

BioEntry R2

設置ガイド

バージョン 1.02

日本語

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安全にお使いいただくために

本製品を使用する前に、ご自身や他人への怪我を未然に防ぎ、物的損害を防止するために、この「安全にお使いいただくために」をお読みください。本マニュアルの「製品」という用語は、製品および製品に付属するすべての品目を指します。

指示アイコン



警告:この記号は、死亡または重傷につながるおそれのある状況を示しています。



注意:この記号は、中度の傷害や物的損害をもたらすおそれのある状況を示しています。



注意:この記号は、注記または追加情報を示します。



警告

設置場所

本製品を無断で設置したり修理したりしないでください。

- 感電、火災、または製品の損傷につながるおそれがあります。
- あらゆる改造により、または取り付け手順に従わなかったために損傷が生じた場合は、製造元の保証が無効になることがあります。

本製品を、直射日光の当たる場所、湿気の多い場所、埃やすずの多い場所、ガス漏れがありそうな場所には置かないでください。

- 感電または火災につながるおそれがあります。

本製品を、熱器具の近くなど高温になる場所に置かないでください。

- 過熱により火災につながるおそれがあります。

本製品を、乾燥した場所に設置してください。

- 湿気や液体は感電や製品の損傷につながるおそれがあります。

本製品を、無線周波数の影響を受ける場所に設置しないでください。

- 火災や製品の損傷につながるおそれがあります。

お取り扱い

本製品は乾燥した状態にしておいてください。

- 湿気や液体は感電、火災、または製品の損傷につながるおそれがあります。

損傷した電源アダプタ、プラグ、緩んだコンセントは使用しないでください。

- 接続部がしっかりと固定されていないと、感電や火災の原因になるおそれがあります。

電源コードを折り曲げたり損傷させたりしないでください。

- 感電または火災につながるおそれがあります。



注意

設置場所

本製品を、直射日光や紫外線が当たる場所に設置しないでください。

- 製品の損傷、故障、変色、変形につながるおそれがあります。

電源ケーブルを人が通る場所に取り付けしないでください。

- 負傷や製品の損傷につながるおそれがあります。

本製品を、磁石、テレビ、モニター（特に CRT モニター）、スピーカーなど磁気を発する物の近くに設置しないでください。

- 本製品が故障するおそれがあります。

複数の製品を設置する場合は、製品の間で最低限の間隔を空けてください。

- 本製品が他の製品から放射される無線周波数の影響を受けて、故障するおそれがあります。

DC 12 V および 1,500 mA 以上の電源アダプタのみを使用してください。

- 適切な電源を使用しないと、本製品が正しく動作しないおそれがあります。

Secure I/O 2、電子ロック、および本製品に対して、独立した電源を使用してください。

- 同じ電源を接続して使用すると、本製品が誤動作するおそれがあります。

お取り扱い

本製品を落下させたり、衝撃を与えたりしないでください。

- 本製品が故障するおそれがあります。

製品のファームウェアのアップグレードが進行中の電源供給が中断されないように注意してください。

- 本製品が故障するおそれがあります。

パスワードを他人に開示しないでください。また、定期的に変更してください。

- そうしないと、不正な侵入が発生するおそれがあります。

本製品のボタンを無理に押ししたり、鋭利な工具で押ししたりしないでください。

- 本製品が故障するおそれがあります。

本製品を非常に高温または低温になる場所に保管しないでください。本製品は -20 °C ~ 50 °C の温度で使用することをお勧めします。

- 本製品が故障するおそれがあります。

本製品を清掃する際は、次の点に注意してください。

- 清潔で乾燥したタオルで本製品を拭きます。
- 本製品を消毒する必要がある場合は、布またはティッシュを適量の消毒用アルコールで湿らせ、指紋センサーなどの露出した表面をすべて丁寧に清掃します。消毒用アルコール（イソプロピルアルコール含有率 70 %）と、清潔で研磨性のない布（レンズ用ティッシュなど）を使用します。
- 本製品の表面に液体を直接塗布しないでください。

