be displayed:

Table 11: Wireless Device Status Indicators

LCD	Status	Repeater [905]
Strong	Strong signal strength	Repeater 1
Good	Good signal strength	Repeater 2
Poor	Poor signal strength	Repeater 3
1-Way	The device is operating in 1-way mode only. The alarm panel cannot configure or control the device	Repeater 4
Not Test	Displayed as the Now result if no test was performed.	Repeater 5

Table 11: Wireless Device Status Indicators

LCD	Status	Repeater [905]
None	Always displayed as the 24-hour result when testing wireless keys.	Repeater 6

ⓘ   **Note:** For UL/ULC installations, only STRONG signal levels are acceptable.

Troubleshooting

1. When attempting to assign a zone number to a wireless device, the keypad responds with a long beep.

   - Ensure that the keypad is properly connected to the Corbus.

2. After entering the Device ID of a wireless device, then tripping it, the keypad does not indicate the zone is open.

   - Ensure the Device ID has been entered correctly.

   - Ensure that the zone is enabled for the partition (if partition programming is used).

   - Ensure that the wireless zone is not assigned to a zone used by HSM3408/HSM2108 modules, an on-board zone or a keypad zone.

   - Ensure that the zone is programmed for something other than "Null Operation".

3. "Poor" or no results are received from a module placement test.

   - Verify that you are testing the correct zone.

   - Verify the device is in range of the keypad. Test the device in the same room as the receiver.

   - Confirm that the keypad is properly connected to the Corbus.

   - Check that the zone is being tested correctly. Refer to the instructions that came with the device.

   - Check that the batteries are working and installed correctly.

   - Look for large metal objects that may be preventing the signal from reaching the keypad.

   - The device must be located where consistent "Good" results are obtained. If several devices show "Poor" results, or if panic pendants and wireless keys operate inconsistently, move the receiver.

Keypad Symbols

Table 12: Keypad Symbols

✔	Ready Light (green) – If the Ready light is on, the system is ready for arming.
🔒	Armed Light (red) – If the Armed light is on, the system has been armed successfully.
⚠	System Trouble – Indicates that a system trouble is active.
∿	AC – Indicates that AC is present at the main panel.

Simplified EU declaration of conformity

Hereby, Tyco Safety Products Canada Ltd. declares that the radio equipment type is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

HS2LCDPRO: http://dsc.com/pdf/1903004

HS2LCDRFPRO4: http://dsc.com/1903008

HS2LCDFFPRO8: http://dsc.com/pdf/1903005

Frequency band and Maximum power

433,22 MHz - 434,62 MHz: 10 mW

868.0 MHz - 868.6 MHz: 10 mW

868,7 MHz - 869,2 MHz: 10 mW

119 KHz – 135 KHz: 66 dbµA/m @ 10 m

European single point of contact: Tyco Safety Products, Voltaweg 20, 6101XK Echt, Netherlands.

This installation sheet applies to models HS2LCDWFPRO8 and HS2LCDWFVPRO8.

The model HS2LCDPRO keypad is certifiedby Telefication according to EN50131-1:2006+ A1:2009, +A2:2017, EN50131-3:2009 for Grade 3, Class II.

The model HS2LCDRFPRO8 keypad is certified by Telefication according to EN50131-1:2006 + A1:2009, EN50131-3:2009 for Grade 2, Class II.

⚠ **WARNING:** Please refer to the System Installation Manual for information on limitations regarding product use and function and information on the limitations as to liability of the manufacturer.

ⓘ **Note:** These instructions shall be used in conjunction with the system Installation Manual of the Control Panel with which this equipment is intended to be used.

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Tech Support: 1-800-387-3630 (Canada, US), 905-760-3000

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