HYPERTHERM®
A Hypertherm Associates Brand

XPR® PCB Firmware Updates

Field Service Bulletin

10084813
Revision 3
September 2026

Warranty information

You can find warranty information for your product at www.hypertherm.com/warranty.

Recycling information

You can find recycling information for your product at www.hypertherm.com/resources/system-support/recycling.

Contact us

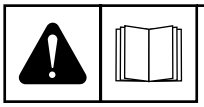
hypertherm.com/contactus

Hypertherm, Inc.
21 Great Hollow Road, P.O. Box 5010
Hanover, NH 03755 USA

© 2017 – 2026 Hypertherm, Inc. All rights reserved.

EDGE, HyDefinition, OptiMix, SureCut, TorchConnect, True Hole, VWI, XPR, XPR170, XPR300, XPR460 and Hypertherm are trademarks of Hypertherm, Inc. and may be registered in the United States and/or other countries. All other trademarks are the property of their respective holders.

Environmental stewardship is one of Hypertherm's core values. www.hypertherm.com/environment



ENGLISH

WARNING! Before operating any Hypertherm equipment, read the safety instructions in your product's manual, the *Safety and Compliance Manual* (80669C), *Waterjet Safety and Compliance Manual* (80943C), and *Radio Frequency Warning Manual* (80945C). Failure to follow safety instructions can result in personal injury or in damage to equipment.

Copies of the manuals can come with the product in electronic and printed formats. Electronic copies are also on our website. Many manuals are available in multiple languages at www.hypertherm.com/docs.

BG (БЪЛГАРСКИ/BULGARIAN)

ПРЕДУПРЕЖДЕНИЕ! Преди да работите с което и да е оборудване Hypertherm, прочетете инструкциите за безопасност в ръководството на вашия продукт, „Инструкция за безопасност и съответствие“ (80669C), „Инструкция за безопасност и съответствие на Waterjet“ (80943C) и „Инструкция за предупреждение за радиочестота“ (80945C).

Продуктът може да е съпроводен от копия на ръководствата в електронен и в печатен формат. Тези в електронен формат са достъпни също на уебсайта ни. Много ръководства са налице на няколко езика на адрес www.hypertherm.com/docs.

CS (ČESKY/CZECH)

VAROVÁNÍ! Před uvedením jakéhokoli zařízení Hypertherm do provozu si přečtěte bezpečnostní pokyny v příručce k produktu a v *Manuálu pro bezpečnost a dodržování předpisů* (80669C), *Manuálu pro bezpečnost a dodržování předpisů při řezání vodním paprskem* (80943C) a *Manuálu varování ohledně rádiových frekvencí* (80945C).

Kopie příruček mohou být součástí dodávky produktu, a to v elektronické i tištěné formě. Elektronické kopie jsou k dispozici i na našich webových stránkách. Mnoho příruček je k dispozici v různých jazycích na stránce www.hypertherm.com/docs.

DA (DANSK/DANISH)

ADVARSEL! Inden Hypertherm udstyr tages i brug skal sikkerhedsinstruktionerne i produktets manual og i *Manual om sikkerhed og overholdelse af krav* (80669C), *Manual om sikkerhed og overholdelse af krav for vandstråleskæring* (80943C), og *Manual om radiofrekvensadvarsel* (80945C), gennemlæses.

Kopier af manualerne kan leveres med produktet i elektronisk og trykt format. Elektroniske kopier findes også på vores hjemmeside. Mange manualer er tilgængelige på flere sprog på www.hypertherm.com/docs.

DE (DEUTSCH/GERMAN)

WARNUNG! Bevor Sie ein Hypertherm-Gerät in Betrieb nehmen, lesen Sie bitte die Sicherheitsanweisungen in Ihrer Bedienungsanleitung, das *Handbuch für Sicherheit und Übereinstimmung* (80669C), das *Handbuch für Sicherheit und Compliance bei Wasserstrahl-Schneidanlagen* (80943C) und das *Handbuch für Hochfrequenz-Warnung* (80945C).

Bedienungsanleitungen und Handbücher können dem Gerät in elektronischer Form oder als Druckversion beiliegen. In elektronischer Form liegen sie auch auf unserer Website vor. Viele Handbücher stehen in verschiedenen Sprachen auf www.hypertherm.com/docs zur Verfügung.

ES (ESPAÑOL/SPANISH)

¡ADVERTENCIA! Antes de operar cualquier equipo Hypertherm, lea las instrucciones de seguridad del manual de su producto, del *Manual de seguridad y cumplimiento* (80669C), del *Manual de seguridad y cumplimiento en corte con chorro de agua* (80943C) y del *Manual de advertencias de radiofrecuencia* (80945C).

El producto puede incluir copias de los manuales en formato digital e impreso. Las copias digitales también están en nuestra página web. Hay diversos manuales disponibles en varios idiomas en www.hypertherm.com/docs.

ET (EESTI/ESTONIAN)

HOIATUS! Enne Hyperthermi mis tahes seadme kasutamist lugege läbi toote kasutusjuhendis olevad ohutusjuhised ning *Ohutus- ja vastavusjuhend* (80669C), *Veejoa ohutuse ja vastavuse juhend* (80943C) ja *Raadiosageduse hoiatusjuhend* (80945C). Ohutusjuhiste eiramine võib põhjustada vigastusi ja kahjustada seadmeid.

Juhiste koopiad võivad tootega kaasas olla elektrooniliselt või trükituna. Elektroonilised koopiad on saadaval ka meie veebilehel. Paljud kasutusjuhendid on erinevates keeltes saadaval veebilehel www.hypertherm.com/docs.

FI (SUOMI/FINNISH)

VAROITUS! Ennen minkään Hypertherm-laitteen käyttöä lue tuotteen käyttöoppaassa olevat turvallisuusohjeet, *turvallisuuden ja vaatimustenmukaisuuden käsikirja* (80669C), vesileikkauksen *turvallisuuden ja vaatimustenmukaisuuden käsikirja* (80943C) ja *radiotaajuusvaroitusten käsikirja* (80945C).

Käyttöoppaiden kopiot voivat olla tuotteen mukana sähköisessä ja tulostetussa muodossa. Sähköiset kopiot ovat myös verkkosivustollamme. Monet käyttöoppaat ovat myös saatavissa useilla kielillä www.hypertherm.com/docs.

FR (FRANÇAIS/FRENCH)

AVERTISSEMENT! Avant d'utiliser tout équipement Hypertherm, lire les consignes de sécurité du manuel de votre produit, du *Manuel de sécurité et de conformité* (80669C), du *Manuel de sécurité et de conformité du jet d'eau* (80943C) et du *Manuel d'avertissement relatif aux radiofréqunces* (80945C).

Les exemplaires des manuels qui accompagnent le produit peuvent être sous forme électronique ou papier. Les manuels sous forme électronique se trouvent également sur notre site Internet. Plusieurs manuels sont offerts en plusieurs langues à www.hypertherm.com/docs.

GR (ΕΛΛΗΝΙΚΑ/GREEK)

ΠΡΟΕΙΔΟΠΟΙΗΣΗ! Πριν θέσετε σε λειτουργία οποιονδήποτε εξοπλισμό της Hypertherm, διαβάστε τις οδηγίες ασφαλείας στο εγχειρίδιο του προϊόντος και στο *εγχειρίδιο ασφάλειας και συμμόρφωσης* (80669C), στο *εγχειρίδιο ασφάλειας και συμμόρφωσης του waterjet* (80943C) και στο *εγχειρίδιο προειδοποιήσεων για τις ραδιοσυχνότητες* (80945C).

Το προϊόν μπορεί να συνοδεύεται από αντίγραφα των εγχειριδίων σε ηλεκτρονική και έντυπη μορφή. Τα ηλεκτρονικά αντίγραφα υπάρχουν επίσης στον ιστότοπό μας. Πολλά εγχειρίδια είναι διαθέσιμα σε διάφορες γλώσσες στο www.hypertherm.com/docs.

HU (MAGYAR/HUNGARIAN)

VIGYÁZAT! Mielőtt bármilyen Hypertherm berendezést üzemeltetne, olvassa el a biztonsági információkat a termék kézikönyvében, a *Biztonsági és szabálykövetési kézikönyvben* (80669C), a *Vízsugaras biztonsági és szabálykövetési kézikönyvben* (80943C) és a *Rádiófrekvenciás figyelmeztetéseket tartalmazó kézikönyvben* (80945C).

A termékhez a kézikönyv példányai elektronikus és nyomtatott formában is mellékelve lehetnek. Az elektronikus példányok webhelyünkön is megtalálhatók. Számos kézikönyv áll rendelkezésre több nyelven a www.hypertherm.com/docs weboldalon.

ID (BAHASA INDONESIA/INDONESIAN)

PERINGATAN! Sebelum mengoperasikan peralatan Hypertherm, bacalah petunjuk keselamatan dalam manual produk Anda, *Manual Keselamatan dan Kepatuhan* (80669C), *Manual Keselamatan dan Kepatuhan Jet Air* (80943C), dan *Manual Peringatan Frekuensi Radio* (80945C). Kegagalan mengikuti petunjuk keselamatan dapat menyebabkan cedera pribadi atau kerusakan pada peralatan.

Produk mungkin disertai salinan manual atau petunjuk dalam format elektronik maupun cetak. Salinan elektronik juga tersedia di situs web kami. Berbagai manual tersedia dalam beberapa bahasa di www.hypertherm.com/docs.

IT (ITALIANO/ITALIAN)

AVVERTENZA! Prima di usare un'attrezzatura Hypertherm, leggere le istruzioni sulla sicurezza nel manuale del prodotto, nel *Manuale sulla sicurezza e la conformità* (80669C), nel *Manuale sulla sicurezza e la conformità Waterjet* (80943C) e nel *Manuale di avvertenze sulla radiofrequenza* (80945C).

Copie del manuale possono accompagnare il prodotto in formato cartaceo o elettronico. Le copie elettroniche sono disponibili anche sul nostro sito web. Molti manuali sono disponibili in diverse lingue all'indirizzo www.hypertherm.com/docs.

JA (日 本語/JAPANESE)

警告！Hypertherm 機器を操作する前に、この製品説明書にある安全情報、「安全とコンプライアンスマニュアル」(80669C)、「ウォータージェットの安全とコンプライアンス」(80943C)、「高周波警告」(80945C) をお読みください。

説明書のコピーは、電子フォーマット、または印刷物として製品に同梱されています。電子コピーは当社ウェブサイトにも掲載されています。説明書の多くは www.hypertherm.com/docs にて複数の言語でご用意しています。

KO (한국어/KOREAN)

경고! Hypertherm 장비를 사용하기 전에 제품 설명서와 안전 및 규정 준수 설명서(80669C), 워터젯 안전 및 규정 준수 설명서(80943C) 그리고 무선 주파수 경고 설명서(80945C)에 나와 있는 안전 지침을 읽으십시오.

전자 형식과 인쇄된 형식으로 설명서 사본이 제품과 함께 제공될 수 있습니다. 전자 사본도 Hypertherm 웹사이트에서 보실 수 있으며 설명서 사본은 www.hypertherm.com/docs 에서 여러 언어로 제공됩니다.

NE (NEDERLANDS/DUTCH)

WAARSCHUWING! Lees voordat u Hypertherm-apparatuur gebruikt de veiligheidsinstructies in de producthandleiding, in de *Veiligheids- en nalevingshandleiding* (80669C) in de *Veiligheids- en nalevingshandleiding voor waterstralen* (80943C) en in de *Waarschuwingshandleiding radiofrequentie* (80945C).

De handleidingen kunnen in elektronische en gedrukte vorm met het product worden meegeleverd. Elektronische versies zijn ook beschikbaar op onze website. Veel handleidingen zijn in meerdere talen beschikbaar via www.hypertherm.com/docs.

NO (NORSK/NORWEGIAN)

ADVARSEL! Før du bruker noe Hypertherm-utstyr, må du lese sikkerhetsinstruksjonene i produktets håndbok, *håndboken om sikkerhet og samsvar* (80669C), *håndboken om vannjet sikkerhet og samsvar* (80943C), og *håndboken om radiofrekvensadvarsler* (80945C).

Eksemplarer av håndbøkene kan følge med produktet i elektronisk og trykt form. Elektroniske eksemplarer finnes også på nettstedet vårt. Mange håndbøker er tilgjengelig i flere språk på www.hypertherm.com/docs.

PL (POLSKI/POLISH)

OSTRZEŻENIE! Przed rozpoczęciem obsługi jakiegokolwiek systemu firmy Hypertherm należy się zapoznać z instrukcjami bezpieczeństwa zamieszczonymi w podręczniku produktu, w p*odręczniku bezpieczeństwa i zgodności* (80669C), *podręczniku bezpieczeństwa i zgodności systemów strumienia wody* (80943C) oraz *podręczniku z ostrzeżeniem o częstotliwości radiowej* (80945C).

Do produktu mogą być dołączone podręczniki użytkownika w formie elektronicznej i drukowanej. Kopie elektroniczne znajdują się również w naszej witrynie internetowej. Wiele podręczników jest dostępnych w różnych językach pod adresem www.hypertherm.com/docs.

PT (PORTUGUÊS/PORTUGUESE)

ADVERTÊNCIA! Antes de operar qualquer equipamento Hypertherm, leia as instruções de segurança no manual do seu produto, no *Manual de Segurança e de Conformidade* (80669C), no *Manual de Segurança e de Conformidade do Waterjet* (80943C) e no *Manual de Advertência de radiofrequência* (80945C).

