

XR™ Control Feeder

Push-Pull Control

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Push-Pull
Wire Feed System 

Quick Specs



Heavy Industrial Applications

Emergency Vehicles	Shipbuilding
Recreational Vehicles	Tool Boxes
Trucks and Trailers	Railcars
Heat Exchangers	Fabrication
Sign Manufacturers	

Processes

MIG (GMAW) Welding
Pulsed MIG (GMAW-P) with pulsing power source

Input Power

24 VAC, 50/60 or 100 Hz

Dimensions

H: 16 in (406 mm)
W: 9-1/4 in (235 mm)
D: 21-1/4 in (540 mm)

Wire Speed

70–900 IPM (1.8–23 m/min)
(Dependent on gun used)

Weight

38 lb (17.2 kg)

The Power of Blue.®

Unique **solid-state control** permits XR systems to work with most CC, CV, or CC/CV, DC welding power sources.

Digital display indicates wire feed speed or weld voltage. Allows you to switch between wire feed speed and voltage display.

Push-pull design feeder motor provides continuous push force to the wire while the gun motor controls wire feed speed at the arc, together providing accurate and positive wire feed speed over long distances (up to 35 ft).

Master/gun wire feed speed control improves resolution by limiting speed range available at the gun, making it easier to fine-tune arc conditions.

Unique arc starting control can be adjusted to tune arc starting, reducing wire stubbing or arc flaring which can result in burnbacks to the contact tip.

Wire jog control allows wire to be threaded through gun cable without energizing weld output.



Control shown with optional voltage control, gas flowmeter, and dual schedule control.

A Complete System Consists of the Following:

- XR-Control with recommended 14-pin Miller power source (see page 4)
- XR Push-pull gun
- XR-Control Drive Rolls

Preflow/Postflow factory preset times: 0.5 second preflow, 3.5 second postflow (unit arrives with default setting: preflow off, postflow on).

Trigger hold reduces fatigue by allowing operator to weld without holding trigger.



The XR™-Control and new XR-Aluma-Pro™ gun combine with the XMT 350 MPa to make a great Pulsed MIG system. Welding aluminum has never been easier.



Wire feeder is warranted for 3 years, parts and labor.
Guns are warranted for 1 year.

MADE IN USA
APPLETON, WI



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Web Site
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XR-Control Specifications (Subject to change without notice.)



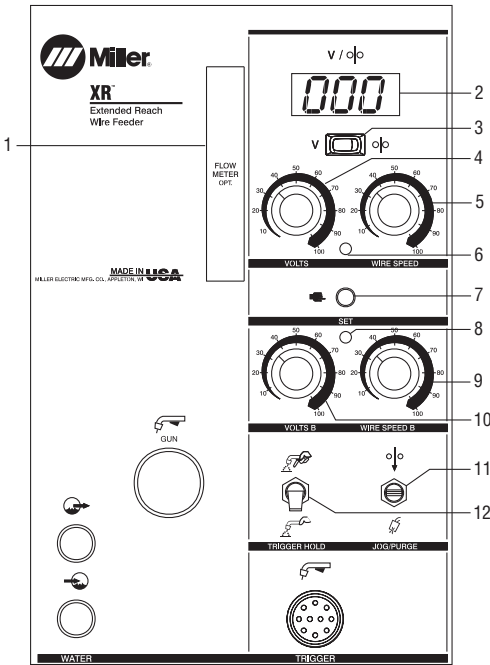
(Use with CC/CV, DC Power Sources.)

Input Power	Wire Speed	Maximum Spool Size Capacity	Dimensions	Net Weight
24 VAC, 50/60 or 100 Hz	70–900 IPM (1.8–23 m/min) (Dependent on gun used)	12 in (305 mm)	H: 16 in (406 mm) W: 9-1/4 in (235 mm) D: 21-1/4 in (540 mm)	38 lb (17.2 kg)

