FORTRESS POWER • INSTALLER PROCEDURE

ENVY Export Derating & End-User Lockout

Configure the export limit and PCS busbar rating, lock end-user access, and submit the signed Export Derating Confirmation to the AHJ.

Subject	Configure export derating and the PCS busbar rating, lock end-user access, and provide the signed AHJ confirmation
Applies to	ENVY hybrid inverter • Fortress Power web portal
Audience	Installers / commissioning technicians
Covers	1) Sign in 2) Max export (derating) 3) PCS busbar rating 4) LCD password 5) Read-only owner access 6) AHJ confirmation handout

This procedure has two parts. First, the installer configures the ENVY system to the utility / AHJ interconnection limits – setting the maximum grid export (power derating) and the PCS main service busbar rating – and locks the end user out of these protected settings. Second, the installer completes and signs the FP-ENVY Inverter Export Derating Confirmation on the last page and submits it to the Authority Having Jurisdiction (AHJ). Configuring the system and its compliance are the installer's responsibility; the confirmation documents the as-configured values for the AHJ.

Table of Contents

1. SIGN IN TO THE WEB PORTAL 2

2. SET THE MAXIMUM EXPORT LIMIT (POWER DERATING) 2

3. SET THE PCS MAIN SERVICE BUSBAR RATING 3

4. LOCK END-USER ACCESS 4

4.1 Set the LCD Password 4
4.2 Provide Read-Only Owner Credentials 5

5. APPLY THE PCS FIELD LABELS 5

5.1 PCS Controlled Current Setting — master (primary) inverter 6
5.2 Sensor label — at the CT panel 6

6. BEFORE YOU LEAVE SITE 6

7. COMPLETE & SUBMIT THE AHJ CONFIRMATION 7

8. EXPORT DERATING CONFIRMATION (AHJ HANDOUT) 8

1. Sign In to the Web Portal

Sign in to the Fortress Power web portal with installer-level credentials. Every setting below requires installer access – the homeowner's read-only account cannot reach them.

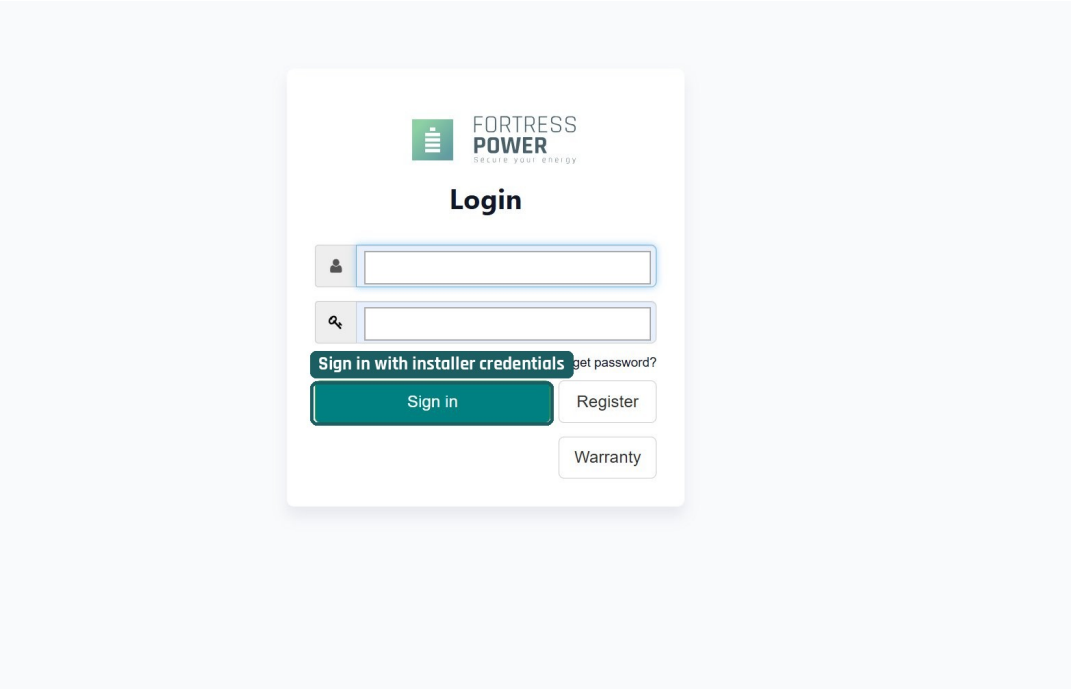

Figure 1 – Fortress Power web portal login. Sign in with installer credentials (shown redacted).

