

X20

COMPLETE PRECISION AG SYSTEM



Complete Precision Control

- VISUAL OR AUTOMATIC GUIDANCE
- VARIABLE RATE CONTROL FOR SEEDING, PLANTING, FERTILIZING & SPRAYING
- AUTO-SECTION CONTROL-UP TO 30 BOOM SECTIONS
- REAL-TIME DATA MAPPING
- FULL COLOR, SUNLIGHT VISIBLE DISPLAY WITH TOUCH SCREEN

It's time.

The way we work is constantly changing. Adopting and utilizing the very best technology innovations for your agricultural business enables you to increase your productivity and profitability like never before.

As the use of GPS on the farm becomes increasingly prevalent and accepted, so does the need for advanced application technologies and the efficiency of in-cab control with multiple functions as well as ease of use. The Topcon X20 control console is a powerful solution.

Topcon manufactures core GPS positioning technology with many applications in precision agriculture, surveying, and construction. Topcon's dual-constellation GPS + GLONASS provides up to 75% more satellite availability than GPS alone. More satellites means higher accuracy and 24/7 operation. GPS+ means maximum uptime and accuracy in all conditions – dust, fog, up against a treeline, or even at night. Topcon helps you maximize your productivity and save time, fuel, and materials.

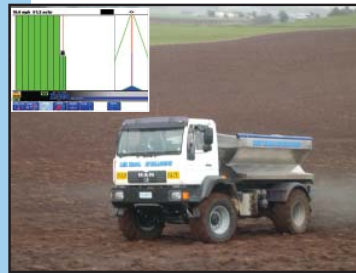
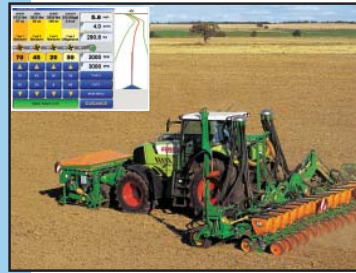
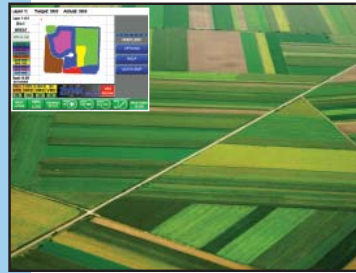
The Topcon X20 console adds value throughout the farming cycle, providing increased efficiency and enhanced capabilities to tractors and sprayers. First, and most simply, it can be a rate controller, replacing existing Raven, Dickey-John, Mid-Tech, Micro-Trac or other rate controllers for liquid, granular, or injection control systems. In addition, it provides the enhanced functionality of Automated Section Control (ASC) with the industry leading capability to control up to 30 individual or grouped boom sections.

The unit can also be used for single and multiple product variable rate control, all from a color touch screen. The X20's large, highly visible screen allows the operator to intuitively understand sophisticated multiple product control and Variable Rate Control in a very intuitive, user-friendly way. Plus, the system can be run with the optional ProSteer module to enable autosteering of the tractor or sprayer along with the other functions.



With 72 years of positioning technology experience, Topcon offers a complete suite of world leading products to improve the productivity and efficiency of every farm operation:

- Guidance and Autosteering
- Water Management
- Application, Control and Variable Rate
- Planning and Documentation



Guidance

- Visual and auto-steering: forward and reverse operations
- Accuracy from sub-meter to 2 cm, easily upgradeable
- Gyro-tilt compensated for uneven terrain
- Straight, circular or contour patterns
- Fully integrated with all X20 applications
- Optimized control software and proportional hydraulic valves for smoothest steering
- Compatible with most GPS systems that support NEMA data strings

Mapping & Variable Rate Control

- Up to 11 simultaneous active maps with 5 logging layers plus elevation
- Layers can include prescription maps to control up to 5 tanks
- Generate prescription maps for all work performed
- Auto Section Control reduces input - helps protect the environment
- Interactive obstacle flagging
- Optional Sectional Sensing

Spraying

- Optional automatic boom leveling
- Variable Rate Control
- Auto-section control-up to 30 sections
- Dual boom and up to 3 channel tank or injection control
- Application files and as-applied maps can be created, saved and shared

