#### **FLEXIBLE INSTALLATION OPTIONS**

- Integrated or Off-Fairway
- Simplicity
- Ease of Access

GDC 2-wire modules can be installed near or on the sprinklers, providing simplicity, consistency and dedicated intelligence for every sprinkler.

Another option is to install the modules in valve boxes, out of the area of play, for enhanced access and lowest cost. If desired, you can also combine the two styles, simplifying fairway installation but providing the assurance that you won't be doing any digging around greens for repairs or maintenance.

#### LIGHTNING PROTECTION

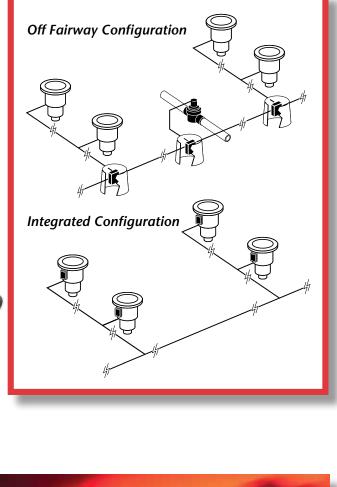
- Broadband Protection
- Best in Class
- Prevents Storm Damage

Mother Nature occasionally hits every course with some electricity, some much more than others. The GDC system is ready. Our innovative, broadband protection circuit is based on our decades of experience providing the ultimate protection for traditional satellites.

All parts of the field modules are protected with a proven combination of gas tube surge arrestors, inductors and movs, so any surge, at any frequency, is

routed away from the microprocessor and safely into the ground. This surge protection circuit also protects the solenoid up to 20KV, the Toro benchmark for protection.

As in a satellite system, there is some grounding required on the main communication cable, but the advanced protection built into every module means there are significantly less of these in field grounds to install and maintain than what is required for competitive systems.



# **Lightning Protection** 20 15 10 5 0 Competition Toro

#### **CUSTOMER SATISFACTION**

- Chosen More than any other
- Hundreds of Systems
- Superintendents Agree

With hundreds of systems in 37 countries, the Toro<sup>®</sup> GDC 2-wire system has been chosen by more courses than any other advanced 2-wire system. Here's what some of the superintendents have to say about their GDC systems:

California Golf Club Superintendent, Thomas Bastis, says... "The GDC system uses advanced technology that simplifies things for me. There are fewer parts, so fewer items to stock and my staff can make any needed repairs on site instead of sending boards in to a service center. The architect and the members also like having everything below grade - no boxes to look at and no chance of vandalism. "



Blue Ash Superintendent, Dan Walter, says... different options for a new system, GDC was the obvious choice."

Morris County Superintendent, Paul Mulholland, says... "The Lynx software is easy to use and lets us run what we need to. The 2-wire design has allowed us to add 24 rough sprinklers on several holes without having to trench all the way back to a satellite. The GDC lightning protection is excellent. We had a major strike recently directly on the course that did some damage to one sprinkler, but there was no other damage to the rest of the Toro equipment."

#### **TORO® NSN SUPPORT**

- Telephone Support 24/7/365
- 24 hour Replacement
- Remote Access and Monitoring

#### COUNT ON TORO.

Toro products are developed by golf irrigation experts for individuals like you who work hard to maintain flawless turf conditions. We strive to help you manage your water, energy and labor resources most effectively, while delivering the best playing conditions on your course.

As issues about water usage continue to impact golf, count on Toro to take an industry-leading position in finding new, practical and innovative ways to irrigate more efficiently. Toro stands behind our quality products with the most experienced service

# **GDC Control System**

TORO

## **Count on it**



"Less wire makes the GDC system easy to work with, and it's less expensive than a satellite system. It's also very flexible so I can easily add or move sprinklers wherever I need them. When I weighed all of the



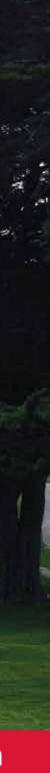
**NSN<sup>®</sup>** 

professionals—from installation and training to system optimization and everything in between, including financing. Toro also funds research and support for several trade associations, all to help us understand your challenges and provide better solutions.