2. Set the Maximum Export Limit (Power Derating)

Export (power) derating caps how much power the system pushes to the grid, keeping the site within the utility's interconnection limit and preventing over-export. Set it from Maintenance > Working Mode (Application Setting).

Compliance – use the approved value. The export limit must match the value approved by the utility / AHJ on the interconnection agreement. Setting it too high can violate the agreement; always use the approved value and verify it.

1. Confirm the approved export limit from the interconnection agreement / utility: [export limit – kW].
2. Open Maintenance > Working Mode and find the **Application Setting** section.
3. To allow limited export: set **Grid Sell Back** to Enable, set **Grid Sell Back Power (kW)** to the per-inverter export value (see **Multiple inverters** below), then click Set. For zero export: set **Fast Zero Export** to Enable (or Grid Sell Back to Disable).
4. Save, then verify under PV production that export does not exceed the limit (watch the meter / CT reading).

Multiple inverters – divide the limit

Grid Sell Back Power is set on each inverter individually. When a site has more than one inverter, divide the utility-approved total export by the number of inverters and set that same value on every inverter – e.g., a 12 kWAC approved limit across two inverters = 6 kW on each. The combined export then equals the approved total, and each inverter row on the confirmation shows its own per-inverter value.

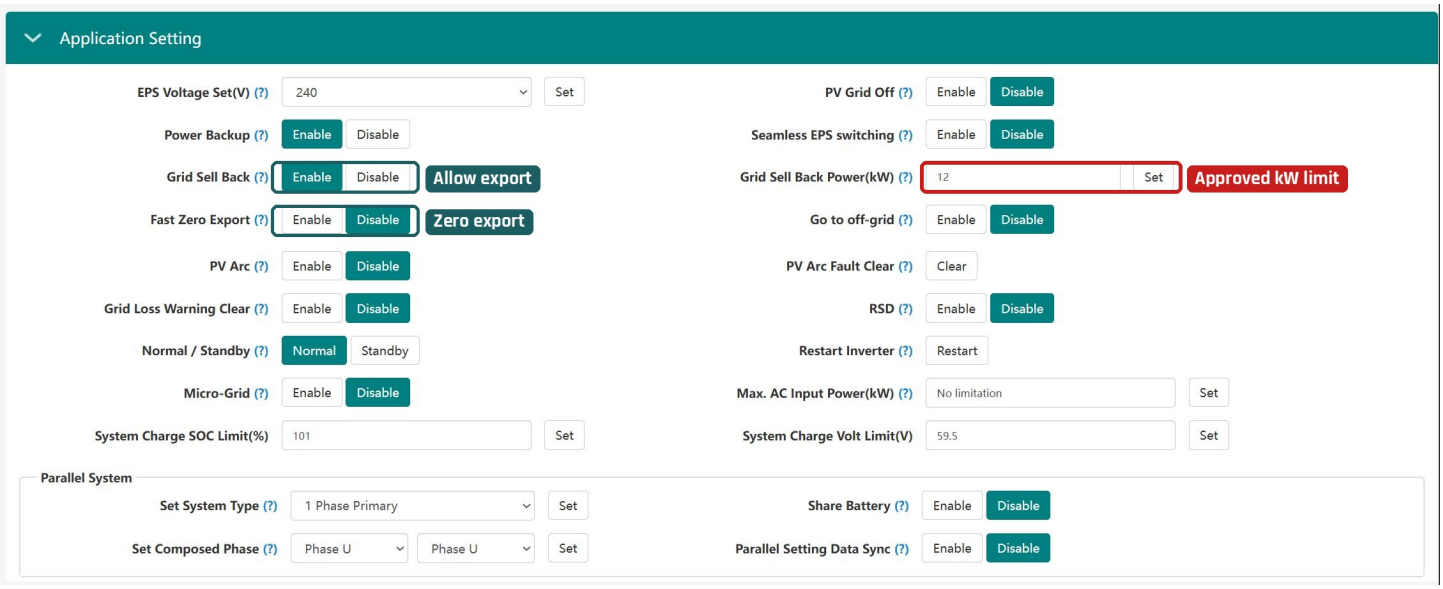

Figure 2 – Application Setting. Grid Sell Back and Fast Zero Export (teal); the Grid Sell Back Power export cap (red) must match the per-inverter share of the utility-approved kW value.