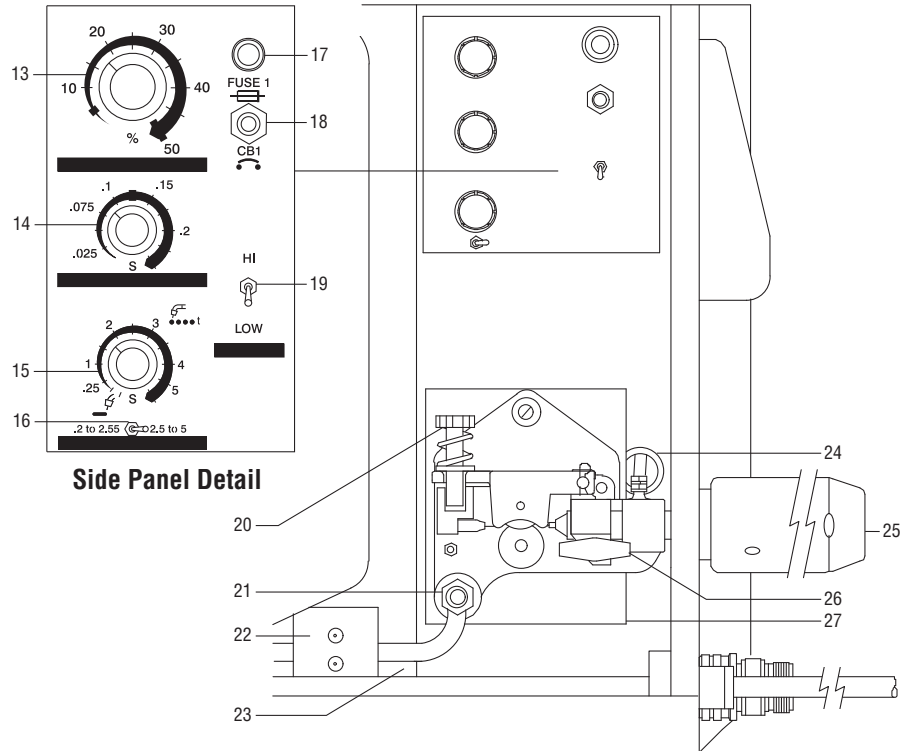
Certified to both the Canadian and U.S. Standards for welding equipment.

Conforms to European standards.

XR-Control Panel



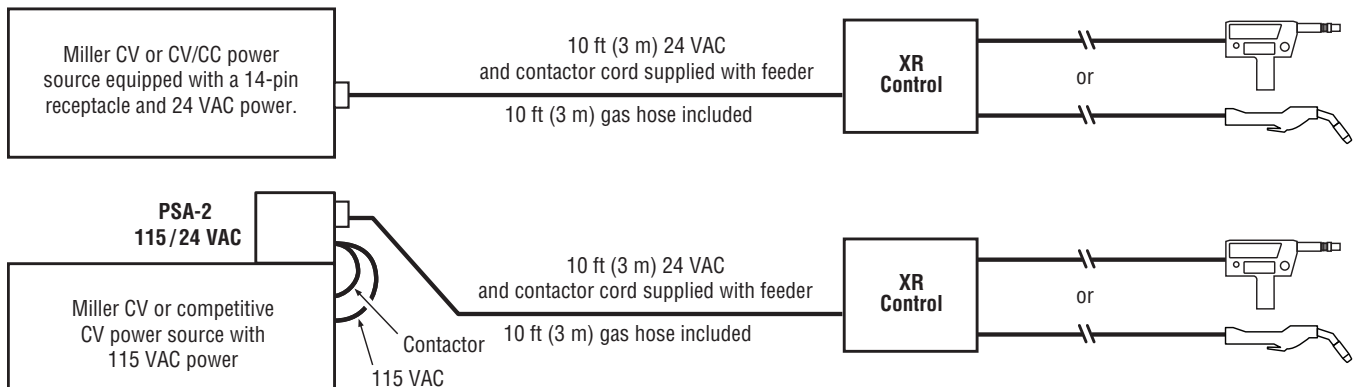
Front Panel



Side Panel

- | | | | |
|------------------------------|-------------------------------|-------------------------------------|-----------------------------------|
| 1. Gas Flowmeter* | 8. Schedule B Indicator LED* | 15. Continuous/Spot Time Control* | 21. Weld Cable Terminal in Feeder |
| 2. Voltage/Wire Speed Meter | 9. Wire Speed B Control* | 16. Spot Time Range Switch* | 22. Reed Relay |
| 3. Voltage/Wire Speed Switch | 10. Remote Volts B Control* | 17. Fuse F1 | 23. Weld Cable |
| 4. Voltage Control* | 11. Wire Jog/Gas Purge Switch | 18. Circuit Breaker CB1 | 24. Gas Hose |
| 5. Wire Speed Control | 12. Trigger Hold Switch | 19. Motor Torque Switch | 25. Gun Connector |
| 6. Schedule A Indicator LED* | 13. Run-In Speed Control | 20. Drive Tensioner Adjustment Knob | 26. Gun Securing Knob |
| 7. Press To Set Push Button* | 14. Burnback Time Control* | | 27. Gun Connector Block |
- * Optional

Typical Installations



XR-Control Genuine Miller Options

*Factory option available only in XR-Control packages
— see Ordering Information on page 4.



