VANDERBILT SPCN341 GSM Module Instructions

Contents

VANDERBILT SPCN341 GSM Module

Product Information SPCN341 2G/4G Module with Antenna

- The SPCN341 modem provides the SPC controller with a 2G/4G interface.
- The modem supports 4G and 2G communications, enabling IP communications to central station software, SPC Connect, and mobile technologies.
- The Pay As You Go (PAYG) credit balance can also be read by SPC controller when a PAYG SIM is used with a provider that supports USSD credit checks.
- The device must only be connected to SPC42xx/43xx/52xx/53xx/63xx.
- The device comes with an antenna and requires a standard-size SIM card to operate.

Product Usage Instructions

1. When replacing or installing modules on the SPC system, always ensure that the mains supply and the battery are disconnected. Ensure that all antistatic precautions are adhered to when handling connectors, wires, terminals, and PCBs.
2. Do not reduce the standard-size SIM card to micro- or nano-size.
3. Before installing the 2G/4G module onto the SPC controller, ensure that a functioning SIM card is installed on the module.
4. **To insert a SIM card into the 2G/4G module:**
    1. Place a finger on the SIM card holder and slide the SIM card holder flap to the right.
    2. Rotate the SIM card holder flap to the ‘up’ position.
    3. Slide the SIM card into the SIM card holder flap.
    4. Rotate the SIM card holder flap back to its original position.
    5. Press and slide the SIM card holder flap to the left to click into place.
5. Make a note of the unlock code for your SIM card. The code is required when enabling the SIM card on the SPC system.

6. **To install the SPCN341 (with SIM card):**
    1. Ensure the AC mains power and battery backup connections are removed.
    2. Insert the push-in mounting pillars (included with the module) into the four hole positions on either the primary slot (left) or secondary slot (right) on the controller.
    3. Align the 16-pin female socket over the 16-pin male connector, ensuring that the holes on the SPCN341 are aligned with the top of the mounting pillars.
    4. Firmly but gently press down to secure the module.
    5. Attach the antenna (supplied) to the SMA connector on the 2G/4G module.

This device must only be connected to SPC42xx/43xx/52xx/53xx/63xx.

EC Declaration of Conformity

Hereby, Vanderbilt International (IRL) Ltd declares that this radio equipment type is in compliance with all relevant EU Directives for CE marking.

- **EMC directive**:2014/30/EU
- **LVD directive**: 2014/35/EU
- **RE directive (RED):** 2014/53/EU

The full text of the EU declaration of conformity is available at **https://vanderbiltindustries.com/compliance-documents**

Package contents

- SPCN341 x1
- Antenna x 1
- Mounting pillar x 4

Product overview

The SPCN341 modem provides the SPC controller with a 2G/4G interface. The modem supports 4G and 2G communications, enabling IP communications to central station software, SPC Connect, and mobile technologies. The “Pay As You Go” (PAYG) credit balance can also be read by SPC controller when a PAYG SIM is used with a provider that supports USSD credit checks. For a description of the 2G/4G features please consult the SPC4xxx/5xxx/6xxx Installation & Configuration Manual

