



Medtronic

Neurostimulation Systems



Expanding the Array of Pain Control Solutions

PROVEN EFFECTIVE FOR SIMPLE PAIN

ITREL® 3 SYSTEM

- For simple neuropathic pain
- Totally implantable for enhanced quality of life
- Easy to use for both physicians and patients



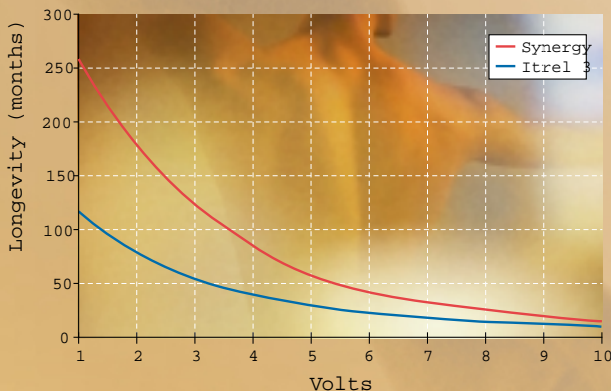
ITREL 3 SINGLE LEAD SYSTEM
 Itrel 3 Neurostimulator—Model 7425
 Itrel EZ Patient Programmer—Model 7434
 Pisces-Quad Compact Lead—Model 3887



SYNERGY SINGLE LEAD SYSTEM
 Synergy Neurostimulation System—Model 7729
 Pisces-Quad Compact Lead—Model 3887
 IPG Plug (Socket II)—Model 3550-09

SYNERGY™ SINGLE LEAD SYSTEM

- Increased longevity for fewer surgical replacements
- Flexibility to adapt to a dual lead system if disease progression is expected
- Programmable Day Cycler mode conserves energy for greater battery longevity



SINGLE LEAD APPLICATION DEVICE LONGEVITY*

The Synergy implantable pulse generator (IPG), when used as part of a single lead system, will last approximately twice as long as an Itrel 3 IPG at moderate voltage settings. At higher voltage settings, the Synergy IPG will last at least 50% longer than an Itrel 3 IPG.

*Longevity modeling calculations compare battery longevity of a Synergy single lead system and an Itrel 3 single lead system where both devices are programmed at 240 μ sec, 30 Hz with 2 active electrodes.

PUTTING PAIN CONTROL IN YOUR PATIENTS' HANDS

- Allows patients to fine-tune amplitude, pulse width, and rate for optimal pain relief
- Convenient and easy to use



Itrel EZ Patient Programmer—Model 7434



Synergy EZ Patient Programmer—Model 7435

SYNERGY SYSTEM: POWER AND FLEXIBILITY TO TREAT COMPLEX BACK AND LEG PAIN

- Total implantability for patient quality of life
- Access to 8 electrodes per channel
- Alternating pulses on 2 independent channels
- EZ patient control of stimulation
- “Transverse stimulation” offers more options for targeting of required stimulation sites



SYNERGY DUAL CHANNEL SYSTEM
 Synergy Neurostimulation System—Model 7729
 Pisces-Quad Compact Leads—Model 3887



Channel 1



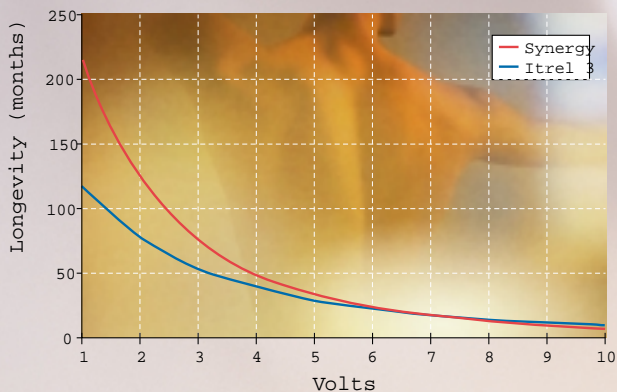
Channel 2

MATRIX® SYSTEM: ADDED POWER

- For patients with high power requirements
- Access to 4 electrodes per channel
- Alternating pulses on 2 independent quadripolar arrays



MATRIX DUAL CHANNEL SYSTEM
 Matrix Receiver—Model 3272
 Matrix Transmitter—Model 3210
 Specify Surgical Lead—Model 3998



SYNERGY DUAL CHANNEL AND ITREL 3 SINGLE LEAD DEVICE LONGEVITY*

The Synergy implantable pulse generator (IPG), when used as part of a dual channel system, will last approximately as long as an Itrel 3 IPG with a single lead. At lower voltages, the Synergy IPG longevity is significantly greater than that of the Itrel 3.

*Longevity modeling calculations compare battery longevity of an Itrel 3 single lead system to a Synergy dual channel system where all leads/channels are programmed at 240 μ sec, 30 Hz with 2 active electrodes per lead/channel.