Cópias dos manuais podem vir com o produto nos formatos eletrônico e impresso. Cópias eletrônicas também são encontradas em nosso website. Muitos manuais estão disponíveis em vários idiomas em www.hypertherm.com/docs.

RO (ROMÂNĂ/ROMANIAN)

AVERTIZARE! Înainte de utilizarea oricărui echipament Hypertherm, citiți instrucțiunile de siguranță din manualul produsului, *manualul de siguranță și conformitate* (80669C), *manualul de siguranță și conformitate Waterjet* (80943C) și din *manualul de avertizare privind radiofrecvența* (80945C).

Produsul poate fi însoțit de copii ale manualelor în format tipărit și electronic. Exemplarele electronice sunt disponibile și pe site-ul nostru web. Numeroase manuale sunt disponibile în mai mult limbi la adresa: www.hypertherm.com/docs.

RU (РУССКИЙ/RUSSIAN)

БЕРЕГИСЬ! Перед работой с любым оборудованием Hypertherm ознакомьтесь с инструкциями по безопасности, представленными в руководстве, которое поставляется вместе с продуктом, в *Руководстве по безопасности и соответствию* (80669C), в *Руководстве по безопасности и соответствию для водоструйной резки* (80943C) и *Руководстве по предупреждению о радиочастотном излучении* (80945C).

Копии руководств, которые поставляются вместе с продуктом, могут быть представлены в электронном и бумажном виде. Электронные копии также доступны на нашем веб-сайте. Целый ряд руководств доступны на нескольких языках по ссылке www.hypertherm.com/docs.

SK (SLOVENČINA/SLOVAK)

VÝSTRAHA! Pred použitím akéhokoľvek zariadenia od spoločnosti Hypertherm si prečítajte bezpečnostné pokyny v návode na obsluhu vášho zariadenia a v *Manuáli o bezpečnosti a súlade s normami* (80669C), *Manuáli o bezpečnosti a súlade s normami pre systém rezania vodou* (80943C) a v *Manuáli s informáciami o rádiofrekvencii* (80945C).

Návod na obsluhu sa dodáva spolu s produktom v elektronickej a tlačenej podobe. Jeho elektronický formát je dostupný aj na našej webovej stránke. Mnohé z návodov na obsluhu sú dostupné vo viacjazyčnej mutácii na stránke www.hypertherm.com/docs.

SL (SLOVENŠČINA/SLOVENIAN)

OPOZORILO! Pred uporabo katerekoli Hyperthermove opreme preberite varnostna navodila v priročniku vašega izdelka, v *Priročniku za varnost in skladnost* (80669C), v P*riročniku za varnost in skladnost sistemov rezanja z vodnim curkom* (80943C) in v *Priročniku Opozorilo o radijskih frekvencah* (80945C).

Izvodi priročnikov so lahko izdelku priloženi v elektronski in tiskani obliki. Elektronski izvodi so na voljo tudi na našem spletnem mestu. Številni priročniki so na voljo v različnih jezikih na naslovu www.hypertherm.com/docs.

SR (SRPSKI/SERBIAN)

UPOZORENJE! Pre rukovanja bilo kojom Hyperthermovom opremom pročitajte uputstva o bezbednosti u svom priručniku za proizvod, *Priručniku o bezbednosti i usaglašenosti* (80669C), *Priručniku o bezbednosti i usaglašenosti Waterjet tehnologije* (80943C) i *Priručniku sa upozorenjem o radio-frekvenciji* (80945C).

Уз производ се испоручују копије приручника у електронском или штампаном формату. Електронске копије су такође доступне на нашем веб-сајту. Многи приручници су доступни на више језика на адреси www.hypertherm.com/docs.

SV (SVENSKA/SWEDISH)

VARNING! Läs häftet säkerhetsinformationen i din produkts *säkerhets- och efterlevnadsmanual* (80669C), *säkerhets- och efterlevnadsmanualen för Waterjet* (80943C) och *varningsmanualen för radiofrekvenser* (80945C) för viktig säkerhetsinformation innan du använder eller underhåller Hypertherm-utrustning.

Kopior av manualerna kan medfölja produkten i elektroniskt och tryckt format. Elektroniska kopior finns också på vår webbplats. Många manualer finns på flera språk på www.hypertherm.com/docs.

TH (ภาษาไทย/THAI)

คำเตือน! ก่อนการใช้งานอุปกรณ์ของ Hypertherm ทั้งหมด โปรดอ่านคำแนะนำด้านความปลอดภัยในคู่มือการใช้สินค้า คู่มือด้านความปลอดภัยและการปฏิบัติตาม (80669C), คู่มือด้านความปลอดภัยและการปฏิบัติตามสำหรับการใช้หัวตัดระบบวอเตอร์เจ็ต (80943C) และ คู่มือคำเตือนเกี่ยวกับความถี่วิทยุ (80945C) การไม่ปฏิบัติตามคำแนะนำด้านความปลอดภัยอาจส่งผลให้เกิดการบาดเจ็บหรือเกิดความเสียหายต่ออุปกรณ์

สำเนาคู่มือทั้งในรูปแบบอิเล็กทรอนิกส์และแบบสิ่งพิมพ์จะถูกแนบมาพร้อมกับผลิตภัณฑ์ สำเนาคู่มือในรูปแบบอิเล็กทรอนิกส์ของผลิตภัณฑ์และสำเนาคู่มือต่าง ๆ ในหลากหลายภาษานั้นยังมีให้บริการบนเว็บไซต์ www.hypertherm.com/docs ของเราอีกด้วย

TR (TÜRKÇE/TURKISH)

UYARI! Bir Hypertherm ekipmanını çalıştırmadan önce, ürününüzün kullanım kılavuzunda, *Güvenlik ve Uyumluluk Kılavuzu'nda* (80669C), *Su Jeti Güvenlik ve Uyumluluk Kılavuzu'nda* (80943C) ve *Radyo Frekansı Uyarısı Kılavuzu'nda* (80945C) yer alan güvenlik talimatlarını okuyun.

Kılavuzların kopyaları, elektronik ve basılı formatta ürünle birlikte verilebilir. Elektronik kopyalar web sitemizde de yer alır. Kılavuzların birçoğu www.hypertherm.com/docs adresinde birçok dilde mevcuttur.

VI (TIẾNG VIỆT/VIETNAMESE)

CẢNH BÁO! Trước khi vận hành bất kỳ thiết bị Hypertherm nào, hãy đọc các hướng dẫn an toàn trong hướng dẫn sử dụng sản phẩm của bạn, *Sổ tay An toàn và Tuân thủ* (80669C), *Sổ tay An toàn và Tuân thủ Tia nước* (80943C), và *Hướng dẫn Cảnh báo Tần số Vô tuyến* (80945C). Không tuân thủ các hướng dẫn an toàn có thể dẫn đến thương tích cá nhân hoặc hư hỏng thiết bị.

Bản sao của sổ tay có thể đi kèm với sản phẩm ở định dạng điện tử và in. Bản điện tử cũng có trên trang web của chúng tôi. Nhiều sổ tay có sẵn bằng nhiều ngôn ngữ tại www.hypertherm.com/docs .

ZH-CN (简 体中文/CHINESE SIMPLIFIED)

警告！ 在操作任何海宝设备之前，请阅读产品手册、《安全和法规遵守手册》(80669C)、《水射流安全和法规遵守手册》 (80943C) 以及 《射频警告手册》(80945C) 中的安全操作说明。

随产品提供的手册可提供电子版和印刷版两种格式。电子版本同时也在我们的网站上提供。很多手册有多种语言版本，详见 www.hypertherm.com/docs.

ZH-TW (繁 體中文/CHINESE TRADITIONAL)

警告！在操作任何 Hypertherm 設備前，請先閱讀您產品手冊內的安全指示，包括 《安全和法規遵從手冊》(80669C) 、《水刀安全和法規遵從手冊》(80943C)，以及 《無線電頻率警示訊號手冊》(80945C)。

電子版和印刷版手冊複本可能隨產品附上。您也可以前往我們的網站下載電子版手冊。我們的網站上還以多種語言形式提供多種手冊，請造訪 www.hypertherm.com/docs 。

Contents

Introduction 7

How to know if you need to update the XPR PCB firmware 8
Decide which method to use to update the PCB firmware 10

Use the XPR Web Interface to Update the XPR Firmware 11

Step 1 - Download the firmware-update files 13
Step 2 - Prepare the plasma power supply 13
Step 3 - Connect to the cutting system with the XPR web interface 13
Step 4 - Update the firmware 15
Step 5 - Make sure that the firmware updated correctly 17

Use a USB Memory Stick to Update the XPR Firmware 19

Step 1 - Prepare the USB memory stick 20
Step 2 - Prepare the plasma power supply 21
Step 3 - Connect the USB memory stick to the main control PCB 21
Step 4 - Update the firmware 22
Step 5 - Remove the USB memory stick from the main control PCB 23
Step 6 - Make sure that the firmware updated correctly 23

Troubleshooting 25

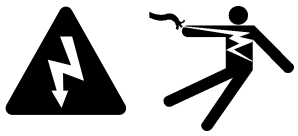
Introduction 25
Troubleshoot XPR web interface update problems 26
Update individual control PCBs with a USB memory stick 27
Step 1 - Prepare the USB memory stick 27
Step 2 - Prepare the component that you want to update 27
Step 3 - Update the firmware 31
Step 4 - Make sure that the update completed correctly 32
Re-install the previous version of the firmware 33
Troubleshoot wireless connection problems 35
Fix XPR web interface connection problems 35
Restart the cutting system 35

Reset the XPR plasma power supply wireless module 37
Fix Windows wireless connection problems 41
Troubleshoot USB update problems 45
Check the Log for firmware-update errors 45

Introduction

This guide shows you how to update the firmware on the XPR main control and chopper PCBs (Printed Circuit Boards) in the plasma power supply, the control PCB in the gas connect console, the control PCB in the TorchConnect™ console, and the control PCB in the cooler (if applicable).

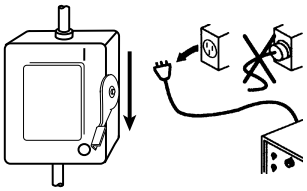
⚠ WARNING



ELECTRIC SHOCK CAN KILL

Disconnect electrical power before doing installation or maintenance.

The line-disconnect switch must stay in the OFF position until all installation or maintenance steps are completed.



In the United States, use a “lock out/tag out” procedure until installation or maintenance is completed. In other countries, do the applicable national and local safety procedures.

Refer to the *Safety and Compliance Manual* (80669C) for more safety information.

⚠ WARNING



ELECTRIC SHOCK CAN KILL

The plasma power supply contains dangerous electric voltages that can seriously injure or kill you.

Even if the plasma power supply is turned OFF, you can still get a serious electric shock if the plasma power supply stays connected to an electric power source.

Use extreme caution if you do diagnosis or maintenance tasks when the plasma power supply remains connected to an electric power source and the outer cover or panels are removed. All work that requires removal of the plasma power supply outer cover or panels must be done by a qualified technician. Refer to the Safety and Compliance Manual (80669C) for more safety information.

⚠ NOTICE

USING A LOWER VERSION OF FIRMWARE CAN CAUSE SOME FEATURES OR DATA TO BE LOST

If you downgrade the firmware for the cutting system (for example, going from a higher firmware version number to a lower version number), some features or saved data can be lost. Lost data cannot be restored by changing again to the higher firmware version number.

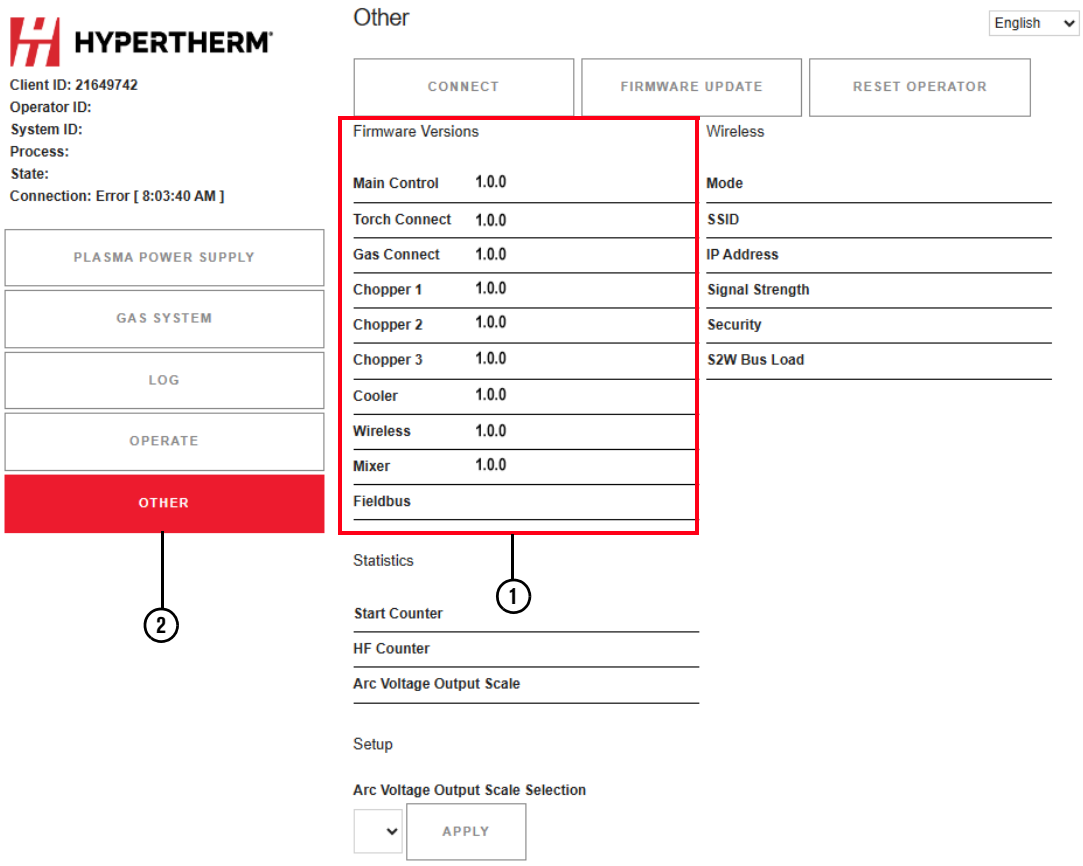
How to know if you need to update the XPR PCB firmware

Update the PCB firmware on your XPR® cutting system if the version number on the cutting system is lower than the version number on the Hypertherm website.

