

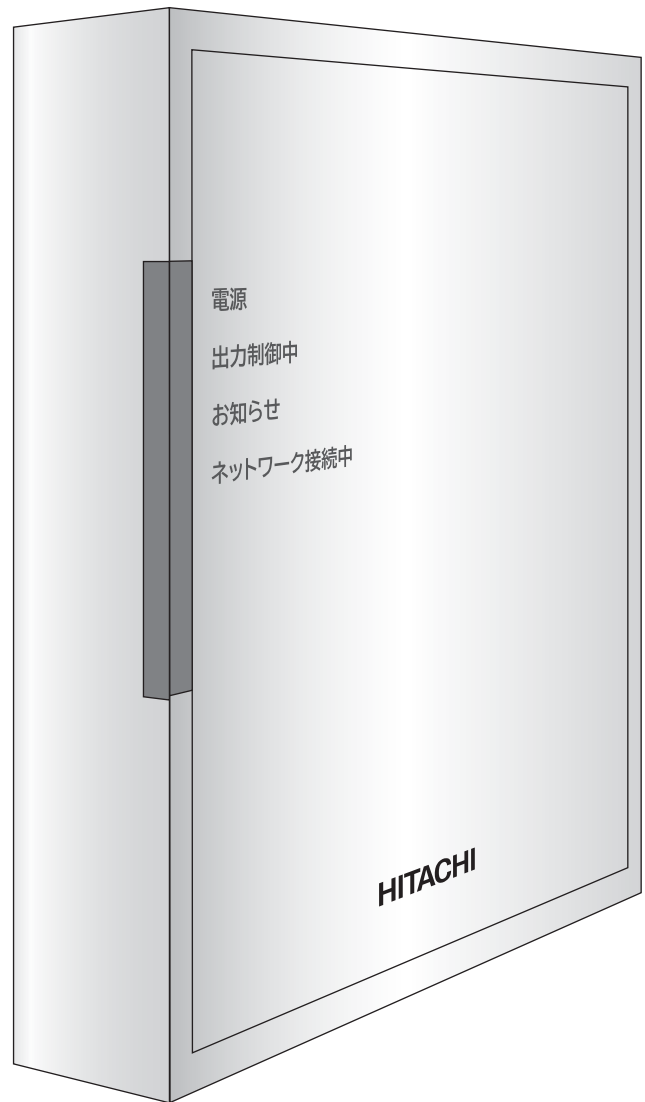
HITACHI
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日立太陽光発電システム
出力制御ユニット

取扱説明書

保証書 別添付

イーチ エス エス ワイ ディー
型式 **HSS-Y10D**



このたびは日立太陽光発電システム 出力制御ユニットをお買い上げいただき、まことにありがとうございました。

この取扱説明書をお読みになり、正しくお使いください。

取扱説明書(本書)、保証書とともに大切に保管してください。

「安全上のご注意」[→ P.6~7](#)をお読みいただき、正しくお使いください。

概要

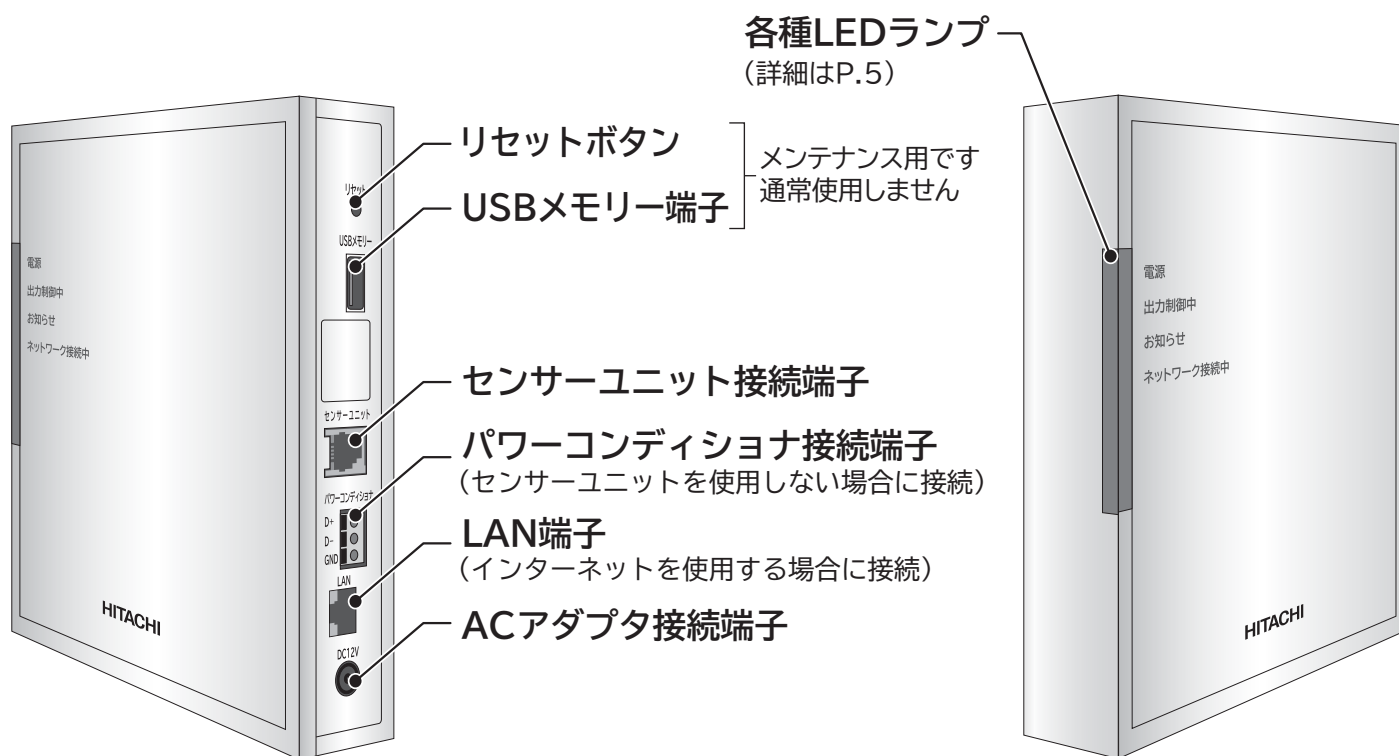
- 再生可能エネルギー特別措置法施行規則の一部を改正する省令と関連告示（2015年1月22日公布）による遠隔出力制御に対応しています。
- 電力会社からインターネットを介して出力制御の情報を取得し、これに従いパワーコンディショナを制御します。
- 今後正式に発表される遠隔出力制御の仕様によっては、出力制御ユニットのファームウェア（ソフトウェア）の更新が必要となる場合もあります。
- 遠隔出力制御は電力会社の要請により実施されますので、詳細については電力会社にご確認ください。