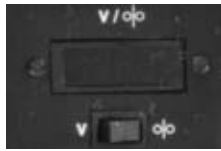
Voltage Control*
#194 027 Field
Allows voltage adjustment at the current XR-Control when used with Miller electrically controlled, constant-voltage DC power sources that have a 14-pin receptacle.



Dual Schedule Control*
#193 276 Field
Allows two different welding conditions (voltage and wire feed speed) to be used on the same wire. This is ideal

when different heat settings are required or when the need arises to change conditions while welding, i.e. different material thickness, out of position welding, etc. Is also ideal for use as a start control or crater fill control.

Note: The Digital Display is required to use the Dual Schedule. Only for use with Miller CV or CC/CV power sources. Dual Schedule Switch required.



Digital Display V/WFS
#193 274 Field
For XR Control prior to serial #LC122752.

Note: Voltage Sense Lead (#209 867) required for voltage display when used with non-solid-state Miller and competitive power sources.

Allows wire feed speed to be preset and displayed. Will also monitor voltage while welding. If used with current manufactured Miller CV or CC/CV power sources (excluding CPs) and the optional voltage control or dual schedule control is used, the arc voltage can also be preset on the digital display. Includes back-lit LCD digital display that is easy to read in virtually any lighting condition. A selector switch allows the display to switch between wire feed speed and voltage.

Dual Schedule Switches

DSS-30 #193 271 Field
For 15 ft (4.6 m) and 30 ft (9 m) guns
Required to operate the dual schedule control. A two position slide switch that can be positioned at the push-pull gun to remotely select schedule A or B conditions.



Gas Flowmeter*
#193 278 Field
#197 793 Field w/CE
Monitors and adjust gas flow at the XR Control.

Note: Gas pressure must be controlled at the primary gas supply with the use of a regulator.



Spot Weld/Burnback Control #193 279 Field
Provides up to 5 seconds of spot weld time and 0 (zero) to 0.25 seconds of burnback time.

XR-Control Genuine Miller Accessories



Optima™ MIG (GMAW) Pulse Control #043 389
For XMT 304, 350, 456 CC/CV and Invision 304P, 456 P and Phoenix 456 CC/CV. A multipurpose, microprocessor-based pulse control for synergic MIG (wire welding or

GMAW), manual MIG pulsing or standard MIG welding. Use this control with all above power sources and any Miller wire feeder. Includes 25 ft (7.6 m) cord with 14-pin plug.



PSA-2 Control #141 604
Required when using the XR Control with power sources having only 115 VAC available. Mounts at power source and includes a 10 ft (3 m) 115 VAC cord and contactor cord with Hubbell connectors.

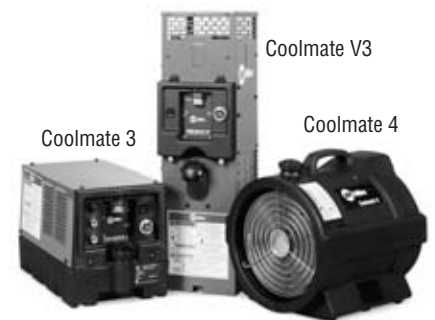
A simple modification in the PSA-2 control also allows it to be used with competitive constant voltage power sources requiring a contact closure for contactor control. The PSA-2 includes a 14-pin receptacle for direct connection of the standard interconnecting cord and optional extension cords. Bracket included for side mounting to the power source.

Note: When using the PSA-2 control, the optional Remote Voltage Control is not functional.

Extension Cords

#122 973 25 ft (7.6 m)
#122 974 50 ft (15.2 m)
#122 975 75 ft (22.9 m)
Provides 14-pin, 24 VAC, contactor and voltage control. Can be added to the standard 10 ft (3 m) feeder cord to extend feeder farther from power source.

Water Coolant Systems



Coolmate™ 3 #043 007 115 VAC
Coolmate™ 3 #043 008 230 VAC
Coolmate™ V3 #043 009 115 VAC
Coolmate™ 4 #042 288 115 VAC

For use with water-cooled guns. Refer to Lit. Index No. AY/7.2 for additional coolant system information.

Coolant #043 809

Sold in cases of four 1-gallon recyclable plastic bottles.

Ordering Information (Use the 3-step process below to assemble a complete system.)