The Toro Company | Irrigation Division 5825 Jasmine Street | Riverside, CA 92504 877.345.TORO | www.toro.com

# **GDC Control System**



#### **TORO**

#### **GDC Control System**

- Advanced 2-Wire Technology
- Reduced System Cost
- Lynx Central Software
- Superior Diagnostics

- Flexible Installation Options
- Lightning Protection
- Customer Satisfaction
- Support

#### **ADVANCED 2-WIRE TECHNOLOGY**

- Reduces amount and cost of wire
- Eliminates satellite boxes
- Uses patented technology introduced by Toro

In 2006, Toro changed the industry with the introduction of GDC advanced 2-wire technology. This patented new system revolutionized the irrigation industry by making 2-wire technology practical for all types of golf courses.

2-Wire systems eliminate the need for traditional satellite boxes by installing Intelligent modules near or on the sprinklers. These modules are all joined to the central computer by a simple twoconductor cable. The elimination of the satellite boxes and the thousands of feet of wire simplifies the installation, improves aesthetics and reduces cost.

Built on our 20 years of experience with decoder systems, the introduction of two-way communication and *ultra low power* latching solenoids reduce power use and allow the use of smaller wire while enabling advanced, intelligent diagnostics. While others have followed in our footsteps, Toro is the industry leader in advanced 2-wire control, with the largest customer base and the largest systems in operation.

# Central Module 2-Wire Module

#### LYNX<sup>®</sup> CENTRAL SOFTWARE

- Easy to Use
- Easy to Set Up
- Easy to Support

The GDC 2-wire system works with Lynx, the newest, highest featured yet easy-to-use control software available. Lynx was designed to provide precision control without being complicated. Based on direct input from superintendents, the software is highly intuitive so you can set up your watering schedule and make changes quickly, with just a few clicks. Features like the Watering Plan, Course Report and Course Map all work together with the GDC system in real time, so you are always in control.

Name of Street, Street

	Daily Operation	a las contras.	-		_	1			-		
	Course Report	Saletyne		Current Designer Hilling			Tundu - Far			1718 -	1
	Manual Enligation Synchronite	3* A&= [m n[]] \/	Store 3	No. 81 1. []			Sect by factors folded				
-	Work Order	Nogar 1.8	-	10111	Sec.87	Apr. 83	1.0		All And	- Pris	M
$\subseteq$	Watering Plan Instant Program		0			6/10	MART	1.04/10.1	8894	4	-
	Projected Flow	E Strands 8	0	100	- 2029	5/10	1.6	-18	3.3/15.		10
	Scheduled Activity					0.00	\$392.0	9.4927	8.0	1	*
	Switch Program	5 🖨 (3.5m) / 7				1/10	2.04(12.1				
		Opmunteda *	8	-		100/14	10		3.4/14		11
		Clarg her 19	0 11	-		04/14	1.66.4	6.4,8,8	3.8/30. 0.0/00.		2
		T & Land All Int	3			4/18	MARKS				2
	Advanced Setup Daily Operation Report Generator Set Unities Favorites Turif Guard	Dag Berngel ( a dated busines	A								
	-	Every Agenciation	Sear In			á	4		No.		
	1000	Parcel Interior	Course Report								
	Contraction of the	Swithranize Work Order	-				AM	nuite.	100	-	ł
	1.07210	Watering Plan			Ermin e-ta	-	a.enny	Targare	Berneg	Capter.	4
		Instant Program Projected flow					-	rt.		Conciers	İ
		Scheduled Activity	COLUMN T						A CONTRACTOR		ļ
		Seitch Program		alor	large	e M	1.00	Lauke	Aureig .	Drawn	Í
			4 101		+01 4.0				1	Midad?	
					***					40.010T	
										104407	Ę
			- 101 - 104 - 104		40						
			1		440 540 242	P4			1	.1 .1	1
			-		740	P4			1		
		Advanced Settup	-		242	P4			1		
		Advanced Sellup		• (1000) 1.10	242	P4			* 2 10		
					242	P4			* 2 30		
		Dully Operation		• 300001	242	P4			**************************************		
		Dully Operation		a Jacobi m	242	P4			1 10		
		Duly Operation Duly Operation Deport Generator Control Forcettes Turf Gaunt	Final Action		242	P4			1		
		Duly Operation Duly Operation Deport Generator Control Forcettes Turf Gaunt			242	P4					
		Daily Operation     Deport Generator     Utilities     Foreefics     Turf Gaunt	Final Action								