Planting

- Single or multiple control: up to 5 products
- Variable Rate Control on all bins
- Blocked Head Monitoring option with alarms
- Drives electric motors, hydraulic motors (PWM), and actuators
- Multiple fan speed monitoring

Spreading

- Variable Rate Control
- Independent spinner control and monitoring
- Automatically adjusts belt for ground speed
- Dual belt control
- Auto-clutch dump feature

Fertilizing

- Auto-section Control
- Granular, liquid or NH3 Variable Rate Control
- Multiple tank control
- Compatible with 3rd party controller flow and regulator valves
- Lockout function

X20

One Powerful Console, Complete Precision Control



MicroSoft® Windows XP® Pro operating system for full software compatibility

Proximity activated, on-screen drop-down menus for system diagnostics and brightness control

Super-Bright SVGA LCD Display, allows digital dimming to suit all light conditions

UV stable, sealed housing provides exceptional impact strength and high heat resistance

Rugged and ready for tough environments
No moving internal parts

Internal speaker for audio commands and Alarms

System status LED's

Internal backup battery ensures no data loss

X20 Software Application Features

- Easy-to read large color touch screen
- Easy to use standardized screen layout
- Read at a glance moving icons and numeric counters
- Password protection and customizable user settings
- Compatible with 3rd party valves, pumps, flow meters and controllers
- Standard kits replace existing controllers through simple Plug-n-Play installation
- Easily upgrade as your application needs grow



The Leader in Positioning Technology...

Topcon offers positioning products that deliver unparalleled site-wide performance and integration. Topcon's history of technological advances and our reputation for superior reliability means there's no other company positioned to provide you with a better "Total Positioning Solution."

From land forming to compliance reporting, through our authorized dealers of North and South America, Topcon provides innovative technology that helps farming professionals maximize efficiency, improve crop yield, comply with changing regulations, implement environmentally sustainable management practices and improve workplace safety. Our dealers are there to help you every step of the way.

Complete Precision Farming Solutions, field-to-fork: That's the goal of Topcon. When it's time for you to take your first or next step, it's time to turn to Topcon.

The Leader in Customer Satisfaction...

To ensure that your equipment maintains peak performance your local Topcon dealer provides factory trained and certified service technicians.



Offices Worldwide



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Specifications subject to change without notice

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P/N: 7010-0800 Rev. A Printed in U.S.A. 02/07

X20 Specifications

System Software Windows XP Professional
1GHz Processor
512MB RAM
2GB Solid State Drive
128MB Thumbdrive

Display & Touch Screen
8.4" 21.3cm TFT Active Matrix color
Indoor/Outdoor display with resistive touch screen
SVGA 800 x 600 pixels
32 bit Color
Contrast Ratio 400:1
Brightness 400 col/m2
Brightness control via software
External XGA monitor support -1024 x 768

Interfaces
4 x RS232 Ports
COM2 configurable to RS232 or RS485
4 x USB 2.0 Ports (2 at rear, 2 at side)
1 x CANBUS Port (ISO11783)
2 x PS2 Ports (6 pin mini DIN)
1 x VGA Port (1280 x 1024, (60Hz)), (1024 x 760 (85Hz))
1 x 10/100 Base T Ethernet Port (RJ45)
100Mbs LAN

Audio
1.5W Stereo audio amplifier
Internal speaker
Ext. stereo line inputs / outputs microphone (6 pin DIN socket)

Power
Input voltage 9-18V DC
Built in protection from power supply voltage transients
Intelligent power management system

Dimensions
Size: 7.4" x 9.8" x 2.7" (188mm x 248mm x 70mm)
Weight: 5.8 pounds (2.65kg)
International Standard Mounting System (RAM)



Topcon Positioning Systems is the worldwide leading developer and manufacturer of precision positioning equipment and offers the widest selection of innovative precision GPS systems, laser, optical surveying, and machine control products.



From open-field construction projects to isolated surveying sites and from rolling farmland to inner city utility projects, Topcon Positioning Systems provides innovative technology that provides a decidedly competitive edge to end-users.



Recognized as an innovative industry trend-setter, Topcon has focused on developing an array of integrated positioning and automation technologies to meet the constantly changing demands facing construction, surveying, agriculture, utilities and law enforcement industries worldwide.

Your local Authorized Topcon dealer is:

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