INSTALLATION INSTRUCTIONS

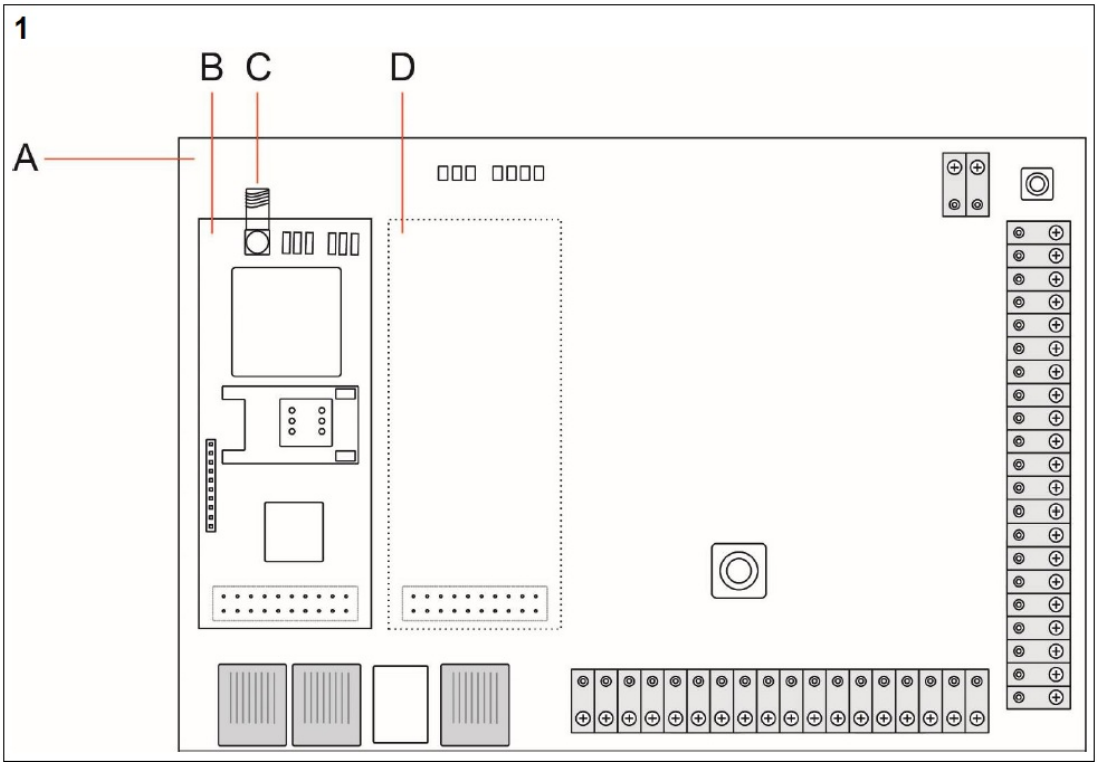
Installing the SPCN341

- When replacing or installing modules on the SPC system, always ensure that the mains supply and the battery are disconnected. Ensure that all antistatic precautions are adhered to when handling connectors, wires,terminals and PCBs.
- Do not reduce the standard-size SIM card to micro- or nano-size.

The SPCN341 must have a standard-size SIM card installed in the unit to operate. The SIM card must be in the

holder before power is applied to the SPC system (see below for details on installing the SIM card).

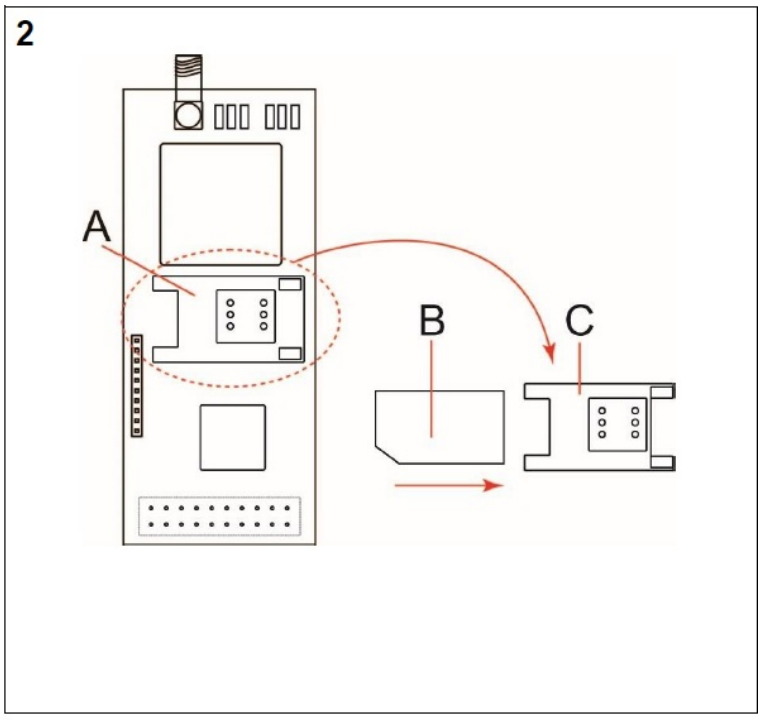
SPCN341



A	Controller PCB (Printed Circuit Board)
B	SPCN341 in the primary slot on the controller PCB
C	SMA connector for antenna
D	Secondary slot

Before installing the 2G/4G module onto the SPC controller, ensure that a functioning SIM card is installed on the module

Insert SIM Card



A	SIM card holder
B	SIM card
C	Flap on SIM card holder

To insert a SIM card into the 2G/4G module:

1. Place a finger on the SIM card holder (Fig. 2, Item A) and slide the SIM card holder flap (Fig. 2, item C) to the right
2. Rotate the SIM card holder flap to the ‘up’ position
3. Slide the SIM card (Fig. 2, Item B) into the SIM card holder flap.
4. Rotate the SIM card holder flap back to its original position.
5. Press and slide the SIM card holder flap to the left to click into place.

Make a note of the unlock code for your SIM card. The code is required when enabling the SIM card on the SPC system.