本製品を本来の用途以外に使用しないでください。

- 本製品が故障するおそれがあります。

RTC バッテリー

正しくないタイプのバッテリーに交換すると、バッテリーが爆発する恐れがあります。

バッテリーの廃棄は、地域または国際的な該当する廃棄物規制に従ってください。

はじめに

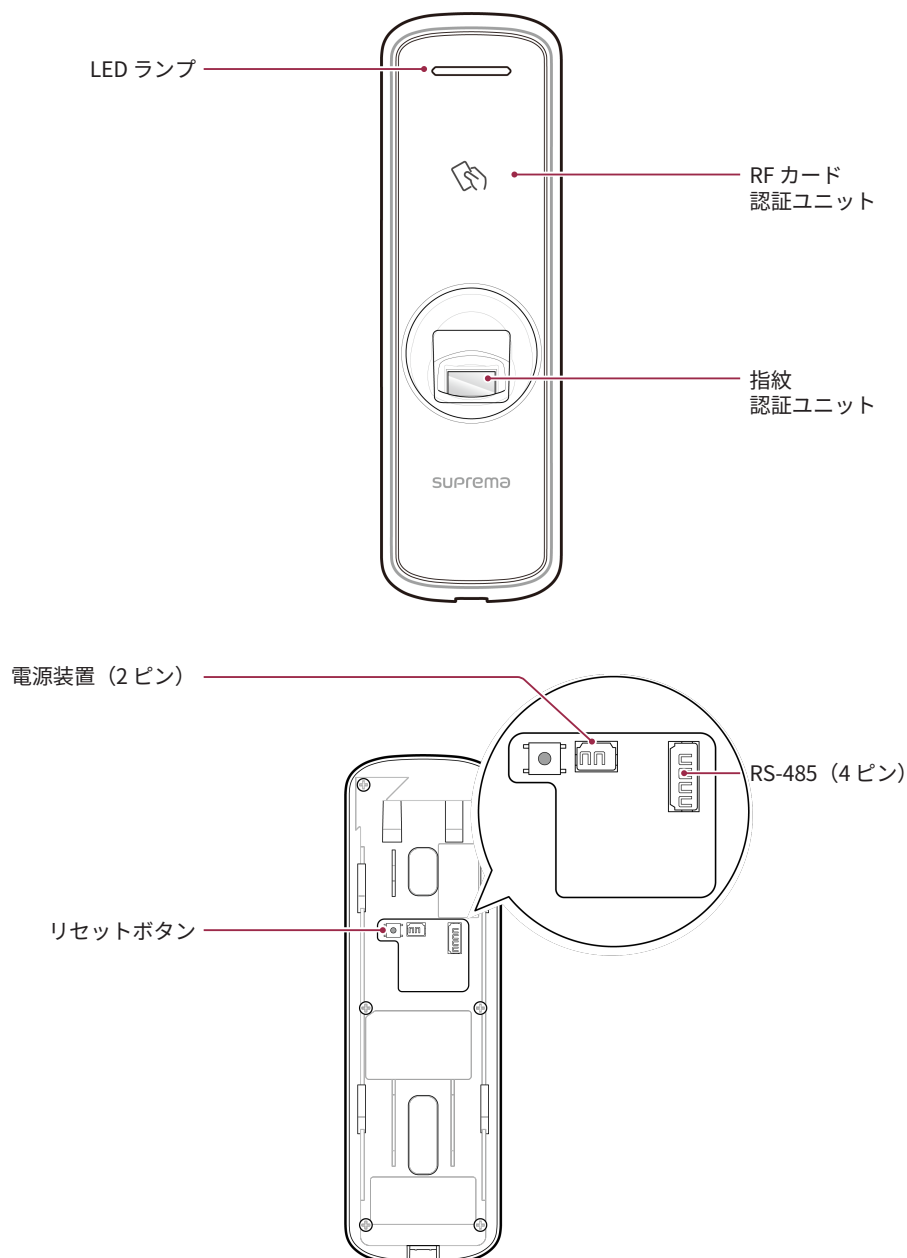
部品

		
<p>BioEntry R2</p>	<p>壁用ブラケット</p>	<p>穴あけ用テンプレート</p>
		
<p>接続ケーブル</p>		<p>ブラケット固定ねじ(星形)</p>
		
<p>PVC アンカー x 2</p>	<p>固定ねじ x 2</p>	<p>120 Ω 抵抗器</p>
		
<p>フェライト磁心</p>	<p>クイックガイド</p>	<p>オープンソースのソフトウェアガイド</p>



部品は設置環境によって異なる場合があります。

各部品の名前と機能



名前	説明
LED ランプ	製品の動作状態を LED ランプの色で示します。
RF カード認証ユニット	入退出用に RF カードを読み取ります。
指紋認証ユニット	入退出用にユニット上の指紋を読み取ります。
電源装置 (2 ピン)	電源ケーブルを接続します。
RS-485 (4 ピン)	RS-485 ケーブルを接続します。
リセットボタン	デバイスを初期化します。