3. Set the PCS Main Service Busbar Rating

The Power Control System (PCS) limits current on the main service busbar so the combined sources do not overload it (NEC 705.13). Enter the main service busbar ampacity so the PCS enforces it. Set it from Maintenance > Remote Set > Application Setting > Advanced settings > CT/Meter Setting.

1. Confirm the main service busbar rating from the service panel / one-line diagram (e.g., 200 A).
2. Open Maintenance > Remote Set > Application Setting and select **Advanced settings**.
3. Under **CT/Meter Setting**, enter **Busbar PCS rating(A)** (valid range 50–5000 A) and click Set.
4. Record the value – it must match the PCS main service busbar rating entered on the confirmation handout.

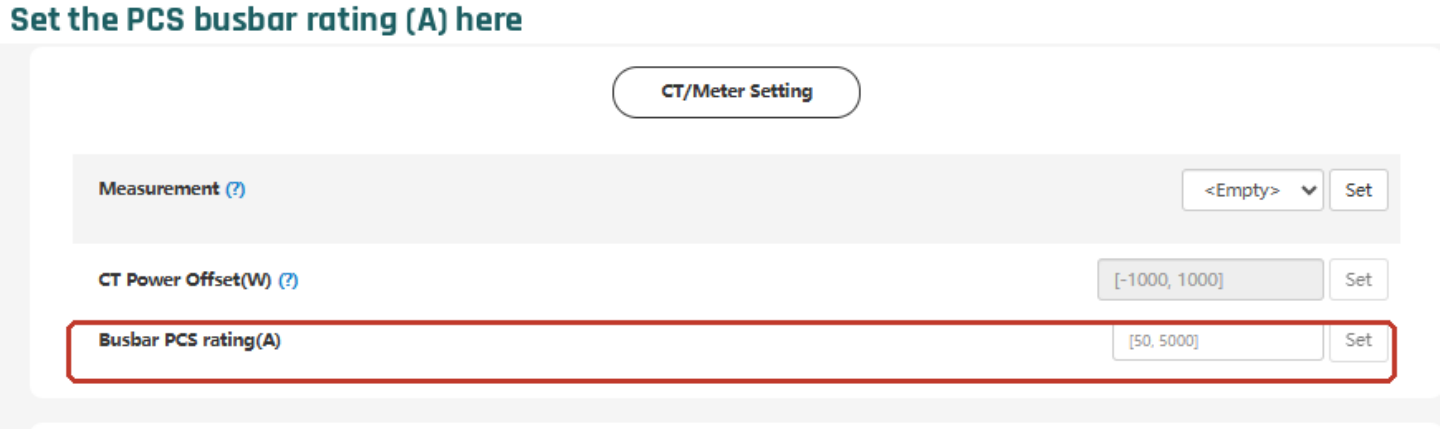

Figure 3 – Application Setting > Advanced settings > CT/Meter Setting. Set Busbar PCS rating(A) (boxed) to the main service busbar ampacity.

4. Lock End-User Access

Lock down end-user access so the homeowner can monitor the system but cannot change the protected settings above. This has two parts: the LCD password (front panel) and a read-only owner account (portal / app).

4.1 Set the LCD Password

The LCD password locks the inverter's front-panel display so the homeowner cannot change parameters locally. Set it from Maintenance > Remote Set > Common Setting.

1. Go to Maintenance > Remote Set and select the station.
2. Open Common Setting and find the LCD Password field (lower right).
3. Enter a password, click Set, and record it in the project file: [LCD password].

