FRACKING





ABOVE GROUND MARKER Pg. 8-7



TRANSMITTERS Pg. 8-3 to 8-5







T R A C K I N G RECEIVERS

TRAXALL 500 & 501

The TRAXALL 500 and TRAXALL 501 receivers differ in their ability to support add-on accessories. The TRAXALL 501 system monitors the 22 Hz transmitter frequency and supports the use of remote electromagnetic antennas and strobe lights with two external connectors while the 500 system does not. TRAXALL 500 is CDI's lowest-cost receiver.

Signal strength is intuitively indicated on a horizontal row of scrolling LEDs, while a single knob adjusts the reception sensitivity of each frequency.

TRAXALL 620

With TRAXALL 620, up to three transmitter frequencies are represented as scrolling rows of LEDs. The 620 works with CDI's transmitter family and the new TRAXALL X-Series multi-frequency transmitters, as well as transmitters from competitive systems. The TRAXALL 620 supports the use of remote electromagnetic antennas and strobe lights.

TRAXALL 720

The TRAXALL 720 tracks two programmable frequencies as well as 22Hz and MFL. A high-speed GPS system is built in, allowing arbitrary points of interest to be waypointed and stored in memory as GPS coordinates. Trackpoiting records breadcrumb trails showing routes taken to and from hard-to-find locations.

Bluetooth communication allows remote viewing of the system from a vehicle in inclement weather. LineStat provides the 720 with the capability to autonomously monitor for pig passages and send remote notifications as emails or text messages. LineStat requires no cellular telephone network, and functions anywhere in the world.

TRAXALL 770

The TRAXALL 770 tracks as many as 7 different transmitter frequencies simultaneously with a unique color assignment for each on the bright, wide temperature display. A high-speed GPS system is built in, allowing arbitrary points of interest to be waypointed and stored in memory as GPS coordinates. Trackpoiting records breadcrumb trails showing routes taken to and from hard-to-find locations.

Bluetooth communication allows remote viewing of the system from a vehicle in inclement weather. LineStat provides the 720 with the capability to autonomously monitor for pig passages and send remote notifications as emails or text messages. LineStat requires no cellular telephone network, and functions anywhere in the world.



OPTIONS



T R A C K I N G TRANSMITTERS

X-Series Programmable Multi-frequency Transmitters

X-Series Transmitters are TRAXALL-compatible electromagnetic pipeline pig-tracking devices offering both programmable frequency and power control through CDI's proprietary FieldLink wireless communications system.

Frequency Control allows you to configure the transmitter to one of TRAXALL's seven colorized frequencies, or 22 Hz legacy frequency for backward compatibility with CDI's CD42 receiver or competitive receivers.

Power Control allows the operator to directly manage a trade-off between transmitter range vs. battery life. You can set output power to maximum for short runs/long range, or reduce output power for long runs/long battery life. *Requires USB for programming.*

FieldLink is CDI's proprietary wireless communications network. Each X100 transmitter comes with a built-in radio frequency antenna. By connecting an optional radio frequency USB key, any Windows PC or laptop can be used to configure a transmitter.

CD42 22Hz Transmitters

CDI Transmitters are manufactured in-house to exacting tolerances, operate on the principles of magnetics, and emit electromagnetic fields at a frequency near 22Hz.

The 22Hz Transmitters have pressure housings that allow them to be mounted directly in or on a pipeline pig and can withstand pressures of up to 2,500 PSI.

Most transmitters have an on-board computer that allows you to switch between two pulse modes and continuous, or, if tracking a train of pigs, the transmitter can be programmed to create any number of unique and easily identifiable patterns.

22Hz Transmitters are available in a wide variety of sizes to fit every application.

Pressure switch modules and flange kits are also available for most models.



Delrin Can



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TRACKI G TRANSMITTERS

Feature	CD42-T1A	X200-2AA	X200-3AA	X300-3C	X300-4C
Recommended Diameters	8" - 28"	6" - 24"	8" - 28"	8" - 28"	12" and larger
Length	10.19" (259mm) 11.00" (279mm)	5.00" (127mm)	7.07" (179mm)	7.74" (196mm)	9.61" (244mm)
Diameter	2.00" (51mm) 3.00" (76mm)	1.125" (28.5mm)	1.125" (28.5mm)	1.74" (44mm)	1.74" (44mm)
Pressure	2,500 PSI (172 bar)	2,500 PSI (172 bar)*	2,500 PSI (172 bar)*	2,500 PSI (172 bar)*	2,500 PSI (172 bar)*
Range (Alkaline)	45' (13.7m)	37' (11.3m)	49' (14.9m)	62' (18.9m)	67' (20.5m)
Range (Lithium)	65' (19.8m)	42' (12.8m)	56' 17.1m)	75' (22.98m)	83' (25.3m)
Run Time (Pulse)	500 hrs	500 hrs	500 hrs	1,000 hrs	1,000 hrs
Run Time (Constant)	125 hrs	188 hrs	188 hrs	288 hrs	288 hrs
Available in ATEX	No	Coming Soon	Coming Soon	Yes	Yes
Programmable Patterns	No	Yes	Yes	Yes	Yes
Programmable Frequencies	No	Yes	Yes	Yes	Yes
Pressure Activation Available	Yes	Yes	Yes	Yes	Yes
Battery Cell Count	6 AA	2 AA	3 AA	3 C	4 C