ケーブルとコネクタ

電源装置



ピン	名前	色
1	PWR +VDC	赤 (白のストライプ)
2	PWR GND	黒 (白のストライプ)

RS-485



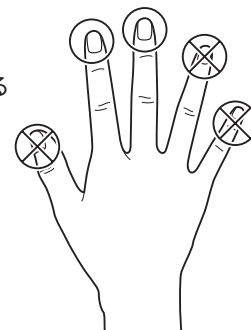
ピン	名前	色
1	485 TRXP	青
2	485 TRXN	黄
3	485 GND	黒
4	SH GND	グレー

指紋を登録する方法

指紋の認証率を上げるために、指紋を正しく登録してください。BioEntry R2 では、ユーザーの指紋入力角度と位置が変化しても指紋を認識できます。指紋を登録する際に次の点に注意すると、認証率が上がる場合があります。

指紋を入力する指を選ぶ

- 特定の指の指紋を使用できない場合、例えば片手で荷物を持ち上げていたり、指に怪我をしていたりする場合に備えて、ユーザーごとに最大 10 個の指紋を登録できます。
- 指紋がうまく認識されない場合は、2 回連続して同じ指で登録すると認証率が上がる場合があります。
- 指に切り傷がある場合や、指紋がはっきりしない場合は、別の指の指紋を登録します。
- 指紋をスキャンする際に人差し指または中指を使用することを推奨します。指紋センサーの中央に別の指を正確に置くことが難しい場合は、認証率が低下する場合があります。



指紋の登録方法

- 1 指紋を登録する指を指紋認証ユニットに置き、認証率を上げるために指を軽く押し付けます。



- 2 ビープ音の後に、登録した指の指紋を再度スキャンします（登録する指の指紋を 2 回スキャンします）。



指紋の登録に関する注意

指紋認識時には最初に登録した指紋と照合されるため、最初の指紋登録が最も重要です。指紋を登録する際は次の点に注意してください。

- 指をセンサーに密着させてしっかりと押し付けます。
- 指紋の中央をセンサーの中央に合わせます。
- 指に切り傷がある場合や、指紋がはっきりしない場合は、別の指の指紋を登録します。
- 画面の指示に従って、指を動かさずに指紋を正しくスキャンします。
- 指を動かしてセンサーとの接触面が小さくなったり指の角度が変わったりすると、指紋認証が行われません場合があります。



指紋認識が失敗した場合

BioEntry R2 は、季節の変化や指の状態にかかわらず、指紋を認識できます。ただし、認証率は、外部環境や指紋入力方法によって異なる場合があります。

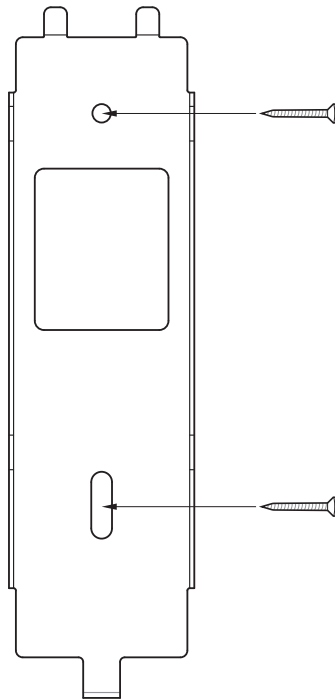
指紋認証がスムーズにいかない場合は、以下の措置を講じることをお勧めします。

- 指が水や汗で濡れている場合は、指を乾かしてからスキャンします。
- 指が乾燥し過ぎている場合は、指先に息を当ててから指をスキャンします。
- 指を切った場合は、別の指の指紋を登録します。
- 最初に登録した指紋が正しくスキャンされていない場合があるため、「指紋の登録に関する注意」に従って、もう一度指紋を登録してください。

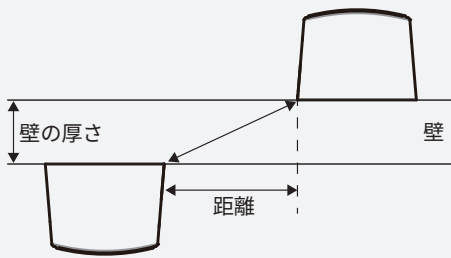
設置場所

ブラケットと製品の固定

- 1 付属のドリル用テンプレートを使用して、ブラケットを取り付ける正しい位置を決定します。固定ねじをブラケットに通して、BioEntry R2 の取り付け位置にブラケットをしっかりと固定します。