もくじ

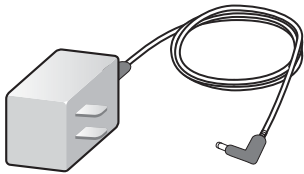

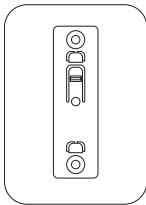
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各部のなまえ・付属品

出力制御ユニット (本体)

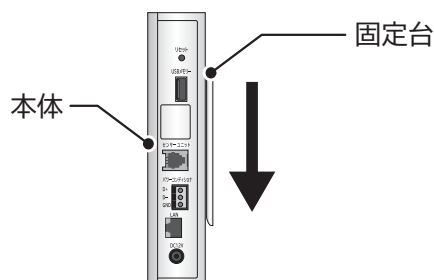


付属品

ACアダプタ (KSW1210H)	木ネジ (4×25)	固定台
 <p>1個</p>	 <p>2個</p>	 <p>1個</p>

固定台を本体から外してください

- 固定台を矢印方向に抜く
固定台は本体に取り付けた状態で梱包されています。
固定台を矢印方向にスライドさせて外してください。



LEDランプ表示

各種LEDランプで本体の状態を知ることができます。

電源

[緑]点灯時は電源が入っている状態です。

出力制御中

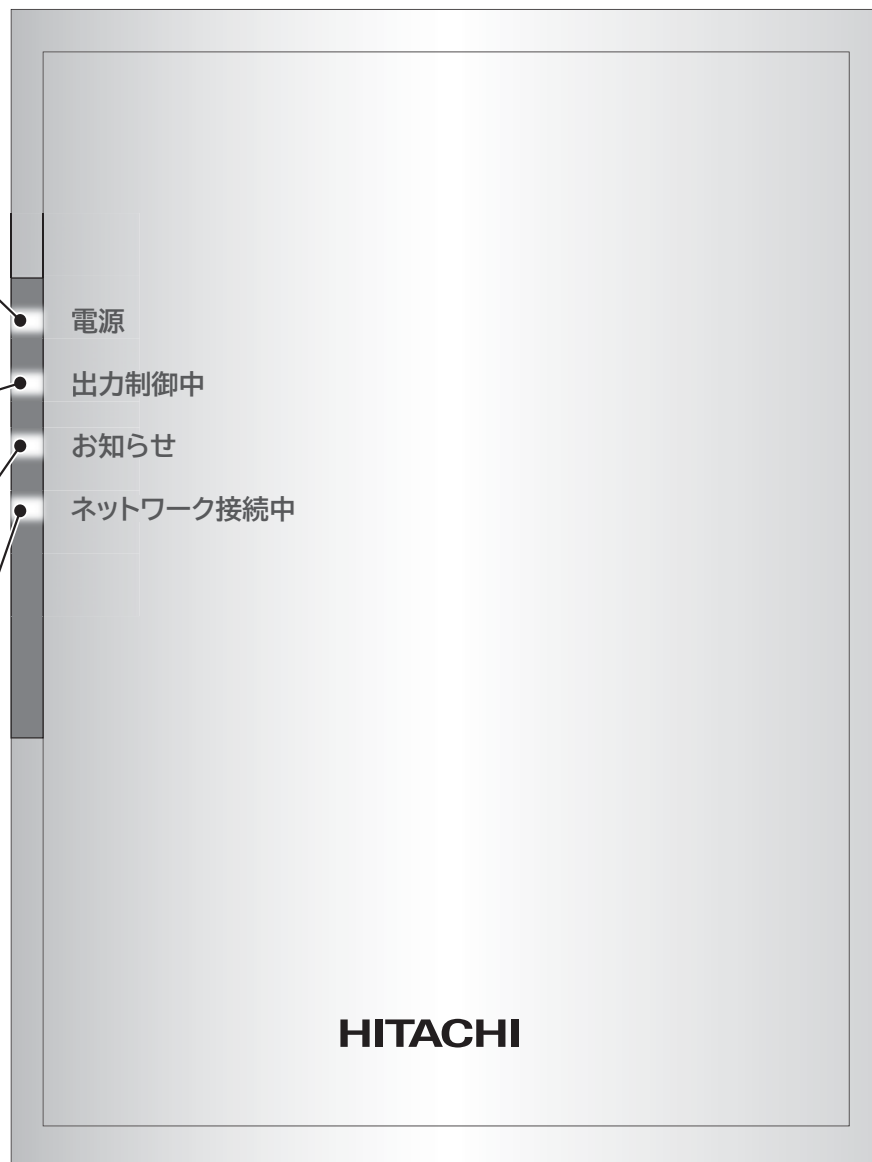
[橙]点灯時は発電に制御がかかっている状態です。

お知らせ

[赤]点滅時はお知らせ表示です。「こんなときは」(→P.17)を確認してください。

ネットワーク接続中

[緑]点灯時はインターネットにて電力会社サーバに接続されています。



その他ご用意いただくもの






- イーサネットケーブル
LAN端子に接続します。お客様ご使用のインターネット環境にあった長さのものをご用意ください。
- モジュラーケーブル
センサーユニットと接続する場合に使用します。(有線接続する場合)
- 通信用ケーブル(VCTF 3芯)
パワーコンディショナと接続する場合に使用します。

安全上のご注意





お使いになる人や、ほかの人への危害、財産への損害を未然に防止するため、お守りいただくことを、次のように説明しています。また、本文中の注意事項についてもよくお読みのうえ、正しくお使いください。

■ここに示した注意事項は

表示内容を無視して誤った使いかたをしたときに生じる危害や損害の程度を、次の表示で区分し、説明しています。

表示の例	
 警告	この表示の欄は、「死亡または重傷を負うことが想定される」内容です。
 注意	この表示の欄は、「傷害を負うことが想定されるか、または物的損害の発生が想定される」内容です。
	「警告や注意を促す」内容です。
	してはいけない「禁止」内容です。
	実行しなければならない「指示」内容です。

警告

-  ●屋外に設置しない
●高温・多湿・水のかかるおそれがある場所・ホコリの多い場所（車庫・納屋・物置・屋根裏など）に設置しない
火災・感電・漏電・故障の原因となります。
-  ●本体のカバーをはずしたり、分解、改造、取りはずしをしない
火災・感電・漏電・故障の原因となります。
分解禁止
-  ●ぬれた手でさわったり、液体をかけない
ぬれた手でさわったりぬれた布でふいたりしないでください。
本体に液体をかけないでください。
火災・感電・漏電・故障の原因となります。
ぬれ手禁止
- ぬれた手で、ACアダプタの抜き差しはしない
感電の原因となります。
-  ●本体隙間からものを入れない
本体のスリットや各端子の隙間から細長いピン等を入れないでください。
感電・漏電・故障の原因となります。