Feature	CD42-T3	X100-4N	X100-5N	X200-2AA	X200-3AA
Recommended Diameters	2" - 8"	6" - 12"	6" - 14"	6" - 24"	8" - 28"
Length	6.3" (160mm)	5.7" (145mm)	6.9" (175mm)	5.0" (127mm)	7.07" (179mm)
Diameter	0.875" (22.2mm)	0.995" (25.3mm)	0.995" (25.3mm)	1.125" (28.5mm)	1.125" (28.5mm)
Pressure	2,500 PSI (172 bar)	2,500 PSI (172 bar)*	2,500 PSI (172 bar)*	2,500 PSI (172 bar)*	2,500 PSI (172 bar)*
Range (Alkaline)	30' (9.1m) *T3 Lithium Only	28' (8.5m)	30' (9.1m)	37' (11.3m)	49' (14.9m)
Range (Lithium)	30' (9.1m) *T3 Lithium Only	28' (8.5m)	30' (9.1m)	42' (12.8m)	56' (17.1m)
Run Time (Pulse)	110 hrs	16 hrs	16 hrs	500 hrs	500 hrs
Run Time (Constant)	N/A	5 hrs	5 hrs	188 hrs	188 hrs
Available in ATEX	No	Coming Soon	Coming Soon	Coming Soon	Coming Soon
Programmable Patterns	No	Yes	Yes	Yes	Yes
Programmable Frequencies	No	Yes	Yes	Yes	Yes
Pressure Activation Available	No	Yes	Yes	Yes	Yes

*Titanium Version to 7,500 PSI (517 bar) available.

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T R A C K I N G TRANSMITTERS

Feature	CD42-T4	X100-1N	X100-2N	X100-3N
Recommended Diameters	2" - 8"	2" - 8"	3" - 10"	4" - 12"
Length	3.0" (76mm)	1.96" (50mm)	3.35" (49.7mm)	4.53" (115mm)
Diameter	1.375" (35mm)	0.995" (25.3mm)	0.995" (25.3mm)	0.995" (25.3mm)
Pressure	2,500 PSI (172 bar)*			
Range (Alkaline)	23' (7m)	22' (6.7m)	24' (7.3m)	26' (7.9m)
Range (Lithium)	N/A	N/A	N/A	N/A
Run Time (Pulse)	65 hrs	16 hrs	16 hrs	16 hrs
Run Time (Constant)	N/A	5 hrs	5 hrs	5 hrs
Available in ATEX	No	No	Coming Soon	Coming Soon
Programmable Patterns	No	Yes	Yes	Yes
Programmable Frequencies	No	Yes	Yes	Yes
Pressure Activation Available	Yes	Yes	Yes	Yes

Feature	CD42-T2	X300-5C	X400-4D	X400-5D
Recommended Diameters	30" and larger	14" and larger	14" and larger	16" and larger
Length	12.85" (326mm)	11.5" (293mm)	11.5" (291mm)	13.83" (351mm)
Diameter	4.375" (111mm)	1.74" (44mm)	2.5" (63.5mm)	2.5" (63.5mm)
Pressure	2,500 PSI (172 bar)	2,500 PSI (172 bar)*	2,500 PSI (172 bar)*	2,500 PSI (172 bar)*
Range (Alkaline)	92' (28m)	74' (22.6m)	75' (22.9m)	77' (23.5m)
Range (Lithium)	99' (30.2m)	91' (27.7m)	99' (30.2m)	110' (33.5m)
Run Time (Pulse)	375 hrs	1,000 hrs	1,344 hrs	1,344 hrs
Run Time (Constant)	100 hrs	288 hrs	336 hrs	336 hrs
Available in ATEX	No	Yes	Yes	Yes
Programmable Patterns	No	Yes	Yes	Yes
Programmable Frequencies	No	Yes	Yes	Yes
Pressure Activation Available	No	Yes	Yes	Yes

*Titanium Version to 7,500 PSI (517 bar) available.