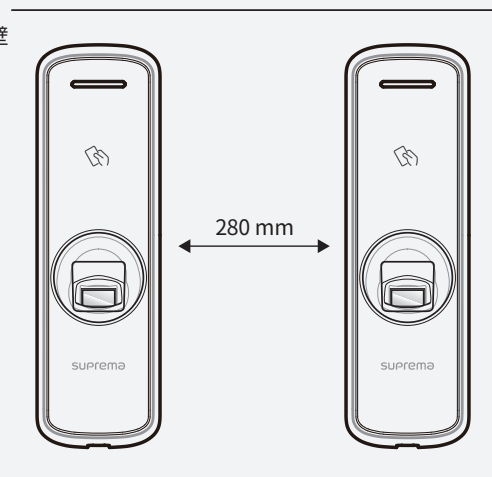


- コンクリート壁に BioEntry R2 を設置する場合は、ドリルで穴を開け、PVC アンカーを挿入して、固定ねじで固定します。
- RF 干渉を回避するには、最小分離距離を維持する必要があります。

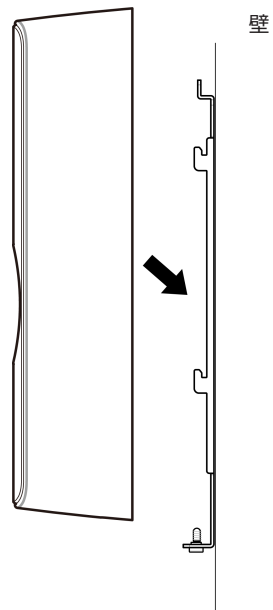


壁の厚さ	距離
100 mm	250 mm
120 mm	250 mm
150 mm	180 mm

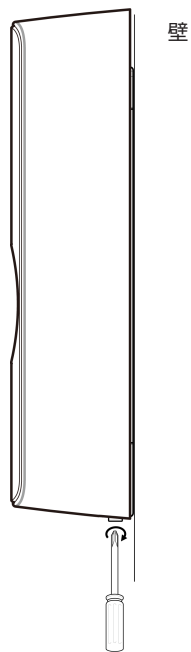
壁



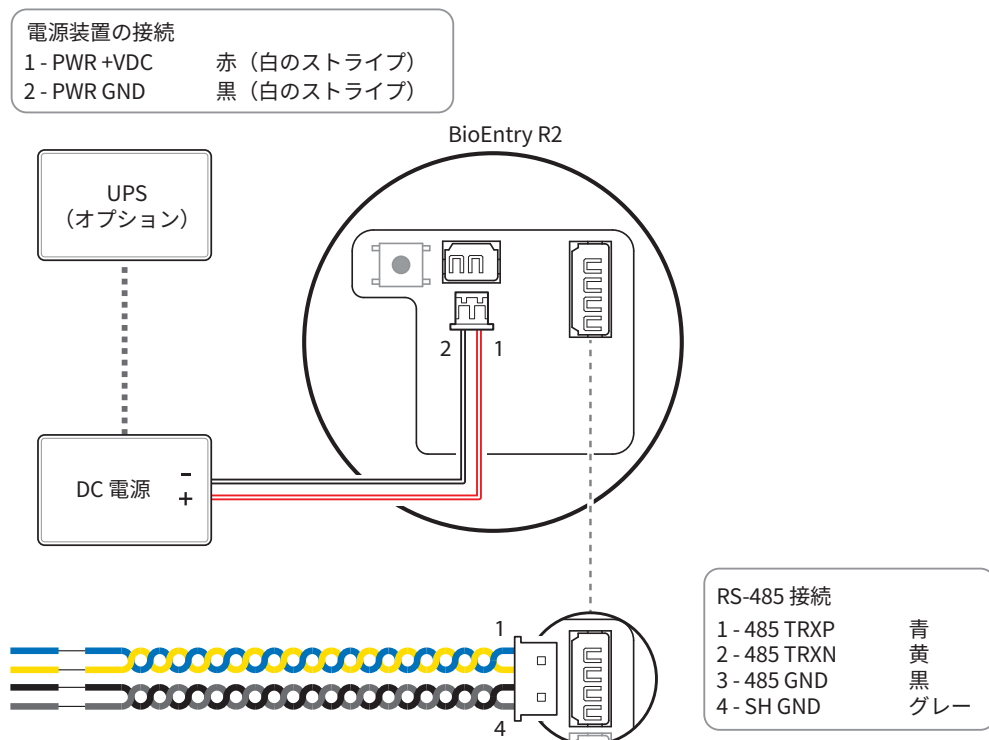
2 BioEntry R2 を固定ブラケットに取り付けます。



3 製品固定ねじを回して、BioEntry R2 をブラケットに組み付けます。



ケーブルの接続



- IEC/EN 60950-1 の認可を受けた 1,500 mA 以上の DC 12 V (± 10 %) 電源アダプタを使用します。別のデバイスを電源アダプタに接続して使用する場合は、端末と別のデバイスに必要な合計電力消費量以上の電流容量を備えたアダプタを使用してください。
- Secure I/O 2、電子ロック、および BioEntry R2 ごとに独立した電源を使用してください。これらのデバイスを同じ電源に接続して使用すると、デバイスが正常に機能しない場合があります。
- RS-485 ケーブルには、最大長が 1.2 km の AWG 24 ツイストペアを使用します。