SOLUTIONS FOR DIVERSE PATIENT NEEDS

PERCUTANEOUS LEADS

Optimal steerability with Medtronic's coiled wire design and removable center stylet.

Pisces-Quad® Compact Lead

- For a more precise, focused field
- Lead electrodes 3 mm long, 4 mm spacing
- Electrode span 24 mm

Pisces-Quad® Lead

- Lead electrodes 3 mm long, 6 mm spacing
- Electrode span 30 mm

Pisces-Quad Plus® Lead

- Lead electrodes 6 mm long, 12 mm spacing
- Electrode span 60 mm

SURGICAL LEADS

For patients who can benefit from increased lead stability.

Resume II® Lead

- The most requested surgical lead on the market
- Lead paddle 8 mm wide, 2 mm thick

Resume® TL Lead

- For smaller epidural spaces
- Lead paddle 6.6 mm wide, 1.4 mm thick

On-Point® PNS Lead

- For single-nerve-distribution pain
- Anchorable mesh skirt surrounding paddle
- Lead paddle 6.6 mm wide, 1.4 mm thick

Specify™ Lead

- Ability to increase specificity of paresthesia patterns
- Lead paddle 7.9 mm wide, 1.8 mm thick
- Especially for use with Synergy and Matrix Systems

Percutaneous Leads

Top to Bottom:
Pisces-Quad Compact—Model 3887 Lead
Pisces-Quad—Model 3487a Lead
Pisces-Quad Plus—Model 3888 Lead

Surgical Leads

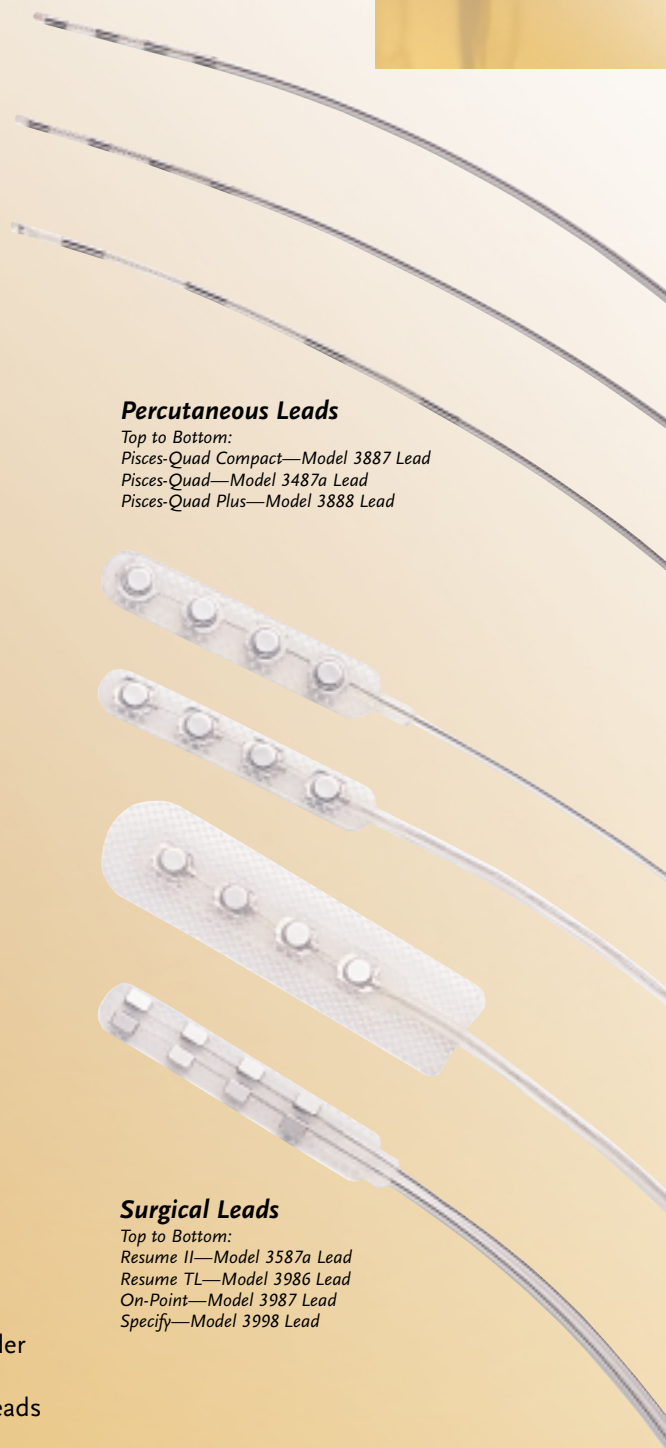
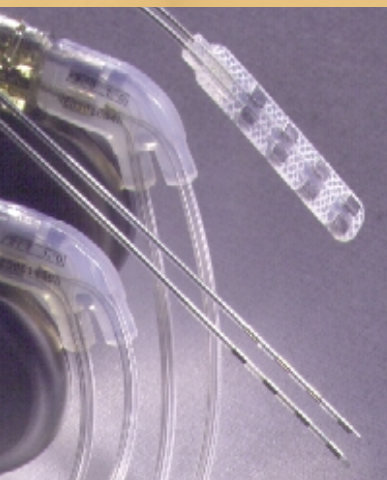
Top to Bottom:
Resume II—Model 3587a Lead
Resume TL—Model 3986 Lead
On-Point—Model 3987 Lead
Specify—Model 3998 Lead