警告



●ACアダプタは根元まで確実に差し込む

差し込みが不完全ですと、感電や発熱による火災の原因となります。
いたんだACアダプタやゆるんだコンセントは使用しないでください。

●ACアダプタの刃や、刃の取り付け面にほこりが付着したら乾いた布でよくふきとる

ほこりがたまると湿気などで絶縁不良となり、火災の原因となります。
ACアダプタを抜き、乾いた布でふいてください。

●万一、異常が発生したらACアダプタをコンセントから抜く

そのまま使用すると、火災・感電の原因となります。お買い上げの販売店にご相談ください。

●付属のACアダプタを使用する

付属以外のACアダプタを使用すると、火災や焼損、故障の原因となります。



●製品の近くで殺虫剤などの可燃性ガスを使用しない

引火し火災・やけどの原因となります。

●製品の近くで発熱機器や蒸気の出る機器を使用しない

ストーブなどの発熱する機器や炊飯器・加湿器などの蒸気の出る機器を近くで使用しないでください。火災・故障の原因となることがあります。

●ACアダプタやACアダプタのコードは傷つけない。

傷つけたり、無理に引っ張ったり、ねじったり、つぶしたり、挟み込まない。
火災・感電・故障の原因となります。

注意



●高周波ノイズを発生する機器のあるところに設置しない

正常な動作ができなくなることがあります。

●本体を不安定なところに置かない

落下によるけが・故障の原因になります。

●重い物を載せたり、乗ったりしない

けが・故障の原因となります。



●ACアダプタをコンセントから抜くときは、ACアダプタ本体をもって抜く

ACアダプタのコードを引っばると断線やコンセントを傷めたり故障の原因となります。



●お手入れの際は、ACアダプタをコンセントから抜く

感電の原因となります。

プラグを抜く

ご使用時の注意点

ご使用前に必ずお読みください

- ①建物の構造（RC、鉄骨、断熱材のアルミシートなど）等の影響でセンサーユニットや表示ユニット間の電波状態が悪くなる場合があります。出力制御ユニットを屋根裏等に隠蔽設置しないでください。
- ②出力制御ユニットから表示ユニット、センサーユニットへの通信距離の目安は、障害物がない場所での見通し距離で50mです。
- ③出力制御ユニットの電源は常時入れておいてください。電源が切れるとパワーコンディショナは発電を止めます。
- ④インターネットに接続してご使用の場合は、LANケーブルを抜いたりルータ等ネットワーク機器の電源を切ったりしないで常時接続にしてください。

出力制御について

- ①以下の場合には発電が停止しますのでご注意ください。
 - ・出力制御ユニットの電源が切れた場合。
 - ・出力制御ユニットとセンサーユニット間の通信（有線または無線）が途切れた場合。
- ②出力制御ユニットはインターネットに接続して電力会社のサーバから最新の出力制御スケジュール情報を取って制御を行いません。ルータ等ネットワーク機器の電源が切れたり接続ケーブルが抜けたりしてインターネットに接続できないと最新のスケジュール情報が取得できず、発電量が減るおそれがあります。

無線通信について

本製品はセンサーユニット及び表示ユニットと、特定小電力無線を使用して通信を行っているため、次のような場合は注意が必要です。

- ①特定小電力無線は電波法による免許不要の無線であり、自動車用エンジンスターター等にも使用されています。
これらが本製品の近くにある場合、両者の無線通信が干渉し、表示ユニットの表示が頻繁におかしくなる（アンテナマークが「圏外」、表示数値が「0」、または自動車用エンジンスターターが動作しない等）の現象がおこる可能性があります。（表示については表示ユニットの取扱説明書をご覧ください）
これらの現象がおきた場合は、速やかにお買い上げの販売店にご連絡をいただき、無線通信の干渉を防ぐ処置（例えば、周波数の変更など）についてご相談ください。
- ②太陽光発電システムの機器や配線から電氣的雑音が漏れ、近隣のアマチュア無線やラジオなどの通信・受信の障害になることがあります。近隣にアマチュア無線のアンテナがある場合は、お買い上げの販売店にご相談ください。