- RS-485 のデジチェーンで接続する場合は、デジチェーン接続の両端に終端抵抗 (120 Ω) を接続してください。中央の線に接続すると、信号レベルが小さくなり、通信性能が低下します。必ずデジチェーン接続の両端に接続してください。
- Xpass がマスターデバイスに接続されている場合は、カード認証のみを使用できます。

RS-485 接続のリセット

- 1 電源を入れます。
- 2 リセットボタンを1秒以上押したままにします。デバイスのLEDが緑色に点灯します。
- 3 ビープ音が鳴ると、RS-485 接続がリセットされます。



マスターデバイスとの RS-485 接続を解除して、別のマスターデバイスに再接続する場合は、BioEntry R2 の RS-485 接続をリセットします。

RS-485 のボーレートのリセット

- 1 電源を入れます。
- 2 リセットボタンを2秒以上押したままにします。デバイスがセットアップモードになると、LEDが緑色に点滅します。
- 3 リセットボタンを押した回数に応じて、ボーレートが変更されます。ボーレートはLEDの色で識別できます。

回数	ボーレート	LEDの色
1	9600	シアン
2	19200	青
3	38400	マゼンタ
4	57600	白
5	115200	赤

- 4 上記で設定した色で、LEDが5秒間点滅します。ボーレートが設定されると、ビープ音が鳴ります。



セットアップモードに変更した後リセットボタンを押さなかった場合、ボーレートは115200に設定されます。

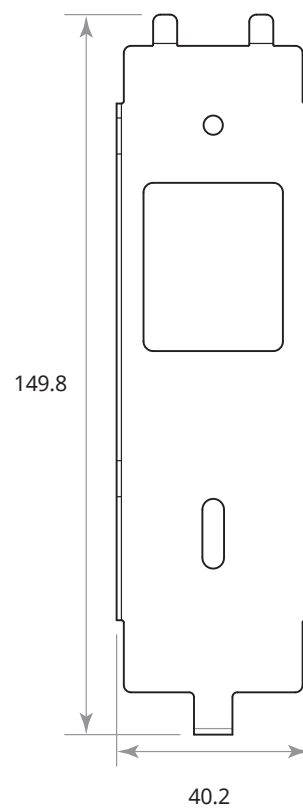
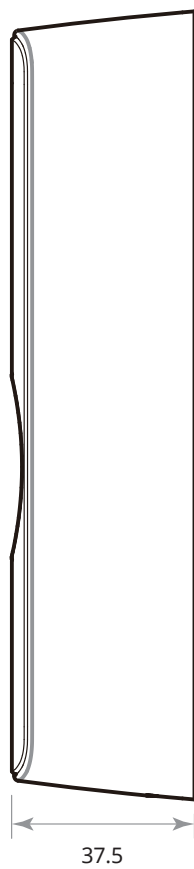
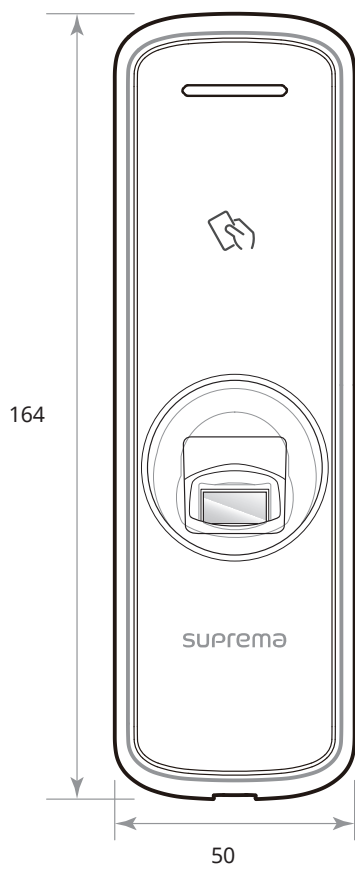
製品仕様

