



**PHILIPS**

mDIXON XD TSE

MR software

# Changing your **mainstream MR procedures**

## Philips mDIXON XD TSE for 1.5T systems

### **Key benefits**

- Premium fat-free\* quality even over large FOV and challenging anatomies
- Routine scan times and resolution, simultaneously
- 2-echo technology for 30% increase in speed and up to 30% in sharpness compared to 3-echo technique
- Up to 4 image types (Water only, In Phase, Out Phase, Fat only) in 1 scan

With mDIXON XD TSE, Philips offers its unique mDIXON technology to mainstream Turbo Spin Echo MRI acquisitions. mDIXON XD TSE brings a new dimension to fat suppression: Premium fat-free\* performance with high consistency, even over large field of views (FOVs) and in challenging anatomies such as HeadNeck, Spine, or MSK. Powered by its unique 2-echo technology, mDIXON XD TSE enables routine scan times and resolution, allowing you to easily replace your favorite routine TSE scans with it.

With up to 4 image types in 1 single scan (including with/without fat suppression contrasts), mDIXON XD TSE will enable you to enhance your imaging strategies by simplifying your routine TSE procedures.

\*Premium fat-free defined as mDIXON fat-free compared to Dixon fat-free (3-echo, fixed TE)

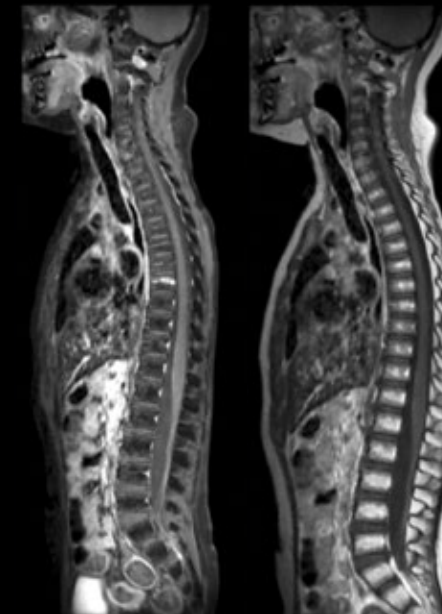


# mDIXON XD TSE

Changing imaging strategies for your mainstream MR procedures with mDIXON TSE.

|                      | Technical characteristics             | Additional information  |
|----------------------|---------------------------------------|---|
| Fat suppression type | mDIXON                                | Apply 1 fat suppression strategy across procedures: instead of SPIR, SPAIR or STIR  |
| Sequence             | TSE                                   | Supports all routine contrasts: T1w, T2w, FLAIR, and PDw and all orientations   |
| Number of echoes     | 2 echoes with unrestricted echo times | 30% faster and up to 30% sharper than a 3-echo Dixon TSE technique  |
| Image types          | 4 image types in 1 single scan        | Image choices:<br>. Water only ("fat-suppressed" contrast)<br>. In Phase ("non fat-suppressed" contrast)<br>. Out Phase<br>. Fat only |
| Main applications    | HeadNeck, Spine, MSK                  | Also available for other anatomies  |
| Field strength       | 1.5T                                  |   |
| Parallel imaging     | Compatible with dS SENSE              | Leverages the efficient dS SENSE parallel imaging technology to provide optimal SNR and further reduce scan time to routine levels    |

Large FOV, high resolution imaging with 2 contrasts simultaneously.



Water only In Phase

**Top:** T1w mDIXON XD TSE  
 Resolution: 0.8 x 0.9 x 3.0 mm  
 Scan time: 5:37 min  
 FOV 440 mm  
**Courtesy:** Phoenix Children's Hospital, USA

Premium fat-free\* imaging even in challenging anatomies, such as HeadNeck or Foot/Ankle



Water only

**Top:** T2w mDIXON XD TSE  
 Resolution: 0.9 x 1.2 x 3.0 mm  
 Scan time: 3:46 min. FOV 400 mm  
**Bottom:** T2w mDIXON XD TSE  
 Resolution: 0.3 x 0.3 x 2.8 mm  
 Scan time: 3:50 min  
**Courtesy:** Leuven University Hospital, Belgium

Very high resolution MSK imaging with simultaneous water only (Fat-free) and In Phase contrast



Water only In Phase

**Top:** PDw mDIXON XD TSE  
 Resolution: 0.2 x 0.3 x 3.0 mm  
 Scan time: 5:20 min  
**Courtesy:** Oakland Children's Hospital, USA

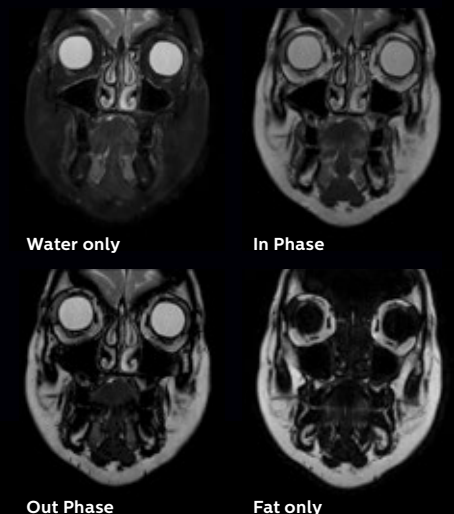
Large FOV, high resolution fat-free imaging, and In Phase contrast simultaneously.

**Right:**  
 T2w mDIXON XD TSE  
 Resolution: 0.7 x 0.9 x 4.0 mm  
 Scan time: 4:43 min  
 FOV 400 mm  
**Courtesy:** Utrecht Medical Center, The Netherlands



Water only In Phase

Robust fat-free imaging in the challenging orbital area.



Water only In Phase

Out Phase Fat only

**Top:** T2w mDIXON XD TSE  
 Resolution: 0.5 x 0.7 x 3.0 mm  
 Scan time: 3:57 min  
 FOV 180 mm  
**Courtesy:** Leiden University Hospital, The Netherlands

# How mDIXON XD TSE can impact your procedures?

Example ExamCard: HeadNeck – Posterior Triangle

## Without mDIXON XD TSE

| Posterior Triangle |             | 00:29:54 |
|--------------------|-------------|----------|
| ◆                  | SURVEY      |          |
| ▢                  | T1W_TSE     | Cor      |
| ▢                  | T1W_SPIR    | Cor      |
| ▢                  | T2W_TSE     | Cor      |
| ▢                  | STIR_longTE | Cor      |
| ▢                  | T2W_TSE     | Sag      |
| ▢                  | T2W_SPAIR   | Sag      |

- 3 strategies for fat suppression
- 2 separate scans w/wo fatsat
- Long procedure time: 29:54 min

## With mDIXON XD TSE

| Posterior Triangle mDIXON XD |                | 00:13:24 |
|------------------------------|----------------|----------|
| ◆                            | SURVEY         |          |
| ▢                            | T1W_mDIXON_... | Cor      |
| ▢                            | T2W_mDIXON_... | Cor      |
| ▢                            | T2W_mDIXON_... | Sag      |

- 1 strategy for fat suppression
- 2 contrasts (w/wo fatsat) simultaneously
- Short total procedure time: 13:24 min

Fast, robust, and simplified procedure with mDIXON XD TSE

### Contact Philips for a trial key<sup>(1)</sup>

<sup>(1)</sup> Only for systems with release 5 onwards

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