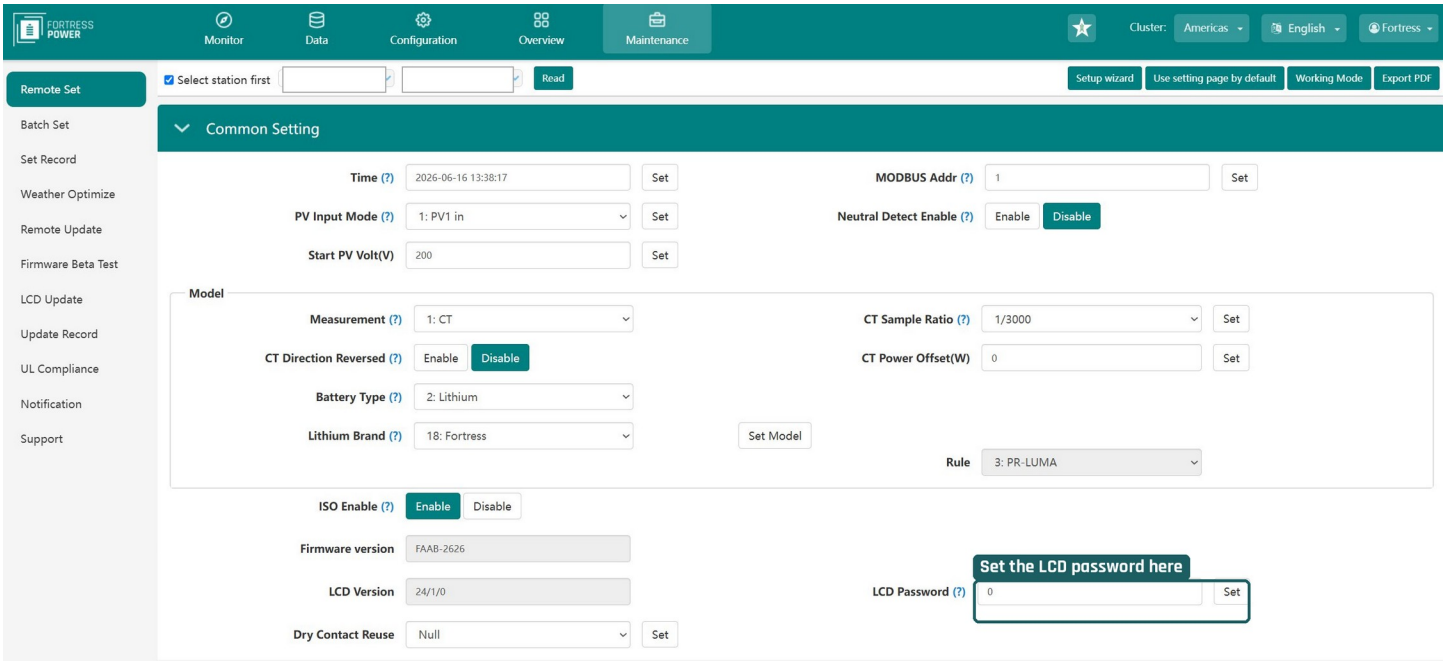

Figure 4 – Maintenance > Remote Set > Common Setting. Set the LCD Password (boxed). Station name and serial number are redacted.

> **Keep this with service records.** The LCD password is needed for future service – store it with the installer file. Do not give it to the end user.

4.2 Provide Read-Only Owner Credentials

Give the homeowner an account that can view production, state of charge, and status, but cannot change settings. Work in Configuration > Users.

1. In Configuration > Users, search for the customer's account – or click Add end user to create one.

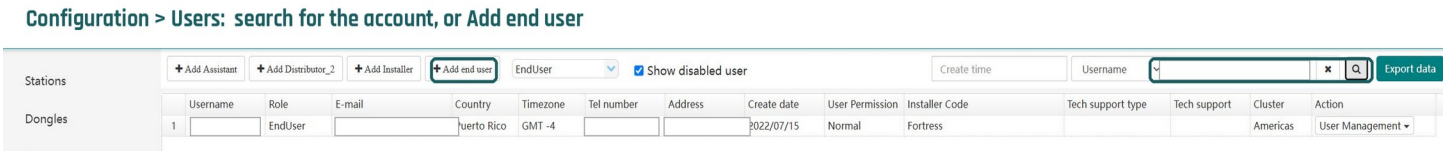

Figure 5 – Configuration > Users. Search for the account or use Add end user. E-mail, phone, and address are redacted.