カテゴリ	機能	仕様
認証情報	生体認証	指紋
	LF カードオプション	EM
	HF カードオプション	MIFARE、MIFARE Plus、DESFire / EV1、FeliCa
	NFC カード	サポート対象
	RF 読み取り範囲*	MIFARE / DESFire / EM / HID Prox / iCLASS: 50 mm、FeliCa: 30 mm
全般	CPU	1.0 GHz
	メモリ	32 MB Flash + 32 MB RAM
	クリプトチップ	サポート対象
	LED	マルチカラー
	サウンド	マルチトーンブザー
	動作温度	-20°C - 50°C
	保管温度	-40°C - 70°C
	動作湿度	0% - 80%, 結露しないこと
	保管湿度	0% - 90%, 結露しないこと
	寸法 (W x H x D)	50 x 164 x 37.5 (mm)
	重量	<ul style="list-style-type: none"> デバイス: 158 g ブラケット (ワッシャーとボルトを含む): 39 g
	証明書	CE、FCC、KC、RoHS、REACH、WEEE
	指紋	画像寸法
画像のビット深度		8 ビット、256 グレースケール
解像度		500 dpi
テンプレート		SUPREMA / ISO19794-2 / ANSI-378
エクストラクタ		MINEX 認定および準拠
インターフェイス	RS-485	1チャンネルスレーブ
	タンパー	サポート対象
電気関連	電源	電圧: DC 12 V、電流: 最大 600 mA * 12 VDC、1.5 A 電源を使用してください。

* RF 読み取り範囲は、設置環境によって異なります。

寸法

(単位: mm)

* 公差は ± 0.3 mm です。

FCC 準拠情報

このデバイスは、FCC 規則第 15 部に準拠しています。

動作は、次の 2 つの条件に従います。

- (1) このデバイスは、有害な電波干渉を引き起こしてはなりません。また、
- (2) このデバイスは、望ましくない動作を引き起こす可能性のある電波干渉を含め、受信したあらゆる電波干渉を許容する必要があります。



この装置は、FCC 規則の第 15 部に従って、クラス B デジタルデバイスの制限に準拠していることがテストおよび確認されています。これらの制限は、居住地域での設置において有害な電波干渉から適切に保護するためのものです。この装置は、無線周波エネルギーを生成、使用、および放射する可能性があり、指示に従って設置および使用しないと、無線通信に有害な電波干渉が発生することがあります。ただし、特定の設置で電波干渉が発生しないことを保証するものではありません。この装置のオフとオンを切り替えてみて、この装置によってラジオやテレビなどの受信に有害な電波干渉が発生することが判明した場合は、次の方法で電波干渉を解消してみてください。

- 受信アンテナの方向や場所を変更する。
- 装置と受信機の位置を離す。
- 受信機が接続されている回路とは別の回路のコンセントに機器を接続する。
- 販売店や、ラジオまたはテレビの経験豊富な技術者に相談する。

製造元によって明示的に承認されていない変更を行った場合、FCC 規則に基づき、ユーザーの装置を操作する権限が無効になる場合があります。

- この機器とそのアンテナを、他のアンテナや送信機と一緒に設置または操作しないでください。
- RF 被曝の要件を満たすため、アンテナとこの機器の使用者の間隔を 20 cm 以上空ける必要があります。

付録

免責事項

- 本書は、Suprema 製品に関する情報について記載したものです。
- 利用規約、販売条件に含まれるSuprema製品として保証されたもののみ使用権が認められます。明示的、黙示的に関わらず禁反言またはその他の方法により、いかなる知的財産権も本書によって付与されるものではありません。
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