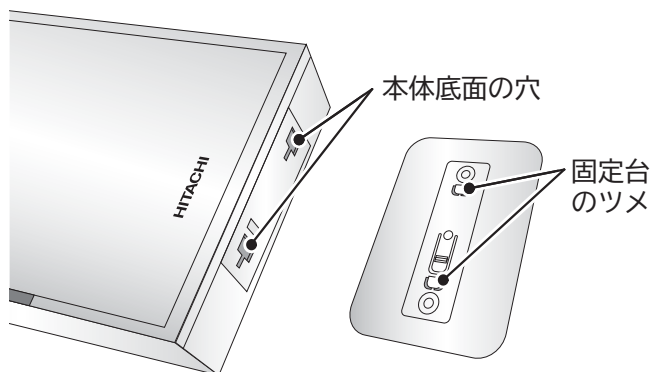
設置のしかた

固定台への取り付けかた

本体（出力制御ユニット）は固定台へ取り付けて水平な所に置くか、壁に固定してご使用ください。

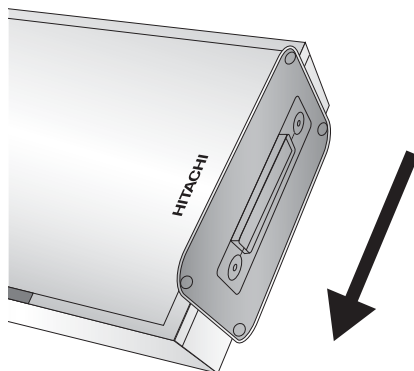
1 固定台を本体底面に合わせる

- 固定台のツメを本体底面の穴に入れる。その際、右図の様にツメの向きを合わせて挿入してください。



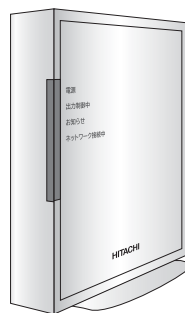
2 固定台を矢印方向に差し込む

- 固定台を矢印方向に「カチッ」というまでスライドさせて差し込んでください。



3 水平な所に置いて使用する

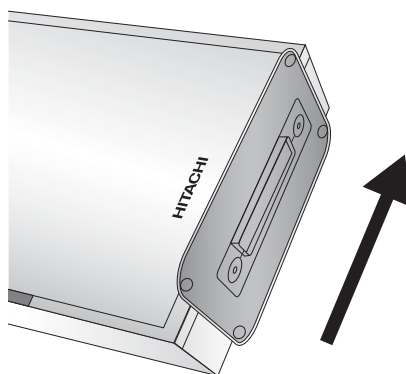
- 水平な凹凸のない所（テーブルなど）に置いてご使用ください。



固定台の外しかた

1 固定台を矢印方向に抜く

- 固定台を矢印方向にスライドさせて外してください。



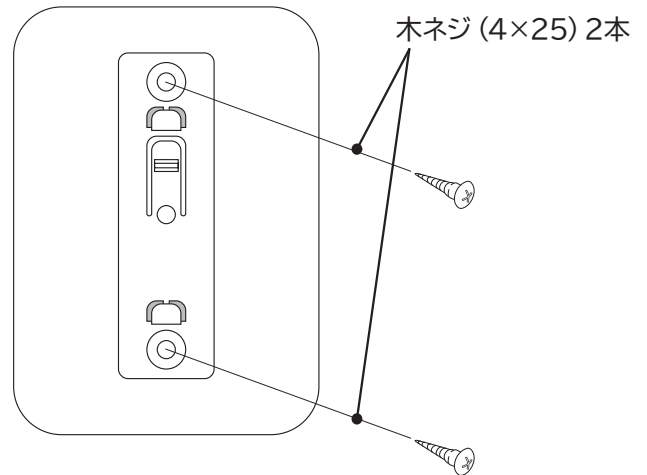
設置のしかた (つづき)

壁固定のしかた

各機器との通信接続可能な範囲で固定する場所を決めてください。
LEDランプが見やすい位置を確認してから設置してください。

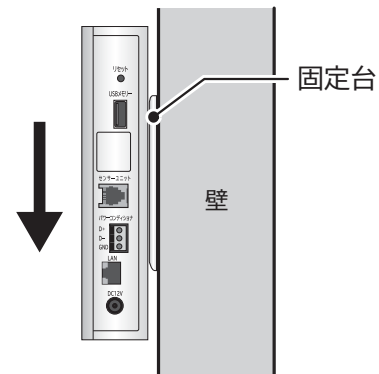
1 固定台を付属の木ネジで 壁に固定する

- 木ネジで確実に固定できる十分な強度のある壁面に設置してください。
- 固定する場所を決めて右図のように、固定台をツメが上を向く様に付属の木ネジ (4×25) 2本で壁に固定してください。



2 本体を矢印方向に差し込む

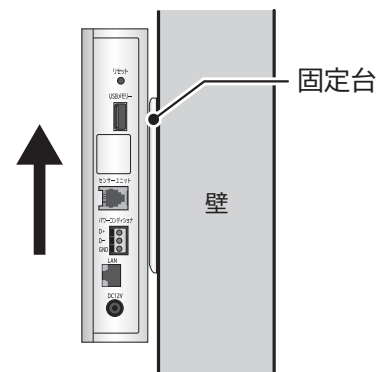
- 本体後面の穴に固定台のツメを合わせて本体が浮かない様に入れて、矢印方向に「カチッ」というまでスライドさせて差し込んでください。



壁固定後の外しかた

1 本体をしっかり持って 矢印の向きに外す

- 本体をしっかり持って矢印の向きにスライドさせて外してください。



各機器との接続

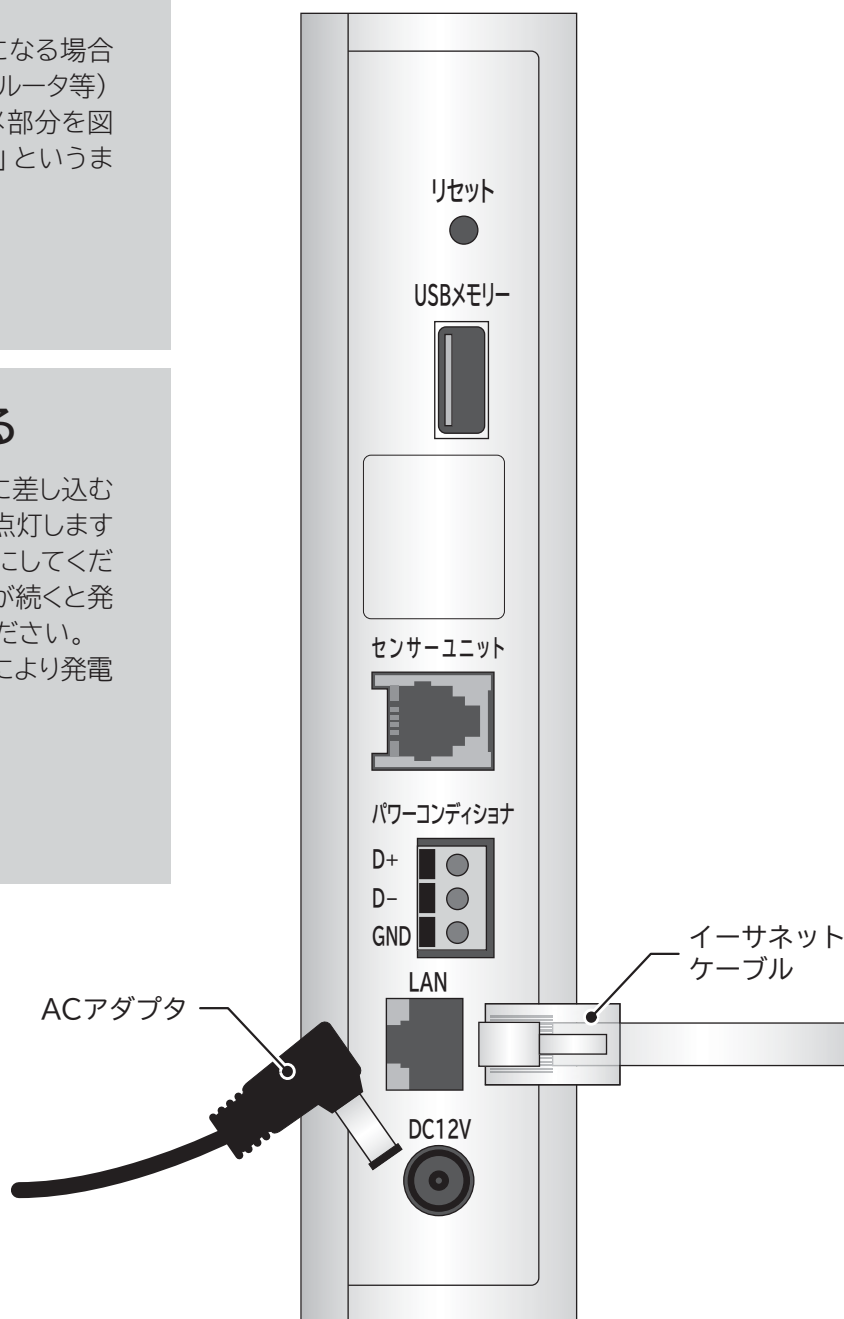
インターネット、ACアダプタ接続のしかた

1 イーサネットケーブルをLAN端子に接続する

- インターネットに接続してご使用になる場合にはお客様のインターネット環境（ルータ等）からのイーサネットケーブルのツメ部分を図のように端子に合わせて「カチッ」というまで挿入します。