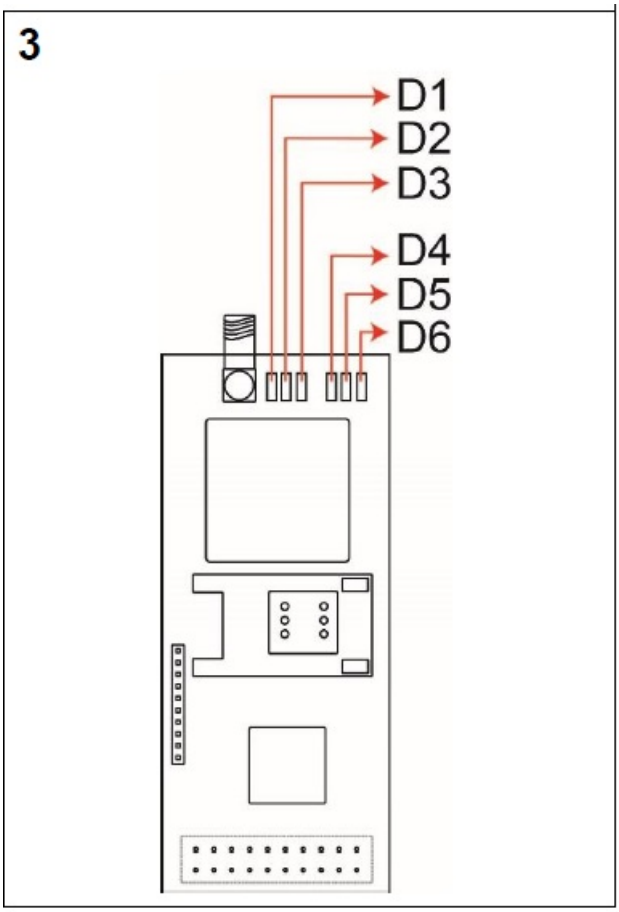
To install the SPCN341 (with SIM card):

1. Ensure the AC mains power and battery backup connections are removed.
2. Insert the push-in mounting pillars (included with the module) into the four hole positions on either the primary slot (left) or secondary slot (right) on the controller.
3. Align the 16-pin female socket over the 16-pin male connector, ensuring that the holes on the SPCN341 are aligned with the top of the mounting pillars.
4. Firmly but gently press down to secure the module.
5. Attach the antenna (supplied) to the SMA connector (Fig. 1, item C) on the 2G/4G module. For new system installations, consider removing the knock-out for the
   antenna prior to mounting the housing on the wall.

6. Mount the antenna on the top of the housing using one of the 12mm knock-out holes provided. The 12mm knock-out holes align with the primary slot (left) and secondary slot (right). Ensure that the antenna is unobstructed.
7. Restore the AC mains power and battery backup connections to the controller.

LED Functionality

There are six LEDs on the top of the modem module labelled D1 to D6 (See Fig. 3). These are used to indicate the status of the modem



The function of each LED is as follows

LED	State	Indicates		LED	State	Signal Strength
D1 Green	Flashing	Power		D4 Red	Off	Low 1
					Flashing	Low 2 – 3
					On	Medium 4 – 5
D2 Green	On	Mast connection		D5 Amber	Flashing	Medium 6
					On	High 7
D3 Green	On	Data Transmission		D6 Green	Flashing	High 8
					On	Very High 9

Configuring the SPCN341

For configuration instructions, please refer to the Configuring Modems sections of the SPC4xxx/5xxx/6xxx Installation & Configuration Manual. For 4G performance ensure that the panel firmware is updated with version 3.13.5 or later.

Technical Data

Network connection	4G: 800MHz/900MHz/1800MHz 2G: 900 MHz/1800MHz
Operating current	Max. 130 mA at 12 VDC
Quiescent current	Max. 40 mA at 12 VDC
Operating temperature	-10 to +50 °C
Relative humidity	Max. 90 % (non-condensing)
Mounting	Plug on module to SPC controller
Dimensions (W x H x D)	90mm x 38mm x 25mm (PCB)
Weight	0.130 kg
Standards / approval	Pending: EN

Ordering Information

SPCN341.000	2G/4G Module incl. Antenna	V54550-B102-A500
SPCW101.000	External aerial kit	V54559-B101-A100

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Documents / Resources

	VANDERBILT SPCN341 GSM Module [pdf] Instructions SPCN341 GSM Module, SPCN341, GSM Module, Module

References

- Vanderbilt Industries | Security Systems & Solutions
- Compliance Documents | Vanderbilt Industries