1. Go to www.hypertherm.com.
2. Go to **Resources > Software updates and support**.
3. Under **XPR firmware**, select **View release notes and access the latest firmware file**.
4. Connect to the XPR web interface.

   For information about how to connect to the XPR web interface, refer to the XPR Instruction Manual that came with your cutting system.

5. Compare the versions shown on www.hypertherm.com to the firmware versions ① shown on the **OTHER** ② screen in the XPR web interface.



6. If the versions on the **OTHER** screen in the XPR web interface are lower than the versions shown on www.hypertherm.com, update the firmware.

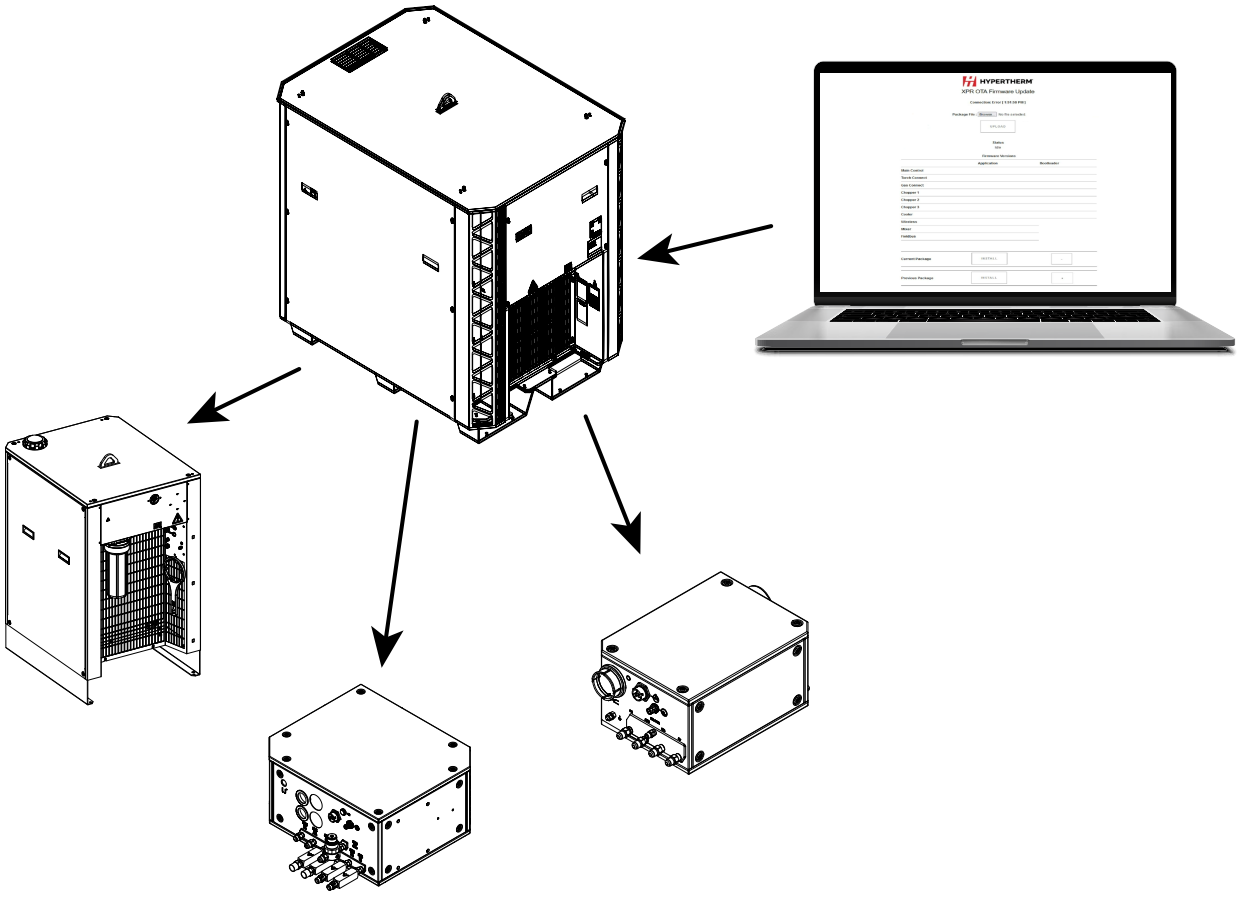
Decide which method to use to update the PCB firmware

Table 1 – PCB firmware update methods

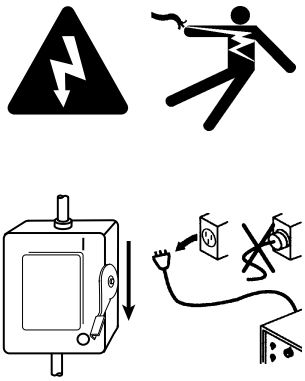
PCB firmware-update method	Notes
XPR web interface with Wi-Fi™ or Ethernet LAN	Use the XPR web interface as the primary method to update the PCB firmware. Refer to Use the XPR Web Interface to Update the XPR Firmware on page 11.
USB memory stick	If the XPR web interface is not available, you can use this method to update the PCB firmware. Refer to Use a USB Memory Stick to Update the XPR Firmware on page 19.
File over EtherCAT (FoE)	If enabled by the CNC manufacturer or cutting machine supplier, you can use this method to update the PCB firmware. For more information, contact your cutting machine supplier.

Use the XPR Web Interface to Update the XPR Firmware

Use this procedure to update the firmware on the main control and chopper PCBs in the XPR plasma power supply, the control PCB in the gas connect console, the control PCB in the TorchConnect console, and the control PCB in the cooler (if applicable).



⚠ WARNING



ELECTRIC SHOCK CAN KILL

Disconnect electrical power before doing installation or maintenance.

The line-disconnect switch must stay in the OFF position until all installation or maintenance steps are completed.

In the United States, use a “lock out/tag out” procedure until installation or maintenance is completed. In other countries, do the applicable national and local safety procedures.

Refer to the *Safety and Compliance Manual* (80669C) for more safety information.

⚠ WARNING



ELECTRIC SHOCK CAN KILL

The plasma power supply contains dangerous electric voltages that can seriously injure or kill you.

Even if the plasma power supply is turned OFF, you can still get a serious electric shock if the plasma power supply stays connected to an electric power source.

Use extreme caution if you do diagnosis or maintenance tasks when the plasma power supply remains connected to an electric power source and the outer cover or panels are removed. All work that requires removal of the plasma power supply outer cover or panels must be done by a qualified technician. Refer to the Safety and Compliance Manual (80669C) for more safety information.

Tools and materials needed:

- Wireless Internet access
- An authorized Hypertherm Xnet account
- Chrome™ or Microsoft Edge™ Internet browser
- Laptop computer that is connected to the XPR web interface. You can use any wireless device to update firmware, but Hypertherm recommends a laptop computer for best results.

For information about how to connect to the XPR web interface, refer to the XPR Instruction Manual that came with your cutting system.

Step 1 - Download the firmware-update files

1. Go to www.hypertherm.com.
2. Go to **Resources > Software updates and support**.
3. Under **XPR firmware**, select **View release notes and access the latest firmware file**.
4. Use the link at the bottom of the **XPR firmware updates** web page to download the firmware update *.zip file.

   It can be necessary to first log into Xnet.

5. Extract the files from the *.zip file to your device.

Step 2 - Prepare the plasma power supply

1. Make sure that you have consumable parts installed on the torch.
2. Set the remote on-off switch to ON.

   If the redundant remote on-off switch is enabled, make sure that it is set to ON.

   For information about the remote on-off switch and redundant remote on-off switch, refer to the XPR Instruction Manual that came with your cutting system.

3. Supply power to the cutting system:
   a. Set the line-disconnect switch to the ON position.
   b. Make sure that the power-indicator LED on the plasma power supply, TorchConnect console, gas connect console, and cooler (if applicable) is illuminated.

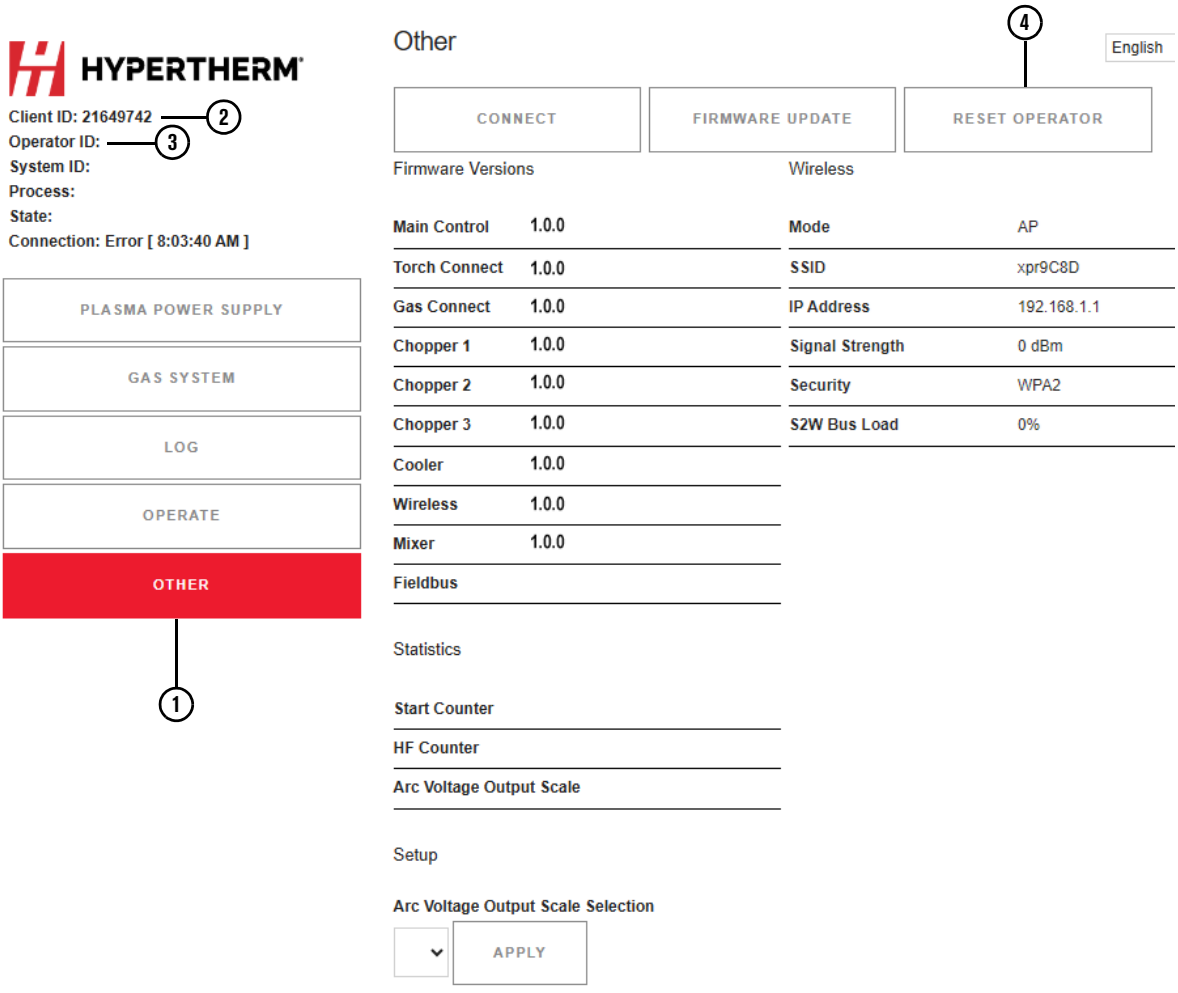
Step 3 - Connect to the cutting system with the XPR web interface

1. Use a web browser to connect to the cutting system with the XPR web interface.

   For information about how to connect to the XPR web interface, refer to the XPR Instruction Manual that came with your cutting system.

