

F E A T U R E S

FORCE America ONE™ is a turnkey, fully-integrated, one-ton package for commercial plow and spreader applications. Designed and manufactured by FORCE® America, it offers easy installation and no calibration.

A simple, powerful solution that is perfect for the one-ton trucks in any fleet.

- **Total package offering an all-in-one solution**
 - Includes valve tank enclosure, PTO, controller and joystick
- **Easy installation and usability**
 - Hoist and plow joystick easily added/removed for seasonal use
- **Automatically detected in the system**
 - No need for additional calibration
- **Automatic electronic limiting to allow for greatly improved flow sharing capabilities**
 - Choose from two default limiting schemes or create your own custom scheme.
 - Limiting schemes allow flow sharing when multiple functions are operated simultaneously.
 - Eliminates the spreader or plow stalling while operating at low speeds.
- **Ergonomic, compact design with adjustable mounting options**
 - Offers comfortable operation of plow and hoist
- **Quality components offering a powerful application**
 - Designed and manufactured by FORCE® America, Inc.
- **Built for commercial and public works organizations**

Chelsea® Power Take Off

Single hose connection with noise suppression system



5100ex Controller

Manual, open and closed loop controller



5150ex Joystick

Easy-to-use joystick for plow and hoist control



Valve Tank Enclosure

Powder coated steel enclosure with tank and custom designed monoblock valve



Product Specifications



Built in USB port for data retrieval and firmware upgrades.



Tactically placed interlock system to ensure safe use of critical functions.



Fully adjustable mounting option for easy, customizable installation.



Protective casing surround control knobs to prevent unintentional use.



Bright, bold color LCD touchscreen for calibration and configuration options.

Technical Specifications

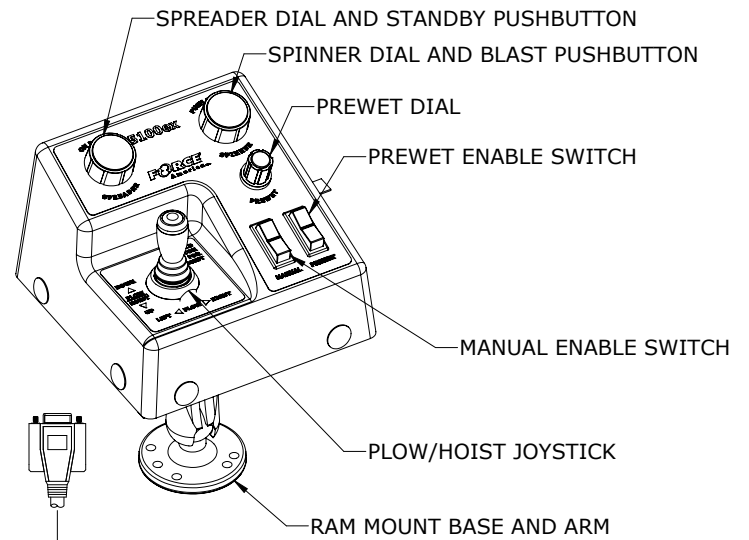
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|-------------------------------|---|
| Size | 5.1" H x 7.2" W x 2.5" D |
| Case Material | Glass filled Nylon |
| Screen Size | 3.5" |
| Screen Resolution | 320 x 240 px |
| USB Connector | Standard-A type |
| Discrete Digital Inputs | 6 |
| Dashkey Input | 1 |
| Speedometer Input Type | Dual Adjustable Trip Point, w/ pull up enable |
| Valve Outputs | 9 |
| Valve Output Current | 4A |
| Operating Voltage | 9-30VDC constant power |
| Operating Current | 250mA + valve drive current |

| | |
|----------------------------------|--|
| Max System Current | 15A |
| Electrical Protection Type | Fuse, reverse polarity, load dump |
| Electrical Testing | J1113/4: Bulk Current Injection 1-400MHz |
| | J1113/21: Immunity to |
| | Electromagnetic Fields 20-1000MHz |
| | CISPR 25: RF Radiated Emissions |
| | J1113/13: ESD 4 & 8kV Direct, 4/8/15kV Air |
| Mechanical Testing | SAE1455 Shock |
| | SAE1455 Swept Sine Vibration |
| | SAE1455 Random Vibration |

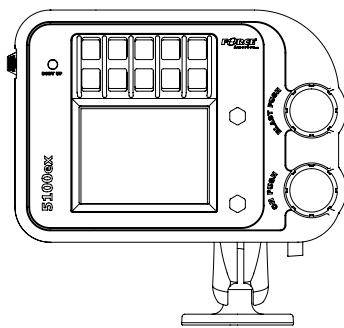
Product Specifications



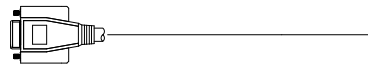
Dual axis joystick allows for easy plow and hoist operation.



