

# PLUS+1<sup>®</sup> Mobile Machine Displays

## DP7XX Series



PLUS+1<sup>®</sup> Mobile Machine Displays are designed to provide flexible, expandable, powerful and cost effective total machine management system displays for a wide variety of vehicle applications.

### DP7XX Series Displays

DP7XX Series Displays are designed to perform in the most extreme mobile machine environments. The latest technology with back-light provides outstanding brightness and contrast performance resulting in an easy-to-read screen. Develop your own software and layout using the PLUS+1<sup>®</sup> GUIDE (Graphical User Integrated Development Environment) and the GUIDE Vector Based Screen Editor (VBSE). A basic graphic library is available.

### Display options

The DP7XX offers different display options to meet your application needs. An optional projective capacitive touch screen that works through mud, water and with gloves is available for the DP720 model. The DP730 model is equipped by default with the projective capacitive touch screen.



## User liability and safety statements

### OEM responsibility

The OEM of a machine or vehicle in which Danfoss products are installed has the full responsibility for all consequences that might occur. Danfoss has no responsibility for any consequences, direct or indirect, caused by failures or malfunctions.

- Danfoss has no responsibility for any accidents caused by incorrectly mounted or maintained equipment.
- Danfoss does not assume any responsibility for Danfoss products being incorrectly applied or the system being programmed in a manner that jeopardizes safety.
- All safety critical systems shall include an emergency stop to switch off the main supply voltage for the outputs of the electronic control system. All safety critical components shall be installed in such a way that the main supply voltage can be switched off at any time. The emergency stop must be easily accessible to the operator.



## DP7XX Series Displays

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### Literature references

#### DP7XX reference literature

Literature title	Literature type	Literature number
<i>DP7XX Series PLUS+1® Mobile Machine Displays</i>	Technical Information	L1315553
<i>DP700 Series PLUS+1® Mobile Machine Displays</i>	Data Sheet	L1205618
<i>DP710 Series PLUS+1® Mobile Machine Displays</i>	Data Sheet	L1205246
<i>DP720 Series PLUS+1® Mobile Machine Displays</i>	Data Sheet	L1205154
<i>DP730 Series (black and gray bezel) PLUS+1® Mobile Machine Displays</i>	Data Sheet	AI00000269
<i>PLUS+1® GUIDE Software User Manual</i>	Operation Manual	10100824

#### Technical Information (TI)

A TI is comprehensive information for engineering and service personnel to reference.

#### Data Sheet (DS)

A DS is summarized information and parameters that are unique to a specific model.

#### API Specifications (API)

An API is specifications for programming variable settings.

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[API specifications are the definitive source of information regarding pin characteristics.](#)

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#### PLUS+1® GUIDE User Manual

The Operation Manual (OM) details information regarding the PLUS+1® GUIDE tool used in building PLUS+1® applications. This OM covers the following broad topics:

- How to use the PLUS+1® GUIDE graphical application development tool to create machine applications
- How to configure module input and output parameters
- How to download PLUS+1® GUIDE applications to target PLUS+1® hardware modules
- How to upload and download tuning parameters
- How to use the PLUS+1® Service Tool

#### Latest version of technical literature

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[Comprehensive technical literature is online at www.danfoss.com](http://www.danfoss.com)

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## Overview

### LCD options

LCD option	Type	Contrast	Brightness (cd/m2)	Viewing angle*	For application use
Standard	Transmissive	1000:1	400	80°, 80°, 80°, 80°	In and out of cab
High-performance	Transmissive-Enhanced View TFT	800:1	550	80°, 80°, 80°, 80°	In and out of cab

\* Viewing angle: Up, Down, Right, Left

### PLUS+1° GUIDE

PLUS+1° GUIDE (Graphical User Integrated Development Environment) is a complete toolbox that generates downloadable applications for all programmable PLUS+1° Compliant products.

A screen editor allows easy development of applications by programmers without formal software development training. The expertise from a software engineer is not needed to find your way around in PLUS+1° GUIDE

### Linux® operating system

DP7XX Series Displays contain embedded Linux® operating system software that is copyrighted software licensed under the GPL Version 2.0 or LGPL Version 2.1.

Linux® operating system software is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; Licenses full notice available:

GPL Version 2.0 <http://www.gnu.org/licenses/old-licenses/gpl-2.0.html>

LGPL Version 2.1 <http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html>

As an installer of Linux® operating system you will have your own obligations under the licensing agreements, which may include among other things the obligation to include a copy of these licenses or to include an offer of a physical copy of the source code for such software with your distributions of the equipment. You should carefully review the licenses to determine what your obligations and options may be for your intended use.