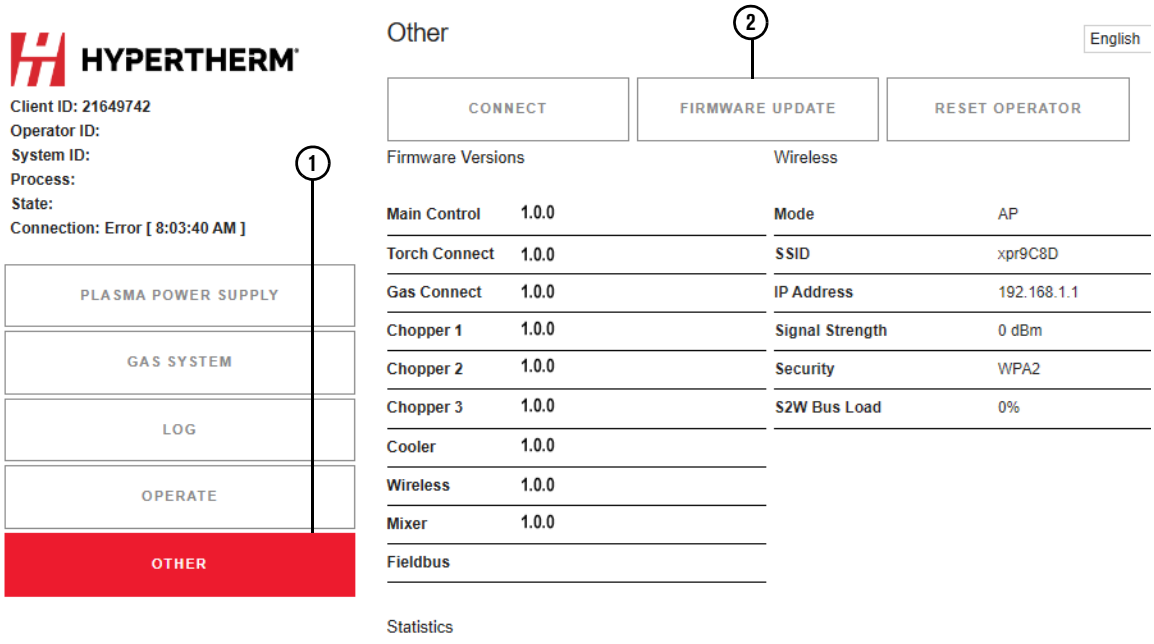
2. Select **OTHER** ①.

3. Make sure that the XPR web interface is correctly connected to the XPR cutting system.
   - If the **Client ID** ② field shows your network information and **Operator ID** ③ shows "No User," go to Step 4 - Update the firmware on page 15.
   - If the **Client ID** and **Operator ID** fields are empty, use your browser's refresh button to reset the connection to the web page. If the problem persists, refer to Fix XPR web interface connection problems on page 35.
   - If the **Operator ID** field shows anything other than "No User", select **RESET OPERATOR** ④.



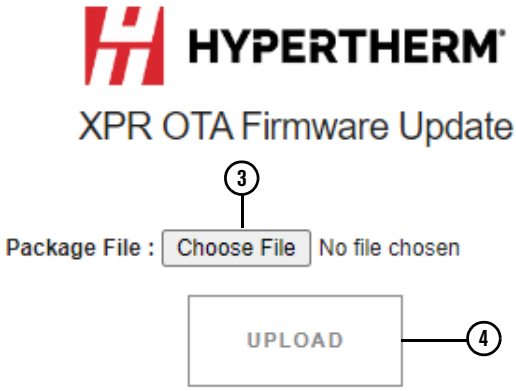
Step 4 - Update the firmware

1. Select **OTHER** ① > **FIRMWARE UPDATE** ② from the XPR web interface screen.

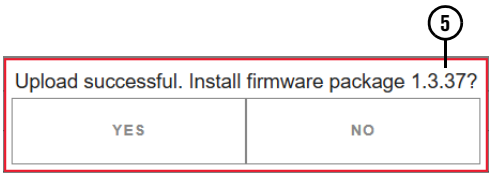


2. Select **Choose File** ③ and then browse to the firmware-update files on your device.

3. Select the **XPRFirmwarePackage_Rev_n.n.n.bin file** and then select **UPLOAD** ④.

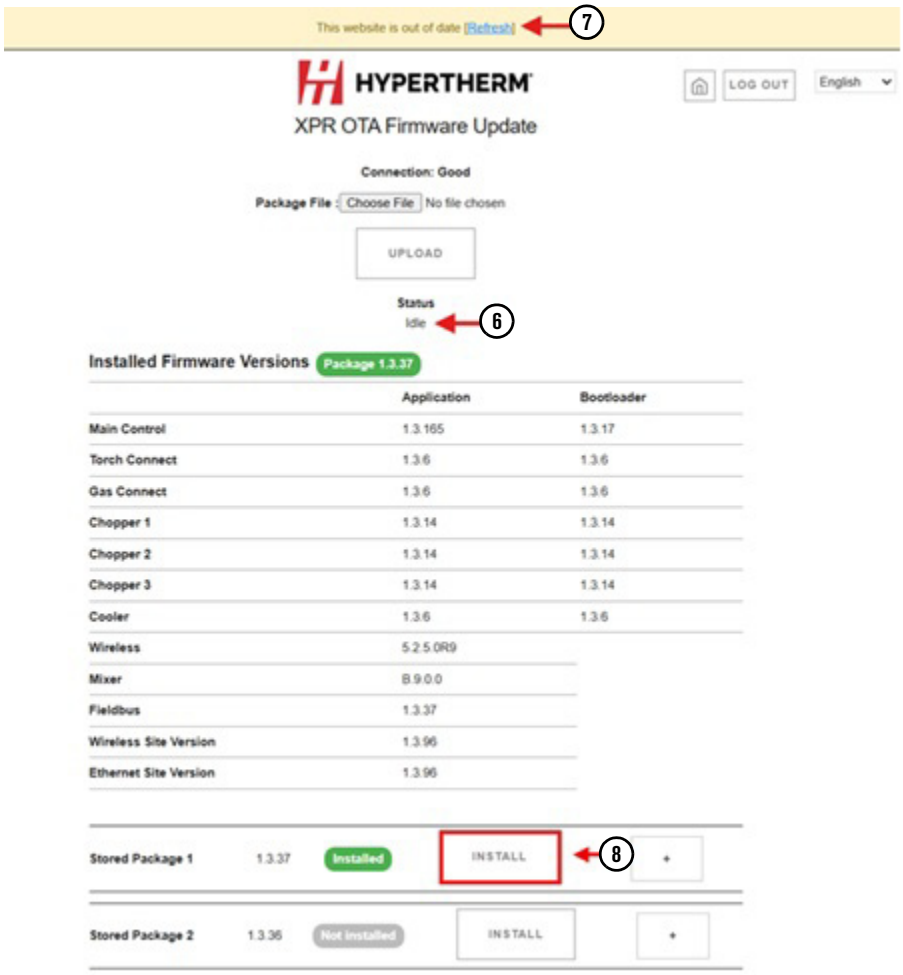


4. After the upload is completed, make sure the package number that shows ⑤ is the version you want:
   - If correct, select YES and continue to step 5.
   - If not correct, select NO and do step 3 on page 15 again to upload the correct version.



5. Wait for the installation to complete.
   - The firmware installation can take several minutes.

- Do not turn off the remote on-off switch during the installation.
- The XPR web interface shows the status of the installation during the installation process. In this example, the **Status** is Idle ⑥.
- If an on-screen message shows that the website is out-of-date ⑦, select **Refresh** to see the newly installed version of the XPR web interface pages.



It can be necessary to install a firmware package that is already stored on the plasma power supply. After a system component gets replaced or during troubleshooting are examples of situations when another installation can help. To install a stored package, select INSTALL for the Stored Package you want and then select YES. In this example, firmware for Stored Package 1 ⑧ will install again.

Step 5 - Make sure that the firmware updated correctly

After the installation is completed, make sure the firmware is correct.

1. Use the XPR web interface to connect to the XPR cutting system.
2. Select **OTHER** > **FIRMWARE UPDATE** from the XPR web interface screen.
3. From the Firmware Update screen do a check of the firmware versions:
   - If a package number shows in green in the **Installed Firmware Versions** field ① and agrees with the package number from Step 1 - Download the firmware-update files on page 13, the full package of the correct firmware updated correctly.
   - If **Installed** shows in green adjacent to the package number for a stored package ②, the stored package updated correctly.
   - If a package number is different or missing, or if **Not Installed** ③ shows for the package you tried to install, the firmware did not update correctly. Refer to Troubleshoot XPR web interface update problems on page 26.



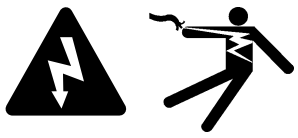
The plasma power supply can store up to two firmware packages.

THIS PAGE IS BLANK.

Use a USB Memory Stick to Update the XPR Firmware

Use this procedure to update the XPR cutting system firmware if you cannot use the XPR web interface to do the update.

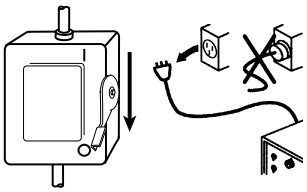
⚠ WARNING



ELECTRIC SHOCK CAN KILL

Disconnect electrical power before doing installation or maintenance.

The line-disconnect switch must stay in the OFF position until all installation or maintenance steps are completed.



In the United States, use a “lock out/tag out” procedure until installation or maintenance is completed. In other countries, do the applicable national and local safety procedures.

Refer to the *Safety and Compliance Manual* (80669C) for more safety information.

⚠ WARNING



ELECTRIC SHOCK CAN KILL

The plasma power supply contains dangerous electric voltages that can seriously injure or kill you.

Even if the plasma power supply is turned OFF, you can still get a serious electric shock if the plasma power supply stays connected to an electric power source.

Use extreme caution if you do diagnosis or maintenance tasks when the plasma power supply remains connected to an electric power source and the outer cover or panels are removed. All work that requires removal of the plasma power supply outer cover or panels must be done by a qualified technician. Refer to the Safety and Compliance Manual (80669C) for more safety information.

Tools and materials needed:

- Internet access
- An authorized Hypertherm Xnet account
- FAT32-formatted USB memory stick

  There are different types and sizes of USB memory sticks. You may need to try different USB memory sticks to find one that works. The best results come from USB memory sticks that are less than 16 GB and that support USB standard 3.1 or lower.

- USB adapter cable (223291) included in the plasma power supply

Step 1 - Prepare the USB memory stick

1. Download and extract the firmware-update files to your local device (refer to Step 1 - Download the firmware-update files on page 13).
2. Copy **XPRFirmwarePackage_Rev_n.n.n.bin** and **AutoUpdate.txt** to the top-level of the USB memory stick.

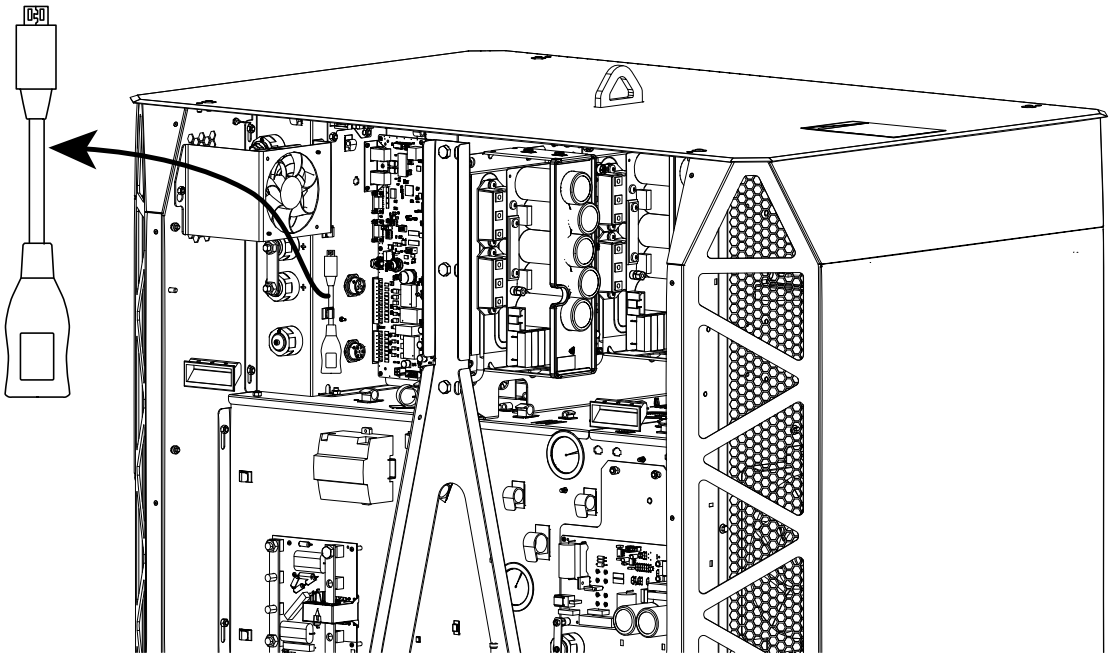
Step 2 - Prepare the plasma power supply

1. Remove the power from the cutting system.
   a. Set the line-disconnect switch to the OFF position.
   b. If used, make sure that the alternate 24 VDC power input is removed from the main control PCB.
   c. Make sure that the power-indicator LED on the plasma power supply, TorchConnect console, gas connect console, and cooler (if applicable) is not illuminated.
2. Remove the control-side external panel from the plasma power supply.