### **REDUCED SYSTEM COST**

• Uses 85% less wire than a traditional satellite control system

Wire for a traditional system 1,000,000 feet of 14 AWG signal wire 25,000 feet of 6-12 AWG power cable 25,000 feet of 16 AWG communication cable

Wire for a two-wire system 90,000 feet of 14 AWG communication cable



# **GDC Control System**

#### **SUPERIOR DIAGNOSTICS**

- Automatic system check every time you water
- Course report shows where and when issues occur
- System alarms keep you informed

One of the great things about a 2 -wire system is that everything is out of sight, below grade. So if and when something goes wrong, how do you know?

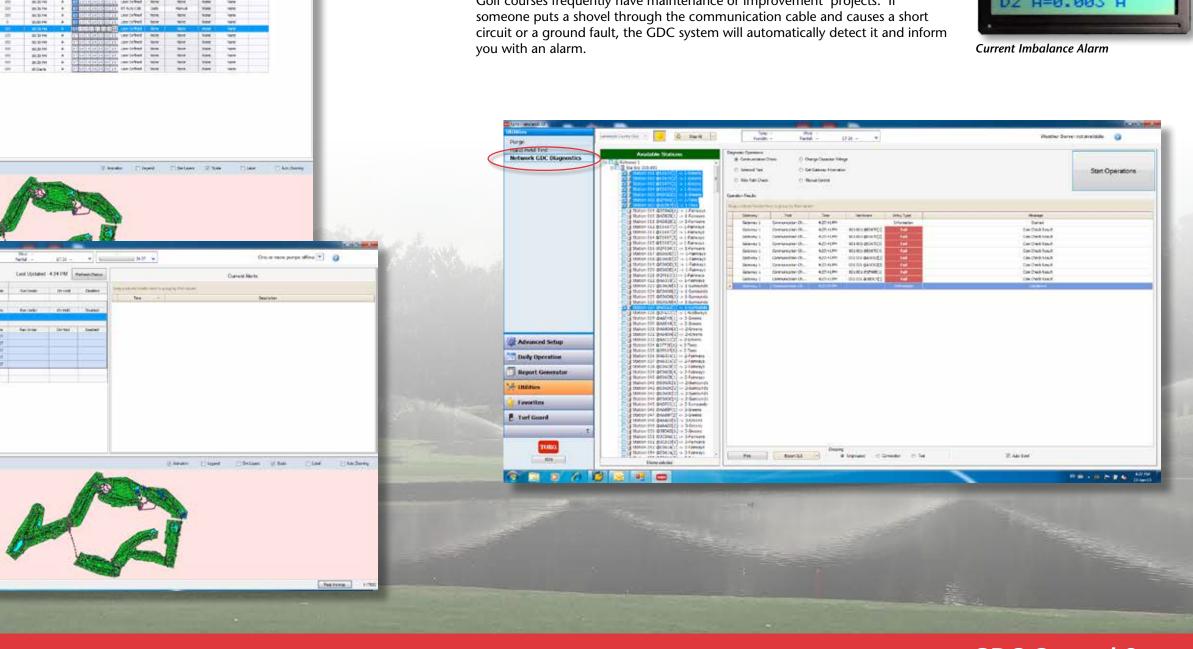
The GDC system uses advanced diagnostics to make sure the system is always operating correctly. Every time you water, the GDC system verifies communication with every module. If there is a problem, the Course Report in Lynx shows you when and where it happened, automatically. The wire path check guickly confirms that all communication cables are intact and that voltage and amperage values are within the necessary limits.

Golf courses frequently have maintenance or improvement projects. If



High Current Alarm





**GDC Control System**