How to Assemble a System

- 1** Pick a Control
Standard or with Options



- 2** Pick a Gun Style
Gooseneck or Pistol (15, 25, 30 or 35 ft Cable, Air- or Water-Cooled)



See Lit. Index No. M/1.71 or M/1.73 for information on Gooseneck or Pistol guns

- 3** Pick Drive Roll Kits or Drive Rolls
.030, .035, .040, .047 or .062 in

Equipment	Stock No.	Description	Qty.	Price
Important: The XR-Control and specific type and length gun must be ordered separately. Also order proper Drive Roll Kit below for the size wire being used.				
XR™-Control	#181 538 #181 538-01-1 #181 538-03-3 #181 538-04-2	Standard model w/digital display Standard model w/digital display & w/CE W/digital display, voltage control & gas flow meter W/digital display, voltage control & gas flow mtr w/CE		
XR/XMT® 350 Package	#951 097	Includes XR-Control, XMT® 350 MPa and XR-Aluma-Pro™ Gun		
XR-Aluma-Pro A Gun (Air-Cooled)	#300 000 #300 001 #300 264	15 ft (4.6 m) cable 25 ft (7.6 m) cable 35 ft (10.6 m) cable	See Lit. Index No. M/1.71	
XR-Aluma-Pro W Gun (Water-Cooled)	#300 003 #300 004 #300 265	15 ft (4.6 m) cable 25 ft (7.6 m) cable 35 ft (10.6 m) cable	See Lit. Index No. M/1.71	
XR-A Pistol Grip Gun (Air-Cooled)	#198 127 #198 128	15 ft (4.6 m) cable 30 ft (9 m) cable	See Lit. Index No. M/1.73	
XR-W Pistol Grip Gun (Water-Cooled)	#198 129 #198 130	15 ft (4.6 m) cable 30 ft (9 m) cable	See Lit. Index No. M/1.73	
XR-A Python® Gun (Air-Cooled)*	#195 373	25 ft (7.6 m) cable	See Lit. Index No. M/1.71	
XR-Pistol Gun FasTip™/ XR Control Drive Roll Kits (Required when using pistol grip guns. Includes pistol and XR-Control drive rolls)	#195 213 #195 212 #195 211 #195 210 #195 209	.030 in (0.8 mm) .035 in (0.9 mm) .040 in (1.0 mm) .047 in (1.2 mm) .062 in (1.6 mm)	See Lit. Index No. M/1.73	
XR-Control Drive Rolls (Required when using gooseneck guns)	#194 118 #194 118 #196 301 #194 119 #195 591	.030 in (0.8 mm) (Order from Miller Service Parts.) .035 in (0.9 mm) (Order from Miller Service Parts.) .040 in (1.0 mm) (Order from Miller Service Parts.) .047 in (1.2 mm) (Order from Miller Service Parts.) .062 in (1.6 mm) (Order from Miller Service Parts.)		
Options				
Voltage Control	#194 027	Field		
Dual Schedule Control	#193 276	Field		
Digital Display V/WFS	#193 274	Field. For XR-Control prior to serial #LC122752		
Remote Volt Sense Lead	#209 867	Field. Required for CC, competitive or non-solid-state Miller power sources		
Dual Schedule Switch	#193 271	Field. For 15 ft (4.6 m) and 30 ft (9 m) guns		
Gas Flowmeter	#193 278 #197 793	Field Field w/CE		
Spot Weld/Burnback Control	#193 279	Field		
Accessories				
Optima MIG Pulse Control	#043 389			
PSA-2 Control	#141 604	For older power sources w/ 115 V feeder power		
Extension Cords		See XR-Control Accessories on page 3		
Water Coolant Systems		See Lit. Index No. AY/7.2		
Date:		Total Quoted Price:		

Recommended Power Sources*

Deltaweld® Series	Lit. Index No. DC/16.2
XMT® 350	Lit. Index No. DC/18.83
Invision™ 350	Lit. Index No. DC/23.5
Trailblazer® Series	Lit. Index No. ED/4.77
Big Blue Air Pak™	Lit. Index No. ED/10.5
PipePro™	Lit. Index No. ED/10.6
Millermatic® 350/350P	Lit. Index No. DC/12.51

*Other power sources may be used.

Important note: The products and descriptions mentioned in this literature are for use with XR-Control systems with serial #KK309906 or higher. To confirm compatibility of any products listed here with older equipment, please contact the factory at 1-920-735-4505.

* XR-A Python gun is not a CSA approved product. Python® is a registered trademark of MK Products, Irvine, CA USA.



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