Step 3 - Connect the USB memory stick to the main control PCB

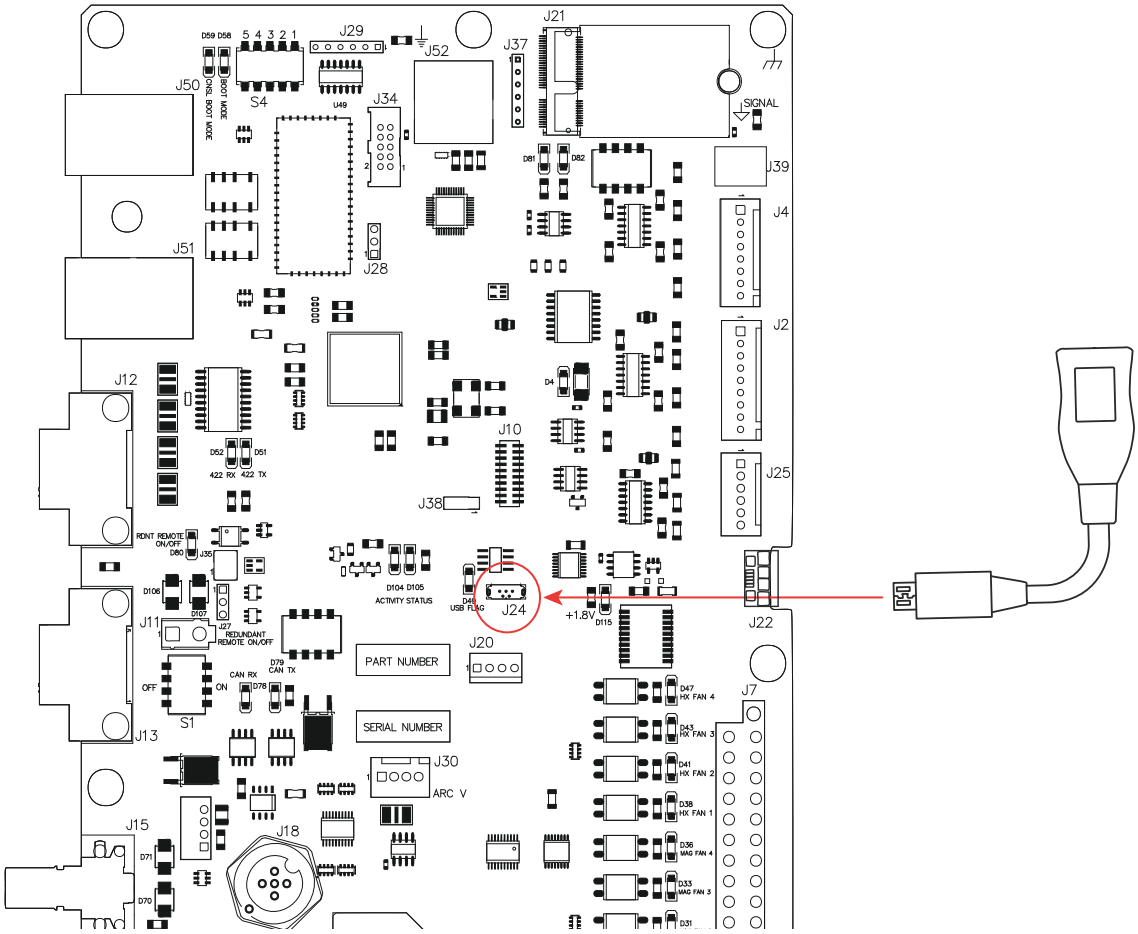
1. Remove the USB adapter cable (223291) from the plasma power supply.

   This figure shows an example XPR460 plasma power supply. Your plasma power supply could look different.



2. Connect the USB memory stick to the adapter, and then connect the adapter to the micro-USB connector (J24) on the plasma power supply main control PCB (Figure 1 on page 22).

Figure 1 – Main control PCB micro-USB connector



Step 4 - Update the firmware

1. Install the control-side external panel on the plasma power supply.
2. Set the remote on-off switch to ON.

   If the redundant remote on-off switch is enabled, make sure that it is set to ON.

   For information about the remote on-off switch and the redundant remote on-off switch, refer to the XPR Instruction Manual that came with your cutting system.

3. Supply power to the cutting system:
   a. Set the line-disconnect switch to the ON position.
   b. Make sure that the power-indicator LED on the plasma power supply, TorchConnect console, gas connect console, and cooler (if applicable) is illuminated.

⚠ WARNING



ELECTRIC SHOCK CAN KILL

To prevent electric shock, do not touch anything in the plasma power supply.

Voltages in the cutting system can cause injury or death.

Only qualified technicians should remove the plasma power supply outer cover or external panels.

4. Wait 15 minutes for the update to complete.

Step 5 - Remove the USB memory stick from the main control PCB

1. Remove the power from the cutting system.
   a. Set the line-disconnect switch to the OFF position.
   b. If used, make sure that the alternate 24 VDC power input is removed from the main control PCB.
   c. Make sure that the power-indicator LED on the plasma power supply, gas connect console, TorchConnect console, and cooler (if applicable) is not illuminated.
2. Remove the USB memory stick from the main control PCB in the plasma power supply.
3. Put the USB adapter cable into the wire clip in the plasma power supply.
4. Install the control-side external panel.

Step 6 - Make sure that the firmware updated correctly

1. Set the remote on-off switch to ON.

   If the redundant remote on-off switch is enabled, make sure that it is set to ON.

   For information about the remote on-off switch and redundant remote on-off switch, refer to the XPR Instruction Manual that came with your cutting system.

2. Supply power to the cutting system:
   a. Set the line-disconnect switch to the ON position.
   b. Make sure that the power-indicator LED on the plasma power supply, TorchConnect console, gas connect console, and cooler (if applicable) is illuminated.

3. Use the XPR web interface (refer to Step 5 - Make sure that the firmware updated correctly on page 17), your CNC, or your preferred method for connecting to the plasma power supply.

4. Make sure that the package number from Step 1 - Download the firmware-update files on page 13 agrees with the number in the **Installed Firmware Versions** field.
   - If the numbers are the same, the firmware updated correctly.
   - If the numbers are different or missing, the firmware did not update correctly. Refer to Troubleshoot USB update problems on page 45.

Troubleshooting

Introduction

This chapter shows how to troubleshoot problems that can occur when you update the XPR firmware.

Troubleshoot XPR web interface update problems

Problem	Causes	Solutions
The firmware version numbers are the same as they were before the update.	▪ The remote on-off switch is set to OFF. ▪ The update was interrupted. ▪ The connection to one or more PCBs was lost or interrupted. ▪ There was a problem with the wireless connection.	▪ Set the remote on-off switch to ON. Refer to Step 2 - Prepare the plasma power supply on page 13. ▪ Restart the cutting system. ▪ Do the firmware update again. Refer to Use the XPR Web Interface to Update the XPR Firmware on page 11 or Use a USB Memory Stick to Update the XPR Firmware on page 19. ▪ Do a check of the wireless connection to the cutting system. Connect again if necessary. Refer to Troubleshoot wireless connection problems on page 35. ▪ Reset the wireless module in the plasma power supply. Refer to Troubleshoot wireless connection problems on page 35. ▪ Use a USB memory stick to update the firmware on the PCBs that did not update correctly. Refer to Update individual control PCBs with a USB memory stick on page 27. ▪ Install the previous version of the firmware. Refer to Re-install the previous version of the firmware on page 33.
The main control PCB firmware updates, but one or more of the other PCBs do not.		
The firmware version number fields are empty.		
The firmware version number for a PCB shows “- . - . -”.		
The firmware update stops responding.		

Update individual control PCBs with a USB memory stick

If the XPR web interface is unable to update a cutting system component, you can use a USB memory stick to update the component directly.

Step 1 - Prepare the USB memory stick

1. Download and extract the firmware-update files to your local device (refer to Step 1 - Download the firmware-update files on page 13).
2. Copy the correct firmware file to the top-level of the USB memory stick.

To update this component	Use this file
Gas connect console	405ZGBmpConsole.bin
Cooler (if applicable)	405ZGCooler.bin
TorchConnect console	405ZGMeteringConsole.bin
Choppers	405ZGSmartChopper.bin

Step 2 - Prepare the component that you want to update

1. Remove the power from the cutting system:
   a. Set the line-disconnect switch to the OFF position.
   b. If used, make sure that the alternate 24 VDC power input is removed from the main control PCB.
   c. Make sure that the power-indicator LED on the plasma power supply, TorchConnect console, gas connect console, and cooler (if applicable) is not illuminated.
2. Remove the external panels to get access to the PCBs that you need to update.
3. Use the micro-USB adapter cable in the plasma power supply to connect the USB memory stick to the PCB that you need to update. The figures that follow show the locations of the micro-USB port on each PCB:
   - Plasma power supply main control PCB – Figure 2 on page 28
   - Gas connect console control PCB – Figure 3 on page 29
   - TorchConnect console control PCB – Figure 4 on page 29
   - Cooler control PCB – Figure 5 on page 30
   - Chopper control PCB – Figure 6 on page 31

Figure 2 – Plasma power supply main control PCB (141545)

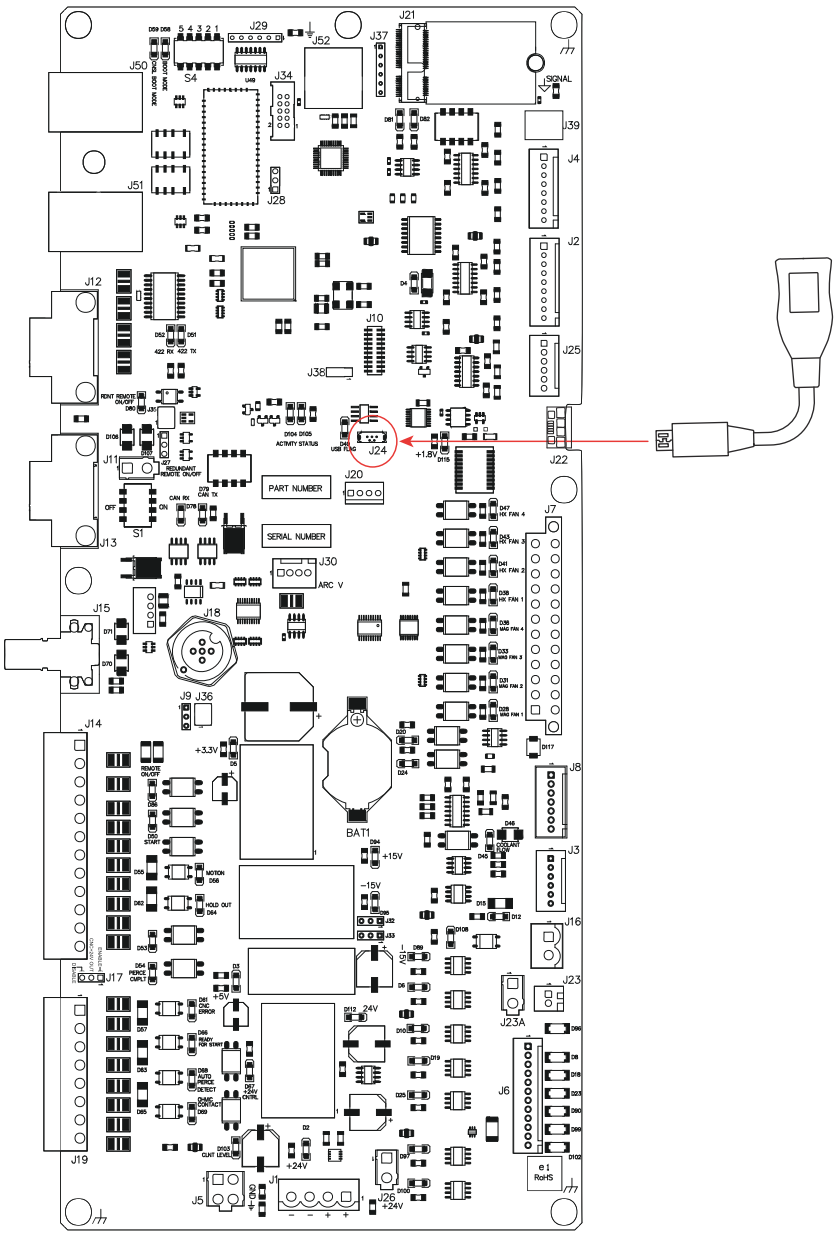


Figure 3 – Gas connect console control PCB (141375)

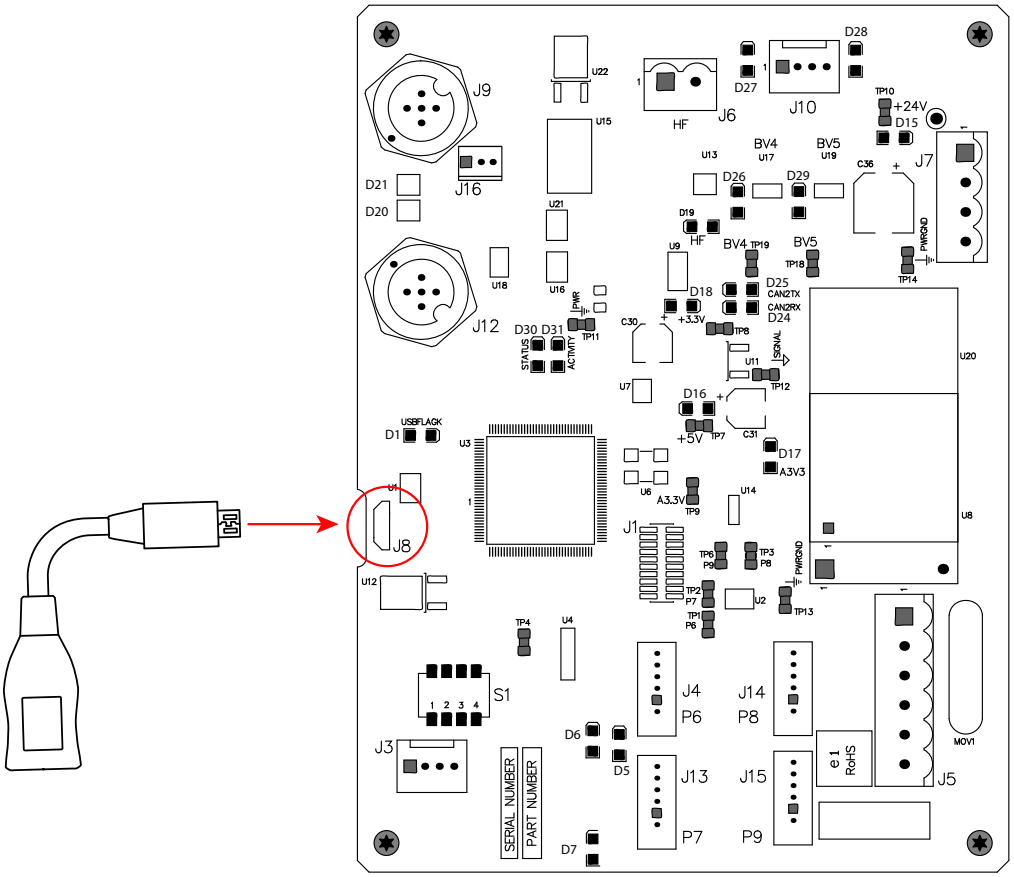


Figure 4 – TorchConnect console control PCB (141334)