2 ACアダプタを接続する

- ACアダプタを接続し、コンセントに差し込むと全てのLEDランプが約30秒間点灯します（起動準備中）。電源は入れたままにしてください。4分以上電源が切れた状態が続くと発電が止まってしまうのでご注意ください。その場合は電源を再投入することにより発電が再開されます。



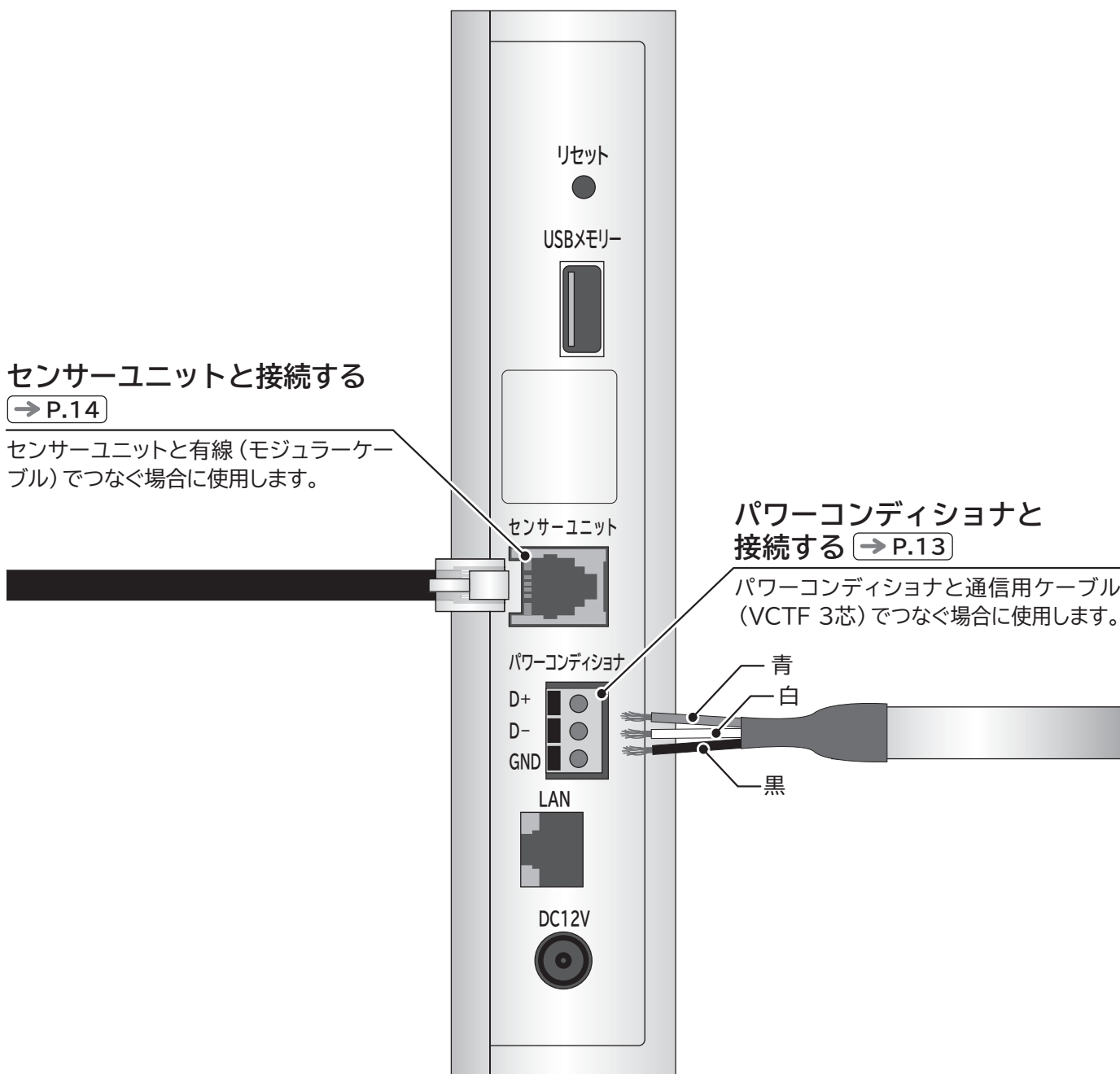
各機器との接続 (つづき)

各端子の接続について

出力制御ユニットは、パワーコンディショナ、表示ユニット、センサーユニットと接続して使用します。用途に応じて以下の組み合わせの接続ができます。

- パワーコンディショナと接続する。
- センサーユニットと接続する。
- 表示ユニット、センサーユニットと接続する。

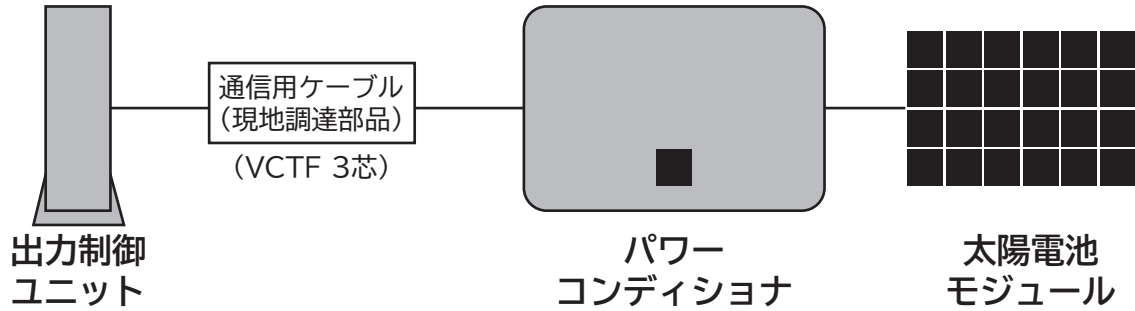
パワーコンディショナを複数台設置の場合はパワーコンディショナの工事説明書をご覧ください。