Anyone in receipt of this program may obtain the complete corresponding source code from Danfoss for a period of three years after the last shipment of this product and/or spare parts by going on line at <http://www.danfoss.com> or include "source code for DP7XX" in your written request to:

PLUS+1° Helpdesk Danfoss (US) Company, 3500 Annapolis Lane North Plymouth, MN 55447 USA

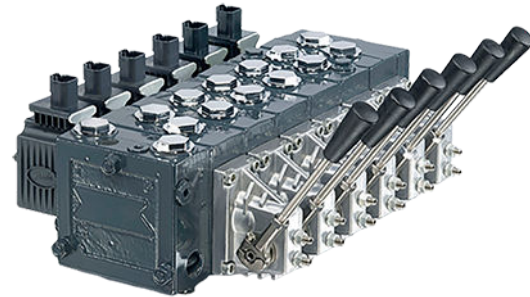
# JOYSTICK



Danfoss Power solutions (DPS) has more than 40 years of experience in market leading solutions for your application.

Our product portfolio contains a big variety of different product types which gives the opportunity to create sub-systems by combining two different DPS products.

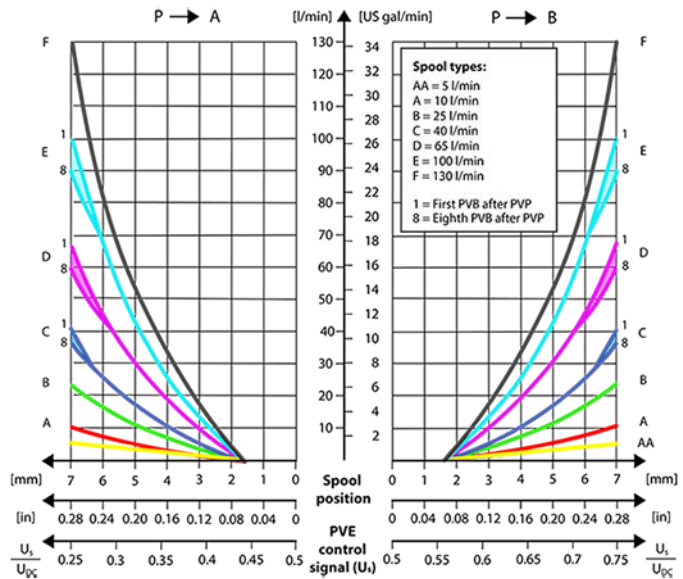
The JS1-H joystick and our proportional valve group PVG could be one of these sub-systems. With its setup simplicity when it's best, it gives perfect controllability of the application and a very positive person to machine interaction.



## Features

- Operator Presence switch
- Multiple output options
- Simultaneous operation of two proportional rollers
- Hall effect with two sensors per axis or long-life potentiometer position sensing
- Modular PVG concept
- For all PVG types 16-32-100-128-256
- Flow 5-500 l/min [1.3-132 US gal/min]
- Works with both compensated and uncompensated basic modules