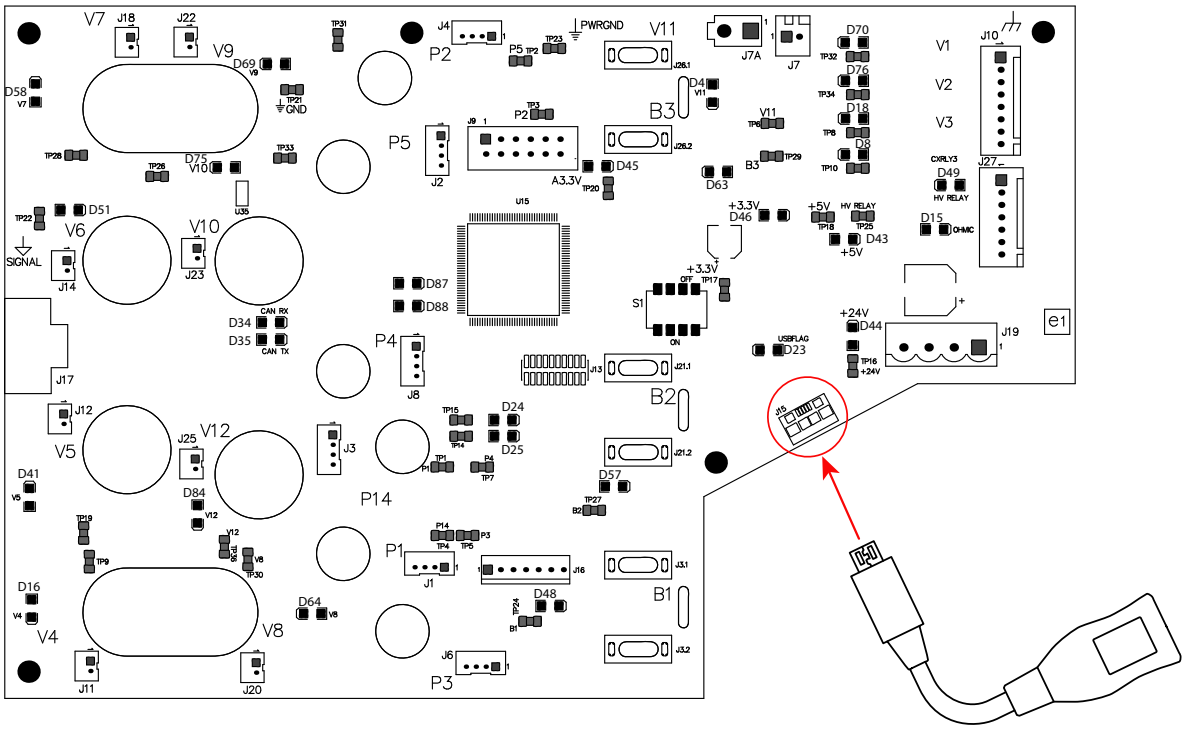


Figure 5 – Cooler control PCB (141524)

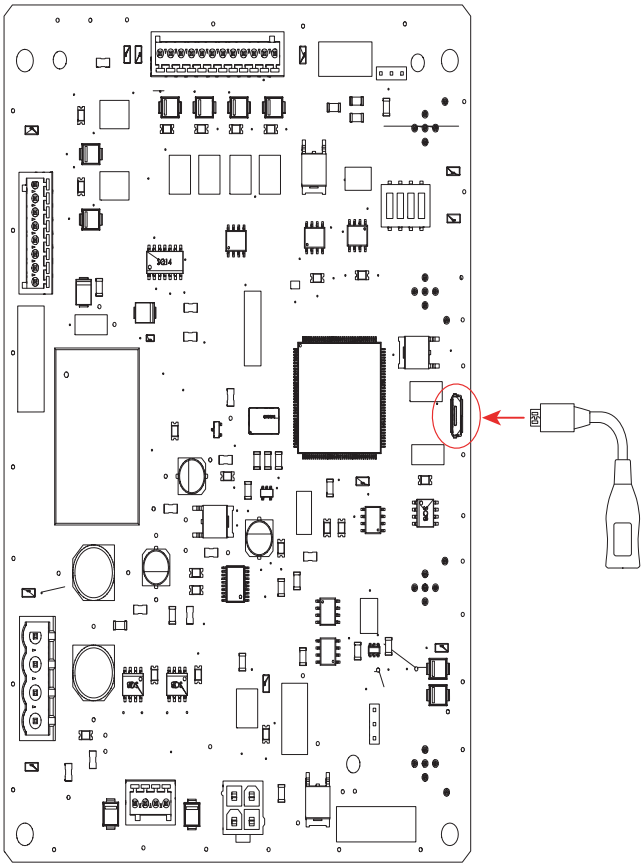
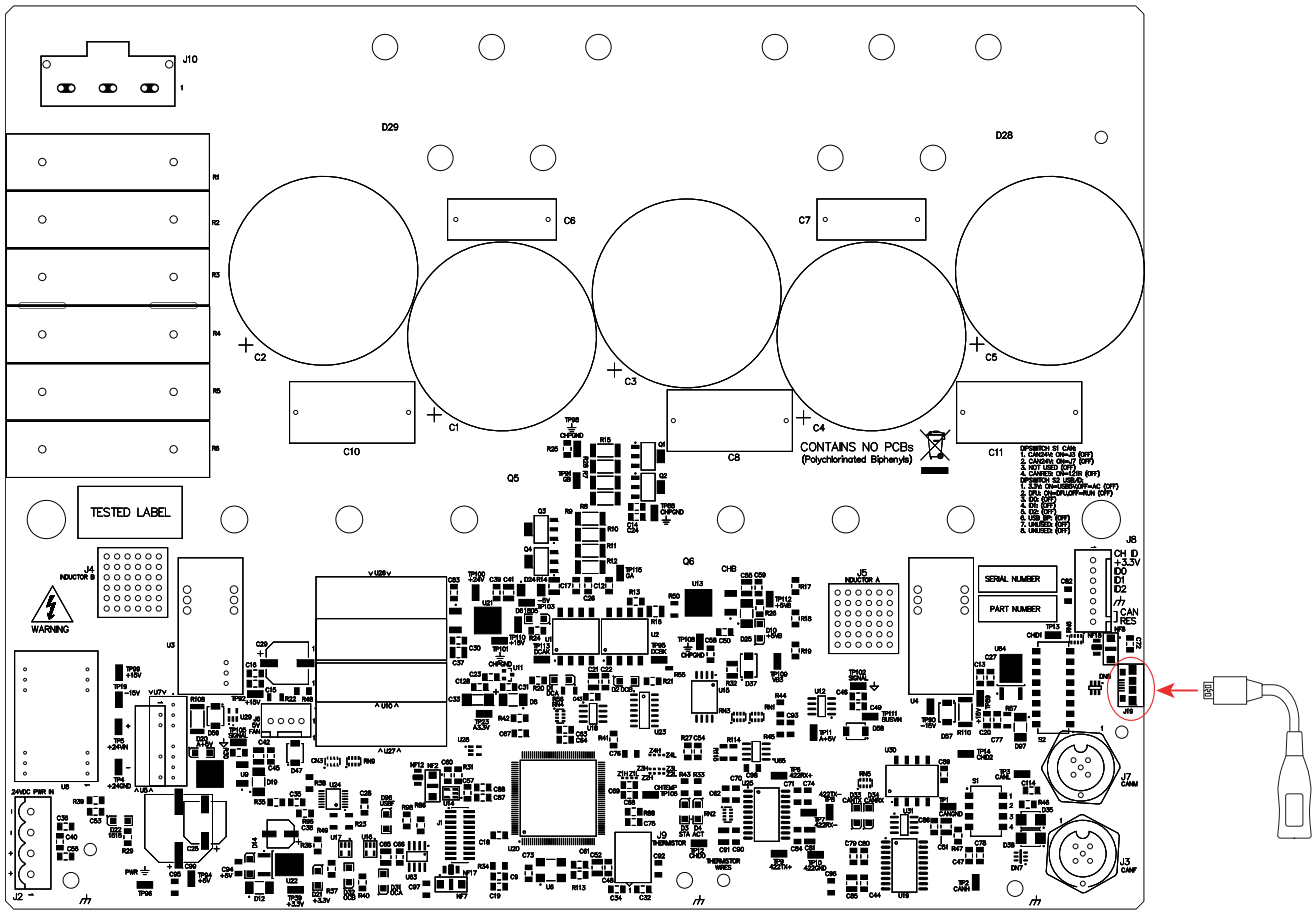


Figure 6 – Chopper control PCB (10085242)



Step 3 - Update the firmware

1. Install the external panels on the plasma power supply, gas connect console, TorchConnect console, or cooler.
2. Set the remote on-off switch to ON.

   If the redundant remote on-off switch is enabled, make sure that it is set to ON.

   For information about the remote on-off switch and redundant remote on-off switch, refer to the XPR Instruction Manual that came with your cutting system.

3. Supply power to the cutting system:
   a. Set the line-disconnect switch to the ON position.
   b. Make sure that the power-indicator LED on the plasma power supply, TorchConnect console, gas connect console, and cooler (if applicable) is illuminated.
4. Wait 2 minutes for the update to complete.
5. Remove the power from the cutting system:

   a. Set the line-disconnect switch to the OFF position.

   b. If used, make sure that the alternate 24 VDC power input is removed from the main control PCB.

   c. Make sure that the power-indicator LED on the plasma power supply, TorchConnect console, gas connect console, and cooler (if applicable) is not illuminated.

6. Remove the necessary external panels from the plasma power supply, gas connect console, TorchConnect console, or cooler.

7. Remove the USB memory stick from the PCB.

8. Put the USB adapter cable into the wire clip in the plasma power supply.

9. Install the external panels that you removed from the plasma power supply, TorchConnect console, gas connect console, or cooler.

Step 4 - Make sure that the update completed correctly

1. Use the XPR web interface (refer to Step 5 - Make sure that the firmware updated correctly on page 17), your CNC, or your preferred method for connecting to the plasma power supply.

2. Make sure that the package number from Step 1 - Download the firmware-update files on page 13 agrees with the package number in the **Installed Firmware Versions** field.

   - If the numbers are the same, the firmware updated correctly.
   - If the numbers are different or missing, the firmware did not update correctly. Refer to Troubleshoot USB update problems on page 45.

Re-install the previous version of the firmware

It can be necessary to install a firmware package that is already stored on the plasma power supply. After a system component gets replaced or during troubleshooting are examples of situations when another installation can help.

NOTICE

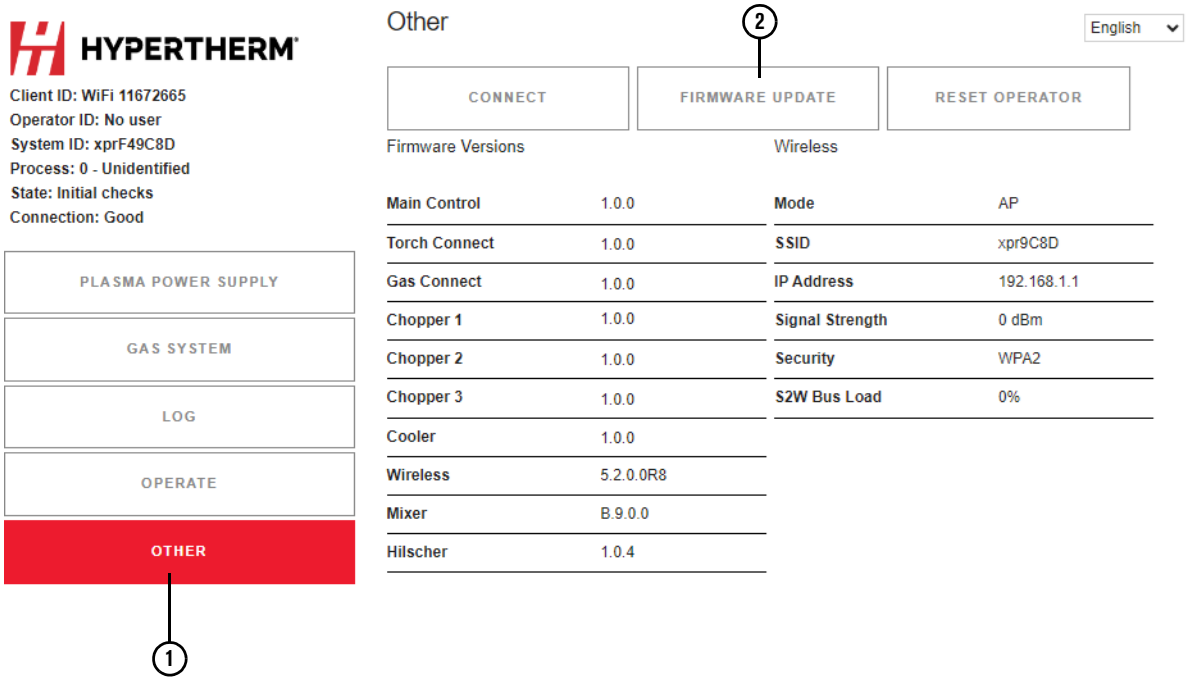
USING A LOWER VERSION OF FIRMWARE CAN CAUSE SOME FEATURES OR DATA TO BE LOST

If you downgrade the firmware for the cutting system (for example, going from a higher firmware version number to a lower version number), some features or saved data can be lost. Lost data cannot be restored by changing again to the higher firmware version number.