パワーコンディショナと接続する場合

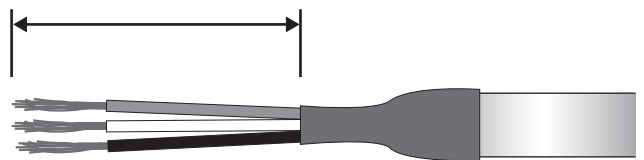
通信用ケーブルでパワーコンディショナと接続します。

接続図



1 通信用ケーブルを
右図のように加工します

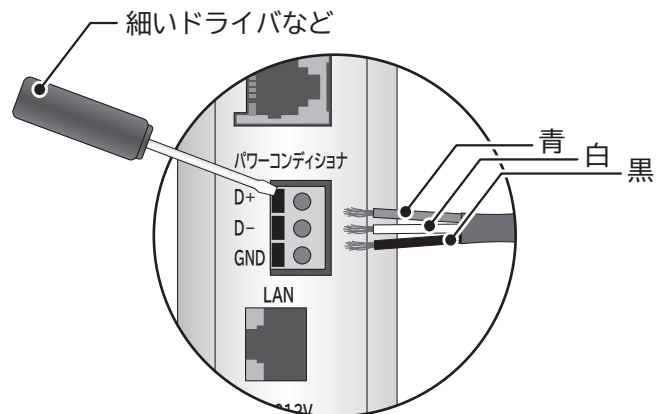
シースの皮むき寸法約30mm



リードの皮むき寸法9~10mm

2 通信用ケーブルを
パワーコンディショナ接続端子に
接続します

- 図のように穴の左の黒いボタンを細いドライバなどで押しながら、より線を挿入してください。線の色はパワーコンディショナ側と合わせて誤挿入しないようにしてください。誤挿入した場合、通信ができなくなります。

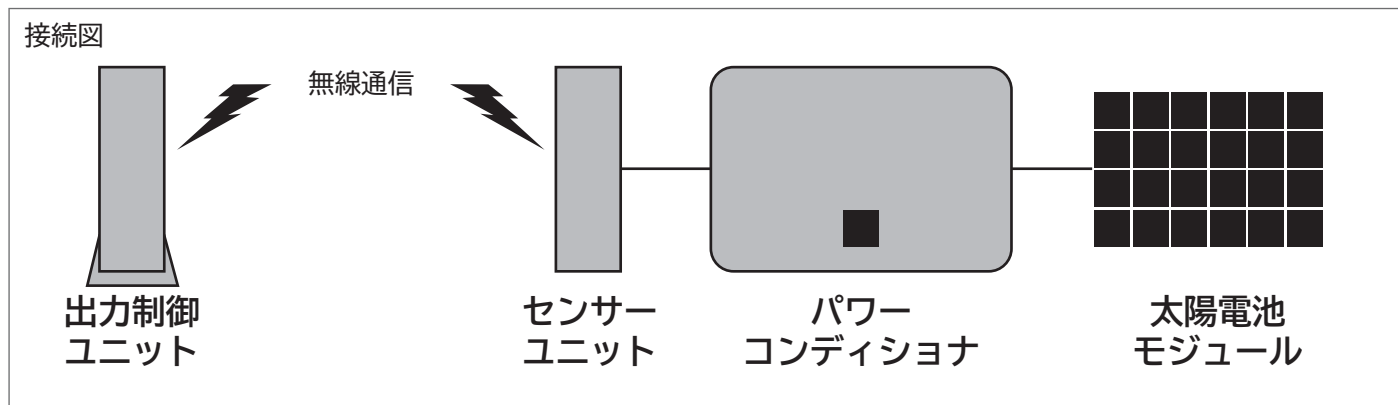


各機器との接続 (つづき)