T R A C K I N G DELRIN CANS

ELECTRONIC TRANSMITTER PROTECTION

Our Delrin Cans feature a threaded cap with hex head and pressure vent. In addition to the pressure vent built into the cap there is a bleed bolt threaded into the cap designed as the primary pressure relief. Delrin Cans come standard with grooves to accommodate various sizes of rings for a secure fit in any size transmitter cavity. OD rings allow the same Delrin/transmitter combination to be quickly and easily modified to fit in a variety of pig and/or cavity sizes.

Features & Benefits:

- Explosive de-compressive O-rings for bleed bolt and cap
- Threaded base for securing to various pig cavities
- Hexagonal base of canister body allows the operator to easily secure the canister for cap removal

Size	Part Number		
2.0" Assembly	95-2010-20		
2.5" Assembly	95-2010-25		
3.0" Assembly	95-2010-30		
3.5" Assembly	95-2010-35		



FOUR STANDARD SIZES TO FIT MOST CDI TRANSMITTERS:

- 2.0" OD fits CD42-T3, X200-2AA, X100-1N, X100-2N
- 2.5" OD fits CD42-T4, CD42-T0
- 3.0" OD fits X300-2C, CD42-T1A, X300-3C, X300-4C
- 3.5" OD fits X400-3D, X400-3D ATEX

**ID's can be customized upon request to fit all CDI transmitter sizes.



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T R A C K I N G ABOVE GROUND MARKER

The CD47-C Above Ground Marker (AGM) time-based benchmarker is designed to record within just a few milliseconds the GPS time of a passing intelligent inspection tool. This precise time coupled with the physical pipeline location is correlated with the data recorded by the inspection tool. This correlated data provides a major increase in the accuracy of a smart pig's feature location callouts.

Utilizing precision time synchronization provided by its onboard Global Positioning System (GPS), the CD47-C is able to provide tool passage time accuracy that is guaranteed to be within 250 milliseconds over the 7 day battery life.

With its ability to record passages of both transmitter-equipped and magnetic (MFL) inspection tools without transmitters, the CD47-C provides users with a comprehensive, well-tested and field hardened system for their benchmarking requirements.

Features & Benefits:

- Detects transmitter equipped and MFL tools without transmitters
- GPS standard in every system
- Wide temp graphics LCD display
- Custom ABS plastic with urethane bumpers
- -40°C to +85°C operating temperature
- Optional swamp antenna
- Subsea version available
- LCD display provides operator with immediate access to information about the pig run in English, Spanish or German.



Options Available:

- Subsea ROV/Diver Housing
- Provides subsea AGM capability to 150m depth
- Swamp Antennas
- Provides shallow water and swamp antennas for use with the CD47-C without the bulkier subsea packaging

LineStat:

CD47-C has the option of satellite radio for worldwide global service of automatic pig passage status reporting by email and text message with viewing passage locations in Google Maps. This is your best option for remote onshore locations to offshore platform work as cellular signals are not reliable or even available. This solution works anywhere in the world and relies upon the Globalstar network of earth orbit satellites. No cellular access is required for LineStat to function.

CDI's SR100 satellite radios are ATEX and Class 1 Div 1 rated and are designed for field use. These devices are rugged and built to withstand virtually any outdoor temperature extremes.



T R A C K I N G GeoEAR GEOPHONE

The GeoEAR acoustic amplifier system allows a listener to hear extremely faint sounds at great distances using a geophone probe which is either inserted into the soil or placed in direct contact with the pipeline.

The GeoEAR has the ability to amplify the sound of an approaching pipeline pig's cups striking welds of a pipeline to an easily discernable level and under normal circumstances a pig can be heard approaching for miles.

Features & Benefits:

- Hear pigs in pipelines up to 2 miles away
- Separate volume control for speaker and headphones
- Pushbutton keypad interface
- Rugged machined aluminum geophone housing
- Durable Pelican carrying case with built-in 5" waterproof speaker
- Optional auxiliary cable allows a vehicle 12V system to provide power
- Headphones and geophone probe supplied
- Optional auxiliary output to vehicle sound system for even greater audio clarity
- Long cables available loose or on convenient takeup reels



T R A C K I N G RENTALS

NOW AVAILABLE TO RENT



Equipment Available:

- X100-1N Transmitter
- X300-2C Transmitter
- X400-3D Transmitter
- CD42-T0 22Hz Transmitter
- CD42-T1A 22Hz Transmitter
- CD42-T3 22Hz Transmitter
- CD42-T4 22Hz Transmitter
- Swamp Antenna

- TRAXALL 770 Receiver
- TRAXALL 720 with Linestat Receiver
- TRAXALL 620 Receiver
- CD43 GeoEar
- CD47 AGM with Linestat
- CD52-P Portable Bandit Detector
- Strobe Light

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