1. Connect to the cutting system with the XPR web interface.

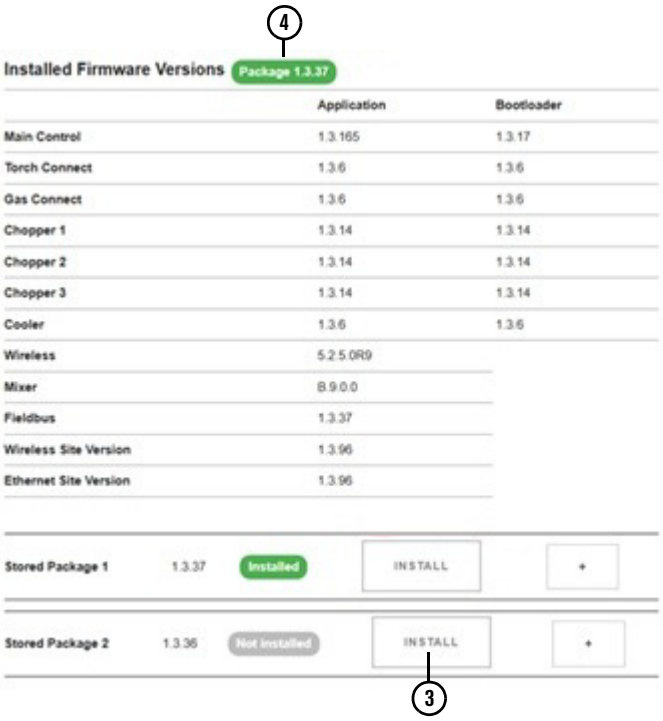
   For information about how to connect to the XPR web interface, refer to the XPR Instruction Manual that came with your cutting system.

2. Select **OTHER** ① > **FIRMWARE UPDATE** ② from the XPR web interface screen.



3. Select **INSTALL** adjacent to **Stored Package 2** ③ then select YES to start installation.

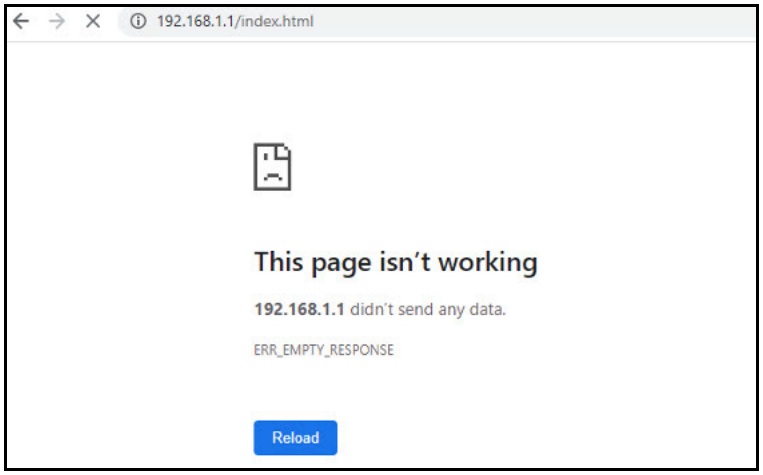
4. After the installation is completed, do a check of the firmware versions.
   - If the package number shows in green in the **Installed Firmware Versions** field ④ and agrees with the package number from **Stored Package 2,** the firmware installed correctly.
   - If the numbers are different or missing, the firmware did not install correctly.



Troubleshoot wireless connection problems

Problem	Causes	Solutions
You can see and connect to the XPR plasma power supply, but you cannot connect to the XPR web interface.	▪ There is a wireless connection problem between your computer and the XPR web interface.	▪ Reset the XPR wireless module. Refer to Fix XPR web interface connection problems on page 35.
The XPR plasma power supply is not available on the wireless network.	▪ There is a problem with the wireless settings on your computer.	▪ Do a check of the wireless network settings on your computer. Refer to Fix Windows wireless connection problems on page 41.

Fix XPR web interface connection problems



If you are having trouble connecting to the XPR web interface, do the following:

- Restart the cutting system. Refer to Restart the cutting system on page 35.
- Reset the wireless module if restarting the cutting system did not fix the problem. Refer to Reset the XPR plasma power supply wireless module on page 37.

Restart the cutting system

1. Remove the power from the cutting system:
   a. Set the line-disconnect switch to the OFF position.
   b. If used, make sure that the alternate 24 VDC power input is removed from the main control PCB.
   c. Make sure that the power-indicator LED on the plasma power supply, TorchConnect console, gas connect console, and cooler (if applicable) is not illuminated.
2. Wait 2 minutes.
3. Supply power to the cutting system:

a. Set the line-disconnect switch to the ON position.

b. Make sure that the power-indicator LED on the plasma power supply, TorchConnect console, gas connect console, and cooler (if applicable) is illuminated.

4. Use a web browser to connect to the cutting system with the XPR web interface.



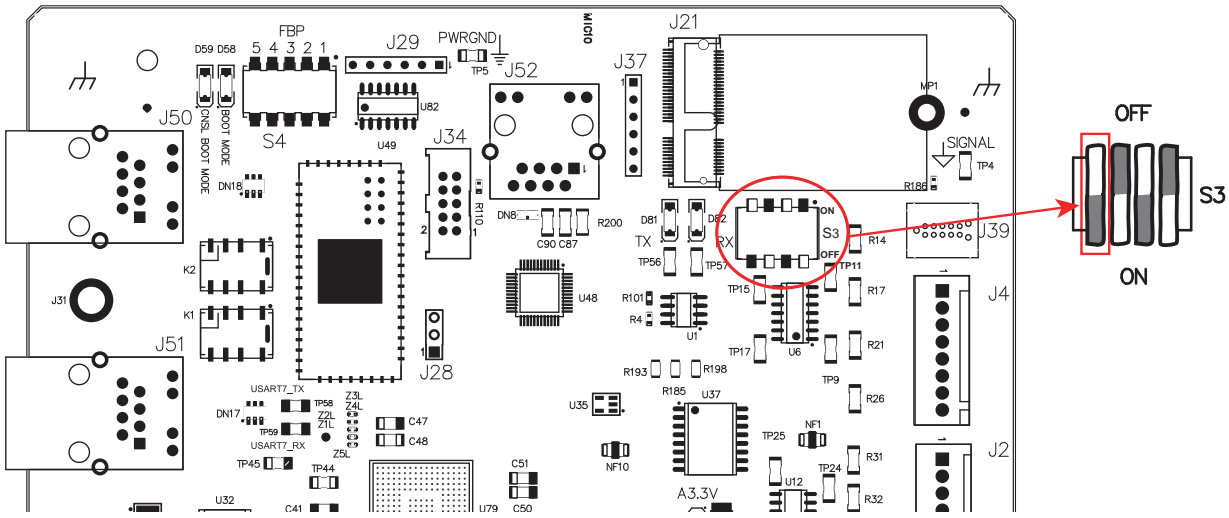
For information about how to connect to the XPR web interface, refer to the XPR Instruction Manual that came with your cutting system.

If you continue to have connection problems, reset the XPR plasma power supply wireless module. Refer to Reset the XPR plasma power supply wireless module on page 37.

Reset the XPR plasma power supply wireless module

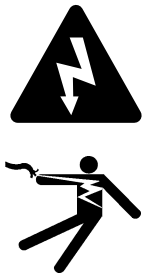
1. Remove the power from the cutting system:
   a. Set the line-disconnect switch to the OFF position.
   b. If used, make sure that the alternate 24 VDC power input is removed from the main control PCB.
   c. Make sure that the power-indicator LED on the plasma power supply is not illuminated.
2. Remove the control-side panel from the plasma power supply.
3. On the main control PCB, set position 4 on DIP switch S3 to the ON position to disable the wireless connection.

   Set position 4 on DIP switch S3 to the ON and OFF positions 2-3 times before setting it to the ON position.



4. Install the control-side panel of the plasma power supply.
5. Supply power to the cutting system:
   a. Set the line-disconnect switch to the ON position.
   b. Make sure that the power-indicator LED on the plasma power supply is illuminated.

⚠ WARNING

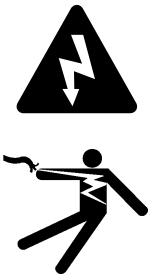


ELECTRIC SHOCK CAN KILL

The plasma power supply contains dangerous electric voltages that can seriously injure or kill you.

Be very cautious if you do service or maintenance work on a plasma power supply when it is connected to an electric power source and the outer cover or panels are removed.

⚠ WARNING



ELECTRIC SHOCK CAN KILL

The plasma power supply contains dangerous electric voltages that can seriously injure or kill you.

Even if the plasma power supply is turned OFF, you can still get a serious electric shock if the plasma power supply stays connected to an electric power source.

Use extreme caution if you do diagnosis or maintenance tasks when the plasma power supply remains connected to an electric power source and the outer cover or panels are removed. All work that requires removal of the plasma power supply outer cover or panels must be done by a qualified technician. Refer to the Safety and Compliance Manual (80669C) for more safety information.

⚠ WARNING



ELECTRIC SHOCK CAN KILL

The plasma power supply contains dangerous electric voltages that can seriously injure or kill you.

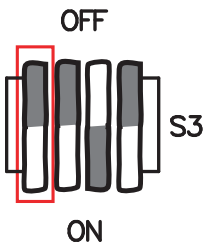
Even if the plasma power supply is turned OFF, you can still get a serious electric shock if the plasma power supply remains connected to an electric power source. When the remote on-off switch is in the OFF position, electric **power remains active** to the following components in the system:

- Control board
- Control transformer input and output
- 48 V power supply
- 24 V power supply
- 120 VAC and 220 VAC on the power distribution board
- Input side of the contactors
- Input side of the pump relay
- Power-indicator LED on the front of the plasma power supply

Use extreme caution if you do diagnosis or maintenance tasks when the plasma power supply remains connected to an electric power source and the outer cover or panels are removed. All work that requires removal of the plasma power supply outer cover or panels must be done by a qualified technician.

Refer to the *Safety and Compliance Manual* (80669C) for more safety information.

6. Wait 1 minute.
7. Remove power from the cutting system:
   a. Set the line-disconnect switch to the OFF position.
   b. If used, make sure that the alternate 24 VDC power input is removed from the main control PCB.
   c. Make sure that the power-indicator LED on the plasma power supply is not illuminated.
8. Remove the control-side panel from the plasma power supply.
9. Set position 4 on DIP switch S3 on the main control PCB to the OFF position. This enables the wireless connection.



10. Install the control-side panel of the plasma power supply.

11. Supply power to the cutting system:

a. Set the line-disconnect switch to the ON position.

b. Make sure that the power-indicator LED on the plasma power supply is illuminated.

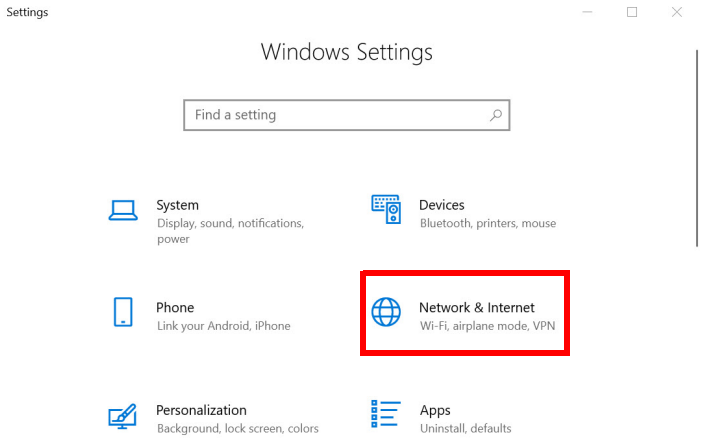
12. Wait 2 minutes. The wireless module now has the factory default settings.