センサーユニットと接続する場合

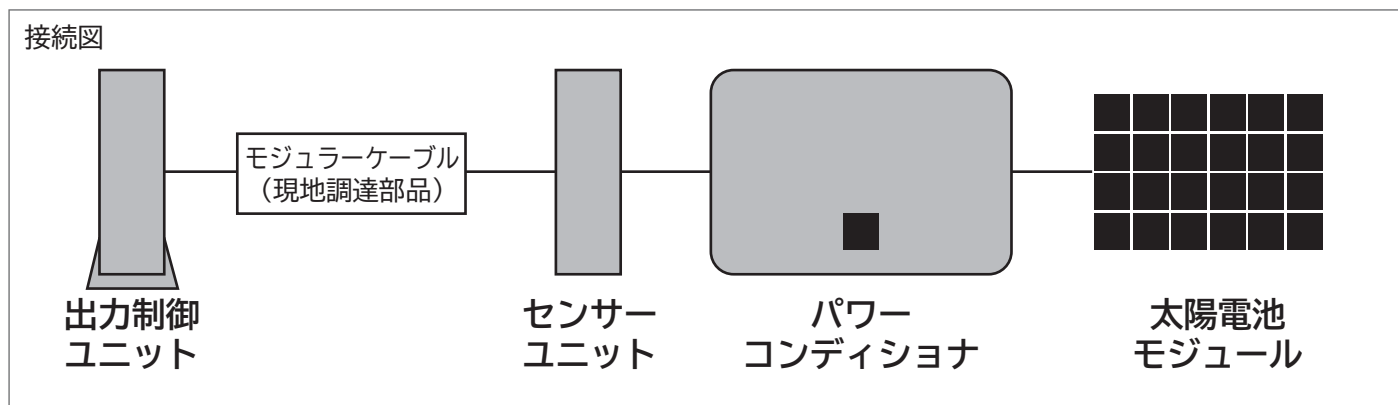
無線接続の場合

出力制御ユニットとセンサーユニット間の無線通信は「特定小電力無線局の無線設備」の技術基準に適合しています。通信できる距離は見通し50m程度が目安です。



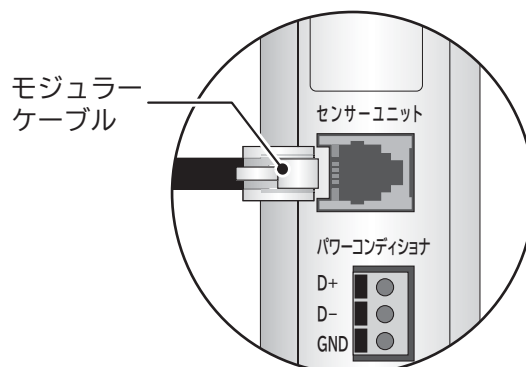
有線接続の場合

モジュラーケーブルでセンサーユニットと接続します。



1 モジュラーケーブルをセンサーユニット接続端子に接続する

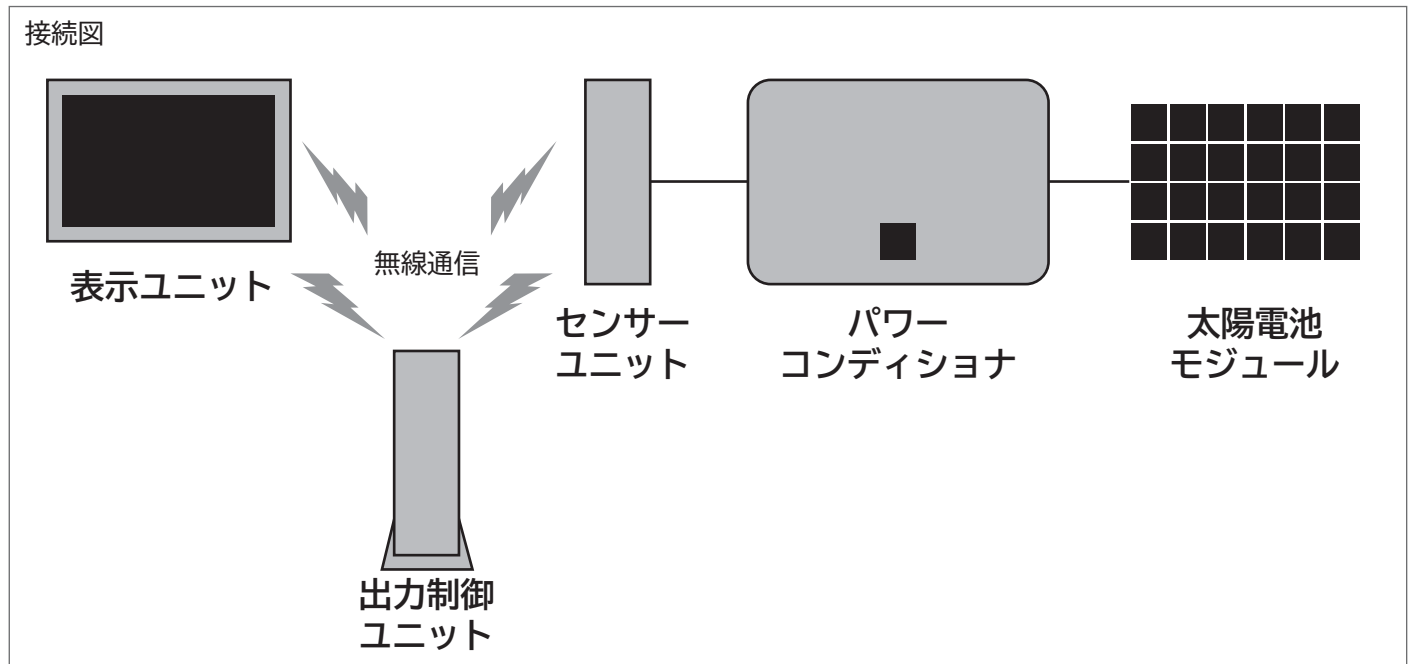
- モジュラーケーブルのツメ部分を図のように端子に合わせて「カチッ」というまで挿入します。



表示ユニット、センサーユニットと接続する場合 出力制御実施時の画面表示について → P.16

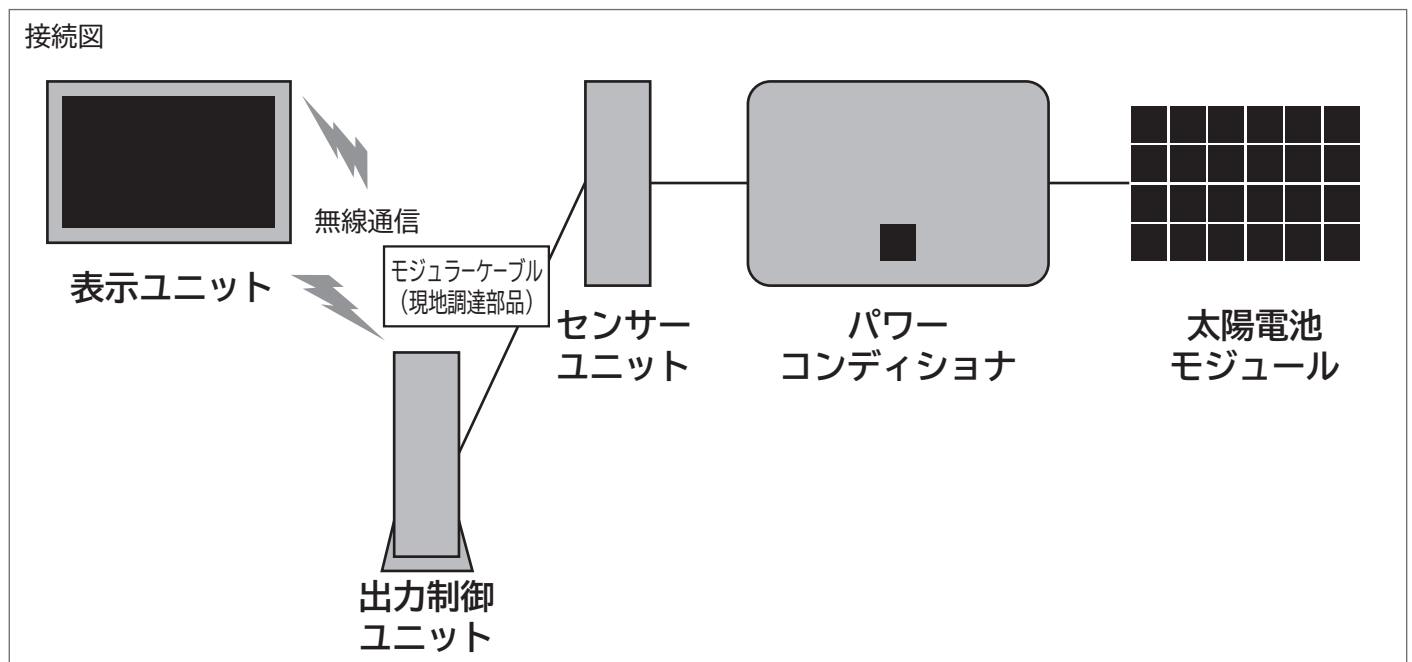
無線接続の場合

出力制御ユニットとセンサーユニット及び表示ユニット間の無線通信は「特定小電力無線局の無線設備」の技術基準に適合しています。通信できる距離は見通し50m程度が目安です。



有線接続の場合

モジュラーケーブルでセンサーユニットと接続します。表示ユニット間の通信は無線通信で行います。センサーユニットとの接続のしかたは [→ P.14](#) を確認してください。

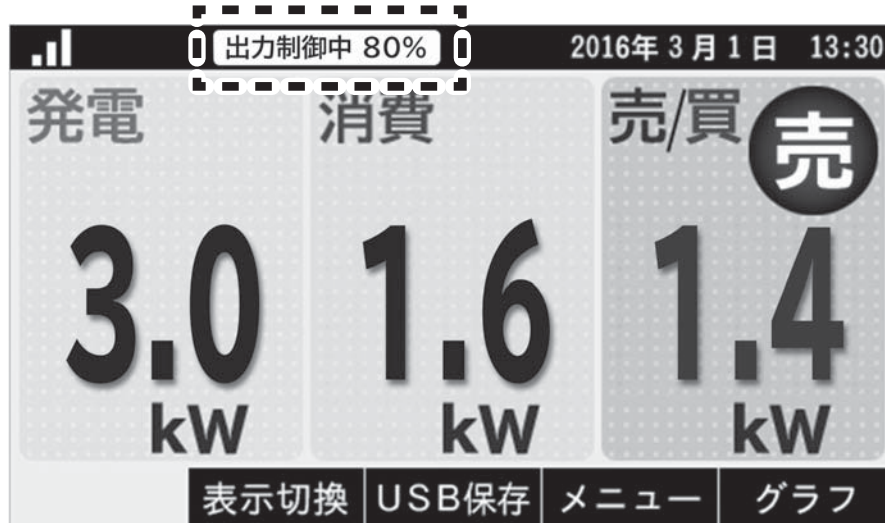


各機器との接続 (つづき)