Flow characteristics

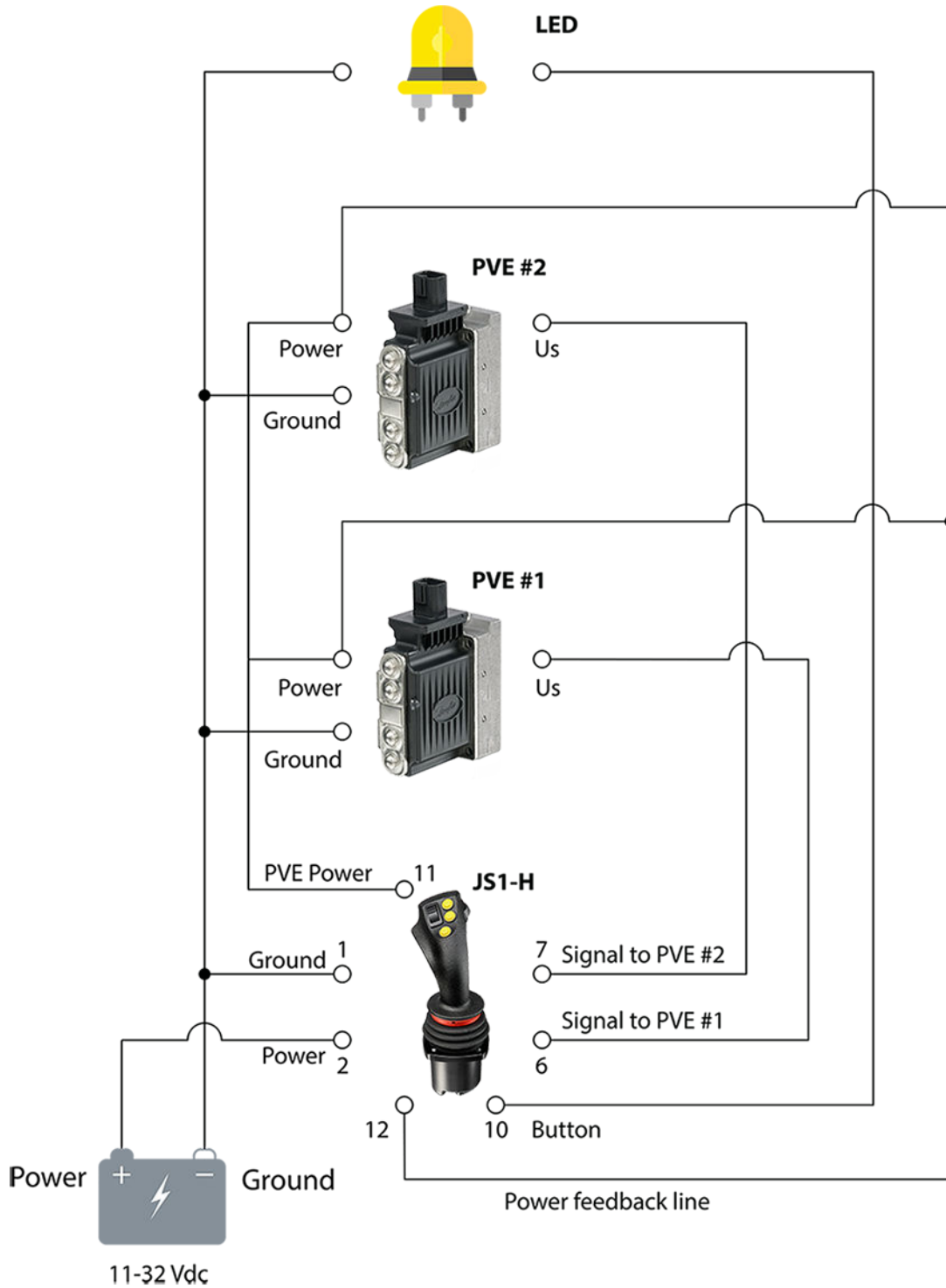


Comprehensive technical literature is online at [www.danfoss.com](http://www.danfoss.com)

Search for literature numbers:

- JS1-H Technical Information - BC00000347
- PVG 32 Technical Information - BC00000038

JS1-H and PVG sub-system diagram



Power feedback line is needed to ensure same reference point JS1-H vs PVE. There could be a difference in voltage due to voltage drop in the line from the power supply.

# Remote Control IK2 Transmitter



The IK2 remote control is highly customizable with many features and accessories. These remote controls also support the operator with an ergonomic design that allows for safe and efficient operation.

## Features

- Up to 2 joysticks or 4 paddles
- Multiband Radio with Full-Duplex communication
- Highly customizable
- 128x64 Graphic LCD
- External removable EEPROM SIM module

## Benefits

- Easy and fast maintenance
- High resistance to impacts
- Innovative ergonomics
- Non-slip handles
- Frequency management against interferences

## Applications

- Industrial lifting and automation
- Construction and mining vehicles
- Cranes
- Industrial vehicles
- Agriculture and forestry
- Maritime



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[www.danfoss.com](http://www.danfoss.com)

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Description	Value
Stop function	Cat. 3-PLd
Ingress Protection rating	IP65/NEMA4
Anti-condensation system	Goretex Film
Frequency band	Multiband (400 - 930 MHz)
Main mechanisms (maximum number)	Joystick (2) or Paddle (4)
Auxiliary mechanisms	Pushbutton, toggle and rotary switches
Removable EEPROM	External
Battery model	BT11K
Battery life	16 hours
Operating temperature range	-20 °C to 70 °C (-4 °F to 158 °F)
Weight (with battery)	950 grams
Harness	Belt/shoulder strap
Display	128x64 Graphic LCD
Cable connector	Yes (M12 Connector)
Range limiter	Yes
Associated receivers	R06, R13, R70, MPCAN, MP08, MP20

**Services of Samer:**

- Systems design with pumps and motors in closed and open loop circuits including valves
- Sale of hydraulic components and electronic devices
- Commissioning and start up on machinery.
- Repair of hydraulic components
- Postsale and service troubleshoot on phone

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