Fix Windows wireless connection problems

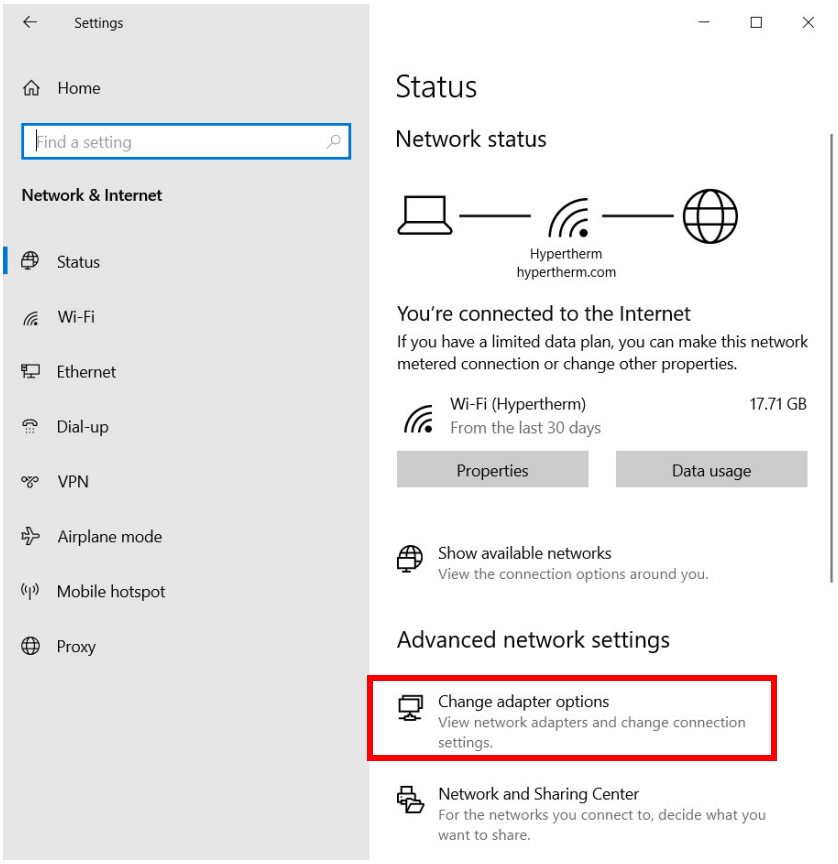
Follow these steps if the XPR plasma power supply is not available on your wireless network.

This procedure is specific to Microsoft® Windows™ 10.

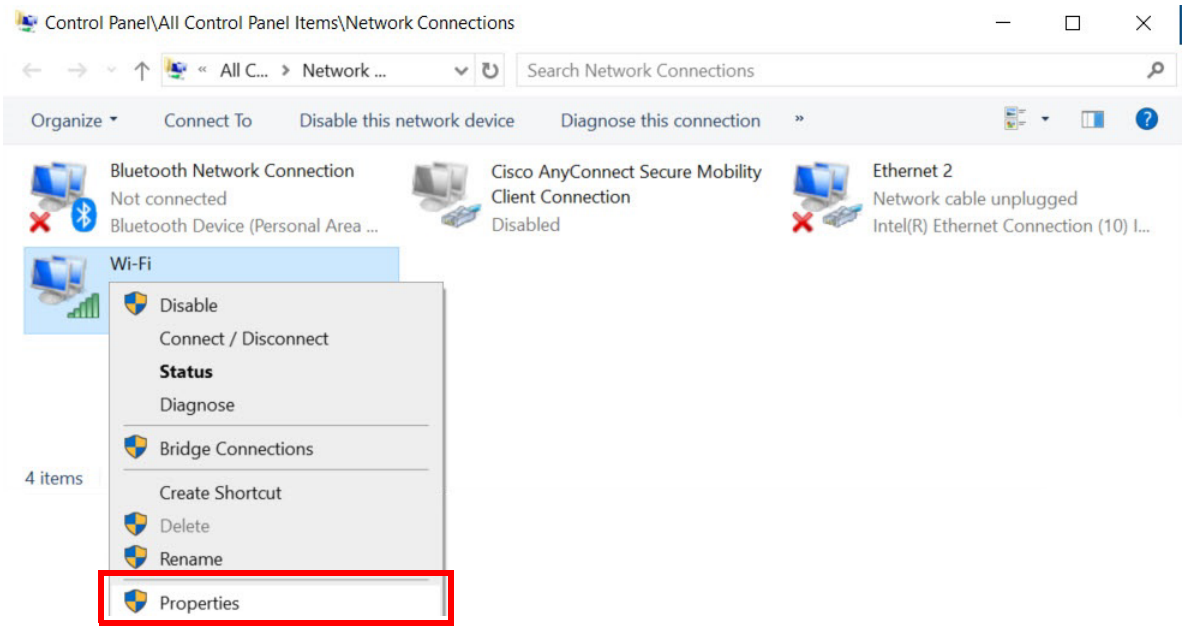
1. Select **Settings** from the Windows Start menu to open the Windows Settings screen.
2. Select **Network & Internet**.



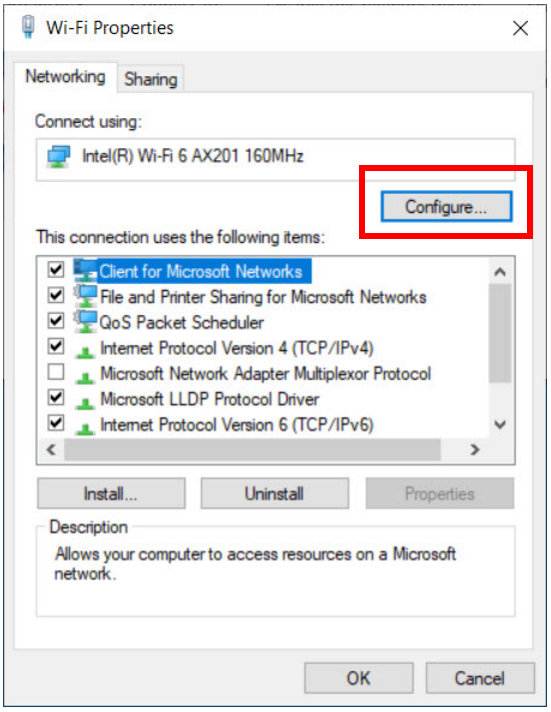
3. Select **Change adapter options** to open the Network Connections screen.



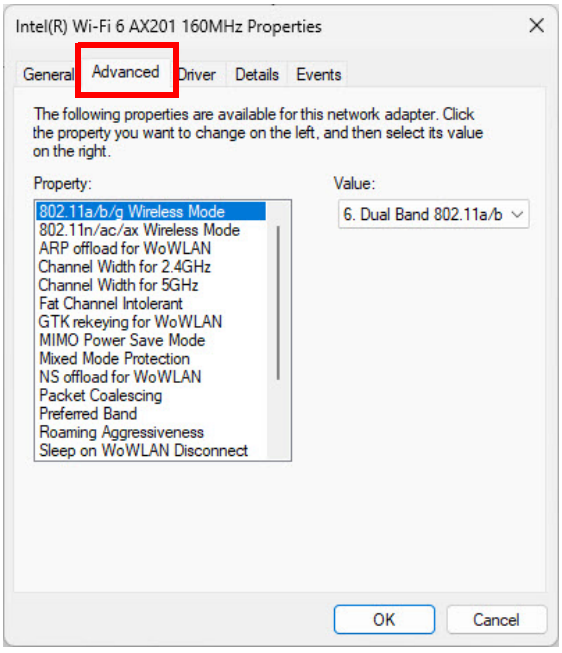
4. Right-click on **Wi-Fi™** and select **Properties** to open the Wi-Fi Properties screen.



5. Select **Configure**.

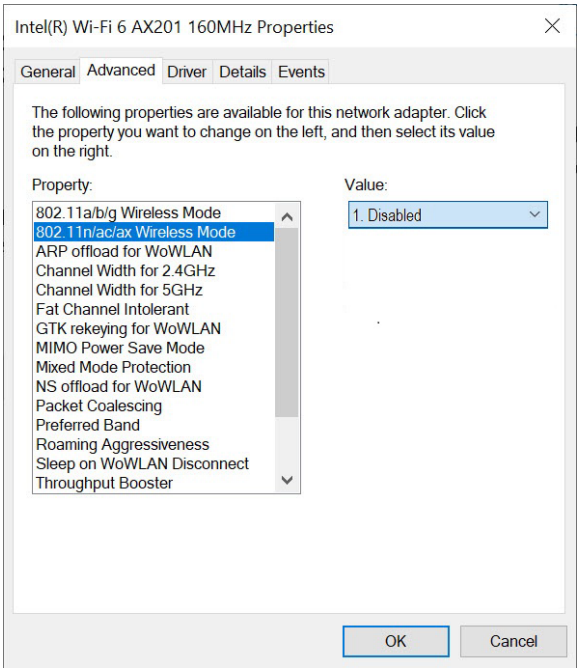


6. Select the **Advanced** tab.



7. In the **Property** dropdown list, select **802.11n/ac/ax Wireless Mode**. In the Value dropdown list, select **Disabled**.

   This disables the 802.11n/ac/ax wireless mode and enables the 802.11a/b/g wireless mode that shows available wireless devices.



8. Select **OK**.

9. Go to the Wi-Fi Properties screen and enable the 802.11n/ac/ax wireless mode again after finding and connecting to the XPR cutting system that you want.

Troubleshoot USB update problems

Problem	Causes	Solutions
The USB firmware update did not work.	▪ The remote on-off switch is set to OFF. ▪ The USB memory stick is not compatible with the XPR cutting system for updating firmware. ▪ The firmware files are not in the top-level directory of the USB memory stick.	▪ Set the remote on-off switch to ON. Refer to Step 2 - Prepare the plasma power supply on page 13. ▪ Check the Log for firmware-update errors on page 45. ▪ Use a different USB memory stick. The USB memory stick must be FAT32-formatted and for best results, use one that is 16 GB or less. ▪ Make sure that the firmware files are in the top-level directory of the USB memory stick. ▪ Update the XPR PCB firmware again. Refer to Use a USB Memory Stick to Update the XPR Firmware on page 19.
The USB firmware did not automatically update.	▪ The **AutoUpdate.txt** file is missing on the USB memory stick, or the **XPRFirmwarePackage_Rev_*n.n.n*.bin** is missing on the USB memory stick, or both files are missing.	▪ Make sure that **AutoUpdate.txt** and **XPRFirmwarePackage_Rev_*n.n.n*.bin** are in the top-level of the USB memory stick.

Check the Log for firmware-update errors

If there were errors during the firmware update, the Log screen can show the errors.

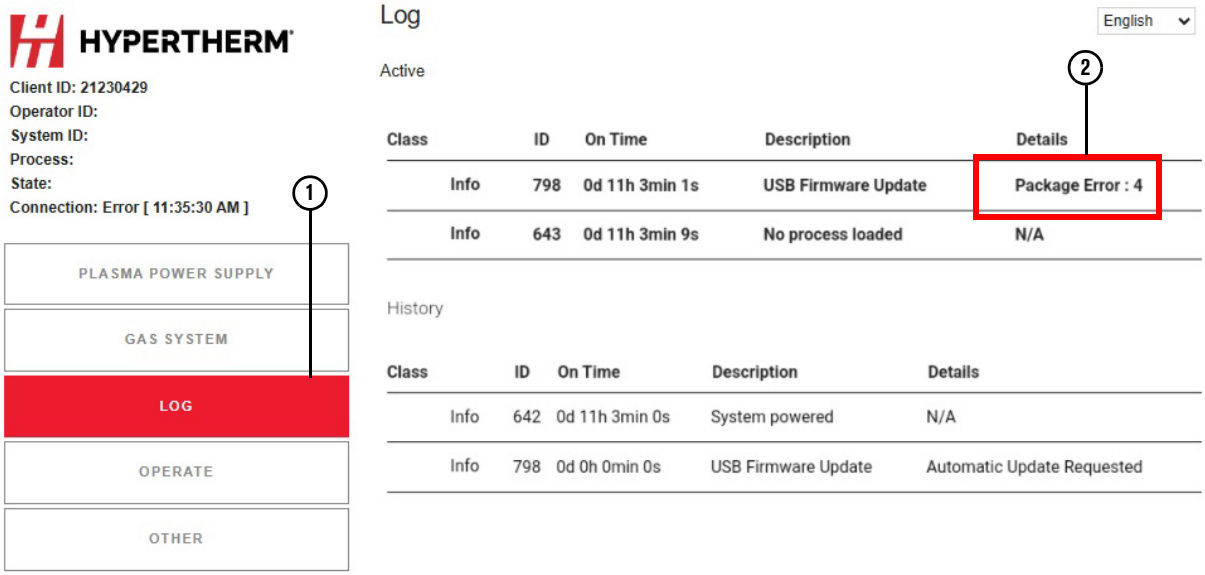
1. Use a web browser with the XPR web interface to connect to the cutting system.

   For information about how to connect to the XPR web interface, refer to the XPR Instruction Manual that came with your cutting system.

2. Select **LOG** ①.

3. Check the Log screen for errors.

In this example, **Package Error: 4** is the error ②.



This table shows the causes and solutions for usual firmware-update errors.

Error	Causes	Solutions
Canceled Error	▪ The remote on-off switch is set to OFF	▪ Set the remote on-off switch to ON.
Package Error: *n*	▪ Problem validating the package file	▪ Download the firmware-update files again and then do the firmware update again using the new files. Refer to Step 1 - Download the firmware-update files on page 13.
USB Error: *n*	▪ Problem with the **AutoUpdate.txt** file or ▪ Problem with copying the file to XPR Memory	▪ Check that the correct firmware-update files are on the USB memory stick. Refer to Step 1 - Prepare the USB memory stick on page 20. ▪ Download the firmware-update files again and then do the firmware update again using the new files. Refer to Step 1 - Download the firmware-update files on page 13.