2. On that row, open the User Management menu and choose Edit.

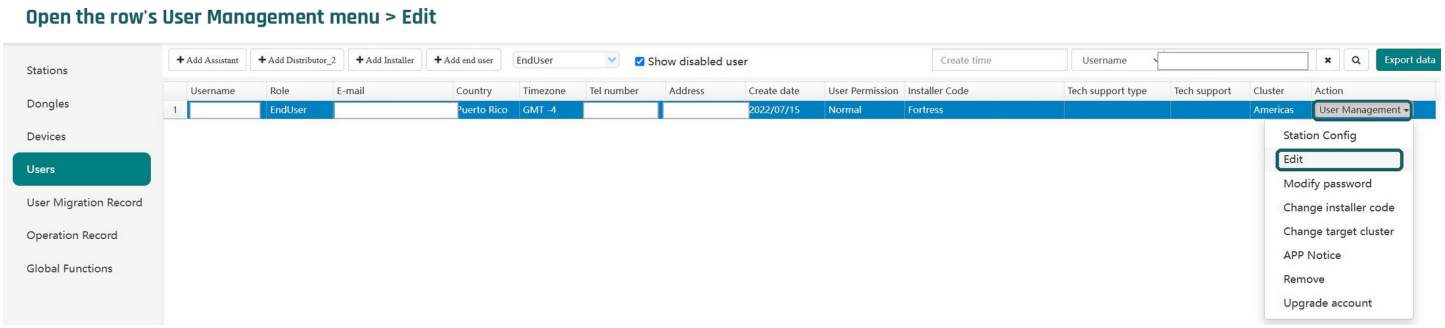

Figure 6 – Open the row's User Management menu and select Edit.

3. Set **User Permission** to **Readonly**, then click Update.

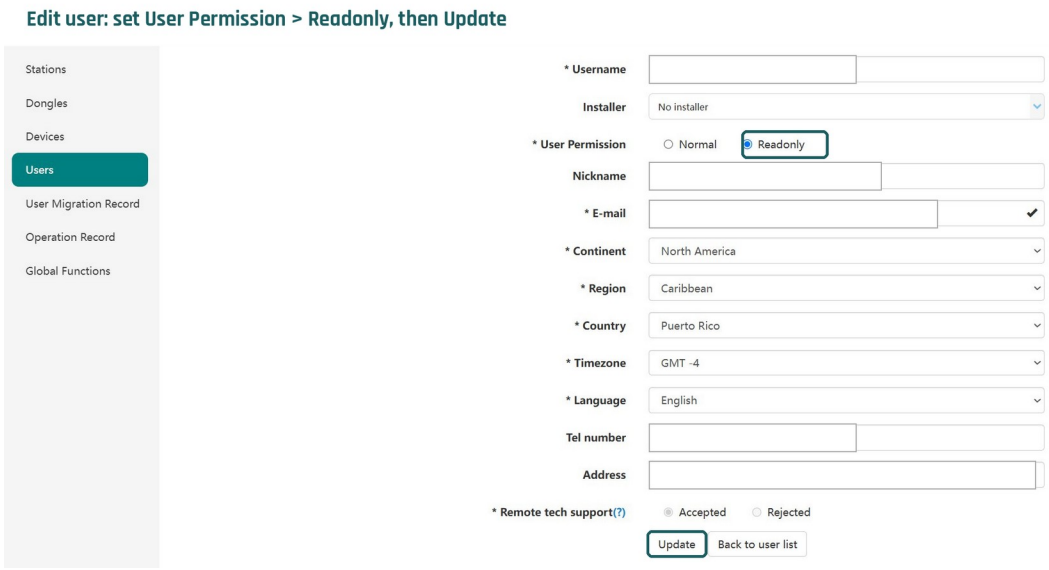

Figure 7 – Edit user: set User Permission to Readonly and click Update. Personal details are redacted.

4. Share only the read-only login and the Fortress Power Owner app with the customer. Keep installer / admin credentials separate.

> **Rule:** the customer gets the read-only (owner) account only. Installer and admin credentials stay with the installer.

5. Apply the PCS Field Labels

A listed Power Control System must be field-marked so its control setting and current sensors are identified (NEC 110.21(B)). Apply the two labels below with the system values written in, using durable, permanently-affixed labels. Do not cover existing product, warning, or certification labels.

> **Labels are installer-supplied.** These PCS labels are not included with the inverter packaging – the installer must acquire them and apply them at commissioning.

5.1 PCS Controlled Current Setting – master (primary) inverter

Apply the PCS Controlled Current Setting label to the master (primary) inverter – the unit set as 1 Phase Primary that coordinates the system. Write in the total system current: the maximum controlled output current (A) for the combined system under the configured export limit.