5150ex REMOTE JOYSTICK



5100ex CONTROLLER



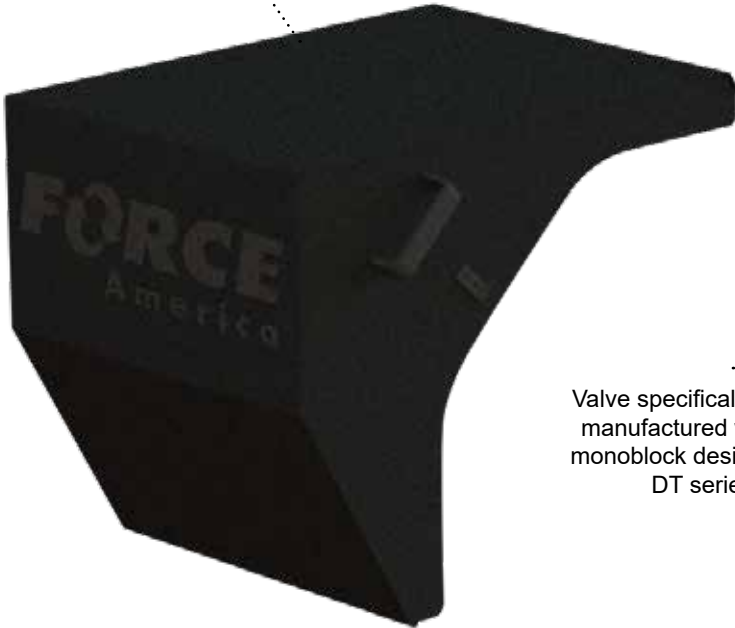
Technical Specifications

| | |
|--------------------------|------------------------------|
| Size | 4.5" H x 6.0" W x 6.0" D |
| Case Material | ABS plastic |
| Operating Voltage | Powered by 5100ex controller |
| Rotary Dials | 3 |
| • Spreader Control | 1 |
| • Spinner Control | 1 |
| • Prewet Control | 1 |

| | |
|------------------------|--------|
| Rocker Switches | 2 |
| • Manual Mode | 1 |
| • Prewet Control | 1 |
| Joystick | 1 |
| • Gated | |
| • Dual Axis | |
| • Rubber Boot | |
| • PushButton | 1 |
| Communication | Serial |

Product Specifications

Powder coated steel valve enclosure offers protection and easy serviceability.



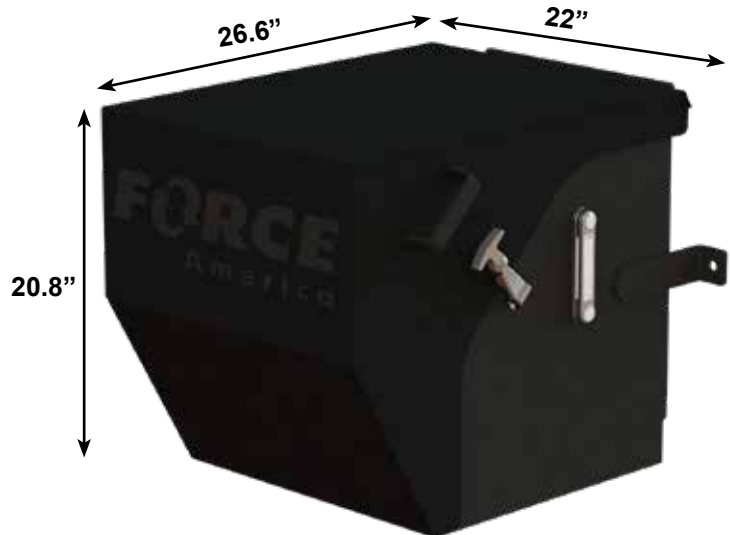
Enclosure combines a 12 gallon reservoir, valve, filter, breather, sensor, electrical connections and hose fittings.



Valve specifically designed and manufactured with a compact monoblock design and Deutsch DT series plugs.

Technical Specifications

| | |
|--------------------------------|----------|
| Flow Range | 20 GPM |
| Operating Pressure (max) | 3000 PSI |
| Tank Pressure (max) | 500 PSI |
| Seals | BUNA-N |
| Duty Cycle | 100% |
| Coil Resistance | 4.7ohms |
| Current Rating | 2.5amps |
| Frequency | 100hz |



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Sales and Service Centers

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FA1003-0318-03

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