FOR BROADER COVERAGE

Dual 4™ Extension

- Converts single lead systems to allow broader coverage of pain
- Compatible with all of Medtronic's in-line leads

Dual4 Extensions—Model 7498
Specify Surgical Lead—Model 3998
Two Pisces-Quad Compact—Model 3887 Leads



EXPANDING YOUR OPTIONS FOR PAIN CONTROL

For more than 30 years, Medtronic has been a pioneer in the development of neurostimulation systems for neuropathic pain. This therapy has offered hope to thousands of people with chronic intractable pain.

Now, Medtronic has expanded its array of products to include the world's only totally implantable neurostimulation system for complex back and leg pain—the **Synergy™ Neurostimulation System**.

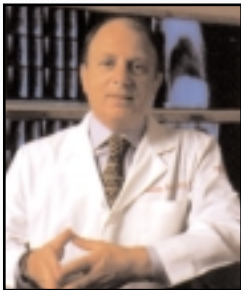
SYNERGY™ NEUROSTIMULATION SYSTEM:

- **Adaptability**—use as a single lead system or as a dual channel system
- **Flexibility**—transverse stimulation between the leads increases options to direct stimulation to where it's needed
- **Longevity**—increased battery capacity for more demanding applications



SYNERGY NEUROSTIMULATION SYSTEM—MODEL 7729

Synergy IPG—Model 7427
Synergy EZ—Model 7435



Giancarlo Barolat, MD

Thomas Jefferson University Hospital, Department of Neurosurgery

“The Synergy System will offer an advantage for the pain practitioner when treating patients with complex back and leg pain. Part of the frustration of using neurostimulation in these patients has been the inability to direct the stimulation to where the pain is. Dual channels will allow us to better tailor the stimulation so that we can capture both the low back and lower extremity pain. With this totally implantable system, we now have something that may help patients who could not be helped previously.”

SYNERGY NEUROSTIMULATION SYSTEM POWER AND FLEXIBILITY

Learn more about how Medtronic neurostimulation systems provide additional solutions for treating complex back and leg pain. For more information, contact your therapy consultant directly or call 1-800-664-5111, ext. 470, to receive an informational packet. Or, you can visit us at www.medtronicsynergy.com.



VALUE-ADDED SERVICES ONLY FROM MEDTRONIC

Every neurostimulation product from Medtronic is supported by a comprehensive range of services including:

- On-site Training Program
- 24-hour technical support
- Reimbursement and Clinical Education Specialist support
- Training and educational materials and workshops
- Patient services
- Therapy Access Consulting

BRIEF SUMMARY: Product technical manual must be reviewed prior to use for detailed disclosure.

INDICATIONS: The Medtronic Synergy, Medtronic Itriel, and Matrix Neurostimulation Systems are indicated to aid in the management of chronic, intractable pain of the trunk or limbs. The Matrix Receiver Model 3272 system is also indicated for peripheral nerve stimulation.

CONTRAINDICATIONS: Unsuccessful pain relief during trial stimulation of the spinal cord, or inability of patients to properly operate the system. The Matrix system is contraindicated for patients with an implantable cardiac pacemaker or cardioverter/defibrillator, or for those patients who will be exposed to magnetic resonance imaging (MRI).

WARNINGS/PRECAUTIONS/ADVERSE EVENTS: Safety has not been established for pregnancy or pediatric use. Patients should not drive or use dangerous equipment during stimulation. Systems may be affected by or adversely affect cardiac pacemakers, cardioverter/defibrillators, external defibrillators, MRI, diathermy, ultrasonic equipment, electrocautery, radiation therapy, theft detectors, security systems, and aircraft communications systems. Adverse events may include: undesirable change in stimulation described by some patients as uncomfortable, jolting or shocking, hematoma, epidural hemorrhage, paralysis, seroma, CSF leakage, infection, erosion, allergic response, hardware malfunction or migration, pain at implant site, loss of pain relief, chest wall stimulation, and surgical risks. Patient selection criteria include physiological origin for the pain, appropriate surgical candidate, detoxification from narcotics, and availability of long-term post-surgical management.

CAUTION: U.S. federal law restricts this device to sale and use by or on the order of a physician.



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