表示ユニット、センサーユニットと接続する場合 (つづき)

出力制御実施時の画面表示について

電力会社からの出力制御指示が実施されている間、表示ユニットの画面上に、出力制御中を示すメッセージが表示されます。



グラフ画面、表画面で過去の出力制御実施状況を確認できます。

グラフ画面



出力制御が発生した時点で▼が表示されます。

表画面 (日単位)

2016年 3月 1日 13:30

	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	
発電	1.6	2.3	2.8	2.9	2.2	2.8	2.3	1.9	
売電	1.2	1.9	2.5	2.7	1.6	2.5	2.2	1.8	
買電	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	
消費	0.4	0.4	0.3	0.2	0.9	0.3	0.1	0.1	
出力制御 (%)	-	-	-	-	-	80	70	70	80
単位:kWh									

ホーム << >> グラフ

表の最下行に出力制御率が表示されます。
(「-」(ハイフン)表示は出力制御なし)

表画面 (月単位)

2016年 3月 1日 13:30

日	月	火	水	木	金	土	
1	15.4	2	15.9	3	17.8	4	17.4
5	16.3	6	16.0	7	13.2	8	15.4
9	15.9	10	13.2	11	15.4	12	15.9
13	16.0	14	15.0	15	15.4	16	16.0
17	16.0	18	17.4	19	16.3	20	16.3
21	15.9	22	17.8	23	17.4	24	16.3
25	15.9	26	17.8	27	16.3	28	13.2
29	15.4	30	16.8	31	16.8		

ホーム ▼売電 <<前の月 次の月>> グラフ

出力制御が実施された日の発電量が朱文字で表示されます。

注意

出力制御実施時刻は、表示ユニットの時刻で保存されるため、実際の実施時刻とのズレが発生する場合があります。

こんなときは

確認してください

LEDランプが全て消灯している

ACアダプタはコンセントにしっかり差し込まれていますか？
ACアダプタの出力制御ユニット側接続部はしっかり差し込まれていますか？
ブレーカーが落ちていませんか？

お知らせLEDランプが
「複数回点滅」を繰り返す

お知らせ表示があるとお知らせLEDランプが「複数回点滅」→「3秒消灯」→「複数回点滅」・・・を繰り返します。点滅回数によって内容が異なります。
以下、点滅回数ごとの対応を試みてもお知らせLEDランプの点滅が1日以上続く様であれば、お買い上げの販売店へお問い合わせください。

2回点滅

弊社サーバとのインターネット通信が正常ではありません。
LAN端子にケーブルが正しく挿入されているか、ルータの電源が切れていないか確認してください。
その後に本体のACアダプタを一度抜いて再投入してください。

3回点滅

センサーユニットとの通信が正常ではありません。
センサーユニットの電源が切れていないか確認してください。
センサーユニットと有線（モジュラーケーブル）で繋いでいる場合は正しく接続されているか確認してください。

4回点滅

電力会社サーバとのインターネット通信が正常ではありません。
LAN端子にケーブルが正しく挿入されているか、ルータの電源が切れていないか確認してください。
その後に本体のACアダプタを一度抜いて再投入してください。

上記以外の点滅

ACアダプタを一度抜いて再投入してください。

煙が出ていたり、
変なにおいがする

ACアダプタをコンセントから抜いてください。
その後、お買い上げの販売店へお問い合わせください。

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本製品のソフトウェアを弊社サーバよりダウンロードして自動更新する機能があります。今後、予告なくソフトウェアが更新されることがあります。

発電データ情報の収集

今後、アフターサポートのために、お客様の発電データ情報を収集して弊社サーバへアップロードすることがあります。

保証とアフターサービス

必ずお読みください

■保証書(別添付)

保証書は必ず「お引き渡し日・販売店名」などの記入をお確かめのうえ、販売店から受け取っていただき、内容をよくお読みのあと、大切に保管してください。

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部品代	修理に使用した部品代金です。その他修理に付帯する部材等を含む場合もあります。
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■修理を依頼されるときは 出張修理

「こんなときは」(→P.17)に従って調べていただき、なお異常のあるときはご使用を中止し、ACアダプタをコンセントから抜いてください。

- 保証期間中は

修理に際しましては保証書をご提示ください。保証書の規定に従って、販売店が修理させていただきます。

【ご連絡していただきたい内容】

品名	出力制御ユニット
型式	HSS-Y10D
お引き渡し日	年 月 日
故障の状況	できるだけ具体的に
ご住所	付近の目印等も併せてお知らせください
お名前	
電話番号	
訪問ご希望日	

- 保証期間が過ぎているときは

修理すれば使用できる場合は、ご希望により有料で修理させていただきます。

■ご転居されるときは

ご転居によりお買い上げの販売店のアフターサービスが受けられない場合は、前もって販売店にご相談ください。

ご相談窓口

商品情報や修理はお買い上げの販売店へ

(ご不明な点は、下記窓口にご相談ください)

修理に関するご相談はエコーセンターへ

TEL 0120-3121-68
FAX 0120-3121-87

(受付時間) 9:00~19:00(月~土)、9:00~17:30(日・祝日)
携帯電話、PHSからもご利用できます。

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家電ビジネス情報センターへ

TEL 0120-3121-19
FAX 0120-3121-34

(受付時間) 9:00~17:30(月~土)
日曜・祝日と年末年始・夏期休暇などは休ませていただきます。
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仕様

品名	出力制御ユニット
型式	HSS-Y10D
定格入力電圧	DC12V
使用温度範囲	動作時:0~40℃
使用湿度範囲	20~90%
最大消費電力	4W
データ通信方法	出力制御ユニットー表示ユニット間:無線通信 出力制御ユニットーセンサーユニット間:無線通信/有線通信 出力制御ユニットーパワーコンディショナ間:有線通信
質量	本体約300g(固定台含む)、ACアダプタ130g
外形寸法	幅131 × 奥行37.5 × 高175mm
設置方法	屋内用(卓上据置/壁面取付固定)
LED表示内容	電源:緑 出力制御中:橙 お知らせ:赤 ネットワーク接続中:緑

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