

PILOT INTEGRATED HUB SYSTEMS

Number of Stations: **999**
Type: **Integrated Hub**

Integrated hub systems are one of the fastest growing forms of technology in irrigation control. A key advantage over field controller systems is that integrated hub systems use significantly less wire. This means lower costs, faster installation, and easier system diagnosis and repair if needed. Systems can be easily expanded — with minimal digging and disruption of landscaping — by adding more two-way modules (TWMs) instead of running additional wires.

Pilot embraces this cost-efficient approach. Pilot two-way modules are available with 1-, 2-, 4-, and 6-station outputs, making it possible to run each head on an entire green with a single device. In all, TWMs let you operate about 1,000 stations up to 1½ miles from a single hub.

Pilot two-way modules include built-in surge suppression, color-coded wire connections, true independent station control, programmable station addresses, and two-way feedback to the hub with confirmation and status indication. Pilot-SG surge suppressors are required when the system is designed and installed with golf rotors containing integrated TWMs.



TWM Hub

Water-Resistant Keypad
The backlit display and illuminated control panel mean you can easily access the hub, day or night

Diagnostic LED Indicators
For all functions on 250-station output modules

250-Station Output Modules
Enable your integrated hub system to expand with your course; start with 250 and grow to 999

Pilot TWMs

1- and 2-station:
Height: 3⅝"
Width: 1½"
Depth: 1"
Weight: 5 oz.

4- and 6-station:
Height: 3⅝"
Width: 1¾"
Depth: 1½"
Weight: 9 oz.



The distinct yellow design of TWMs makes them much easier to locate in dark valve boxes or buried in the soil.

PILOT-SG Surge Suppressor

All integrated TWM rotors include two 3M DBRY-6 splices for connection to the two-wire path. Integrated TWM systems require grounding with Pilot-SG surge suppressors coupled to an appropriate grounding plate or rod. Hunter recommends a minimum of one Pilot-SG for every 12 installed rotors or as per project specification.



PILOT-DH – SPECIFICATION BUILDER ORDER 1 + 2 + 3		
1 Model	2 Standard Features	3 Communication Options
Pilot-DH250 (250-station)	Plastic pedestal (gray)	S Standalone TWM hub with no central communications
Pilot-DH500 (500-station)		HWR Wired communications
Pilot-DH750 (750-station)		UHF UHF radio (license required)
Pilot-DH999 (999-station)		LF 915 MHz spread-spectrum radio (no license required)

Examples:
Pilot-DH250-S = 250-station, standalone TWM hub with no central communications
Pilot-DH999-HWR = 999-station TWM hub with wired communications

Pilot Integrated Hub

The hub provides independent station control of 999 TWMs with up to 120 running simultaneously.

Extended Control

Control system components up to 8,000' away with single pair of wires.

TWM in Valve Box

Sprinkler solenoids can be up to 240' from the TWM.

Expansion Options

More than 999 stations, you can use up to 999 TWM hubs for nearly 100,000 TWM devices.

Surge Protection

Integrated TWM systems require approximately one Pilot surge suppressor for every 12 rotors. The actual number will vary by system design.

Integrated TWM

Hunter's exclusive integrated TWM module within TTS rotors minimizes valve box covers on playing surfaces. See page 24 for more information.

TWM - SPECIFICATION BUILDER ORDER 1

1	Model	2	Standard Features
Pilot-100	1-station TWM		Built-in surge suppressor
Pilot-200	2-station TWM		DBRY-6 waterproof connectors included
Pilot-400	4-station TWM		
Pilot-600	6-station TWM		
Pilot-SG	Inline surge suppression (for integrated TWM rotor systems)		

Example:

Pilot-100 = 1-station TWM



Wireless Programming

This device is used to test, troubleshoot, and program integrated TWMs. It allows you to wirelessly link directly to TWMs without removing the TTS cover. You can also use it to update the coding inside the TWM's microprocessor.

See the ICD-HP on page 17