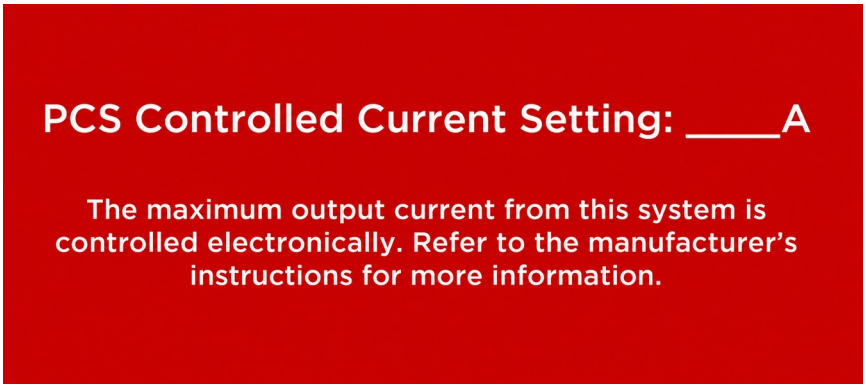

Figure 8 – PCS Controlled Current Setting label. Apply to the master (primary) inverter and enter the total system controlled output current (A).

5.2 Sensor label — at the CT panel

Apply the Power Control System sensor warning label at the panel / enclosure where the CTs (current sensors) are installed, so the CTs are identified as part of the PCS and are not removed or replaced with a different type or rating.

Figure 9 – PCS sensor warning label. Apply at the panel where the CTs are installed.

6. Before You Leave Site

- Maximum export set on each inverter (approved total ÷ number of inverters), with the CT / meter verified.
- Export confirmed at or below the limit under production.
- PCS main service busbar rating set to the service busbar ampacity.
- LCD password set, tested, and recorded in the project file.
- Customer has read-only (owner) access only; installer keeps admin credentials.
- PCS field labels applied — Controlled Current Setting on the master inverter and the sensor label at the CT panel.
- Export Derating Confirmation completed, signed, and submitted to the AHJ (last page).
- All passwords, accounts, and settings recorded in the project file.

7. Complete & Submit the AHJ Confirmation

The last page is the FP-ENVY Inverter Export Derating Confirmation — the handout the installer submits to the AHJ. Complete it from the values set above:

1. Enter the site / station name and location.
2. Enter the PCS main service busbar rating (A) from Section 3.
3. Add one row per inverter — model, serial number(s), and the configured maximum export power (kW) and current (A) from Section 2. Use **"+ Add inverter"** for additional units, up to ten.

4. Mark whether the end user has been locked out of settings (Section 4).
5. Sign and date as the installer, then submit the page with the interconnection application / to the AHJ.

> **The confirmation is an installer attestation.** Fortress Power supplies the certified equipment and this form; configuration of the system and its site-specific compliance are the installer's responsibility.

FP-ENVY INVERTER EXPORT DERATING CONFIRMATION

Official Fortress Power document. The FP-ENVY inverter is listed to UL 1741 / IEEE 1547, is PCS CRD certified, and provides configurable export (power) limiting. This form is completed and signed by the installer.

The undersigned installer confirms that the inverter(s) listed below have been programmed and configured to limit export to the utility grid to the value(s) stated, in accordance with the requirements of the Authority Having Jurisdiction (AHJ) and the interconnecting utility, at the site identified below.

Site / Station name: _____ **Location:** _____

PCS main service busbar rating (A): _____ **End-user locked out of settings:** ☐ **Yes** ☐ **No**

- Remove last + Add inverter

Inverter Model	Serial Number/s	Maximum Exporting Power Output (kW)	Maximum Exporting Current Output (A)
FP-ENVY-12K			

Installer responsibility – The installer is solely responsible for programming and configuring the export limit and the end-user lockout, and for the system's compliance with all applicable codes, standards, and Authority Having Jurisdiction (AHJ) and utility requirements. Fortress Power LLC supplies the certified equipment and this form; it does not configure the system and makes no representation of site-specific compliance.

Installer company: _____ **License No.:** _____

Installer name (print): _____ **Date:** _____

Signature: _____ **Email / phone:** _____